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Official Year Book of New South Wales.

1923.



H. A. SMITH.

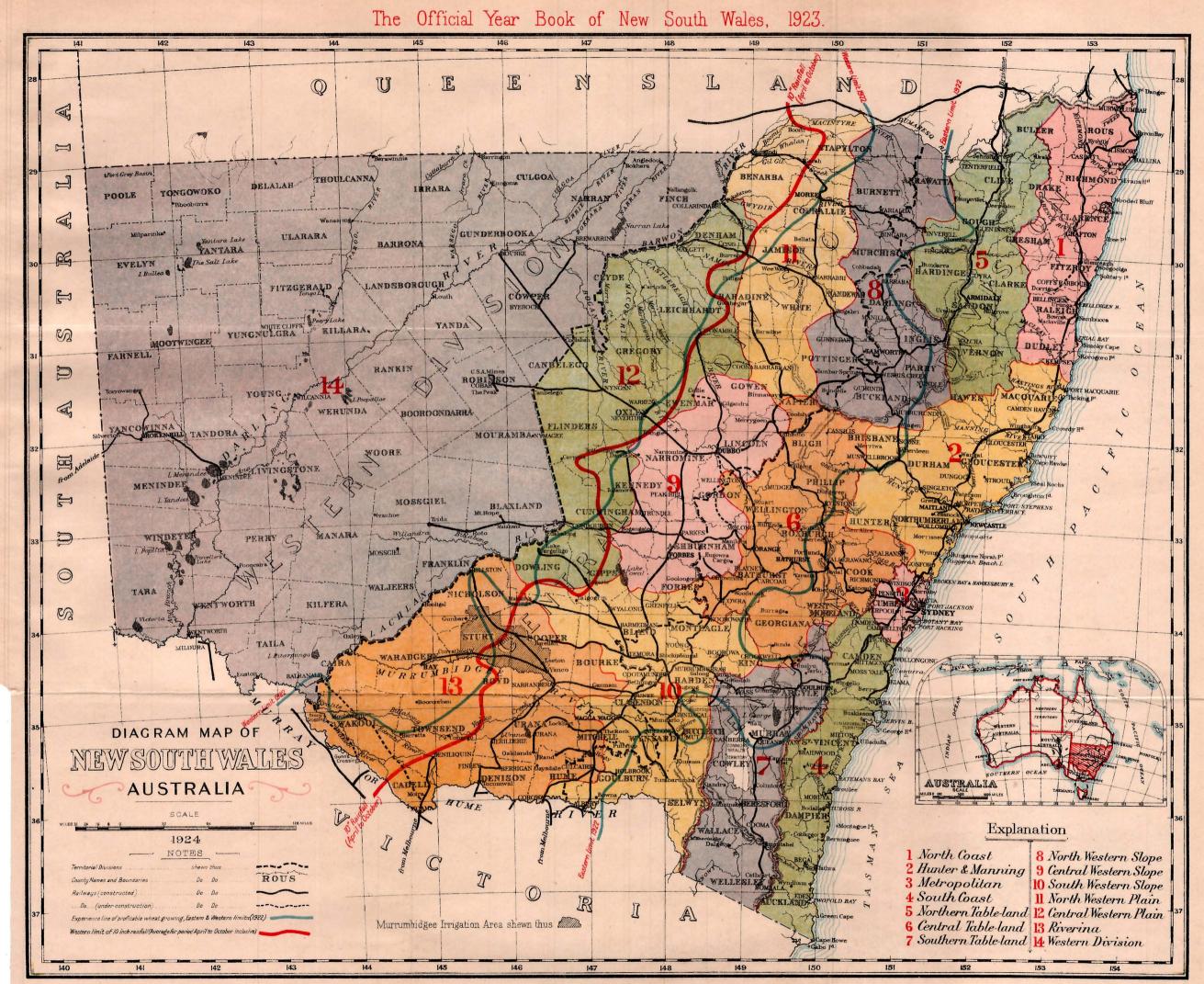
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Compiled, Drawn and Printed at the Department of Lands, Sydney, N. S. W., 1924

THE

OFFICIAL YEAR BOOK

07

NEW SOUTH WALES. 1923.



PREFACE AND INDEX.

H. A. SMITH, F.S.S.,

GOVERNMENT STATISTICIAN.

PUBLISMED BY AUTHORITY OF THE GOVERNMENT OF NEW SOUTH WALES.

SYDNEY: ALFRED JAMES KENT, GOVERNMENT PRINTER.

1924. [5s.]

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PREFACE.

THIS is the thirty-first 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 a work of this kind there is always difficulty in making it interesting to the two classes of persons for whose use it is intended, viz., those within the State, and those abroad, but it is believed the difficulty has been met.

The contents have been published already in fifteen parts, containing information which was the latest available at the date of publication, and they were issued as they became available from the printer, in order to render them of immediate service.

A diagram map of New South Wales is published with the volume to show the railways, territorial divisions, and area of the State suitable for the profitable cultivation of wheat as indicated by recent experience. The divisional boundaries coincide with those of Shires instead of Counties as in former issues, because it is thought desirable that statistics generally should be compiled with the local governing area as the geographical unit.

Every care has been taken to keep the work free from errors, but if any be noticed by readers, I should be pleased to receive information regarding them.

I have to express my thanks to the responsible officers of the various State and Commonwealth Departments, and to others who have kindly supplied information, often at considerable trouble.

The "Statistical Register of New South Wales," published annually from this Bureau, contains in full detail the statistics of the State, and it will prove serviceable to those who wish to obtain additional information regarding the matters treated generally in this Year Book.

II. A. SMITH,

Government Statistician.

Bureau of Statistics,

Sydney, 29th July, 1924.

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GEOGRAPHY.

N EW 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 involved in adjustment.Population of Territory known as wew South Wales atter adjustment.Population of Territory known as wew South Wales atter adjustment.Population of Territory known as wew South Wales atter dot year.1788New South Wales tralasia east of longitude 135° east.*Sq. miles. ustralasia east of longitude 129° east.*Sq. miles. ustralasia east of longitude 129° east.Sq. miles. ustralasia east of longitude 129° east.South Wales ustralasia founded as a separate ustralasia east of longitude 129° east.Stall 2,076,917 ustralasia founded as a separate ustralasia east of longitude 129° east.Stall 2,076,917 ustralasia founded as a separate ustralasia east of longitude 129° east.Stall 2,076,917 ustralasia founded as a separate ustralasia founded as a separate colonyStall 2,076,917 ustralasiaStall 2,076,917 ustralasia1836South Australia founded as a separate colony longitude 129° and 132° east separate colony wealth.Stall 309,850 ustralasia1,767,067 ustralasiaStall 2,020,412 ustralasia1851Victoria proclaimed a separate colony longitude 129° and 132° east separated. wealth.Stall 300 ustralasia east east east east east east east eas		the second se		the second s	<u> </u>
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1915 Territory at Jervis Bay ceded to Common- 28 309 432 1 905 602	1911	Federal Capital Territory ceded to Common-	012	200 460	1 501 590
28 300 432 1005 605 605		wealth.	512	309,400	1,701,730
	1915	Territory at Jervis Bay ceded to Common- wealth.	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.

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.

* 31409-A

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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 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 is covered by rivers and lakes, and 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.	
	<u> </u>	sq. miles.	, I
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
Pasmania		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 somewhat smaller than South Australia; Queensland is about 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, m les.	1	1
New South Wales .	309,432	1.000	·104
Commonwealth	. 2,974,581	9.613	1.000
United Kingdom .	. 121.633	.393	.041
Comodo	3,729,665	12.053	1.254
Argentina	1,153,119	3.729	•388
TT. T. J. CL. C.	2,973,890	9-618	1.000
Dattinh Theread	13,257,584	42.845	4.456
The World	F0.055.050	168-231	17.500
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LORD HOWE ISLAND.

Lord Howe Island is a dependency of New South Wales, and is included in the electorate of Sydney; it is situated about 300 miles east of Port Macquarie, and 436 miles north-east of Sydney. The island was discovered

GEOGRAPHY.

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, but is occupied rent free on sufferance, and is 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.

Coastline.

The coastline of New South Wales is remarkably regular, trending almost uniformly from north-north-east to south-south-west and displaying few striking topographical features. It consists of rugged cliffs, alternating with sandy beaches and numerous inlets, with here and there a river estuary.

The operations of important physiographical factors have prevented the coast from acquiring features such as projecting deltas and wide river valleys and estuaries, which so commonly give natural access to the interior of other countries. These factors are the close proximity of the watershed to the coast, the consequent shortness of the rivers, and the presence of a constant though slow-moving southerly ocean current, which sweeps along the coast and prevents the formation of deltas beyond the line of protection afforded by headlands. In a number of instances the volume of the coastal rivers is not great enough to carry their silt far to sea, with the result that, where they meet the dead water of the coast at their mouths, matter is deposited, forming a ground-work for "sand-bars," which constitute impediments to navigation even by coastal vessels.

The central portion of the coast, however, is well furnished with spacious inlets, distinguished by winding foreshores and ample roadsteads, so that within a space of about 150 miles there are four large natural harbours, of which some rank among the finest in the world, and only await economic development. Port Stephens, the most northerly, lies a little to the north of the central point of the coast; it possesses a great expanse of water exceeding 30 feet in depth. Broken Bay is a submerged river valley, with three arms and spacious anchorage, at the mouth of the Hawkesbury. Port Jackson (Sydney Harbour), perhaps the finest harbour in the world, is the commercial centre of the State, and an important shipping port with a large volume of trade. Jervis Bay possesses deep water throughout its great extent, and is a naval base destined to be the port of the Federal Capital at Canberra, with which it will be connected by rail. Further south, Twofold Bay, near the southern boundary, is a potential harbour, with a convenient entrance and spacious waterways.

The coastal formation of Port Kembla and the estuary of the Hunter River (Port Hunter) have been converted into serviceable harbours for growing manufacturing centres. At frequent intervals along the coast numerous inlets provide shelter and facilities for coastal shipping.

Further particulars regarding the harbours and anchorages are shown in the chapter relating to shipping.

Strewn along the coast at intervals there are eight lakes, partly marine and partly estuarine, connected with the sea by narrow channels. It is believed that they were formerly coastal valleys at a higher level than they occupy at present, and that they became "drowned" by the sea when the subsidence occurred which formed the existing harbours and the present coastal levels. Their entrances in most cases are narrow and shallow, and are usually blocked by the action of the sea and wind upon the sand.

Most of these lakes are surrounded by picturesque scenery. They attract tourists and holiday-makers, and provide extensive fishing grounds. The largest, Lake Macquarie, 8 miles south of Newcastle, is 44 square miles in area. A chain of beautiful lakes, of which the principal are the Myall and Wallis Lakes, lies between Port Stephens and Cape Hawke.

The Surface.

The story, as told by geologists, of the manner in which the surface of New South Wales assumed its present shapes is very interesting.

In past ages a great part of the interior of Australia was occupied by a vast mediterranean sea, bounded by a line of highlands, which probably extended considerably to the east of the present coastline. Their slope was towards the west, and rivers flowed down from them into the inland sea, carrying thither the sand and silt which now seals down the artesian basin. In a later age a gradual uplift took place in the northern part of Australia, accompanied by a depression in the southern portion; and streams which formerly flowed north-west and entered the sea by separate mouths became diverted to the south and conjoined with the Darling River.

The southern depression allowed the sea to encroach inland from the south and to spread over the region now known as the Riverina, but a subsequent uplift pushed the southern sea back to its present boundary and caused a combination of the western rivers into the one great system of Australia—the Murray-Darling.

During the upward movement in the interior a marked elevation took place in the coastal portion, the uplift being greater towards the coast, and an elevated plateau with a short steep slope to the eastern seaboard was produced. Rivers which then commenced to flow down this slope evidently possessed great erosive power, and, by a gradual process of denudation, worked their way inland, extending the coastal district into what were formerly the eastern portions of the Great Dividing Range.

Subsequently a submergence of the coast took place and the valleys of the coastal rivers were converted into harbours, such as Port Jackson, Broken Bay, and Port Stephens.

The surface of New South Wales bears signs of having passed through lengthy periods of erosion. It possesses less diversity than any of the continents, and there are no lofty mountain ranges, few peaks of importance, and no large lakes of permanent water. Nearly the whole of the State consists of extensive plains and hilly patches at varying levels. The surface is divided naturally into four main divisions—the Coast District, the Tablelands, the Western Slopes, and the extensive Plains. The tablelands form the Great Dividing Range, which traverses the State from north to south, and marks the division between the coast district and the plains.

The coastal strip is undulating and well watered. The average width is about 50 miles in the north and 20 miles in the south. At Clifton the tableland abuts on the ocean, while the widest part (150 miles) is in the valley of the Hunter River, where the relatively soft rocks of the coal basin have offered least obstruction to river erosion.

The coastal region is bounded on the west by steep, often inaccessible, escarpments, where the highlands rise suddenly from the lower levels of

GEOGRAPHY.

the coast; the declivities are furrowed by deep and rugged valleys sloping toward the sea, and here and there a mountain spur projects eastward. These natural features have made access to the tablelands from the coast a matter of formidable difficulty in many districts, so that the highlands are crossed only at three points by the railway and at few more by roads.

The coast line is fringed with a narrow and fertile plain extending from north to south and broken only at Clifton. This plain juts along the Hunter Valley for a distance of 60 miles. A considerable strip north and south of the Clarence River is 30 to 40 miles wide, thence south to Port Stephens it is 10 to 15 miles in width; thereafter it gradually broadens to a width of 35 miles, until it is broken at Clifton. The South Coast continuation of the plain is nowhere wider than 15 miles, the average width being about 10 miles.

There are two tablelands—the northern and southern—comprising an extensive plateau region, divided near the middle by the Cassilis or Hunter Gap. Generally they present on the eastern side a steep descent towards the ocean, while on the west they slope gradually towards the plains. They vary in width from 30 to 100 miles. The northern tableland commences in Queensland and terminates on the northern side of the Peel River Valley; its average height is 2,500 feet. The southern tableland extends from the Victorian border, and slopes gradually to the Cudgegong and Colo Rivers; its average height is slightly less than the northern tableland, although the Kosciusko Plateau, the most elevated portion of the State, is within its limits.

At various levels gently undulating upland plains occur throughout the tableland division, such as the Dorrigo, which forms the elevated hinterland of the coastal tract around Coff's Harbour; and the Bathurst, Goulburn, Yass, and Monaro Plains on the central and southern tablelands. Notable features of the southern tableland are the limestone belt, in which the famous Jenolan and other limestone caves occur, and the grandeur of the scenery in the numerous sunken valleys, such as those of the Blue Mountains, the Burragorang Valley, through which the Wollondilly River flows, the Kangaroo Valley, between Moss Vale and the Shoalhaven River, and the Araluen Valley further south.

The Great Plain district covers nearly two-thirds of the area of New South Wales. It stretches from the base of the slopes of the tablelands to the western boundary of the State, and thence north, south, and west as the Great Central Plain of Australia. The plains are not quite level, but rise very gently from the bed of the Darling eastward towards the Great Dividing Range and westward towards the South Australian horder. Only a few trifling elevations occur, but in the centre the Cobar plain, 150 miles wide, stretches for 300 miles in a north-westerly direction towards the Darling River, its altitude ranging from 500 feet to 1,000 feet above sea level. Owing to scanty rainfall the plains are devoid of forests.

The plains are watered by the rivers of the Murray-Darling system; the Darling and its tributaries are liable to considerable shrinkage in periods of dry weather; but, on the other hand, in wet seasons, these streams overflow their banks and flood the surrounding country for miles, producing a luxuriant growth of grasses.

The surface of the plains consists of fertile red and black soils, the former being particularly rich in plant food. The black soil formations represent the silted-up channels of old rivers which, when flooded, spread a fertile

NEW SOUTH • WALES OFFICIAL YEAR BOOK.

silt over the surrounding district. The black soil plains occupy large areas along the middle courses of the Macquarie, Castlereagh, Namoi, and Gwydir Rivers.

Several portions of the plains are distinguished by special names, such as the Liverpool Plains, between the Peel and Liverpool Ranges; the Riverina, stretching northward from the Murray and intersected by a network of streams; the Bulloo Plain, between the Paroo River and the Grey and Barrier Ranges; the Bland, between Cootamundra and Lake Cowal; and the Pilliga Scrub, between Narrabri and Coonabarabran. The name Western Plains is applied generally to the Western Division as shown on the map in the frontispiece, while the plain country of the Central Land Division is referred to as the Central Plains, the southern portion receiving the special name Riverina.

Particulars relating to the economic condition and settlement of the various divisions of the State are published in Part "Rural Settlement" of this Year Book.

Mountains.

The mountains of New South Wales may be classified in two main groups —the Great Dividing Range with its coastal spurs, and the ranges of the interior.

The Great Dividing Range is the name given to a continuous chain of highlands stretching along the whole eastern portion of Australia. In a strict acceptance of the term the portion within New South Wales is not a range of mountains, but a succession of extensive plateaux. Except for a westerly bend skirting the valley of the Hunter River, it runs for the most part parallel to the coast-line, and a number of lateral spurs branch from either side.

Proceeding from north to south, the names distinguishing the various portions of the Great Dividing Range in New South Wales are:--Macpherson, New England, Liverpool, Main or Blue Mountain, Cullarin, Gourock, Monaro, and the Muniong Ranges.

The Northern Tableland, comprising principally the highlands known as the New England Range, is the largest positive physical feature of the State. It has a considerable area at a greater altitude than 4,000 feet, and its highest point, Ben Lomond, is 5,000 feet above sea level. The highest parts of the Great Dividing Range are situated in the extreme south of the State, and are known as the Muniong Range. Several peaks attain an altitude of about 7,000 feet, the highest being Mount Kosciusko (7,328 feet).

The remaining mountains of the State, representing the remnants of ancient ranges, possess little importance.

The Warrumbungle Range is practically a continuation of the Liverpool, extending in a north-westerly direction for a distance of nearly 100 miles. These mountains represent the denuded stumps of a series of volcances, which burst into activity near the shores of the old inland sea before it became silted up. The sandstone beds of the Warrumbungle Range form part of the intake beds of the great artesian basin.

Two ranges—the Barrier and Grey—of an average elevation of about 1,500 feet, and rising 800 feet above the surrounding plains, lie near the extreme west and north-west of the State. They form the western boundary of the vast depression through which the Darling River and its tributaries flow. The Barrier Range contains rich silver-lead deposits, and some of its rocks are possibly the oldest in Australia, if not in the world.

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GEOGRAPHY.

Rivers.

New South Wales does not possess any great rivers, and for this there are three mains causes, viz., the position of the watershed; the absence of lofty peaks, whose snowy caps in melting might feed large streams; and the spasmodic, and unreliable nature of the rainfall in the western interior.

The Great Dividing Range, which constitutes the main watershed, has formed an absolute boundary between two river groups—the eastern or coastal, and the western—which are entirely distinct and possess dissimilar characteristics.

The coastal rivers flow east into the Pacific Ocean, and, on account of the proximity of the mountains to the ocean, the majority are short, rapid, independent streams; the Hunter (340 miles) and the Hawkesbury (335 miles) by reason of their winding courses are the longest. Generally, the rivers South of Sydney, where the coastal strip narrows considerably, are of less importance than those of the north.

The physical aspects of all the eastern rivers are similar. Their upper courses are amidst broken and mountainous country, and the lower basins consist usually of undulating land with rich alluvial flats; where uncultivated, the land is densely timbered.

There are eight principal coastal rivers and numerous minor streams. Some are navigable for various distances; thus ocean-going vessels may proceed along the Richmond for 65 miles, the Clarence 45 miles, the Macleay and Manning 30 miles, and the Hunter 35 miles. Ocean-going vessels may penetrate the Hawkesbury for 70 miles, but the Shoalhaven is navigable for only 5 miles from its mouth.

The rivers of the western slope belong to the Murray-Darling system. They drain an immense area, including the whole of the western portion of New South Wales, and large portions of Queensland and Victoria, and they discharge into the sea through a single mouth. In consequence of the gradual slope of the plain country, these rivers, unlike the coastal, are long, meandering, and slow in discharge. They wind for the most part through loose, absorbent soils, in which they have usually cut deep channels, which at times are full of heavily-charged, fast-moving water, of which they relieve their upper basins after heavy rains. On such occasions these streams are impressive rivers. The Gwydir, Namoi, Castlereagh, Macquarie, and Bogan discharge their water into the Darling, which in turn carries it to the Murray, which receives also the waters of the Lachlan and Murrumbidgee. Normally they have not a great volume of flow, being sluggish, shallow, clear streams flowing at the bottom of channels, as much as 30 feet below the ground level. Sometimes, in dry seasons, the flow ceases and there remains nothing but a chain of water-holes. These curious variations in the condition of the western streams are due to the following causes—the variableness of the rainfall at their sources, the small rainfall in their lower basins, the absence of large feeding streams, the great evaporation, and the absorbent nature of the soils, particularly over the artesian basin.

The most important river is the Murray, which forms part of the southern boundary of the State. It has a total length of 1,600 miles, of which 1,200 are within New South Wales, and along this course a more or less regular stream flows, fed by the snows of the southern highlands. For about seven months of the year the river is navigable as far as Wentworth for large riverboats, and for smaller craft as far as Albury. The Murrumbidgee, 1,050 miles in length, ranks next to the Murray in regularity and volume of flow. In its lower course it receives the Lachlan, 850 miles in length. The longest river in Australia is the Darling, which measures 1,760 miles, the total length from its source to the mouth of the Murray being 2,310 miles. The Darling flows across western New South Wales from north-east to southwest to join the Murray 150 miles from the South Australian border. It receives a number of rivers from South Queensland when their volume is sufficiently great, and in New South Wales receives successively the following rivers whose lengths are as shown:—Gwydir, 350 miles; Namoi, 430 miles; Macquarie, 590 miles; Castlereagh, 340 miles; and Bogan, 370 miles. Particulars of the water storage schemes in connection with these rivers are published in chapter "Water Conservation and Irrigation" of this Year Book.

Lakes.

The lakes of New South Wales are unimportant, but may be classified in five groups,—the coastal lakes or lagoons, those of the tablelands, and of the Western Plains, the lakes and tarns of the Kosciusko Plateau, and the great artificial lake at Burrinjuck used for irrigation purposes.

The coastal lakes have been described already.

The lakes of the tablelands owe their origin to volcanic and other geological disturbances of former ages, and nearly all are situated in the southern tableland. Lake George, sometimes termed the largest freshwater lake in New South Wales, occupies a depression in the Cullarin Range; it is fed by several small streams, but has no visible outlet, its waters are shallow, except after a succession of wet seasons, being lost by evaporation and by soakage through the slate formation of its bed. If full, Lake George would cover an area of 60 square miles, but in average seasons a large proportion of its bed is dry and is utilised for grazing stock. Lake Bathurst lies in a circular depression about 7 square miles in area, 10 miles east of Lake George. Both lakes are situated more than 2,000 feet above sea level.

The lakes of the Western Plains occur usually along the courses of the western rivers; they are mostly natural shallow depressions of considerable extent, which are filled during floods by the overflow of the rivers. Like the western rivers, these lakes vary with the seasons, presenting an appearance of great size in wet seasons, and dwindling to a succession of ponds and mud basins in continued dry weather, but they serve a useful purpose in dry seasons by maintaining the flow of the rivers below the lakes for some months after the upper courses become dry.

Within the Lachlan basin the most important are Lake Cowal, which is situated about 40 miles from Forbes, receiving the drainage of the Bland Plain and the overflow of floodwaters from the Lachlan River, and Lake Cudgellico, which also receives the floodwaters of the Lachlan in wet seasons.

Lake Victoria, on the right bank of the Murray River, in the southwestern corner of New South Wales, is connected with the Murray by Frenchman's Creek. It covers an area of 26,000 acres, and holds 17,000,000 cubic feet of water when full. It has been selected as the site of a reservoir in connection with the River Murray Irrigation Scheme.

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The Kosciusko Lakes are due to the formation of barriers of moraine material left behind by glaciers. They are situated about 6,000 free above sea-level. The principal are the Blue Lake, Lake Albina, Cootapatamba and Club Lakes, and Hedley Tarn.

The Burrinjuck Dam, near the head of the Murrumbidgee River, is a large lake covering 12,740 acres, with a capacity of 33,612,000,000 cubic feet of water impounded by a retaining wall 240 feet in height. Its outlet is by the Murrumbidgee River, whose flow is regulated thereby to meet the needs of an extensive irrigation area on its bank 240 miles below the dam.*

Mineral Springs.

Mineral springs of varied composition are found in many parts of the State; in some cases the waters have been marketed as table-waters, and some are of medicinal value. Such springs occur at Mittagong, Ballimore, Rock Flat, Bungonia, Jarvisville, and Yarrangobilly.

TRANSPORT AND COMMUNICATION.

The problem of establishing an efficient system of transport in New South Wales is rendered difficult by several causes, viz., the existence of a belt of rugged highlands comparatively near the coast readily passable at only a few points; the consequent difficulty in connecting the coast with the interior; the absence of navigable rivers and waterways; and the scattered nature of the settlement.

The rugged approaches to the Great Dividing Range defied the efforts of explorers until 1813, when an expedition succeeded in crossing the mountains, and the first road over the range was opened in 1815. Shortly afterwards a way was discovered across the mountains in the vicinity of Lake George, near the spot where Goulburn now stands. These routes remained the easiest lines of communication with the interior to the west and south, and when railways were built they followed the roads. Strangely enough, the only real gap in the mountains, situated opposite Newcastle, and discovered by Cunningham in 1825, has not yet been utilised for traffic. The Great Northern Railway traversed the mountains by way of a higher gap at Murrurundi. The interior is connected with the sea by rail at only two points—Sydney and Newcastle.

The early policy of government made Sydney the centre of the whole settlement commercially as well as politically, and with its advantageous situation on an unrivalled natural harbour, it became from the earliest times the point from which the roads radiated, and to which trade and commerce were drawn, despite the facts that its immediate district was not well adapted for agriculture and that access to the fertile interior was impeded by difficult mountains. In point of situation Port Stephens and Jervis Bay, both excellent natural harbours, situated respectively 85 miles north and 82 miles south of Sydney, are both qualified to constitute commercial outlets for the interior, and this remark applies with especial force to Port Stephens, which is the most central port of the State and has the advantage of large coal supplies in close proximity. The development of this port is urged strongly as part of a decentralisation scheme, and it is probable that Jervis Bay also will become a shipping centre when it is opened up in connection with the establishment of the Federal capital at Canberra. There is no good harbour north of Port Stephens; and Twofold Bay, on the far South Coast, is probably too difficult of access from the interior to develop into an oversea shipping port.

Railway, shipping, postal, cable and telegraphic services all have their centre in Sydney, which with its environs contains nearly one-half of the population of the State.

Localities such as the southern Riverina, the Broken Hill district, and the far North Coast, which are not yet connected by rail with the metropolis, find their outlet in other States, but the New South Wales lines are being extended in these districts.

In view of its vast open spaces, New South Wales is specially adapted for aviation; air routes between Sydney and the capital cities of other States have been prepared and other work in connection with the organisation of air services is in progress.

Particulars regarding the systems of transport and communication in New South Wales are given in other chapters of this volume, namely, Railways, Local Government, Post and Telegraphs.

GEOLOGY, FAUNA, FLORA.

A description of the geological formation of New South Wales, the fauna and the flora, was published in the 1921 issue of this Year Book.

CLIMATE.

N EW South Wales is situated entirely in the temperate zone, and its climate is mild and equable, being free from extremes of heat and cold. Abundant sunshine is experienced in all its seasons, and this factor exercises a strong influence on the lives and character of the people. In the capital city an average of only twenty-three days per year are without sunshine, and the average range 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, but although snow has been known to fall over nearly two-thirds of the State, 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, but are generally as follow:—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 in New South Wales are directed from Sydney as the centre of a subdivision of Australia, which includes the greater part of New South Wales; a special climatological station is maintained also at Dubbo, and there are many reporting stations throughout the State. Bulletins and weather charts are issued daily from the Meteorological Bureau, and rain maps and isobaric charts are prepared.

Particulars of meteorological observations at various stations in New South Wales are published annually in the Statistical Register of New South Wales; in some cases rainfall records from the year 1860 are given.

Signals are displayed in Sydney to give warnings of storms and to indicate fair weather, rain, and cold or heat waves; forecasts are telegraphed daily to towns in country districts, and the city forecasts are published in the early editions of the press. Special forecasts regarding cyclonic conditions are issued to the press and to the Commonwealth and State Departments of Navigation; this arrangement enables precautions to be taken in regard to shipping. Flood warnings also are given in urgent cases.

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 continuously 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 lowpressure 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. This vital factor plays a very powerful part in determining the character of settlement.

Generally, the wet season extends over the first six months of the year, although occasionally the most serviceable rains occur in the spring. The coastal districts receive the heaviest falls, ranging from 30 inches in the south to 80 inches in the 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:—

1	lrea.	Proper- tion per	Annual		Proper- tion per	
Sq. Miles.	Acres.	cent. of total area.	Ramiall.	Sq. Miles.	Acres.	cent. of total area
			inches	1	1.1 × 1	
668	427.520	.2		77.202	49 409 280	24.3
1,765	1,129,600	.6	15 to 20	57,639	36,838,960	18 6
4,329	2,770,560	1.4	10 to 15	77,268	49,451,520	24.9
15,804	10,114,560	5.1	Under 10	44,997	28,798,080	15.0
30,700	19,648,000	9.9	Total	310,372	198,638,080	100.0
	668 1,765 4,329 15,804	668 427,520 1,765 1,129,600 4,329 2,770,560 15,804 10,1149560	Area. tion per cent. of cent. of total area. 8q. Miles. Acres. total area. 668 427,520 2 1,765 1,129,600 6 4,329 2,770,560 1·4 15,804 10,1149560 5·1	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$	$\begin{tabular}{ c c c c c c c c c c c c c c c c c c c$

CLIMATE.

It is apparent that only 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 30 per cent. from the average, and continued periods of dry weather are not uncommon.

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; and 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 nonseasonal; between Nowra and Broken Bay a narrow coastal strip receives most of its rain 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.

Evaporation.

Investigations are being made in order to gauge the amount of evaporation in New South Wales, and it has been found that the amount of evaporation is so great as to make it a climatic element only second in importance to rainfall in its influence on 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 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.

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

The following table shows the average meteorological conditions of Sydney, based on the experience of the sixty-four years ended 1922:--

		vding eter, h.; nd	Temper	ature (in	shade).		Rainf	all.	
Month.		Hourly Average Keading of Standard Barometer, corrected to 32° Fah.; Standard Gravity and Mean Sea Level.	Mean Standard.	Average Reading of Maximum Thermometer.	Avorage Reading of Minimum Thernometer.	Average.	Greatest.	Least,	Average number of days Rain
			0	D	0	inches.	inches.	inches.	
January		29·9 01	71.6	78-4	64·9	3.67	15.26	0.42	14-2
February		29 ·945	71.2	77·5	64·9	4 42	18.56	0.34	14.0
March		30.012	69 2	75.6	62.9	4 97	18.70	0.45	14.9
April		30.073	61.6	71.2	58.1	5.33	24.49	0.06	13.3
May	• •••	30.082	58·6	65·2	52.2	5.14	23.03	0.18	15.0
June	•••	3 0·058	54.5	60.9	48·2	4.84	16.30	0.19	12.6
July		30.074	52 [.] 6	59·3	45 ·9	4-97	13:21	0.12	12.5
August	[30.069	55.0	62.5	47.5	3.01	14-89	0.04	11.3
September		30.009	59·1	66.8	51.2	2.91	14.05	0.08	12.0
October		29.972	63·4	71.2	55.8	2.96	11.14	0.21	12.5
November		29.939	67·1	74.5	59.7	2.84	9.89	0.02	12.3
December		29·880	70.1	77.3	62.9	2.85	15.82	0.23	13.0
Annual	.	30.001	63.1	70.0	56.2	47.91	82.76	23.01	157.6

The North Coast districts are favoured with a warm, moist climate, the rainfall being from 40 to 80 inches annually. The mean temperature for

CLIMATE.

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 59° 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.

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:—

	. '	ance st.	പ്		Te	mperatu	re (in Sha	ıde).		uel.
Station.		Least Distance from East Coast.	Altitude.	Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	Rainfall— Mean Annual.
		- A								1 1
North Coast—		miles.	feet.	0	0	0 .	°	•	•	inches.
Lismore	•••	13	52	66·7	75:0	56.7	22.4	113.0	23.0	50.96
Grafton	•••	22	40	67.8	76.2	57.6	24.7	114.0	24.9	38.37
								• *		
Hunter and Manni	na									
Singleton	•••	40	135	64.1	76-1	52.1	20.3	113.9	22.0	28.49
West Maitland	•••	18	40	64.4	74.7	53.2	21.3	114.0	28.0	33.97
Newcastle	•••	1	34	64.6	72.3	55.2	14.9	110.2	31.0	46.22
			1							
Sydney	•••	5	146	63·1	71.0	54.0	13.8	108 •5 .	35.9	47.91
			,							
South Coast		·								1.1
Wollongong	•••	0	54	63.0	70.2	54 ·8	17.0	106-0	33.6	44.65
Nowra	••••	6	30	62.8	71.1	54.0	<u>19</u> .9	110.8	32.6	39.02
Moruya Heads	•••	0	50	61.0	67.9	53.0	18.5	114.8	22.6	35.05
Bega		8	50 °	60.0	69.1	49 ·8	26·5	109.0	20.0	33.77

Taking the coast as a whole, the difference between the mean summer and mean winter temperature is about 17° only.

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 average for the year being between 56° and 60°; the mean summer temperature lies between 65° 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 57° to 70°, and in winter from 34° 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.

	ance ist.	6		Te	mperatu	re (in Sha	de).		fall- Annual.
Station.	Least Distance from East Coast.	Altitude.	Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	Rainfall- Mean Annu
Northern Tableland-	- miles.	feet.	a	•	•	0	0.		inches.
Tenterfield	80	2,827	58.6	68·5	47.0	24:3	101:0	18.0	32.23
Inverell	124	1,980	59.8	71.4	47.2	29.1	105.5	14:0	30.28
Glen Innes	90	3,518	56.2	66.7	44.4	24.4	101.4	16.0	31.62
Central Tableland—		·							
Cassilis (Dalkeith)	120	1,500	59.8	71.8	47.3	24.5	109.5	19.0	23.79
Mudgee	121	1,635	59.9	72.4	47.1	28.4	108.0	15.0	25.56
Bathurst	96	2,200	57.2	69.7	44.3	27:9	1 12 ·9	13.0	23.88
Katoomba	58	3,349	53.7	63.0	43.3	15.4	98·0	26.5	55.61
Southern Tableland-	-				1	L j			
Crookwell	81	2,000	52.8	63.9	41.3	22.1	99·0	20.0	32.19
Goulburn	54	2,129	56·1	67.6	44.1	23.8	111.0	13.0	24:86
Yass	92	1,657	57.2	70.3	44 ·8	-24-4	108.0	21.0	23.17
Kiandra	88	4,640	44.4	55.7	32:6	20.8	91 ·0	4 below zero	64.24
Bombala	37	3,000	52.8	63-3	42 .0	24.1	100.2	17.0	23.46

The statement below shows, for the Tableland, similar particulars to those already given for the Coastal Division:---

Western Slopes.

On the Western Slopes the rainfall is distributed uniformly, varying from 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. The mean annual temperature ranges from 68° 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 these 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, for the principal stations on the Western Slopes, information similar to that shown for Coast and Tablelands:—

- 1 		Distance om Coast.	đ		Tei	nperatu	re (in Sha	ıde).		Ansual.
Station.		Least Distance from East Coast.	Altitude.	Mean Annual.	Mean Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	Rainfall Mean Ann
North Western—		miles.	feet,	0	0	o	Ð	0	0	inches.
Moree		204	680	67.4	80.1	53.5	28.8	117.0	24:0	23.47
Bingara		153	1,200	64.2	77.1	50·4	28.7	112.5	16.0	31.04
Quirindi		115	1,278	61.6	73.6	48·4	30.0	107.6	13.0	27.73
Central Western-										
Dubbo		177	863	63.2	77.4	49.4	27.8	115.4	16.9	21.97
South Western-										· ·
Young		140	1,416	59.3	73.1	46.1	25.4	109.0	21.9	25.04
Wagga Wagga	·]	158	615	61.9	75-8	48.7	25.2	116.8	22.0	21.35
Urana		213	400	63.1	76.6	49.3	26.4	113.0	27.0	17.15
Albury		175	531	60.8	74.3	47.8	27.1	117.3	19.9	27.80

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CLIMATE.

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 western boundary to 10 and 15 inches along the Darling River, and 20 inches on the eastern limits. 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, and with many summers intervening, 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° would accumulate only 20° to 25° by contact with the radiation from the soil during its passage across the continent.

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 the best merino wool in the world.

The meterological 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:—

		t.			Те	nperatu	e (in Sha	.de).		ST.
Station.		Least Distance from East Coast.	Altitude.	Mean Annual.	Meàn Summer.	Mean Winter.	Mean Daily Range.	Highest.	Lowest.	Rainfall- Mean Annual
		miles.	feet.	•	0	8	•	•	•	inches.
Brewarrina	بعو	345	43 0	68.5	82.4	54.0	26.2	120.0	28.0	15.36
Bourke		386	350	69·2	83.5	54.1	27.5	127.0	25.0	13.84
Wilcannia	· •••	473	246	66:4	80.2	52.3	26.2	120.8	21.8	10.03
Broken Hill		555	1,000	64 [.] 6	77.8	51.3	23.3	115.9	28.5	9.98
Condobolin	•••	227	700	65.3	79.0	51.2	26.8	115.0	20 ·0	17.07
Wentworth		478	144	63·8	76.6	51 [.] 6	24.7	117.0	21.0	12.12
Нау		309	291	63·1	76 •0	50 · 3	27.0	117-3	22 9	14.17
Deniliquin		287	268	62.0	74.8	49.2	25.1	116.5	2 2·0	16.17

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 of an astronomical character; the principal instruments are the transit circle, astrograph, 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.

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 throughout New South Wales, except in the district of Broken Hill, where South Australian standard time has been adopted, viz., 1422° of east longitude, or 9 hours 30 minutes east of Greenwich. In Western Australia the standard time is the 120° of east longitude, or 8 hours east of Greenwich; in the States of Queensland, Victoria and Tasmania, the standard time is the same as in New South Wales.

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 252 feet; ordinary low water, 078 feet; ordinary high water, 420 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 $4\frac{7}{12}$ inches, and of spring tides 5 feet $5\frac{1}{6}$ inches; the greatest range being 6 feet $6\frac{1}{2}$ 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.

HISTORY.

THE name "New South Wales" was given to the whole of the eastern part of Australia in 1770 probably by Captain Cook, and for a short period (1814 to 1840) the distant islands of New Zealand were among the dependencies of the colony founded at Port Jackson in 1788.

The early history of New South Wales traces its transition from a Crown Colony, used as a penal settlement, to a self-governing dominion through a period of sixty-eight years. This period was marked by a process of division of its huge area, nearly half the size of Europe, into six smaller political units and by a slow development of settlement carried out, often in defiance of the Government, by the few hardy pioneers who crossed the world to make their homes in this new land of the antipodes. How slow was this development can be appreciated best by contrast with the phenomenal expansion of the United States of America, which already, by 1856, had a population as great as that of the United Kingdom and 100 times greater than that of New South Wales.

New South Wales inherited current British traditions of government and public institutions, and in 1856 received a flexible frame of government on the English model. The democratic spirit natural in a new land moulded the political constitution and the form of society on modern principles of equality without any bitter struggle for freedom. This fact, combined with the absence of virile native races and of foreign aggression, has rendered the history of the State unusually placid, so that its development, at all events until the European War (1914-18), was moulded almost entirely by economic factors.*

The following statement indicates chronologically the main events in the development of the State up to the introduction of responsible government in 1856:---

1770. Captain Cook discovered the eastern coast of Australia.

- 1788. First settlement founded.
- 1791. First grant of land to settlers.
- 1793. Free immigrants arrived.
- 1794. Settlement established on the Hawkesbury River.
- 1795. First plough introduced.
- 1797. Merino sheep imported. Coal discovered at Coal Cliff and Port Hunter.
- 1801. Hunter River coal mines worked.
- 1803. First newspaper published (Sydney Gazette).
- 1805. MacArthur began sheep farming at Camden.
- 1807. Merchantable wool first exported (245 lb.).
- 1813. Blue Mountains crossed.
- 1814. Civil Law Courts created. New Zealand proclaimed a dependency of New South Wales.
- 1815. Settlement founded on Bathurst Plains.
- 1817. Exploration of interior begun.
- 1821. Settlement at Port Macquarie.
- 1823. First Constitution. Trial by jury instituted.
- 1824. Censorship of press abolished.
- 1825. First land regulations issued. Tasmania practically separated from New South Wales. Boundary of New South Wales moved westward.
- 1827. Colony became self-supporting.

1828. Second Constitution. All English laws applicable to New South Wales brought into force. Assisted immigration introduced. Richmond River discovered.

1831. First land sales.

1834. Settlement established at Twofold Bay.

1836. Religious equality established. South Australia founded as a separate colony.

1838. Assignment of convicts ceased.

1840. Transportation of convicts to New South Wales abolished. New Zealand separated from New South Wales.

1842. Third Constitution—Representative Government. Settlement at Moreton Bay proclaimed.

1843. Financial crisis.

1851. Gold discovered. Victoria separated from New South Wales.

1852. First trade union formed. Sydney University opened.

1855. First railway built.

1856. Fourth Constitution-Responsible Government.

1856-1872.

The Constitution Act of 1856 conferred a system of government, closely modelled on that of the United Kingdom, upon a community of one-quarter of a million people in a territory (omitting Queensland) two and a half times as large as the United Kingdom. Of this community one-third had newly arrived in the gold rushes; of the remainder few had been born in the country, and a considerable proportion had unenviable antecedents. With the continuance of gold finds, a very rapid proportional growth of population set in, and in the next fifteen years the number of inhabitants doubled. It is not surprising, therefore, that in these circumstances and in the lack of an intimate knowledge of the workings of the machinery of parliamentary government the new administration was at first unstable and the times were somewhat lawless. In the first five years no less than seven Ministries held office and four Parliaments sat. But gradually the workings of the new constitution became smoother. Manhood suffrage and election by secret ballot were introduced in 1858, and at the first constitutional crisis in 1861, involving the fate of the Land Bills, the will of the electorates gained the recognised supremacy which it has since held.

The lawless instincts of certain elements of the population were excited in some measure by the turbulence of the gold rushes, and found expression in the anti-Chinese riots on the gold-fields of Lambing Flat in 1861; in a revival of bushranging from 1861 to 1867 after thirty years' quiescence; and in the wild scramble for land under the loosely enacted laws of 1861, which created bitter conflicts between free selectors and squatters, and left wide scope for malpractices such as "dummying" and blackmail.

But when the gold fever began to subside in the seventies many newcomers settled down as landholders, and sheep-raising rapidly became the stable industry of the State. The industrial depression of the sixties passed away, the new Government took firm control, and an era of prosperity and rapid progress began. With the separation of Queensland in 1859 the territory of New South Wales became confined within its present limits. Religious equality was consummated in 1862 by the abolition of State aid to religion, and in 1866 all schools receiving State aid were placed under Government control. The construction and working of railways was made almost exclusively a Government function, and lines were opened from Newcastle to Maitland (1857), from Sydney to Penrith (1862), and to

* A brief review of the expansion of population, and of rural settlement, will be found in later parts of this Year Book, and of the early forms of Government in the Year Book for 1921.

HISTORY.

Goulburn (1869). Telegraphic communication was established between Sydney, Melbourne, and Adelaide in 1858 and Brisbane in 1861, while the cable service to England was opened for business in 1872.

1873-1893.

Rapid as had been the disorderly progress since the discovery of gold, the country now settled down to orderly ways, and yet more rapid headway was made in the next twenty years. Although the activity in gold mining subsided, immigrants continued to arrive freely; but after reaching half a million in 1871, the population only attained the first million in 1887. Flocks grew, and New South Wales soon gained importance as one of the main sources of the world's supply of wool. Indeed, in 1891 the number of sheep in New South Wales reached its highest level. The tin-mining fields were opened in 1872, the richest silver-lead fields of the world were discovered at Broken Hill in 1883, and coal mining steadily increased in importance. This rapid expansion of the primary industries produced rapid expansion throughout the country. A vigorous policy of public works was initiated by the Government in 1872 and continued until 1885; during the period of twenty years under review nearly £50,000,000 was borrowed by the Government and expended upon developmental works, principally railways. Rail communication was established with Orange by 1877, and lines were extended to the southern border by 1883, and the northern by 1889. The first telephonic services were established in Sydney in 1880.

Some national ideals began to take definite shape, and settled policy in many provinces of government became the result. The duration of Parliament was limited finally to three years in 1874; the education question was decided in 1880, when a national system of secular and compulsory education for all children between the ages of 6 and 14 years was introduced; in 1888 the further influx of Asiatics was checked effectively, and the principle of "White Australia" firmly established. At the same time the serious difficulties of the community began to assume formidable proportions in the land and labour problems. Although the bitter struggle for the possession of land subsided as years passed, it was found that the policy of disposing of Crown lands by the free and easy methods of earlier years produced a pronounced shortage of land for settlement. Parliament was engaged frequently with the task of promoting genuine and closer settlement, and of reconciling the conflicting rights and interests of landholders and land seekers. The practice of securing possession of land by "dummying" was prohibited in 1875, and in 1884 stability of tenure was granted to pastoral lessees. In 1885 the present system of land administration by local land boards in land board districts and territorial divisions was introduced, placing the disposal of this most important national asset on an orderly basis, although the problem of promoting closer settlement remained unsolved.

The question of fiscal policy was a prominent issue at Parliamentary elections during this period, and a change of Government sometimes involved a reversal of existing tariff arrangements. Thus in 1874 customs taxes were abolished, except for a few specific duties on liquor and narcotics. A Protectionist tariff, introduced in 1886, was repealed in the following year, but was re-imposed in 1892, to be revoked four years later after a Free-trade Party had gained office.

Immigration from Europe to New South Wales was at no period nearly so great as to the United States, and during the period 1877-1886—the most active decade of immigration ever experienced in New South Wales the net gain of population by migration was only 200,000. Yet, despite the vast territory of the State, people settled in the towns and city rather than in rural districts, with the consequence that the population steadily became

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urban rather than rural in character, and the predominant interests industrial in the narrow sense. This development largely determined the course of politics, and progress in the country, and its influence became clearly apparent in a growing industrial agitation. These years were affected by frequent strikes, and in the late eighties the effects of industrial ferment apparent in other countries were marked by the spread of socialistic doctrines, the visit of propagandists advocating a new social order and the strong undercurrent of sympathy evinced in the cause of strikes abroad. In 1881 a Trade Union Act was passed removing all existing legal restrictions on combinations of workmen for industrial purposes. These events produced a very rapid growth in trade unionism, which became a most important factor in the economic life of the community, and had its counterpart among organisations of employers.

While these developments were proceeding the commercial prosperity began to show signs of weakening, and after 1885 the volume of trade contracted, the programme of public works was curtailed, and unemployment became rife. These circumstances further embittered industrial relationships, and in the prevailing discontent the efforts of the new unions to improve conditions of employment culminated in the maritime strike of 1890—one of the most momentous industrial events in the history of the State. The strike failed, and unionism began to turn its attention to parliamentary action to further its industrial aims. Recourse to political activity led to the development of a typically Australian form of unionism, and to the rise of the Labour Party as a power in Parliament; it induced a pronounced type of party government, characterised by pledges and "caucuses," and a new cleavage of political interests was formed.

These important events were accompanied by the worst financial crisis experienced in the State. The industrial depression gradually became more severe after 1885, and a series of world financial upheavals, signalised by the Baring crisis of 1890 in England, served to aggravate local conditions. In 1893 the business failures and alarms of two years' duration culminated in the suspension of payments by thirteen out of twenty-five local banks, with consequent disaster to the commerce and industry of the State. This severe experience was productive of much good. More discipline was introduced into the financial system, securities were more carefully scrutinised before acceptance, certain bogus institutions ceased to exist, the banks associated more closely, and an office was opened for daily clearances between banks.

Moreover, the withdrawal of English capital from local investments encouraged local saving and spontaneous internal development.

1894-1900.

After the financial crisis industrial depression became more acute; it was intensified by the continuance of low prices for wool, the withdrawal of British capital from local investments, a succession of bad seasons, and the diminution of Government expenditure from loans. Immigration practically ceased in 1893 and did not revive until 1905, unemployment became prevalent, conditions of employment ceased to improve, and some emigration was evident. At first a number of strikes occurred, with disaster to the strikers; trade unionism lost power and many unions decayed; but although the numerical strength of the Labour Party in Parliament decreased, it was sufficient to influence the passage of some most important industrial legislation and to effect a change of Government in 1899. This movement was consummated in 1901 by the enactment of provision for a system of compulsory industrial arbitration, which has had a most important influence on the subsequent economic development of the State. These matters and the important questions of federation and fiscal policy dominated politics.

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The decision in 1899 of the six Australian States to federate ultimately brought about a reversion from the virtual "free-trade," adopted by the State Government in 1896, to "protection," introduced by the Commonwealth Government in 1901. A policy of non-political control of appointments and promotion in the civil service was adopted in 1895.

Most important changes had gradually come about in the primary industries. Wheat-growing expanded steadily, until an export trade was established in 1898; refrigeration was applied to sea cargoes, and an important oversea trade in butter and frozen meat grew up. The prices realised for wool improved gradually after 1896, and as buyers continued to seek wool at its source, growers benefited by the speedy returns from Sydney wool sales. With these developments the industrial outlook brightened, and a period of remarkable prosperity opened.

1901-1910.

In these happy circumstances the Commonwealth of Australia came into being. The new Government was clothed with a wide range of powers, concurrent with those of the State Government, and in a number of important Federal matters, viz., customs, excise, defence, coinage, currency, bounties on production and export, naturalisation, extradition, post and telegraphs, lighthouses, quarantine, and certain minor matters it was given exclusive authority. Henceforward the activities of the Commonwealth were important factors in determining the course of State development. A policy of encouraging local manufactures was adopted in 1901, when, in October, uniform customs duties were imposed; a Federal High Court was established with a general appellate jurisdiction—in some cases final; in 1903 a Commonwealth Court of Conciliation and Arbitration was established with jurisdiction in interstate industrial matters.

With the introduction of a system of industrial arbitration, there set in more intense development in the political and industrial systems of the State, and an era of sectional combination to secure common objects. Trade unionism spread rapidly as workers combined to obtain the assistance of the Court of Arbitration in improving their working conditions. Employers organised in order to meet the situation unitedly, and an Employers' Federation was founded in 1903. In Parliament a new significance attached to party organisation, so that with the continued advocacy of solidarity, the pledge, party platform, party meetings and caucuses, the system sometimes called "machine politics" developed peculiarly local characteristics. These developments in the industrial and political spheres had their counterpart in the commercial world in the rapid growth of joint stock companies to handle business on a large scale, and in the formation of trusts and combines for the more effective prosecution of business. From time to time restrictive legislation was introduced.

Although the conflict of party interests became more strenuous, 'a new political and social consciousness seemed to awaken and marked progress was made. State assistance by pensions for indigent aged persons was provided in 1900 and for invalids in 1907; payment of compensation to workmen in cases of industrial accident was prescribed in 1910, and effective measures were taken in 1908 to abolish and prevent a system of sweating female and juvenile workers. An instalment of the principle of paying wages according to needs was introduced in 1905, and the first official estimate of the living wage was made in 1907. An Act to protect the property of married women (1897) was followed in 1902 by the introduction of the women's franchise. Education again became a topic of vital interest in the community, and, after a strong agitation, a series of far-reaching reforms were begun in 1904, including the introduction of free primary

education in 1906 and of reforms in the syllabus, the training of teachers, and, after 1910, the enlargement of the system of secondary and University education.

This period was characterised by unsurpassed economic development, based upon the expansion of the rural industries and the improvement of foreign markets for primary products. Immigration revived after 1903, new tenures of land were introduced, a system of State finance was established to assist settlers, the Murrumbidgee Irrigation Scheme was commenced, and the tenure of land in the Western Division was placed on a liberal basis. Moreover, Local Government, which after the adverse experiences of the premature system of the forties had been confined to a small number of towns, was extended in 1906 to include hitherto unincorporated districts as "shires" covering three-fifths of the area of the State.

1911-1914.

This period of prosperity, during which the State had regained its economic stability and the Federal Government had developed strength, was followed by a new movement towards assuming the responsibilities of nationhood. Much attention was devoted to schemes of local defence under the ægis of the Commonwealth Government. The nucleus of an Australian fleet was established, and a system of compulsory military training was inaugurated for home defence. A system of local coinage was introduced: the Federal Government took charge of the issue of bank notes; and the Commonwealth Bank of Australia was established. In 1911 wireless telegraphy was introduced, and the first aeroplane flight was made successfully.

Social progress continued, and the most important reforms in the primary system of education were followed by a wide extension of facilities for secondary and University education, State aid in the form of bursaries being provided in cases of financial disability. At the same time, the scope of the University was extended and provision made for an elective body of control; technical education received more attention, continuation schools and rural schools were established, and greater provision was made for medical attention to school children. The Government assumed greater responsibility in regard to housing by providing and carrying out schemes for garden suburbs, and by making advances to persons building homes. Baby clinics were opened, and maternity bonuses were instituted by the Federal Government to provide financial assistance at childbirth.

Each election after 1901 saw a greater proportion of pledged labour representatives returned to Parliament, particularly in the Federal Houses. Finally in 1910 the new party assumed office, both Federal and State, and since then has been either in charge of the Government or in direct opposition. Industrial problems constantly occupied the Legislature; much attention was given to matters of arbitration and to the problem of avoiding strikes and lockouts, which were constantly dislocating the course of industry. The principle of the "living wage" was established firmly and pro-vision made for its regular determination. Prices, employment, and monopolies in restraint of trade were all matters of live interest, and were made subjects of close inquiry both State and Federal. The rise in the cost of living, which had been steady during the previous decade, proceeded more rapidly, and with it came the need for frequent re-adjustment of wages. which, coupled with questions of hours, union principles, and working conditions, led to continual agitation among the new working-men's organisations, which were of greater relative extent in New South Wales than in any other part of the world.

The land problem received further attention. A graduated land tax was imposed upon large estates by the Federal Government to induce closer

HISTORY.

settlement through their subdivision; additional tenures on a leasehold basis were created to stay the process of alienation; the Murrumbidgee Irrigation Scheme was advanced sufficiently to receive settlers, and an additional scheme on the Murray River was agreed upon.

1914-1920.

The outbreak of the European War in 1914 intruded a dominating external influence into a local situation fraught with great possibilities of economic and social progress. Although the principle of "business as usual" was at first widely urged, it was soon found that the dislocation of trade and the necessary mobilisation of the national resources to meet the demands of the times produced a re-adjustment of economic conditions and of political parties and policies which diverted the normal trend of development.

The successful prosecution of the war became the dominant issue, and the High Court decided early that the Commonwealth Government could do legally anything which might conduce to the successful prosecution of the war (subject, of course, to Imperial control). As a result wider powers were assumed in the Federal sphere than were exercised ordinarily in time of peace. A War Precautions Act placed power of issuing regulations in many important matters in the hands of the Federal Executive Government. A censorship of the press was established; trade and commerce were regulated closely to prevent trade with enemy countries and to secure adequate supplies of raw materials for the Imperial Government; investment and the import of luxuries were restricted in the interests of finance; unprecedented loans for war purposes were floated and subscribed on the local markets; prices were regulated, and comprehensive schemes of government control and marketing of primary products were initiated. Great numbers of men in the prime of life enlisted for war service, and large military encampments were maintained. Consequently production languished, but the phenomenal rise of prices due to war conditions and to the immense expenditure of money for war services and supplies created an air of artificial prosperity, which endured until the close of 1920.

Domestic politics were disrupted in 1916 on the issue of conscription for service abroad, which was submitted as a referendum to the people. The Labour Party, which held office in both State and Federal Governments, became sharply divided, and with the resultant expulsion from the Labour movement of conscriptionist members of Parliament, including the Premier and most members of the Cabinet, a new party distribution was effected and Labour lost office. The industrial ferment of previous years continued, and was increased by these events and by the failure of wages to rise as fast as the cost of living, although in many cases wartime profits The discontent in certain sections was intensified by the were large. imprisonment of a number of members of a well-known revolutionary body in connection with the outbreak of a series of disastrous fires in Sydney. The prevailing discontent finally burst out in 1917 into the most widespread strike in the history of the State. The strikers were, however, defeated by the introduction of loyalist workers from the country districts and from Victoria, and by the unyielding attitude of the Government, and much bitterness was engendered by the conflict.

This event led in the following year to renewed attempts to secure industrial peace. A Board of Trade was appointed, with power to promote amicable relationships between employers and employees and to declare regularly a living wage. This power was exercised in 1919 to review the whole problem of the cost of living, and a substantial increase in rates of wages resulted immediately. But the close of the war and the sudden world-wide rise of prices to unprecedented heights led to yet greater economic disorder and to a recrudescence of industrial disputes. Amid the prevailing discontent an election was held in 1920, under the system of proportional representation. The Labour Party was returned with a bare majority over the Nationalist and Progressive Parties on a policy of more effective price control, profiteering prevention, land legislation, and adjustment of finance.

Social and industrial progress continued. Further improvements were made in the system of education by providing for compulsory regular attendance of children of school age, by close supervision of private schools, the establishment of a Conservatorium of Music and a State Orchestra. All legal disabilities preventing women from holding public office or entering the learned professions were removed, the benefits of workmen's compensation were extended to all classes of workers, facilities for legal aid to poor litigants were provided, the State Housing Scheme was extended, a Fair Rents' Court was constituted, and through private subscription large funds were established for the care of soldiers and their dependents.

1921-

The remarkable boom in trade and commerce which followed closely upon the termination of the war showed signs of collapsing in New South Wales some months after the fall of prices had set in oversea. The resultant reversal of economic fortunes dominated all issues, and industrial and political problems centred around the re-adjustments necessary to meet the altered conditions. These problems were complicated by the stagnation of trade and industry, with the resultant unemployment. But although the problem of the workless became so acute that frequent demonstrations were made and extensive relief was given, at no period was unemployment so widespread as in older countries. Industrial conferences were held—some proved abortive through conflict of fundamental principles of the conferring parties, while others suggested the usual remedy of opening Government relief works, but this course was prevented by financial stringency.

During the early part of the depression, movements, begun in more prosperous times, were continued to maintain and even improve working conditions. During 1921 the working week in many trades was reduced to forty-four hours after exhaustive inquiries, and in October, 1921, the living wage, which a year earlier had been declared at £4 5s., was reduced to £4 2s., but the Government refused to put the reduction into operation, and considerable controversy was aroused.

In December, 1921, a constitutional crisis was precipitated by the resignation of the Speaker of the Legislative Assembly, and as an outcome the Labour Government was defeated after holding office for two years. A general election was held in March, 1922, again under the system of proportional representation. Large numbers of candidates presented themselves, and a new political group appeared—the Country Party—which gained a number of seats. This party had appeared already in the elections of 1920 as Progressives and in the Federal elections of 1919. It had associated itself with movements for formation of separate political units in the northern and southern parts of the State, and had conducted much propaganda on behalf of country interests. None of the three parties gained an absolute majority, but, upon the resignation of the Labour Ministry, a Nationalist Government was formed.

With the reversal of the state of parties at the elections, extensive changes of policy were made. Economy in administration, enforcement of the reduced living wage, reversion to a forty-eight hour week, modification of industrial arbitration, and the abolition of restrictions on trade and industry became features in the policy of the Government. The problem of land settlement was subjected to considerable investigation, and activity in immigration was revived.

Steps were now taken to introduce a measure of law reform whereby effete laws were removed from the Statute Book. In addition, the extent of arbitration rights was restricted, so that rural workers and civil servants were removed from the jurisdiction of the Arbitration Courts. The education system was modified by remodelling the examination system and imposing fees upon admission to certain secondary schools. The number of applicants for secondary education declined considerably, but the continuation courses of a commercial and technical character became more popular. Rural schools, providing elementary agricultural training, were opened in a number of country centres. The problem of providing adequate accommodation for children in primary schools had become acute, and was vigorously attacked, a sum of £1,000,000 being made available from loan funds for building purposes during the years 1922-23 and 1923-24. The demand for musical education continually expanded, and the Conservatorium of Music found difficulty in accommodating all applicants. However, the State Orchestra, which had operated actively for over two years, was disbanded in September, 1922, through financial failure.

As the year 1922 progressed signs of a revival of trade had become more evident. The market for wool recovered from its temporary depression, and very favourable prices were realised. The seasons had improved, large quantities of wheat and butter were exported at remunerative prices, industry at home and abroad began to resume its normal course, and unemployment decreased, although a number of large manufacturing establishments remained closed.

However, agricultural and dairying operations failed to provide a steady basis for the trade of the State on account of adverse market and seasonal conditions in 1923. Pastoral conditions were not seriously affected by the former cause, and the record prices obtained for wool provided excellent returns to the State. Gradually economic conditions improved, and in 1923 a new stability was attained. The volume of employment increased steadily, certain large works were re-opened, and new operations were commenced, and the need for charitable aid diminished. Those remaining out of work were principally unskilled labourers, and in some trades, notably building, there was a shortage of artisans, particularly in Sydney, where very great building activity was manifested. However, the disturbed state of international trade and the prevalence of drought conditions over the northern part of the State reacted adversely upon the general prosperity. Several State industrial undertakings which had been operating at a financial loss were closed down and the assets disposed of.

In 1923 a comprehensive scheme of rural development was propounded, partly as an outcome of the investigations of the Select Committee on Agriculture in 1920 and 1921. A very important migration agreement was made between the State, Commonwealth, and Imperial Governments, with the object of placing 6,000 oversea settlers on land in New South Wales within a period of five years. At the same time a measure was drafted to provide a complete basis for co-operative enterprise for rural and urban development and credit, to provide new facilities for self-help, and to bring the benefits being reaped from co-operation in other lands within reach of producers and consumers in New South Wales. In response to a lengthy

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agitation it was decided towards the close of the year to refer the question of establishing new States within New South Wales to a Royal Commission of inquiry.

In the early part of the year an agreement was made permitting the Victorian Government to extend two lines of railway across the border in the south-west Riverina, and in December the North Coast railway was opened for traffic as far as Murwillumbah. Under the auspices of the British Cotton-growing Association much propaganda was conducted in favour of cotton-growing, and, although the area actually cropped was comparatively small, experiments were undertaken by farmers over a wide area, and a cotton ginnery was opened at Newcastle and a spinning mill at Wentworthville.

CONSTITUTION AND GOVERNMENT.

T HERE are in New South Wales three administrations, viz., the Federal, which meets in Melbourne (Victoria), and 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 concernthese 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 seven diverse sources, comprising 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; sundry 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, but 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." He may, if he sees sufficient cause, dissent from the opinion of the Council and refer the matter to the Imperial authorities through the Secretary of State for the Colonies. The extent of the Governor's discretionary powers, however, tends to contract though he still possesses important spheres of independent action, such as in granting dissolution of Parliament and in making appointments to the Legislative Council. He is, moreover, 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 his Ministers take the responsibility for their advice, on which he acts. 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, at a salary of £5,000 per annum, with certain allowances for his staff, provided by the Constitution Act out of the revenues of the State.

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.

The present Governor is Admiral Sir Dudley R. S. De Chair, K.C.B., M.V.O. He was sworn in on 28th February, 1924.

The Executive.

All important acts of State are performed or sanctioned by the Governorin-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.

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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, 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.

The members of the present Ministry, which assumed office on 13th April, 1922, are as follow:--

Premier-The Hon. Sir G. W. Fuller, K.C.M.G., M.L.A.

Vice-President of the Executive Council-The Hon. Sir J. H. Carruthers, K.C.M.G., LL.D., M.L.C.

Secretary for Lands and Minister for Forests-The Hon. W. E. Wearne, M.L.A.

Colonial Secretary and Minister for Public Health-The Hon. C. W. Oakes, C.M.G., M.L.A.

Attorney-General-The Hon. T. R. Bavin, M.L.A.

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Minister for Agriculture-Captain the Hon. F. A. Chaffey, M.L.A.

Minister of Public Instruction-The Hon. A. Bruntnell, M.L.A.

Secretary for Mines and Minister for Local Government—The Hon. J. C. L. Fitzpatrick, M.L.A.

Minister of Justice-The Hon. T. J. Ley, M.L.A.

Minister for Labour and Industry-The Hon. E. H. Farrar, M.L.C.

Member of Executive Council (without portfolio)—The Hon. F. S. Boyce, M.L.C. The salaries payable annually to members of the Cabinet as from 1st July, 1922, were fixed as follows by the Parliamentary Allowances and Salaries Act. 1922:--

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The Premier								
The Attorney-O	deneral	• •	·· .	••	••	••	•••	1,600
The Vice-Presi	ident of	the]	Executiv	re Co	uncil (and le	eader	
of the Gove	ernment	in the	Erista Erista	ative (Council)		900
Nine other Min	nisters o	f the	Crown,	£1,50() each	• •	••	13,500
							-	
Тс	otal		••	••			£	18,000

These amounts are inclusive of the allowance of £600 per annum paid to members.

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 is a constituent body; 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. However, bills involving money matters may be introduced only by a Minister on the recommendation of the Governor, and in this way the responsibility of the Ministry for financial measures is secured.

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 both Houses of 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 the Parliamentary Electorates and Elections Act, 1912 (as amended in 1918), which 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,

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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 at his discretion may summon any person to the Legislative Council, provided that such person 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. In making appointments the Governor acts ordinarily on the advice of the Executive Council, but he may at his discretion refuse to make appointments. 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. The lowest number of members during the past twenty years was fifty-one in 1911. In 1917 there were seventy-one members of the Council, and this number was not exceeded until 1921, when sixteen new appointments were made, and the total membership on 29th February, 1924, was eighty-two.

The Council is presided over by a President appointed from among the members by the Governor. He receives an annual salary of £925. There is also a Chairman of Committees, who receives a salary of £500 per annum. As a matter of privilege all members of the Legislative Council and of the Legislative Assembly are allowed to travel free on State railways and tramways.

. 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. It was provided in 1916 that 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. At the close of 1918 all legal impediments to the election of women to the Legislative Assembly were removed. Several women have since contested seats at the elections, but none have been elected. The seat of a member becomes vacant in similar cases to those stated above for Legislative Councillors.

The House is presided over by a Speaker, whose election is the first business of the House when it meets after election. He presides over debate, maintains order, represents the House officially, communicates its wishes

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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 at Deputy-Speaker.

Payment of members of the Legislative Assembly was introduced as from 21st September, 1889. The amount fixed originally was £300 per annum, but it 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, and reduced to £600 as from 1st July, 1922. An aggregate amount of £2,700 is provided for postage, each member receiving an order monthly for one-twelfth of his annual allowance. The salary of the Speaker is £1,400, of the Chairman of Committees £840 per annum, and, since 1912, the leader of the Opposition has received an annual allowance of £250 in addition to his allowance as member.

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 appointed by ballot as soon as practicable 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 prosecute inquiries, to summon witnesses, and to compel the production of books, &c.

The Chairman receives as remuneration £3 3s. for each sitting of the committee, and the other members £2 2s. each.

Proposals for public works of an estimated cost exceeding £25,000 must be submitted and explained by a Minister in the Legislative Assembly, and then referred to the Public Works Committee for report.

Public Accounts Committee.

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For the better supervision of the financial business of the State a Public Accounts Committee is appointed every session 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.

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Committee of Elections and Qualifications.

Within seven days of his election the Speaker is required by the Parliamentary Electorates and Elections Act, 1912, to select mine members of the Legislative Assembly to act as the Committee of Elections and Qualifications. His choice is subject to the approval of the House. The Committee is clothed with judicial powers, and each member is required to take an oath of impartiality. Its business is to inquire into and determine matters connected with the 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 Board of Water Supply and Sewerage.

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.

In each case the authority controls a specific service, and administers the statute law in relation to it.

Auditor-General.

The office of Auditor-General is the real security that public moneys will be collected and expended in accordance with the wishes of Parliament.

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 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 1894 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 membership was submitted to the electors by referendum, and as a result the number of districts and of representatives was reduced to 90 in 1904.

In 1918 an Act was passed to introduce a system of proportional representation in respect of the State Parliamentary elections. Under this

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system the number of members remained at ninety, and twenty-four electoral districts were constituted; eight constituencies in the metropolitan area, and the City of Newcastle, are represented by five members each, and fifteen districts return three members each. Casual vacancies are filled by the unsuccessful candidate of the same constituency who represented the same party interest as the late member and whose count of primary preference votes was next highest at the last general election. Where such a candidate is not available, the leader of the party concerned nominates a successor.

An analysis of the results of the two elections under this system was published in the 1922 issue of this Year Book at page 38.

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 appointed by the Governor from the Public Service of New South Wales.

The following table shows at the various dates on which the membership of the Assembly or the franchise was altered, and at election years since 1901 (a) the size of the elective Chamber, (b) the average number of persons per member, and (c) the proportion of the population who possessed the right to vote.

Year of Election.	Number of Members of Legislative Assembly.	Population per Member.	Proportion of persons enrolled to Total Popula tion.
			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
1901	125	10,900	25.3
1904	90	15.900	48.3
1907	90	17,000	48.8
1910	90	18,200	53·3
1913	90	20,500	55-1
1917	90	21,000	58.5
1920	90	22,800	56·1
1922	90	23,800	58.5

The number of distinct 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. When women were enfranchised in 1904 practically the whole of the adult population became qualified electors.

After the revision of the electoral rolls (April to October, 1922), the number of names appearing thereon was 1,194,636, which bore a ratio of 55 6 per cent. to the total population at 30th June, 1922.

The elections of members of the Legislative Assembly are conducted by secret ballot. Adult British subjects, men and women, are qualified for

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CONSTITUTION AND GOVERNMENT.

enrolment as electors when they have resided in the Commonwealth for a period of six months, in the State for three months, and in the electoral district for one month prior to the issue of the writs for the election. Persons are disqualified from voting who are of unsound mind, a charge on public charity, criminals, disorderly persons, or defaulters from justice. Each elector is entitled to one vote only. The electoral lists are compiled annually under provisions for compulsory enrolment and revised before a special court under the presidency of a stipendiary or police magistrate.

Electors absent from their districts may record their votes at any pollingplace in the State, and postal voting is allowed in the case of persons precluded from attendance at any polling-place by reason of illness or infirmity, distance over 15 miles, or travelling.

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.

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:—

	Elect	ors.		Cont	ested Electo	rates.	
Year of Election.	· · · · · · · · · · · · · · · · · · ·	1		Votes R	lecorded.	Inform	al Votes.
	Enrolled.	Per Member.	Electors.	Number.	Percentage.	Number.	Percentage
1894—Males	298,817	2,390	254,105	204,246	80.38	3,310	1.62
1895-Males	267,458	2,139	238,233	153,034	64.24	1,354	•88
1898-Males	324,339	2,595	294,481	178,717	60.69	1,638	.92
1901—Males	346,184	2,769	270,861	195,359	72.13	1,534	•79
(Males	363,062		304,396	226,057	74.26		
1904 Females	326,428	•••	262,433	174,538	66.51		
(Total	689,490	7,661	566,829	400,595	70.67	3,973	•£9
(Males	392,845		370,715	267,301	72.10		
1907 Females	353,055		336,680	204,650	60.78		
(Total	745,900	8,288	707,395	471,951	66.72	13,543	2.87
(Males	458,626		444,242	322,199	72.53		the second
1910 Females	409,069	•••	400,139	262,154	65.52		
(Total	867,695	9,641	844,381	584,353	69-20	10,393	1.78
f Males	553,633		534,379	385,838	72.20		•.
913 Females	484,366	•••	468,437	302,389	64.55		
(Total	1,037,999	11,533	1,002,816	688,227	68.63	14,439	2.10
(Males	574,308		525,681	328,030	62.40		
917 Females	535,522		487,585	295,354	60.57		
	1,109,830	12,331	1,013,266	623,384	61.52	5,844	•94
Males	593.244		593,244	363,115	61.21	1.1	
.920 Females	561,193	•••	561,193	285,594	50.89		
(Total	1,154,437	12,716	1,154,437	648,709	56.19	62,900	9.70
(Males	636,662		636,662	466,949	73.34		
922 Females	614,361		614,361	408,515	66.49		. '
	1,251,023	13,900	1,251,023	875,464	69.98	31,771	3.63

The analysis shown above indicates that the proportion of electors who fail to record their votes is large, even if due allowance is made for obstacles to voting, especially in sparsely-settled districts. The highest proportion of votes to enrolment, 804 per cent., was recorded in 1894, when there was a strenuous contest on the question of fiscal reform; and the lowest proportion, 562 per cent. was recorded in 1920. The elections in the latter year were the first under the system of proportional representation, and the method of voting was somewhat complex, the electors being required to sign a statutory declaration before obtaining a ballot-paper and to record a preference for every name on the ballot-paper. Under these conditions an unusually large number of electors refrained from voting.

At 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 in 1922 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 influences the size of the polling is the intensity of interests in party issues.

The number of women exercising their right to vote has always been less, relatively and absolutely, than the number of men. At the first elections after enfranchisement 66 per cent. of the women enrolled recorded votes, then the proportion declined. In 1910, when a Labour Government was placed in office for the first time in the State Parliament, and in 1913, the proportion of women who voted was about 65 per cent.; in 1920 it was less than 51 per cent., but in 1922 it was practically the same as in 1904.

It is noteworthy that, whereas at the elections of 1910 and previous years a greater proportion of electors enrolled recorded their votes at State than at Federal elections, the proportion has, since 1913, been greater at Federal than at State elections, viz.:—1913, Federal 69:28 per cent., State 68:63 per cent.; 1917, Federal 71:17 per cent., State 61:52 per cent.; 1919, Federal 66:97 per cent., State (1920) 56:19 per cent. The change was due doubtless to the dominance of war issues, for the proportion of votes cast at the State elections of 1922 rose to 69:98 per cent. as against a decline to 56:16 at the Federal elections of that year.

Number of Parliament.	Date of Opening.			Date of 1	Dissolutio	m.	E	Duration.		Number o Sessions.	
							yrs.	mths.	dys.		
14	27 Feb.	1889		6 June	1891		2	3	10	4	
15	14 July	1891		25 June	1894		2	11	11	4	
16	7 Aug.	1894		5 July	1895		0	10	28	1	
17	13 Aug.	1895		8 July	1898		2	10	25	45	
18	16 Aug.	1898		11 June	1901		2	9	26	5	
19	23 July	1901		16 July	1904		2	11	23	4	
20	23 Aug.	1904		12 July	1907		2	10	19	4	
21	2 Oct.	1907		14 Sept.	1910		. 2.	11	12	5	
22	15 Nov.	1910		6 Nov.	1913		2	11	22	5	
23	23 Dec.	1913		21 Feb.	1917		3	1	30	5	
24	17 April	1917		18 Feb.	1920	ي م	2	10	8	4	
25	27 April	1920		17 Feb.	1922		1	9	22	3	
26	26 April	1922	•••	Sitting*							

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

29th February, 1924.

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CONSTITUTION AND GOVERNMENT.

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 3 years 1 month 30 days.

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 sixty-five years under the present system there have been forty Ministries, but only twenty-five Parliaments. Up to 3rd August, 1894. twenty-seven Ministries had held office.

	Ministr	y.				In O	ffice.				
Number.		Name.	•		From		То-	•		Durati	on.
•								· · · ·	yrs. 1	nths.	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	•••			30 Aug.	1904	1 Oct.	1907	3	1	2
33	Wade	•••• •••	•••• •••	• •*	2 Oct.	1907	20 Oct.	1910	3	0	19
34	McGowen	••• •••	148	•••	21 Oct.	1910	29 June	1913	2	8	9
35	Holman	***	***	•••	30 June	1913	15 Nov.	1916	3	4	16
36	Holman	· · · ·	•••	•••	16 Nov.	1916	11 April	1920	3	4	27
37	Storey		•••		12 April	1920	9 Oct.	1921	1	5	28
38	Dooley	••••		••••	10 Oct.	1921	20 Dec.	1921	0	2	10
39	Fuller	•••	***	••	20 Dec.	1921	21 Dec.	1921	0	0	1
40	Dooley		•••	•••	21 Dec.	1921	13 April	1922	0	3	23
41	Fuller	e.me	•••	•••	13 April	1922	In office.	**************************************		••••	
									1.		

* 29th February, 1924.

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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 Governments are not included:---

Head of]	Expend	iture.	7		1910-11.	1915-16.	1920-21.	1921-22.	1922-23.
		.		l		l			· · · · · · · · · · · · · · · · · · ·
Governor-					£	£	£	£	£
Governor's Salary	7		•••		5,000	5,000	5,000	5,000	5,000
Official Secretary					335	400	536	687	630
Clerk							305	. 391	343
Private Secretary	7				350	350			
Aide-de-Camp					350	350			
Orderlies	••••		•••	;	728	796	290	320	321
Repairs and Mai	 ntoner		Rouide		8,183	1,653	2,929	2,727	2,575
Miscellaneous		106 01	INCOLUC		1,231	1,547	1,012	1,303	
miscentaneous		•••	•••	•••					
	Total	•••	••• ·	£	16,177	10,096	10,082	10,428	10,305
Executive Council-									
Salaries of Officer	s			•••	279	•••	317	473	458
Other Expenses					25		150	163	439
-	Total			£	304		467	636	
N.S									
Ministry— Salaries of Min	istere				11,040	11,040	-21,866	26,825	21,665
Other Expense		•••			1,445	1,298	1,436	1,880	1,290
	Total			£	12,485	12,338	23,302	28,705	22,955
Parliament—				~	12,100	10,000	-0,004	 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	22,000
The Legislative C	ounci	1						· .	
Railway Passes			•••	£	5,810	6,070	12,455	14,924	14,757
The Legislative A	anomi	، مار							
Allowances to				[22,423	40,335	57,819	67,612	47,020
Railway passes		619	•••	•••	10,869				
		el				10,387	16,398	17,346	17,055
Other Expense	e (r osi	tage 5	tamps,		1,583	1,770	2,752	3,258	3,391
Miscellaneous-				£	34,866	52,492	76,969	88,216	67,466
Fees and expe	nses (of Po	rliamon	tarr				· · ·	
					F 500	0.007	0.077		
Standing Com				OFES	5.529	6,225	2,957	5,082	5,325
Salaries of Offic	ers an	iu ota	ш	•••	18,903	21,454	25,753	24,99:	22,584
Printing				•••	7,687	14,967	15,016	21,552	16,972
Hansard (inclu	ding S	salarie	es)	•••	5,668	7,121	8,988	8,584	9,185
Library	<u></u>	•••	<u>.</u>		795	677	775	911	821
Water, Power,					504	575	565	560	830
Postage, Stores	s, and	Stati	onery		887	947	1,702	1,528	1,253
Refreshment R	ooms				465]	1	b ' 1	3
					564	} 3,339	{ 1,856	} 13,807	} 4,554
				£	41,002	55,305	57,612	77,016	61,524
T	otal P	arlian	nent	£	81,678	113,867	147,036		143,747
Electoral Office and	Elect	iona			<u> </u>				·
Salaries	meet	10118-	-		HOC	1 100	0.000	0.000	1 000
Blacking Drive					788	1,123	2,230	2,026	1,826
Elections, Printi	ng or	Flec	toral R	olls,					
Expenses of El	ectora	I Reg	istrars,	and				1	
Contingencies	•••		•••		35,291	56,491*	27,437	69,914	16,642
T	otal	•••	•••	£	36,079	57,614	29,667	71,940	18,468
Royal Commissions	and S	alaat	Commi	ttoos		·			
Fees, etc	anu o	00000	Comm		0 407	1 4.5	÷'074	CA.	1 001
Miscellaneous		•••	•••	•••	2,627	{ 4,114	7,274	644	1,231
	•••		•••	•••	1,165	1	12,206	28,863	1,134
	otal	•••	•••	£	3,792	4,114	19,480	29,507	2,365
GRAND TO		•••	•••	£	150,515	198,029	230,034	321,372	198,737
		Popu	lation]	ls. 10d.	2s. 1d.	2s. 2d.	3s. 0d.	ls. 10d.
			1.000			l de la compañía de la	h		ļ

* Includes £30,244 for Liquor Referendum.

The cost of Parliamentary Government in 1922-23 represented less than 15 per cent. of the governmental expenditure during that year, that is excluding expenditure on business undertakings. The corresponding ratio in 1910-11 was 2.6 per cent. In addition to the referendum taken in 1915-16, general elections were held in two of the years shown above, viz., 1910-11 and 1921-22, and the expenditure in those years was considerably increased thereby.

THE COMMONWEALTH.

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 federation of the six Australian States was inaugurated formally on 1st January, 1901, for their mutual benefit in matters upon which it was agreed joint action was desirable. 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.

The numbers of representatives elected from the various States to the House of Representatives are as follow:—New South Wales, 28; Victoria, 20; Queensland, 10; South Australia, 7; Western Australia, 5; Tasmania, 5; while it has been provided that a representative of the Northern Territory may attend and participate in debates without having the right to vote.

FEDERAL ELECTORAL SYSTEM.

For the purpose of electing representatives to the Senate of the Federal Parliament, New South Wales is treated as one constituency, returning six members, each for six years, three of whom retire triennially. Its twentyeight members of the House of Representatives are elected for three years from single-member constituencies under a system of preferential voting. Otherwise the electoral system is similar to that of the State.

An analysis of the voting at Senate elections in New South Wales since 1901 was published in the 1921 edition of this Year Book at page 40; the voting at elections of members of the House of Representatives from New South Wales has been as follows:—

Elec- tions.	Electors (Contested onl	Divisions	Votes R	ecorded.		tage of V led to Ele Enrolled	etors	Informa	al Votes.	
Year.	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	1.29	
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	517.398	498,209	330,362	239,980	63.85	48.17	56 16	25,665	4.20	

* 31409-C

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 the highest since the inauguration of the Commonwealth Parliament.

FEDERAL REFERENDA.

Analyses of the voting on Federal questions submitted to referenda were shown in the 1921 addition of this Year Book at page 42.

SEAT OF FEDERAL GOVERNMENT.

It is provided in the Commonwealth of Australia Constitution Act that the seat of Federal Government shall be within the State of New South Wales at a distance of not less than 100 miles from the City of Sydney, but that Parliament shall meet at Melbourne until such time as it meet at the Seat of Government. A site containing 912 square miles was chosen near Queanbeyan in 1908, and ceded to the Commonwealth in December, 1910. In 1915 an additional area of 28 square miles at Jervis Bay was ceded for use as the seaport of Canberra.

The administration of the Capital Territory is conducted in accordance with the Seat of Government (Administration) Act, and, until the Federal Parliament makes other provision, the Governor-General may issue ordinances having the force of law in the Territory unless disallowed by resolution of either House of Parliament. Laws hitherto in force in the Territory were retained except those relating to industrial arbitration, local government, water supply and sewerage, and those imposing rates and taxes other than duties on estates of deceased persons; they are administered by the State authorities. All revenue accrues to the Commonwealth, which repays the State for service such as education, police &c. New licenses to retail intoxicating liquors are not granted, and existing licenses may be renewed for the same premises only. Crown lands in the Territory may not be sold or converted into freehold.

In 1913 the name "Canberra" was chosen for the Federal Capital City, and the work of construction was inaugurated. Slow progress has been made, but in 1921 a Federal Capital Advisory Committee was appointed with a view to providing a scheme of works which would enable the early transfer of the Federal Parliament and Central Government offices to the chosen site. The scheme of works drawn up by the Committee provided a programme of works costing £1,799,000, which would enable the transfer of the Government to Canberra in three years. The general principles of the scheme were approved by Cabinet, but subsequently the programme was modified considerably. During the year ended 30th June, 1923, the sum of £335,325 was expended in the erection of buildings, the construction of works, &c., as compared with £148,916 in the previous year.

DEFENCE.

U PON 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, subject to Imperial approval, 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 or 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 or 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 classified as follows:—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 financial considerations and the resolutions passed at the Washington Conference on limitation of armament. At present, training is commenced by senior cadets in the year in which they reach the age of 16 years, two years later they are transferred to the citizen forces to undergo courses during another period of two years. The training of boys under 16 years as part of the defence system has been suspended though they are still required to register during the months of January and February of the year in which they reach the age of 14 years.

MILITARY DEFENCE.

The Commonwealth is organised for defence purposes into six military districts, corresponding as far as practicable with the political divisions into States. The second military district represents the State of New South Wales, excepting the North Coast district, the Barrier district, which are attached to Queensland and South Australia respectively, and the Denilijuin, Moama, and Corowa districts attached to Victoria.

			Mi	litary Distr	ict.		
Classification.	1st. Queens- land.	2nd. New South Wales.	3rd. Victoria.	4th. South Australia.	5th. Western Australia.	6th. Tasmania	Total.
Permanently employe	d 154	607	526	101	126	62	1,576
Citizen Soldiers	4,100	16.110	10,981	3,940	1,996	1,366	38,493
Engineer and Railwa							
Staff Compa	. 9	12	10	5	6	4	46
	of			}		1	
Officers	48	152	143	58	28	20	449
Reserve of Officers .	1,750	4,231	3,562	1.106	901	337	11,887
()h laima	. 57	55	150	27	35	19	343
Samian Cadata	3,733	14,251	10,701	3,452	2,004	958	35,099
Total	9,851	35,418	26,073	8,689	5,096	2,766	87,893

The following table shows the strength of the military forces of the Commonwealth on 1st August, 1923:--

A military college is maintained at Duntroon in the Federal Capital Territory for the training of officers.

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.

The fleet of the Australian Navy consists of 4 light cruisers, 12 destroyers and a parent ship, 1 submarine, 3 sloops, 2 fleet auxiliaries, 3 depôt ships, 4 minor vessels, and a boys' training ship. Of these, the following are in reserve:—1 light cruiser, 9 destroyers, 2 sloops, 1 submarine, 1 fleet auxiliary, 2 depôt ships, and 2 minor vessels.

There were 367 officers and 3,497 ratings on active service in the Royal Australian Navy in November, 1923; about 82 per cent. of the officers and 92 per cent. of the men were Australians, the remainder being on loan from the Royal Navy.

Reserves of officers and men for the Royal Australian Navy are provided from four services, viz.:—(a) Ratings who have completed periods of service; (b) officers permanently employed in the mercantile marine; (c) compulsory trainees of citizen forces; (d) volunteers enrolled for service in any capacity in time of war or emergency.

Junior officers are trained at the Naval College, Jervis Bay, and junior seamen ratings on the H.M.A.S. "Tingira" at Sydney. The general depôt of the Navy is at Westernport, Victoria, where the more advanced training of officers and men is conducted.

AIR DEFENCE.

An 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.

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IN New South Wales the State has established a system of national education which embraces all branches of primary, secondary, and technical education, and it contributes considerable sums towards the maintenance of the University of Sydney. In addition to the State schools, there are numerous private educational institutions subject to State inspection, of which the majority is conducted under the auspices of the religious denominations.

Development of the present School System.

The first school in New South Wales was established in 1792 by the Society for the Propagation of the Gospel in Foreign Parts. But, as late as 1845, a committee of inquiry reported that more than one-half of the children of New South Wales (then including Victoria and Queensland) were receiving no education at all.

Until the year 1848, education in New South Wales was conducted mainly by the religious denominations, with monetary assistance from the Govern-But in that year an undenominational scheme of education, or the ment. national system, as it was called, was introduced and conducted side by side with the denominational schools, each group of schools being placed under a The existence of these two boards continued until 1867, separate board. when the Public Schools Act provided for the continuance of the two classes of schools, but placed all schools receiving aid from the State under the control of the Council of Education, a board appointed by the Government. In practice the public schools were administered entirely by this board, and the denominational schools were governed partly by the Council and partly by the various religious bodies by which they were founded. From this dual control, transition was made to the present centralised system by the Public Instruction Act, 1880, which abolished all State aid to denominational education. State supervision of private schools ceased finally in 1882, when financial aid was discontinued. The Act of 1880, as amended by the Free Education Act, 1906, the Bursary Endowment Act, 1912, and the Public Instruction (Amendment) Act of 1916 and 1917, is the statutory basis of the present education system of New South Wales.

Denominational and other private schools continue in existence without endowment, but by virtue of the compulsory education principles of the Act of 1916, and of the conditions attaching to bursary awards for secondary and tertiary education, all primary schools, and most secondary schools, have become subject to a measure of inspection by officers of the State, and are required to conform to the standards prescribed by the Government. In December quarter, 1922, approximately 82 per cent. of the children between 7 and 14 years of age attended State schools, and 18 per cent. attended private schools.

PRESENT SCHOOL SYSTEM.

The principles of the present State or Public School system were originated by the Education Act, 1880, which is still in force, but since 1899 the growth of new educational ideals has led to extensive changes through endeavours "to construct a flexible, coherent, and comprehensive national system which should correspond with the economic and political ideals of the people." Corresponding changes have been wrought in the nature of school work, and in the Primary Syllabus of 1922 the aim of the system was thus stated: "The function of a school is to supply the circumstances and conditions most favourable to a child's growth." No

* 31387-A

particular method of teaching is imposed, and emphasis is laid upon the acquisition of personal culture and the development of intelligence as well as on the assimilation of useful knowledge.

Education under this system is 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 for limited periods, with the consent of parents, by ministers of religion. The Free Education Act, 1906, provided that all education in State primary schools must be free; fees in secondary schools were abolished by regulation in 1911, and were not reimposed until 1923. The Act of 1880 provided that attendance of children at school be compulsory between the ages of 6 and 14 years, but the Amending Act of 1916 raised the compulsory age at beginning to 7 years.

The State School system is subject to central guidance and control, being administered by a responsible Minister of the Crown, through a permanent Director of Education, who is Under-Secretary of the Department of Education. Practically the whole of the expenditure on State education is provided by appropriation from the Consolidated Revenue Fund.

The complete scheme of education, as established, insures co-ordination between both public and private schools, and provides a direct avenue from Kindergarten to University. The various stages are marked by examinations designed to test the fitness of candidates for higher education. Assistance to obtain secondary and tertiary education is accorded by the State through the bursary system to promising students who lack financial means.

Census Results.

Particulars of the numbers of persons receiving education and of the extent to which the rudiments of education—reading and writing—had been acquired at the censuses of 1901, 1911 and 1921 are shown in the Year Book for 1921 at pages 148-150.

SCHOOLS AND TEACHING STAFFS.

The following table shows the total number of public and private schools in operation at the end of 1901, 1911, and of each of 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 schools maintained by charitable organisations, shorthand and business colleges, etc.

		Schools.	1	Teaching Staffs.						
Year.				In Public Schools.*			In Private Schools.			Grand
	Public.	Private.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Total.
1901 1911 1918 1919 1920 1921 1922	2,745 3,125 3,152 3,152 3,124 3,163 3,216 3,213	890 757 699 678 • 679 677 678	3,635 3,882 3,851 3,802 3,842 3,893 3,891	2,829 3,165 3,522 3,410 3,432 3,549 3,696	2,318 3,034 4,803 4,806 4,948 5,117 5,310	5,147 6,199 8,325 8,216 8,380 8,666 9,006	337 366 423 387 431 465 461	2,303 2,262 2,205 2,367 2,360 2,463 2,435	2,640 2,628 2,628 2,754 2,791 2,928 2,946	7,852 9,145 11,650 11,756 11,995 12,522 12,763

* Including subsidised schools.

The number of teachers shown above excludes, in the case of public schools, students in training, who numbered 811 in 1922, and in the case of private schools, visiting or part-time teachers, who numbered 342 males and 804 females, some of whom doubtless attended more than one school and appear 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 1922 was only 41 per cent. of the total a slight increase since the previous year. In the private schools the proportion of men teachers has been small always, but it is increasing. Men constituted only 16 per cent. of the full-time teaching staff of private schools in 1922.

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 formerly collected in regard to private schools relate only to that period. The following statement shows the recorded 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.	Pu	Public Schools.†			vate Scho	ols.	Total	Proportion of Scholars Enrolled.	
Year.	Boys.	Girls,	Total,	Boys.	Girls.	Total.	En rol- ment.		Private Schools.
	,		<u>.</u>		 			per cent.	per cent.
1901	110,971	99,617	210,588	27,163	33,674	60,837	271,425	77.6	22.4
1911	116,317	105,493	221,810	26,962	34,588	61,550	283,360	78.3	21.7
1918	146,136	134,100	280,226	33,829	40,363	74,192	354,428	79.1	20.9
1919	150.465	138.466	288.931	34,267	40,669	74.936	363,867		20.6
1920	156,066	143,625	299,691	34.254	40.085	74,339	374.030	80.1	19.9
1921	163,699	151.529	315,228	35,903	42,557	78,460	393,688		19.9
1922	167,503	154,028	321.531	36,525	43,722	80.247	401,778		19.9

† Including Subsidised Schools.

Since 1901 the enrolment in public schools has increased by 50 per cent. while in the private schools it has risen by only 29 per cent., so that the proportion of children in public schools has advanced from 77.6 per cent. to 80.1 per cent. In the public schools there are more boys than girls, the proportions being boys 52 per cent., and girls 48 per cent.; in the private schools girls are in the majority, representing 54 per cent. of the enrolment.

Considering only children, for whom education is compulsory, the following table shows the numbers and proportions taught in public and private schools, based on the enrolment in December quarter omitting institutional schools and free kindergartens :--

		ar. Public Schools.			Proportion	per cent. Private Schools. 19·4 18·4 17·3	
	Year.	Public Schools.	Private Schools.	Total.	Public Schools,		
	1911	192,740	46,346	239,086	80·6		
	1916‡ 1917§	232,408 218,995	52,568 45,628	284,976 264,623	81.6 82.7		
^	1921§	246,136	53,664	299,800	82.1	17.9	
	1922§	253,073	55,361	308,434	82.1	17.9	

‡ Children over 6 and under 14 years of age. § Children over 7 and under 14 years of age.

* The numbers of pupils so excluded were as follows in 1922 :- Evening continuation 3,902, charitable 1,205, free kindergarten 720, technical colleges and trade schools 9,806; the number of persons enrolled at business colleges and shorthand schools in 1922 exceeded 7,000.

Apparently the proportion of children of statutory ages attending private schools decreased between 1911 and the introduction of provision for enforcing compulsory attendance in 1916, and increased thereafter.

Movement of School Population.

A very considerable movement of pupils from one school to another occurs during the year, and this is occasioned only to a small extent by transfers from primary to secondary schools, which occur usually at the beginning of the year. The total number of dual enrolments effected in 1922 was 71,363, of which 50,947 were due to pupils transferring from one public school to another; 7,953 from one private school to another; 7,468 from private to public school, and 4,995 from public to private schools. The total movement of school population during the year was 18-1 per cent. of the individual enrolments. This is slightly less than the proportional movement of electors, which was 19-9 per cent. of the number enrolled.

CHILDREN RECEIVING EDUCATION.

The total number of individual pupils who received instruction in schools in New South Wales at any time during 1922 was 429,415, and of these 346,388 were last enrolled at public schools and 83,027 at private schools.

From the approximate results of tests made it is apparent that a considerable number of children between the ages of 7 and 13° years, when education is compulsory, are not enrolled in schools for the whole of those years, although they may be attending school for most of the statutory period. The children not enrolled in schools include those receiving instruction at home, (numbering 12,181 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 conveyance facilities, and of subsidies for private teachers of small rural schools are now doing much to reduce the number of children In this connection it is interesting to not reached by the education system. note that of the persons married in New South Wales in 1921, nearly two and a half per cent. could not sign their names.

An interesting test of the efficacy of the compulsory attendance provisions during the last three years is provided in the following table, which indicates the proportion of the effective enrolment each year to the estimated number of children "requiring education":---

Year-	Estimated Number of Children of School Age in December.	Children of Other Ages Enrolled (December Quarter).	Estimated Number of Children requiring Education.	Average Weekly Enrolment during December Quarter.	Preportional Effective Enrolment.
1920	304,300	87,027	391,327	352,719	per cent. 90·1
1921	313,900	93,888	407,788	371,952	91-2
1922	320,000	93,344	413,344	375,930	90-9

It is apparent that the effective enrolment in schools is approximately 91 per cent. of the standard used to gauge the number of children " requiring education." This comparison, however, is vitiated by the fact that the "number of children of other ages" included in it is a gross enrolment, and therefore is in excess of the number of children of those ages requiring education.

Moreover, it is probable that the effective enrolment of children outside the ages of compulsory attendance is proportionally lower than that of children for whom education is obligatory, and this is especially so toward the close of the school year.

A less comprehensive, though more accurate, test of the provisions for compulsory attendance is obtained by considering the average number of pupils present each day in relation to the average number enrolled each week, pupils being omitted from the roll as they leave school. The following comparison is made on this principle, secondary schools being included :—

		Public Schools.		Frivate Schools.					
Year.	Average Weekly Enroiment.	Average Daily Attendance.	Ratio of At- tendance 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	*			
1916	246.572	200,695	81.3	*	56,880	*			
1918	265,756	225.790	84.9	•	59,986	1			
1919	261,778	212,873	81.3	64,851	53,937	83.2			
1920	279.944	234.657	83.8	72,103	59,495	82.5			
1921	292,264	248,605	85.1	74,206	64,172	86.4			
1922	300.827	254,382	84.5	76,328	66,340	86.4			

* Not available.

The marked improvement in attendance in public schools since 1916 is due to the operation of the amended law relating to school attendance. The decline during 1919 was an effect of the epidemic of influenza in that year. The low 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 attendance of children at school is affected adversely by the considerable amount of infectious and contagious diseases among children, 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 these enumerated at the foot of page 47.

		Publie	Schools.		Private Schools,						
Year.	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.			
1918	35,641	222,370	22,225	280,236	13,182	49 186	11,924	74,192			
1919	37,985	227,535	23,461	288,931	13,195	50,739	11,002	74,936			
1920	39,319	235,611	24,761	299,691	12,137	54,392	10,810	74,339			
1921	41,988	246,136	27,154	315,228	12,622	53,664	12,174	78,460			
1922	41.572	253,073	26.886	321.531	13.092	55.361	11,794	80.247			

The numbers of pupils following super-primary courses of instruction in 1922 were 31,435 in public schools and 11,634 in private schools. Most of these were above the statutory age. In 1922 there were enrolled 54,664 children below the statutory school age—27,735 boys and 26,929 girls; and 38,680 pupils were over 14 years of age—19,156 boys and 19,524 girls.

More detailed information as to the ages of children attending public primary schools may be obtained from a table published annually in the report of the Director of Education. That table shows also the ages of children in the various school classes, and, considered in conjunction with the primary and secondary school syllabuses, affords an excellent means of gauging the educational progress of school children as a whole.

RELIGIONS.

Particulars of the religions of each child attending a public school are obtained upon enrolment, but no such information is 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 47) 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 :---

	D	Put enomination	lic Schools n of Childro	Private Schools— Denomination of Schools.					
Year.	Church of England.	Roman Catholic.	Presby- terian.	Methodist.	Other.	Church of England.	Roman Catholic.	Undenom- inational.	Other.
1901 1911 1918 1919 1920 1921 1922	109,876 118,794 153,993 159,876 166,733 176,998 180,888	31,054 31,044 33,274 33,607 34,500 35,532 35,458	23,511 26,347 33,428 34,165 35,491 37,497 38,829	24,971 30,595 40,324 41,514 42,776 44,210 45,104	21,176 15,030 19,217 19,769 20,191 20,991 21,252	$4,749 \\ 5,265$	$\begin{array}{r} 41,486\\ 46,097\\ 59,136\\ 60,271\\ 60,196\\ 63,060\\ 64,693\end{array}$	13,546 10,141 8,912 8,244 7,541 8,131 8,255	1,839 2,015 1,824 1,706 1,853 2,004 2,011

Proportion Per Cent. of Total Number of Pupils Enrolled.

1901 1911 1918 1919 1920	40 ·5 41 ·9 43 ·4 43 ·9 44 ·6	11 4 10 9 9 4 9 3 9 2	8·7 9·3 9·5 9·4 9·5	9 2 10 8 11 4 11 4 11 4	7·8 5·3 5·4 5·4 5·4	$ \begin{array}{r} 1 \cdot 5 \\ 1 \cdot 2 \\ 1 \cdot 2 \\ 1 \cdot 3 \\ 1 \cdot 3 \\ 1 \cdot 3 \\ 1 \cdot 3 \end{array} $	15.3 16.3 16.7 16.6 16.1 16.0	5.0 3.6 2.5 2.2 2.0	0.6 0.7 0.5 0.5 0.5
1920 1921 1922	44.0 45.0 45.0	9·2 9·0 8·8	9·5 9·5 9·7	$ \begin{array}{c} 11.4 \\ 11.2 \\ 11.2 \end{array} $	5·3 5·3	1 4 1 3	16-0 16-1		0·5 0·5

The numbers of children attending schools of "other" religious denominations shown in the last column were as follow:—1922, Presbyterian 888, Methodist 639, Seventh Day Adventist 344, Theosophical 81, Lutheran 59.

The pupils attending Roman Catholic schools constitute approximately 80 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 is

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 is coincident with an increase in the proportion of persons of that faith.

The enrolment at undenominational schools diminished very considerably between 1901 and 1920, but since then a small increase has been evident.

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 :—

		Numt	er of Lessons.		
Denomination.	1918.	1919.	1920	1921.	1922.
Church of England		28,444	31,363	40,530	40,517
Roman Catholic Presbyterian	. 9,122	1,167 7,626	1,477 9,005	1,696 12,684	2,034 12,769
Methodist Other Denominations	0.960	$11,472 \\ 5,893$	$13,594 \\ 7,518$	17,314 8,605	17,834 10,341
Total	. 67,715	54,602	65,957	80,829	83,495

SCHOOL EXAMINATIONS.

Formerly, public examinations were conducted by the University for the purpose of testing the educational fitness of intending students and of candidates for matriculation. The standards of these examinations became generally accepted by public bodies. With the reorganisation of the whole scheme of secondary education in 1911, which brought about a co-ordination of curricula between public and private schools and established secondary schools as a connecting link between primary school and University, it became necessary to establish a system of examinations with a wider purpose. A new scheme was formulated by the Department of Education with the concurrence of the University authorities, who agreed to accept as evidence of satisfactory educational qualification appropriate certificates issued by the Department, and, in 1916, the University discontinued holding further public examinations, with the exception of an annual special matriculation examination, on the results of which a number of University scholarships and prizes are awarded.

The regulations of the Department provide for the issue of certificates on the results of examinations which mark definite stages in the progress of school pupils. The Qualifying Certificate (the issue of which was discontinued in 1922) indicated that the holder had completed the primary course satisfactorily, and was fitted to enter upon a secondary course of instruction. Since 1922 a written examination has been held, to determine the award of High School bursaries and fitness for admission to High Schools. In 1923 a system was instituted of examination and certification by the teacher of the fitness of pupils in sixth class to enrol in super-primary classes. The Superior Public School Certificate is issued to successful candidates at a written examination terminating the continuation course of instruction. 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.

Particulars of the number of candidates who sat for the various examinations each year are published in previous issues of this Year Book.

The first examination for the Qualifying Certificate was held in December, 1911, and the last in November 1921. There were 34,155 candidates in 1921, of whom 24,000, or 70.3 per cent., were successful. In 1922 there were 7,916 candidates for the High School entrance and Bursary examinations and of these 5,633 or 70.8 per cent. passed.

The first examination for Superior Public School Certificates was held in December, 1914. In 1922 the candidates numbered 2,432, and the passes 2,028, viz. — Commercial, 323 candidates and 195 passes; Junior Technical, 769 candidates and 607 passes; Domestic, 1,024 candidates and 971 passes. The certificate gained in the Commercial Continuation Schools for boys, where a three-years' course was initiated in 1918, is the Intermediate Certificate. A special examination is held for girls completing a third year course at a superior commercial school. In 1922 there were 316 candidates and 255 passes at this examination.

The Board of Examiners in connection with the Intermediate and Leaving Certificates consists of the Director of Education, the Chief Inspector, the Principal of the Teachers' College, the Inspector of Secondary Schools and four delegates appointed by the University.

Examinations for the Intermediate Certificate were commenced in November, 1912. In 1952 the number of candidates at this examination was 4,474, of whom 3,061, or 68.4 per cent., passed. Of these the number of candidates from State Schools, including those from the Commercial Continuation Schools, was 2,663, and the number of passes was 1,983, or 74.4 per cent. From private schools there were 2,134 candidates and 1,273 passes, or 59.6 per cent.

The first Leaving Certificate Examination was held in November, 1913. On the results of this examination, University bursaries, the exhibitions instituted under the University Amendment Act, and scholarships for the Diploma Courses at the Technical College, are awarded. In 1922 the number of candidates was 1,345, of whom 989, or 73.5 per cent., secured passes. There were 666 candidates from State Schools, and the passes, numbering 542, represented 81.4 per cent. From private schools there were 679 candidates; 447, or 65.9 per cent., being successful.

The Intermediate and Leaving Certificate Examinations have been adopted as standards for the admission of persons to the various branches of the public service of the State, and are accepted widely in commercial circles.

Certificates of proficiency are awarded to pupils of Evening Continuation Schools whose attendance and work have been satisfactory throughout the course. In 1922 there were 418 candidates at the examination for certificates, and 302 passed; in the previous year 375 passed out of 469 candidates.

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 to meritorious pupils whose parents have small means.

Scholarships tenable at State schoels, which were awarded formerly on the results of the Qualifying Certificate examination, were discontinued in 1915, when arrangements were made for the free supply of school material; a few limited scholarships are provided to enable pupils to attend the Sydney Grammar School.

Scholarships are awarded annually on the result of the Intermediate Certificate examination to students of the Agricultural High School, entitling the holders to free education for two years at the Hawkesbury Agricultural College, with monetary allowance and text books. The holders commence on the second year's course at the College.

Boys who intend to become teachers may gain at the Intermediate Certificate examination two-year scholarships tenable at District or High Schools. Text-books are supplied, and an allowance is granted.

Scholarships, admitting to courses of technical instruction, are provided to assist students to pass from the Day and Evening Junior Technical Schools to the Trades and Domestic Science Schools, from Lower to Higher Trades Courses, and from Trades to Diploma Courses. Students holding Leaving Certificates may obtain entrance by Scholarship to the Diploma Courses; and those who have gained the Intermediate Certificate at the Technical High School may obtain scholarships enabling them to enter the Higher Trades Courses. These technical scholarships carry a grant of text books and appliances and exemption from fees, and holders must be engaged in the trade or profession for which the course has been established.

Students who pass through the Diploma Course with sufficient distinction are enabled to continue their education at the University by means of scholarships valued at $\pounds 100$ per annum.

Bursary Endowment.

In 1912 the Bursary Endowment Act was passed by Parliament, providing public moneys for bursaries, tenable in public or private secondary schools and in the University of Sydney. This fund is administered by a specially constituted 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.

Schools desiring to educate bursars or competitors for bursaries must register with the Bursary Endowment Board. Such registration, which is effective for two years, is conditional upon the suitableness of school premises, the organisation and equipment of the school, the method and range of instruction, efficiency of the teaching staff, and the general conduct of the school.

At 30th June, 1923, in addition to 42 public high, and district schools and 21 intermediate high schools, there were 87 non-State schools, registered under the Bursary Endowment Act as competent to educate students to the Leaving Certificate standard, and 67 other non-State schools whose standard was recognised to the Intermediate Certificate stage of the secondary course.

Bursaries admitting to a course of secondary instruction are awarded to pupils between the ages of 12 and 14 years, whose parents' income is less than $\pounds 260$ per annum, or not more than a quota of $\pounds 60$ per annum for each member of the family, exclusive of children earning 15s. or more weekly. One-third of the bursaries are available for pupils of metropolitan and suburban schools, and special provision is made for small country schools.

Each bursary comprises a grant of text-books not exceeding in value $\pounds 1$ 10s. per annum, and a monetary allowance of $\pounds 40$ for the first and second years, and $\pounds 50$ for the third and fourth years, to holders who live away from home in order to attend school, the allowance in the case of

those who reside at home being $\pounds 12$ per annum to the intermediate standard, increasing to $\pounds 18$ and $\pounds 24$ respectively in the last two years. The bursaries are extended usually for a fifth year.

Bursaries are awarded upon the results of the Intermediate Certificate Examination. These bursaries are of the value of third and fourth year bursaries, and are tenable for two or three years.

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 unequal to the expense of a University education. A full bursary entitles the holder to a grant for text-books not exceeding £5 per annum, and to free education. An allowance not exceeding £25 per annum is made to those who need not board away from home, in order to attend the University, and not exceeding £65 per annum to those who must do so. The number of such bursaries awarded annually ranges from twenty-five to forty.

At 30th June, 1922, excluding 565 holders of war bursaries, there were 1,427 pupils holding bursaries under the Bursary Endowment Act; 1,300 were attending courses of secondary instruction, and 127 were attending University lectures. The annual monetary allowances paid in 1922 were as follow:—

Allowances.	Bursars.	Allowances.	Bursars.
£		£	
12	407	40	340
18	149	50	260
24	146	60	. 2
25	65	65	58
	1 N 1 N 1		·
		Total	1,427

War bursaries are provided by the Bursary Endowment Board for children of incapacitated and fallen soldiers; and may be awarded to assist holders during primary, secondary, or University courses, or in technical, trade, or agricultural instruction; they may be applied also to augment the wages of apprentices. War bursaries are tenable for a period not exceeding two years, but are subject to renewal. Up to 30th June, 1922, war bursaries had been awarded in 989 cases; the number in operation at that date was 565, and the expenditure for the year amounted to £6,001.

A sum of money, amounting to $\pounds 7,726$, was raised by public subscription to provide war bursaries, and the fund, known as the Anzac Memorial Bursary Fund, has been invested in the Bursary Endowment Board. Up to 30th June, 1922, the number of these bursaries awarded was 33; each bursary bears the name of its founder and is tenable at a secondary school.

In addition to the bursaries made available by the Bursary Endowment Board, three bursaries, tenable for three years, may be awarded at the Hawkesbury Agricultural College; three, tenable for two years, at each of the Farm Schools at the Bathurst and Wagga Experiment Farms; and one, tenable for one year, at the Apprentice School at Wollongbar Experiment Farm.

COMMERCIAL EDUCATION.

Preparatory education for commercial life has been provided in the State primary schools, where the course of instruction, especially in the Commercial Continuation Schools, includes elementary training in many commercial subjects; economics, shorthand, and business principles and practice are included in the curriculum of the High Schools. A number of private schools and colleges also afford facilities for commercial training, both by day and evening classes; book-keeping, business methods, shorthand, and typewriting are the main subjects taught.

A complete return of the number of pupils taught in these special subjects is not available, but statistics of the State Commercial Continuation Schools are supplied on a later page, and particulars obtained from Business and Shorthand Schools under private management show that 15 were in operation in 1922 with 128 teachers, and a total enrolment of 3,166 boys and 3,841 girls; the average attendance during the year was 2,568, and the amount of fees received £39,235.

Advanced preparation for commercial life has been provided in some measure by the University course in Economics and Commerce. The diploma course was converted in 1913 into a degree course.

A special grant is paid from the public revenue of the Commonwealth to the University to assist in the teaching of languages serviceable to the development of commercial relations between Australia and other countries. By this means a lectureship in Japanese language and oriental history has been established.

DOMESTIC TRAINING.

In the reorganisation of Superior Public Schools provision was made for the establishment of Domestic Superior Public Schools for girls. The syllabus came into operation at the beginning of 1913, and the course includes household accounts, cookery, laundry work, dressmaking, millinery, gardening, art of home decoration, music, social exercises, morals and civics, and physical training, as well as a course in English, designed to encourage a taste for wholesome reading. Three hours per week are devoted to cooking and laundry, the course being practical and diversified. Personal hygiene, nursing of sick, and care of infants receive considerable attention. Botany and gardening are taught, and, while the course is designed primarily to train girls to manage a home, provision is made also for a training in commercial horticulture, and after the completion of the domestic course a third year course of business lessons has been arranged to fit girls to take upwork in commercial houses in the city.

During 1922 seventy schools for practical cookery were in operation, the enrolment being more than 5,147; in addition, demonstrations in cooking were given to another 3,580 pupils. The Technical College provides more advanced courses.

The courses of study provided at Secondary Schools include needlework, art, and music.

A School of Domestic Science was established recently at the Sydney University. The course for the degree of Bachelor of Science in Domestic Science covers a period of three years, and includes Physics, Chemistry, Physiology, and Botany or Zoology, Public Health, and the course in Domestic Science at the Sydney Technical College.

INDUSTRIAL TRAINING.

Industrial training is connected intimately with the question of apprenticeship, and from time to time attempts have been made to relate school training and apprenticeship. Useful courses have been provided for boys who finish the primary course of education at the age of 14 years and cannot enter apprenticeship before the age of 16 years an endeavor has been made to modify the conditions of apprenticeship, and to establish a Boys' Vocational Bureau. Technical instruction in the form of manual training is a feature of the primary school syllabus, and a preparatory course leading to the trade courses under the Technical Education System is given in the Junior Technical Continuation Schools. The course in the Continuation Schools, covering two years, was planned with the object of supplying a useful introduction to industrial occapations for boys. The subjects of instruction which were chosen with the intention of meeting the needs of the future artisan are essentially of a practical nature, viz:—Practical Drawing and Workshop Practice, English, Practical Mathematics, History and Civics, Industries and Elementary Science; at the same time attention is given to the training of pupils in citizenship, and corporate life is made a feature of the school organisation.

Higher courses of instruction are given in the institutions under the Technical Education system hereinafter described. Consideration has been given to the question of extending the period of compulsory education beyond the present limits as defined by the Public Instruction Act. For apprentices in a number of trades a measure of compulsion is supplied already by means of awards and agreements under the Industrial Arbitration system. In some instances, they contain clauses which make attendance at a technical course obligatory on the part of the apprentices, while the employers are required to pay the fees, other awards require the apprentices to obtain certificates of attendance before admission to the trade as journeymen. In some trades in which attendance is optional, the employers must pay the fees of the apprentices who attend the technical schools, and in others higher rates of wages are prescribed for apprentices who pass the technical examinations.

In a few instances provision has been made either by award or by the voluntary action of the employers for attendance of apprentices at day classes, but generally the apprentice is regarded as a full time wage-earner and attendance is in addition to the day's labour in the workshop.

AGRICULTURAL AND RURAL TRAINING.

Education in subjects pertaining to rural industries is now receiving increasing attention in New South Wales and a Supervisor in Agricultural Education, appointed in 1921, is steadily developing the system. Training commences in the primary schools with the teaching of the elementary principles of agriculture, both practical and theoretical. School gardens and experiment plots are adjuncts to many State schools, and grants are made of farm, vegetable, and flower seeds.

In 1922 ten Rural Schools were established in conjunction with the primary schools in ten country centres. At each of these schools super-primary courses are provided extending over a period of three years in elementary agriculture, agricultural nature study, applied farm mechanics, rural conomics and horticulture. In June quarter 1923 there was an effective enrolment of 540 pupils in Rural Schools.

In the country high schools at Albury, Orange, and Wagga, and in the Casino District School, courses in agriculture are provided, and a special Agricultural High School is situated at Hurlstone Park. The grounds at Hurlstone Park, covering 26 acres, are used for teaching practical operations and for experimental work in the growth of crops, action of fertilisers, etc. The course at this school extends over three years, and covers a general English education in addition to science with laboratory practice, and agriculture with field work. The training at Hurlstone Agricultural High School forms a preparatory course to the more advanced work at Hawkesbury Agricultural College. An Agricultural High School was opened at Yanco in 1922 with an average attendance of 64 students, all of whom wore in During 1922, there were 167 students at Hurlstone. For residence. resident students the fee is £6 6s. per quarter; for day students no fees are charged.

In the Murrumbidgee Irrigation Area a special teacher of agriculture visits the seven local schools for the purpose of supervising a special course in practical experimental agriculture. Instruction in general farm work is a feature of the treatment of delinquent and neglected children at the Farm Schools at Gosford and Mittagong. Particulars regarding the operations of these institutions will be found in a later chapter of this Year Book dealing with Social Condition.

Advanced training in all branches of Agriculture is provided for farmers and students at the Hawkesbury Agricultural College and the Experiment Farms where 199 students were in attendance in 1922. Further particulars of these institutions are published in part "Agriculture" of this Year Book.

The Diploma course at the Hawkesbury Agricultural College covers three years' work, but certificates may be obtained for shorter courses. Students holding the Diploma of the College may be permitted to complete the course for the degree of Bachelor of Science in Agriculture at the University in three years instead of four.

The final stages of agricultural education and training are reached at the University, where, in 1910, a degree course in Agriculture was instituted. A four-years' course leads to the degree of Bachelor of Science in Agriculture, and, in providing a higher training ground for teachers and experts, completes the whole system of preparation for rural industries. The Experiment Farms of the State are available for the practical and experimental work in connection with the degree course.

In Veterinary Science a course extending over a period of four years leading to the degree of Bachelor of Veterinary Science is provided at the University.

SCHOOL SAVINGS BANKS.

A system of school savings banks in connection with the State schools was initiated in the year 1887, and by this means $\pounds 887,746$ have been received in deposits, and $\pounds 170,243$ transferred to the Government Savings Bank as children's individual accounts. The object of these banks is to inculcate principles of thrift during the impressionable ages.

In 1922 these banks numbered 856; the deposits amounted to $\pounds 65,430$, and withdrawals, $\pounds 66,018$; $\pounds 8,939$, representing individual sums of $\pounds 1$ and upwards, were transferred to the Government Savings Bank, leaving $\pounds 17,609$ as credit balances in the school banks.

DELINQUENT, DEFECTIVE, AND DEPENDENT CHILDREN.

Special provision has been made for delinquent, defective, and dependent children in several reformatorics and industrial schools maintained by the State and in private charitable institutions. Particulars of these are given in part "Social Condition" of this Year Book.

The education of deaf and dumb and blind children is undertaken at a school in connection with the Institution for the Deaf and Dumb and the Blind, which is endowed by the State. In 1922 there were 96 children enrolled in the deaf school and 33 in the blind school. Deaf mutes are trained also at two religious institutions, one at Waratah for girls, there being 35 inmates at the end of 1922, and the other, recently established at Baulkham Hills for boys.

Extensive special measures have not yet been taken for the education of feeble-minded children, but the matter is under consideration, and statistics as to retardation are collected by the Department of Education.

MEDICAL INSPECTION OF CHILDREN.

The Medical Branch of the Department of Education undertakes the medical inspection of the school children attending State and private schools;

the work is arranged so that each child is examined every three years. Treatment of physically defective children in country districts is provided by means of a travelling school hospital and travelling clinics; there is also s metropolitan dental clinic. Details regarding the medical inspection of school children and the school clinics will be given in the chapter of the Year Book relating to Social Condition.

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' College; lectures to senior girls in metropolitan schools on the care of babies, personal cleanliness, home hygiene, sick-nursing, etc., and lectures to parents.

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 immediate ministerial control, and the numbers open at later periods.

Turne of Colory			Schools at	end of year	•	
Type of School.	1881.	1891.	1901.	1911.	1921.	1922.
Secondary Schools-				ĺ		1
High		5	4	8	27	28
Intermediate High		Ū			25	26
District					13	12
Continuation Schools-					10	14
Commercial	·			· · · ·	(15	16
Junior Technical					26	25
Domostio			•••		46	48
Composito	58*	 78*	113*	145*	57	151
		10	110	110		101
Total-Secondary and Con-						
tinuation Schools	58	83	117	153	209	306
				100	200	000
Frimary Schools-						
Public	1,007	1,686	1,874	1,915	2,020	2,004
Provisional	227	320	398	475	477	488
Half-time	83†	280	414	271	90	95
House-to-house and Travelling		83	17	-, -	4	3
Contempondoneo					3	3
Subsidiand		•••	. •••	414	546	542
Evening Schools—	***	••••		313	0.00	014
D.'	33	13	34	16	ł	
Continuation	÷-			18	46	47
Industrial and Deformations	2	 3		10		3
industrial and reformatory	4	J.	- T	4	J	3
Fotal—Primary	1,352	2,385	2,741	3,117	3,189	3,185
Number of Schools per 1,000 of						
population-						
	1.73	2.05	1 9	1.83	1.21	1.48
Secondary and Continuation	.07	2.03 •07	•09		1.10	•14
Secondary and Continuation	07	. 01	.00		10	1 12

* Superior Public Schools. † Including Third Time Schools.

The number of schools is not of itself an accurate indication of the effective provision of educational facilities, even when considered in relation to population. During the past forty years population has tended increasingly to congregate in cities and other urban centres, where schools have grown in size, rather than in numbers, while, with the decline of the birth-rate, the proportion of children in the population has diminished. For these

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reasons the relative number of public schools required has decreased; but on the other hand the proportionate number of private schools has also decreased heavily.

The small number of secondary schools provided prior to 1912 is shown in the table, which also indicates the great expansion which occurred thereafter, the increase being from eight in 1911 to sixty-six in 1921, largely due to the provision of High and District Schools in country towns, and to the revival in 1921, of the secondary courses, formerly given in Superior Public Schools, but now in post primary composite courses.

A notable feature is the changes among schools provided in rural districts where population is scanty. Provisional schools have increased in numbers, but part-time schools (Half-time, House to House, and Travelling), have in many cases been supplanted by smaller full-time schools, subsidised by the Government, and by correspondence schools, three of which, with thirty-one teachers, educated in 1922 nearly 1,700 pupils in remote localities.

Evening schools have never operated extensively, but recent innovations have increased their popularity.

Particulars of each class of school existing in 1922 are given below : ---

Kindergarten.

Kindergarten methods under the Montessori system have been adopted as far as practicable in the infant schools under the Department of Education, and in various large schools throughout the State, Kindergarten classes are conducted for the purpose of bringing young children under refining influences.

During the year 1921 classes were in operation in 152 public schools; seventeen were separate infant schools, and the remainder were primary schools with Kindergarten departments attached; the number of pupils enrolled for Kindergarten instruction was 9,296, the average attendance being 7,148.

Primary Schools.

Primary work in its various stages is undertaken in 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, House-to-house, and Subsidised schools; and (c)Correspondence Schools, instructing children so isolated as to be unable to attend school.

The schools are classified according to the average attendance into six classes. The number in each group, as from 1st January, 1923, is shown in the following statement; each pair of half-time schools is counted as one.

Class of School.	Average Attendance required.	Schools in Operation.	Class of School.	Schools in Operation.
I. II. III. IV. V. VI.	Over 1,000 751-1,000 541-750 201-540 41-200 20-40	48 33 43 146 526 1,181	Correspondence Infants Sut sidised Reformatory Evening Continuation	3 19 542 3 47
Provisional. Half-time. Travelling and House	10-20	488 95		-
to House	•••	3	•	

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 360 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, completed generally between the ages of 13 and 14 years, includes English, mathematics, geography, elementary science, nature knowledge, civics and morals (history, Scripture, moral duties and citizenship), art and manual work, music, and physical education as prescribed in the syllabus issued by the Department of Education.

Schools in Sparsely Settled Districts.

Provisional schools are maintained where there is an attendance of at least ten pupils, and in places, where doubt exists as to the permanence of the settlement. 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 course of instruction in provisional and half-time schools follows the course of full-time schools.

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 entering and supervising the contract for the carriage of children, but the cost of conveyance is defrayed by the Department according to fixed rates. In 1923 about 7,500 pupils were conveyed to 1,012 central schools, principally at daily rates, as conveyance contracts were not renewed upon expiry.

There are three travelling schools and one house-to-house school in operation. The travelling schools visit localities where the families are so isolated that two cannot combine readily for the education of the children. The first commenced operations in 1908, when the teacher was 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.

Another type of school for the benefit of families in remote districts is the subsidised school, which may be formed 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 castern 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 school may be established by a single family with at least four children of school age. As an alternative to subsidising a teacher, payments may be made under certain conditions as an aid towards boarding children in a township for the purpose of attending a public school.

Correspondence Schools.

At the beginning of 1916, further efforts were made, by means of teaching by correspondence, to extend educational facilities to children in remote

localities. The experiment was commenced with three pupils, and met with such success that operations have been extended considerably. The course of instruction covers the ordinary primary course up to the standard of the Qualifying Certificate examination, and some of the pupils have passed this test with credit. A pupil is not admitted before the age of 7 years, and the young children are taught by kindergarden teachers, illustration being employed largely with satisfactory results. There were three correspondence schools in operation at the end of 1922 with an enrolment of nearly 1,700 pupils taught by thirty-one teachers.

SECONDARY EDUCATION IN STATE SCHOOLS.

Prior to the year 1912 the facilities provided by the State for secondary education had grown slowly and were then limited to eight High Schools at which students were required to pay fees. But in that year a comprehensive system of free secondary education was instituted. All fees were abolished, the number of bursaries and scholarships was greatly increased, and, later on, text books were provided free to all students. The provision of facilities on these liberal terms caused a strong demand for secondary education, and, within the next nine years, the number of students attending high and district schools trebled, the number of students enrolled during 1921 being more than 15,000. Fees were re-imposed in High Schools in 1923. Admission to High Schools is gained by competitive examination and only properly qualified pupils are allowed to enter.

The courses of instruction provided at High Schools cover five years, leading to the Leaving Certificate Examination, at which candidates may matriculate, while 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.

Secondary courses with a more directly vocational bias are also provided in Superior or Continuation Schools, some of which have now been converted into Intermediate High Schools providing commercial courses.

At the beginning of 1923 there were nine High Schools in the metropolitan area (including a Technical High School) and seventeen in the country districts providing a full course of instruction. At all of these fees to the amount of $\pounds 2$ 2s. per term are charged, subject to exemptions in certain cases by the Minister. There were twenty-eight Intermediate High Schools, thirteen (including two Agricultural High Schools) being in the country, and twelve District Schools, at which secondary education is free, a deposit of $\pounds 1$ being required in certain cases as a guarantee of attendance for at least one year.

Certain large primary schools in the country districts from which secondary schools are not readily accessible commenced in 1921, to provide composite courses of study leading to the Intermediate Certificate, the Commercial Superior Public School Certificate, and the Public Service Entrance Examinations.

		1913.			1922.	
Schools.	Number of Schools.	Gross Enrolment.	Average Daily Attendance.	Number of Schools.	Gross Enrolment.	Average Daily Attendance
High and District Superior or Public (Day		6,392	4,712	66	16,620	12,962
Continuation) — Commercial Junior Technical Domestic	20	1,724 804 1,601	883 416 778	16 25 48	1,213 4,544 7,041	684 2,874 • 4,0 95
Total, Superior	. 104	4,129	2,077	89	12,798	7,653
Composite* Total, Secondary and		•••	<u>-</u>	151	2,017†	1,781
Super Primary	140	10,521	6,789	306	31,435	22,396
* Sec	ondary pupil	s.	† Net enr	olment.		· · · · ·

The following statement shows the number of pupils receiving recognised secondary education at State schools in 1922, in comparison with the number in 1913, the first year for which particulars are available :----

The average daily attendance of secondary pupils has increased more than three-fold during the last nine years, the increase being numerically greater in secondary schools, but relatively greater in continuation schools.

Growth of High Schools.

The following particulars relate to High Schools and Intermediate High Schools maintained by the State :---

	1	[Teacher		1	Pupils.		1		
Year.	High	Inter- mediate		Teacher	rð.	Enrol	ment.	Average		ers of—	Cost per
	Schools.	Schools.	М.	F.	Total.	Total.	Av'rage Weekly	Attend-	Bur- saries.	Scholar- ships.	head of enrolment.
1901	4		16	11	27	676	526	400	+	+	£ s. d.
1911	8	•••	59	38	97	2,293		$\begin{array}{r} 489 \\ 1.786 \end{array}$	201	250	$10 \ 6 \ 10$
1916	19	3	195	146	341	5,888		4,780	748	1,165	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$
1917	21	3	172	170	342	6,780		5.555	861	693	14 12 11
1918	22	4	214	195	409	7,454		6.047	929	390	14 8 2
1919	23	4	229	215	44.1	7,750	6,744	5.916	990	t	16 16 8
1920	27	23	310	274	584	12,636	9,575	8,805	1.064	Ĭ	18 2 0
1921	27	25	349	299	648	14,247	12,199		1,005	Ť.	17 10 0
1922	28	26	371	318	689	15,537	13,151	12,108	923	1 I	17 19 3

* Including huildings. † Not available. ‡ Additional scholarships were not awarded after 1916, in which year the free supply of text-books and materials commenced.

This rapid expansion in secondary schools affords evidence of a widespread desire for education among the people, and the anxiety to take advantage of the improved facilities has imposed on the Department the necessity of excluding by means of competitive examination for admission those less qualified to benefit from a course of secondary education. A corresponding growth in the number of University undergraduates is evident after 1916, in which year students educated entirely under the new system introduced in 1911 were first able to qualify educationally for matriculation.

Arrangements are being made for the establishment of hostels in connection with the High Schools in country districts; five hostels are already open and sites have been purchased for two others.

EVENING CONTINUATION SCHOOLS.

Evening Continuation Schools have been established for the benefit of those who leave school at the termination of the primary course to engage in occupations. They 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 necessarily 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 for the years 1921 and 1922:-

		1921.		1922.				
Classification.	Number	Average	Average	Number	Average	Average		
	of	Weekly	Weekly	of	Weekly	Weekly		
	Schools.	Enrolment.	Attendance.	Schools.	Enrolment.	Attendance		
Junior Technical (Boys)	11	1,290	994	17	1,515	1,175		
Commercial (Boys)		1,586	1,245	17	1,728	1,356		
Domestic (Girls)		821	5 3 1	13	927	596		
Total	46	3,697	2,770	47	4,170	3,127		

A large increase has occurred in the enrolment and attendance since 1920, due partly to the opening of new schools, but also to reorganisation of the curricula and the addition of social attractions for pupils.

PRIVATE SCHOOLS.

The position of private schools in the education system of the State is discussed on page 45.

By virtue of the 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 so certified by the Minister of Education, who takes into account the standard of instruction, the qualifications of the teachers, the suitableness 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 a'l of these 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. Public examinations are based upon the curricula of State schools, and this tends to establish still greater uniformity in the standards of instruction.

State-aid to private schools was discontinued in 1882, and conditions them approximated to those existing to-day. Between 1883 and 1899 private schools grew faster than State schools, and the proportion of pupils in private schools to the total increased from 16.9 to 22.6 per cent. In the next ten years there was a decline in the number of pupils attending private schools, and the proportion fell to 21 per cent. But despite an increase in number since 1908, the proportion of pupils in private schools has fallen further, and has stood at 19.9 per cent. of the total since 1920. Fees are usually charged at private schools but they vary considerably in amount, numerous schools being residential. In certain denominational schools the payment of fees is to some extent voluntary, and some scholarships and bursaries have been provided by private subscriptions for the assistance of deserving students.

The following table affords a comparison of schools of each denomination over an interval of ten years :---

			1912.		1922.				
Classification.	Schools.	Teach- ers.	Enrolment December Quarter.	Average Daily At- tendance.	Schools.	Teach- ers.	Enroiment December Quarter.	Average Daily At- tendance	
Undenominational	289	712	10.088	8.379	150	478	8,255	7,049	
Roman Catholic	401	1,680	46,778	38,518	451	2,070	64,693	52,874	
Church of England	53	193	3,347	2,876	60	298	5,288	4,629	
Presbyterian		28	381	344	5	47	888	810	
Methodist		18	309	273	2	28	639	579	
Lutheran		I	34	24	2	2	. 59		
Seventh Day Adventist	11	12	222	197	7	16	314	261	
Hebrew		6	582	557					
Theosophical					1	7	81	82	
Total	754	2,650	61,744	51,163	678	2,946	80,247	66,340	

In addition to the number of teachers, shown in the table, there are some who visit schools to give tuition in special subjects only. The total number of visiting teachers shown in the school returns was 1,023 in 1912, and 1,146 in 1922. It is not possible to ascertain the number of individuals represented by these figures, because the number of teachers connected with more than one school is not recorded.

In 1922 there where 72,488 day scholars and 7,759 boarders enrolled at private schools.

The number of scholars attending private schools has increased since 1910, despite a decline in undenominational schools, but the increase has not been so fast a rate as in public schools. More than 80 per cent. of the pupils at private schools were enrolled at Roman Catholic establishments, which, since 1911, have grown at a faster rate than the population.

The total number of private schools certified by the Minister of Education as efficient to educate children between the ages of seven and fourteen years in 1922, was 678, and of these 142 were also registered as secondary schools competent to educate holders of bursaries

Formerly secondary education was left largely in the hands of private institutions, but since the inauguration of an extended system of secondary education by the State in 1912, State secondary schools have assumed very great importance. Sufficient data is not available to show whether the development of State secondary schools has had any effect upon private establishments. Particulars were obtained in 1922, for the first time, of the number of pupils at private schools undergoing a course of instruction similar to that followed at State secondary schools. These are as follows :--

	Number	Secondary Pupils Entolled December Quarter.			
		of Schools.	Boys.	Girls	Total.
	1				
Registered Secondary Schools-					
Full Course		82	4,330	4,141	8,471
Full Course Intermediate Course		60	902	1,138	2,040
Full Course	1				

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Private Kindergarten Schools.

Free Kindergarten schools are conducted by the Kindergarten Union of New South Wales, which is assisted by a grant from the Government, amounting to £1,000. In 1922 there were 12 Free Kindergarten schools with 36 teachers; the number of scholars on the roll during the December quarter was 720, all being under 7 years of age. The average daily attendance was 552, and the gross enrolment for the year 932. In addition some of the ordinary private schools also have departments for Kindergarten work.

A private institution supplies training for teachers in Freebelian methods, and the free Kindergartens provide observation and practice schools.

Charitable Schools.

There were also 17 charitable schools in operation in 1922, of which 8 were under the auspices of the Roman Catholic Church, 3 Church of England, 2 Salvation Army, and 4 were conducted as ragged schools. The gross enrolment at the institutional schools during 1922 was 1,305 and at the ragged schools 191.

Kindergarten Playgrounds.

In recognition of the fact that normal physical development is fundamental to proper mental training the modern tendency is to defer the age of school attendance and formal instruction, and to bring young children under supervision in playgrounds set apart for their exclusive use. In these areas the children are engaged in organised games, under trained Kindergarten Special attention is directed to physical welfare, and to the supervisors. cultivation of hygienic habits. The organisations engaged in the promotion of the welfare of children are devoting greater attention to the needs of children below the statutory school age-7 years. The Kindergarten Union maintains three kindergarten playgrounds in the Metropolis; another is attached to the welfare centre, opened recently by the Child Welfare Association; and in Victoria Park, also in the city area, a playground for children is maintained under the supervision of a State Kindergarten teacher. The establishment of additional playgrounds is under consideration.

TECHNICAL EDUCATION.

The first class for Technical Education in New South Wales was established by the Sydney Mechanics' School of Arts in 1865. The scheme passed under Government control in 1883, and the Sydney Technical College was opened in 1892.

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, viz., technical classes in Public Primary Schools, the Junior Technical Continuation Schools, the Trades' Schools, and the Technical High School.

The system of Technical Education is administered from the Central Technical College, Sydney; branch Technical Colleges have been established at East Sydney, Newcastle and Broken Hill; and Trade Schools have been instituted in seventeen country and suburban centres. Several large departments of technical education have been transferred from the Central Technical College to the branch at East Sydney (Darlinghurst) whereby allowance has been made for the growth and extension of higher technical education.

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.

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; and 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 lower Trade Courses cover a period of three years in the Trade Schools. 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, and artistic and manufacturing trades. Instruction is given also in women's handicrafts (which include domestic science, cookery, and laundry work), window dressing, and tailor's cutting, but these subjects are not included in the trade or diploma courses. Special courses of instruction in Sanitary Science, Draining and Water Fitting, Meat Inspection, and Printing (composing) are conducted by means of correspondence.

Certain of the higher courses of evening instruction are co-ordinated with first-year courses at the University.

The satisfactory completion of any course of instruction is marked by the award of certain certificates, viz., the Certificate of Trade Competency in trade courses and the College Diploma in the higher courses. These certificates are recognised by employers.

A liberal system of scholarships has been instituted, enabling students who gain them to pass without payment of fees from Junior Technical Schools, through Trade Schools, and Technical College to the University. These scholarships usually carry grants of text books and instruments.

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. The following table shows the number of classes and teachers and the enrolments at the Technical College and Trades 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.	Average Weekly Attendance.	Fees Received.	Net Expenditure
1918	572	369	15,936	8,717	12,156	£ 9,422	£ 86,700
1919	557	379	14,580	7,827	10,949	8,788	87,669
1920	638	406	18,119	9,258	13,808	12,701	115,195
1921	636	447	18,974	9,696	+	12,641	129,851
1922	646	470	21,328	9,806	+	13,627	127,638

* Students being counted in each class joined.

† Not available.

The enlistment of students for military service affected the attendance during the war, while in 1919 the abnormal conditions accompanying an outbreak of influenza adversely affected both enrolment and attendance. Marked expansion occurred in technical education in 1920 and a steady increase continued in 1921 and 1922.

EDUCATION.

Technical Education Examinations.

The following are particulars of examinations conducted in the Technical Education Branch during the last five years :---

Particulars.	1918.	1919.	1920.	1921.	1922.
Number Examined	7,410	6,367	9.268	12.075	13,269
Number of Passes	5,648	5,003	7,747	9,907	11,046
Percentage of Passes	76.2	78.5	83.5	82.0	83.2
Number Öbtaining Honours	785	652	1,154	1,537	1,766

These figures afford evidence of a very encouraging growth in this important branch of education, but a wider expansion is desirable. The year 1919 was affected adversely by an epidemic of influenza.

UNIVERSITY OF SYDNEY.

The University of Sydney was incorporated by Act of Parliament passed in New South Wales on 1st October, 1851, its scope being then limited to promoting study in Arts, Law, and Medicine. 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.

Subsequent legislation extended the scope of the University from time to time, and the various Acts were consolidated by the "University and University Colleges Act, 1900," which as amended in 1902, 1912, and 1916, constitutes the present statutory basis of the University of Sydney. The University is incorporated as a body politic, consisting of a Senate comprising twenty-four fellows, of whom four are appointed by the Governor, one is elected by each House of Parliament, five represent the teaching staff of the University, ten are elected by the graduates, and three are elected by the aforesaid fellows. This Senate has complete powers of management in the affairs of the University, and it may provide such instruction and grant such degrees as it thinks fit, except in Theology and Divinity, from which it is precluded by statute.

Within the University there are now ten faculties, viz., Arts, Law, Medicine, Science, Engineering, Dentistry, Veterinary Science, Agriculture, Architecture, and Economics, besides a School of Domestic Science. Degrees are awarded each of these faculties in addition to diplomas in Economics and Commerce, Education, Pharmacy, Public Health, Tropical Medicine and Psychiatry. Since 1884 women have been eligible for all University privileges.

University lectures (except in Law) are delivered in buildings within the University grounds, and all buildings (excepting the Law School) are in close proximity to the main administrative block containing the Great Hall, Offices, the Schools of Arts and Economics, and the Fisher Library, bordering the quadrangle. Separate buildings are provided for the other faculties, and in convenient positions, on the 126 acres of land vested in the Senate are situated the Macleay Muscum, separate club houses for men and women, the five Affiliated Colleges, the Teachers' College, Royal Prince Alfred Hospital, and the Sports Oval.

Although the object of the University is to provide secular instruction to all students on equal terms, the various religious denominations have been permitted to establish residential colleges within the University grounds in which to supplement University training and instruction. These colleges are the Church of England (St. Paul's), Roman Catholic (St. John's), Presbyterian (St. Andrew's), Methodist (Wesley), and the Women's College, the lastnamed being conducted on an undenominational basis. The Teachers' College, which is non-residential and is not affiliated with the University, is maintained by the State for the training of its teachers, and is situated in the University grounds for the sake of convenience. By-laws have been promulgated enjoining the residence of all University students in approved lodgings but these are not enforced.

Many benefactions have been bestowed on the University by private persons. These endowments include the Challis Fund, of which the original amount was $\pounds 276,856$ now increased by investment to $\pounds 341,715$; the P. N. Russell Funds, $\pounds 100,000$; and the Fisher Estate, $\pounds 30,000$. In addition, the University received in 1922 $\pounds 17,450$ as revenue from the trustees of the McCaughey bequest. Some prizes have been exhausted by award, but by careful investment, increases in value, unawarded scholarships, and other causes, the private foundations showed credit balances to the amount of $\pounds 632,390$ at 31st December, 1922.

University Finances.

The University is supported chiefly by Government aid and the fees paid by students, but it also benefits to a considerable extent from income derived from extensive private foundations. The income of the University from all the principal sources practically doubled between 1918 and 1921.

The following statement shows the amounts derived by the University from each of the principal sources of revenue, and the total expenditure, during each of the last five years. Under the items are included sums received for special expenditure and amounts from benefactors to establish new benefactions :---

			Receipts.		Private Endowment		
Year. Government. Aid. Fee	Fees.	Challis Fund and other Private Foundations.	Other Sources.	Total.	Disburse- ments.	Funds Credit Balance at end of Year.	
1918	£ 66,232	£ 15,798	£ 32,439	£ 1,380	£ 115,849	£ 116,347	£ 589,369
1919	67,203	21,353	35,685	1,428	125,669	121,608	597,333
1920	83,478†	33,324	48,371	1,957	167,130	160,203	600 , 339
1921	130,112†	41,731	59,543	2,113	233,499	211,051	622,380
1922	118,870+	43,330	59,350	6,854	228,404	199,074	632,390

* Includes Retiring Allowances Fund. † Includes Building Vote of £25,000 (1920); £50,000 (1921); £50,000 (1922).

Classification.		Amoun		Percentage of Total.		
Grassification.	1920.	1921.	1922.	1920.	1921.	1922.
Salaries Maintenance, Apparatus, etc. Buildings and Grounds Scholarships and Bursaries Other Total	3 7,815 1,744 6,873 13,563	£ 116,505 41,510 30,722 6,499 15,815 211,051	119,919	$ \begin{array}{c} 62.6 \\ 23.6 \\ 1.1 \\ 4.3 \\ 8.4 \\ \hline \end{array} $	per cent. 55.2 19.7 14.5 3.1 7.5 100.0	per cent. 60·3 17·4 18·3 2·6 1·4 100·0

EDUCATION.

Lectures, Staff, and Students.

Before admission to courses of study leading to degrees, students must afford proof of prescribed 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 to that effect. 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, $5\frac{2}{3}$ years, £235; Dentistry, 4 years, £203; Agriculture, 4 years, £125; Veterinary Science, 4 years, £120; Science, 3 years, £105; Engineering, 4 years-Civil, £167; Mechanical and Electrical, £167; Mining and Metallurgy, £181; and Architecture, 4 years, £181. The scale of fees was increased by approximately fifty per cent. in 1921, but they do not apply generally, for 200 public exhibitions or exemptions from the payment of fees are granted annually on the results of the Leaving Certificate examination to students entering the University, and fees are not required of teachers or students in training for the teaching profession attending University lectures. In 1922 11 students were exempt from payment of fees besides 135 State and University bursars (of whom 131 were also exhibitioners), 739 exhibitioners, and 629 teachers and students in training as teachers. Thus University education was provided free in 1922 to 1,383 students, or 47 per cent. of the total students in attendance at lectures. More than forty scholarships are awarded from private foundations to meritorious students, and seventeen bursaries may be awarded by the Senate to impecunious students of sufficient In addition, 131 students attending the University in 1922 held merit. bursaries awarded by the State.

The number of degrees conferred by the University from the foundation to the end of 1922 was 7,197, made up as follows :--M.A., 540; B.A., 2,627; B.Ec., 85; LL.D., 28; LL.B., 316; M.D., 70; M.B., 1,393; Ch.M., 1,053; B.D.S., 96; L.D.S., 30; D.Sc., 29; B.Sc., 430; M.E., 10; B.E., 438; B.V.Sc., 23; B.Sc. (Agr.), 21; B.Arch., 8.

In 1922 the teaching staff of the University included 32 professors, 6 associate professors, 2 assistant professors, and 170 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 no 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.

Between 1914 and 1920 there was an increase of 100 per cent. in the number of students attending lectures, principally owing to the increased vogue of secondary education and to the improved facilities for entering the University; but the figures of 1920 were increased by the return of students from active service abroad. The decline of nearly 400 students between 1920 and 1922 is attributable partly to the completion of courses delayed by the war, but probably is due mainly to the increase in fees in 1921, for while the decrease in the number of paying students was 343 that of non-paying students was only 48. The number of students admitted to matriculation was 618 in 1919, 729 in 1920, 575 in 1921, and 464 in 1922. The following statement shows the number attending each course at different periods since 1914:—

Course.	1014	1000	1001		1922.	•
Course.	1914.	1920.	1921,	Men.	Women.	Total.
Degree and Special Courses-		[.			-	
Arta [Day	310	555	626	216	306	522
(invening)	223	236	230	148	58	206
Law	108	280	328	302	11	313
Medicine	525	991	985	772	98	870
Science	72	233	220	126	116	242
Engineering	103	229	224	193		193
Dentistry	27	74	82	76	4	- 80
Veterinary Science	14	17	16	25		25
Agriculture	10	26	28	26	5	31
Architecture	•••	48	55	35	24	59
Economics and Commerce	30	150	138	96	28	124
Japanese and Oriental History		29	12	7	4	- 11
Diploma Courses—			ĺ			
Economics and Commerce	135	296	148	96	22	118
Pharmacy	50	191	204	171	26	197
Military History and Science	. 89	•••				
Massage	•••	42	21	4	10	· 14
	1,696	3,397	3,317	2,293	712	3,005
Less Students included in two	22	41	42	34	6	40
Courses.						
Fotal, Individual Students	1,674	3,356	3,275	2,259	706	2,965

As a result of the expansion of secondary education in 1911 students in increasing numbers became qualified to enter the University in 1915 and subsequent years. The above table shows the extent of the consequent expansion at the University. The greatest growth is shown in the faculties of Medicine, Law, and Engineering, although considerable growth has occurred in the non-professional faculties—Arts, Science, and Economics and Commerce.

University Clinics.

The Royal Prince Alfred Hospital is a General Hospital and Medical School for the instruction of University students and for the training of nurses. 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. All appointments to the medical and surgical staff of the hospital are made conjointly by the Senate of the University and the directors of the Hospital.

Sydney Hospital, founded in 1811, also provides a Clinical School under the direction of a Board of Medical Studies, and all appointments of clinical lecturers and tutors are subject to the approval of the Senate.

Other hospitals recognised as places where studies may be undertaken in connection with the Faculty of Medicine are:—The Royal Hospital for Women, Royal Alexandra Hospital for Children, St. Vincent's Hospital.

EDUCATION.

the Gladesville and Callan Park Mental Hospitals, 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 was established in 1901, and provides facilities for the instruction of students. It was amalgamated with the Dental Hospital of Sydney in 1905. The University lecturers in surgical and mechanical dentistry are, *ex officio*, honorary dental surgeons of the hospital.

Extension Lectures.

University Extension Lectures were inaugurated in 1886, and have been conducted since that date under the direction of a University Extension Board of from twelve to eighteen members appointed annually by the Senate. Courses of lectures are given upon application in various centres at a charge of $\pounds 2$ per lecture upon topics of literary, historical, and scientific interest. At the conclusion of a systematic course, consisting of ten lectures, an examination may be held and certificates awarded to successful candidates. In 1922 the Board provided seventeen courses of lectures of which ten were in country centres. The total number of lectures delivered was eighty-four in addition to a post-graduate course in medicine extending over a fortnight.

Tutorial Classes.

In accordance with the provisions of the University Amendment Act of 1912, the Senate has established regular evening Tutorial classes, which are open to unmatriculated as well as to matriculated students; 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 was appointed at Broken Hill in 1920 and another at Newcastle in 1921. There were over 1,400 students in regular attendance at systematic courses of study during 1922, and fifty-nine tutorial classes were at work, twenty-five being in country districts including seven at Newcastle.

TRAINING OF SCHOOL TEACHERS.

All teachers permanently entering the service of the State are now required stop be trained for their work and must have a preliminary education to the Intermediate or Leaving Certificate standard. Teachers for private schools may also be trained by the State on certain conditions.

The ordinary course at the Teachers' College extends over a period of two years and prepares teachers for the various classes of primary and infant schools. Owing to the urgent demand, teachers of small rural schools are required to undergo an abbreviated course of one year, but the course for teachers of secondary schools extends over four years. Special courses are arranged with reference to departmental requirements and to the capabilities of individual students.

Teachers' College.

Teachers are trained at the partly completed Teachers' College building at the University, at Blackfriars, and at Hereford House (Glebe). Students are usually granted living allowances during their period of training. A hostel for the accommodation of women students has been established in connection with the College.

Stude	nts.		Men.	Women.	Total.	
First year]	67	113	180	
Second year		 	77	99	176	
Third year		 	30	53	83	
Fourth and fifth		 ··· ĺ	19	43	62	
Graduate		 	1	5	6	
Short Course (one	vear)	 	156	166	322	
a 1 .		 		11	11	
Artisan Teachers		 	8	í	8	
Total		 -	358	490	848	

There were 848 students enrolled at the Teachers' College in 1922 distributed as follows :---

Of these students attending the Teachers' College 796 were in receipt of living allowances, 47 were exempt from the payment of fees, and 5 were paying fees.

The staff of the College consists of a Principal, Vice-Principal, 49 lecturers, 9 visiting lecturers, a warden of women students, and 9 clerical and library assistants. Members of the teaching staff are afforded opportunities to study abroad, and leave of absence, on full pay, may be granted for this purpose.

The library in connection with the College contains 20,359 volumes.

Classification of State Teachers.

Teachers in the service of the State are expected to obtain classification either on leaving the Training College or within two years thereof, and they may advance thereafter by acquiring prescribed educational and practical attainments.

A comparative statement of the classifications of the teaching staff of the State schools at the end of the years 1912 and 1922 is shown below; those in the Technical Education Branch are not included.

		1912.			1922.			
Teachers.	Men.	Women.	Total.	Men.	Women.	Total.		
Teachers and Assistants—	1							
First Class	. 263	93	356	439	142	581		
Second Class	851	588	1,439	1,221	976	2,197		
Whind Class	1,216	657	1,873	1,084	1,615	2,699		
Unalassified	. 643	854	1,497	193	559	752		
Ampiting (Tamification	. 221	432	653	209	506	715		
Cooken Too ahow		54	54		75	75		
Lowing Mistrograg		105	105		178	178		
Manual Training Teachers .	•	*	4	106		106		
Visiting Teachers	*	. w .	*	15	79	94		
High School Teachers	05	5]	146	371	318	689		
Femporary Teachers		+	+	35	343	378		
Total	3,289	2,834	6,123	3,673	4,791	8,464		
Students in Training	1.51	285	436	333	478	811		
ubridized School Terehove	. 50	439	489	23	519	549		
Grand Totak	3,490	3,550	7,048	4,029	5,788	9,917		

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* Included above. † Nil.

EDUCATION.

There has been a general advance in the standard of educational attainments in New South Wales during the past ten years. Marked decrease is noticeable in the number of unclassified teachers, while large proportional growth has occurred among teachers holding first and second class certificates. University education is becoming increasingly popular with teachers, and at the end of 1922 there were 808 graduates in the teaching service, viz., 423 men and 385 women.

Teachers awaiting classification consist almost exclusively of ex-students of the Training College ineligible for classification until the completion of two years' teaching experience. Most of these already possess the requsite educational attainments for second or third class certificates.

Temporary teachers were first employed in 1915 to fill the places of teachers absent on war service; the numbers so employed have been diminishing since 1918, but those retained are required to meet pressing needs occasioned partly by the death and incapacitation of soldier-teachers and partly by the difficulty in obtaining suitable entrants to the service.

Particulars as to the conditions of service, classification, and salaries paid to teachers in public schools were published in the Year Book for 1921.

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. The Commonwealth Government has afforded a measure of recognition to the efforts of Australian men of letters by establishing in 1908 a Commonwealth Literary Fund to provide pensions and allowances to literary men and their families.

As far back as the year 1821 a scientific society, under the title of the Philosophical Society of Australasia, was founded in Sydney, and after many vicissitudes of fortune was merged, in 1866, into the Royal Society of New South Wales. Its objects are the advancement of science in Australia, and the encouragement of original research in all subjects of scientific, artistic, and philosophic interest, which may further the development of the resources of Australia, draw attention to its productions, or illustrate its natural history.

The study of the botany and natural history of Australia has attracted many enthusiatic students, and the Linnæan Society of New South Wales was established for the special purpose of furthering the advancement of these particular sciences. The Society has been richly endowed, and possesses a commodious building at Elizabeth Bay, Sydney, to which are attached a library and museum. The proceedings are published at regular intervals, and contain many valuable papers, with excellent illustrations of natural history.

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 Australian Association for the Advancement of Science; the Royal Geographical Society; the University Science Society; Australian Historical Society; and the Naturalists' Society of New South Wales.

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, and since that date the new movement, despite vicissitudes of fortune, has grown considerably. Its main purpose is "to bring the mellowing influence of education into the Labour Movement," and its appeal is to workers of all degrees. In this endeavour it works in conjunction with other educational associations (particularly the Tutorial Classes at the University) and with working-class organizations. It publishes a series of books on matters of local and general economic importance. In 1922 the membership of the association in New South Wales consisted of 268 individual members and 122 organizations, including 42 trade unions, were affiliated with it.

In 1922 classes were held at 59 centres; there were nearly 1,200 meetings and 1,650 students of whom about 1,400 were effective. There was also a considerable number of visitors at many of the lectures. In 1922–23 the Association received an endowment of $\pounds400$ from the State.

CONSERVATORIUM OF MUSIC.

The State Conservatorium of Music, which was established in 1915, provides tuition in every branch of 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 in all subjects is available for juveniles who have not previously received musical tuition. During the year 1922 there were 1619 students enrolled in the various courses of study at the Conservatorium. The financial operations of the year 1922-23 showed a marked improvement, and the net cost to the State of maintaining the institution was reduced to $\pounds 2,180$, although the parliamentary appropriation was £11,447. The receipts consisted of fees and deposits amounting to £22,032; revenue from hire of hall, concerts, etc., $\pounds 1,200$; and the expenditurepayments to teaching staff, £17,554, other salaries, £5,417; and contingencies, £2,441.

The operations of the New South Wales State Orchestra ceased on 6th September, 1922. The net expenditure for the preceeding two months was $\pounds 7,133$, resulting in a net loss of $\pounds 2668$.

MUSEUMS, LIBRARIES, AND ART GALLERIES.

Recognising that Museums, Libraries, and Art Galleries are powerful factors in promoting the intellectual wellbeing of the people, the Government of New South Wales has been active in founding and maintaining such establishments. The expenditure by the State on buildings for Museums, Libraries, and Art Galleries to 30th June, 1922, amounted to £423,026.

Museums.

The Australian Museum, the oldest institution of its kind in Australia was founded in Sydney in 1836 as a Museum of Natural History. In 1853 the Museum, till then managed by a committee, was incorporated under control of trustees, with a State endowment, which is now 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 fine 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 1922, visitors to the Museum numbered 208,757. The institution is supported by a statutory endowment of £1,000 per year and by an annual parliamentary appropriation amounting in 1923-24 to £15,883. The expenditure during the year was £16,128.

A Technological Museum was instituted in Sydney at the close of 1879, under the administration of a committee of management appointed by the trusteees of the Australian Museum. The whole original collection of some 9,000 specimens was destroyed in 1882 by fire. Efforts were at once made to replace the lost collection, and in December, 1883, the Museum was again opened to the public. In 1890 it was transferred to the Department of Education, as an adjunct to the Technical College, and now contains a valuable series of specimens illustrative of various stages of manufacturing, and an excellent 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 of the Technological Museum in connection with the development of the natural vegetable resources of Australia, particularly in respect of the pines and eucalypts.

The functions of the Mining and Geological Museum include the preparation and collections 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 established, under the designation of the Free Public Library, on 1st October, 1869, when the building and books of the Australian Subscription Library, founded in 1826, were purchased by the Government. The books thus acquired formed the nucleus of the present Library. In 1890 the Library was incorporated with a statutory endowment of $\pounds 2,000$ per annum for the purchase of books.

The scope of the Public Library, which is essentially a reference institution, is extended by a loan system, under which, in 1922, 33,435 volumes were forwarded to 462 country institutions, including libraries, schools of arts, progress associations, lighthouses, individual students in the country, associations of primary producers, and to Public School Teachers' Associations, and branches of the Agricultural Bureau.

In 1922 the Reference Department of the Public Library (exclusive of the Mitchell Library) contained 249,290 volumes, including 37,275 volumes for country libraries under the lending system. The attendance of visitors during 1922 numbered 214,527.

In 1899 Mr. David Scott Mitchell donated to the trustees of the Public Library a collection of 10,024 volumes, together with 50 valuable pictures and at his death, in 1907, bequeathed to the State the balance of a unique

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collection, principally of books and manuscripts relating to Australasia, and containing over 60,000 volumes, and 300 framed paintings of local historic interest, valued at £100,000. He endowed the Library with an amount of £70,000, from which the income, amounting to about £2,750 per annum, is expended on books and manuscripts. In 1922 there were 109,723 volumes in the Mitchell Library, which is located in a separate building, opened in March, 1910. There were 18,179 visitors during the year.

The total cost to the State of the Public Library buildings was £28,957, and of the Mitchell Library £43,118. The expenditure on the Public Library (including the Mitchell Library) during 1922 was £24,520.

Sydney Municipal Library.

The Sydney Municipal Library was formed by the transfer to the City Council in 1908–9 of the lending branch of the Public Library; it contained 40,632 volumes in 1922.

Maintenance costs during 1922 amounted to £11,572, made up as follows:—Salaries, &c., £5,803; books, periodicals, binding, and electric lighting, £5,769.

Other Libraries.

Local libraries established in about 400 centres throughout the State, may be classed broadly under two heads—Schools of Arts, receiving 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 about 23,000 volumes may be found on the shelves.

The library in connection with the Technological Museum, at the Central Technical College, and its branches, contains approximately 8,500 text books.

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 paintings and statuary, including some works of prominent modern artists, and some valuable gifts from private persons; there is also a fine collection of water colours.

The present value of the contents of the Gallery is $\pounds 164,000$, and the cost of the building to 30th June, 1922, was $\pounds 94,437$.

The number of paintings, etc., in the Gallery at end of year 1922 was 2,659, and the total amount expended in purchasing works of art during that year was $\pounds 2,777$, distributed as shown below :---

	Classification.									
Oil Paintings Water Colours Black and White Statuary, Casts, and	nd Bro	 nzes	•••	•••	••••	••••	•••	No. 509 408 783 177	£ 2,231 198 262 	
Various Art Wo Mosaic, etc.	•••	ме 	tals, 	Ivory, 	Ceram	ics, G	lass, 	782	\$6 2,777	

The attendance at the National Art Gallary during 1922 was, on week days 138,946, and on Sundays, 72,041.

The total disbursements in connection with the National Art Gallery during the year 1922 were £6,900.

Art students, under certain regulations, may copy any of the various works, and enjoy the benefit of a collection of books of reference on art subjects. In 1894 a system of loan exchanges between Sydney, Melbourne, and Adelaide was introduced, by which pictures are sent from Sydney to Melbourne and Adelaide and reciprocally, with results most beneficial to the interests of art. Since 1895 the distribution of loan collections of pictures to the principal country towns has been permitted for temporary exhibition, and 252 pictures were so distributed among fourteen country towns during 1922.

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 was instituted in 1897, and consists of the interest on approximately $\pounds 1,000$, which 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 was instituted in 1922. It is a bequest in the estate of the late J. F. Archibald 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 value of the prize is approximately $\pounds 400$.

STATE EXPENDITURE ON EDUCATION.

Although the expenditure by the State on education 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 1922 was $\pounds 3,733,832$. The following statement provides a comparison of the expenditure at intervals since 1891 :-

Maintenance				Per Pupil-Mean Quarterly Enrolment.					
Year. Administration.	School Premises.	Total Expenditure.	Maintenance and Administration	School Premises.	Total Expenditure.				
	£	£	t t	1 £ s. d.	£ s. d.	1 £ s. d.			
1891	578,191	191,374	769,565	3 7 10	126	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	017 4	5 11 2			
1918	1,736,175	279,863	2,016,038	5 19 11	0 19 4	6 19 3			
1919	1,971,211	299,038	2,270,249	6 16 5	1 0 9	7 17 2			
1920	2,668,059	410.847	3,078,906	8 15 4	170	10 2 4			
1921	3,227,245	329,795	3,557,040	10 4 2	1 0 11	11 5 1			
1922	3,234,549	499,283	3,733,832	9 18 3	1 10 7	11 8 10			

Practically the whole increase in expenditure in recent years has been absorbed in maintenance and administration, the capital expenditure having been so small as to give rise to a serious problem in providing school accommodation. In his annual report (1921) the Minister for Education estimated that "fully £1,500,000" was needed to perform essential and urgent work to relieve overcrowding in schools. Special sums of £250,000 and £500,000 were appropriated from loans for such works during 1921-22 and 1922-23 respectively. Of these amounts, £91,787 and £387,270 were expended. A further appropriation of £500,000 was made in 1923-24. The following statement shows the distribution of expenditure in connection with primary and secondary schools in the three calendar years 1920 to 1922 :--

0 00 1022.	1920.	1921.	1922,
Sites, Building Additions*-	£	£	£
Primary Schools	170,425	173,781	312,083
High Schools	44,975	26,703	46,378
Teachers College	2,622	3,816	8,482
Rates (municipal and shire)†	40,434	36,376	35,268
Rent, Furniture and Repairs	152,391	89,120	97,072
Salaries and Allowances -		1	
Primary Schools	2,017,960	2,446,638	2,446,226
High Schools	160,527	200,028	205,606
Evening Continuation Schools	9,247	12,190	13,738
Other Maintenance Expenditure	•		
Primary Schools	149,913	188,975	189,232
High Schools	25,472	27,314	32,104
Evening Continuation Schools	1,062	1,541	1,775
Bursaries and Scholarships	56,436	58,285	50,766
Boarding and Conveyance Allowances	30,271	36,149	39,866
Training of Teachers	78,398	98,537	87,331
School Medical Inspections	19,875	22,197	23,506
' al 17 d' ⁻	39,897	47,971	45,927
Administration and other Expenses	79,001	87,419	98,472
	£3,078,906	3,557,040	3,733,832

In addition to the above expenditure vested residences of an estimated annual value of $\pounds 32,212$, in 1922, were granted to teachers, as a deduction from salary.

To estimate the total cost to the State of education in any one year would necessitate an investigation of the capital value of buildings and equipment and the allowance of a rate of depreciation, etc., and the addition in 1922 of the following items:—University grant, £118,870; Public Library (1922-1923), £24,520; Australian Museum, £16,128; National Art Gallery, £6,900; Sydney Grammar School, £1,500; Sydney Observatory, £6,900; Conservatorium of Music, £11,303; Technical Education, £127,638; certain small sums allotted by way of subsidy to educational institutions; and the expenditure by the Department of Agriculture on Hawkesbury Agricultural College and the training of students on experimental farms. In certain cases small amounts of revenue from fees, endowments, etc., should be deducted.

The insured value of all school properties of the Department of Education in May, 1922, was approximately $\pounds 4,000,000$. This value is based on valuations of buildings existing in 1912 and on the cost of buildings subsequently erected. It is, therefore, subject to a very large allowance for appreciation of values.

The collection and expenditure of public moneys in New South Wales are controlled by four authorities, viz., the State and Commonwealth Governments, local governing bodies, such as Municipal and Shire Councils, and Boards, such as the Metropolitan and Hunter River District Water Supply and Sewerage Boards and the Sydney Harbour Trust, appointed by the State Government, with statutory authority to administer public services.

Prior to Federation about two-thirds of the revenue of the State Government from taxation consisted of Customs and Excise duties, but power to impose these duties now lies exclusively with the Commonwealth Government. All other realms of taxation, however, are open to both Governments. Each imposes on the people of the State an income tax, a land tax (which, however, in the case of the State tax in New South Wales is very limited in its application) and probate duties; in addition the States imposes stamp duties, motor, betting, totalisator and racecourse admission taxes, also fees for certain licenses, while the Commonwealth levies a tax upon entertainments.

The expenditure of the State Government, other than loan expenditure, may be classed conveniently under two heads, (a) Government expenditure, which includes interest and charges on debt, expenditure in connection with the Parliament, elections, administration of local government, education, health (including hospitals), charities, justice, police, prisons, lands (including closer settlement), mines, agriculture, forests, water conservation and irrigation, and public works, including industrial unde takings; and (b) expenditure of the business undertakings, viz., Railways and Tramways, Metropolitan and Hunter River District Water Supply and Sewerage Boards, and the Sydney Harbour Trust.

The Commonwealth bears the expenditure upon trade and customs, naval and military defence, lighthouses, navigation, quarantine, astronomical and meteorological observations, Federal elections, old age and invalid pensions, and of the Post and Telegraph Department, which is in the nature of a business undertaking.

Local governing bodies are required to levy a general rate of not less than one penny in the pound (unless by special permission of the Governor) on the unimproved capital value of land, and have power also to levy certain other rates on either the unimproved or the improved value. The extent of their rating powers is described in that portion of this Year Book which treats of local government, and their general expenditure is confined to administration, health, roads, and other public services.

The Water and Sewerage Boards are authorised to levy rates to meet the cost, including interest on capital, of the services rendered, and in like manner the Sydney Harbour Trust has power to demand and collect wharfage and tonnage rates in respect of vessels berthed at any wharf, etc., vested in the Commissioners of the Trust, or of their cargoes.

Each Government raises such loan money as it requires for its own purposes. Loans raised by the State have been devoted chiefly to developmental and reproductive works, and all the loans raised by the Commonwealth Government prior to the war were similarly applied, but those raised during the years 1915 to 1921, amounting to £250,000,000, were raised for war purposes or for the payment of gratuities to, and the repatriation of Australian soldiers.

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,

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and, in the case of a shire, thrice its annual income, and all such loans are guaranteed by the State Government.

TAXATION.

The total amount of taxes collected from the people of New South Wales by the several authorities during the year 1922-23 amounted to £35,237,650. The various forms of State taxation yielded a revenue of £7,799,118; the Commonwealth Government collected taxes amounting to £21,028,978, and receipts by local bodies from rates and charges were £6,409,554.

The following statement shows in detail the taxation collected in New South Wales by the State and Commonwealth Governments, and the rates and charges received by local bodies, etc., during the five years ended the 30th June, 1923.

Head of Taxation, or Charge.	1919.	1920.	1921.	1922.	1923.
State.	£	£	£	£	£
Land Tax	2,800		2,717	2,490	
Income Tax	2,355,243	2,308,267	4,399,360	4.077,897	4,196,228
Stamp and Probate Duties.					
Stamps	631,007	889,512	1,316,671	1,235,911	1,349,512
Bank-note Composition	1,456	1,327	1,461	1,412	1,374
Betting Tickets	54.841	87,504	96,336.	106,066	109,550
Probate	574,950	1,061,574	727,716	906,289	1,175,444
Settlement and Compa-					_
nies' Death Duties	925	959	6,636	1,018	1,152
Total, Stamp Duties \pounds	1,263,179	2,040,876	2,148,820	2,250,696	2,637,032
Motor Tax	90,716	110,390	123,590	141,772	185.694
Betting Taxes	72,290	93,726	108,911	110,120	111,079
Totalizator Tax	132,403	222,970	274,171	281,819	275,944
Racecourse Admission Tax	•••		117,820	155,638	150,587
Licenses	167,359	183,455	212,744	228,585	239,984
Total, State Taxa-	4 000 000	4 000 510	7 000 100	7 949 917	8 800 110
tion £	4,083,990	4,962,518	7,388,133	7,249,017	7,799,118
COMMONWEALTH.					
Customs Duties	5,398,654	6,604,913	9,797,982	7,847,620	9,905,443
Excise ,,	2,841,047	4,015,417	5,027,497	5,057,694	4,898,854
Estate	310,454	452,972	469,317	373,821	489,680
Land Tax*	1,036,974	1,162,400	1,144,174	1,268,338	1,111,588
Income Tax*	4,430.035	5,245,497	5,280,977	5,613,053	4,301,506
War-time Profits Tax* Entertainment Tax	467,040 136,892	1,293,840	844,425 272,631	516,198 277,541	113,269 208,632
Total, Commonwealth	190,092	234,615		411,011	200,032
Taxation £	14,621,096	19,009,714	22,777,003	20,954,265	21,028,978
LOCAL.					
Wharfage and Tonnage					
Rates	365,03 3	355,784	551,377	687,119	734,735
fees for Registration of Dogs	18,311	17,678	19,137	20,370	19,629
Municipal Rates-		1			
City of Sydney	465,988	564,747	623,766	747,654	729,096
Suburban and Country	1,241,178	1 907 951	1 020 808	1 055 537	1,992,423
Municipalities Shire Rates	729,966	1,327,351 763,356	1,630,626 868,809	1,855,557 1,034,147	1,992,423
Vater and Sewerage Rates	129,900	103,330	000,009	1,034,147	1,107,411
-(Metropolitan and					
TT 4 1	1,234.340	1,309,146	1,618,261	1,760,123	1,826,260
	1,401.010	1,000,140	1,010,401	1,100,120	1,020,200
Total, Local Rates and Charges £	1 054 010	4,338,062	# 911 0FC	6,104,970	6,409,554
	4,054,816		5,311,976		
Grand Total £	22,759,902	28,310,294	35,477,112	34,308,252	35,237,650

* Partly estimated.

† Year ended 31st December preceding.

Taxation per Head of Population.

The previous quotations, stated in their equivalent rates per head of population, are shown in the following table:---

Ilead of Taxation, or Charge.	1919.	1920.	1921.	1922.	1923.
State.	£ s. d.	£ s. d	£ s. d.	£ s. d.	£ s. d.
Land Tax Income Tax	1 4 0		2 2 1	1 18 4	1 18 7
Stamp and Probate Duties-					0.10.0
Stamps	065	0 8 9	0 12 7	$\begin{array}{c} 0 11 8 \\ 0 1 0 \end{array}$	0 12 6
Betting Tickets Probate Settlement and Companies	0 0 7 0 5 10	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 0 11	$\begin{array}{ccc} 0 & 1 & 0 \\ 0 & 8 & 6 \end{array}$	$\begin{array}{ccc} 0 & 1 & 0 \\ 0 & 10 & 10 \end{array}$
Settlement and Companies Death Duties	· · · ·		001	•••	•••
Total, Stamp Duties £	0 12 10	1 0 0	107	1 1 2	144
Motor Tax	0 0 11	0 1 1	0 1 2	0 1 4	0 1 8
Betting Taxes Totalizator Tax	$\begin{array}{cccc} 0 & 0 & 11 \\ 0 & 0 & 9 \\ 0 & 1 & 4 \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{ccc} 0 & 1 & 1 \\ 0 & 2 & 8 \end{array}$	$\begin{array}{cccc} 0 & 1 & 0 \\ 0 & 2 & 8 \end{array}$	$\begin{array}{ccc} 0 & 1 & 0 \\ 0 & 2 & 7 \end{array}$
Racecourse Admission Tax Licenses	0 1 9	0 1 10	$\begin{array}{ccc} 0 & 1 & 2 \\ 0 & 2 & 0 \end{array}$	$\begin{array}{cccc} 0 & 1 & 6 \\ 0 & 2 & 2 \end{array}$	$\begin{smallmatrix}0&1&5\\0&2&2\end{smallmatrix}$
Total, State Taxation £	2 1 7	2 8 8	3 10 9	3 8 2	3 11 9
Commonwealth.					
Customs Duties Excise ,, Estate ,, Land Tax* Income Tax* War-time Profits Tax* Entertainment Tax	$\begin{array}{c} 2 \ 14 \ 10 \\ 1 \ 8 \ 11 \\ 0 \ 3 \ 1 \\ 0 \ 10 \ 7 \\ 2 \ 5 \ 1 \\ 0 \ 4 \ 9 \\ 0 \ 1 \ 5 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccc} 4 & 13 & 8 \\ 2 & 8 & 2 \\ 0 & 3 & 11 \\ 0 & 10 & 11 \\ 2 & 10 & 7 \\ 0 & 8 & 1 \\ 0 & 2 & 7 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Total, Commonwealth Taxation £		966	10 17 11	9 16 10	9136
LOCAL.					
Wharfage and Tonnage Rates Fees for Registration of Dogs +Municipal Rates	$\begin{array}{ccc} 0 & 3 & 8 \\ 0 & 0 & 2 \end{array}$	$[\begin{array}{cccc} 0 & 3 & 6 \\ 0 & 0 & 2 \\ \end{array}]$	$\begin{smallmatrix}0&5&3\\0&0&2\end{smallmatrix}$	$\begin{array}{ccc} 0 & 6 & 6 \\ 0 & 0 & 2 \end{array}$	$\begin{array}{ccc} 0 & 6 & 9 \\ 0 & 0 & 2 \end{array}$
City of Sydney Suburban and Country Muni-	049	057	0 5 11	0 7 0	0 6 9
cipalities †Shire Rates	$\begin{array}{cccc} 0 & 12 & 8 \\ 0 & 7 & 5 \end{array}$	$\begin{array}{cccc} 0 & 13 & 0 \\ 0 & 7 & 6 \end{array}$	$\begin{array}{ccc} 0 \ 15 & 7 \\ 0 & 8 & 4 \end{array}$	$\begin{array}{ccc} 0 & 17 & 5 \\ 0 & 9 & 9 \end{array}$	$\begin{array}{cccc} 0 & 18 & 4 \\ 0 & 10 & 2 \end{array}$
Water and Sewerage Rates- (Metropolitan and Hunter)	0 12 7	0 12 10	0 15 6	0167	0 16 10
Total, Local Rates and Charges f		2 2 7	2 10 9	2 17 5	2 19 0
Grand Total £	11 11 6	13 17 9	16 19 5	16 2 5	16 4 3

* Partly estimated. † Year ended 31st December preceding.

Particulars of revenue from taxation in the other States, and in the Commonwealth, for the year ended 30th June, 1923, will be found on page 114.

NEW SOUTH WALES OFFICIAL YEAR BOOK.

State Land Tax.

The land tax of the State is levied on the unimproved value at the rate of 1d. in the \pounds . A sum of \pounds 240 is allowed by way of exemption, and where the unimproved value is in excess of that sum, a reduction equal to the exemption is made; but where several blocks of land within the State are held by a person or company, only one amount of \pounds 240 may be deducted from the aggregate unimproved value.

The State land tax is now levied only on the unincorporated portion of the Western Division.

State Income Tax.

Income tax is payable by all persons, other than companies, in receipt of more than £250 per annum, derived from all sources within New South Wales, and in the case of companies the total receipts are taxable. A taxpayer is entitled to a deduction of £50 in respect of each child under 18 years of age wholly maintained by him, and insurance and superannuation premiums up to £50 are exempt.

The tax payable under Act No. 21 of 1922 by any company is 2s. 6d. in the \pounds on the taxable income of the company without exemption, and the rates per \pounds for persons other than companies are as follows:—

On tax	able incon	ae which	1 does	not exceed	£250	•••	••• •••	ls.
,				ds £250 and		exceed	£500	1s. 1d.
	,	**		£500	"		£750	1s. 2d.
	,	"	,,	£750	,,		£1,000	1s. 3d.
	, .	,,	,,	£1,000	,,		£1,500	ls. 4d.
	,	,,	,,	£1,500	,,		£2,000	1s. 5d.
	•	,,	,,	£2,000	,,		£2,500	1s. 6d.
	,	,,	.,,	£2,500	,,		£3,000	1s. 7d.
	,,	**	,,	£3,000	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		£3,500	la. 8 d.
	,,	,,	,,	£3,500		. '	£4,000	ls. 10d.
	; ;	,,	,,	£4,000	,,		£5,000	2s. 0d.
	<u>,</u> ,	,,	,,	£5,000	,,		£7,000	2s. 2d.
	,, ,,	,,	,,	£7,000				2s. 3d.

In each case an addition of one-third of the tax is made on so much of the income as is derived from the produce of property. In computing the tax payable, income from personal exertion is first taken into account.

In the case of a taxpayer whose income is derived wholly from agricultural, dairying, or pastoral pursuits, although the tax is payable upon the taxable income derived during the year of assessment, the rate of tax payable is determined upon the average taxable income of that year and the four years immediately preceding.

The exemptions from income-tax are as follow:----

Municipal corporations and other local authorities.

- Mutual life assurance societies, and other companies or societies not carrying on business for purposes of profit or gain, except income from mortgages.
- Societies registered under the Friendly Societies Act, or under any Act relating to Trade Unions.

- Ecclesiastical, Charitable, and Educational Institutions of a public character, whether supported wholly or partly by grants from the Consolidated Revenue Fund or not.
- Income arising or accruing to any person from Government debentures, inscribed stock, and treasury bills.

Dividends derived from shares in a company.

Starr-Bowkett Building Societies.

In addition to the above, under the Co-operation, Community Settlement, and Credit Act (No. 1) of 1924, the undistributed profits of a society registered under that Act are exempt from income tax.

These exemptions do not extend to the salaries and wages of persons employed by any such corporation, company, society, or institution, whether paid wholly or in part from the revenues thereof.

No statistics relating to incomes are available. In addition to the income tax levied by the State a tax on incomes is imposed by the Commonwealth, particulars of which are given on page 85.

State Stamp and Probate Duties.

In the year 1920 additional Stamp and Probate Duties were imposed, and the rates payable since 1st January, 1921, on estates of deceased persons have been as follow:—

Over £1,000 and under £5,000-2 per cent.

	,,	£5,000	,,	£10,000-21 to 41	per cent.	Increase $= \frac{1}{2}$ pe	r cent. j	per £1,000
• ;	,,	£10,000	,,	£20,000-5 to 7	39	Increase=1	.57	£2,000.
	,,	£20,000	,,	£140,000-71 to 19	,,	$Increase = \frac{1}{2}$	53	£5,000.
1	5.9	£140,000	.,	$\pm 150,000 - 19\frac{1}{2}$				
E	x	ceeding £1	50,000	-20 per cent.				

The duties are charged upon the whole value of the estate, but estates valued at not more than £1,000 are exempt, and half rates are allowed on estates under £5,000 when the property passes to widows, or to legitimate children under 21 years of age.

Particulars of the estate duties imposed by the Commonwealth are given on page 86.

Many legal documents are subject to stamp duty, and a stamp duty of 2d. is imposed upon all cheques and upon receipts, whether by cash or cheque, for amounts of £2 or more.

State Motor Tax.

Motor vehicles must be registered annually with the Police Department, and on such registration a fee fixed at a minimum of £1 is payable in respect of a motor cycle, motor tricycle, or taxi-cab. On other motor vehicles the license fee ranges between £2 and £20, and the basis upon which it is payable is the "horse-power" of the vehicle. Motor cars used by medical practitioners or clergymen, public motor cars (except taxi-cabs), and trade motor vehicles pay half-rates. Government and ambulance motor vehicles, and those owned by municipalities and shires, or by the City of Sydney, are exempt from taxation. The total number of motor vehicles licensed, including motor cycles, was 60,035, and the revenue benefited by the tax during 1922-23 to the extent of £185,694, while £72,655 were received for licenses.

NEW SOUTH WALES OFFICIAL 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.

With regard to the 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, or 20 miles from the Post Office, Newcastle, to 20 per cent. on courses outside the limits mentioned.

The taxes payable by bookmakers are regulated according to the particular courses and enclosures where operations are carried on, and vary considerably. The amount received during the year ended 30th June, 1923, from clubs and bookmakers, was $\pounds 111,079$.

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 half-penny 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 which is the same as if tickets had been issued. The revenue derived from this source during the year ended 30th June, 1923, was £109,550.

State Totalizator Tax.

The Totalizator Act (No. 75, 1916) was passed on the 20th December, 1916, and was amended by Acts No. 29, 1919, and No. 16, 1920. The revenue derived from this source during the year 1922-23 amounted to $\pounds 275,944$.

All registered racing clubs and associations must establish an approved totalizator. The commission to be deducted from the total amount invested is $12\frac{1}{2}$ per cent., with an additional 1 per cent. for the sinking fund to meet the cost of machines. The contribution which must be paid to the State Treasurer by clubs racing for profit is 9 per cent. of the total payments into the machine and by other clubs $5\frac{1}{2}$ per cent.

State Racecourse 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 all racecourses within 40 miles of the General Post Office, Sydney, and a similar distance from the Newcastle Post Office. The amounts leviable are:— Twopence on the admission charge through the outside gate or into the flat, 10d. into the Leger Reserve, while into the Saddling Paddock the rate is 3s. for males, 2d. additional being charged at Randwick, and 1s. 7d. for females. If no charge is made at the outside gate the tax for the Leger and Paddock enclosures is 2d. higher. Members 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. The amount received on account of this tax for the year ended 30th June, 1923, was £150,587.

This amount, added to the receipts from betting and totalisator taxes, brings the total revenue from racing taxation during 1922-23 to £647,160.

Year endcd 30th June.	Racing Clubs and Associations.	Bookmakers.	Betting Tickets Stamp Duty.	Totalisator Tax.	Racccourse Admission Tax.	. Total.
1010	£	£	£	£	£	£
1916	10,102	21,228	27,636			58,966
1917	22,881	24,655	40,849	6,346	•••	94,731
1918	31,815	27,544	57,391	82,802		199,552
1919	43,969	28,321	54,841	132,403		259,534
1920	60,951	32,775	87,504	222.970		401,200
1921	66,970	41,941	96,336	274.171	117,820	597,238
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
Fotal	369,871	264,489	580,173	1,276,454	421,037	2.915.024

Commonwealth Land Tax.

The first direct taxation by the Federal Government was imposed in 1910, when the Land Tax was passed, which levies a graduated tax on the unimproved value of the lands of the Commonwealth. In the case of owners who are not absentees, an amount of £5,000 is exempt, and the rate of tax is $1 \frac{1}{187500}$ d. for the first £1 of value in excess of that amount, and increases 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 $2 \frac{1}{18750}$ d. to 6d. for the next £75,000. On every £ in excess of £80,000, the rate payable is 10d.

Lands exempt from taxation are those owned by a State, municipality, or other public authority, by savings banks, friendly societies, or trade unions, or such as are used solely for religious, charitable, or educational purposes.

The latest available statement issued by the Commonwealth Commissioner of Taxation shows that the land tax payable for New South Wales property by residents was £1,192,086, by absentees £23,635; total, £1,215,721. For the whole Commonwealth the corresponding figures were:—Residents, £2,133,117; absentees, £55,106; total, £2,188,223.

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).

The exemptions from taxation 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; interest on certain Commonwealth war loan securities; 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; salaries of Governor-General, State Governors, foreign consuls, and trade commissioners of any part of the British Dominions; agricultural, pastoral and horticultural, viticultural, stock-raising, manufacturing and other industrial societies not carried or. for profit or gain; musical, art, scientific, and literary societies; remuneration paid by the Commonwealth or a State Government to non-residents for expert advice, and war pensions paid under the Australian Soldiers' Repatriation Act, 1920-21. 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.

Resident taxpayers are allowed an exemption of £200 less £1 for every £3' by which the income exceeds £200. Absentees are assessed on their total incomes from all sources in Australia.

Special deductions include £50 for every child under 16 years of age maintained by a resident taxpayer; payments up to £100 for friendly society benefits, superannuation, etc.; and up to £50 for life assurance and fidelity guarantee; and gifts over £5 each to public charitable institutions or contributions to the Department of Repatriation.

The rate of taxation upon incomes derived from personal exertion is $3\frac{3}{500}d$. per pound sterling up to £7,600, increasing uniformly with each increase of one pound sterling of the taxable income by three eight-hundredths of one penny, until an average rate of 2s. 74d. per pound is reached at £7,600. Over £7,600 the rate per pound sterling is 5s.

The rate of taxation upon incomes up to £546 derived from property is stated by the following formula:---

$$\mathbf{R} = \left(3 + \frac{\mathbf{I}}{181.058}\right) \text{pence},$$

R being the average rate of tax in pence per pound sterling, and I the taxable income in pounds sterling.

Over the sum of £546, and up to £2,000, the tax increases continuously with the increase of the taxable income till it reaches 33.6 pence per pound sterling on £2,000 10s., thence up to a rate of 5s. for every pound sterling in excess of £6,500.

To the tax payable in all cases is added a further tax equal to 53.5 per cent.

Companies pay a flat rate of 1s. in the £ on the taxable income.

In assessments for the year which began on 1st July, 1922, and subsequent years, the rate to be applied to the taxable income is to be calculated as if the taxable income were the average of the taxable incomes derived in a period of at least two and not more than five years immediately preceding.

Winners of prizes in lotteries pay a tax of 12¹/₂ per cent.

During 1923 an agreement was made between the Commonwealth and State Governments for the collection by the State Commissioner of Taxation of the income tax payable in the State under Commonwealth law, thus obviating the necessity for separate returns.

Commonwealth Estate Duties.

The Estates Assessment Act (No. 22 of 1914) provided for the imposition of a duty on properties of persons who died after the commencement of the Act. The rates are 1 per cent. where the total value exceeds \pounds 1,000 but does not exceed \pounds 2,000, and an additional one-fifth per cent. for every thousand pounds, or part thereof, in excess of two thousand pounds, the maximum being 15 per cent.

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.

Commonwealth Entertainments Tax.

The Entertainments Tax is levied on payments for admission to almost every class of amusement at the rate of one penny when the payment for admission is one shilling, and, if it exceeds one shilling, one halfpenny for every sixpence or part of sixpence by which it exceeds such amount. Details of the various classes of entertainment and the amount of tax collected, also the number of persons admitted and the amounts paid, will be found in Part Social Condition of this book.

THE STATE ACCOUNTS.

The State Accounts are kept on a cash basis, and the financial position can be ascertained readily from the annual statement prepared by the Treasurer. This, however, involves the consideration of the Consolidated Revenue Account, Closer Settlement Account, Public Works Account, Loans Account, the various Trust Accounts shown on page 98, and the accounts of the industrial undertakings shown on page 95, which do not form part of the Consolidated Revenue Account. Some little difficulty, moreover, may be experienced in determining the actual position, as due regard must be given to such items as refunds, advances, cancellations, and cross entries.

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 the 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.

THE CONSOLIDATED REVENUE ACCOUNT.

The Consolidated Revenue Account for each year shows the whole of the receipts and expenditure, inclusive of those in connection with business undertakings, but exclusive of transactions under the Loans Account and the other accounts previously mentioned. All revenue is paid into the Consolidated Revenue Account, but the whole cannot be used for general purposes, as, under section 13 of the Forestry Act, 1916, one-half of the gross proceeds received by the Forestry Commission must be carried to a special account and set apart for afforestation; also, under the Public Works and Closer Settlement Funds Act, 1906, two-thirds of the net proceeds of the sale of Crown lands, exclusive of interest, less 20 per cent., must be paid to the Public Works Fund. These are the only cases in which revenue is earmarked for specific purposes.

The receipts during the year ended 30th June, 1923, amounted to $\pounds 36,145,944$, and the expenditure to $\pounds 35,342,436$, so that on the operations of the year there was a surplus of $\pounds 803,508$, which decreased the accumulated deficiency to $\pounds 2,774,755$. Similar details for each of the last ten years are shown in the following table, also the revenue and expenditure per head of population:—

Year ended	R see	pts.	Expend	liture.	Surplus (+) or deficiency (),		
30th June,	Total.	Per inhabitant.	Total.	Per inhabitant.	On operations of year.	Accumulated at end of year.	
·	£	£ s. d	£	£ s. d.	£	£	
1914	18,438,228	9 19 8	18,065,189	9 15 7	(+) 373.039	(-) 793,978	
1915	18,946,227	10 1 1	18,516,179	9 16 7	(+) 430.048	(-) 363,930	
1916	19,703,518	10 8 0	19,553,927	10 6 5	(+) 149,591	(-) 214,339	
1917	20,522,097	10 16 8	20,790,895	10 19 6	(-) 268,798	(-) 483,137	
1918	21,543,742	11 4 0	21,519,918	11 3 8	(+) 23.824	(-) 459.313	
1919	23,448,166	11 18 6	23,233,398	11 16 3	(+) 214,768	(-) 244,545	
1920	28,650,496	14 1 1	30,210,013	14 16 4	(-)1,559,517	(-)1.804.062	
1921	34,031,396	16 5 7	34,476,892	16 9 10	(-) 445,496	(-)2.249.558	
1922	35,637,820	16 14 11	36,966,525	17 7 5	(-)1.328,705	(-)3,578,263	
1923	36,145,944	16 12 8	35,342,436	16 5 3	(+) 803,508	(-)2.774.755	

The increases in revenue and expenditure, although constant, were gradual up to 1918-19. Since that year the expenditure has been considerably

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affected by the movement of the basic wage, which was increased from £3 to $\pounds 3$ 17s. per week in October, 1919, and from £3 17s. to £4 5s. in October, 1920. The effect of the subsequent reductions to £4 2s. in October, 1921, and to £3 18s. in May, 1922, is apparent in the reduced expenditure in 1922-23.

Heads of Revenue and Expenditure.

The following table shows the details of revenue and expenditure during the last five financial years. The revenue in 1922-23 was the largest recorded for the State, being more than £500,000 greater than in 1921-22, but the xpenditure was £1,624,000 less.

1	1919.	1920.	1921.	1922.	1923.
REVERUE.		1	1		
Governmental.	£	£	£	£	£
evenue Returned by Commonwealth	2,380,139		2,533,234	2,632,036	2,690,19
evenue neturned by commonwearth	2,000,100	2,312,11	2,000,201	2,002,000	2,000,10
· · · · · · · ·		1.002.010	H 000 100	F 040 01F	F 500 11
tabe Taxation	4,083,990	4,962,518	7,388,133	7,249,017	7,799,11
and Revenue-			1 005 051	1 100 700	1 007 00
Alienation	1,049.674	1,115,399	1,235,951	1,130,777	1,025,29
Occupation and Miscellancous, including Forestry	778,733	800,040	915,514	878,043	888,93
		·			
Total Land Revenne £	1,828,407	1,915,439	2,151,465	2,008,820	1 01/ 09
	1,010,100	-,,	-,,		1,914,23
ervices Rendered	440.007	543,278	P40 001	923,915	984,40
1 1 1	446,837		748,291	983,058	932,98
	632,039	683,140	695.324		
ndustrial Undertakings	11,581	12,505	12,005	11,050	10,36
Advances Repaid	28,908	95,856	40,083	92,596	52,84
Total Governmental £	9,411,899	10,685,453	13,569,535	13,905,492	14,384,14
Business Undertakings.					
Railways and Tramways	19 193 096	15,997,584	18 017 289	19 145 082	19,083,50
	618.901		18,047,389 797,211	19,145,082 827,±23	852,24
vdney Harbour Trust	1 204 210	1,309,146	1 010 001	1,760,123	1,826,20
Water Supply and Sewerage	1,234,310	1,000,190	.1,618,261	1,100,120	1,020,20
Total Business Undertakings £	14,036,267	17,965,043	20,462,861	21,782,328	21,761,80
		·	÷		
Grand Total £	23,448,166	28,650,496	34,031,396	35,637,820	26,145.9
EXPENDITURE.					
Governmental.					
1				1 001 0 1	1 007 10
	975,352	1,074,896	1,637,586	1,604,6:7	1,827,10
T 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	6,832		2,566		
Fransfer to Public Works Fund	369,769	402,388	451,561	406,708	347,9
Departments-					
Premier	92,576		119,480	70,779	65,19
Chief Secretary	829,090		1,359,375	1,474,054	20 549 4
Public Health	. 802,280	951,957	1,258,910	1,474,054 1,215,622	5-,040,4
Treasurer (excluding Business Undertakings		1 '			
and Interest on Deposits, &c.)	803,294	1,711,092	1,158,869	1,054,192	948,3
Attorney-General and Justice	434,334		576,224	651,191	646,4
Lands	396,348		580,949	630,704	575,9
Public Works (excluding Business Undertakings)				658,080	637.2
	427,500	515,862	635,128		
Public Instruction (excluding Endowments)	2,271,257		3,702,721	4,085,177	3,941,2
Labour and Industry	63,022		102,287	99,882	99,9
Mines	62,745	5 73,421	72,059	94,593	78,1
Agriculture	254,809	304,752	450,788	473,871	461,7
Local Government—		1	· ·		
Administration	27,490	24,133	37,641	45,255	43,9
Endowments and Grants	\$32,664		347,869		302,0
All Other Services	558,463	917 918	1,072,694	1,346,980	
Grants to Public Works Fund	200,000		200,000		
Advances made	306,474	1 703,508	247,745		
(a) the state of the state o	000,11	100,000	211,110	.,	
P 1 1 A	0.010.000	10 100 000		15 000 010	14 000 -
Total Governmental £	9,219,296	9/12,100,002	14,014,452	15,293,243	14,083,0
Business Undertakings (Working Expenses				· · · · · · · · · · · · · · · · · · ·	
	10.050			10.055	
and Interest).	12,370,545	5 16,158,569	18,295,085	19,275,198	18,787,0
Railways and Transways			645,801		
Railways and Tranıways	510,788	1 1 040 107	1,521,554	1,691,289	1,745,6
Railways and Transways	1,132,769	1,368,197			
Railways and Tranıways	1,132,769	9 1,368,197	· · · ·	21,673,282	21,258,7
Railways and Tranıways	1,132,769		· · · ·	21,673,282	21,258,7

nave been determined:					
	1919.	1920.	1921.	1922.	1923.
REVENUE.	1			l: '	
Governmental.					
Revenue Returned by Commonwealth.	£ s. d. 1 4 3	£ s. d. 1 4 3	£ s. d. 143	£ s. d. 1 4 9	£ s. d. 1 4 9
Revenue recurred by commonwealth		J. Z J.		1 4 9.	143
State Taxation	217	288	3 10 9	382	3 11 9
Land Revenue-					
Alienation Occupation and Miscellaneous, including Forestry	$\begin{array}{ccc} 0 \ 10 \ 8 \\ 0 \ 7 \ 10 \end{array}$	$\begin{array}{cccc} 0 & 11 & 0 \\ 0 & 7 & 10 \end{array}$	$\begin{array}{c} 0 \ 11 \ 10 \\ 0 \ 8 \ 9 \end{array}$	$\begin{array}{ccc}0&10&7\\0&8&3\end{array}$	$\begin{array}{c} 0 & 9 & 5 \\ 0 & 8 & 3 \end{array}$
occupation and misochancous, molucing roreshy			.000		
Total £	0 18 6	0 18 10	107	0 18 10	0 17 8
10000					
Services Rendered	047	0 5 4	072	0 8 8	091
General Miscellaneous	$\begin{array}{ccc} 0 & 6 & 5 \\ 0 & 0 & 1 \end{array}$		$\begin{array}{c}0&6&8\\0&0&1\end{array}$	094	$\begin{array}{c}087\\001\end{array}$
Industrial Undertakings	$0 0 1 \\ 0 0 4$	0 0 11	004	0 0 1 0 0 10	0 0 6
Advances Repaid					• • • •
Total Governmental£	4 15 9	5 4 10	6 9 10	6 10 8	6125
Business Undertakings.		·	·		
Railways and Tramways	6 3 11	7 16 11	8 12 8	8 19 11	8 15 8
Sydney Harbour Trust	$\begin{array}{cccc} 0 & 6 & 4 \\ 0 & 12 & 6 \end{array}$	0 6 6 0 12 10	$\begin{array}{ccc} 0 & 7 & 7 \\ 0 & 15 & 6 \end{array}$	079016-7	$\begin{array}{ccc} 0 & 7 & 10 \\ 0 & 16 & 9 \end{array}$
Water Supply and Sewerage	012 0	0 12 10	0 15 0	0 10 7	010 9
Total Business Undertakings £	7 2 9	8 16 3	9 15 9	10 4 3	10 0 3
	11 18 6	14 1 1	16 5 7	16 14 11	16 12 8
Grand Total f					
EXPENDITURE.					
Governmental.					
Interest on Public Debt and Special Deposits	0 9 11	0 10 6	0158	0 15 1	0 16 10
Reduction of Public Debt	$\begin{array}{ccc} 0 & 0 & 1 \\ 0 & 3 & 9 \end{array}$	0 0 1	0 4 4	0 3 10	0 3 2
Transfer to Public Works Fund	039	0 3 11	0 4 4	0 3 10	0 3 2
Premier	0 0 11	014	012	0 0 8	0 0 7
Chief Secretary	0 8 5	0 11 4	0 13. 0	0 13 10	1 3 5
Public Health	082	095	0 12 1	011 5	1 2 2
Treasurer (excluding Business Undertakings	0 8 3	0 16 10	0 11 1	0 9 11	089
and Interest on Deposits, &c.) Attorney-General and Justice	0 8 5	0 16 10	0111 056	$0 \ 9 \ 11 \\ 0 \ 6 \ 2$	0 8 9
Lands	040	0 5 2	057	060	0 5 4
Public Works (excluding Business Undertakings)	044	051	061	062	0 5 10
Public Instruction (excluding Endowments)	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	1 4 6 0 11	1154 010	1 18 4	1 16 3
Labour and Industry	0 0 8	$\begin{array}{ccc} 0 & 0 & 11 \\ 0 & 0 & 9 \end{array}$	$ \begin{array}{c} 0 & 1 & 0 \\ 0 & 0 & 8 \end{array} $	$\begin{array}{ccc} 0 & 0 & 11 \\ 0 & 0 & 11 \end{array}$	0011
Agriculture	0 2 7	0 3 0	0 4 4	045	0 4 3
Local Government-					
Administration	0 0 4	003	0 0 4	005	005
Endowments and Grants	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	032	$\begin{array}{c}0&3&4\\0&10&3\end{array}$	$\begin{array}{c} 0 & 3 & 6 \\ 0 & 10 & 9 \end{array}$	$\begin{array}{c} 0 & 2 & 9 \\ 0 & 7 & 1 \end{array}$
All Other Services	0 2 0	0 2 0	0 1 11	0109 0111	0 1 10
Advances made	0 3 2	0 6 10	025	0 9 6	0 5 6
	·		/		<u> </u>
Total Governmental£	4 13 10	5 18 8	6141	739	697
Business Undertakings. (Working Expenses and Interest).					
Railways and Tramways	659	7 18 6	8 15 0	912	8 12 11
Sydney Harbour Trust	053	0 5 9	062	068	069
Water Supply and Sewerage	011.5	0135	0 14 7	0 15 10	0 16 0
Total Business Undertakings £	7 2 5	8 17 8	9 15 9	10 3 8	9 15 8
		341.8			
Grand Total £	$11 \ 16 \ 3$	$14\ 16\ 4$	16 9 10	17 7 5	16 5 3
	1 I			1	

From the foregoing figures the following rates per head of population have been determined:-

Land Revenue of the State.

The receipts from the sale and occupation of Crown lands are treated as public income. Although the proceeds from occupation, being rent, can be reasonably regarded as an item of revenue, the inclusion of the proceeds of auction, conditional purchase, and other classes of sale as ordinary revenue is open to serious objection. It has been urged in justification of this course that the sums so obtained have enabled the Government to construct works which enhance the value of the remaining public lands and facilitate settlement. Under the Act instituting the Public Works Fund, two-thirds of the net proceeds of the sale of Crown lands, less 20 per cent., equivalent to a clear 53¹/₃ per cent., are paid into the fund.

The revenue from lands may be grouped under three main heads—(a) auction sales and other forms of unconditional sale; (b) conditional sales under the system of deferred payments; (c) rents from pastoral, mining, and other classes of occupation. The net receipts from each source in 1922-23 were £69,296, £955,998, and £668,646, respectively, while miscellaneous receipts and forestry amounted to £220,293, making a total of £1,914,233.

The land policy of the State, though largely connected with public finance, is discussed in that part of this volume which treats of Land Settlement.

Receipts for Services Rendered.

The net amount collected for services rendered by the State, other than for trading concerns, during the year ended 30th June, 1923, was £984,403. The principal sources of revenue were Pilotage, Harbour and Light Rates, &c., £312,965, and Registrar-General, Fees, £195,741.

General Miscellaneous Receipts

All items which cannot be placed under the headings already mentioned are included herein; in 1922-23 they amounted to £932,981.

The balance of the revenue for the year ended 30th June, 1923, consisted of the amount returned by the Commonwealth, £2,690,198, and interest and contributions from Industrial Undertakings (Act No. 22, 1912), £10,362.

Expenses of General Government and of Business Undertakings.

The following statement shows the expenditure classified under two headings—the ordinary expenditure of General Government, including interest on the capital liability of the services connected therewith, and the expenditure on services practically outside the administration of General Government, including interest on their capital liability. The expenditure of the industrial undertakings shown on page 95, and of the Murrumbidgee Irrigation Area are not included. The figures for the ten years ended the 30th June, 1923, and the rates per inhabitant, were as follow:—

Year	G	Governmental.			Business Undertakings.			
ended 30th June	General Services.	Interest and Redemp- tions.	Total.	Railways and Tramways.	Water Supply and Sewerage.	Sydney Harbour Trust.	Total.	Expendi- ture (Including Advances).
	£	£	£	£	£	£	£	L £
1914	6,438,271	1,028,363	7,466,634	9,505,926	725,931	366,698	10,598,55	18,065,189
1915	6,830,162	977,123	7,807,285	9,540,159	785,300	383,435	10,708,89	18,516,179
1916	7,120,558	1,064,273	8,184,831	10,107,149	841,278	420,669	11,369,090	19,553,927
1917	7,535,774	1,011,060	8,546,834	10,794,69?	984,803			20,790,895
1918	7,888,877	1,096,548	8,985,425	10,969,924	1,065,413	499,156	12,534,493	321,519,918
1919	8,237,115	982,184	9,219,299	12,370,545	1,132,769	510,785	14,014,099	23,233,398
1920	11,018,130	1,081,872	12,100,002	16,158,569	1,368,197	583,245	18,110,011	30,210,013
1921	12,374,300	1,640,15 ?	14,014,452	18,295,085	51,521,554	645,801	20,462,440	34,476,892
1922	13,688,556	1,604,687	15,293,243	19,275,198	1,691,289	706,795	21,673,282	2 36,966,525
1923				18,787,004		726,089	21,258,76	5 35, 342, 436
	1	t, i						

Year	Ge	overnmental.		Business Undertakings.			
ended S∂th June.	General Services.	Interest and Redemp- tions. Tots	al. Railways and Tramways	Supply and	Sydney Harbour Trust.	Total.	Expendi- ture (Including Advances).
1914 1915 1916 1917 1918 1919 1920 1921 1922 1923	$\begin{array}{c} \textbf{\pounds} \textbf{s. d.} \\ \textbf{3} \textbf{9} \textbf{8} \\ \textbf{3} \textbf{12} \textbf{6} \\ \textbf{3} \textbf{15} \textbf{2} \\ \textbf{3} \textbf{19} \textbf{7} \\ \textbf{4} \textbf{2} \textbf{0} \\ \textbf{4} \textbf{3} \textbf{10} \\ \textbf{5} \textbf{8} \textbf{1} \\ \textbf{5} \textbf{18} \textbf{5} \\ \textbf{6} \textbf{8} \textbf{8} \\ \textbf{5} \textbf{12} \textbf{9} \end{array}$	$ \begin{array}{c} \textbf{\pounds} & \textbf{s. d.} & \textbf{\pounds} & \textbf{s.} \\ 0 & 11 & 2 & 4 & 0 \\ 0 & 10 & 5 & 4 & 2 \\ 0 & 11 & 3 & 4 & 6 \\ 0 & 11 & 3 & 4 & 6 \\ 0 & 11 & 5 & 4 & 13 \\ 0 & 10 & 6 & 4 & 13 \\ 0 & 10 & 7 & 5 & 13 \\ 0 & 15 & 8 & 6 & 14 \\ 0 & 15 & 1 & 7 & 3 \\ 0 & 16 & 10 & 6 & 9 \\ \end{array} $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} \pounds & \mathbf{s.} & \mathbf{d.} \\ 0 & 4 & 0 \\ 0 & 4 & 1 \\ 0 & 4 & 5 \\ 0 & 4 & 11 \\ 0 & 5 & 3 \\ 0 & 5 & 3 \\ 0 & 5 & 9 \\ 0 & 6 & 2 \\ 0 & 6 & 8 \\ 0 & 6 & 9 \end{array}$	$\begin{array}{ccccc} 7 & 2 & 5 \\ 8 & 17 & 8 \\ 9 & 15 & 9 \\ 10 & 3 & 8 \end{array}$	$\begin{array}{c} \pounds & \text{s. d.} \\ 9 & 15 & 7 \\ 9 & 16 & 7 \\ 10 & 6 & 5 \\ 10 & 19 & 6 \\ 11 & 3 & 8 \\ 11 & 16 & 3 \\ 14 & 16 & 4 \\ 16 & 6 & 9 & 10 \\ 17 & 7 & 5 \\ 16 & 5 & 3 \end{array}$

Expenditure per Inhabitant

General services include public health, education, police, and all other civil and legal expenditure, also the cost of public works paid out of revenue, transfers to Public Works Fund, advances, etc.

CLOSER SETTLEMENT ACCOUNT.

The Closer Settlement Account was established under Act No. 1 of 1906. It is not included in the operations of the Consolidated Revenue Fund, although grants from that fund have formed a considerable portion of its receipts. As its name implies, the moneys of the fund are devoted to the promotion of closer settlement.

The following statement shows the net receipts and expenditure during the financial year ended the 30th June, 1923:--

Receipts.	Amount.	Expenditure.	Amount.
Credit Balance, 30th June, 1922 Assurance Fees—Real Property Act Repayments by Settlers ,, on account of Improvement Leases	£ 24,903 19,412 402,246 15,662 437,320	Under Real Property Act Purchase of Estates, including Contin- gent Expenses Interest on Loans (Recoup) 	£ 1,554 167,380 279,775 226,657 411 154,40
Transfer from General Loan Account . Debit balance, 30th June, 1923	434,320 300,000 67,954 830,177		839,177

During the period of seventeen years ended 30th June, 1923, 1,720 estates, representing 6,178 farms, were purchased for closer settlement, inclusive of improvement leases, &c., acquired under Closer Settlement Acts, the total area being 3,470,084 acres. The expenditure was as follows:--Purchase money, £12,952,181; contingent expenses, £134,736; total, £13,086,917.

PUBLIC WORKS ACCOUNT.

The Public Works Account. like the Closer Settlement Account, does not form part of the Consolidated Revenue Fund. It was opened in the year 1906, under the authority of the same statute which provided for the Closer Settlement Fund, and it receives two-thirds of the net proceeds of the sales of Crown Lands, less 20 per cent., credited to the Consolidated Revenue Fund; the proceeds of land sales under the Public Instruction Act. 1880; and amounts voted from the Consolidated Revenue. Its moneys, like loan proceeds, may be applied in the construction or equipment of public works, but not to the repair or upkeep of such works. The net transactions during the year ended the 30th June, 1923, are shown herewith.

Receipts.	Amount.	Expenditure.	Amount.
Two-thirds of Net Proceeds of Sale of Crown Lands, exclusive of Interest on Purchase Money-less 20 per cent. (Act No. 9, 1946)	£ 347,961	Business Undertakings— Railways and Tranways Metropolitan Water and Sewerage Hunter District Water and Sewerage Sydney Harbour Trust	£ 18,947 16,757 201 23,766
Net Proceeds of Sale of Lind, under Section 4, Public Instruction Act of 1880	1,356	Industrial Undertakings	59,671 2,910
Transfers from Consolidated Revenue Account—Amount in aid	200,000	Observatory Hill Resumed area Water and Drainage Trusts Country Towns Water Supply and Sewerage	9,913 9,973 1,228
Net Repayments on account of pre- vious years	26,536 575,853	Wentworth Irritation Area Government Printer	1,970 4 388,295 188,522 10,519
	1		600,511
D 1 0012 To 1002		Total Expenditure	673,005
Balance, 30th June, 1922, brought forward	253,137	Balance, 30th June, 1923	155,985
Grand Total £	828,990	Grand Total	828 990

Expenditure on Public Works.

The total expenditure on Public Works, exclusive of the cost of repairs and upkeep, during each of the last five years is shown in the following table, which distinguishes the amount disbursed from the Public Works Fund, from the Consolidated Revenue Fund, and from Loans. The amounts shown as expended from the Loans and Public Works Funds are exclusive of repayments of votes for previous years; and transfers from the Consolidated Revenue to the Public Works Fund are not included in the expenditure of the former fund.

Year ended 30th June,	Public Works Fund. (Net.)	Consolidated Revenue Fund.	Loans. (Net.)	Total Expenditure.	Per Inhabitant.
1	£	£	£	£	£ s. d.
1919	493,292	562,164	3,918,887	4,974,343	2 10 9
1920	532,090	633,166	8,794,905	9,965,170	4 18 2
1921	719,145	731,227	14,701,028	16,151,400	7 14 9
1922	635,807	771.624	10,442,732	11,853,163	5 11 7
1923	673.005	703,667	9,794,019	11,170,691	5 3 0

The expenditure varies greatly from year to year according to the amounts appropriated from loans; in five-year periods the expenditure was as follows:--

Period.	Public Works Fund (Net.)	Consolidated Revenue Fund.	Loans. (Net.)	Total Expenditure.	Per Inhabitant.
1909-13 1914-18 1919-23	£ 4,037,911 2,717,0°3 3,056,348	£ 2,623,174 2,772,459 3,405,848	\pounds 23,269,602 35,645,745 47,651,571	\pm 23,950,637 41,135,287 54,114,767	£ s. d. 18 0 3 21 15 7 26 0 5

The expenditure in the last period was about $\pounds 13,000,000$ in excess of that in the period immediately preceding, and about $\pounds 24,000,000$ greater than in the quinquennium from 1909 to 1913, the increases in both cases being for loan services.

GENERAL ACCOUNT.

Summarising the foregoing accounts, and adding the transactions on account of loans, the receipts by the State during the year ended 30th June, 1923, amounted to £57,476,700, and the expenditure to £57,142,010.

The aggregate receipts and expenditure during each of the last five years, after necessary adjustments, were as follow:—

	· · · · ·	MECEIFIS.				
Account.	1918-19.	1918-19. 1919-20. 1920-		1921-22.	1922-23.	
	£	£	£	£	£	
Consolidated Revenue .	23,448,166	28,650,496	34,031,396	35,637,820	36,145,944	
Closer Settlement	164,309	1,225,183	3,096,608	1,993,742	737,320	
Public Works	570,573	604,082	652,970	607,862	575,853	
Railways Loan	••••	1,559,656	•••	•••	259,662	
General Loan	15,453,503	20,623,164	12,366,053	18,961,362	19,757,921	
Total	39,636,551	52,662,581	50,147,027	57,200,786	57,476,700	

\mathbf{R}	ECEIPTS.
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Expenditure.							
23,233,398	30,210,013	34,476,892	36,966,525	35,342,436			
263,183	1,224,985	2,419,869	2,419,460	675,777			
493,292	572,265	719,289	638,807	673,005			
194,666	44,042						
3,735,914	8,761,223	14,734,389	10,463,284	9,841,610			
12,813,724	16,799,068	1,175,120	10,442,989	10,609,182			
40,734,177	57,611,596	53,525,559	60,931,065	57,142,010			
	23,233,398 263,183 493,292 194,666 3,735,914 12,813,724	23,233,398 30,210,013 263,183 1,224,985 493,292 572,265 194,666 44,042 3,735,914 8,761,223 12,813,724 16,799,068	23,233,398 30,210,013 34,476,892 263,183 1,224,985 2,419,869 493,292 572,265 719,289 194,666 44,042 3,735,914 8,761,223 14,734,389 12,813,724 16,799,068 1,175,120	23,233,398 30,210,013 34,476,892 36,966,525 263,183 1,224,985 2,419,869 2,419,460 493,292 572,265 719,289 633,807 194,666 44,042 3,735,914 8,761,223 14,734,389 10,463,284 12,813,724 16,799,068 1,175,120 10,442,989			

The results shown above are exclusive of the transactions of the Special Deposits and Suspense Accounts; including these, the total receipts of all funds controlled by the Treasurer during 1922-23 were £75,329,084, and the expenditure $\pounds72,185,376$.

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 the several headings which follow, 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 position of the General Account on the 30th June, 1923, is shown below.

_	Ledger Balances on 30th June, 1923.			
Head of Account.	Invested in Securities	Cash Balances.	Total.	
Credit Balances— Special Deposits Account— Government Savings Bank Deposits Account	£	£ 3,088,500	£ 3,089,500	
,, , Advances Deposit Account		500,000	500,000	
State Debt Commissioners' Trust Accounts		189,926	189,920	
,, , Deposit Account		191,410	191,410	
Compensation-Liquor Amendment Act		612,255	612,25	
Sydney Municipal Council Sinking Funds		29,796	29,79	
Industrial Undertakings and Housing Fund		361,871	361,871	
Conmonwealth Government Advances-			,	
Returned Soldiers		9,806,604	9,806,604	
Wheat Storage	•	250,000	250,000	
Broken Hill Water Supply Administration		362,685	362,688	
Treasury Fire Insurance Fund	58,000	205,271	263,271	
Railway Stores Advance Account		769,563	769,563	
Other	1,150,199	335,325	1,485,52	
Total Special Deposits Account Cr. £	1,208,199	16,703,206	17,911,40	
Public Works Account		155,985	155,985	
Special Accounts — Colonial Treasurer's Supreme Court Moneys		616,468	616,468	
Miners' Accident Relief Account	133,500		133,590	
London Remittance Account		784,423	784,423	
Total Cr. £	1,341,699	18,260,082	19,601,781	
ess Debit Balances— £ Consolidated Revenue Account 2,774,755				
General Loan Account 10,740,098				
Loans Expenditure Suspense Account 471,281				
Public Works Expenditure Suspense Account 5,726			• • •	
Closer Settlement Account 67,954		14,136,131	14,136,131	
Government Dockyard— Stores Advance Account 15,000				
Coal Purchase Suspense Account 45,317				
Government Printer Stores Advance Account 16,000				
Net Credit Balance Cr.	1,341,699	4,123,951	5,465,650	
educt-Amounts not transferred to Public Accounts. Dr.		731,757	731,757	
Net Credit Balance in Sydney Cr.	1,341,699	3,392,194	4,733,893	
educi-London Account ., Dr.	••	784,423	784,423	
Net Balance Cr.	1,341,699	2,607,771	3,949,470	

The cash balance on the 30th June, 1923, was distributed as follows:-

Sydney-Net Credit London-Net Debit	•••	***	•••	•••	 x 3,392,194 784,423
					£2.607.771

INDUSTRIAL UNDERTAKINGS OF THE STATE.

In addition to the business undertakings, viz., Railways, Tramways, Harbour Trust, Water Supply and Sewerage, and the national undertaking, the Murrumbidgee Irrigation Scheme, the State controls various industrial undertakings, the revenue and expenditure of which do not form part of the Consolidated Revenue Fund, but are included principally under the Special Deposits Fund.

The following table shows the transactions of these undertakings during the year ended 30th June, 1923, and the total capital expenditure at that date.

	m. (.) () . () .))	E	xpenditure	• • • • • •	
Service.	Total Capital as determined by Committee.	Revenue.	Working Expenses, including Rates and Taxes.	Interest; Sinking Fund, &c.	Total.	Net Revenue.
INDUSTRIAL UNDERTAKINGS- Bakery Blue Metal Quarries-Kiama and	£ 21,793	£ 8,592	£ 8,976	£ 356	£ 9,332	() £ 740•
Port Kembla	151,686	229,283	203,824	11,905	215,729	13,554
Brickworks-Homebush Bay	114,509	147,971	124,091	11,108	135,199	12,772
Building Construction	35,032	374,243	368,428	696	369,124	- 5,119
Monier Pipe Works	43,089	78,059	66,475	7,066	73,541	4,518
Mctor Garage	9,224	29,567	26,690	1,269	27,959	1,608
Power Station-Uhr's Point	32,505	6,050	8,372	1,774	10,146	() 4,096
Sawmills-Craven and Gloucester	70,703	126,352	128,166	3,594	131,760	() 5,408
Timber Yard, etc Uhr's Point	105,765	367,910	400,195	12,828	413,023	(—) 45,113
Trawlers	194,909	56,069	85,390	10,505	95,895	() 39,526-
Total, Industrial Undertakings	779,215	1,424,096	1,420,607	61,101	1,481,718	() 57,612
OTHER SERVICES - Housing Board	971,055	85,338	7,342	£0,851	58,193	27,145
Metropolitan Meat Board	1,898,253	594,582	488,356	- 51,606	539,932	54,620
Observatory Hill, Resumed Area	1,413,007	90,057	18,971	70,698	89,162	288
Total, Other Services	4,282,315	769,977	514,6+.9	173,155	687,824	82,153
Grand Total £	5,061,530	2,194,073	1,935,276	234,256	2,169,532	24,541

(--) Denotes net expenditure.

Some of the undertakings have consistently returned a profit while others have been conducted at a loss. The meat industry, brickworks, metal quarries, Monier pipeworks, and building construction branch have been the principal profit producing concerns, while large losses have been sustained in connection with the trawling, timber, saw-milling, power station, and bakery industries, which have been closed since, and the assets sold. The motor garage ceased to be an industrial undertaking in November, 1923. With regard to the trawling industry, the position on the 28th February, 1923, was:—Capital cost, less depreciation and estimated realisation of assets, £97,806; accumulated deficiency on working from commencement, £210,518; making a total loss of £308,324.

The operations of the building construction branch, which now includes the Maroubra quarry, were very successful in 1922-23, showing a net profit of £5,119. The total receipts, including value of works completed and in progress, were £374,243, and the expenditure, including interest and sinking fund, etc., amounted to £369,124. The trading profit was £5,815, or 166 per cent. of capital, and the result is very satisfactory, especially as wages and prices of materials were very high.

Brickworks also were carried on very profitably, notwithstanding that the products were sold at 19s, per thousand lower than those of private makers. The favourable price induced the general public to patronise the Government yards to a considerable extent, no less than 27,454,000 bricks, or 65 per cent. of the output being sold to private persons. The trading profit for the year 1922-23 was £23,879 (equal to 20 9 per cent. on capital employed), out of which a sum of £7,646 was paid as a bonus to employees, £904 as interest, £57 to sinking fund, and £2,500 to general plant reserve, leaving a balance of £12,772 to be carried forward.

In 1922-23 the operations of the Housing Board and the Observatory Hill area showed a profit, and it should not be overlooked that this project was undertaken mainly with a view to the improvement of the city, and its benefits cannot be measured in money alone.

The following table shows the capital invested in each of the existing undertakings, and the net profit or loss which resulted from its operations, in 1916-17, and in the last two years.

	1916	1916-17.		-22.	1922-23.	
Establishment.	Capital Invested.	Net. Profit.*	Capital Invested.	Net Profit.*	Capital Invested.	Net Profit.*
Industrial Undertakings-						
Bakery	£ 16,474	£ 1,958	£ 21,794	£ 457	£ 21,793	(—) £ 740
Brickworks-Homebush ···	. 88,853	3,672	106,312	10,947	114,509	12,772
Building Construction	31,026	9,229	32,699	7,720	35,032	5,119
Clothing Factory	13,170	1,791	13,635	6,261	†	†
Drug Depot ·· ·· ··		· · ·	189	621	†	t
Metal Quarries	86,531	8,700	114,504	8,041	151,686	13,554
Monier Pipe Works	18,922	6,225	42,051	3,198	43,039	4,518
Motor Garage		920	9,024	2,987	9,224	1,608
Power Station-Uhr's Point	32,610	(-) 2,752	32,505	(—) 751	\$2,505	() 4,096
Sawmills	. 15,141	819	66,918	() 6,997	70,703	() 5,408
Timber Yard ·· ·· ··	163, 309	() 10,857	179,708	(-) 90,297	105,765	(
Trawlers	127,631	(-) 12,866	206,793	() 64,328	194,909	() 39,826
Total Industrial Undertakings	. 601,201	6,839	856,132	() 122,138	779,215	(-) 57,612
Other Services-		1			-	
Housing Board	150,961	1,189	993,983	() 2,021	971,055	27,145
Metropolitan Meat Board ••	. 1,262,956	46,924	1,853,212	34,053	1,898;253	54,620
Observatory Hill Resumed Area	1,336,595	() 6,067	1,360,775	() 9,493	1,413,007	388
Total Other Services	2,750,512	42,046	4,207,970	22,539	4,282,315	82,158
Grand Total	3,351,713	48,885	5,064,102	() 99,599	5,061,530	24,541

* After payment of interest on capital. (--) Denotes loss. † Not in operation—transferred to Stores Department.

Only five of the industrial undertakings showed a profit for the year 1922-3, amounting to £37,571, while the operations of the other five resulted in a loss of £95,183, leaving a deficit for the year of £57,612. In 1921-2, eight concerns were worked profitably, showing a net return of £40,235, and

the other four lost £162,373, so that the net debit was £122,138. During 1920-1, eleven of the industries returned a total profit of £35,247, and only one showed a loss (£2,291), the net credit being £32,956. For the three years ended 30th June, 1923, therefore, the transactions resulted in an aggregate loss of £146,794, after paying working expenses, interest, contributions to sinking funds, &c. The large losses which had been incurred led to the decision of the Government to close down some of the undertakings and dispose of the assets.

The following table shows the transactions of all State industrial undertakings during the years 1914-23, excluding the business undertakings (Railways, etc.) and the Murrumbidgee Irrigation area.

Year			-	Expenditure.		Proportion of	
ended 30th June. Capital Ex- penditure.	Revenue.	Working Expenses.	Interest, Sinking Fund, Depreciation, and Reserves.	Total.	Net Revenue.	Net Revenue to Capital Expenditure.	
	. [
	£	£	£	£	£	£	per cent.
1914	1,688,090	591.644	521,680	72,008	593,688	(-) 2,044	
1915	1,875,251	853,434	756.464	93,019	849,483	3,951	0.21
1916	2,905,985	1.049.212	902,663	143,479	1.046,142	3,070	
1917	3,421,687	1,265,398	1.085.776	138,678	1.224.454	41,944	
1918	3,731,639	1,430,425	1,259,738	159,232	1,418,970	11,455	
1919	3,518,025	1,475,526	1,310,025	185,143	1,495,168		
1920	4,240,607	2,414,448	2,183,868	226,885	2,410,753	3,695	
1921	4,821,237	2,194,471	1,970,682		2.163.677	30,794	
1922	5,064,102	2,394.091	2,282,743	210,947	0 100 000	() 99,599	
1923	5,061,530	2.194.073	1,935,276	234,256	2,169,532	24,54	

(-) Denotes net expenditure.

The Murrumbidgee Irrigation area is of a national character, and has therefore been treated separately. The following table shows the transactions for the past seven years:—

Year	Capital Ex-		-	Expenditure.	Net	Proportion of net	
ended 30th June. Capital Ex- penditure.	penditure. Kevenue. Working Interest, Expanses Sinking		Total.	Deficiency.	D.C.		
1917 1918 1919 1920 1921 1922 1923	£ 3,855,503 4,116,941 4,336,399 5,290,692 6,090,681 6,923,063 7,832,738	£ 248,170 225,297 310,045 354,851 359,498 478,897 550,536	£ 272,080 240,442 313,428 403,502 400,355 462,775 478,377	£ 170,428 194,153 210,485 235,916 267,289 341,655 415,437	£ 442,508 434,595 523,913 639,418 667,644 804,430 893,814	£ 194,338 209,298 213,868 284,567 303,146 325,533 343,278	per cent. 5 04 5 08 4 93 5 28 5 05 4 70 4 38

The revenue and working expenses shown are the gross amounts. For the year 1923 there was a net trading profit of £72,159, which, deducted from the interest and sinking fund liability, £415,437, gives a total loss for the year of £343,278. The principal losses in the year 1923 occurred in the House and Property Rents Accounts, the Accommodation Houses, and the Leeton Nursery, while the services which showed the largest profits were the Dry Areas, the Canning Factory, and the Nursery at Griffith.

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

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assistance in the banking operations of the Government, and they form \mathbf{x} strong reserve on which the Treasurer may draw in time of need. 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 these funds at 30th June in each year of the last decade:—

As at 30th June.	Amount.	As at 30th June.	Amount.	As at 50th June.	Amount.
	£		£		£
1914	5,341,000	1918	5.957,608	1921	13,097,856
1915	5,259,710	1919	6,222,291	1922	17,491,833
1916	5,601,471	1920	9,848,520	1923	18,527,573
1917	5,619,703				

The funds are divided into two classes, viz.:—Special Deposits Account and Special Accounts. The total of all moneys under these headings on the 30th June, 1923, was £18,527,873, viz., the Special Deposits Account, £17,911,405, and the Special Accounts, £616,468. The amount at the credit of each account is shown in the following table:—

Government Savings Bank of	£	Elder's Trustee and Executor Company, Limited	20,000
New South Wales Deposit Account	3,088,500	Union Trustee Company of Aus-	20,000
Account	0,000,000	tralia, Limited	20,000
New South Wales Advances		Government Dock, Newcastle-	_0,000
Deposit Account	500,000	Store Advance Account	43,932
State Debt Commissioners'		Unclaimed Salaries and Wages	
Deposit Account	191,410	Account	9,518
State Debt Trust Accounts	189,927	Public Trustee — Unclaimed	-
Public Works, Railways, and		Balances	64,740
Sydney Harbo ir Trust Stores		Commonwealth Advances—	
Advance Accounts	931.888	Settlement of Returned	
Industrial Undertakings	290,198		9,806,604
Sundry Deposits Account	628,024	Wheat Act	250,000
Municipal Council of Sydney,		Territory Trust Account	612
Sinking Funds	29,796	Metropolitan Water and Sewer-	
Government Railways Super-		age Board	10,617
annuation Account	8.575	Hunter District Water and Sew-	
Housing Fund	89,604	erage Board	19,624
Revenue Suspense Account	13, 005	State Superannuation Board	19,611
Broken Hill Water Supply	000 00T	Compensation Fund (Liquor	010 OFF
Account	362,685	Amendment Act)	612,255
Forestry (Act No. 55 of 1916)	74,357	Sydney Harbour Bridge (Act 28	
Treasury Guarantee Fund	24,194	of 1922). Municipal and Shire	50 540
Treasury Fire Insurance Fund	263,271	Rate Account	79,543
Treasury Workmen's Compen-	110 400	Other Accounts	49,137
sation Fund	116,460		
"Sobraon' Fund	10,000	Total£1	7 011 405
Water and Drainage Loan Re-	00.910		7,911,405
demption Fund	90,318	l	
	Special	Accounts.	
	Spara	10.0011103.	~
	£		£
Master-in-Equity Account	109,935	Prothonotary Account	2.100
Master-in-Lunacy Account	30,626	Registrar of Probates' Account	18,109
Public Trustee Account	455,689	T 1	C16 469
		Total	616,468

Grand Total, Special Deposits and Special Accounts, £18,527,873.

Of the total sum of £18,527,873 at the credit of the accounts on the 30th June, 1923, £208,199 was invested in securities; £5,009,801 was uninvested, but used in advances and on public account at interest, the rates allowed ranging from 1 to $4\frac{1}{2}$ per cent.; the remainder, £13,309,873, was similarly used, but without any interest allowance. In cases where interest was being paid by the Treasurer on the 30th June, 1923, the rate was 3 per cent., with the following exceptions:—

Crown Leases Security Deposit Account	4 per cent.
Government Savings Bank of N.S.W. Deposit Account 4 a	nd 41 ,,
,, ,, . Advances Deposit Account	4 ,,
State Debt Commissioner's Trust Accounts, Municipal Council of Sydney Sinking Fund (50 Vic., No. 13)	4 ,,
State Debt Commissioners' Deposit Account	4 <u>1</u> ,,
Master-in-Equity and Master-in-Lunacy Accounts	1 ,,

On the 30th June, 1923, the funds in the custody of the State Treasurer were held as follow:---

In Banks—						£
Special Deposits Account						16,703,206
Special Accounts		•••		•••	•••	616,468
New South Wales Funded Sto	ck	•••	•••,			113,750
Commonwealth Inscribed Stoc	k	••••	•••	••••	•	6,000
Deposits on Tenders	•••	•••	·			64,126
Miscellaneous Securities	• •••	•••		•••	•••	1,024,323
Total	•••	•••		•••	£	18,527,873

LOAN ACCOUNTS.

The following statement shows the amount of loans raised from the commencement of the Loan Account, in 1853, to the 30th June, 1923, and the proceeds available for expenditure, including the moneys credited to the Railways Loan Account:—

Treasury Bills, Debentures, Inscribe	ed and Fu	nded Stock	sold
to the 30th June, 1923			£297,291,692
Discount, Interest, Bonus, and Charge	es		7,404,122
Net amount raised	·····	•••	£289,887,570
Less Amount of Proceeds included	in Public	Debt, but	not
credited to Loan Accounts	••• •••		5,107,861
Net amount available for Pu	blic Works,	etc	£284,779,709

On the 30th June, 1923, an amount of £113,720,136 had been redeemed, of which £9,714,054 was a charge on the Consolidated Revenue, leaving £183,571,556 outstanding at the close of the last financial year. This amount is exclusive of the liabilities on account of the Closer Settlement Fund debentures, reference to which is made on a subsequent page. The aggregate amount of interest actually paid by the State on loans to the 30th June, 1923, was £137,222,051, the liability during 1922-23 being £8,535,650. The services to which the available sum of $\pounds 284,779,709$ was applied are shown in the following table. The redemptions are included in the total, as although they are not items of expenditure on works and services, their inclusion is necessary to account fully for the total expenditure.

Reproductive W	orks :-			· ·				£	£
Railways								96,065,476	
Tramways		•••			•••		•••	10,454,890	
Water Supply		•••		•••			•••	16,749,911	
Sewerage	•••							9,926,508	
Sydney Harbo			••	•••				9,775,720	
Darling Harb			ions	,			••••	1,351,470	
Industrial Un		-						641,756	1 · · · · ·
Housing Fund	ι							1,003,000)
0							· .		145,968,731
Partly Productiv	ve Wo	rks:—							
Conservation of	of Wat	er, Ar	tesian	Boring	, etc.	•••	•••	9,777,585	i
Harbours and	Rivers	s—Nav	igatio	n			•••	6,820,380	۱
Roads, Bridge	s, and	Punts						2,416,477	
							-		19,014,442
Public Buildings	s and S	ites, &	c			• •••	•••	21,945,079	
Immigration	•••	•••	•••	•••	•••	•••		569,93 0) <u> </u>
Public Works in	a Queer	nsland	prior (to sepa	ration		•••	49,855	
Services transfer	rred to	Comm	onwea	lth—					22,564,861
Construction of	of Tele	graph	and Te	lephor	ne Line	s	• • • •	1,297,583	: :
Post and Tele	graph	Offices				·	••••	464,262	
Fortifications	and De	efence	Works	s	•••	• • • •	•••	1,457,536	•
Lighthouses	•••	•••		•••	•••		•••	144,288	
Customs Build	lings				•••			54,481	
Quarantine Bu	uilding	s	•••					18,099	
Government I)ockya	rd Co	ockato	lslan	d			502,988	
Naval Victual	ling St	tores-	Darlin	g Har	bour			26,450	
	•						-		3,965,687
									·····
Redemptions :	-								£191,513,724
Loans rep	aid un	der va	rious A	Acts	•••			66,887,388	i
Treasury	Bills f	or Loa	n Serv	ices		• • • •		37,118,695	
									104,006,083
									£295,519,807
Less Debit Ba	lance,	Genera	al Loai	a Acco	unt	•••	•••	••• •	10,740,098
	Fotal	•••	•••	•••			•••	··· ···	£284,779,709

The sum actually expended from loans on public works and services was £191,513,724, and an analysis shows that the proportional allocation of this amount was as follows:—Reproductive works, 76 per cent.; partly productive works, 10 per cent.; other, 12 per cent.; Commonwealth services, 2 per cent.

It will thus be seen that the proceeds of loans have been used judiciously, as most of the works are self-supporting, and have assisted materially in developing the State's resources.

· · · · · · · · · · · · · · · · · · ·		1.	1	1	
Head of Service.	1919.	1920.	1921.	1922.	1923.
	£	£	£	£	£
Railways	1,441,105	2,387,303	3,598,351	4.399.725	
(a)	102,752	2,337,303	426,687	4,399,720	
1177 J . Ωັ 1	515,984	732,333	1,404,709	1,232,467	
Q	182,946	310,330	317.890	463,611	
Sewerage Water Conservation and Irriga		310,330	317,000	405,011	=10,010
tion	328,778	998,459	1,131,896	1 048 613	1,004,504
Harbours, Rivers, Wharves, and		330,409	1,101,000	1,040,010	1,001,001
Denver	290,329	432,231	663,842	676,642	451.279
Public Works, Buildings, etc	290,029	402,201	000,014	010,042	301,410
Public Abattoirs, Homebush	16,329	37,277	171,190	11,375	
OUT.	55,952	63,458	33,312	123,924	
D. 1 1D 11	12,346	8,088	13,555	320,827	
Roads and Bridges		0,000	19,000	520,327	401,471
1111	7,206	26,187	43,568	6,307	39,514
Grain Elevator and Bulk Wheat		20,107	40,000	0,007	00,013
Handling	523,375	643,021	815,556	548,629	778,284
Industrial Undertakings, includ	020,070	040,041	010,000	040,020	110,209
	43,429	453,449	320,878	80,823	18,237
ng Housing Fund Returned Soldiers' Settlement.		400,449	320,878	00,020	10,207
oto	417 057	1,506,246	1,438,456	710.437	38.284
Closer Settlement	417,907	1,000,240	2,758,000	1,500,000	
Advances to Settlers for financial	•••	1,000,000	2,100,000	1,000,000	300,000
aid		16,318	1,659,078	1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 - 1999 -	
All Other Services	36,558	29,981	1,059,078	9,872	112,180
All Other Bervices	30,558	29,901	0,702	9,672	112,100
Gross Expenditure	3,975,046	8,847,333	14,803,670	11,523,044	9,799,410
•					
Less Repayments to Credit of					
Votes	56,159	52,428	102,642	1,080,312	5,391
Net Expenditure on Public	• • • •				
Works, etc £	3,918,887	8,794,905	14,701,028	10,442,732	9,794,019
Loans repaid by New Loans (in-			, , , , , , , , , , , , , , , , , , , ,	, ,,	
	12,813,724	15,181,648	995,820	10,311,829	10,195,119
Total £	16,732,611	23,976,553	15,696,848	20,754,561	19,989,138
			,,.=0	,,	,,

The loan expenditure on account of various services during each of the last five years ended 30th June is shown below:—

The loan expenditure, exclusive of redemptions, conversions, and renewals, is shown herewith for the period of thirty-nine years, 1842-1880, in decennial periods from 1881 to 1920, and to the end of the financial years 1921-23:--

	During E	ach Period.	For Whole Period.			
Years.	Amount.	Per Inhabitant.	Amount.	Per Inhabitant		
	£	£ s. d.	£	£ s. d.		
1842-1880	16,316,529	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	78 6 5		
*1921-1923	34,937,779	16 7 11	191,513,724	87 8 4		

*Three ye	ars only.
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In explanation of the great increase in loan expenditure during the period 1911-20 it may be mentioned that 1,372 miles of railway were opened as against 832 in the preceding ten years, while there was enormous expenditure also in connection with the Murrumbidgee Irrigation scheme, Sydney Harbour Trust, the rapid extension of water and sewerage services, the erection of silos and terminal elevator for handling wheat in bulk, meat abattoirs (Homebush), and Returned Soldiers and Closer Settlement schemes.

The total expenditure from loans on works and services now exceeds the public debt by £7,942,168. As a general rule, loans are renewed on maturity, and while the total actual expenditure increases each year, the outstanding debt may be increased or reduced according to the operations necessary to the flotation of new loans or the redemption of matured loans.

PUBLIC 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 purpose 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 51d. 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.

Between 1842 and 1855 ten loans, amounting in all to £705,200, were raised for immigration purposes. Debentures representing $\pm 329,700$ were redeemed from the Territorial Revenue, and the balance, $\pm 375,500$, was taken over as a public liability upon the institution of Responsible Government.

Rai	sed on th Immigra Sydney	ation		• • • •		even:	1e— ·	•••		£ 423,000 217,500
Rai	sed on th	e Sec	nrity o	f Gene	ral Reve	nue-	_			
	Amount									54,900
	**				Supply					28,000
	**			7s			•••			256,400
-	,,,	,, l	Public			•••				21,000
	т	otal			• •		••••	•••	••••	£1,000,800

The following table shows the amount of Public Debt outstanding at the end of each quinquennial period. The growth of the debt was not rapid until after the year 1880, but during the next five years twenty millions and a half were added to the total, and in the next quinquennium approximately thirteen millions. The greatest absolute addition in any of the quinquennial periods shown was made in the five years from 1910 to 1915, when over thirty-five millions were added to the total, and the greatest expenditure relative to population in the five years 1880-85.

Year.	Amount.	nt. Year. Amount.		¥ear.	Amount.	
	£		£		E	
1842	49,500	1875	11,470,637	1910	92,525,095	
1845	97,900	1880	14,903,919	1915	127,735,405	
1850	132,500	1885	35,564,259	1920	152,776,082	
1855	1,000,800	1890	48,383,333	1921	164, 336, 492	
1860	3,830,230	1895	58,220,933	1922	176,674,387	
1865	5,749,630	1900	65.332.993	1923	183,571,556	
1870	9.681.130	1905	82,321,998			

PUBLIC FINANCE.

The total debt quoted above and in subsequent tables, unless otherwise mentioned, is exclusive of Debentures and Ministerial Certificates issued under Closer Settlement Acts, the amount at 30th June, 1923, being £4,307,936.

The following table shows the position of the public debt as at 30th June, 1914, and annually thereafter. The amount at 30th June, 1918, includes $\pounds10,076,000$ floated in February, 1918, being part of a loan of $\pounds12,648,477$ for redemptions due 1st September, 1918, which will explain the difference in the amount per head for the years 1917 to 1919.

				Redeemed.		Public D	ebt.
As at 30th June.	Authorised to date.	Sold.	From Con- solidated Revenue and Sinking Fund.	From General Loan Account, including Renewals.	Total.	Total.	Per Head.
	£	£	£	£	£	£	£ s. d.
1914	183,018,817	165,746,770	9,519,705	39,532,034	49,051,739	116,695,031	62 5 2
1915	207,445,569	185,651,798	9,519,705	48,396,688	57,916,393	127,735,405	67 10 11
1916	220,603,887	191,244,436	9,519,705	51,210,713	60,730,418	130,514,018	68 19 5
1917	228,636,874	200,340,248	9,524,105	52,677,796	62,201,901	138, 133, 347	72 10 2
1918	215,493,790	214,797,361	9,524,105	52,688,563	62,212,668	152,584,693	78 11 0
1919	249,677,612	222,340,928	9.664.105			147.174.536	73 13 8
1920	279,207,930	244.715.885	9.696.211	82.243.592	91,939,803	152,776,082	73 16 11
1921	293.101.030	257,272,115	9,696,211	83,239,412		164,336,492	78 2 5
1922		279,939,742				176,674,387	82 3 9
1923		297,291,693					83 15 8
2							

In considering the figures relating to redemptions, only the loans paid off from revenue or from sinking fund can be said to be absolutely redeemed, as when an old loan is repaid from the proceeds of subsequent flotations there is merely a change in the form of liability. Up to the time of the war this was accompanied frequently by some reduction of the interest charge, but recent renewals have had to be effected at a considerable increase in the rate of interest.

Prior to 1900 the State Government depended largely upon the London money market for the flotation of its loans, but during the last twenty-three years the requirements have been met to a much greater extent locally, as will be seen from the following statement, which shows the public debt on each register at quinquennial intervals from 1900 to 1920, and for the year 1922-23. Stocks may be transferred at any time from London to Sydney, and it should be noted that the amount registered in Sydney in 1920 and 1923 includes $\pounds7,400,000$ advanced by the Commonwealth Government, which is repayable not later than 1925, and bears interest at 4½ per cent. approximately.

As at	Registered i	n London.	Registered i			
30th June.	Amount.	Proportion to Total Debt.	Amount.	Proportion to Total Debt.	Total.	
· · · .[£	per cent.	£	per cent.	£	
1900	55,060,650	84 28	10,272,343	15.72	65,332,993	
1905	64,007,550	77.75	18,314,448	22.25	82,321,998	
1910	67,154,805	72.58	25,370,290	27.42	92,525,095	
1915	86,167,288	67.46	41,568,117	32.54	127,735,405	
1920	101,977,445	66.75	50,798,637	33 25	152,776,082	
1923	120,353,435	65-56	63,218,121	34.44	183,571,556	

From the above table it will be noted that the amount of securities held locally at the close of the financial year 1922-23 amounted to slightly more than one-third of the total indebtedness.

Expenses Commission Interest and charges paid to Financial connected Average paid. Year rate of interest with ended Re-Interest. inanagement Agents in demptions. 30th payable England and of Inscribed June. Per Inhabitant. New South Wales. Total. on Debt. Stock. d. £ £ £ £ s. per cent. 1914 3.881.011 5.63221,171 1.039 3,908,853 2 2 4 3.49 1915 4,125,600 5,688 21.394 1.492 4,154,174 $\mathbf{2}$ 4 1 3.60 1916 4,552,765 6.50421,705 2,117 4,583,091 $2 \cdot 8$ 5 3.71 1917 4,914,211 6,868 22,297 1,991 4,945,367 2 12 3 3.81 1918 5,188,754 6,819 22,746 1,988 5,220,307 3.98 2 14 3 1919 5,462,991 2,3826,833 20,861 5,493,067 2 15 10 4.10 1920 6,030,721 6,976 20,213 6,062,079 4.30 4,169 2 19 5 1921 6,601,894 2,566 21,102 5,506 6,631,068 3 3 5 4.42 1922 7.081.938 23,366 2.3957,107,699 3 6 10 4.60 . . . 1923 7,672,590 26,862 2,001 7,701,453 3 10 10 4.65 • • •

The annual payments under each head for interest and for expenses of the public debt since 1914 are shown below:—

The interest paid during each year shown above is exclusive of payments on account of trust funds and special deposits held by the Government, and on closer settlement debentures, while the average rate quoted is based on the actual liability of the public debt, redeemable at par on maturity.

The public debt is partly funded and partly unfunded, the former comprising debentures and inscribed and funded stocks, and Treasury bills constituting the latter. The amounts outstanding, and the annual interest payable on the 30th June, 1923, were as follow:---

Description of Stock.		Amount Outstanding.	Annual Interest Payable.
Debentures		£	£
Matured	•	14,050	• •••
Still bearing Interest		10,217,430	541,279
Inscribed and Funded Stock-			
Matured		52,271	
Still bearing Interest	•••	165,530,505	7,669,588
Total, Funded Debt	•••	£175,814,256	£8,210,867
Treasury Bills—		· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·
Matured		1,200	
Still bearing Interest	••••	7,756,100	324,783
Total, Unfunded Debt	•••	£7,757,300	£324,78 3
Total, Public Debt		£183,571,556	£8,535,650

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Rate per cent.			Amount of Stock and Bills.		Annual Interest payable.
£ s. d.			£		£
6 10 0	• • •		6,500,000		422,500
600	••••		10,000,000		600,000
5150	•••	•••	25,914,452		1,490,081
5 10 0			22,581,637		1,241,990
5 6 11		·	250,000		13,365
5 5 3			500,000	·	26,313
5 5 0			16,445,043		863,365
5 0 0			10.040.982		502,049
4 10 0			10,981,384		494,162
426			7,400,000		305,250
4 0 0			20,806,034		832,241
$3\ 15\ 0\ \dots$		• / •	2,644,960		99,186
3 10 0			32, 392, 471		1,133,736
300			17,047,072		511,412
Matured	•••	•••	67,521		•••
Total			£183,571,556		£8,535,650

The following table shows the total debt outstanding on 30th June, 1923, at each rate of interest, and the annual amount payable thereon.

The whole of the loans on which the interest rate is higher than 4 per cent. have been floated since 1914; those at the highest rates are the most recent.

The rate given for the £7,400,000 outstanding at £4 2s. 6d. per cent. is approximate only, as it has not been fixed definitely.

Dates of Maturity.

The dates of repayment of the public debt extend to 1963, and the sums falling due for redemption each year vary considerably, as will be seen from the following table, which shows the due dates and the amount repayable in London and in Sydney:—

Due Dat			Register		
Due Dat	e.		London.	Sydney.	Total,
· · · · · · · · · · · · · · · · · · ·			£	£	£
Matured	•••	·	14,050	53,471	67,521
Minimum ds	ıte				
expired				7,395,208	7,395,208
1923-24			1,999,300	4,229,659	6,228,959
1924-25	•••		16,419,522	21,618,681	38,038,203
1925-26				3,083,331	3,083,331
1926-27	•••	•••	5,997,000	12 615,867	18,612,867
1927-28			4,999,300	1,310,911	6.310.211
1928-29				4,000	4,000
1929-30		÷•••		165,040	165,040
1930-31	••••			3,268,170	3,268,170
1931-32		• • • •		4,288,242	4,288,242
1932-33			13,002,904	3,729,310	16,732,214
1933-34			12,635,846	50,454	12,686,300
1934 - 35			4,997,052	2,948	5,000,000
1935-36			12,430,613	69,387	12,500,000
1940-41			16,325,765	104,235	16,500,000
1942-43		·	4,000,000	408,400	4,408,400
1945-46			5,000,000		5,000,000
1950-51	•••		12,067,928	182,072	12,250,000
1962-63			10,392,956	107,044	10,500,000
Interminable				530,190	530,190
Permanent			1,200	1,500	2,700
Total	•••	£	120,353,436	63,218,120	183,571,556

The latest due date has been given, but in several cases the loans may be redeemed earlier, subject to the Government giving notice to that effect, at periods ranging from three to twelve months.

Data at M Analt		Rate of Interest	Amounts repayable in—				
Date of Maturity.		per cent.	London.	Sydney.	Total.		
		£s.d.	£	£	£		
1923-4		£ s. d. 3 10 0	£	1,874,015	1,874,015		
1540-4	•••	3 15 0	•••	1,144,960	1,144,960		
		500	1,999,300	16,700	2,016,000		
		5 5 0		94,574	94,574		
		5 5 3		500,000	500,000		
. *		5 10 0	••	599,410	599,410		
Total		•••	1,999,300	4,229,659	6,228,959		
1924-5		300		420,320	420,320		
1041-0	•••	3 10 0	16,419,522	80,478	16,500,000		
		400	10,413,522	89,544	89,544		
1 N 1		4 2 6		4,316,669	4,316,669		
		5 5 0		12,694,255	12,694,255		
•		5 10 0		4,017,415	4,017,415		
Total		•••	16,419,522	21,618,681	38,038,203		
1007 4		•			0.000.001		
1925-6		4 2 6	•••	3,083,331	3,083,331		
1926-7	ĺ	4 10 0		977,384	977,384		
1920-7		4 10 0 5 0 0	•••	3,821,242	3,821,242		
		5 10 0 ·	5,997,000	1,003,000	7,000,000		
	1	5 15 0		6,814,241	6,814,241		
Total	•••••		5,997,000	12,615,867	18,612,867		
•]				
1927-8		4 10 0	4,999,300	700	5,000,000		
		500	· · · ·	36,000	36,000		
		5 6 11		250,000	250,000		
	-	5 15 0	···	1,024,211	1,024,211		
Total	••••	•••	4,999,300	1,310,911	6, 310,211		
Total for 5 years			29,415,122	42,858,449	72,273,57		
LOUNT IN O YOURS	•.••	•••	200 T10 , 10	10,000,110			
				1			

Total Indebtedness of the State.

The amounts shown in preceding tables do not represent the total liabilities of the State Government, as they are exclusive of Debentures and Ministerial Certificates issued for the purchase of estates under Closer Settlement Acts, Advances by the Commonwealth Government, Trust Funds and Special

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PUBLIC FINANCE.

Deposits used by the Treasurer, and payments on Bank Accounts still to be transferred. Details of these items are shown below, and the corresponding figures for 1922 are included for purposes of comparison.

		As at 30th June, 1923.		
£ 	£ 176,674,387	£	£ 183,571 ,556	
	4,121,956		4,307,936	
9,811,441 250,000	••	9,806,604 250,000		
10,961,441 4,652,324	€ • • • •	10,056,604 3,790,042	•••	
•••	14,713,765 972,307	•••	13,816,646 731,757	
•••	196,482,395	1.4 6	202,457,895	
	 9,811,441 250,000 10,061,441 4,652,324 	176,674,387 4,121,956 9,811,441 250,000 10,061,441 4,652,324 972,307	Image: Non-State Nan-State Non-State Nan-State Nan-State Nan-St	

On the 30th June, 1923, the liabilities of the State, as shown above, were £202,457,895, but this amount should be decreased by advances to be repaid under the headings shown below:—

				£
Country Towns Water Supply		•••	·	1,499,423
Country Towns Sewerage and Drainage	• •••			528,353
Water and Drainage Trusts				120,089
Other Services	• •••		•••	160,476
Total	• • •••	•••	••••	£2,308,341

There is also the property transferred to the Federal Government, valued at £3,965,687, on which interest is paid at $3\frac{1}{2}$ per cent. per annum, and the amoount at credit of the Sinking Fund, £441,844, so that the net liability is reduced to £195,742,023, and there is a further set-off in the balance repayable by settlers under Closer Settlement Acts, which amounts to £10,582,216.

Cost of Raising Loans.

The charges incidental to the issue of loans in London are heavy. Operations are conducted by the Bank of England and by the London and Westminster Bank, and the former charges 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 charges 4 per cent. and £150 per million respectively for similar services. In Sydney the Bank of New South Wales and the Commercial

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Banking Company of Sydney (Limited) transact all Government banking business. The former acts as the financial agent for the State in Victoria, and undertakes the payment of the half-yearly dividends on local debentures and funded stock. The Treasury directly conducts the operations connected with the issue of New South Wales Funded Stock and Treasury Bills, and no local loan has been underwritten.

The following statement shows the charges for the negotiation of loans floated during the period 1914 to 1923, inclusive of the accrued interest and bonuses allowed to investors. Local Debentures and Treasury Bills have not been included, as those disposed of in Sydney are usually sold 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.

					Charges, et	c		
Year when Floated.	Amount of Principal. Proceeds.	Stamp Duty, Postage, and other Expenses.	Duty, Bank Postage, Commis- nd other sion.		Broker- age and Under- writing.	Total.	Expenses per £100 of Gross Proceeds.	
	£	£	£	£	£	£	£	£ s. d.
	-		Is	sued in Lor	idon.			• •
1914	7,500,000	7,312,500	43,875	18,750	55,473	1:5,270	236,363	3 3 1
1915	7,000,000	6,965,000	23,310	17,500	9,015	106,553	156,378	2 4 11
1917	2,500,000	2,500,000	3,095	6,250	14,389	38,650	62,384	2 9 11
1918	19,076,000	19,001,000	42,135	47,690	41,219	258,027	354,071	1 17 3
1919	3,000,000	2,985,000	4,295	7,500	7,681	44,356	64,062	2 2 11
1919-20	5,000,000	4,910,000	6,918	12,500	11,240	68,995	99,653	207
1920-21	6,500,000	6,500,000	73,198	16,250	22,486	112,544	224,478	391
1921-22	3,000,000	2,865,000	9,735	7,500	3,527	51,851	72,613	2 10 8
1921-22	7,000,000	6,790,000	4,519	17,500	2,516	103,262	127,797	1 17 8
1922-23 (5,000,Q00	4,750,000	16,703	12,500	2,595	• 74,827	106,625	2 4 11
1922-23	4,000,000	3,900,000	*	*	. •	*	*	*
		·	Is	ued in Syc	ney.			
1914	532,056	532,056	n , .:		. [™] [1,300	1,300	0 4 11
1917	1,770,154	1,770,154	1		.	2,110	2,110	048
1918	979,313	979,313				Nil.	Nil.	Nil.
1919	1,492,367	1,492,367	1			,,	۰,	. ,, . '
1919-20	14,778,156	14,773,186	}	Nil.		20,000	20,000	028
1920-21	5,309,000	5,309,000	1.		5	12,000	12,000	046
1921-22	8,817,927	8,817,927				10,400	10,400	24
1922-23	7,193,551	7,193,551				18,750	18,750	052

* Not available,

The Sydney sales take place at the Treasury on the basis of £100 cash for every £100 of stock, and a commission of $\frac{1}{2}$ per cent. is allowed when a broker is engaged. The cost of negotiation for issues in Sydney during the past ten years was about 3s. 2d. per £100 of gross proceeds, whilst the average charges for London loans, including underwriting, were £2 6s. 7d.

PUBLIC FINANCE.

STOCK QUOTATIONS.

The average market prices of stock in Sydney are shown in the following table for each month of the year 1922-23, the figures being taken from the Sydney Stock and Share List.

D . (Stock bearing interest at								
Date.	51 per cent.	54 per cent.	5 per cent.	$\begin{array}{c} 4\frac{1}{2} \text{ per} \\ \text{cent.} \end{array}$	4 per cent.	33 per cent.	3½ per cent.	3 per cent.		
922 July	£ 97	£ 96	£	£	£ *	£ *	£ 64	£ 54		
August	97 <u>1</u>	97	*	*	*	*	64	54		
September	98	97 <u>3</u>	95	*	*	*	67	.57		
October	981	971	95	.*	*	*	68	58		
November	. 98 <u>1</u>	$97\frac{1}{2}$	$95\frac{1}{2}$	*	$98\frac{1}{2}$	*	68	58		
December 923—	987	971	*	*	*	*	68	. *		
January	99	$97\frac{1}{2}$	98	*	*	*	*	58		
February	994	97 <u>1</u>	96	*	*	· * :	*	58		
March	993	98	*	•	*	*	67	59		
April	. 100	$98\frac{1}{2}$	- 96	* .	.*	*	· .*	58		
May	100‡	$98\frac{1}{2}$	961	*	* -	. *	70 1	59		
June	10`‡	100	99	*	*	*	701	60		

* No quotations.

The only London prices available for the twelve months ended 30th June, 1923, as shown in the *Economist*, relate to the $5\frac{3}{4}$ per cent. stock, which was quoted in July, 1922, at par, after which it fluctuated between that price and 102 in march, 1923, which was the maximum for the period.

REDEMPTIONS AND SINKING FUNDS.

Under the provisions of the State Debt and Sinking Fund Act, 1904, the State Debt Commissioners' Board was constituted, the members being the Treasurer, the Chief Justice, the Speaker of the Legislative Assembly, and the Under Secretary for Finance and Trade; and the Board controls certain trust funds and special accounts. The original Act provided for a general sinking fund, and a sum of £350,000 was paid each year to the credit of the fund, while under the Treasury Bills Deficiency Act, 1905, an additional £50,000 was required to be transferred to the fund whenever a sufficiently large surplus enabled this to be done. The Commissioners apply the credit balance in purchasing or paying-off stock, debentures, or Treasury bills; and they are empowered to invest the moneys in approved securities. The State Debt and Sinking Fund (Amendment) Act, 1914, provided that where at the close of a year there is a deficiency on the Consolidated Revenue Account the Commissioners shall repay any amount, not being greater than such deficiency, which had been issued from the fund to the Commissioners during the year. Since the last-mentioned Act was passed the amount of £350,000 has been paid to the Commissioners each year, and has been returned to the Treasury.

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The transactions under the Act for the financial year ended the 30th June, 1923, were as follow:---

RECEIPTS.	£	£
Balance brought forward from 1921-22		417,067 350,000
Annual Contribution from Consolidated Revenue Fund Country Towns Water Supply	7,736	000,000
Country Towns Sewerage	2,894	10,630
Interest-Funded Stock	9,089	10,000
Deposit with Colonial Treasurer	5,058	14,147
Total	••	£791,844
EXPENDITURE.	£	£
.Annual contribution from Consolidated Revenue Fund		350,0 00
Balance carried forward to 922-23- Invested in N.S.W. Funded Stock	250,370	
On Deposit with Colonial Treasurer	191,410 64	
On Account Current		441,844
Total		£791,844

FINANCIAL RELATIONS BETWEEN THE STATES AND THE COMMONWEALTH.

The relations between States and Commonwealth are such that neither can truly gain by obtaining advantage over the other. The affairs of each are so intertwined that if one be hampered the other must be affected also, and the development of Australia, on which both are dependent, will be retarded.

One of the most difficult problems to be solved in formulating a constitution for the Commonwealth of Australia was the determination of the relative shares of the Commonwealth and States respectively in the proceeds of taxation from Customs and Excise. Each of the two governing powers was invested with authority to levy direct taxation, consequently no difficulty arose in this respect; but the power to impose tariffs through Customs and Excise duties, formerly exercised by the State, was at Federation vested in the Commonwealth Parliament. Hence it became necessary to decide some proportion of the revenue derivable from these sources of indirect taxation which should constitute by legal right the share of the States qua States in these imposts.

From the time when the Federal Constitution was under discussion to the time when the Surplus Revenue Act was passed in 1910, it was universally admitted that in any arrangement between the Commonwealth and the States the proportion of Customs and Excise Revenue to be retained by the one, and the proportion to be handed back to the other, should be based on the respective needs of each. Practically the only difference of opinion was whether expenditure on such services as it has been the public policy of the States or Commonwealth to undertake, and which are called "Business Undertakings" in New South Wales, should be included in the "needs," or whether it should be premised that they should pay for themselves.

It was in recognition of these needs that it was provided by section 87 of the Commonwealth Constitution Act, popularly known as the "Braddon" clause, that during the first ten years of the existence of the newly-created Australian Commonwealth there should be returned not less than threefourths of the net revenue from Customs and Excise to the State in which it was received; also, that such proportion should continue to be returnable after the ten-year period until the Commonwealth Parliament should decide what other disposition of these revenues should be made. During the early years of the experience of the Commonwealth the question of the policy to be pursued at the expiry of the period of ten years named in the Braddon clause was not immediately pressing, because (1) the needs of the Federation had not become sufficiently urgent to cause a necessity for appropriating the full quarter allocated for Commonwealth requirements until 1st July, 1908, and (2) the fact that a term of years had yet to ensue before a fresh arrangement could be made under the Constitution, tended to the postponement of the determination of a question which was fully recognised to be intricate and difficult of solution.

Towards the close of the ten-year period, however, it became evident that more revenue would be required to enable the Federal Government to fulfil its assigned functions. A number of conferences were held, but until the year 1909 a definite agreement was not reached. In that year it was agreed that the amount to be returned should be 25s. per head of population, and the original proposal was that the Constitution should be altered to provide that payment. At a referendum, however, the proposal was defeated by a small majority, and the Surplus Revenue Act of 1910 was passed by the Commonwealth Parliament. The Act provides that for ten years, from 1st July, 1910, and thereafter, until Parliament provides otherwise, the Commonwealth shall pay to each State by monthly instalments an annual sum amounting to 25s. per head of its population.

This measure was a temporary expedient, and the matter has been disoussed at length by representatives of the Government of the Commonwealth and of the States many times without reaching finality. A conference of Premiers was held in May 1920, and continued in July, and other meetings were subsequently held, but although the parties arrived at satisfactory agreements upon several important matters, some involving heavy expenditure, they were unable to agree upon the two most important questions of finance, namely, the co-ordination of borrowing, and the per capita payment to the States.

The last Conference between Ministers of the Commonwealth and the States was held at Melbourne in May-June, 1923, when the Commonwealth Government proposed that, for a period of five years, and thereafter until the Parliament otherwise provided, it should relinquish portion of its field of direct taxation by ceasing to collect tax from all individuals whoseincomes were £2,000 a year or less, and by granting an exemption of £2,000 to other individuals; in consideration of this action the States were asked to agree to the cessation of the per capita payments and to forego the interest now being paid by the Commonwealth on transferred properties.

The States proposed that-

- (1) The Commonwealth should retire from the field of income taxation.
- (2) Contingent on this being done, the States would relinquish claim to any share in Customs and Excise Revenue, and, if necessary, recoup the Commonwealth, on an equitable basis, loss of revenue to the Commonwealth under these proposals, the amount payable in each year by the several States to be determined in conference, with the Prime Minister.
- (3) This arrangement to be embodied in a ten years' agreement between the Commonwealth and the States.

After discussion the Commonwealth amended its proposal and offered to abolish entirely taxation of individual incomes, and to operate only in the field of Company Taxation, undertaking not to collect more than the equivalent of 2s. 6d. in the \pounds on the total profits of companies. Later the Conference discussed the matter informally in committee, when the Prime Minister outlined the following proposals, which, upon resumption of

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the Conference, were accepted in principle by four States—Victoria, Queensland, South Australia, and Western Australia. New South Wales dissented and Tasmania was not represented. The proposals were:—

For the period of five years from the 1st July, 1923:

- 1. The Commonwealth not to levy any income tax on any incomes except those of companies.
- 2. The income tax levied by the Commonwealth on the income of companies not to exceed 2s. 6d. in the £.
- 3. No interest to be paid by the Commonwealth to the States on properties transferred to the Commonwealth under section 84 of the Constitution.
- 4. No payment to be made by the Commonwealth to the States under the Surplus Revenue Act, 1910.

5. The Commonwealth to make payments to the States upon the • following basis calculated with regard to each State:—

- (a) i. The amount of the payments made to the States under the Surplus Revenue Act, 1910.
 - ii. The interest on properties transferred from the States.
 - iii. The amount of tax on the incomes of companies collected by the States.
- (b) i. The amount of tax on the incomes of companies collected by the States in excess of an average of 1s. 3d, in the £.
 - ii. The amount of Commonwealth income tax collections in the State, other than taxes on the incomes of companies.

Where, in regard to any State, the total of the amount calculated under paragraph (b) does not exceed the total of the amounts calculated under paragraph (a) by £100,000 the Commonwealth was to pay to the States the sum necessary to produce an excess of £100,000.

The proposals have not been brought into operation in any of the States, but agreements have been made between the Commonwealth and each State, excepting Western Australia, for the collection in the State of the Commonwealth and State taxes by one authority, namely, the State Commissioner of Taxation, thus effecting a great saving and obviating the necessity for separate returns. Under a somewhat similar agreement the Commonwealth has collected the taxes in Western Australia since 1921.

With reference to the co-ordination of borrowing, the Commonwealth Government proposed that there should be a Loan Council, consisting of the Treasurer of the Commonwealth and the Treasurer of each State. Its functions would be to determine the order in which the Commonwealth, the States, and the various public bodies created by the State Legislatures should come upon the market within Australia, and to advise each Treasurer as to the rate of interest and the other terms upon which local loans should be floated. The States supported the proposal for the establishment of a Loan Council, but with power to act in an advisory capacity only, and this proposal was adopted. It was considered desirable by the States and agreed to by the Commonwealth, that a Sinking Fund, or Redemption Fund, of not less than one-half per cent. should be established in connection with all new loans.

It was resolved also that, providing all the States and the Commonwealth have passed the necessary validating legislation, interest on all loans issued

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after the 31st December, 1923, be subject to taxation. The Commonwealth Parliament has already passed an Act making the interest on all loans raised in Australia after 31st December, 1923, subject to Commonwealth income tax.

It is interesting to consider the following table, which shows, taking the combined expenditure of the Commonwealth and States on administrative or governmental functions, that is, exclusive of business undertakings, the proportion of the total expenditure which was incurred by the States and by the Commonwealth in 1901-2, the first year of the Commonwealth, in 1909-10, the year before the commencement of the Surplus Revenue Act, in 1913-14, the year before the War, and in 1922-23, the latest year. The expenditure by the Commonwealth on war services in 1922-23 has not been included, as there was no similar expenditure in the earlier years. The table shows also the proportion of Customs and Excise revenue retained by the Commonwealth in each of those years:—

Year.	Proportie Expenditure Business Un	Proportion of Customs and Excise retained		
	By States.	By Common- wealth.	hv	
1901-02	per cent. 85	per cent. 15	per cent. 15	
1909-10	79	21	25	
1913-14	73	27	56	
1922-23	73	27	78	

The following statement shows the extent to which the States' revenues are dependent on the per capita payments from the Commonwealth. It gives the proportion per cent. from the revenue (excluding business undertakings) of each State from the principal sources in 1922-23, and it is obvious that if the Commonwealth payments were reduced materially the States could balance their accounts only by severe economy or by heavy increases in taxation. The receipts of business undertakings have been excluded on the assumption that the charges for those services should be fixed to meet the expenditure.

	Proportion of Revenue obtained from-							
State.	Commonwealth Payments.	Taxation.	Land.	All Other Sources.	Total.			
New South Wales	per cent. 18·7	per cent. 54·2	per cent. 13·3	per cent. 13.8	per cent 100			
Victoria	21.6	43.2	4.1	31-1	• 100.			
Queensland	13.7	46.7	21.8	17.8	100			
South Australia	16.7	47.8	7.4	28.1	100			
Western Australia	15.7	28.0	11.5	44.8	100			
Tasmania	25 9	53.0	6.3	14.8	100			
All States	18.3	47.3	11:7	22.7	100			

The next statement shows the principal items of revenue and expenditure of the States and of the Commonwealth for the year 1922-23, and is included to show the relation of the various States to each other, and of all the States to the Commonwealth.

Heading.	New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tasmania.	All States.	Common- wealth.
			Revenu	e.				
Le de la construction de la constru	£	£	£	(£ ., £ ., 1	£	£	£	£
GOVERNMENTAL-		i	•	1			1. 1. 1. 1	S. C. Martin
Payments by Common- wealth	2,690,198	1,969,772	977,897	635,833	554,231	†356,237	7,183,668	
Customs and Excise Income Tax Land Tax Probate Duties Other	4,196,22 8 2,570 1,176,596 2,423,724	1,51 4,256 392,594 697,482 1,323,856	2,149,607 417,865 *611,147 152,266	903,460 197,107 205,382 510,827	390,008 79,983 45,99* 471,575	325 151 97,352 56,530 249,142	9,478,705 1,147,471 2,793,134 5,131,390	32,872,124 12,904,518 2,018,876 1,172,934 916,559
Total Taxation	7,799,118	3,928,188	3,330,885	1,816,776	987,558	728,175	18,590,700	49,885,01
Land Other Public Services Other Revenue	1,914,233 984,403 996,188	369,356 617,164 2,212,367	1,552,379 161,459 1,111,780	280,772 455,626 610,405	403,335 773,358 806,192	86,735 77,942 129,563	4,606,810 3,064,952 5,866,495	255,242 4,557,967
Total Governmental	14,384,140	9,096,847	7,133,900	3,799,412	3,524,674	1,373,652	39,312,625	54,698,220
Business Undertakings	21,761,804	12,201,363	5,465,503	4,632,288	3,682,818	800,409	48,544,185	10,022,409
Total Revenue	36,115,944	21,298,210	12,599,403	8,431,700	7,207,492	2,174,061	87,856,810	64,720, 63 5
			Expendit	ure.				
GOVERNMENTAL— Administrative and De-				[· ·				1.1.1
partmental	12,256,569	6,362,277	4,179,073	2,897,880	2,259,312	\$68,747	28,823,808	12,175,267
Interest, excluding Busi- ness Undertakings Sinking Fund and Re-	1,827,102	1,636,713	1,376,321	714,408	1,156,208	465,788	7,176,540	1,397,603
demptions	••	357,710	224,611	141,999	87,691	83,157	895,168	42,369 3,459,167
War Services, including	••					••:		
Pensions and Interest.		••				••	· · ·	30,100,472
Total Governmental	14,083,671	8,356,700	5,780,005	3,754,237	3,503,211	1,417,692	36,895,516	47,174,871
BUSINESS UNDERTAKINGS- Working Expenses Interest and Sinking Fund	11,702,154 6,556,611	8,912,554 3,708,122	4,790,981 2,213,393	3,078,527 1,593,753	2,778,475 1, 3 31,170	•	34,959,876 15,7 60,69 7	8,002,090 617,046
Total Business Undertakings	21,258,765	12,620,676	7,604,377	4,672,280	4,109,645	1,054,830	50,720,57 3	8,619,136
New Works	•••			•••		•••		720,927 7,185,551

* Includes other Stamp Duties-not shown separately.

Total Expenditure 35,342,436 20,977,376 12,784,382 8,426,517

† Includes £85,000, special grant.

7,612,856 2,472,522 87,616,089

63,700,485

The amounts shown as expended as interest on capital expenditure of business undertakings were known absolutely in some of the States, but were estimated for the other States, where the information was not known definitely, on the assumption that the average rate of interest on the whole public debt was the rate on the loan expenditure of these undertakings.

The administrative and departmental services of the State comprise such important matters as education, hospitals and charities, police and law, local government, lands, mines, agriculture, and forestry; and of the Commonwealth, invalid and old age pensions maternity allowances, defence, and trade and customs.

PUBLIC FINANCE.

Relatively to population, the heads of revenue and expenditure of each State separately, of all the States combined, and of the Commonwealth, in 1922-23 are as follow:—

n se sendo de la nove En enco		an a	· · · · · ?	Per head of	population	i.		
Heading.	New South Wales.	Victoria.	Queens- land.	South Australia.	Western Australia.	Tasmania.	All States.	Common wealth.
			Revenu	e.				
GOVERNMENTAL— Payments by Common- wealth Taxation—	£ s. d. 1 4 9	£ s. d. 1 4 9	£ s. d. 1 4 9	£ s. d. 1 4 9	£ s. d. 1 12 4	£ s. d. 1 12 6	£ s. d. 1 5 6	£ s. d.
Customs and Excise Income Tax Land Tax Probate Duties Other	1 18 7 0 10 10 1 2 4	0 19 1 0 4 11 0 8 9 0 16 8	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	1 15 2 0 7 8 0 8 0 0 19 11	$ \begin{array}{r} 1 & 2 & 9 \\ 0 & 4 & 8 \\ 0 & 2 & 8 \\ 1 & 7 & 6 \end{array} $	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	5 16 8 2 5 10 0 7 2 0 4 2 0 3 3
Total Taxation	3 11 9	2 9 5	4 4 3	3 10 9	2 17 7	3 6 6	3 6 1	8.17 1
Land Other Public Services Other Revenue	$\begin{array}{cccc} 0 & 17 & 8 \\ 0 & 9 & 1 \\ 0 & 9 & 2 \end{array}$	$\begin{array}{cccc} 0 & 4 & 8 \\ 0 & 7 & 9 \\ 1 & 7 & 10 \end{array}$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	0 10 11 0 17 9 1 3 10	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{ccc} 0 & 7 & 11 \\ 0 & 6 & 8 \\ 0 & 11 & 10 \end{array}$	$\begin{array}{rrrrr} 0 & 16 & 4 \\ 0 & 10 & 11 \\ 1 & 0 & 10 \end{array}$	$\begin{smallmatrix}&&&\\0&&0&11\\&0&16&2\end{smallmatrix}$
Total Governmental	6 12 5	5 14 5	9 0 7	7 8 0	10 5 6	655	6 19 8	9142
Business Undertakings	10 0 3	7 13 5	6 18 4	906	10 14 9	3 13 1	8 12 6	1 15 7
• Total Revenue	16 12 8	13 7 10	15 18 11	16 8 6	21 0 3	9 18 6	15 12 2	11 9 9
C. S. Martinez, C. S. Martinez, and C. S. Martinez, and C. S. Martinez, and C. S. Martinez, and C. Martin			Expenditu	ure.				
GOVERNMANTAL Administrative and De- partmental Interest, excluding Busi-	5 12 9	4 0 0	5 5 9	5 12 11	6119	3°19 '4	5 2 5	2 3 3
ness Undertakings Sinking Fund and Re- demptions	0 16 10	107	1 14 10 0 5 8	1 7 10 0 5 6	375 051	$\begin{array}{cccc} 2 & 2 & 6 \\ 0 & 7 & 7 \end{array}$	$\begin{array}{ccc} 1 & 5 & 6 \\ 0 & 3 & 2 \end{array}$	0411 002
Defence War Services, including Pensions and Interest			••••	••••	199 1993			0123 5610
Total Governmental	697	5 5 1	7 6 3	7 6 3	10 4 3	695	6 11 1	8 7 5
BUSINESS UNDERTAKINGS— Working Expenses Interest and Sinking Fund	6154 304	$egin{array}{cccc} 5&12&1\\ 2&6&7 \end{array}$	6 1 3 2 16 0	$5 19 11 \\ 3 2 1$	$\begin{smallmatrix}8&2&0\\3&17&7\end{smallmatrix}$	$\begin{smallmatrix}3&3&8\\1&12&8\end{smallmatrix}$	$\begin{smallmatrix}6&4&3\\2&16&0\end{smallmatrix}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
Total Business Un-	9 15 8	7 18 8	8 17 3	9 2 0	11 19 7	4 16 4	9 0 3	1 10 7
dertakings			خمصنه محمد فحمص					027
	••••	••••		••••	••••		••••	156

The payments by the Commonwealth to all the States in 1922-23 represented 25s. 6d. per head of population, the excess of 6d. per head over the 25s. mentioned above being due to a special payment to Western Australia, and a special grant of £85,000 to Tasmania. Under the Surplus Revenue Act of 1910 a moiety of the special payment to Western Australia is deducted from the amounts payable to the State at the rate of 25s. per head, so that the sum actually paid to New South Wales in 1922-23 represented only 24s. 9d. per head.

The Commonwealth Constitution Act of 1901 empowered the Commonwealth to take over from the States their public debts as existing at the establishment of the Commonwealth. In 1910 a proposed law to alter the Constitution so as to authorise the transfer of all the debts incurred by the States was ratified by means of a referendum, but no further action has been taken:

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NEW SOUTH WALES OFFICIAL YEAR BOOK.

The public debts of the States as at 30th June, 1923, amounted to £533,560,201, and of the Commonwealth to £410,996,316, of which £362,692,574 was incurred on account of the war. The following table shows the public debt of each State and of the Commonwealth, also the total amount of interest payable. In the statement on page 114 relating to the finances of the States and Commonwealth, the interest payable appears partly under Governmental Services and partly under Business Undertakings.

0+-+-	Publi	c Debt.†	Interest Payable.		
State.	Total.	Per Head.	Total.	Per Head.	
Queensland South Australia Western Australia Tasmania	£ *183,571,556 118,562,029 88,005,001 62,496,585 58,485,854 22,439,176 533,560,201	$\begin{array}{cccccc} 73 & 13 & 11 \\ 109 & 15 & 8 \\ 120 & 9 & 8 \\ 168 & 5 & 11 \end{array}$	£ *8,535,650 5,577,953 3,589,714 3,014,842 2,351,152 1,086,091 24,155,402	$\begin{array}{c} \pounds \text{ s. d.} \\ 3 17 11 \\ 3 9 4 \\ 4 9 7 \\ 5 16 3 \\ 6 15 4 \\ 4 18 11 \\ \hline 4 4 11 \end{array}$	
Commonwealth War Debt	362,692,574 48,303,742	63 13 0 8 9 7	18,200,816 2,238,391 20,439,207	3 3 11 0 7 10 3 11 9	
- Grand Total	944,556,517	165 18 11	44,594,609	7 16 8	

* Exclusive of Closer Settlement Debentures.

† Gross amount-Sinking Funds not deducted.

The grand total is duplicated to the extent of £27,793,000, of which £11,043,000 represents the value of properties transferred to the Commonwealth, and £16.750,000 loans raised by the Commonwealth for the States, which was apportioned as follows:—Victoria, £1,954,000; Queensland, £5,462,500; South Australia, £4,116,000; Western Australia, £4,150,500; and Tasmania, £1,067,000. New South Wales did not participate in the distribution of these loan proceeds, but, in common with the other States, received advances from the Australian Notes Fund. These advances are not included in the Public Debt of the States.

The Public Debt of the States as shown above appears large, but no less than 72 per cent. of the total amount, ranging from 60 per cent. in Western Australia to 80 per cent. in New South Wales, has been spent on works of a reproductive character, such as railways, tramways, water supply, sewerage, harbours, and rivers. The balance of the debt has been expended on other necessary works or services, namely, roads, bridges, industrial undertakings, promotion of agriculture, assistance to returned soldiers, aid to farmers, and other matters, which, although not returning direct revenue, have assisted in the development of the States.

In so far as a comparison between the various States is concerned, the Victorian Public Debt, to be on the same basis as that of the other States, should be increased by £16,055,211, representing loans raised by the Melbourne Metropolitan Board of Works, the Melbourne Harbour Trust, and the Geelong Harbour Trust, to construct necessary works. Corresponding amounts are included in the quotations shown above for the other States, and if the sums referred to were added as stated, the Victorian Public Debt would be £134,617,240, or £83 13s. 7d. per head, and the annual interest thereon would be £6,384,041, or £3 19s. 4d. per head.

RAILWAYS AND TRAMWAYS.

THE first two projects for the construction of railways in New South Wales originated with private companies, but it was scon recognised that the undertakings were beyond their financial resources, and the works were transferred to the Government. Since then it has been an established policy that all railways shall be under Government control, although a few private lines have been constructed purely for local purposes. One result of this policy is to be seen in the magnitude of the annual receipts and expenditure of the State, and in the growth of the public debt. More than 53 per cent. of the expenditure in 1922-23 was in connection with railways and tramways, and nearly 56 per cent, of the public debt has been expended in their construction and equipment.

The management is in the hands of a Chief Commissioner and of three Assistant Commissioners, whose duties are allotted by the Governor upon the recommendation of the Chief Commissioner. The third Commissionership is at present vacant.

On 26th September, 1855, the first railway line, 14 miles in length, was opened for traffic between Sydney and Parramatta, and communication was established between Newcastle and East Maitland on 11th April, 1857.

The growth of the State railways may be traced in the table given below, and the Campbelltown to Camden, Westmead to Castle Hill, and Yass tramways are included, as they are worked with the railways.

Period.	Opened during the period.	Total opened at end of period.	Period.	Opened during the period,	Total opened at end of period.
	miles.	miles.		miles.	miles.
	miles.	mines.	1905-14	686	3,967
1855-64	143	143	1915-19	858	4,825
1865-74	260	403	1920	190	5,015
1875-84	1,215	1,618	1921	28	5,043
1885 - 94	883	2,501	1922	73	5,116
1895-1904	780	3,281	1923	202	5,318

The total length of lines open at 30th June, 1923, as shown above, was 5,318 miles, distributed as follows :—Southern system, 1,922 miles; Western, 1,827 miles; and Northern, 1,569 miles; and in addition there were 1,058¹/₄ miles of sidings and crossovers.

The progress can be gauged fairly by comparing the population and area of territory to each mile of line open for traffic at different periods. In 1900 the average population per mile of line was 482, and in 1923 it was 412, while the area of territory has decreased from 4,434 square miles in 1860 to 60 square miles in 1923. The following statement shows the extension since 1860.

Year.	Population to each Mile of Line open.	Area to each Mile of Line open.	Year.	Population to each Mile of Line open,	Area to each Mile of Line open.
1860 1865 1870 1875 1880 1885	No. 4,979 2,861 1,471 1,360 881 548	sq. miles. 4,434 2,170 916 710 366 179	1895 1900- 1905 1910 1915 1920	No. 501 482 443 443 455 406	sq. miles. 123 110 95 85 75 62

DUPLICATION OF LINES.

In addition to increasing the facilities by the construction of new lines, provision for the rapidly extending traffic is being made by the duplication of existing main lines.

There are duplicate lines on the main western line as far as Cox's River, and works now in progress will extend the duplication to Orange; already those portions between Cox's River and Kelso, Gresham and Murrabo, are completed; the southern line is duplicated as far as Cootamundra North Junction, the northern line as far as Branxton, and all the South Coast line, except certain tunnels.

The following statement shows the length of line laid with one or more tracks at intervals since 30th June, 1900 :--

At 30th June.	Single.	Double.	Triple.	Quadruple.	Total.
1900 1905 1910 2915 1920 1923	miles. 2,644 3,0794 3,393 3,6924 4,405 4,674	miles. 158 <u>\$</u> 193 2241 <u>‡</u> 406 <u>‡</u> 567 601	miles. 8 71 71	miles. 84 84 274* 354* 354*	miles. 2,811 1 3,280 2 3,643 .4,1341 5,015 5,318

* Includes 1 mile 9 chains with five tracks.

COST OF RAILWAY CONSTRUCTION.

The average cost per mile open for traffic of the Government Railway lines, excluding expenditure for rolling stock, machinery, furniture, and workshops and stores, has been $\pounds 13,025$ —an amount which is by no means high, considering the character of some parts of the country through which the lines have been carried, and the cost of labour and materials.

The amount expended on rolling stock, &c., to 30th June, 1923, was $\pounds 20,013,220$, viz.:—Rolling stock, $\pounds 15,686,496$; machinery, $\pounds 1,531,300$; workshops, $\pounds 1,220,530$; furniture, $\pounds 11,894$; and stores advance account, $\pounds 1,563,000$. The total capital expenditure amounted to $\pounds 89,276,871$, an average of $\pounds 16,788$ per mile. The growth of the capital expenditure may be seen in the following table:—

Period.	Capital expended during period.	Total capital expended to end of period.	Period.	Capital expended during period.	Total capital expended to end of period.
	£	£ 1		£	£
1855-9	1,278,416	1,278,416	1900-4	4,296,241	42,288,517
1860-4	1,353,374	2,631,790	1905-9	5,324,149	47,612,666
1865-9	2,049,539	4,681,329	1910-4	13,652,203	61,264,869
1870-4	2,163,217	6,844,546	1915-9	15,336,722	76,601,591
1875-9	3,561,949	10,406,495	1920	2,717,326	79,318,917
1880-4	9,673,643	20,080,138	1921	2,985,277	82,304,194
1885-9	9,759,029	29,839,167	1922	3,248,677	85,552,871
1890-4	6,016,104	35,855,271	1923	3,724,000	89,276,871
1895-9	2,137,005	37,992,276			

Of the £89,276,871 expended to 30th June, 1923, an amount of £659,930 was provided from Consolidated Revenue, leaving a balance of £88,616,941 raised by debentures and stock. The net revenue for the year ended 30th June, 1923, after paying working expenses, was £4,571,359, or 5.22 per cent. upon the total capital expenditure, which is the highest rate recorded, with the exception of the year 1881.

RAILWAYS AND TRAMWAYS.

COACHING AND GOODS TRAFFIC.

For the first ten years after the opening of the railways in New South Wales the larger part of the earnings was obtained from the passenger traffic, no doubt owing to the fact that the original lines were entirely suburban. It was not until the line crossed the mountains and opened up the interior that the proportions changed, and the goods traffic became the principal source of revenue.

The following table gives the proportion of earnings from the coaching and goods traffic at intervals since 1890. The percentages shown for coaching include earnings from miscellaneous sources and rents.

Year ended 30th June.	Proportion of	Total Earnings.	Year ended 30th June.	Proportion of Total Earnings.		
	Coaching, &c.	Goods and Live Stock,		Coaching, &c.	Goods and Live Stock.	
	per cent.	per cent.		per cent.	per cent.	
1890	40.2	59.8	1910	39.9	60.1	
1895	35.5	64.5	1915	44.7	55.3	
1900	38.8	61.2	1920	47.7	52.3	
1905	39.9	60.1	1923	48.1	51.9	

Coaching Traffic.

The following table shows the number of passenger journeys and the receipts from coaching traffic since 1890 :---

		Guard C.		of population.
Year ended 30th June.	Passenger Journeys.	Gross Earnings from Coaching Traffic.	Passenger Journeys.	Gross Earnings from Coaching Traffic.
	No.	£	No.	s. d.
1890	17,071,945	1,041,607	15.8	19 3
1895	19,725,418	1,001,107	15.9	16 2
1900	26,486,873	1,195,496	19.7	17 6
1905	35,158,150	1,428,190	24.4	19 10
1910	53,644,271	2,124,292	33.6	26 7
1915	88,774,451	3,315,294	47.1	35 2
1920	114,654,660	5,714,131	56.3	56 1
1923	123,714,639	7,325,846	56.9	67 - 5

Particulars regarding the passenger traffic on suburban and country lines during the years 1918 and 1923 are shown below; suburban lines include distances within 34 miles of Sydney and Newcastle :---

	Year en	ded 30th Jun	e, 1918.	Year en	ded 30th Jun	e, 1923.
Description.	First Class.	Second Class.	Total.	First Class.	Second Class.	Total.
SUBURBAN LINES. Ordinary Passengers	5,590,544	27,703,655	33,294,199	4,924,441	39,520,094	44,444,535
Season Ticket Holders' Journeys Workmen's Journeys		20,025,600	29,203,860 22,252,644	8,339,720	24,766,008 35,466,984	33,105,728 35,466, 9 84
Total Passenger Journeys			84,750,703	13,264,161	99,753,086	113,017,247
Miles Travelled Average Mileage per Pas-	106,355,818	509,514,358	615,870,174	105,081,192	736,582,117	841,663,209
Amount Received from	7.20	7.28	7.27	7.92	7.38	7.44
Passengers f Average Receipts per Pas-	251,068	849,081	1,100,149	371,274	1,878,429	2,249,703
senger per mile d.		0.40	0.43	0.85	0.61	0.64
COUNTRY LINES. Passengers Miles travelled	314,198,162	7,161,347 454,697,506	9,553,813 768,895,668	$2,334,641 \\ 321,243,445$	8,362,751 516,995,883	10,697,392 838,239,328
Average Mileage per Pas- senger Amount Received from	131.32	63.49	8 0·4 8	137.60	61.32	78 · 35
Passengers £	1,097,810	1,275,381	2,373,191	1,576,491	2,178,508	3,754,999
senger per Mile d.		0.67	0.74	118	1.01	1.08

Goods Traffic.

The following figures show how greatly the goods traffic has expanded, especially in recent years :---

Year ended	Goods and Li	ve Stock Traffic.	Per head of Population.			
30th June.	Tonnage.	Tonnage. Gross Earnings.		Gross Earnings		
		£		£ s. d.		
1890	3,788,950	1,569,356	3.5	190		
1895	4,075,093	1,855,187	3.3	1 9 11		
1900	5,531,511	1,936,217	4.1	185		
1905	6,724,215	2,213,105	4.7	1 10 9		
1910	8,393,038	3,290,640	5.3	2 1 3		
1915	11,920,881	4,206,234	6.3	248		
1920	13,293,528	6,807,792	6.2	3 6 10		
1921	15,563,131	7,270,856	7.4	3 9 7		
1922	14,532,811	7,981,466	6.8	3 15 0		
1923	13,801,310	7,895,487	6.3	3 12 8		

The tonnage carried in 1923 was 731,500 tons less than in 1922, but the gross earnings were only £86,000 lower. The next statement shows the class of goods carried on the railways since 1900.

	erals.	Min			General Merchandise.		
Total Goods	Other.	Coal, Coke, and Shale.	Live Stock.	Wool.	Other.	Grain, Flour, etc. (Up Journey).	30th June. etc
Tons. 5,531,511	Tons. 338,853	Tons. 3,406,769	Tons. 188,595	Tons. 84,678	Tons. 1,151,564	Tons. 361,052	1900
6,724,213	368,945	4,169,076	174,424	90,572	1,398,443	522,755	1905
8,393,038	528,017	4,553,965	463,669	138,779	2,100,203	608,405	1910
11,920,881	955,894	6,649,704	849,604	132,895	2,849,908	482,876	.1915
13,293,528	1,092,125	6,732,859	900,933	117,171	3,685,983	764,457	1920
15,563,131	1,262,494	8,881,796	732,804	93,760	3,375,443	1,216,834	1921
14,532,811	1,307,868	7,491,001	603,067	128,085	3,350,796	1,651,994	1922
13,801,310	1,385,860	7,154,346	736,895	124,033	3,572,401	827,775	1923

The following table contains information relating to ton mileage in 1915 and later years :---

Year ended 30th June.	Goods Train Mileage. (000 omitted.)	Tons	† Ton-miles. (000 omitted.)	Earnings, exclusive of haulage, tonnage dues, &c.	Average Freight- paying Load carried per Train.	Average Miles per Ton.	Earnings per Ton- mile,	Density of Traffic per aver- age mile Worked.
	1			£	Tons.		d.	Tons.
1915	10,321	11,660	916.923	3.633.613	88.84	78.64	0.95	226,010
1920	11,698	13,010	1,394,099	6,106,563	119.17	107.15	1.05	280,729-
1921	11,491	15,262	1,418,386	6,501,914	123 [,] 43	92.94	1.10	282,603
1922	10,508	14,197	1.365.961	7,851,887	123.00	96.21	1.38	269,049
1923	9,871	13,567	1,166,238	7,761,788		85.96	1.60	224,426

* Exclusive of coal, etc., on which shunting charges only were collected. † "Ton-mileage" is the product of the load in tons and the distance in miles over which the load is . carried

Year ended 30th Junc.	Passenger Train Mile- age. (000 omitted.)	Passenger Journeys. (000 omitted.)	Total Pas- senger Miles. (000 omitted.)	Amount re- ceived from Passengers.	Average Number of Pas- sengers carried per Train.	Average Mileage per Pas- senger Jour- ney.	Average Receipt per Pas- senger Mile.	Dag.	Density of Traffic per Average Mile Worked.
. '				£			d.	d	
1915	10,099	88,774	1,230,901	2,910,684	122	13.87	0.57	7.87	303,402
1920	11,136	114,655	1,632,627	5,137,247	147	14.24	0.76	10.75	328,761
1921	30,751	120,735	1,620,857	5,736,256	151	13.42	0.82	11.40	322,944
1922	10,820	121,299	1,610,619	5,934,616	149	13.28	0.88	11:74	317,238
1923	11,256	123,715 [.]	1,679,903	6,004,702	149	13.58	0.86	11.62	323,264

Information relating to passenger mileage from 1915 onwards is contained in the following table :---

WORKING EXPENSES AND EARNINGS.

While the primary object of State railway construction has been to promote settlement, apart from consideration of the profitable working of the lines, the principle has nevertheless been kept in view that the railways should be self-supporting.

A statement of the working expenses and earnings of the railways during the year ended 30th June, 1923, is shown below :---

Working Expenses.	Earnings.	
£ Maintenance of Way and Works 1,891,233 Rolling Stock— Loco. Power 2,529,754	£ Passengers 6,004,' Mails, Parcels, Horses, &c 689,6	
General Superintendence 133,182 Maintenance of Rolling Stock 2,520,375	Total Coaching 6,694,:	353
Examination and Lubrication of Vehic'es 64,669	Refreshment-rooms 471,	557
Transportation and Traffic 2,806,970 General Charges 290,105 Refreshment-rooms 411,245 Gratuities, &c. 441 Fire Insurance Fund 2,000	Goods Merchandise 4,361, Live Stock 1,462, Wool 541, Minerals 1,502,8	727 998
10,649,974	Total Goods 7,868,	769
Balance, Net Earnings 4,571,359	Rents 111, Miscellaneous 75,	
Total£15,221,333	Total£15,221,	333

The expenditure on locomotive power amounted to 24 per cent. of the total; maintenance of rolling stock to 24 per cent.; transportation and traffic to 26 per cent.; and maintenance of way and works to 18 per cent. Of the earnings, 39 per cent. was derived from the carriage of passengers, 5 per cent. from mails, parcels, &c., 3 per cent. from refreshment rooms, and 52 per cent. from the conveyance of goods.

As the carriage of goods and live stock constitutes the principal source of railway revenue, the earnings fluctuate in each year in accordance with 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 several of these lines earn little more than cost of maintenance.

The following table shows the gross earnings, working expenses, and the proportion of the expenditure to receipts, in stated years from 1890 to 30th June, 1923 :--

12	per la serie de	Working E	Working Expenses.			Working Expenses.		
Year ended 30th June.	Gross Earnings.			Year ended 30th June.	Gross Earnings.	Total.	Pro- portion to gross carnings	
]	£	£	per cent		£	£	per cent.	
1890	2,633,086	1,665,835	63-3	- 1915	7,616,511	5,311,162	69.7	
1895	2,878,204	1,642,589	57.1	. 1920	13,083;847	9,570,984	73-2	
1900	3,163,572	1,844,520	58·3	1921	14,267,205	11,032,678	77.3	
1905	3,684,016	2,216,442	60:2	1922	15,213,019	11,116;302	73:1	
1910	5,485,715	3,276,409	59.7	1923	15,221,333	10,649,974	70-0	

The working expenses during the year ended 30th June, 1923, represented 70 per cent. of the gross earnings. In 1907 the proportion was 530 per cent., the lowest since the control of the railways was vested in Commissioners, but the percentage has risen steadily since that year, the increase from 1920 being due mainly to advances in the salaries and wages of the staff, in the prices of coal and other necessary materials, additional payments for rates on railway properties under the Local Government Act, 1919, and to other items.

The following table shows the gross earnings, working expenses, and net earnings per train mile and per average mile open at five yearly intervals from 1900 onwards :---

Year		Per train mile.		Per average mile open.				
ended 30th June.	Gross Earnings.	Working Expenses.	Net Earnings.	Gross Earnings.	Working Expenses.	Net Earnings.		
	d.	d.	d.	£	£	£		
1900	85.36	49 ·77	35-59	1,139	664	475		
1905	84.46	50.82	33.64	1,123	676	447		
1910	85.12	50.84	34.28	1,513	904	609		
1915	89.52	62.42	27.10	1,877	1,309	568		
1920	137:51	100.59	36.92	2,635	1,927	708		
1921	150:23	116-17	34:06	2,843	2,198	645		
1922	166:82	121-89	44 93	2,996	2,189	807		
1923	168-39	117*82	50.57	2,929	2,019	910		

NON-PAYING LINES.

As many of the railways of New South Wales Fave been constructed with the view of promoting settlement and developing the natural resources of the State rather than of meeting requirements already existing, it is not surprising that traffic over a number of lines is conducted at a loss. Most of the unprofitable lines are branch lines of comparatively recent construction, but even on portions of the main lines also the earnings do not cover working expenses and interest on the capital cost.

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 all worked at a loss.

Earticulars relating to non-paying lines, under which category are included only lines which have not yet returned a profit, are shown below mainly for the year ended 31st December, 1922 :—

• Line.	Lengt	h.	Capital Cost.	Interest.	Working Expenses.	Earnings.	Loss after providing for work- ing ex- penses and interest.
	m.,	с.	£	£	£	.	
Northern Main LineTamworth to Wallan- garra Branch lines	211	27 † 47	3,065,259 1,942,771	155,209 98,374	332,983 133,309	38 3,482 139,656	104,710 92,027
Total Northern	596	74	5,008,030	253,583	466,292	523,138	196,737
North Coast	462	35	6,387,350	319,980	353,701	441,827	231,854
Southern—Branch lines	1,130	73	8,596,540	416,219	606,891	563,537	459,573
South Coast-Kiama to Nowra	22	59 1 .	413,149	20,920	27,045	22,704	25,261
Western Main Line—Nyngan to Bourke Branch Lines	126 788		716,639 4,852,686	38,287 232,138	\$5,618 273,482	49,336 351,012	22,569 154,608
Total Western	915	171	5,569,325	268,425	309,100	400,348	177,177
Suburban-Branch Lines	6	35	137,386	6,957	19,827	10,505	16,279
Total-specified lines	3,133	69 1	26,111,780	1,286,084	1,782,856	1,962,059	1,106,881

The non-paying lines, which represent approximately 59 per cent. of the total mileage, were responsible for a loss of nearly £1,107,000 in 1922, and as the total surplus on railway operations was approximately £84,000, it follows that the paying lines, which constitute only 41 per cent of the whole, returned a profit of about £1,191,000. This is shown in the following interesting summary, which has been compiled from the above figures and from the reports of the Railway Commissioners. The particulars relate to the operations during the year 1922.

		Expenditure.		1	
	Interest.on Cost.	Working Expenses	Total.	Earnings.	Deficiency (). Surplus (+-)
Non-paying lines Paying lines	£ 1,286,084 3,201,219	£ 1,782,8567 8,867,118	£ 3, (68,94 0 12,068,337	£ 1,962,059 13,259,274	£ (-)1,106,881 (+)1,190,937
Tetal	4,487,303	10,649,974	15,237,277	15,224,333	(+) 84,056

NEW SOUTH WALES OFFICIAL YEAR BOOK.

NET EARNINGS AND INTEREST ON CAPITAL.

The net revenue from railways for the year ended 30th June, 1923, was $\pounds 4,571,359$, while the capital expended on lines open for traffic to that date was $\pounds 89,276,871$, including $\pounds 659,930$ paid from consolidated revenue. The amount thus available to meet the interest charges on the capital expended represents a return of 5.22 per cent. The following table shows the net earnings and the interest returned on the total capital expended on railways, including the cost of construction and equipment for the year 1890 and subsequent periods :—

Cear ended Net Earnings.		Interest returned on Capital invested	Year ended 30th June.	Net Earnings.	Interest re- turned on Capi tal invested.
	£	per cent.		£	per cent.
1890	967,251	3.17	1915	2,305,349	3.60
1895	1,235,615	3.31	1920	3,512,863	4.48
1900	1,319,052	3.43	1921	• 3,234,527	4.01
1905	1,467,574	3.40	1922	4,096,717	4.88
1910	2,209,306	4.58	1923	4,571,359	5.22

The next table shows the rate of interest returned on the capital expenditure for each of the years since 1914, with the amount by which such return falls short of or exceeds the actual rate of interest payable on the cost of construction. The rate of return on capital represents the interest on the gross cost of the lines :---

Year ended 30th June.	Interest returned on Capital.	Actual rate of Interest payable on Public Debt.	Gain (+) or Loss ().	Year ended 30th June.	Interest returned on Capital.	Actual rate of Interest payable on Public Debt.	Gain (+) or Loss ().
	per cent.	per cent.	per cent.		per cent.	per cent.	per cent.
	per cent.	per cent.	per cent.		per cent.	per cent.	per cent.
1914	3.87	3.62	(+)0.20	1919	4.03	4.10	() 0.07
1915	3.60	3.67	(–) 0'0'7	1920	4.48	4.30	(+)0.18
1916	3.45	3.78	(-) 0.33	1921	4.01	4.42	(-)0.41
1917	3.50	4.09	(–) 0.59	1922	4.88	4.60	(+) 0-28
1918	4 ·10	4.12	() 0.07	1923	5.22	4.65	(+) 0.57
						and a state of the	

The railways being owned by the State, public opinion at once demands a reduction in freights and fares when the net earnings are much in excess of the interest requirements; substantial reductions were made in 1911 and 1912, but passenger fares and goods rates have been increased considerably since June, 1913.

EXPANSION OF TRAFFIC.

The expansion which has taken place in the volume of traffic on the railways of New South Wales will be seen from the following comparison. The earnings during the quinquennium 1919-23, show an increase of

 $\pounds 27,043,782$, or 66 per cent., as compared with the previous five years; the number of passengers increased by 26 per cent.; and the tonnage of goods and live stock, &c., by 16 per cent.

			Five years ended 30th June, 1918.	Five Years ended 30th June, 1923.	Increase.	Percentage increase,
Earnings – Coaching Traffic Goods and Live Stock Coal, Coke, and Shale	•••	£ £ £	18,570,861 19,075,770 3,053,164	32,258,268 30,004,687 5,480,622	13,687,40710,928,9172,427,458	74 66 79
Total earnings		£	40,699,795	67,743,577	27,043,782	66
Passengers	4 * 6	No.	458,968,072	578,972,068	120,003,996	26
Goods and Live Stock	•••	Tons	27,544,735	33,666,877	6,122,142	22
Coal, Coke, and Shale	•••	Tons	32,563,412	36,237,915	3,674,503	11
Total Tonnage		,	60,108,147	69,904,792	9,793,645	16

FARES AND FREIGHT CHARGES.

Passenger traffic is greatest within the Sydney and Newcastle suburban areas, and the rates of fares within a 34 miles radius of either of these cities are lower than those for equal distances outside those areas. The following table shows the fares charged for ordinary single journeys in 1911, 1916, and 1923, over stated distances from either Sydney or Newcastle. Cheaper fares are available for journeys to tourist districts and holiday resorts.

	30th Ju	me, 1911.	S0th Ju	ne, 1916.	30th Ju	ne, 1923.
Distance.	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.
1	$0 \ 0 \ 2$	001	002	$0 \ 0 \ 1$	$0 \ 0 \ 3\frac{1}{2}$	0 0 2
5	0 0 5	0 0 4	$0 \ 0 \ 5$	0 0 4	0 0 8	0 0 6
10	0 0 9	0 0 6	0 0 9	006	$0\ 1\ 3$	$0 0 10\frac{1}{2}$
20	016	0 0 11	016	0 0 11	$0\ 2\ 5$	0 1 6
30	0 2 2	015	022	$0 \ 1 \ 5$	$0\ 3\ 7$	024
34	026	0 1 7	$0\ 2\ 6$	0 1 7	$0 \ 4 \ 1$	$0\ 2\ 7\frac{1}{2}$
50	046	6211	047	0 3 0	$0 \ 7 \ 7$	0 5 0
100	0 10 9	071	0 11 2	074	0187	0 12 2
200	1 3 3	0 14 9	143	$0\ 15\ 5$	2 0 7	1 5 7
300	1 15 9	121	1 17 5	$1 \ 3 \ 1$	$3 \ 2 \ 2$	1 18 3
400	2 8 3	1 8 8	2 10 6	1 10 0	4 3 7	2 9 10
500	2 18 0	1 13 4	3 0 9	1 15 1	508	2 17 10

Single Tickets.

Since 1916 the fares for single journeys, either first or second class, have been increased generally by approximately 66 per cent., although in some cases the increases have been much greater. The cost of periodical tickets at the dates mentioned for journeys over the same distances were as follow :---

	3	0th June, 19	11.	3(0th June, 19	916.	30	oth June, 19	923.	
Distance.	Work- men's				thly.	Work- men's	Monthly.			
	Weekly		Second Class.	Weekly.	First Class.	Second Class.	Weekly.	First Class.	Second Class.	
$ \begin{array}{r} 1 \\ 5 \\ 10 \\ 20 \\ 30 \\ 34 \\ 50 \\ 100 \\ 200 \\ 300 \\ 400 \\ 500 \\ \end{array} $	s. d. 0 6 1 6 2 2 3 0 3 10 4 2 	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} \pounds & \mathrm{s.} & \mathrm{d.} \\ 0 & 5 & 0 \\ 0 & 10 & 9 \\ 0 & 15 & 0 \\ 1 & 0 & 3 \\ 1 & 2 & 9 \\ 1 & 3 & 6 \\ 1 & 14 & 6 \\ 2 & 9 & 0 \\ 3 & 1 & 6 \\ 3 & 14 & 0 \\ 4 & 6 & 6 \end{array}$	s. d. 0 9 1 9 2 6 3 4 4 2 4 6 	$\begin{array}{c} {\bf \pounds} {\rm s.} \ {\rm d.} \\ 0 9 0 \\ 0 19 3 \\ 1 17 3 \\ 1 16 3 \\ 2 1 0 \\ 2 9 3 \\ 3 0 \\ 3 9 3 \\ 3 19 6 \\ 6 0 6 \\ 7 1 6 \\ 8 2 6 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 4 & 1 \\ 5 & 5 \\ 6 & 11 \\ 7 & 5 \\ \dots \\$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} \pounds \text{s. d.} \\ 0 9 2 \\ 1 0 6 \\ 1 8 9 \\ 1 19 6 \\ 2 4 3 \\ 2 5 9 \\ 2 11 3 \\ 3 6 9 \\ 4 12 0 \\ 5 12 0 \\ 6 11 3 \\ 7 10 6 \end{array}$	

Periodical Tickets.

The above rates represent the maximum charges, but liberal concessions are made to school pupils, youths, and women. Periodical tickets for distances within the suburban area cost 60 per cent. more than they did in 1916, but for longer journeys the proportionate increase is less. During 1922 there were slight reductions in second-class periodical tickets, but charges for first-class tickets over long distances were substantially reduced.

Freight Charges.

The system adopte l 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 in 1911, 1916, and 1923:-

Class of Freight.		3Ct	h Ju	ne,	1911			30t)	n Ju	ne,	1916			30 t	ih Ju	ne,	1023	
Show of Program.	100 miles.			500 miles.		100 miles.		500 miles.		iles.	100 miles.		500 miles.					
Ordinary Goods (per ton)- Highest Class Freight Lowest , , , , , , , , , , , , , , , , , , ,	$\begin{bmatrix} 2\\ 0\end{bmatrix}$	$\frac{4}{3}$	11 7	е 0	15 11	$\frac{9}{11}$	£ 2 0	s 9 3	d. 5 7	£ 6 0	s 7 11	. d. 4 11	£ 3 0	16	d. 8 9	9	17	- 6
(Up journey) Butter Beef, Mutton, Veal. &c	$\begin{array}{c} 0 \\ 0 \end{array}$	18	10	2	16	4	1				2		1	$\frac{11}{15}$	$\begin{array}{c} 6 \\ 5 \end{array}$	$\begin{array}{c} 0 \\ 4 \end{array}$	$10 \\ 2$	
(frozen) Wool—Greasy ,, —Scoured Minerals—Crude Ore	0 1 1	9 5 9	$2 \\ 0 \\ 2$	233	5 8 15	$\begin{array}{c} 10\\9\\0\end{array}$	0	$9 \\ 5 \\ 9$	$\frac{2}{0}$	21 23 23 23	$egin{smallmatrix} 5 \\ 8 \\ 15 \end{smallmatrix}$	$\begin{array}{c} 10\\9\\0\end{array}$	$egin{array}{c} 0 \\ 2 \\ 2 \end{array}$	1			$3 \\ 9 \\ 15$	
Not exceeding £20 per ton in value Not exceeding £10 per ton in value	0	4	2	0	15		0		2	0		8	0	6	5 5	1		51
Live Stock (per truck)-	3	3		8	13	9	3	$\frac{1}{9}$		9	11		.5	9	9		$\frac{17}{19}$	10

The highest class freight includes expensive, bulky, or fragile articles, such as boots, drapery, drugs, groceries, furniture, liquors, crockery, glassware, cutlery, ironmongery, confectionery, and carpets; the lowest class includes fertilisers, coal, coke, shale, firewood, limestone, stone, slates, bricks, rabbit-proof netting, timber in logs, posts and rails &c.

The freight charges over 100 miles are from 50 to 100 per cent. higher than in 1916, but for 500 miles the increases have not been so great, and for frozen meats the charges have been reduced.

SYDNEY AND SUBURBAN PASSENGER SERVICE.

A portion of the passenger traffic between Sydney and suburbs is conducted by suburban railways and ferry services, but the tramways form the most important means of communication.

The railway suburban traffic is conducted principally on the main trunk line, which runs in a westerly direction from Sydney to Granville, where the main southern and western railway systems separate; the northern system branches off at Strathfield (8 miles from Sydney). The South Coast 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. The passengers travelling by these lines, however, are served by trams running through the city streets from the Central Station to Circular Quay.

The populous suburbs of the north western, central, and eastern divisions of the metropolitan area are served entirely by the 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; with this exception all the passengers from the northern suburbs connect by tramway at various points with the ferry services to the Circular Quay.

On account of the expansion of the commercial interests of New South Wales, and the consequent growth of population in and around Sydney, where the trade of the State is centralised, the tramway system has been extended steadily, but the requirements of suburban traffic are gradually outgrowing the capacity of the main city thoroughfares, which were not originally designed for this class of traffic. Thus the extension of the tramway system, combined with the increase in the mercantile vehicular traffic, has resulted in a state of congestion in some of the city streets that demands remedy. The urgent necessity is now recognised of supplying a more effective method of dealing with the rapidly increasing traffic than is possible under any system of surface tramways.

CITY AND SUBURBAN ELECTRIC RAILWAY.

The construction of this railway, which was commenced in 1916, but was suspended upon the cancellation of the Norton Griffiths contract in May, 1917, was resumed on 17th February, 1922. The work which is now being undertaken provides for the construction of the city tracks from the "take off" from the existing suburban lines at Redfern to the proposed station at St. James', Queen's-square, and the construction of "up" and "down" Eastern Suburbs tracks from their junction at St. James' station to the

*32137-C

cross-over near Park-street. When completed, six electric tracks will be provided into the city over a stone-faced viaduct and bridges extending from Eddy-avenue to Campbell-street. Two tracks only will be carried on the eastern side of the city to St. James', which will be a temporary terminal station.

At 30th June, 1923, considerable progress had been made in the construction of the necessary retaining walls and abutments, and the open cut for the Liverpool-street station was completed. Excavations for the subway are now in hand, and portion of the station sidewalls has been concreted. Tunnelling for the extension to St. James' has proceeded satisfactorily, and during the year work was commenced on excavations from St. James' station to the Circular Quay, which are required for the City and Eastern Suburbs systems. The retaining wall for the western approach to the Central Station has been finished up to the end connections, and the retaining walls to Eddyavenue are almost completed, while good progress is being made with the bridges over Hay and Campbell streets.

ELECTRIFICATION.

Further progress has been made in converting the Illawarra lines to electricity; Mortdale station has been completed, while the bridge over Cook's River at Tempe is well in hand. Other buildings have been erected at Rockdale and Punchbowl, and preparations are being made at White Bay for the necessary power.

RAIL MOTOR TRAFFIC.

In order to meet the requirements of the population in sparsely settled districts, a system of rail motors was established during 1919 in the Lismore district. The first train ran from Grafton to Lismore, a distance of 87 miles, but it now runs from the latter town to Murwillumbah, a distance of 62 miles. Accommodation is provided for 33 passengers, and general goods are also carried, while special cars have been built for cream traffic. This experiment proved so successful, that a further line was inaugurated from Manilla to Barraba, 61 miles, which (joins the main Northern line at Tamworth, and additional extensions are contemplated with larger engines where extra power is necessary.

GRADIENTS.

In many cases the railways of New South Wales pass through mountainous country, and have been constructed with a large proportion of steep gradients, some of the heaviest being situated on the trank lines.

In the southern system, the line at Roslyn, near Crookwell, reaches 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, at Newnes Junction, on the Blue Mountains, a height of 3,503 feet is attained; and on the northern line the highest point, 4,473 feet, is reached at Ben Lomond.

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.

				1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
Gradients.	Southern System.	Western System.	Northern System.	Total.
1 in 18 to 30	$\begin{array}{c}\text{miles.}\\3\frac{1}{2}\end{array}$	miles. $1\frac{3}{4}$	miles.	miles. 51
-31 " 40	623	$62\frac{1}{2}$	$32\frac{1}{2}$	$157\frac{3}{4}$
41 ,, 50	734	$51\frac{1}{2}$	843	210
51 ,, 60	60	73 1	59_{4}^{3}	193
61 " 70 -	54 <u>1</u>	621	38 1	1554
71 ,, 80	170%	103 <u>1</u>	1721	$446\frac{1}{2}$
81 " 90	4 3 <u>1</u>	44 ³	$45\frac{1}{4}$	133 1
91 ,, 100	115	1483	90‡	354
101 " 150	$219\frac{1}{2}$	201	154	574 <u>1</u>
151 " 200	123	963	883	308 <u>1</u>
201 ,, 250	611	56 1	43	161
251 ,, 300	89 <u>1</u>	87 <u>1</u>	$65\frac{1}{2}$	2421
301 " level	844 <u>1</u>	797 1	694	2,335 ⁸ / ₄
Total	1,9211/2	1,7871	1,5681	5,2774
	<u> </u>	<u> </u>		

The following statement shows the number of miles on different gradients in June, 1923 :---

The above table is exclusive of the Government line from Broken Hill to ς. Tarrawingee, measuring 39 miles 41 chains, and that at Wollongong of 1 mile 8 chains.

ROLLING STOCK.

Information regarding the rolling stock of New South Wales Railways on 30th June, 1922 and 1923, appears in the following table :---

Classification.	1922.	1923.	Classification.	1922.	1923.
Locomotives	1,321	1,341	Merchandise Goods, open	16,451	16,598
Coaching— Special & Sleeping cars	97	99	Goods, covered Live-stock trucks	$1,426 \\ 2,957$	1,378 2,957
First-class Composite	470 220	470 220	Brake-vans	639	644
Second-class Brake-vans	984 145	982 139	Total	21,473	21,577
Horse-boxes, carriage, trucks, mail vans, &c.	278	278	Departmental Stock-		
Total	2,194	2,188	Loco., coal, bellast, etc., waggons	1,846	1,906

For the year ended 30th June, 1923, the total tractive power of the locomotives was 31,970,277 lb., or 23,841 lb. per engine. The passenger capacity of the coaching stock was 99,738, or 46 per vehicle, and the goods waggons were estimated to carry 303,933 tons, or 14 tons per vehicle.

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RAILWAY WORKSHOPS.

The extensive repairs necessary to keep the rolling stock in an efficient state are carried out in workshops at Eveleigh, Honeysuckle, Clyde, Enfield, Flemington, and other places. The following table gives some particulars of the work done at each of the establishments for the year 1922-23 :---

Estab	lishmen	it.		Engines Rebuilt, Repaired, etc.	Coaching Stock Repaired.	Goods Stock Waggons, etc., Repaired.
Eveleigh Honeysuckle Enfield Clyde Flemington Other		···· ··· ···	···· ···· ···	No. 671 84 331	No. 3,913 862 	No. 1,043 5,642 6,277 13,592 2,042 4,717

Other additions and conversions were made during the year, including boiler overhauls, etc. The workshops at Eveleigh and other places are equipped with the latest modern appliances, and are now adequate to deal with all requirements.

ELECTRIC LIGHTING WORKS.

The electric system has been installed in twenty-four stations, and numerous miscellaneous lighting improvements have been carried out, especially at the Central Station, where the supply has been increased by 100 per cent.

SIGNALLING AND SAFETY APPLIANCES.

Great progress has been made in providing safety appliances, and on many of the principal stations the points and signals are interlocked, while at the Central Station, Sydney, an electro-pneumatic system of signalling is in operation. During 1913, track block and automatic signalling—the first in Australia—was installed between Redfern Tunnel Signal-box and Sydenham Junction; this system had been extended to 274 miles 30 chains of double track at 30th June, 1923.

Particulars regarding the various systems employed for the safe working of the lines in 1922 and 1923 are shown below :--

	1922.	1923.
Single Line. By electric tablet	Mls. Chs. 312 17	Mis. Chs. 309 68
electric train staff train staff and ticket with line clear reports	1,895 5 1,448 25	2,136 66 1,421 60
train staff and ticket without line clear reports. train staff and one engine only	$\begin{array}{ccc} 714 & 1 \\ 116 & 57 \end{array}$	$\begin{array}{ccc} 720 & 63 \\ 76 & 15 \end{array}$
	4,486 25	4,665 32
Double Line. By automatic signalling with track block working absolute manual block system	$ \begin{array}{r} 273 & 51 \\ 369 & 52 \end{array} $	$ \begin{array}{r} 274 & 30 \\ 391 & 77 \end{array} $
permissive manual block system telephone	3 44 0 33	3 44 0 33
	647 20	670 24

RAILWAY ACCIDENTS.

The persons meeting with accidents on railway lines may be grouped under three heads—passengers, employees, and trespassers; and the accidents themselves may be classified into those arising from causes beyond the control of the persons injured, and those due to misconduct or want of caution.

The accidents may be further subdivided into those connected with the movement of railway vehicles and those apart from such movement.

Adopting such classifications, the accidents during each of the three years terminated on 30th June, 1923, are shown in the following table :----

Classification.	the Mov	ts connec ement of Vehicles.	Railway	with th	ts not co ne Moven way Veh	nent of
	1921.	1922.	1923.	1921.	1922.	1923.
Passengers— Causes beyond their own control— Killed	5					
Injured	58	38	22	15	7	13
Their own misconduct, or want of caution	14 133	4 134	10 145			
Total { Killed Injured	19 191	4 172	10 167		 109	 91
Servants of the Department— Causes beyond their own control— Killed Injured	2 39	1 25	 16	 248	2 296	 340
Their own misconduct, or want of caution— Killed Injured	000	22 214	10 236	6 5,246	5 5,373	6 5,145
Total ${ {f Killed$	$\frac{15}{262}$	23 239	$\begin{array}{c}10\\252\end{array}$	6 5,494	7 5,669	6 5,485
Trespassers and others	34	40	25	2	3	5
$Injured \dots \dots \dots \dots \dots$	101	40 56	23 79	78	115	131
n an she an		<u> </u>				
Grand Total $\begin{cases} \text{Killed } \dots & \dots & \dots \\ \end{cases}$	68	67	45	8	10	11
Injured	554	467	498	5,654	5,893	5,707

The above return is compiled in a similar way to that adopted by the Board of Trade in England, and all accidents are reported which occur in the working of the railways, or on railway premises, to persons other than servants of the Department, however slight the injuries may be. In the case of employees of the Department all accidents must be reported which cause the employee to be absent for at least one whole day from his ordinary work.

Accidents connected with movement of railway vehicles-		
Causes beyond their own control		·18
Their own misconduct or want of caution	.08	1.17
Accidents not connected with movement of railway vehicles-		
Causes beyond their own control		.10
Their own misconduct or want of caution		.63
Total	08	2.08

The amount of compensation paid during the year ended 30th June, 1923, in connection with accidents on railways, was £14,817, of which £3,478 was paid for passengers and £11,339 for goods.

VICTORIAN GOVERNMENT RAILWAYS IN NEW SOUTH WALES.

• An agreement has been ratified by the Parliaments of New South Wales and Victoria under which the Government of Victoria is authorised to construct and maintain certain railways and other works in New South Wales.

One of the proposed railways will cross the Murray at or near Golgol New South Wales, and extend into New South Wales for a distance not exceeding 20 miles; a second line will extend from the north side of the bridge at Gonn Crossing to a point at or near Stony Crossing on the Wakool River; a third will be constructed either from a point on the north side of the bridge crossing the Murray River at Moama or from a point on the Deniliquin-Moama Railway Company's line between Moama and a point 1 mile north of the Mathoura Railway Station, and extend westerly or north-westerly to Moulamein, thence continuing north-westerly to a point within $1\frac{1}{2}$ miles of the Murrumbidgee River, near Balranald : and a fourth will extend from Euston to a point 30 miles north-easterly therefrom, so as to best serve *en route* the Benance Settlement Area.

The railways will be on the 5 ft. 3 in. gauge, but all the works within New South Wales are to be constructed suitably for conversion to the adopted uniform gauge. They will be operated by the Victorian Railway Commissioners, but the fares and rates for the carriage of passengers, goods, and live stock thereon shall not be less than the rates charged for similar mileage on the Victorian Railways; while in the construction and working of the lines the same conditions and rates of wages as prevail in Victoria will be observed.

RAILWAY GAUGES OF AUSTRALIA.

A classification of all railways, Government and private, in each State, according to gauge as at 30th June, 1923, is given below. The Commonwealth lines have been included with the systems of the States through which they have been constructed :—

. GL 1	Route Mileage at each Gauge.										
State.	lft. Sin.	2ft.	2ft. 3in.	2ft. 6in.	3ft.	Sft. 6in.	4ft.8jin.	5ft. 3in.	Milcs		
·											
New South Wales		36			•••	80	5,519	45	5,6%		
Victoria		13		122	15			4,249	4,399		
Queensland		942		26	•••	6,202		••••	7,170		
South Australia (inc. N. Territory)	•••	10	4	2	••••	1,920	597	1,140	3,673		
Western Australia	29	29			•••	4,351	454		4,863		
Tasmania	• •••	50			••••	816			866		
Total	29	1,080	4	150	15	13, 3 69	6,570	5,434	26,651		

In consequence of the diversity of gauge, interstate railway communication is seriously hampered, and in a journey from Queensland to Western Australia breaks of gauge occur at Wallangarra, where the systems of Queensland and New South Wales meet; at Albury, on the border of New South Wales and Victoria; at Terowie and Port Augusta in South Australia; and at Kalgoorlie, where the Commonwealth and Western Australian lines connect.

The necessity and urgency of a uniform gauge to connect the State capitals were affirmed in May, 1920, at a conference between the Prime Minister of the Commonwealth and the State Premiers, who also agreed upon the allocation of the cost and arranged that a committee of railway experts should report regarding costs, etc.

Following upon the presentation of this report, at a further conference held in July, 1920, it was decided that in the first place a thorough test should be made at Tocumwal of the third-rail device; secondly, that the question of the gauge to be used, the scheme which would best meet requirements, and the estimated cost, should be investigated by a Royal Commission of two expert engineers from overseas and a chairman selected in Australia by the Prime Minister.

The Commission recommended the adoption of the 4ft. $8\frac{1}{2}$ in. gauge, submitted estimates of the cost of converting all lines to this gauge, and made proposals regarding the order in which the work should be carried out, and the methods by which it should be executed and controlled.

The report was considered by the Prime Minister in conference with the Premiers in November, 1921, when it was resolved that the adoption of a uniform gauge was essential to the development and safety of the Commonwealth ; also that the gauge should be 4 ft. $8\frac{1}{2}$ in. The Commonwealth was authorised to prepare and issue to the States a draft agreement to carry into effect the recommendations of the Commission, and did so, but although a further conference was held in January, 1922, the parties were unable to come to a decision. In June, 1923, the Prime Minister submitted to a conference of Ministers an alternative proposal to construct 4 ft. $8\frac{1}{2}$ in. gauge lines between Port Augusta (South Australia) and Hay (New South Wales), and between Kyogle (New South Wales) and Brisbane (Queensland), but the States were unable to come to any agreement on the subject. The Commonwealth Government will consider whether action can be taken to carry out the Kyogle to Brisbane line.

PRIVATE RAILWAY LINES.

The established policy in New South Walcs has been to keep the railways under State control, and at the present time there are only 158 miles of private lines in operation, with the exception of short lines connecting coal and other mines with the main railways, on some of which provision has been made for the carriage of passengers and goods.

In 1874 Parliament granted permission to a company to construct a line from Deniliquin, in the centre of the Riverina district, to Moama, on the River Murray, where it meets the railway system of Victoria. The line, which was opened in the year 1876, is of 5 ft. 3 in. gauge and 45 miles in length; a considerable proportion of the wool and other produce of the Riverina reaches the Melbourne market by this route. During the year 1888 a line of 3 ft. 6 in. gauge, and 35 miles 54 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

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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; and 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 all private railway lines open to the public for general traffic during the year 1922.

Name of		Lin	e.		Total	n	Deben- tures	Passen-	Goods	Live	Train
Private Railway.	Len	gth.			Capital Expended.	Reserve Fund.	Out- stand- ing.	gers carried.	carried.	Stock carried.	Miles run.
	m.	ch.	ft	. in.	£	£	£	No.	tons.	No.	No.
Deniliquin and Moama.	45	0	5	3	162,838	29,569		22,058	39,927	438,479	43,780
	35	54	3	6	501,452	53,061	•••	38,359	† 933,947	92,129	140,773
Warwick Farm	0	66	4	8 <u>1</u>	5,700			42,674		757	92
Seaham Colliery	6	0	4	81	16,000			20,006	9,034	<u> </u>	8,155
South Maitland— East Greta, Stan- ford Merthyr,	20	0-			EEQ 941			936,855	tons 159,		443,721
and Cessnock	19	35	÷ŧ	81	550,841	• •••	•••		a e		
Hexham-Minmi	-6	0	4	$8\frac{1}{2}$	‡1,000,000	••••		4,550	1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -	400	3,504
Commonwealth Oil Corporation.	33	0	4	8 <u>1</u>	194,000		373,577	1,602	11,	736	13,450
New Red Head	12	0	4	81	102,000			Ş	§		Ş

* Year ended 30th June, 1923.

† Excludes 342,241 tons local shunting. ‡Approximate. § Not available.

The Deniliquin and Moama Company possesses 4 locomotives, 6 passenger carriages and 62 goods carriages and vans. The Silverton Company has 20 locomotives, 665 goods vehicles, and 1 passenger carriage; and additional passenger carriages are hired also from the South Australian Government railways as required. On the Warwick Farm line Government rolling-stock is used. The Seaham Colliery has 2 locomotives and 4 passenger carriages, but Government rolling stock is used for goods transport. On the South Maitland system there are 23 locomotives, 27 passenger carriages, and 45 goods carriages. The Hexham-Minmi Company has 1 locomotive and 1 passenger carriage; and the Commonwealth Oil Corporation has 4 locomotives, 2 passenger carriages, 1 motor-car, and 67 goods carriages and vans.

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 $135\frac{1}{3}$ miles, a summary of which is given below :---

		District.				Len m.	gth. ch.	Ga ft.	uge. in.
Connec	ted with	Northern	Line	 		95	54	4	81
	,,	Western	,,	 	•••	6	39	4	81
	33	South Coas	st ,,	 ***	{	3 29	40 76	3 4	6 81/2

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RAILWAYS OF NEW SOUTH WALES AND OTHER COUNTRIES.

The position of the railways of New South Wales, including Government and all private lines, in relation to other important countries of the world, is shown in the following table for the year 1923 in comparison with 1890, to illustrate the relative progress during the last thirty-three years. The figures for South Australia and Western Australia are inclusive of the Federal Government lines. It is, however, necessary to remember that there are vital circumstances which really invalidate any effective comparison, as, for instance, differences in population and in the assistance received or competition encountered from river or sea carriage. In cases where the figures for 1923 could not be obtained those for the latest year available have been inserted.

Length of Railways.		e of Line ben. Area. sq. mls. 137 36 509 312 2,099 66 53 6 498 9	Length of Railways. 5,680 4,399 7,170 3,673 4,863 866 3,156 23,734 59,541 35,677	Op Popu- lation. No. 386 365 112 141 72 247 418 1,993 3,007	o of Line en. Area. 55 20 94 103 201 30 32 5 5 145
miles. New South Wales 2,263 Victoria 2,471 Queensland 2,142 South Australia 1,774 Western Australia 1,774 Western Australia 1,774 Western Australia 1,956 United Kingdom 19,943 Russia (Europe and Asia) 17,363 Germany 24,270 France 1,869 1 Austria 1,869 1	No. 496 457 180 183 96 362 320 1,986 5,291 1,931	sq. mls. 137 36 509 312 2,099 66 53 6 498	miles. 5,680 4,399 7,170 3,673 4,863 866 3,156 23,734 59,541	lation. No. 386 365 112 141 72 247 418 1,993 3,007	sq. mls. 55 20 94 103 201 30 32 5 145
New South Wales 2,263 Victoria 2,471 Queensland 2,142 South Australia 1,774 Western Australia 1,774 Western Australia 1,774 Western Australia 10,974 Western Australia 399 New Zealand 1,956 United Kingdom 19,943 Bussia (Europe and Asia) 17,363 Germany 24,270 France 1,869 1 Switzerland 1,869 1 Austria 15,267 2	496 457 180 183 96 362 320 1,986 5,291 1,931	137 36 509 312 2,099 66 53 6 498	5,680 4,399 7,170 3,673 4,863 866 3,156 23,734 59,541	386 365 112 141 72 247 418 1,993 3,007	55 20 94 103 201 30 32 5 145
New South Wales 2,263 Victoria 2,471 Queensland 2,142 South Australia 1,774 Western Australia 1,774 Western Australia 399 New Zealand 1,956 United Kingdom 19,943 Russia (Europe and Asia) 17,363 Germany 21,899 Switzerland 1,869 Austria 15,267	496 457 180 183 96 362 320 1,986 5,291 1,931	137 36 509 312 2,099 66 53 6 498	5,680 4,399 7,170 3,673 4,863 866 3,156 23,734 59,541	386 365 112 141 72 247 418 1,993 3,007	55 20 94 103 201 30 32 5 145
Victoria 2,471 Queensland 2,142 South Australia 1,774 Western Australia 1,774 Western Australia 505 Tasmania 399 New Zealand 1,956 United Kingdom 19,943 1 Russia (Europe and Asia) 17,363 4 Germany 24,270 5 France 1,869 1 Austria 15,267 5	457 180 183 96 362 320 1,986 5,291	36 509 312 2,099 66 53 6 498	4,399 7,170 3,673 4,863 866 3,156 23,734 59,541	365 112 141 72 247 418 1,993 3,007	20 94 103 201 30 32 5 145
Queensland 2,142 South Australia 1,774 Western Australia 505 Tasmania New Zealand 1,956 United Kingdom 19,943 Russia (Europe and Asia) 17,363 Germany France 1,869 Switzerland 1,869 Austria Hungary	180 183 96 362 320 1,986 5,291	509 312 2,099 66 53 6 498	7,170 3,673 4,863 866 3,156 23,734 59,541	112 141 72 247 418 1,993 3,007	94 103 201 30 32 5 145
South Australia 1,774 Western Australia 505 Tasmania 399 New Zealand 1,956 United Kingdom 19,943 Russia (Europe and Asia) 17,363 Germany 24,270 France 1,869 1 Austria 1,869 1 Austria 15,267 2	183 96 362 320 1,986 5,291	312 2,099 66 53 6 498	3,673 4,863 866 3,156 23,734 59,541	141 72 247 418 1,993 3,007	103 201 30 32 5 145
Western Australia 505 Tasmania 399 New Zealand 1,956 United Kingdom 19,943 Russia (Europe and Asia) 17,363 Germany 24,270 France 1,869 Switzerland 1,869 Austria 15,267 Hungary 12,207	96 362 320 1,986 5,291 1,931	2,099 66 53 6 498	4,863 866 3,156 23,734 59,541	72 247 418 1,993 3,007	201 30 32 5 145
Tasmania 399 New Zealand 1,956 United Kingdom 19,943 Russia (Europe and Asia) 17,363 Germany France 24,270 Switzerland Austria 1,869 Hungary	362 320 1,986 5,291 1,931	66 53 6 498	866 3,156 23,734 59,541	247 418 1,993 3,007	30 32 5 145
New Zealand 1,956 United Kingdom 19,943 Russia (Europe and Asia) 17,363 Germany France 24,270 Switzerland 1,869 Austria 1,869 Hungary	320 1,986 5,291 1,931	53 6 498	3,156 23,734 59,541	418 1,993 3,007	3 2 5 145
United Kingdom 19,943 1 Russia (Europe and Asia) 17,363 1 Germany 24,270 1 France 1,869 1 Switzerland 1,869 1 Austria 15,267 1 Hungary 1 1	L,986 5,291 L,931	6 498	23,734 59,541	1,993 3,007	5 • 145
Russia (Europe and Asia) 17,363 4 Germany 24,270 2 France 21,899 1 Switzerland 1,869 1 Austria 15,267 2 Hungary 12,207	5,291 1,931	498	59,541	3,007	145
Germany 24,270 1 France 21,899 1 Switzerland 1,869 1 Austria 15,267 2 Hungary 12,227	1,931			-	
France 21,899 1 Switzerland 1,869 1 Austria 15,267 2 Hungary 1	•	9	25 677		
Switzerland 1,869 1 Austria 15,267 2 Hungary 2	,74 5		00,011	1,678	5
Austria		9	25,766	1,522	8
Hungary	,569	8	3,915	991	· · · · ·
Hungary		16	15,739 ک	1,855	7
10,000	2,481	10	13,589	1,555	9
Canada 12,628	402	270	39,771	221	94
United States of America 154,276	398	19	254,845	415	12
Argentine Republic 3,635	825	319	21,935	399	53
Japan 584 74	5,171	276	6,728	11,443	39
Italy		l (10,290	3,774	11
India			37,266	8,559	48
Union of South Africa Not availab	ما	- ∛	10,890	636	43
Mexico			10,754	1,291	71
Brazil			17,213	1,780	190

Information relating to the year 1890 is not available for the last five countries mentioned in the table, but the latest figures have been inserted, in order that comparisons for 1923 may be more complete.

TRAMWAYS.

With the exception of $2\frac{3}{4}$ miles privately owned, the tramways of New South Wales are the property of the State Government. The standard gauge of 4 ft. $8\frac{1}{2}$ in. has been adopted for all lines. The electric system was introduced into Sydney at the close of 1899, and is now used, with few exceptions, for all tramways in the metropolitan district. Of the $224\frac{7}{8}$ miles of line open at 30th June, 1923, there were 159 miles under the electric system and $65\frac{7}{8}$ miles worked by steam. The section from Northmead to Castle Hill was converted to a railway from the 28th January, 1923, which accounts for the decrease in the total length of tramways since the previous year.

Line.	Length of Line.	Length of Single Track
Electric	mls. ch.	mls. ch.
City and Suburban	115 42	211 40
North Sydney	23 1	39 76
Ashfield to Mortlake and Cabarita	8 38	15 9
Rockdale to Brighton-le-Sands	1 20	1 20
Manly to The Spit and Manly to Narrabeen	10 58	15 38
	158 79	283 23
Steam-		
Arncliffe to Bexley	2 50	2 50
Kogarah to Sans Souci	5 45	6 79
Parramatta to Northmead	2 10	2 10
Sutherland to Cronulla	7 32	7 32
Newcastle City and Suburban	34 7	44 54
East to West Maitland	4 5	4 5
Broken Hill	10 4	11 35
	65 73	79 25
Total	224 72	362 48
Sidings, loops, and Cross overs		55 71

During the year ended 30th June, 1923, the length of tramway opened for traffic was 16 chains of single track.

The existing steam system at Newcastle is being converted to electricity; and a portion of the lines is now open for traffic, while the whole conversion will be finished in 1924.

The tramway rolling-stock, on 30th June, 1923, consisted of 26 steam motors, 74 steam cars, 1,340 motor cars, 2 trail cars for electric lines, and 113 service vehicles, making a total of 1,555.

A large number of cars and motors are constructed in the workshops at Randwick, where extensive repairs and conversions are also earried out.

• The capital cost of the State tramways to 30th June, 1923, amounted to $\pounds 9,975,031$, or $\pounds 44,352$ per mile open; the cost of construction was $\pounds 5,119,459$, or $\pounds 22,763$ per mile, and the expenditure on rolling-stock, workhops, machinery, &c., amounted to $\pounds 4,855,572$.

Working of Tramways.

The following statement shows the working of the various tramways in sections for the year ended 30th June, 1923. Two sections returned a surplus during the period, and the total profit on all lines, after allowing for interest on capital, amounted to $\pounds 5_534$.

Line.	Cost of Construc- tion and Equip- ment.	Passengers carried.	Gross Revenue.	Working Expenses.	Excess Revenue (+) or Expenses (-).	Interest on Capital.	Profit (+) Loss () allowing for interest.
		·		-			
Electric	£	No.	£	£	£	£	£
City and Suburban	7,116,222	272,938,712	2,945,634	2,380,485	(+)565,149	357,949	(+)207,200
North Sydney	995,434	27,659,118	292,488	252,670	(+) 39,818	49,858	() 10,040
Ashfield to Mortlake and Cabarita	219,037	6,638,953	62,366	64,867	() 2,501	11,161	() 13,662
Manly to The Spit and Manly to Narrabeen	325,150	4,663,687	66,611	55,513	(+) 11,098	16,662	() 5,564
Rockdale to Brighton-le- Sands	24,318	1,029,755	8,824	6,379	(+) 2,445	1,212	(+) 1,233
Steam						· ·	A
Arncliffe to Bexley	22,962	613,700	5,827	10,122	() 4,295	1,185	() 5,480
Kogarah to Sans Souci	30,858	1,411,233	18,362	27,670	() 9,308		() 10,897
Parramatta to Castle Hill	23,345	836,976	10,285	14,798	() 4,513	1,652	() 6,165
Sutherland to Cronulla	52,235	1,034,850	19,543	24,167	(—) 4,624	2,696	() 7,320
Newcastle City and Suburban	1,037,685	12,086,838	145,168	220,759	() 75,591	4 9 ,729	()125,320
East to West Maitland	35,215	740,490	8,060	9,571	() 1,511	1,817	() 3,328
Broken Hill	92,550	1,347,510	14,946	25,305	(—) 10,359	4,764	() 15,123
Total, Al Lines	9,975,031	331,001,822	3,598,114	3,092,306	(+)505,808	500,274	(+) 5,534

Revenue and Expenditure.

In the following table are given details of revenue and expenditure, and capital invested for all State tramways, since 1880. The net earnings of the tramways for the year ended 30th June, 1923, amounted to 5 19 per cent. on cost of construction and equipment, as compared with 4 65 per cent., the actual interest payable on the State Ioan liabilities at the same date :---

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.	
1880	41	60,218	18,980	13,444	5,536	9 19	
1890	39 <u>1</u>	933,614	268,962	224,073	44,889	4.81	
1900	711	1,924,720	409,724	841,127	68,597	3.20	
1910	1653	4,668,797	1,185,568	983,587	201,981	4-33	
1915	2193	7,970,293	1,986,060	1,611,286	374,774	4 70	
1920	$225\frac{3}{4}$	8,768,548	2,881,797	2,486,121	295,676	4-56	
1922	229	9,505,732	3,610,135	3,015,616	594,519	6.41	
1923	225	9,975,031	3,598,114	3,092,306	505.808	5.19	

The increase in the working expenses from 1920 is attributable to the same causes referred to with regard to Railways on page.

During the year ended 30th June, 1923, the percentage of working expenses to the total receipts was 85.9, as compared with 83.5 in the previous year; the net earnings amounted to £505,808, which is equal to a net return per average mile open of £2,223, as compared with £2,605 in the previous year.

Tram Fares.

The following table shows the fares charged on the trams for one and more sections at various periods since 1911. The average length of a section is 1 mile 78 chains :---

		Week Days	3.	Sundays.			
Sections.	June, 1911.	June, 1916.	June, 1923.	June, 1911.	June, 1916.	June, 1923.	
	d.	d.	d.	d.	d.	d.	
1	1	1	2	1	2	2	
2	2	2	3	2	3	3	
3	3	3	4	3	4	4	
4	4	4	5	4	5	5	
5	5	5	6	5	6	6	
6	6	6	6	6	6	6	

Fifthe extra fare charged on Sundays and specified holidays was withdrawn in February 1923, and the rates are now uniform for all days.

Comparison of Tramway Traffic.

The following statement contains a comparison of the passenger traffic and the tram mileage since 1900. With the extension of the system the earnings per tram mile decreased from 2s. 3d. in 1900 to 1s. in 1905, but have since risen to 2s. $4\frac{3}{4}d$; the working cost per tram mile dropped to 10d. in 1905, but increased steadily to 2s. $0\frac{3}{4}d$. in 1923.

Year ended 30th June.	Length of line open.	Passengers carried.	Tram mileage.	Earnings per tram mile.	Working cost per tram mile
	miles.	No.	· · · · ·	s. d.	s. d.
1900	711	66,244,334	4,355,024	2 3	1 10
1905	1253	139,669,459	16,413,762	10	0 10
1910	1653	201,151,021	20,579,386	1 13	0 111
1915	2193	289,282,845	26,842,974	1 57	1 21
1920	2253	324,884,651	26,889,077	2 13	1 10 1
1922	$229\frac{1}{4}$	330,938,567	29,318,532	$2 5\frac{1}{2}$	2. 03
1923	225	331,001,822	30,071,022	2 47	$2^{\circ} 0^{\frac{3}{2}}$

The extension of the City and North Sydney tramways since 1905 may be seen in the following statement, also the enormous increase in the passenger traffic. All lines which communicate directly with the city of Sydney are included in the category "City and Suburban"; the Ashfield, Kogarah, Arncliffe, and Rockdale lines, which act as feeders to the railways, and the Manly lines have not been included :—

Year		City and Subur	ban.	North Sydney.				
ended 30th June.	Length of line.	Passengers carried.	Tram mileage.	Length of line.	Passengers carried.	Tram mileage.		
	miles.	No.	miles.	miles.	No.	miles.		
1905	73 1	120,973,934	14,413,273	11초	9,128,575	1,074,743		
1910	$94\overline{1}$	173,897,034	17,743,868	161	13,677,491	1,651,153		
1915	1101	240,545 317	22,242,010	194	20,743,680	2,375,916		
1920	113	269,255,935	21,811,695	22	25.165.376	2,705,620		
1922	1154	271,384,691	23,784,739	23	26,753,152	2,978,619		
1923	$115\frac{1}{5}$	272,938,712	24,261,186	23	27,659,118	3,245,962		

TRAMWAY ACCIDENTS.

The accidents which occurred on tramways during each of the three years ended 30th June, 1923, are classified in the following table, in a similar way to those relating to the railways :---

	Classi	fication.			•	Accidents connected with the movement of tramway vehicles.			Accidents not connected with the movement of tramway vehicles.		
						1921.	1922.	1923.	1921.	1922.	1923.
Passengers- Causes beyon	d their	OWD CO	ntrol		1						
Killed Injured	••••	•••	•••	•••		$\frac{1}{276}$	 131	 184		 	,
Their own mis Killed Injured	scondu	•••	unt of	cauti 	ion 	7 345	9 309	7 331	ïı	1 19	
Total			·	····	·	8 621	9 440	7 515	 12	1 19	 12
Servants of the Causes beyon											
Killed Injured	•••	••••		· • • •		1 37		1 21	 162	142	
Their own mis Killed	scondu	ct, or wa	int of	cauti	ion—						
Injured	•••	•••	••••	•••	•••	$\frac{2}{206}$	$\frac{2}{199}$	 234	 651	1 766	 723
Total Others—	{Kille {Inju	ed red	•••	•••• ••••		3 243	$\frac{2}{237}$	1 255	 813	1 908	 901
Killed Injured	•••	•••	•••	•••	·	$\frac{20}{276}$	$\frac{21}{280}$	19 315		1	·
Gran	d total	${ {Killed \\ Injure } }$	l ed	•••		31 1,140	32 957	27 1,085	 828	2 928	 913

The number of passengers carried on the tramways during the year ended 30th June, 1923, was 331,001,882, and the rate of fatal accidents among passengers was only 02 per million. With one exception, the fatal accidents in the last five years were ascribed entirely to misconduct or want of caution on the part of passengers, and as the tramways usually traverse crowded streets, the number of accidents must be considered small.

The amount of compensation paid during the twelve months ended 30th June, 1923, in respect of accidents on the tramways was $\pounds 24,612$, as compared with $\pounds 22,571$ for the preceding year.

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, where it connects with the Parramatta River steamers conveying passengers and goods to and from Sydney. The line has been constructed to the standard gauge of 4 feet $8\frac{1}{2}$ inches, and was opened in 1883.

RAILWAYS AND TRAMWAYS.

A statement of the capital cost of the State Railways and Tramways, and the result of working during the last two years, is shown below :---

		1922.	-	1923.			
Particulars.	Railways.	Tramways.	Total.	Railways.	Tramways.	.Total.	
Cost of Construction and Equipment at 30th June	£ 85,552,871	£ 9,505,732	£ 95,058,603	£ 89,276,871	£ 9,975,031	£ 9,9251,902	
Year ended 30th June- Earnings	15,21 3, 019 11,116,302	3,610,135 3,015,616	18,823,154 14,131,918	15,221,3 33 10,649,974	3,598,114 3,992,306		
Balance after paying Work- ing Expenses Interest on Capital	4.096,717 4,217,881	594,519 467,328	4,691,236 4,685,209	4, 571 ,359 4,487,303	505,808 500,274	5,077,167 4,987,577	
Deficit	121,164	*127,191	*6,027	*84,056	\$5,534	*89,590	

* Surplus.

COAL USED.

During the year ended 30th June, 1923, the quantity of coal used for locomotive purposes was 1,040,860 tons and for gas making 9,508 tons.

EMPLOYMENT AND WAGES.

The amount of wages paid, together with the staff employed on the Government railways and tramways in June, 1923, is shown in the following statement, in comparison with the previous year :---

	Year ei	nded 30th Ju	ne, 1922.	Year ended 30th June, 1923.			
Particulars.	Railways.	Tramways.	Total.	Railways.	Tramways.	Total.	
Persons employed— Salaried staff Wages ,,	5,125 31,707	792 8,942	5,917 40,649	5,176 31,040	798 9,099	5,974 40,139	
Total number	36,832	9,734	46,566	36,216	9,897	46,113	
	£	£	£	£	£	£	
Salaries and wages paid	9,337,305	2,384,457	11,721,762	8,740,230	2,357,704	11,097,934	

The average number of men employed during the year ended 30th June, 1923, was 46,070.

A scheme to provide superannuation allowances for the officers of the railway and tramway service was introduced in 1910, particulars of which are shown in the part of this Year Book dealing with Social Condition.

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.

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 population of New South Wales, including Lord Howe Island, is shown in the following table :--

Year.	Population.	Index	Increase I	Number of		
		Number of Population.	Numerical.	Proportional.	Average Annual Rate.	Persons per Square Mile
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
192I†	2,101,968	599	453.222	27.49	2.46	6.79
19221	2,174.553	619	72,585	3.42	1.96	7.03
$1923\frac{1}{2}$	2,211,106	630	36,553	1.68	1.68	7.15

*Since 1851. † 3rd April.

‡ 31st December.

Aborigines 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.

From this table it is apparent that 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.

It is significant that this speedy development proceeded during a period of remarkably flourishing trade, and 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, the migratory and other losses due to the war in South Africa, and a more potent though, perhaps, subsidiary cause the heavy decline in the birth-rate which lowered the rate of natural increase.

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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 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 smaller 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. During 1921, 1922, and 1923 the volume of immigration was very restricted, and the increase in population depended upon natural causes.

The estimated population at the end of the year and the mean population of New South Wales, including aborigines, for the last ten years, were as follow :—

Year.	Estimat	Estimated Population at End of Year.						
	Males.	Females.	Total.	Population				
- 1914	983,939	898,499	1,882,438	1.870.460				
1915	974,264	921,339	1,895,603	1,891,191				
1916	947,287	939,605	1,886,892	1,893,479				
1917	961,288	960,200	1,921,488	1,905,194				
1918	985,662	977,683	1,963,345	1,943,356				
1919	1,042,959	996,764	2,039,723	2,000,573				
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				

Population of Australian States.

The following table shows the population of each State of the Commonwealth at the last two censuses, the proportion of population in each State, and the average annual rate of growth during the interval. Aborigines of full blood are excluded from account.

State or Territory.	Population, Census	Population, Census	Estimated Population, 31st Dec.,	Proportio State or	1922.		
	1911.	1921.	1922.	1911.	1921.		
				per cent.	per cent.	per cent.	
New South Wales	1,646,734	2,100,371	2,172,932	36.96	38.67	38.57	
Victoria	1,315,551	1,531,280	1,590,225	29.53	28.19	28.23	
Queensland	605,813	755,972	788,290	13.60	13.92	13.99	
South Australia	408,558	495,160	513,194	9.17	9.13	1.11	
Western Australia	282,114	332,732	343,608	6.33	6.06	6.10	
Tasmania	191,211	213,780	218,924	4.29	3.91	3.89	
Northern Territory	3,310	3,867	3,551	0.08	0.02	0.06	
Federal Capital Terr.	1,714	2,572	2,557	0.04	0.02	0.02	
Commonwealth	4,455,005	5,435,734	5,633,281	100.00	100.00	100.00	

During the inter-censal period 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. The increased proportion of the population of the Commonwealth in New South Wales placed it in a position of greater relative importance among the States.

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.

Natural increase has been by far the greater cause of growth in the population, and, as would be expected, has provided steadily-increasing additions. The rate of natural increase fluctuated with a falling tendency throughout the period, but a very sudden fall occurred after 1890 owing to the rapid decline in the birth-rate. Immigration has always been a subordinate cause of growth, but has intermittently provided considerable additions to the population. During the sixty years 1861–1921 the net immigration amounted to only 500,277, or about two-sevenths of the total increase. Of these immigrants approximately 60 per cent. were males and about 140,000 were assisted to immigrate. Immigration proceeded rapidly until 1886, when it declined heavily, and did not revive until the State reintroduced its policy of affording assistance to immigrants in 1905. Between the years 1892 and 1904 the State actually lost more than 10,000 inhabitants by net emigration. The rate of increase due to net immigration, measured in relation to population, has been very variable, and although considerable improvement is evident in the past thirty years the rate is still much below that of former years.

It is probable that the last decennial period would have shown a very considerable improvement in all respects had it not been for the unusual influences brought to bear by the war and the epidemic of influenza in 1919.

	I	ncrease during Y	ear.	Increase per cent. during Year.			
Year ended December—	Natural.	Net Immigration.	Total.	Natural.	Net Immigration.	Total.	
1914	34,838	1,440	36,278	1.89	.08	1.97	
1915	33,275	(-) 20,110	13,165	1.77	(-) 1.07	-70	
1916	32,221	(-) 40,932	(-) 8,711	1.70	(-) 2.16	() •46	
1917	34,498	98	34,596	1.83	Nil.	1.83	
1918	31,860	9,997	41,857	1.66	•52	2.18	
1919	22,143	54,235	76,378	1.13	2.76	3.89	
1920	33,013	20,253	53,266	1.62	•99	2.61	
1921	34,600	1,916	36,516	1.65	.09	1.74	
1922	36,036	9,012	45,048	1.69	·43	2.12	
1923	33,061	3,492	36,553	1.52	.16	1.68	

The actual growth of population in New South Wales during each of the last ten years was as follows :---

(-) Decrease.

This table reflects very clearly the effects of the war upon the growth of population. During the four years 1910 to 1913 natural and migratory causes had combined to produce a growth which, in point of magnitude, was unprecedented and, in point of rate, was nearly as rapid as that of any similar period in the previous fifty years. In those four years the net immigration was nearly 126,000. But the advent of war in 1914 caused a practical cessation of immigration in the latter part of the year, while at the same time the despatch of forces oversea caused a heavy drain of emigration, which increased during 1915 and 1916 so much as to cause a large excess of departures over arrivals. 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. In 1922 a pronounced increase was apparent. 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 proportionally was considerably below that of former years.

MIGRATION.

A very large movement of population takes place each year into and out of New South Wales, but is due more to the migratory habits of a large section of the inhabitants and to the movements of tourists and business men than to immigration or emigration properly so-called.

The net immigration to New South Wales is the excess of arrivals in over departures from the State, and is the result principally of intercourse with oversea 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, the direction of interstate migration changed and the number of departures to has since exceeded the number of arrivals from the other States.

-	Arrivals in New South			ales. Departures from New South Wales.			Excess of Arrivals over Departures.		
Year.	Interstate.	From other Countries.	Total.	Interstate.	To other Countries.	Total.	Interstate.	Other Countries.	
1914	309,598	67,268	376,866	307,773	67,653	375,426	1,825	(–) 385	
1915	315,590	45,939	361,529	303,354	78,285	381,639	12,236	(—)32,346	
19 16	322,174	49,354	371,528	318,738	93,722	412,460	3,436	(
1917	274,768	35,063	309,831	260,616	49,117	309,733	14,152	()14,054	
1918	299,735	38,744	338,479	288,732	39,750	328,482	11,003	(-) 1,006	
1919	240,263	93,276	333,539	235,887	43,417	279,304	4,376	49,859	
19 20	311,068	72,515	383,583	303,222	60,108	363,330	7,846	· 12,407	
19 21	284,927	57,190	342,117	288,084	52,117	340,201	(-)3,157	5,073	
192 2	277,938	53,326	331,264	283,432	38,820	322,252	(-)5,494	14,506	
192 3	283,079	48,084	331,46 3	290,756	:36,915	327,671	(-)7,677	11,169	

 $\bar{\mathbf{T}}$ The interstate and oversea movement of people to and from New South Wales in each of the past ten years is shown in the following table :—

Of the total movement of population, more than 80 per cent is to and from other Australian States, and one-third of the movement to and from sountries outside Australia is with New Zealand.

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 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 (1901-20) 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; for a period of five years from 2nd December, 1920 any person of German, Austro-German, Bulgarian, or Hungarian parentage and nationality, or 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.

In the matter of excluding undesirable immigrants, New South Wales is protected by the Federal authority. The number of persons refused admission to the Commonwealth in 1922 was 18, of whom 3 were Chinese, 6 British, 2 Pacific Islanders, 3 Hindoos, 1 Italian, 1 Japanese, 1 Malay, and 1 Syrian. No persons passed the dictation test during the year. The number of recorded departures of coloured persons from the Commonwealth during the year was 3,213, including 2,189 Chinese, 359 Japanese, and 194 Hindoos. The number of coloured persons admitted without test was 3,553, of whom 1,964 were Chinese and 390 were Japanese. Of these, 1,896 were admitted on the ground of former domicile, 968 as pearlers, 106 on passports, and 583 on other grounds.

Particulars of the Contract Immigrants Act will be found in Part "Employment" of this Year Book.

Assisted Immigration.

In the early years of the colony's existence the Governors frequently discouraged free immigration, but in 1832 there was inaugurated a policy.

of State-assisted immigration, which was maintained until 1885. During the economic depression of the next twenty years no encouragement was given to immigrants, and assistance to migrate was not afforded again until 1905. In 1911 the Federal Government assumed the function of advertising the resources of Australia with a view to promoting voluntary immigration from the United Kingdom, Europe, and the United States of America, but the State continued to assist desirable immigrants. Activities were practically suspended during the war period and not revived until 1919. Even then, in view of the industrial position, assistance was at first restricted to nominees and domestic workers, but the Imperial Government also arranged to grant free passages to ex-service men and women and their dependents who could produce evidence that they would be acceptable to any dominion, and that provision had been made for them. The State provided for acceptance under this scheme of selected immigrants, preference being given to agriculturists, domestic servants, and persons nominated by residents. This scheme continued in operation until the end of 1922.

With the advent of more stable industrial conditions, the system of assisted immigration was reorganised by agreement as from 1st March, 1921, when the Federal Government undertook control of the entire oversea organisation for the encouragement and selection of immigrants, and for the provision of passages to Australia. Under this agreement the State arranged to indicate, from time to time, how many settlers it could absorb. Generally speaking, all eligible persons are accepted upon nomination by local residents, who deposit a proportion of the fare and agree to become responsible for the establishment of the immigrants upon arrival.

In 1922, the State decided to embark on a more active policy of immigration by the introduction of oversea settlers for rural development. In November an important agreement was made between the State and Commonwealth Governments and this was ratified in part and extended in June, 1923, by an agreement between the Commonwealth and British Governments providing for co-operation and financial assistance by the latter in terms of the Empire Settlement Act, 1922. The agreements provide that—

- 1. The Federal Government is to provide loans for the Government of New South Wales up to a limit of £6,000,000, such loans to be applied toward the development and settlement of certain areas of land and to promote the immigration and settlement of persons of the British race, including provision for training farms and reception establishments. The lands specially mentioned were the Murrumbidgee Irrigation Area, lands on the Murray River in the Western Division, and lands on the North Coast and downfall from the Northern Tablelands.
- 2. One-third of the interest on such loans is to be borne for five years by the Federal Government, and an equal proportion by the British Government for the same period provided that 6,000 new immigrants from the United Kingdom be placed on farms under the scheme within five years of the commencement of the agreement. Should a smaller number of settlers be so established the contribution of the British Government will be diminished proportionally.
- 3. The developmental works carried out under the scheme are to include surveys of land, road, and railway construction, provision of water supply, other improvements, and, in some cases, resumption of land and works.
- 4. The cost of passages for immigrants is to be defrayed without charge to the State Government.

- 5. All necessary advances to settlers placed upon farms under the scheme are to be made by the Commonwealth Bank, Rural Bank or other jointly approved agency as a business proposition, such bank to be indemnified for a period not exceeding fourteen years against losses sustained in connection with the advances, through their incurring risks beyond such as are incurred in the ordinary course of banking business. The amount so payable is limited to (a) £500 in respect of any individual settler, (b) one-third of the total sums payable under the guarantee. The British Government agreed to pay one-half of any amount falling due under the guarantee. The total advance to any individual settler is limited to £500, and the total indebtedness of any settler or trainee for land is not to exceed £1,500.
- 6. The British Government is to lend half the cost of training a maximum of 6,000 boys or men to fit them for employment or placing on a farm, but such contribution is not to exceed £25 to persons under 18 years of age and £50 to persons over that age.
- 7. The State is to provide one farm for every £1,000 of the loan and to settle immigrants thereon; to see that all immigrants are either offered employment in country districts, or that those suitable are placed on the land; and to make provision for the reception, absorption, instruction, and supervision of all new settlers.

Under the existing system of immigration, "nominated" immigrants preponderate, and the obligations of the State in receiving immigrants are not considerable. In certain cases immigrants receive instruction in rural work on the Government Agricultural Farm at Scheyville (near Windsor), and suitable employment is obtained in co-operation with the State Labour Exchanges.

Any immigrant who settles upon the land as owner, lessee, or labourer, within a reasonable time of his arrival, may be granted concessions in regard to railway fares and freight when travelling to the district in which he settles. These concessions may be granted also to nominated immigrants proceeding to the homes of their nominators, or travelling to take up farm work or domestic service.

The following statement shows the expenditure on immigration by State grants since 1832, and the number of assisted immigrants who arrived in New South Wales, inclusive of Victoria and Queensland, before their separation. After 1905 the number of immigrants nominated by residents of the State and the number selected abroad by the Immigration Office are shown separately.

		Immigrants Assisted.								
Year ended	Expenditure, exclusive of			Toalt.						
30th June.	Administration.	Nominated.	Selected.	Males.	Females.	Total.				
	£	[· ·]			1	1				
1832-1901	3,676,013			104,106	107.866	211,972				
1905-1909	44,925	6.144	2,713	*	*	8,85				
1910 –1914	221,601	32,406	12,444	23,816	21.034	44,850				
1915	24,501	2,399	1,109	1,498	2,010	3,50				
1916	13,571	888	152	354	686	1,04				
1917	3,690	526	60	168	418	58				
1918	1.367	191	1	26	166	19				
1919	1.060	119	· · · ·	21	98	11				
1920	3,025	873	214	527	560	1.08				
1921	6.847	4.026	560	2,220	2,366	4,58				
1922	1.640	5,679	665	3,396	2,948	6,34				
1923	2,294	5.058	933	3.362	2,629	5,99				

* Information not available.

Since 1861 the number of assisted immigrants has been approximately 28 per cent. of the net number of immigrants to the State, and between the censuses of 1911 and 1921 the net immigration was 134,692 persons of whom approximately one-third were assisted by the State.

The figures for the last four years include ex-service immigrants to whom the Imperial Government granted free passages, viz., 663 in 1919-20, 3,394 in 1920-21, 4,260 in 1921-22; and 2,407 in 1922-23. Of these, 9,866 were nominated by residents of New South Wales, and 858 (including 628 domestic servants) were selected. Up to the end of June, 1923, the total number of free-passage immigrants who arrived under the Imperial ex-service scheme was 10,724. Activity under the scheme was discontinued at the end of 1922, but passages are provided for the wives and dependent children of ex-service men already received provided application be made within two years of this departure.

Year ended 30th June.	Rurał Workers.	Domestic Servants.	Other.	Families of fore- going.	Year ended 30th June.		Domestic Servants.	Other.	Families of fore- going.
1914	542	567		321	1919			•••	•••
1915	497	477		135	1920	86	102	. 1 .	25
1916	8	126		18	1921	94	398	6.	62.
1917	3	51		6	1922	354	247	15	49
1918		1			1923	740	191	÷	22

In selecting immigrants choice has been restricted latterly almost exclusively to rural workers and domestic servants. Fractically all the assisted immigrants in the last ten years have come from the United Kingdom; the relatively small number from other countries is shown in the following statement :---

		Assi	sted Immi	grants from		·		Total		
Year ended 30th June	United H	Kingdom.		British ssions.	Foreign (Countries.	Assiste	Assisted Immigrants,		
	Nomin- ated.	Selected.	Nomin- ated.	Selected.	Nomin- ated:	Selected.	Nomin- ated.	Selected.	Total.	
1914	5,197	1,396	23	8	164	26	5,384	1,430	6,814	
1915	2,347	1,087	9 .	5	43	17	2,399	1,109	3,508	
1916	869	145	7		12	7	888 :	152	1,040	
1917	515	60	2		9		526	60	58	
1918	189	1			2		191	1.	19	
1919	118		1				119		. 119	
1920	868	214	3	•••	2		873	214	1,08	
1921	4,010	560	16				4,026	560	4,58	
1922	5,645	665	27		7	•••	5,679	665	6 ,3 4	
1923	5,014	933	14		30		5,058	933	5,991	

There are two private organisations which assist the immigration of boys and youths, viz., the Dreadnought Fund Trust and the Dr. Barnardo Homes.

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. The trustees pay part of the passage money, and, if necessary, the Commonwealth and Imperial Governments advance a sum sufficient to defray the balance of the cost of bringing the lads to New South Wales. The trustees pay also the fees for a course of training at one of the State farms, Upon completion of the course the lads are placed in employment through the agency of the State Labour Exchanges, and they repay in instalments any advances made. Operations under this scheme were suspended during the war period, but were resumed recently, 63 boys being brought to New South Wales in 1921, 637 in 1922, and 472 in 1923.

The organisation known as Dr. Barnardo Homes works in conjunction with an English institution of that name, which arranges passages and pays 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. A hostel is maintained at Sandringham, Sydney, to accommodate them until they go to the country. After a probationary period of three months on the farms the boys are apprenticed until they reach the age of 21 years, and the organisation keeps constantly in touch with them during their apprenticeship. From October, 1921, when the first of these boys were landed in Sydney, to December, 1923, 220 Barnardo boys had arrived in New South Wales.

During 1923 an additional scheme was inaugurated under which 251 British boys between the ages of 15 and 18 years were received upon assisted passages and provided with rural employment in New South Wales. In the same year the Juvenile Migrants Apprenticeship Act was passed to provide for the supervision and care of the persons and property of juvenile migrants until they reach the age of 21 years, and to empower the Minister for Labour to bind them by indenture to any trade or calling.

The number of persons assisted to immigrate in each of the past ten calendar years is shown on page 163 of the Statistical Register of New South Wales for 1922-23.

Passage Money.

Prior to the war several steamship companies conveyed immigrant passengers from the United Kingdom at the rate of £14 per adult, and the State Government contributed from £4 to £8 toward the fares of assisted immigrants. Since the war the cost per berth has been much greater, and in January, 1924, was £33 per person over 12 years of age. Under the Federal scheme the sum of £11 is contributed in equal proportions by the Federal and Imperial Governments toward the cost of assisted passages from the United Kingdom, and the remainder is paid by the immigrant or his nominator.

In the case of persons nominated for assisted passages by relatives or friends in the State, nominators are required to lodge the reduced steamer fare and to guarantee that employment awaits nominees, or that adequate provision will be made for their maintenance.

DISTRIBUTION OF POPULATION.

The population of New South Wales is distributed in a rather remarkable manner. At the end of December, 1922, including shipping, the city of Sydney contained 109,970 persons in a small area surrounded by an extensive group of suburbs with 845,930 inhabitants, making a total of 955,900 dwellers in the metropolis. Outside the boundaries of the metropolis in what is usually termed the metropolitan area there are seven municipalities and three shires, containing in all 109,390 inhabitants. Then scattered throughout the State are 136 of the larger towns incorporated as municipalities with a total population of 462,430; of these, 11 in the County of Cumberland, contained 40,740 persons, for the most part dependent on Sydney for their livelihood, and 14, comprising the large mining centres of Newcastle, Broken Hill, Lithgow, and Wollongong, contained 130,090 inhabitants, leaving 291,600 in 111 of the larger rural towns. Distributed over the remainder of the State, 99 per cent. of its area, are 646,722 persons, of whom a small number live in the large unincorporated towns, and only 14,992 in the Western Division, which covers 40 5 per cent. of the area of the State.

The distribution of population at the end of 1922, together with the proportion in each division and the average population per square mile, are shown in the following table :—

•	Area† (including	Populati includin	ion at 31st Dece g shipping and	mber, 1922, aborigines.	
Division.	Rivers and Lakes).	Total.	Proportion in Each Division.		
Sydney *Suburbs of Sydney	sq. miles. 5 180	109,970 845,930	per cent. 5·1 38·9	per sq. mile. 21,994 0 4,699 6	
Metropolis		955,900	44.0	5,167.0	
Extra Metropolitan Municipalities and Shires.	515	109,390	5.0	212.4	
Metropolitan Area as defined in Local Government Act.	700	1,065,290	49.0	1,521.8	
Country Municipalities Country Shires	2,636 180,621 \ddagger	462,430 631,730	21·3 29·0	175·4 3·5	
Western Division (Part unincor- porated).	125,294	14,992	0.2	0.1	
Lord Howe Island	5	111	0.0	22.2	
Total, New South Wales	309,256‡	2,174,553	100.0	7.0	

* Including Ku-ring-gai Shire, area 36 sq. miles, population 20,930. †Excludes 176 sq. miles being water area of principal harbours. ‡Excludes Federal Territory, 940 sq. miles.

The population of the metropolitan area as defined in the Local Government Act represents nearly one-half of the total population; less than onequarter 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 is greater than that of any other State of the Commonwealth except Victoria and Tasmania.

The lowness of the average in New South Wales-7.0 per square mileis 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 11.7 persons per square mile.

Municipal and Shire Population.

Slightly more than two-thirds of the population of New South Wales live within municipalities and practically the whole of the remainder within shires. Although the area incorporated 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, 1922, is shown below :---

Division,			Municipalities.	Shires.	Total.
Metropolis			934,970	20,930	955,900
Balance-Cumberland			114,360	51,200	165,560
North Coast			34,710	92,150	126,860
Hunter and Manning	•••	.	118,330	136,500	254,830
South Coast			43,320	45,180	88,500
Northern Tableland			19,950	30,630	50,580
Central Tableland			58,470	71.130	129,600
Southern Tableland			19,100	26,210	45,310
North-Western Slope			18,010	34,160	52,170
Central-Western Slope			17,450	35,600	53,050
South-Western Slope			39,510	58,770	98,280
North Central Plain			6,440	17,480	23,920
Central Plain			5,900	13,469	19,360
Riverina			12,250	55,030	67.280
Western Division-					
Incorporated			28,250		28,250
Unincorporated					14,992
Lord Howe İsland	÷••				111
New South Wales		•••	1,471,020	688,430	2,174,553

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 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 parts.

Internal Migration.

Tables published on page 236 of the Official Year Book for 1922 showed that there was considerable migration from the country districts to the city during the last three inter-cencal 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 past ten years 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.

The Metropolis includes the City of Sydney, forty municipalities surrounding it, the Ku-ring-gai Shire, and the islands of Port Jackson. It embraces an area of 185 square miles. The boundaries 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 Hurstville, Canterbury, Enfield, Strathfield, Homebush, Concord, and Ryde municipalities; on the north, the northern boundaries of Eastwood and Ryde municipalities, the western and eastern boundaries of Ku-ring-gai Shire, the north-eastern boundary of Willoughby, and the northern boundary of Manly municipalities. The habitations within these limits are fairly continuous.

The following statement shows the population of each municipality of the Metropolis, and of Ku-ring-gai Shire, at the consuses of 1911 and 1921, and at 31st December, 1922, including aborigines and shipping :---

		1	Population	n,		. 1	Population.	
Municipality.		Census, 1911.	Census, 1921.	31st Dec., 1922.	Municipality.	Census, 1911.	Census, 1921.	31st Dec., 1922.
City of Sydney		119,774	111,059	109,970	Manly	10,465	18,507	20,330
Alexandria		10,123	9,793	9,840	Marrickville	30,653	42,240	43,330
Annandale	•.	11,241	12,648	12,650	Mascot	5,836	10,929	11,210
Ashfield		20,431	33,637	35,330	Mosman	13,243	20,063	20,890
Balmain		32,038			Newtown	26,498	28,169	28,230
Bexley	•••	6,517	14,746	15,760	North Sydney	34,648	48,446	49,930
Botany	•••	4,409	6,214	6,500	Paddington	24,317	26,364	26,500
Burwood		9,382	15,711	16,710	Petersham	21,712	26,236	26,540
Canterbury	÷	11,335	37,639	43,560	Randwick	19,475	50,849	55,740
Concord	• • •	4,076	11,013	13.760	Redfern	24,427	23,978	24,040
Darlington	•••	3,816	3,651	3,650	Rockdale	14,095	25,190	27,200
Drummoyne		8,678	18.764	20,770	Ryde	5,281	14,855	16,850
Eastwood		968	2,133	2,330	St. Peter's	8,410	12,700	12,790
Enfield		3,444	8,530	9,710	Strathfield	4,046	7,594	8,940
Erskineville	•••	7,299	7,553	7,550	Vaucluse	1,673	3,730	4,220
Glebe	•••	21,944	22,772	22,830	Waterloo	10,072	11,199	11,430
Homebush		676	1,622	2,130	Waverley	19,832	36,797	39,480
Hunter's Hill		5,019	7,334	8,160	Willoughby	13,037	28,074	32,020
Hurstville		6,533	13,394	14,650	Woollahra	16,992	25,461	27,300
Kogarah		6,954	18,226		Ku-ring-gai Shire	9,459	19,213	20,930
Lane Cove	• ·	3,300	7,592	10,150		·		<u> </u>
Leichhardt		24,254	29,356	29.570	Total	636,388	906,103	955,900

It is apparent that a number of these suburbs embracing those longest established and nearest the city have attained their maximum development, and that the rate of growth is now greatest in the more remote municipalities such as Bexley, Canterbury, Hurstville, Kogarah, Randwick, and Ryde.

In addition to these suburbs there are, in close proximity to the city, a number of important centres of population of a more or less suburban character, since large proportions of their inhabitants gain their livelihood in the city. An extended definition of the metropolitan area was given in the Local Government Act of 1919 (Schedule Four), and included the following additional localities, whose populations, including aboriginals and shipping, were as shown:—

- 14 A -		Population	n.			Population	
Municipalities.	es. Census; Cansus; 3 lst Drc.; 1911. 1921. 1922.		Cénsus, 1911.	Census, 1921.	31st Dec., 1922.		
Auburn	5,533	13,563	14:770	Hornsby	8.907	15,291	1 6:33 0
Bankstown	2,039	10,670	12,460		2,896	7.707	8,090
Dundas	1,135			Warringah	2,823	9,644	11,350
Ermington and				0 ~			
Rydalmere	1,716	1,931	1,920	Extra-Mêtropolitan			
Granville	7,231	13,328	1',370	Shires	14,626	32.642	35.770
Lidcombe	5,419	10.524	11.0.0			ų	,
Parramatta	12,476	14,595	15,050		4. j		.1
			A -		636,388	906,103	955 900
Extra-Metro-		4 ·	•	47			
politan Muni-	en tra a	1		Metropolitan Area	(all a l	8	
cipalities	35,576	68,184	73,620		1.1.1	-	
			. 1	Government Act.	686,590	1.006.929	1 065 290

The population of the metropolis, including aboriginals and shipping, at census periods and at the end of December, 1923, is shown in the following table, together with the proportion which the metropolitan population bears to that of the whole State :---

TT : :	Popu	lation at Cer	sus.	Incre	ase.	Males	Proportion of Population	
Year.	Males.	Females.	Total.	Numerical.	Per cent.	per cent.	of State in Metropolis.	
							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	
1923	478,800	502,600	981,400	25,500	2.67	48 79	44.4	

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 ten years. 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 populations of the capital cities (including suburbs) of the States of the Commonwealth are shown below :---

			·	31	Proportion to		
Metroj	Metropolis.		Census, 1911.	Males.	Females.	Total.	Population of Whole State. 1922.
			······································				
Sydney		·	629,503	465,100	490,800	955,900	per cent. 43.96
Melbourne			588,971	386,020	430,780	\$16,800	51.36
Adelaide			189,646	127,867	142,462	270,329	52.67
Brisbane			139,480	110,790	119,410	230,200	29.20
Perth			106,792	78,452	83,321	161,773	47.08
Hobart	••••	•••	39,937	25,500	28,510	54,010	24.61

+ Including shipping.

These populations are exclusive of shipping and aboriginals, and for this reason the population of Sydney differs from that shown in previous tables.

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 themetropolitan 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. Lithgew, the third largest town outside County Cumberland, is also dependent on mining for its existence. Apart from these and the centres in the County of Cumberland closely dependent upon the city, there are only two country centres with a population exceeding 10,000; twelve, including two unincorporated, between 5,000 and 10,000; and twenty-five, including two 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 1922 of the towns, which at the census of 1921 had more than 3,000 inhabitants, including aboriginals and shipping, the metropolitan and closely-dependent municipalities being shown first :---

					Pop	oulation at	Census.	
	Municipality	•		Census 1891.	Census 1901.	Census 1911.	Census 1921.	31st Dec., 1922.
Sydney and S	uburbst			387,331	487,900	636,388	906,103	955,900
Parramatta†				11,677	12,560	12,476	14,595	15,050
Auburn*†	••• ••	• •••		2,026	2,948	5,559	13,563	14,770
Granville ⁺				4,248	5,094	7,231	13,328	14,370
Bankstown*†				108	1,246	2,039	10,670	12,460
Lidcombe†	•		•••	2,084	4,496	5,419	10,524	11,040
Dundas†	••• ••			881	1,087	1,136	3,523	4,010
Newcastle an	d Sub ur bs			50,662	54,991	55,380	\$6,267	87,470
Broken Hill	· ·	•		19,789	27,500	30,974	26,338	22,700
Lithgow				3,865	5,268	8,196	13,275	12,940
Goulburn				10,916	10,612	10,023	12,934	11,730
Maitland				10,214	10,073	11,318	12,009	12.360
Bathurst		• •••	•••	9,162	9,223	8,578	9,441	9,350
Kato omba				1,592	2,270	4,924	9,057	9,670
Lismore				2,925	4,464	7,382	8,712	9,220
Albury				5,447	5,821	6,309	7,752	7,970
Wagga Wag	ga	• •••	• •••	4,596	5,108	6,419	7,679	8,200
Orange	•••			5,064	6,331	6,722	7,398	7,570
Cessnock§		• ••••		203	165	3,957	7,343	8,600
Tamworth				4,602	5,799	7,147	7,264	7,310
Wollongong	••• •			3,058	3,554	4,673	6,708	6,980
Kurri Kurri§						4,154	5,542	6,900
Armidule				3,826	4,249	4,739	5,486	5,380
Dubbo			•••	3,551	3,409	4,455	5,032	5,000
Glen Innes				2,532	2,918	4,089	4,974	4,710
Grafton		,		3,618	4.173	4,685	4,609	4,670
Forbes				3,011	4,294	4,436	4,376	4,530
Inverell				2.534	3,293	4,549	4,369	4,380
Hornsby†§				423	1,818	2,213	4,096	4,250
Parkes				2.449	3,181	2,935	3,941	3,960
Wellington		•		1,545	2,984	3,958	3,924	3,900
Windsor†		• •••		2,033	2,039	3,466	3,808	4,190
Cowra				1,546	1,811	3,292	3,732	4,040
Kempsey			· ·	2,194	2,329	2,947	3,613	3,650
Penrith ⁺				3,099	3,539	3,683	3,605	3,710
Junee				1,682	2,190	2,531	3,560	3,520
Cootanundra				2,026	2,424	2,967	3,531	3,590
Casino	•••			1,486	1,926	3,429	3,461	3,520
Young			•••	2,746	2,755	3,140	3,284	3,290
Singleton				2,595	2,872	2,999	3,275	3,300
Mudgee			•••	2,410	2,789	2,942	3,170	3,230
Temora				915	1,603	3.784	3,049	3,110
Moree				1,143	2,298	2,937	3,028	3,190
Narrandera			•••	1,815	2,255	2,374	3,012	3,090
Towns in Cou	unty Cumb	erland	.	413,910	522,727	679,610	983,815	1,039,750
Newcastle an				50,662	54,991	55,380	86,267	87,470
Other Countr			•••	125,057	149,941	187,964	214,878	215,560
Total popu 3.000 inl	lation in nabitants.	towns of	over	589,629	727,659	922,954	1,284,960	1,342,780

* Not incorporated 1891.

† Towns in County Cumberland.

§ Locality, not incorporated, excludes Aborigines.

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 twelve 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. 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, has continued to grow rapidly. Goulburn has developed, after twenty years of stagnation, into the leading town of the interior not dependent on mining; and Katoomba, a residential town, 60 miles from Sydney, has also grown rapidly.

Mining Settlements.

Metalliferous mining is notoriously subject to vicissitudes, and the population dependent upon the industry fluctuates accordingly. In view of the large resources, however, coal-mining is a comparatively stable industry, and the settlements dependent upon it are generally of a more or less permanent character. In New South Wales metalliferous mining has declined very greatly in recent years, but coal-mining has made very great progress. The proportion of the population living in what may be classed as mining settlements is nearly one-tenth of the total.

Kind of Settlement. 1891. 1901. 1911. 1921. 67,497 77,156 106,172 155,537 Coal Mining ... 49,851 67,511 79,514 38,423 Metalliferous Mining Total 117,348. 144,667 185,686 193,960 ••• <u>.</u>...

The following statement shows the total number of inhabitants living in mining settlements at each of the past four censuses :---

The settlements covered by the above statement include those whose populations are dependent mainly upon mining activities, but in some cases subsidiary manufacturing industries have an important bearing upon the population, as at Newcastle, while in others—notably the inland towns portion of the population is usually dependent upon pastoral and agricultural operations. On the other hand, no account is taken of persons engaged in mining operations in small isolated parties nor in settements of a non-mining character.

A list of mining settlements with their respective populations at the successive censuses of 1891 to 1911 was published on page 467 of the Official

: Mining	r Centre.				- Commun	0	G	~
					Census 1891.	Census 1901.	Census 1911.	Census 1921.
Coal and Shale-				<u>'</u>		······································		
Newcastle and Sul	burbs (i	n)			49,910	53,741	55,380	-86,26
					3,865	5,268	8,196	13,27
· /					203	165	3.957	6,74
Wollongong (m)					3,041	3,545	4,660	6,70
						0,0,20	4,154	5,54
Bulli and Woonon		.			2,578	2,720	3,704	4,44
337 4 557 33 3			•••		7,95	1,695	2,723	2,75
		•••	•••	••••	401		1,778	2,41
****		•••	•••	•••	-	•••	1,731	2,41
		•••	•••	•••}	•••			
		•••		•••			1,145	1,99
		•••				1 611		1,99
Helensburgh		•••			1 771	1,611	1,838	1,88
Greta (m)		•••	•••		1,751	861	858	1,53
Cardiff	•••	•••	•••	•••	114	590	667	1,41
Boolaroo		•••		•••		405*	720*	1,28
Balgownie	•••	•••	•••	· •••			957	1,12
Teralba		•••			240*	1,051*	676*	1,03
Branxton					490	506	708	1,00
Bellbird			•••				185*	1,00
Coledale		•••					794	87
Minmi		•••			2,357	2,595	1,708	83
NT.						_,	1,652	82
Catherine Hill Ba			•••		354	651	476	81
Scarborough	-						703	80
							730	78
	,••• .•••	•••	•••			630*	659*	74
		4.4.4			448	662	515	
Charlestown		•••	•••	•••		.002	910	73
Cessnock South	•••	•••	• •·		107	110		59
		•••	•••	•••	127	112	992	-58
	•••	•••	•••	•••		155*	690 *	58
Neath	•••	•••	•••				602	54
Cullen Bullen		•••]	142*	87*	283*	53
Killingworth						199*	372*	47
Young Wallsend	••					233*	268*	- 38
Stanford Merthyr							345*	32
Abernethy		•••						31
Clifton					452	594	571	28
TT 14 1		•••						27
Heddon Greta		•••					401*	23
			•••	•••	•		119*	21
Metalliferous		***					115	41
	. Los A	8-1			19,789	27,500	30,972	06 00
Broken Hill (silver			27. 899	· •	212	543		26,33
Portland (limestor		•••					2,370	2,79
Tingha (tin)				••••	1,167	727	1,938	1,46
		•••			978	978	1,585	1,29
Kandos (limestone	e)	•••		••••				87
Adelong (gold)	•••	•••		•••	1,173	1,410	1,866	86
Ardlethan (tin)							465*	. 68
Carcoar (ironstone	and go	ld)	•••		562*	578*	737*	:51
					814*	212*	464*	88
Yerranderie (silve						100	840	35
Lightning Ridge ((onals)						623	31
Wattle Flat (gold)) L				539*	671*	415*	28
Fifield (magnesite		เส่ง	••••			93*	205*	28
Bodangara (gold)	unu go	•	•••	•••		871	684	28
Louingara (goid)	- ***			••••		72*	153*	20
Cadia (ironstone)		•••	•••		229		771	
Araluen (gold)	•••	•••	•••	••		685		27
Tumblong (gold)		•••		•••			 75*	27
Valla (gold)		•••;		•••		956*		21
Tent Hill (tin and		çal o	re)		319*	356*	311*	21
				•••	310*	•••	459*	21
Torrington				· · · · ·]	163*	20

* Not classe 1 as a mining settlement in these years.

Municipalities are marked (m) .

The towns of Cobar, Temora, Gronfell, Canbelego, Hillgrove, Wrightville, and Peak Hill are omitted from the list, as mining operations at these places are now either of subsidiary importance or non-existent.

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, but 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 early development of the colony depended on the pastoral and mining industries, and 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 greater than that of males. Thus, during the ten years, 1913 to 1922, the natural increase consisted of 152,823 males and 172,063 females. As a consequence the excess of males is diminishing, and the diminution was hastened by the war. The distribution of the sexes at each census from 1861 to 1921, and at 31st December, 1923, was as follows :--

	Distributio	n of Population in (Sexes (including a	boriginals)	Males per
Year.	Males.	Females.	Proportion of Males.	Proportion of Females.	100 Females.
1861	198,488	152,372	per cent. 56.57	per cent. 43.43	No. 130
1871	275,551		54 67	45:33	ļ21
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
1923	1,128,089	1;083,017	51.02	48 98	104

From 1871 to 1881 the proportion of males remained constant at about 55 per cent., but immigration was checked towards the end of the next decade, and in 1891 the proportion of males had decreased slightly. During the following period there was very little immigration, and by 1901 the difference between the sexes had become less than at any previous period, the proportion of males being 52:42 per cent., or 110 males to every 100 females. At the census of 1911 the proportions were approximately the same, as immigration had revived in 1905; but the census of 1921 showed a further pronounced approach to equality between the sexes, due in part to war casualties.

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

** Official Year Book, 1922, page 243.

than in the previous decade, it is clear, from the fact that the greatest surpluses of males are now at ages 50 to 65, that as time passes the proportion of females will continue to increase at a faster rate than the proportion of males in accordance with the general tendency at all age-groups. The relative excess of males will, therefore, decline still further unless there is an increase in the rate of natural increase of males (a rather remote possibility), or an accession of male immigrants in appreciably greater numbers than females.

Ages of the Population.

A summary of the number of persons in quinquennial age-groups at the censuses of 1911 and 1921, and of the proportions in the same groups at successive censuses since 1861, was published on page 244 of the Official Year Book, 1922.

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 any child whose father was a British subject, or a child born on a British vessel, shall be deemed a British subject. The localities of birth of the inhabitants of New South Wales (exclusive of aboriginals of full blood), as stated at the Census of 1921, were as follow :---

Bisthplace.	1921.	Birthplace	•		1921.
British Empire –	1 .	<u>u</u>		. 1	
Australasia		Other Countries -			
	1,772,767	Europe			19,980
	19,256	Asia	•••		8,588
Other		Africa			592
	260,246	America			3,715
	2,461	At Sea			1,295
	2,164	Unspecified			5,893
	1,517			· · · · ·	
Polynesia	. 1,664	Total		!	2,100,371

This table demonstrates the fact that the population is distinctly Australian by birth, still more distinctly British, and that, among the immigrant element, that from the British Isles is overwhelmingly preponderant.

When consideration is given to the period of residence of persons born outside of the Commonwealth some very interesting facts as to immigration are revealed. Thus, in 1921 there were in New South Wales 38,086 persons who had entered Australia between 1916 and 1921, a large proportion being travellers and others than permanent settlers, and 82,021, who entered in the previous five years, making a total of 120,107 for the ten years against a total increase of non-aboriginals by migration of 135,117, indicating that the net number of migrants received in New South Wales from other States during the period was 15,010, excluding from account migrants who died in the period.

POPULATION ACCORDING TO RACE.

The only outstanding racial element in the population is the European, which at the census of 1921 was shown to embrace no less than 99·1 per cent. of the total population as against 98·9 per cent. in 1911. The largest decrease has occurred among Chinese, who constitute by far the greatest non-European element. The total number of persons recorded at the census of 1921 was 2,100,371, and of these 2,082, 418 were of the European race, 11,087 were non-Europeans, and 6,866 were half-caste. In the period 1911 to 1921 the number of Europeans increased by 27·8 per cent, that of half-castes increased

by 10.5 per cent., while that of non-Europeans decreased by 3.6 per cent. The numbers of males and females of the European and various non-European races at the censuses of 1911 and 1921 were shown on page 246 of the Year Book for 1922.

NATIONALITY OF THE POPULATION.

The nationality of the population of New South Wales is preponderantly British, no less than 2,081,984 persons, or 99.1 per cent. of the inhabitants, having been of British allegiance at the census of 1921. The number of persons of foreign allegiance at the same date was 18,387. Particulars of the number of persons of each nationality were shown on page 246 of the Year Book for 1922.

ABORIGINES.

The number of aborigines in New South Wales at 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 aborigines 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. The number ascertained by the annual censuses of the Aborigines Protection Board is considerably less than that recorded at the decennial census of the Commonwealth. On 4th April, 1923, it was ascertained by the Board that there were 1,214 aborigines of full blood in the State; 521 of these were living on reserves, and 447 were receiving aid from the Government. On the other hand, the number of half-castes shows a tendency to increase, numbering 3,183 in 1891, 3,147 in 1901, 4,512 in 1911, and 4,470 in 1921. The numbers of the various castes recorded at the census taken by the Aborigines Protection Board on 4th April, 1923, were 4,783 half-castes, 1,021 quadroons and 304 octoroons, making the total number of aborigines of all castes 7,322.

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, and they may be granted only by the Governor-General in Council. Aboriginal natives of Asia, Africa, or the islands of the Pacific (except New Zealand) are not eligible for naturalisation.

Any person seeking naturalisation must-

- (a) Declare his intention of settling in the British Empire.
- (b) Have resided within the Commonwealth continuously for at least one year, and within the British Empire during four of the eight years immediately preceding the date of application.
- (c) Must abjure former allegiance and take an oath of allegiance to the reigning sovereign and his successors.

He must, furthermore, advertise his intention to seek naturalisation, produce certificates of good character, declare certain personal particulars, and satisfy the responsible Minister of the Crown that he can read and write

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English. Certificates of naturalisation may be retused with or without assigning reasons. Letters or certificates of naturalisation issued in the United Kingdom are accepted in Australia on proof of identity and genuineness.

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 400 persons naturalised during 1922. Between 1849 and 1922 the total number of persons naturalised was 17,641, of whom 6,575 were of German origin; 1,714 were Swedes; 1,156 Russians; 1,164 Danes; 1,014 Italians; and 804 French. There were alco 1,119 Asiatics, of whom 910 were Chinese and 201 Syrians. Certificates of naturalisation issued under former State laws remain in force under the present Federal statute (Nationality Act, 1920). Records of the occupations of naturalised persons show that, in the past ten years, 688 were labourers, 380 were seamen, 137 miners, 142 cooks, 130 fruiterers, 107 tailors, 105 carpenters, and 99 engincers.

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.

All births are required to be registered within sixty days. After the expiration of that time no birth may be registered unless, within six months, a declaration is furnished by the parent, or by some person present at the birth. Within six months of the arrival in New South Wales of a child under the age of 18 months, born outside the State, the birth may be registered upon declaration by the parent, if the parents intend to reside in New South Wales. Still-births are not registered.

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 information is supplied by the Coroner or by the nearest Justice of the Peace.

Marriages may be celebrated only by District Registrars or by ministers of religion registered for that purpose by the Registrar-General. In the former case, the parties to be married must sign, before the Registrar of the district in which the intended wife ordinarily resides, a declaration that they conscientiously object to be married by a minister of religion, or that there is no minister available for the purpose of performing the marriage. Marriage of minors is permissible only with the written consent of parents or guardians.

New South Wales is divided into 212 registry districts, in each of which a District Registrar has been appointed.

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 3731 per cent., which represents an increase from 3350 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:—

		Number.		Pro	Proportion per cent.			
Conjugal condition.	Males;	Females.	Tötal.	Males.	Females.	Tòtal.		
Never married Under age 15 Age 15 and over Married Widowed Divorced Not stated	2 020	334,385 237,693 391,886 60,701 2,395 1,810	678,364 540,267 783,730 88,552 4,609 4,849	32:10 28:24 36:57 2:59 21 -29	32:50 23:10 38:09 5:90 -23 -18	$32:30 \\ 25.72 \\ 37.31 \\ 4.22 \\ .22 \\ .23$		
Total	1,071,501	1,028,870	2,100,371	100.00	1¢0*00	100:00		

The persons never married constitute 58 per cent. of the total population, but of these 678,364 (or 32.30 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, has had the effect of considerably raising the proportion of married The proportion of married to the number of persons in the population. 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 number of widowers is much less than the number of widows, due to the greater mortality of males and not to any greater tendency of widowers to remarry.

		Ma	les.			Fen	ales,	les,		
Census.	Never married.	Married.	Widowed.	Divorced.	Never married.	Married.	Widowed.	Divorced		
1861	69·34	28.23	2.43	*	61.09	35-14	3.77	*		
1871	69.96	27.59	2.42	*	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	60.48	36.68	2.60	-26	55.70	38.16	5.91	·23		
								يد م ي		

* 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 increasing 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 remarried.

MARRIAGES.

変

The number of marriages celebrated in New South Wales during 1922 was 17,583, corresponding to a rate of 8.17 per 1,000 of the population. This shows a marked decrease on the previous year, when the number of marriages was 18,518, and the rate 8.79.

VITAL STATISTICS.

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	1910-14	15,978	9.17
1885-89	7,679	7.67	1915 -19	15,345	7.97
1890-94	7,954	6.80	1920	20,183	9.76
1895-99	8,700	6.74	1921	18,518	8.79
1900-04	10,240	7.37	1922	17,583	8.17
190509	12,080	7.97	1923	17,507	7.99

The following table shows the average annual number of marriages and the rates per 1,000 of the population during each quinquennium since 1880:—

A review of the marriage rates during the last forty years shows that, except for five or six years subsequent to 1880, the rates declined steadily. In 1894 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. Coincident with the return of men from active service the rate exhibited an upward tendency in 1919, and this was more strongly marked in 1920. In 1921 the rate fell to a level below the average for the quinquennium preceding the war, and the decline continued in 1922 and 1923

This survey of marriages, considered in conjunction with the industrial history of the State, shows that in the past fifty years, except for the war period, the marriage rate has risen and fallen with the condition of trade, indicating that it is normally a reliable reflex of the comparative prosperity of the State.

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 1922, compared with the average of 1921 and 1920, and the two preceding periods of five years:—

State.	1910-14.	1915-19.	1920.	1921.	1922.
Victoria	8.29	7.62	9.85	8.90	8.27
South Australia	9.38	7.94	10.03	8.81	8.19
New South Wales	9.17	7.96	9.76	8.79	8.17
Commonwealth	8.72	7.75	9.62	8.59	8 03
Tasmania	7.94	6.90	9.50	7.82	7.79
New Zealand	8.51	7.30	10.32	8.69	7.63
Queensland	8.54	7.59	8.92	7.80	7.51
Western Australia	8.22	6.62	8.90	7.97	7.21

Mark Signatures in Marriage Registers.

In 1870 the proportion of signatures made in the marriage register with marks was as high as 1888 per 1,000 of the whole, but in 1922 the number of persons who signed in this way was only 67, equal to 38 per 1,000 persons married. This significant decrease in illiteracy is emphatic evidence of the efficiency of the State system of public instruction.

Marriages according to Denomination.

Of every 100 marriages performed in New South Wales, about 95 are celebrated by ministers of religion licensed under the authority of the Registrar-General. The number of marriages at which clergymen officiated during the year 1922 was 16,754, and of those contracted before District Registrars 829, or a proportion respectively of 95 3 and 47 per cent.

As compared with the preceding quinquennial period, the returns relating to marriages solemnised by the Church of England showed decreased proportions in the year 1922. The following table gives the number and proportion per cent. of marriages registered by the several denominations during 1922 in comparison with the preceding quinquennium:—

Denomination.	Marriages, 1917–1921.	Proportion per cent.	Marriages, 1922.	Proportion per cent.
Church of England	35,548	43-90	7,595	43-20
Roman Catholic	16,286	20.11	3,562	20.26
Presbyterian	10,640	13.14	2,334	13:27
Methodist	9,903	12:23	2,227	12.67
Congregational	1.811	2.24	418	2.38
Baptist	1,201	1.48	254	1.44
Hebrew	232	0*29	*36	0*20
All Other Sects	1,818	2.24	328	1.87
District Registrars	3,540	4:37	829	4.71
Total Marriages	80,979	100.00	17,583	100.00

Condition before Marriage.

During the year 1922 of the males married, 16,269 were bachelors, 1,045 were widowers, and 269 were divorced. Of the females, 16,175 were spinsters, 1,072 were widows, and 336 were divorced. The proportion of males re-married was 7 47 per cent., and of females 8 01 per cent.

The following table shows at quinquennial intervals since 1891 the proportion of first marriages and of re-marriages per 10,000 married:-

) Mi	ales.	Females.			
Period.	Bachelors.	Widowers and Divorced; Men.	Spinsters.	Widows and Divorced Women.		
1891	9,229	771 if	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		
1922	9,253	747	9,199	801		

The numbers of widows and divorced women who re-married in the years 1916, 1921, and 1922 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. Of the contracting parties per 1,000 marriages in 1922, 925 males and 920 females had never been married before. Generally speaking, the tendency to re-marry is no greater among males than among females.

VITAL STATISTICS.

Age at Marriage.

The following statement shows the average age at marriage both of bridegrooms and of brides for each of the last ten years. The ages are as stated at marriage by the contracting parties, without verification. The difference between the ages at marriage of males and females is now on the average about $3\frac{1}{2}$ years, the males being the older.

	Average	Age of-	Average	Age of—		Average	Age of	f- Average Ag	
Year.	All Bride- grooms.	Bachelors.	All Brides.	Spinsters.	Year.	All Bride- grooms.	Bachelors.	All Brides.	Spinsters
1014	years.	years.	years.	years.	1	years.	years.	years.	years.
1911		28.0	25:3	24.7	1917	29.7	28.5	26.0	25.0
1912		28.4	25.3	25.0	1918	30.0	28.7	26.1	25.1
1913	28.8	27.8	25.5	24.7	1919	29.7	28.7	26.2	25.3
1914	28.8	27.9	25.6	-25.0	1920	29.5	28.5	26:1	25.2
1915	28.7	28.0	25.5	25:0	1921	29.7	28.5	26.2	25.2
1916		28.4	26.1	25:2	1922	29.4	28.4	26.0	25:0

The average age at marriage of both bridegrooms and brides, which is assumed as that at last birthday, has increased by nearly twelve months during the last twenty years. That of both bachelors and spinsters increased by about half that period.

Particulars of the ages of persons married are published in the Statistical Register of New South Wales.

Marriages of Minors.

The number of persons under 21 years of age who were married during 1922 was 4,763, or 13:54 per cent. of the total. The following are the figures at decennial intervals since 1881:—

	. · ·	Min	ors.	Percentage of-			
· 3	Year.	Bride- grooms.	Brides	Bride- grooms.	Brides.		
	1881	149	1.660	2.37	26.42		
	1891	- 177	2,085	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		
	1922	921	3.842	5.24	21.85		

Compared with the early years the proportion of minors increased among bridegrooms up to the year 1912, when it gradually decreased for five years, the proportion in 1916 being 3:32 per cent. During the next three years the rates were 4:04, 5:19, and 4:68 respectively, and although a slight decline then occurred the proportion in 1922 was the highest yet recorded. Among brides the proportion of minors has always been much larger than among bridegrooms, but it has decreased continuously, with irregular fluctuations, in the past forty years.

BIRTHS.

The number of births registered during 1922 was 55,214, equal to a rate of 25 67 per 1,000 of the population, which is 1 1 per cent. below the average for the previous five years, and is the lowest rate on record for any year except 1903 and 1919. The number registered during the year was the greatest yet recorded in New South Wales. The birth-rate 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. Despite a revival in the marriage rate, the birth rate remained low and fell still further in the years succeeding the war.

The following table shows the average annual number of births and the birth-rate per 1,000 of the total population in quinquennial periods since 1880:---

Year.	Average Births.	Birth-rate per 1,000 of Population.	Year.	Average Births	Birth-rate per 1,000 of Population.
1880-84	30,417	37.89	1910-14	50,190	28.79
1885-89	36,877	36.85	1915-19	51,331	26.64
1890-94	39,550	33.80	· 1920	53,974	26.09
1895-99	37,042	28.68	1921	54,634	25.91
1900-04	37,498	26.99	1922	55.214	25.67
1905-09	41,788	27.56	1923	54,112	24.47

The rates shown above are calculated by the usual crude and unsatisfactory method of relating the births to the total population. A preferable method for purposes of strict analysis is to relate the number of mothers at various ages to the total number of women at corresponding ages, or to relate the number of births to the number of women of child-bearing ages.

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 four census periods between 1891 and 1921, 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	169.99	31.3
30-34	238.81	168.42	161.20	140.18	41.3
35-39	196.15	136.60	$122 \cdot 27$	101.21	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 95 per cent. lower in 1921 than in 1911. The rate, calculated on the basis of the number of women of reproductive age, was only 73 per cent. lower.

From the above table it will be seen that the decline since 1891 has been general at all age-groups, although it is more marked at the later than at the earlier stages. The rate in age group 20-24 has shown a persistent recovery since 1901.

The birth-rate per 1,000 of the population of each State of the Commonwealth and of New Zealand is given in the following table:—

State.		1910-14.	1915-19.	1920.	1921.	1922.
Tasmania	 	29.90	27.78	27.28	26.97	27.07
New South Wales	 	28.79	26.64	26.09	25.91	25.67
Queensland	 	28 ·81	27.86	27.10	26.59	25.5
Commonwealth	 	27.73	25.89	25.45	24.95	24 69
Western Australia		28 63	25.21	24.73	23.43	23.96
South Australia	 	27.98	25.51	24.71	24.07	23.7
New Zealand	 	26.15	24.37	25.36	23.34	23.1
Victoria	 	25.42	23.13	23.95	23.15	23.1

VITAL STATISTICS,

Birth-Rates-Metropolis and Remainder of the State.

During the year 1922 the births recorded in the metropolitan district of New South Wales numbered 22,090, and in the remainder of the State 33,124, or 23.47 and 26.55 per 1,000 of the population respectively. Prior to the year 1893 the metropolitan birth-rate was the higher, but since then, with the exception of the year 1913, the country has consistently shown a higher rate. The rate for the metropolis is declining faster than that of the remainder of the State.

	1	Number of Birth	18.	Births per 1,000 of Population.			
Period.	Metropolis.	Remainder of State.	New South Wales.	Metropolis.	Remainder of State.	New South Wales.	
188084	49,058	103,026	152,084	40.16	36.90	37.89	
1885-89	65,866	118.517	184,383	41.50	34.69	36.82	
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	22,352	31,622	53,974	25.26	26.73	26.09	
1921	22,418	32,216	54,634	24.54	26.98	25.91	
1922	22,090	33,124	55,214	23.47	26.55	25.67	

The Sexes of Children.

Of the 55,214 children born during the year (exclusive of those still-born), 28,232 were males and 26,982 were females, the proportion being 105 males to 100 females. In no year, as far as observation extends, have the female births exceeded in number those of males, although the difference has sometimes been very small.

The excess of males over females born during the past sixty-one years has ranged from 2 per cent. in 1875, 1876, and 1901, to about 8'7 per cent. in 1864, the average being 5 per cent. The proportion of males born during the war years was very little different from that in the pre-war years.

It is noteworthy that in the case of illegitimate births, the births of males have always maintained the ascendency, save in the quinquennial period 1885-89 and in the year 1915, when the births of females predominated slightly.

The following table shows the number of males born to every 100 females, both in legitimate and illegitimate births, during the last forty-three years:—

Years.	Legitimate Births.	Illegitimate Births.	All Births.	Years.	Legitimate Births.	Illegitimate Births.	All Births.
188084	104.9	103.9	104.8	1910-14	105.2	$105.1 \\ 104.0$	$105.2 \\ 105.2$
1885-89 1890-94	105·4 105·7	98·8 105·4	$105 \cdot 1 \\ 105 \cdot 7$	1915–19 1920	105.3 105.4	110.3	105.6
1895-99 1900-04	105·0 104·3	105·4 102·8	105·1 104·2	1921 1922	104 ·9 104 ·6	108·0 106·1	105·0 104·6
1905-09	105.0	104.9	105.0				

The proportion in 1922 of male illegitimate births to females was above the general average, but was exceeded in each of the three preceding years.

Plural Births.

During the year 1922 there were 578 cases of plural births. The children thus born numbered 1,151 (exclusive of eight still-births) and included 575 cases of twins (576 males and 566 females), and 3 cases of triplets (6 males and 3 females). Of these 578 cases, 25 were classified as illegitimate.

The number of children born at plural births was 2.08 per cent. of the total births.

The following table shows the number of cases of twins, triplets, and quadruplets born in New South Wales during the last ten years, excluding those still-born, and distinguishing legitimate and illegitimate:—

Cases of-	ĺ	Legitimate.	Illegitimate.	Total.
Twins		5,475	264	5,739
Triplets		41	4	45
Quadruplets		1		1

The total number of confinements recorded during the ten years was 520,205; hence the rates per million confinements were:—11,032 cases of twins, 87 of triplets, and 2 of quadruplets; otherwise stated, there were 11 plural births in every 1,000 confinements.

ILLEGITIMACY.

The number of illegitimate births in 1922 was 2,700, equal to 4.89 per cent. of the total births and to 1.26 per 1,000 of population. A statement of the illegitimate births in New South Wales at intervals since 1900 is given below.

Year.	Number of Illegitimate Births.	Ratio per cent. to Total Births.	Rate per 1,000 of Population.	Year.	Number of Illegitimate Births.	Ratio per cent. to Total Births.	Rate per 1,000 of Population.
1900	2,605	7.01	1.92	1918	2,654	5.23	1.36
1905	2,912	7.37	2.00	1919	2,534	5.22	1.27
1910	2,900	6.37	1.79	1920	2,635	4.88	1.27
1915	2,681	5.02	1.42	1921	2,673	4.89	1.27
1916	2,501	4.80	1.32	1922	2,700	4.89	1.26
1917	2,533	4.83	1.33				the the

Over the whole State the proportion of illegitimate to total births rose gradually from 435 per cent. in 1880 to 737 per cent. in 1905, after which a rapid decline occurred to 480 per cent. in 1916. The rise and fall of this proportion has followed in a general way the same course as the illegitimate birth-rate per 1,000 inhabitants, which rose between 1884 and 1894 from 157 to 209 per 1,000 of population. It remained near that level until 1905, since when a rapid decline has occurred to 126 per 1,000 of population in 1922.

The most accurate test of the extent of illegitimacy is obtained by relating the total number of illegitimate births recorded to the number of unmarried women of child-bearing age. This test indicates that illegitimacy, which was increasing up to about 1890, has declined very markedly in the past thirty years, the proportion of illegitimate children born for 1,000 unmarried women, aged 15 to 45, having fallen from 1841 in 1891 to 1610 in 1901, and to 1448 in 1911. In 1921 the number of illegitimate children born was 2,673, compared with 2,949 in 1911, and the corresponding rate probably did not greatly exceed 11 per 1,000 in 1921—a decrease of approximately 40 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

VITAL STATISTICS.

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 intentions, 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. Since the passing of the Act there have been 6,574 registrations. The number in each of the last ten years is shown in the following table:—

Year.	Registrations.	Year.	Registrations.
1913	298	1918	447
1914	393	1919	398
1915	416	1920	455
1916	420	1921	444
1917	390	1922	371

NATURAL INCREASE.

The excess of births over deaths, or "natural increase," during 1922 was 36,036, equal to 16.92 per 1,000 of 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:—

1. A.				Annual		
Year. Metropolis.	Motuonalia	Remainder of		Whole State.		Increase per 1,000 of
		Males.	Females.	Total.	Population.	
890-94	38,859	82,787	57,233	64,413	121,646	20.79
895-99	33,056	74,575	49,885	57.746	107,631	16.67
900-04	34,470	73,377	49,695	58,152	107.847	15.52
905-09	42,513	88,132	61,652	68,993	130,645	17.23
910-14	58,969	101,218	75,648	84,539	160,187	18.38
915-19	56,584	97,413	71,992	82,005	153,997	15.98
1920	12,923	20,090	15,603	17,410	33,013	15.95
1921	13,725	20,875	16,489	18,111	34.600	16.40
1922	13,665	22,371	17,215	18,821	36,036	16.75

On account of the more favourable 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; that for 1922 shows a slight improvement as compared with the years immediately preceding it.

Although male births are more numerous than those of females, the increase of population from the excess of births over deaths is greatly in favour of the latter. The male population certainly exceeds the female, but there is a disproportionately large number of deaths among males. There is also a greater mortality among male than among female children, a cause from which alone the natural excess of male births is almost neutralised. During the ten years which closed with 1922, the number of females added to the population by excess of births over deaths exceeded the males by 19,240, or 12.6 per cent.

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 and of this Year Book.

During the year 1922 the birth-rates of all the Australian States, except Tasmania and Western Australia, were slightly lower than those of 1921, but a more favourable death-rate resulted in the natural increase being just

above that for the previous year. There is, however, no indication of recovery to the pre-war rates of natural increase, as will be seen from the table below. The rates are per 1,000 of population.

State.		1910-14.	1915–19.	1920.	1921.	1922.
Tasmania	 	19.35	17.83	17.61	16.67	17.78
New South Wales	 	18.38	15.98	15.95	16.40	16.75
Queensland	 	18.51	17.06	16.47	17.25	16.39
Commonwealth	 	17.03	14.99	14.95	15.04	15.48
Western Australia	 	18.61	15.47	14.45	12.99	14.63
South Australia		17.63	14.84	14.27	14.05	14.61
New Zealand	 	16.80	13.85	15.09	14.61	14.40
Victoria	 	13.85	11.75	12.82	12.63	13 45

DEATHS.

The deaths during 1922 numbered 19,178, equal to a rate of 892 per 1,000 of the population, or 141 per cent. below the average for the previous five years. Of the total, 11,017 were males and 8,161 females, the rate for the former being 10.05 and for the latter 7.74 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 quinquennal periods, was as follows:----

Period.	Average A	nnual Number	of Deaths.	Deat	10 00	Proportion per cent.	
	Males.	Females.	Total.	Males.	Females.	Total.	Female Rate,
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	12.120	8.841	20,961	11.46	8.74	10.13	131
1921	11,496	8,538	20.034	10.70	8.26	9.20	130
1922	11,017	8,161	19,178	10.05	7.74	8.92	130

The death-rate has fallen continuously for both sexes, but faster for females than for males. As shown above, the rate for the five years 1880-84 was nearly 60 per cent. higher than the rates now being experienced. 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 the above 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 in each of the Australian States and in New Zealand from 1910 to 1922 provides an instructive comparison:—

State.	•		1910-14.	1915-19.	1920.	1921.	1922,
New Zealand		·	9.35	10.25	10.27	8.73	8.77
New South Wales			10.41	10.66	10.14	9.51	8.92
South Australia			10.30	10.62	10.44	10.02	9.10
Queensland			10.30	10.80	10.63	9.34	9.14
Commonwealth			10.70	10.90	10.50	9.91	9.21
Tasmania			10.55	9.95	9.67	10.30	9.29
Western Australia			10.02	9.74	10.28	10.44	9.33
Victoria			11.57	11.38	11.13	10.52	9.65

The deaths during the five years, 1915-19, included those occasioned by the epidemic of influenza in 1919.

VITAL STATISTICS.

Death Rates-Age and Sex.

The age and sex distribution of a population are most important factors to be considered in comparing death-rates. In New South Wales during 1922 the death-rate of persons under 45 was 47 per 1,000, as compared with 25 4 for persons at and above that age. It follows that any variation in the proportion of persons under and over that age will have a considerable bearing on the death-rate of the whole population.

Again, the death-rate of females during the same period was 23 per cent. less than that of males. 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 and for the years 1921 and 1922:---

Age-Group,	Deaths per 10,000 Living—All causes.								
Years.	1881-90.	1891-1900.	1901-10.	1911-20.	1921.	1922.	1881-90 to 1922.		
			Mal	es.	,		· · · ·		
0-4	44.57	37.65	27.90	23.28	1. 21.55	1 18.05	60		
5–9	3.62	2.88	2.07	1.95	1.93	1:54	57		
10-14	2.44	2.08	1.78	1.52	1.66	1.57	36		
15-19	3.74	3.13	2.85	2.58	2.02	2.15	43		
20-24	5.83	4.38	3.67	3.83	2.88	2.39	59		
25-34	7.72	5.88	4.51	5.16	3.89	3.41	56		
35-44	10.92	9.13	7.46	7.07	6.38	5.76	47		
45-54	17.65	14 69	12.87	12.65	10.55	9.78	45		
	30.46	29.05	24.95	23.91	23.32	22.53	26		
55-64 65-74	63.67	56.58	24 95 58·77	23 91 52·39	50·39	51.54	19		
75 and over									
10 and over	149.36	148.98	142.43	147.36	138.33	140.65	6		
Total	15.62	13.43	11.77	11.81	10.70	10.02	36		
				1	<u> </u>	<u>.</u>			
			Fema	les.					
0-4	40.47	32.98	24.21	19.61	17.24	13.59	66		
5-9	3.29	2.77	1.88	1.79	1.70	1.48	55		
10-14	2.18	1.77	1.58	1.25	1.31	1.28	41		
15-19	3.52	2.80	2.23	1.94	1.79	1.37	61		
20-24	5.40	4.12	3.29	3.20	2.25	2.60	52		
25-34	7.44	5.70	4.71	4.52	3.80	3.40	54		
35-44	9.95	8.04	6.82	5.61	5.22	4.51	55		
15-54	13.83	10.86	9.50	8.65	7.67	8.18	41		
55-64	23.12	21.16	18.24	16.43	15.68	15.68	32		
65-74	52.73	43 48	45.91	40.67	39.71	39.18	26		
75 and over	135.66	134.14	123.05	127.15	117.35	122'23	10		
_ Total	13.47	11.02	9.47	8.96	8.26	7.74	43		
·			Tota	1.					
0-4]	42.56	35.35	26.08	21.49	19.42	15.85	63		
5-9	3.46	2.83	1.98	1.87	1.82	1.21	56		
10-14	2.32	1.93	1.68	1.39	1 49	1.43	38		
5-19	3.63	2.97	2.69	2.25	1.91	1.76	52		
20-24	5.63	4.25	3.63	3.50	2.55	2.50	56		
5-34	7.60	5.83	4.60	4.84	3.85	3.40	55		
35-44	10.53	8.67	7.17	6.37	5.81	5.14	51		
5-54	16.19	13.11	11.42	10.83	9.18	9.38	42		
F 04	27.62	25.83	22.04	20.62	19.83	19.40	30		
5-04	21.02 59.39	51.22	22.04 53.22	47.07	45.43	45.79	23		
5 and over	144.15	142.68	133.22	137.81	127.94	131.50	23 9		
-	14.65	12.31	10.67	10.42	9.51	8.92	39		
Total									

The death-rates for females were reduced 43 per cent. during the period under review, as aganist 36 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 deathrates are most favourable are between 10 and 14 years. But between the ages of 5 and 45 years they are generally considerably below the average.

A further comparison is given showing the progress periodically by stating the rates for each decennium and for the year 1922 as proportional to the 1881-90 rates.

Age Groups. 1881-90		188190.	90. 1891-1900. 1901-10		1911-20. 1921.		1922.	
0-4		100	83	61	50	46	37	
5-9		100	82	57	54	53	·44	
10-14		100	83	72	60	64	62	
15-19		100	82	74	62	53	48	
20-24		100	75	64	62	45	44	
25-34		100	77	61	64	51	45	
35-44		100	82	68	60	55	49	
45-54		100	81	71	67	57	58	
55-64		100	94	80	75-	72	70	
65-74		100	86	90	79	76	77	
75 and over		100	99	93	96 .	89	91	
Total		100	84	73	71	65	61	

The greatest improvement has been at the earlier ages of life, the average death-rate among young children (under 5 years) having fallen in 1922 to less than two-fifths of its magnitude in the decade 1881-90. The deathrates at nearly all age-groups in 1922 were considerably below the average for the preceding ten years.

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 absolutely rural, as a few large towns are contained therein. During the year 1922 the number of deaths recorded in the metropolis was 8,425, and in the remainder of the State 10,753, equivalent respectively to rates of 8.95 and 8.89 per 1,000 of the living. The average annual number of deaths and the rate per 1,000 in each of these divisions since 1880, in five-year periods, are given in the following table:—

an a	Metro	polis.	Remainder of	of the State.	New South Wales.		
Period.	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	15:46	
1885-89	6,181	19.47	8,323	12:18	14,504	14 49	
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	10.29	10,841	10∙30	18,153	10.41	
1915-19	8,727	10.89	11,805	10.49	20,532	10.66	
1920	9,429	10.66	11,532	9.75	20,961	10-14	
1921	8,693	9.52	11,341	9.50	20,034	9.51	
1922	8,425	8.95	10,753	S-89	19,178	8-92	

VITAL STATISTICS.

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 very little higher than in the latter, whereas thirty years ago it was 50 per cent. greater. The improvement dates from the quinquenaium beginning with the year 1890, and is coincident with the installation of the modern system of severage and the enforcement of the provisions of the Dairies Supervision Act of 1886. The marked decline in the rates for each division and for the State as a whole is evident from the fact that the metropolitan rate for the period 1885-9 was 19-5 per 1,000, and for the year 1922 it was 90, or a difference of over 50 per cent.; for the same periods the rates for the remainder of the State were respectively 12:2 and 8.9, or a difference of nearly 30 per cent.; and for the whole State, 14-5 and 8.9, or a difference of 40 per cent.

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.

Deaths of Children under 1 Year.

During the year 1922 the children who died before completing the first year of life numbered 2,980, equivalent to a rate of 540 per 1,000 births. This rate is the lowest on record, and 16 per cent. less than the average for the previous five years.

To the total in 1922 the metropolis contributed 1,279 deaths, or 579 per 1,000 births, and the remainder of the State 1,701, or 51 4 per 1,000 births.

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 kirths, in quinquennial periods sincethe year 1880:--

· · · · ·	Metr	opolis.	Remained	er of State.	New South Wales		
Period.	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	2,250	95.2	4,424	120.0	
1890-94	1,908	138-8	2,471	95-8	4.379	1107	
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	1.658	74.2	2,112	66-8	3,770	69.8	
1921	1,414	63-1	2.022	62.8	3.436	62.9	
1922	1,279	57.9	1,701	51.4	2,980	54.0	

The remarkable improvement in the infantile mortality rate in the metropolis is due in a large degree to the measures adopted to combat preventable disease by more rigid health laws and by education. The Infectious Disease Supervision Act became law in 1881, and in 1896 the Public Health Act was passed, while in 1902 all Acts relating to Public Health were consolidated in the Public Health Act. A scheme for the preservation of infant health was formulated by the Sydney Municipal Council in 1908, 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.

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Luring 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 in all causes in which care and knowledge could have effect a decrease was experienced. Thus the mortality from diarrhea 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 through the establishment in Sydney and other large centres of baby clinics, and through the formation of such public bodies as the Royal Society for the Welfare of Mothers and Babies. Particulars of these institutions will be found in Part "Social Condition" of this Year Book.

The decline in infantile mortality has persisted, especially in diarrheal diseases, as will be seen from the following table, which gives the mortality rate per 1,000 births in each year since 1900 from diarrheal diseases, and from all causes less those diseases:—

		under 1 year r 1,000 Birth		•	Deaths under 1 year of age per 1,000 Births.					
Year.	Diarrhœal Diseases.	All other Diseases.	All causes.	Year.	Diarrhœal Diseases.	All other Diseases.	All causes			
1900	29.37	73.90	103.27	1912	22.37	48.93	71.30			
1901	27.46	76.28	103.74	1913	23.27	55.07	78.34			
1902	33.09	76.65	109.74	1914	19.88	49.84	69.72			
1903	36.90	73.45	110.35	1915	17.28	50.85	68·13			
1904	21.31	61.11	82.42	1916	15 02	52.82	67.84			
1905	18.76	61.79	80.55	1917	10.79	46.69	57.48			
1906	21.39	53.14	74.53	1918	9.25	49.92	59.17			
1907	21.23	67.41	88.61	1919	17.45	54.82	72.27			
1908	21.89	53.90	75.79	1920	17.42	52.43	69.85			
1909	21.86	52.42	74.28	1921	14.02	45.87	62.89			
1910	20.54	54.07	74.61	1922	10.27	43.70	53.97			
1911	16.82	52.67	69.49							

In 1922 diarrheal diseases caused 19.03 per cent. of the deaths of infants under 1 year of age, whereas in 1903 the proportion was 33.4 per cent.

It is worthy of note that the experience of all the other States of the Commonwealth was similar to that of New South Wales, inasmuch as the reduction in infantile mortality rates which occurred in 1904 has been maintained through a large falling-off in the number of deaths from diarrhœal diseases.

	Ma	ales.	Fen	nales.
Period.	Deaths under 1.	Rate per 1,000 Births.	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	2,153	77.7	1,617	61.6
1921	1,942	69.4	1,494	56.1
1922	1,749	62.0	1,231	45.6

The death-rate of female infants has improved more than the male rate, having declined from 1125 per 1,000 births in 1880-4 to 456 in 1922, or by 594 per cent. while the male rate has decreased from 1279 per 1,000 births to 620, or by 516 per cent.

During the period reviewed, the excess of the male infantile death rates fluctuated from 16.4 per 1,000 births in the quinquennium 1890-94 to a minimum of 13.3 in 1921. The excess in 1922 was equal to the maximum of 16.4 per 1,000 births.

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 two-fifths, and within three months, three-fifths. Approximately, one child in every 45 born dies within a week of birth. The following statement shows for 1922, in comparison with the average of the preceding quinquennium, the deaths per 1,000 births during each of the first four weeks after birth, and then for each successive month. The experience in the metropolis is distinguished from that in the remainder of the State, and the sexes are taken together.

		•			Metro	polis.	Remain Sta		New S Wal	
	Age	at Dea	th.							
					1917-21.	1922.	1917–21.	1922.	1917-21.	1922
					I	·			<u> </u>	
Un	der 1 w	eek			23.7	23.4	24.6	21.3	24.3	22.2
1	week	•••	•••	·	3.7	4.1	3.9	$3 \cdot 2$	3.8	3 (
2	weeks				2.3	2.5	2.5	$2 \cdot 2$	2.4	2
3		••••	•••	•••	1.9	1.8	1.7	1.2	1.8	1.
	Total u	ınder	1 montl	ı	31.6	31.9	32.7	28.4	32.3	29.8
1	month				58	4.7	5.2	4.3	5.5	4.
2	months		•••	•••	4.6	3.6	3.6	2.7	4.0	3.
3	,,		·	•••	4.6	3.1	2.9	2.0	3.6	$2\cdot$
4	**	•••		•••	4.0	2.1	2.7	2.0	3.2	2.0
5	. ,,			•••	3.2	2.3	2.5	2.1	2.8	2 2
6	,,	•••			3.0	2.1	2.4	$2\cdot 2$	2.6	2.)
7	33				2.3	1.9	$2\cdot 2$	1.6	$2\cdot 2$	1.
8	,,			•••	2.3	1.6	2.0	1.6	2.1	1.
9				•••	2.1	1.8	2.0	1.6	2.0	1.7
10	• • • •				2.0	1.3	1.8	1.3	1.9	1.
11	* **		•••	•••	$2\cdot 2$	1.2	2.0	1.6	2.1	1.6
	Total	under	1 year	•••	67.7	57.9	62.0	51.4	64 3	54 (

In the first week of life the mortality is approximately six times as great as in the second, and generally more than ten times as great as in the third. In the second month the rate of mortality falls rapidly, and thereafter gradually. The rate of infantile mortality is higher in the metropolis than in the remainder of the State. In 1922 the rate per 1,000 births was 579 in the metropolis, and 514 in the remainder of the State. During the previous quinquennial period the metropolitan rate was 92 per cent. higher than that for the remainder of the State.

A further dissection of the experience in regard to infantile mortality since 1901, discloses the striking fact that relatively deaths under 1 week

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actually increased, until in 1919 the rate was 28 per cent. higher than in the first year under review. The following table shows at various ages in the first twelve months the number of deaths per 1,000 births. In 1922 the death-rates of children under 1 week show an increase of 8 per cent. on those for 1901, while the rates of all children under 12 months decreased by 48 per cent. At ages over 1 week the mortality rate shows a decrease of 62 per cent.

Year.	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	28-5	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	I10-4
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	$21^{\circ}8$	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	9.2	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	21-5	88	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	76	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	11.2	15.2	69.8
1921	23.4	7.4	10.5	41.0	9·6	12.3	62.9
1922	22.2	7.6	7.5	37-3	6.7	10 0	54.0

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.

State.	Year.	Rate.	Country.	Year.	Rate.
New Zealand South Anstralia Queensland Commonwealth Victoria New South Wales Western Anstralia Tasmania	1922 ,, ,, ,, ,, ,, ,, ,, ,,	41.9 47.5 50.4 52.7 53.4 54.0 55.6 55.7	Norway Sweden Irish Free State Netherlands United Kingdom Switzerland *United States Canada Denmark Germany Prussia Japan Japan Jamaica	1921 1922 1922 1921 , 1920 ,	63 65 68 76 83 84 86 88 91 131 142 142 142 142 142 143 143 143 143 143 143 143 143 143 143

* Registration Area.

Of the rates shown in the foregoing table, that for New Zealand is the lowest; but the rates for Australasia generally are greatly superior to those prevailing in most other countries for which records are available.

TITAL STATISTICS.

Deaths of Children under 5 years.

As among children under 1 year of age, so there has been a great improvement in the death-rate of children under 5 years of age.

The following table shows the mortality in each division, in periods of five years since 1890, of children under 5 years of age:--

	Metro	polis.	Remaind	ler of State.	New Sou	th Wales.
Period.	Average Annual Deaths.	Rate per 1,000 Living.	Average Annual Deaths.	Rate per 1,000 Living.	Average Annual 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	8,487	31.0	5,693	34-2
190004	1,846	35-2	3,210	29.6	5,036	31.4
1905-09	1,612	27:6	2,723	23.4	4,335	24-8
1910-14	1,895	26 1	2,986	21.5	4,881.	23:1
•1915-19	1,905	.21.5	2,771	17.8	4,676	1.1
. 1920	2,341	26:5	2;981	19/8	5,322	22:3
1921	1,886	21:0	2,790	18:5	4,676	19·5 ·
1922	1.609	17:6	2,286	15.0	3,895	16.0

At every period shown in the table the metropolitan rate was higher than that of the remainder of the State, being in some cases over 50, and never below 7 per cent. in excess until 1917, when the excess was only 15 per cent. But the improvement in the metropolis has been greater than in the remainder of the State, the rate having decreased since 1890 by 64 per cent. in the former, and in the latter by 53 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 1921, compared with that of a quarter of a century ago, represents a saving of 31 lives in every 1,000 children under 5 years of age in the metropolis, and of 17 in the remainder of the State.

Causes of Infantile Mortality.

The mortality of infants in New South Wales has been exceptionally low since 1904. An upward movement in 1907, when the rate was higher than in any of the three preceding years, was followed by a decline in the following year, which continued until 1911. In 1912 there was a slight increase as compared with the year before, but the rate was considerably lower than the average for the preceding quinquennium, notwithstanding the fact that it was a period of low mortality. In 1913 the rate was 78-3, and the highest since 1907. From 1914 the rate steadily declined, but in 1919, on account of an epidemic of influenza, an increase was experienced, the rate being 72-3. The rate for 1921 was 62-9 per 1,000, and that for 1922 was 54-0, the lowest yet experienced being six per cent. below the most favourable rate previously recorded, viz., 57-5, in 1917.

Children are more susceptible to the attacks of disease in the earliest years of life than later, and 700 children out of every 10,000 born in New South Wales die before attaining the age of 5 years. Since the rate for preventable diseases are highest, there is no doubt that many children succumb through parental ignorance of the proper food or treatment required. The following statement shows the principal causes of death among children and the rates under 1 per 1,000 births and under 5 per 1,000 living in 1922 and in the five years 1917-21, distinguishing deaths in the metropolis from those in the remainder of the State:—

· · · ·	De	eaths u	inder 1	per 1,	000 Bir	ths.	De	aths u	nder 5	per 1,0	00 Livi	ng.	
Cause of Death.	Metro	polis.				New South Wales.		Metropolis.		tate.		South ales.	
	1917- 1921.	1922.	1917- 1921.	1922.	1917- 1921.	1922.	1917– 1921,	1922.	1917- 1921.	1922.	1917- 1921.	1922.	
Measles	0.3		0.3		0.3		0.4		0.1		0.5		
Scarlet Fever								••		· .	· · ·		
Whooping-cough	2.0	1.1	2.7	1.2	2.4	1.1	0.8	0.4	0.9	0.3	0.8	0.4	
Diphtheria and Croup	0.2	0.4	0.3	0.4	0.4	04	0.8	0.2	0.7	0.6	0.7	0.6	
Influenz	0.6		0.6	0.5	0.6	0.5	0.4		03	0.1	0.3	0.1	
Epidemic Cerebro-Spinal	0 •2	0·1	0.1	0.1	0.1	0.1	0'1		0.1	0.1	0:1		
Menginitis. Tuberculosis—Meninges	0.3	0.4	0.1	0.5	0.5	6.3	0.3	0.3	01	0.1	0.2	0.1	
" Abdominal			0.1	0.1	0.1								
" Other Organs	0.1	0.1	0.1		0.1	0.1	0.1		0.1		01		
Syphilis	0.2	0.2	0.2	0.5	0.2	0.3	0.5	0.1		0.1	0.1	0.1	
Meningitis	0.5	0.2	0.2	0.8	0.2	0.7	0.5	0.3	0.5	0.3	0.2	0.3	
Convulsions	11	0.7	2.0	1.4	16	1.1	0.3	0.2	0.5	0.4	0.5	0.3	
Bronchitis	1.0	1.0	1.8	1.2	1.2	1.1	0.3	0.3	0.2	0.4	0.4	0.3	
Broncho-pneumonia	3.8	4.3	2.8	2.8	3.2	3.4	1.5	1.5	1.0	1.0	1.1	1.2	
Pneumonia	1.2	0.8	1.6	2.0	(-5	1.2	0.7	0.7	0.6	0.5	0.7	0.6	
Diarrhœa and Enteritis	16.8	11.6	11.8	9.4	13.8	10.3	5.3	3.4	3.7	2.7	4•3	3.0	
Congenital Malformations	4 ·5	5-2	3.4	3∙3	3.8	4.0	1.1	1.3	0.8	0.8	0.9	1.0	
Infantile Debility	6.9	5.3	7.1	5.6	7.1	5.5	1.6	1.3	1.2	1.2	1.5	1.3	
Premature Birth	18.3	16.4	17.0	13.6	17.5	14.8	4.3	4.0	4.0	3.0	4.1	3.4	
All Others	8.6	9.5	9.5	8.9	9-1	9.1	3.1	3.1	2.6	3.4	2.8	3.3	
Total	67.7	57.9	62.0	51.4	64.3	54.0	21.4	17.6	17.7	15.0	19.1	16.0	

The high mortality of infants is 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, the deaths from these causes in 1922 were equal to 24.3 per 1,000 births, or 45 per cent. of the total deaths of children under 1. A table already given shows that the mortality during the first month of life is about half the total mortality during the whole of the first year, and 68 per cent. of this half proportion of the total mortality of the year was due in 1922 to deaths from congenital debility or defects.

Among children under 1 year, diarrhœa and enteritis were responsible for 103 deaths per 1,000 births, and infectious diseases for 18, of which whooping-cough caused 11. Respiratory diseases are especially fatal to children; bronchitis in 1922 caused 11, broncho-pneumonia 34, and pneumonia 15 deaths per 1,000 births. The death-rate for these respiratory diseases was slightly below the rate for the previous quinquennium. The death-rate from convulsions was 11, from tuberculous diseases 04, and meningitis (not tuberculous) 07 per 1,000 births.

The principal causes of death among children under 5 years of age are the same as among children under 1, namely, diarrhea and enteritis, premature birth, infantile debility, broncho-pneumonia, influenza, malformations, pneumonia, convulsions, whooping-cough, diphtheria, bronchitis, meningitis, tuberculosis, syphilis, measles, and scarlet fever.

VITAL STATISTICS.

A comparison has been made of the causes of death of infants in the different divisions of the State. The variation shown in the mortality-rate is from 48.4 in the Northern Tableland to 1010 in the Western Division. 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 five years 1918-22.

Cause of Death.	Metropolis.	Balance of Cum- berland.	North Coast.	Hunter and Mauning.	South Coast.	Northern Table- land.	Central Table- land.	Southern Table- land.	North-Western Slope,	Central-Western Slope.	South-Western Slope.	North-Central Plain.	Central Plain.	Riverina.	Western Division.	'fotal Country.	Whole State.
Epidemic Diseases Tubercular Diseases Venereal Diseases Meningitis Convulsions Bronchitis Pneumonia and Pleurisy Gastritis and Diarrhea Hernia Congenital Malfrmat ns Congenital n	16·8 6 4·7 24·8	$ \begin{array}{r} 4.1 \\ .4 \\ .5 \\ .3 \\ 1.7 \\ 1.5 \\ 4.5 \\ 9.3 \\ 3.1 \\ 22.2 \\ 4.4 \\ .4 \\ 2.1 \\ \end{array} $	2·3 •4 •3 •6 1·5 •7 3·7 6·5 •4 4·0 17·9 6·7 •6 3·1	$\begin{array}{c} 3.5 \\ \cdot 2 \\ \cdot 4 \\ \cdot 7 \\ 1.8 \\ 1.9 \\ 4.3 \\ 16.3 \\ \cdot 4 \\ 2.9 \\ 26.7 \\ 4.5 \\ \cdot 7 \\ 2.2 \end{array}$	3.4 .2 .1 .7 2.3 1.5 3.7 8.0 .9 3.0 23.9 6.3 .3 3.0	$ \begin{array}{r} 3 \cdot 3 \\ \cdot 4 \\ \cdot 3 \\ 1 \cdot 6 \\ 1 \cdot 9 \\ 3 \cdot 9 \\ 8 \cdot 4 \\ \cdot 5 \\ 17 \cdot 5 \\ 4 \cdot 2 \\ \cdot 1 \\ 2 \cdot 5 \\ \end{array} $	$ \begin{array}{c} 4.6\\ .5\\ .3\\ .6\\ 2.7\\ 2.3\\ 4.8\\ 14.0\\ .5\\ 4.6\\ 25.8\\ 5.5\\ .7\\ 2.9\\ \end{array} $	$5 \cdot 3 \\ \cdot 2 \\ \cdot 3 \\ 1 \cdot 1 \\ 3 \cdot 1 \\ 4 \cdot 4 \\ 16 \cdot 1 \\ \cdot 9 \\ 2 \cdot 0 \\ 27 \cdot 1 \\ 8 \cdot 2 \\ \cdot 5 \\ 3 \cdot 6 \\ \end{vmatrix}$	$ \begin{array}{c} 3 \cdot 2 \\ \cdot 3 \\ \cdot 2 \\ \cdot 6 \\ 2 \cdot 0 \\ 1 \cdot 9 \\ 4 \cdot 6 \\ 9 \cdot 9 \\ 1 \cdot 3 \\ 4 \cdot 6 \\ 24 \cdot 2 \\ 5 \cdot 1 \\ \cdot 4 \\ 2 \cdot 3 \\ \end{array} $	$ \begin{array}{c} 2 \cdot 9 \\ \cdot 2 \\ \cdot 3 \\ \cdot 5 \\ 2 \cdot 4 \\ 2 \cdot 1 \\ 1 \cdot 0 \\ 2 \cdot 1 \\ 1 \cdot 0 \\ 2 \cdot 1 \\ 2 \cdot 7 \\ 5 \cdot 7 \\ \cdot 9 \\ 3 \cdot 5 \\ \end{array} $	$ \begin{array}{c} 3 \cdot 9 \\ \cdot 1 \\ \cdot 7 \\ 1 \cdot 7 \\ 1 \cdot 4 \\ 3 \cdot 0 \\ 8 \cdot 6 \\ \cdot 2 \\ 3 \cdot 5 \\ 20 \cdot 4 \\ 4 \cdot 9 \\ \cdot 6 \\ 3 \cdot 1 \\ \end{array} $	$ \begin{array}{c} 2 \cdot 6 \\ \cdot 5 \\ \cdot 3 \\ 1 \cdot 1 \\ 1 \cdot 3 \\ 3 \cdot 7 \\ 9 \cdot 4 \\ 2 \cdot 1 \\ 2 5 \cdot 3 \\ 6 \cdot 5 \\ 1 \cdot 0 \\ 1 \cdot 8 \\ \end{array} $	1.4 .3 3.0 1.7 5.7 12.5 1.0 2.7 26.7 5.4 1.7 3.4	$ \begin{array}{c} 3.5 \\ .9 \\ .2 \\ .4 \\ 1.1 \\ 1.2 \\ 5.8 \\ .9 \\ 3.1 \\ 16.4 \\ 5.5 \\ 1.2 \\ 3.7 \\ 1.2 \\ 3.7 \\ \end{array} $	7.1 $.5$ $.3$ 2.9 1.6 4.0 37.3 1.4 3.6 32.2 4.0 1.6 3.9	3.7 .3 .6 1.9 1.7 4.1 12.4 .6 3.3 23.3 5.3 5.3 .7 2.8	3.8 .4 .5 .5 1.5 1.4 4.7 14.1 .6 3.9 23.9 5.0 .6 2.6
Total	67•2	55·2	48-7	66-5	57.3	48-4	69-8	73-3	60.6	58 · 0	52.2	57.0	65.5	58•4	101.0	61.0	63*5

Medical opinion is that a favourable summer rainfall reduces the liability to infantile diarrhea, 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 variableness of the seasons intrude irregular factors affecting infantile mortality. The highest rate is that of the Western Division, where the greater part of the population lives in the mining district of Broken Hill and the remainder is scattered over extensive plains which receive a low rainfall. The most favourable rates are those of the Northern Tableland and the North Coast, where the population is engaged largely in rural pursuits, and 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 rate for the Southern Tableland appears exceptional, being due to abnormal mortality from epidemic diseases, bronchitis, congenital debility, and prematurity.

Deaths of Illegitimate Children.

During the first year of life the death rate of illegitimate children is nearly twice as great as that for legitimates, partly owing to premature birth, infantile debility and inherited diseases, but to an equally great extent to causes arising from neglect.

				Death	e per 1,000 Bir	ths.
	Age at	Death.		 Legitimate.	Hlegitimate.	Potal.
Under 1 w	eek			 21.4	37.4	22.2
1 week			***	 3.5	5.2	3.6
2 weeks				 23	3.0	2.3
3 ,,				 1.6	3.7	1.7
	tal und	ter 1 m	onth	 28.8	49-3	29.8
1 month	••••			 4.0	12.7	4.4
2 months				 27	10.0	3.1
3 ,,				 2.4	4.1	2.5
4 ,,				 1.9.	5:2	2.0
5 ,,				 2.1	3.7	$\overline{2}\cdot\overline{2}$
6 ,,				 2.1	3.6	2.1
7 ,,				1.6	3.0	1.7
8 ,,				 1.5	3.0	
9 ,,				 1.7	1.8	1.7
10 ,,				 1.3	1.4	1·3
n ",		•••		 1.2	2.6	1.6
То	tal und	ler 1 y	Pør	 51.6	100.7	54.0

How these combined causes operate to produce a comparatively high death rate among illegitimate children is shown in the following tables which relate to the year 1922 :--

The largest proportional excess is not immediately after birth, but about three months later. Taking the experience of 1922 as a guide the mortality of illegitimate children exceeds that of legitimates by about 75 per cent. during the first week of life. In the first month the excess is 71.per cent., in the second over 200 per cent., and in the third 270 per cent., while an average of the rates experienced from the fourth to the ninth month shows the difference to be nearly 100 per cent. At the ninth month the excess drops quickly, and after the first year of life it practically disappears.

The following table shows the causes of death of illegitimate as compared with those of legitimate children. The figures represent the number of deaths of children under 1 year of age per 1,000 births in New South Wales during the year 1922:—

	Deaths u	nder 1 per 1,00) Births.
Cause of Death.	Legitimate.	Illegitimate.	Total.
Measles	0.02	···· /	0.02
Scarlet Fever			
Whooping-cough	1.14	0.74	1.12
Diphtheria and Croup	0.36	1 I I	0*40
Influenza	0.12		0.16
Epidemic Cerebro Spinal Men-	0.10	•••	0.09
ingitis. Taberculosis—Meninges	0.28		0.27
Abdominal	0.04		0.04
	0.04		0.03
Other Organs		2.22	
Syphilis	0.21	,	0.31
Meningitis	0.67	0:37	0.65
Convulsions	1.07	2.22	1.12
Bronchitis	1.09	1.11	1.08
Broncho-pneumonia	3:31	5:93	3.44
Pneumonia	1:50	2.22	1.54
Diarrhœa and Enteritis	9.56	24:08	10.27
Congenital Malformations	4.00	4.82	4.04
Infantile Debility	5.20	11-18	5.21
Promature Birth	14.26	24.07	14.74
All Others	8.53	20.37	9.11
Total	51.57	100.74	53.97

Diseases due to the condition of parents may be considered to include premature birth, infantile debility, congenital malformation, and syphilis. In the case of legitimate children these caused 24 29 deaths per 1,000 births, while in the case of illegitimate children the rate was 42 59. The respective rates of death from other diseases considered preventable by the exercise of proper care were diarrhea and entertitis, 9 56, as compared with 24 08; respiratory diseases, 5 90, as compared with 9 26; and epidemic diseases 1 69, as compared with 1 85.

CAUSES OF DEATH.

The system of classification adopted in this most important 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.

In the following table will be found particulars of the number of deaths due to the principal causes during the year 1922 and the previous quinquennium, due allowance having been made for the increase in population.—

1.1011			<u> </u>					
Causes of Death.	Number, 1922.	Average Number, 1917–21.	Increase (+) or Decrease(-) in 1922.	Causes of Death.	Number, 1922.	Average Number, 1917–21.	Increase (+)	Decretse(-) in 1922.
			per cent.	Other Diseases of	1	1	per	cent.
Typhoid Fever	100	131	-24	the Circulatory				~
N 2 1	16	73	- 78	System	80	172		53
A	10	21	- 52	Bronchitis	390	606	-	:36
Scarlet Fever Whooping-cough	92	229	- 60	Pneumonia	1,355	1,386	-	2
	211	256	- 18	Other Diseases of			1	
Diphtheria Influenza	222	*1,610	- 86	the Respiratory		ļ	{	
	9			System	242	304	-	20
Plague	27		+8	Diseases of the			ſ	
Erysipelas		13	- 62	Stomach	146	163	- 1	10
Infantile Paralysis Lethargic En-		10	02	Diarrhœa and En-			1	· -
	22	18	+ 22	teritis (under 2				8
cephalitis	22	10	T 24	vears)	727	1,019		29
Epedemic Cerebro-				Diarrhea and En-		1.1	1.	
spinal Menin-	ອກ	=0	- 59	teritis (2 years				
gitis	23	56	09	and over)	001	389	-	42
Other Epidemic	34	46	- 26	Appendicitis	177	162	+	9
Diseases			- 10	Hernia, Intestinal		1.1.1.1.1		
Phthisis	1,080	1,196	- 10	Obstruction		200	+	5
Tubercular			- 18	Cirrhosis of the				
Meningitis	59	72	18	Liver	129	130	-	1
Other Tubercular		100	- 22	Other Diseases of				
Diseases	80	102		the Digestive		1.1		
Cancer	1,871	1,798	+ 4	System	000	263	+	10
Diabetes	283	234	+ 21	Bright's Disease,				11
Leucæmia, Anæ-				Acuteand Chronic	1.007	1,004	1.	
mia, Chlorosis	175	207	- 15	Other Genito-Urin	1,007			
Other General Dis-				ary Diseases		334	+	6
eases	422	443	- 5	Puerperal Septice	_	- Cont	1.	
Meningitis	150	128	+ 17	mia	88	-99	_	11
Cerebral Hæmorr-				Other Puerperal		00	1	• •
hage	653	694	- 5	Diseases	191	216		12
Insanity	141	175	- 19	Malformations		234	+	3
Convulsions of			1	Manormations	304	393	1 .	23
Infants	75	120	- 37	Congenital Debility	0.14	977		17
Other Diseases of				Prematurity	0.14	34.1	-	. 1 .4
the Nervous Sys-				Other Develop	303	265	+	14
tem •	534	515	+ 4	mental Diseases	1 000	1,262		20
Diseases of the				Senility	6010	1,202		- 9
Heart	2,501	2,485	+ 1	Suicide	000	1,006	-	7
Diseases of the		l'		Accident		479		5
Arteries, Ath-				All other Causes	1		-	
eroma, etc	494	410	+ 20	Total	19,178	22,852		14

*Omitting the year 1919, the decrease would be 21 per cent.

The number of deaths in 1922 was 3,174, or 14 per cent. less than the average of the previous five years. Among the more important causes of death, diabetes, meningitis, developmental diseases, diseases of the digestive system and of the arteries showed marked increases, and cancer, appendicitis, hernia, &c., diseases of the nervous system and of the heart, malformations, and genito-urinary diseases slight increases. Practically all other causes were below the average, epidemic diseases remarkably so. Generally speaking, deaths from influenza, cancer, heart disease, and Bright's disease are increasing, whilst those from typhoid, scarlet fever, diphtheria, tuberculosis, bronchitis, and diarrhea and enteritis are decreasing.

Statistics of the occurrence of communicable diseases among school children since 1913 show that epidemics of such diseases as measles, whoopingcough, 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 now collected quarterly, with the object of facilitating steps towards preventive and remedial measures.

Typhoid Fever.

The number of deaths from typhoid fever during the year 1922 was 100, equivalent to 0.47 per 10,000 living. The number was 24 per cent. less than the average for the preceding five years. This is essentially 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 during the past three decades.

	Ma	les.	Fem	ales.	То	tal.
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.
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	76	0.75	53	0.54	129	0.64
1920	81	0.77	51	0.20	132	0.64
1921	76	0.71	53	0.51	129	0.61
1922	63	0.28	37	0 35	100	0.47

The number of deaths from typhoid fever, and the equivalent rates per 10,000 of population since 1884, are stated below.

The decrease 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 improvement as from 1903, and have dropped regularly until that for 1922 was only 9.2 per cent. of the rate for the period 1884-88. The rate is considerably higher than that experienced in England and Wales, where during 1922 only 12 persons died per million living.

The following statement shows the rate for the metropolis and for the remainder of the State during the last twenty-nine years. Owing to a superior system of sewage, and to the greater attention given to sanitary inspection and garbage disposal, the rate of the metropolis has almost invariably been lower than that of the remainder of the State, though it was higher during 1919, and only slightly lower in 1922.

	Metro	polis.	Remainder of State.			
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.		
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	61	0.72	68	0.59		
1920	48	0.54	84	0.71		
1921	49	0:54	80	0.67		
1922	43	0.46	57	0.47		

Most deaths from typhoid occur during the summer and autumn. In 1922 there were 40 deaths during the summer months of December, January, and February, and 27 during the autumn months of March, April, and May.

Smallpox.

During the last ten years there have been only 5 deaths from smallpox in New South Wales, the last being in the year 1915.

Vaccination is not compulsory in this State, and the precaution is rarely adopted unless an epidemic threatens.

During the year 1913 about 425,000 persons voluntarily submitted themselves to vaccination.

Measles.

During the year 1922 the deaths due to measles amounted to 16, a number equal to a rate of 0.07 per 10,000 living. The rate for males was 0.05 and for females 0.09. The following statement shows the deaths from this cause, and the rate per 10,000 living, for each sex, arranged in quinquennial periods since 1884:—

	Ma	les.	Fer	nales.	Total.		
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	
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	0.52	
1904-08	82	0.21	107	0.30	189	0.25	
1909-13	309	0.20	267	0.66	576	0.68	
1914-18	301	0.62	221	0.48	522	0.55	
1919	4	0.04	4	0.01	8	0.04	
1920	95	0.90	94	0.93	189	0.91	
1921	21	0.20	18	0.17	39	0.19	
1922	6	0.02	10	0.09	16	0.02	
		1	.				

The rate in 1922 shows a decrease of 78 per cent. as compared with that of the preceding quinquennium. 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. Of the number first cited, 233 were deaths of children under 5 years of age, and 54 were those of children under 1 year of age. During the year 1922 deaths from measles of children under 1 year of age numbered 1, and 11 of children under 5 years of age.

According to returns obtained by the Department of Education, there were further epidemics of measles among school children in 1918 and 1920, and although these epidemics were more widespread than the outbreak of 1915, the mortality recorded was very much less. It may be assumed that the occurrence of epidemic diseases among school children are coincident with their occurrence among children of all ages.

Scarlet Fever.

In 1922 the number of deaths from this disease was 10, equivalent to a rate of 0.05 per 1,000 of the population. The number of deaths in the metropolis was 4, and in the remainder of the State 6—showing respectively rates of 0.04 and 0.05 per 10,000. The rate for 1922 of deaths from this cause was 52 per cent. below the rate for the preceding quinquennium. Since 1884 the deaths from scarlet fever and the rates for each sex have been as follow:—

	M	ales.	Fer	nales.	Total.		
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	
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	0.32	273	0.29	
1919	7	0.07	10	0.10	17	0.08	
1920	14	0.13	10	0.10	24	0.12	
1921	3	0.03	5	0.02	8	0.04	
1922	5	0.05	5	0.05	10	0.02	

Like measles, scarlet fever is an epidemic disease which mainly affects children, the rate generally being somewhat higher for females than for males. During 1922, 3 of the 10 deaths were of children under 10 years of age, and all of these were males. 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 years 1893 and 1894, when it was very heavy, the rate per 10,000 inhabitants having ranged from 0.63 in 1898 to 0.04 in 1921.

During the past eight years scarlet fever was epidemic among school children only in 1915 and 1916, in which years 205 deaths were recorded in the State from this disease.

Whooping-cough.

Whooping-cough is another disease which mainly affects children, and to which, like scarlet fever, females are more susceptible than males. During the year 1922 the deaths from this cause numbered 92. The deaths included 43 males and 49 females. Of the total number, 62 were infants under 1 year, and of the remainder all but 1 were under 5 years of age. The rate

	Ma	iles.	Føn	uales.	Total.		
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	
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	60	0.20	73	0.74	133	0.66	
1920	167	1.58	202	2:00	369	1.78	
1921	126	1.17	131	1.27	257	1.22	
1922	43	0.39	49	0-46	92	0.43	

was 0.43 per 10,000 living, or 60 per cent. below the average of the preceding quinquennium. The deaths and rates for each sex since 1884 are shown below.

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 page 200 showing the seasonal prevalence of diseases indicates that whooping-cough is most fatal during the four months October to January.

Epidemics of whooping-cough among school children are only second in magnitude to those of measles. The records show that, during the past ten years, this disease has affected large numbers of school children every year and that virulent epidemics occurred in 1913, 1920, and 1921. The total numbers of deaths from whooping-cough in these years was 344, 369, and 257 respectively.

Diphtheria and Croup.

Diphtheria and croup, under which heading membranous laryngitis is included, caused 211 deaths in 1922. The rate was 0.98 per 10,000 living; or 18 per cent. below the rate for the preceding quinquennium. Deaths from these diseases in the Metrolopitan area numberd 80, and those in the remainder of the State 131, the respective corresponding rates per 10,000 living in each division being 0.85 and 1.08. The following table shows the number of deaths and the rates in quinquennial periods since 1884;---

	Ma	les.	Fena	les.	Total.		
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,900.	Deaths.	Rate per 10,000.	
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	0.86	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	66	0.65	69	0.70	135	0.67	
1920	138	1.31	126	1.25	264	1.28	
1921	157	1.46	149	1.44	306	1.45	
1922	ni i	1.01	100	0.95	211	0.98	

During the past forty years the rate of mortality from these diseases has decreased very considerably. 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 nine 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 decimal period 1913-1922 shows the disease to be most fatal during the four months of April to July. Ninety-two per cent. of the persons who died from diphtheria during 1922 were under 10, and about 72 per cent. were under 5 years of age.

Influenza.

During 1922 there were 222 deaths due to influenza. Prior to 1891 the average annual number of deaths was 44, but during that year 988 deaths occurred. From 1892 to 1917 the average number of deaths was 198, but in 1918 a mild outbreak resulted in 372 deaths. This was completely overshadowed by the disastrous epidemic of 1919, when 6,387 persons died from the disease, and 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:—

		Deaths.	Annual Rate	
Period.	Male.	Female.	Total.	per 10,000.
1875-1890	388	322	710	0.23
1891	549	439	988	8.62
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

The year 1921 was marked by an unusual outbreak of influenza during the months of July, August, and September, from which the mortality was as heavy as that from the outbreak of 1918. This mild epidemic presented unusual characteristics. Prior to 1919 influenza was essentially a disease fatal to young children and aged persons, 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). The outbreak of 1921 blended both these characteristics, for while the rate of mortality was especially heavy among young children and persons of advanced age, the rates of mortality among persons over 25 years of age were much heavier than in the period of 1891–1918. In 1922 the death-rate from influenza was considerably below the average of the previous 30 years, and the mortality tended to be distributed among age groups in a way similar to that existing before 1919.

These facts are clear from the above table and from the following comparison, which shows the number of deaths from influenza per 10,000 inhabitants of each sex in age groups since 1891:—

Group ars.	1		Males.	,			Females.			Total.					
Age Gro Years.	1891- 1900.	1901- 1910.	1911- 1918.	1919.	1921.	1891- 1900.	1901- 1910.	1911- 1918.	1919.	1921.	1891- 1900.	1901- 1910.	1911- 1918.	1919.	1921.
0-4	3.82	1.56	•96	12.71	1.80	3.20	1.29	-83	12.22	1.18	3.66	1.58	-90	12.17	1.50
5-9	•36	•14	.16	2.44	-34	•42	-25	.08	4 38	1.52	•39	-20	•12	3.39	•43
10-14	•21	.19	.03	5 32	.19	•34	-23	•10	3.90	•69	-28	-21	•06	4.63	•44
15-19	•64	•40	.29	13.84	•34	•66	•36	•10	11.31	•69	•65	*38	•20	12.58	•51
20-24	•90	•42	•29	26.81	.12	•36	-37	•22	24.72	•34	-78	•40	-25	30.19	•23
25 - 34	1.13	•39	•24	77.42	1.05	1.29	•52	-25	43.57	1.39	1.21	•46	-24	59.96	1.22
35-44	1.83	-96	•50	66.61	2.17	2.04	•73	•43	36.30	2.37	1.92	*86	•47	51.93	2.27
45-54	3.37	1.50	·85	52.40	3.16	3.17	1.55	•60	34.32	2.13	3.29	1.52	•74	43.99	2.67
55-64	7.86	3.11	1.65	41.28	4:21	8.05	3 54	1.52	42.10	3 45	7-94	3.29	1.60	41.65	3.86
65-74	18.57	9.25	4.91	43.46	8.01	22.91	9.80	5'43	54.75	9.89	20.36	9.49	5.12	48.64	8.88
75 &	53.21	29 67	18.66	63.47	21 97	61.43	29.56	19.43	56.14	23.18	56.86	29.62	19.02	59.91	22.57
over.					I										
All	2.69	1.38	-87	37 94	1.90	2.64	1.30	•76	25.74	1.89	2.65	1.34	-82	31 9 3	1.89
aves.				·	·					l		I	ļ		

VITAL STATISTICS.

Tuberculous Diseases.

Of the total deaths in New South Wales during 1922 the number ascribed to the several classified forms of tuberculous disease was 1,219, or 6.36 per cent. of the actual mortality for the State, and equal to 5.67 per 10,000 living—a rate of 11 per cent. below the average for the preceding quinquennium.

Tuberculosis of the Lungs.

Tuberculosis of the lungs, or phthisis, was the cause of 1,080 deaths, or 88.6 per cent. of the number due to tuberculosis during the year 1922, being fourth in the order of the fatal diseases of the State. The mortality rate per 10,000 living was 5.02, the male rate being 6.19, and the female rate 3.81.

The following table shows the deaths from tuberculosis of the lungs and the rates for each sex since 1884:—

	Ma	les.	Fen	ales.	Total.		
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	
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°	1,983	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	744	7.33	472	4.79	1,216	6.08	
1920	700	6.62	418	4.13	1,118	5.40	
1921	703	6.54	426	4.12	1,129	5.35	
1922	678	6.19	402	3 81	1,080	5.02	

The general rate has decreased by 53 per cent. in the period under review, that for males by 48 per cent., and for females by 59 per cent. 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, &c., and the enforcement of the various Health Acts, but principally to the adoption of improved methods of medical treatment.

The following table shows the deaths and the mortality-rates of phthisis in the Metropolis and the remainder of the State. In the quinquennial period 1894-98 the rate for the former was 47 per cent. higher than that for the latter division; since that period the extra-metropolitan rate fluctuated but little until 1920, when the rate dropped about 13 per cent. The higher rate for the remainder of the State during recent years is due largely to the transfer of phthisis patients from the metropolis to institutions situated in the country.

	Metr	opolis.	Remainder of State.			
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.		
1894-98	2,302	· 10·26	2,872	6.99		
1899-1903	2,490	10.03	3,136	7.18		
1904-08	2,184	7.89	2,985	6.40		
1909-1913	2,171	6.60	3,335	6.49		
1914-18	2,006	5.11	3,561	6.38		
1919	467	5.52	749	6.49		
1920	453	5.12	665	5.62		
1921	449	4 91	680	5.69		
1922	429	4.56	651	5.38		

Pulmonary tuberculosis is a notifiable disease 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.

A comparison of death-rates from phthisis in the Australian States and New Zealand is given below. The rates are stated per 1,000 of the total population, and do not take account either of age or sex, which are material factors.

	Death-rate per 1,080 of Total Population.								
State.	1910-14.	191519.	1920	1921.	1922.				
Victoria South Australia .	0.61 0.57	0.51 0.53 0.54 0.58 0.62 0.67 0.75 0.77	0.47 0.48 0.59 0.54 0.58 0.66 0.68 0.78	0·44 0·61 0·52 0·54 0·59 0·67 0·67 0·67 0·67	0·39 0·48 0·50 0·50 0·53 0·58 0·64 0·74				

New South Wales is more fortunate than most of the States of the Commonwealth, especially with regard to the more closely-settled States.

The table below shows the death-rates from phthisis according to age and sex in decennial periods since 1891, and those for the year 1921.

			Γ	eaths p	er 10,00	0 living	-Tuber	culosis (of Lung	9.		
Age Group - Years.		Ma	les.			Fem	ales.			Per	ons.	
	1891- 1900.	1901– 1910.	1911– 1920.	1921.	1891- 1900.	1901- 1910.	1911- 1920.	1921.	18 91 - 1900.	1901- 1910.	1911 1920.	1921.
0-4	1.06	1.17	•68	•49	•97	•97	·62	•57	1.01	1:07	•66	•54
5-9	-34	-31	•18	•50	•57	•39	-25	•52	-45	•35	•21	-51
0-14 .	•54	•52	•28	•19	1.08	1.02	59	49	-81	79	43	•34
5-19	3*57	2.86	2.24	2.02	4.71	5.30	3 25	2.52	4.14	4 07	2.75	2.27
0-24	10.69	7 97	6 67	5:13	9.64	8.94	6.88	5.48	10.17	8.45	6.78	5:3
5-34	15.68	I1 35	9.85	10.08	13.75	11.16	8 61	7.48	14.81	11-26	9.23	8.78
5-41		14:79	12.08	11.75	13:39	11.90	7.70	6.90	16.22	13.48	10:00	9.3
5-54	19:04	16.56	14-34	11.48	10.84	9.76	6.94	5.86	15.37	13.63	10.97	8.8
5-64	21.98	17.44	14 75	14 22	11.17	10.15	6.71	4 38	17.60	14.28	11.21	9.75
5-74	17:09	17.02	13.00	10.87	7.62	9.07	6.85	6 59	12.97	13.59	10.21	8:88
5 and over .	4.67	7.45	6.19	5.49	2.44	4*64	4.01	2 40	3:73	6.19	5.16	3.9
All ages	9.63	8.06	7.00	6.24	6.77	6.48	4.31	4.15	8.30	7.31	5.94	5.36

The decrease shown in female rates is slightly greater than in male rates, that for females being 39 per cent. and for males 32 per cent. The rates according to age, however, show a remarkable difference when the sexes are compared. For males the rates increase steadily till about age 60 is reached, after which a rapid decrease is shown.

For females the rates reach their highest point in the age group 25-34, but do not decline in after life in any marked degree.

The resultant 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.

1 ITAL STATISTICS.

Other Tuberculous Diseases.

Of the 1,219 deaths during 1922 from tuberculosis, only 139 were from tuberculosis of organs other than the lungs. Of the latter 46, equivalent to 33 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:-

		Deaths per 10,000-Tuberculosis other than of Lungs.									
Period.	2	iges 0 to 4 Yea	19.		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	5.98	6 55	1.70	1.51	1.61					
1911-1920	3.13	2.96	3.06	1 00	·86	.93					
· 1921	2 29	1-96	2.16	-83	•58	•71					
1922	1.36	2.39	1.87	-72	•57	-65					

Cancer.

In 1922 the deaths from cancer numbered 1,871, equal to a rate of 870 per 10,000 living, and 4 per cent. above the average of the quinquennial period preceding. The total included 962 males and 909 females, the rates being 878 and 862 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:-Stomach and liver, 709; peritoneum, intestines, and rectum, 275; female genital organs, 187; breast, 162; buccal cavity, 127; skin, 77; and other organs, 334.

The following table shows the deaths and rates per 10,000 living of each sex since 1884:---

		М	ales.	Fen	nales.	Total.		
	Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	
	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	
1	899-1903	2,295	6 38	1,877	5.77	4,172	6.09	
1. J	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	936	9.22	798	8.10	1,734	8.67	
	1920	922	8.72	807	7.98	1,729	8.36	
	1921	939	8 74	878	8.50	1.817	8.62	
	1922	962	8.78	909	8 62	1,871	8.70	

In New South Wales the male rate is usually the higher, which is contrary to the experience of England and Wales, where the female rate is usually the higher. In England and Wales, also, the combined rate is usually much higher, and is increasing more rapidly than in New South Wales.

The ages of the 1,871 persons who died from cancer during 1922 ranged from 2 to 92 years, but the disease is essentially one of advanced age, 96 per cent. of the persons who died from cancer in 1922 being 35 years and over.

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	• Males.				Fem	ales.	. I	- -	Pers	ions.		
	1891- 1900.	1901– 1910.	1911- 1920.	1921.	1891- 190).	1901– 1910.	1911- 1920,	1921.	1891- 1900.	1901- 1910.	1911- 1920.	1921.
2 584	-94	-89	1.09	1.11	1.24	1.37	1.47	1.50	1.07	1.12	1.28	1.30
35-44	3 63	3.83	3.25	4.01	6 79	7.16	6.34	6.47	4.96	5.39	4 86	5 2
45-54	12.13	12.58	13.55	13.78	17.93	19.21	17.35	18.42	14.52	15.41	15.28	15.9
55-64	30.36	34 96	35.43	37.52	33.20	36.24	33.50	37.11	31.52	35.65	34.59	37.3
65-74	51.32	72 00	69.19	80.41	43.00	62.06	59.07	66 90	47.18	67.71	64.60	74.1
5 and over	63 78	86 36	105-94	105.95	62.95	79 98	93.55	103.12	63 43	83.19	100.08	104.5
All Ages	4.99	6.90	8.06	8.74	4.77	6 62	7.37	8.50	4.88	6.77	7.72	8.6

In the following table are shown the death-rates for each sex in age groups above 25 years, in decennial periods since 1891:—

During the period covered by the table the increase in the rates for males ranged from 10 per cent. for the age group 35-44 to 66 per cent. at 75 years and over. For females the range was a decrease of 5 per cent. for the age group 35-44 to an increase of 64 per cent. at 75 years and over.

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 groups 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.

In the following table the rates, based on the whole population, are given for the Australian States and New Zealand. The comparison is uncorrected for age-incidence, and is therefore somewhat crude.

State.			Death-rate per 1,000 of Total Population.							
			1910-14.	1915-19.	1920.	1921.	1922.			
New Zealand			0.79	0.85	0.87	0.85	·85			
Queensland			0.64	0.73	0.80	0.79	•86			
New South Wales			0.74	0.80	0.84	0.86	.87			
Tasmania	•••		0.70	0.78	0.20	0.83	•87			
Western Australia			0.26	0.72	0.81	0.83	•89			
Commonwealth			0.74	0.81	0.82	0.87	•91			
South Australia			0.79	0.87	0.93	0.92	- 95			
Victoria			0.85	0.89	0.86	0.95	1.00			

Diabetes.

The deaths due to diabetes in 1922 numbered 283, equal to a rate of 132 per 10,000 living, which is 21 per cent. above the average for the preceding quinquennium. The rate for males was 112 and for females 152 per 10,000 living of each sex. Most of the deaths occurred after middle life, 230 being those of persons over 45 years of age.

Meningitis.

The diseases included under the above heading—encephalitis, simple meningitis, and non-epidemic cerebro-spinal meningitis—caused 150 deaths during 1922, the corresponding rate being 0.70 per 10,000 living. Of this number 81 were males and 61 females, equivalent to rates per 10,000 living of each sex of 0.74 and 0.65 respectively. The deaths in the Metropolis and

country were 58 and 92, with corresponding rates per 10,000 living of 0.62 and 0.76. The rate for 1922 was 17 per cent. higher than that of the previous five years.

Of those who died during 1922, 64, or 43 per cent., were under 5 years of age.

Hæmorrhage of the Brain.

To cerebral hæmorrhage and apoplexy, during the year 1922, were due 658 deaths, of which 342 were those of males and 316 those of females. The rate was 306 per 10,000 living, or 3.12 for males and 3.00 for females. This rate is less than half that experienced in England and Wales.

The following table shows the number of deaths and the rates for both sexes from cerebral hæmorrhage and apoplexy in quinquennial periods since 1884:—

	M	ales.	Fer	nales.	Total.		
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000	
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	1,303	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	338	3.33	324	3.29	662	3.31	
1920	389	3.68	308	3.05	697	3.37	
1921	323	3.01	313	3.03	636	3.02	
1922	342	3.12	316	3.00	658	3.06	

Convulsions of Children.

Convulsions of children (under 5 years of age) caused 75 deaths during 1922, or 0.35 per 10.000 living at all ages, which is 37 per cent. below the rate for the previous quinquennium.

The following table shows the number of deaths and the rates for both sexes for every fifth year since 1875:--

	M	ales.	Fer	nales.	Total.		
Year.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000	
1875	297	9.34	205	7.69	502	8.59	
1880	388	9.75	297	8.98	685	9.40	
1885	428	8.38	392	9.41	820	8.84	
1890	328	5.47	274	5.45	602	5.46	
1895	280 •	4.19	243	4.17	523	4.18	
1900	203	2.84	168	2.63	371	2.74	
1905	119	1.57	92	1.32	211	1.45	
1910	103	1.23	71	0.91	174	1.08	
1915	91	0.93	67	0.74	158	0.84	
1920	57	0.47	39	0.33	96	0.40	
1922	41	0.37	34	0.32	75	0.35	

Being limited to children under 5 years of age, the rates are better stated proportionately to that age-period. On this basis the death-rate in 1922 was 031 per 1,000 living as compared with 046 of the previous quinquennium. Of the total deaths during 1922, 62 occurred during the first year of life, the equivalent rate being 1.12 per 1,000 births. The deaths of males were more numerous than of females, the numbers during the first year of life being 35 and 27 respectively, and for all children under 5 years of age 41 males and 34 females. The rate for the Metropolis was approximately one-third of that for the remainder of the State. The continuous decline in this cause of infantile mortality is more apparent than real, being due largely to increasing skill in diagnosing the diseases of children.

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.

The number of deaths from this cause was 141 in the year 1922. The death-rate per 10,000 living was 0.85 for males and 0.46 for females.

In England and Wales the corresponding figures for 1922 were 0.96 and 0.43.

Practically all the persons in New South Wales coming within this classification are under treatment in the various mental hospitals. On the 30th June, 1922, there were 7,970 persons under official control and receiving treatment—a proportion per 1,000 of the population of 3.75, or slightly under the average for the preceding quinquennium.

The proportion of deaths of insane persons in New South Wales is comparatively light. The following table has been computed on the basis of the average number of patients resident in mental hospitals:—

	Ma	les.	Fen	nales.	Total.		
Period.	Deaths in Mental Hospitals.	Propor- tion of Average Number Resident.	Deaths in Mental Hospitals.	Propor- tion of Average Number Resident.	Deaths in Mental Hospitals.	Propor- tion of Average Number Resident	
		per cent.		per cent.		per cent	
1894-98	782	6.86	366	5· 18	1,148	6-21	
18 99-1 903	1,021	7.77	465	5:54	1,486	6.91	
1904-1908	1,280	8.24	613	6.00	1,893	7-35	
1909-1913	1,540	8.26	741	6-24	2,281	7-64	
1914-1918	1,739	8.59	914	6.70	2,653	7.83	
1919*	513	12.17	285	9.74	798	11.17	
1920*	372	8.42	229	6-95	601	7.79	
1921†	351	8 33	235	7.71	589	8 97	
1922+	386	9.06	220	7-04	606	8-21	

* Calendar year.

† Year ending 30th June.

Diseases of the Heart.

Diseases of the heart were the cause of 2,501 deaths during 1922. showing a rate of 11.63 per 10,000 living, or 1 per cent. above the average for the preceding five years. Of the total deaths, 1,384 were of males and 1,117 of females, the corresponding rates per 10,000 living of each sex being 12.63 and 10.59. In the Metropolis the rate was 2.9 per cent. higher than in the remainder of the State.

The ages of persons who died from diseases of the heart during 1922 ranged between 5 and 99 years, and 84 per cent. of those who succumbed were 45 years of age and over.

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	Ma	des.	Fen	nal e s.	Total.		
Period.	Deaths.	Rate per 10,000.	Deaths.	Bate per 10,000.	Deaths.	Rate per 10,000	
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	1,263	12.44	1.032	10.47	2,295	11.47	
1920	1,326	12.54	966	9.55	2,292	11.08	
1921	1.418	13.19	1.050	10.16	2,468	11.71	
192:	1.384	12.63	1,117	10.59	2,501	11.63	

The deaths and the death-rates of each sex since 1884 are shown below :---

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.

In the following table are shown the death-rates for each sex in the principal age groups in decennial periods since 1891.

	a]	Deaths]	9er 10,00	90 living	– Disea	ses of th	e Heart	•		
Age Groups Years,	s.	M	iles.		· .	Feu	ales.			Persons.		
	1891 1900		1911- 1920.	1921	1894- 1900,	1901- 19 1 0.	1911- 1920.	1921.	1891– 1900.	1901- 1910,	1914- 1920.	1921.
0-4	. 11		.35	•57	-89	-97	•49	·25	1.02	1.05	•42	42
	. 9			•98	•98	1.16	•95	1.12	•99	1-13	•94	1.02
	. 1.2		1.13	1.34	1.31	1.84	1.49	1.38	1.30	1 66	1.30	1.21
	. 14		1.78	1.12	1 66	1.98	1.75	1.83	1.53	1.95	1.76	1.48
	. 14		2.18	1 43	1.83	1.34	2-02	1 23	1 62	174	2.09	1 33
	. 2.6		2.88	2.94	2.53	2.53	2.70	2.99	2.60	2.34	2.79	2.96
	. 58			5.16	5.63	6 13	5.00	5 68	5 74	5.77	5:38	5 41
	. 13 3			13.30	11.50	11.80	11.90	10.97	12.47	12.93	13.20	12-20
	36.5		38.52	42.13	25.29	28.72	28.47	29 44	31 96	32.48	34.09	36-33
	. 69/4		99.07	109.60	54.65	78.67	81.78	81-04	62-37	86 15	91 21	97 72
75 and over .	. 104-7	4 178-83	237 73	308-36	89-54	141.23	201.76	253 46	98.30	161.94	220.73	281 13
All ages	. 7-3	1 9.60	12.03	13-20	5.20	7.51	9-09	10.16	6.33	8.60	10.60	11.71

Although the apparent rate for all ages has nearly doubled during the period reviewed, the increase is practically confined to ages 65 and over, due, as explained in the previous paragraph, to more correct diagnosis in assigning the cause of death.

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 390 deaths during 1922, equal to a rate of 1.81 per 10,000 living. Of the total, 189 were males and 201 females, the corresponding rates per 10,000 of each sex being 1.72 and 1.91. The rate for the State was 36 per cent. lower than that experienced during the previous five years. Deaths in the Metropolis numbered 172, while 218 succumbed in the remainder of the State. The corresponding rates were 1.83 and 1.80 per 10,000 living. Of the total deaths, 131 were caused by acute bronchitis, the remainder being due to the disease in its chronic form. Of those persons who died of acute bronchitis, 59 per cent. were under 5 years of age, while 92 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 1,355 deaths during 1922, the equivalent rate per 10,000 living being 6.30, which was 2 per cent. below the average for the preceding quinquennium. Of the total 825 were males and 530 females. The male and female rates per 10,000 living were 7.53 and 5.02 respectively. The deaths in the Metropolis numbered 590, and those in the remainder of the State, 765. The rate in the remainder of the State was slightly higher than that in the Metropolis. An analysis of the deaths according to age shows that pneumonia is most destructive in its attacks on young people and adults in the decline of life.

Of the persons who died from pneumonia during 1922, 32 per cent. were under 5 years of age and 40 per cent. 50 years of age and over. The following table gives deaths and rates, according to sex, since the year 1884:—

	м	ales.	Fer	nales.	Total.		
Period.	Deaths.	Rato per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000	
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	6.20	
1919	778	7.66	628	6.37	1,406	7.03	
1920	822	7.77	616	6.09	1,438	6.95	
1921	- 793	7.38	566	5.48	1,359	6.45	
1922	825	7.53	530	5.02	1,355	6.30	

The greatest mortality from pneumonia occurs in the cold weather, and in 1922 there were from this cause 625 deaths, or 46 per cent. of the total number in the four months ranging from June to September.

The following table shows the death-rates for each sex in the principal age groups, in decennial periods since 1891:---

				Dea	ths per	10,000 1	iving—F	neumor	nia.			
Age Group. Years.		Ma	les,			Fem	ales.			Persons.		
	1591- 1900.	1901– 1910.	1911- 1920.	1921.	1891- 1900.	1901– 1910.	1911- 1920	1921.	1891- 1900.	1901- 1910.	1911- 1920.	1921.
0-4	21.08	21.19	20 ⁻ 80	21.37	17.16	17.70	18.00	18.17	19.15	19.48	19.43	20 06
5-9	1.29	1.31	1.48	1.93	1.20	1.27	1.41	-95	1.25	1.29	1'45	1.45
10-14	•55	•95	•64	-86	•93	1.10	•76	1.27	•74	1.02	•70	1.06
15-19	2.01	2.29	1 69	1:91	1.26	1.49	•88	1.60	1.64	1.90	1.28	1.76
20-24	3.03	3.00	2.80	2.75	I ·90	1.54	1.44	1.23	2.50	2.28	2.13	1.96
25-34	3.91	3.62	8.55	3-05	2.60	2.30	2.09	2 83	3.32	3 01	2.82	2.94
35-44	6.69	6 06	5'01	4.62	3.97	3.92	2.72	3.31	5.55	5.09	3.95	3-98
45-54	9 61	9.47	8.76	8 04	5 33	4 78	4.19	3.30	7.85	7 45	6 68	5.80
55-64	16 08	16.15	12.58	12.51	10.78	10.19	8.13	7.36	13.92	13.56	10.65	10.16
65-74	28.21	28.47	23.99	24.90	18.66	22.98	19.19	20 10	23.89	26.10	21.81	22.67
75 and over	42 40	46 54	55 56	55 71	35.38	50 32	52.19	47.16	39*42	48.24	53.97	51.47
Allages	7 46	7.68	7.49	7.38	5.22	5.20	5 29	5-48	6.42	6.64	6.42	6.45

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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 complete information being now available as to cause of death.

Diseases of the Digestive System.

Diseases of the digestive system accounted for the deaths of 1,081 males and 821 females during 1922, the respective rates per 10,000 living being 9.86 and 7.78. The rate corresponding to the total deaths in the State was 8.84 per 10,000 living, and was 18 per cent. below that experienced during the previous five years. Deaths resulting from diseases of the digestive system were caused in the main by diarrhœa and enteritis, with hernia and intestinal obstruction, appendicitis, and cirrhosis of the liver next in order of fatality.

Diarrhea and Enteritis.

In 1922 these diseases were the cause of 951 deaths, or 442 per 10,000 living, the rates for males being 5.05 and for females 3.77. The general rate was 33 per cent. below the average for the preceding quinquennium. The following table gives the deaths and the rates of males and females since 1884:—

	Ma	des.	Fen	nales.	Total.		
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000	
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	871	8.58	717	7.28	1,588	7:94	
1920	919	8 69	795	7.86	1,714	8.29	
1921	779	7.25	571	5.52	1,350	6:40	
1922	553	5.05	398	3.77	951	4.42	

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.

According to the classification deaths from these diseases are divided 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 727, or 76 per cent. of the total, and in the second 224.

Of the total deaths from diarrhea and enteritis, 405, or 43 per cent., occurred in the three summer months of January, February, and December; and 95, or 10 per cent., in the months of August, September, and October. As a rule, about 50 per cent. of the deaths occur in the summer.

Appendicitis.

To this cause 177 deaths were ascribed in 1922, the rate being 0.82 per 10,000 living, which is 9 per cent. above the average of the preceding quinquennium. Appendicitis is more fatal to males than to females, the rate for the former in 1922 being 0.99, and for the latter 0.65 per 10,000 living.

Cirrhosis of the Liver.

In 1922 the deaths from cirrhosis of the liver, which are of interest in connection with alcoholism, numbered 129, the rate being 0.60 per 10,000 living—1 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 1922 being 0.73, and for the latter 0.46 per 10,000 living in each sex.

Bright's Disease.

During 1922 there were 1,361 deaths due to diseases of the genito-urinary system, of which number 936 were caused by Bright's disease, and 71 by acute nephritis. Taking these two diseases together, the rate was 468 per 10,000 living, and for males and females 545 and 389 respectively, the general rate being equivalent to that experienced during the previous quinquennium. The deaths due to these diseases in the metropolis were 550 and in the rest of the State 457, the corresponding rates per 10,000 living being 5.84 and 3.78. 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 and acute nephritis are shown below. Males. Females. Total.

	M	ales.	Fer	nales.	Total.		
	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Bate per 10,000.	
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	6.31	1,682	3.62	4,762	5.01	
1919	581	5.72	356	3.61	937	4 68	
1920	580	5.49	345	3.41	925	4.47	
1921	574	5.34	372	3.00	946	4.49	
1922	597	5.45	410	3.89	1,007	4.68	

During the whole period covered by the foregoing table the rate both for males and for females has more than doubled. The male rate is about half as high again as the female. Comparatively few persons under 35 years of age die from nephritis, the proportion for 1922 being 12 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:---

					Deatl	ns per 1(),000 liv	ing—Br	ight's D	isease.		•	
•	Age Group Years.	Males.				Females. Persons			ons.				
		1891- 1900.	1901- 1910.	1911- 1920.	1921.	1891- 1900.	1901- 1910.	1911- 1920.	1921.	1891 1999.	1901- 1910.	1911- 1 920 .	1921.
	0-4	1.31	1.52	•87	-90	1.44	1.28	-81	•74	1.37	1.38	-84	-83
	5-9	·44 ·26	·48 ·49	·33 •28	·34 •96	-44 -38	•50 •53	-27 -48	·17 ·20	•44 •32	·49 •51	*30 *38	-26 -58
	15-19	-76	.72	67	·11	*61	-77	-60	-46	-68	•74	-63	-28
	20-24	1-01	1.04	1-33	72	1.26	1-07	1-29	-90	1.13	1.05	1.31	-81
	25-34	1.80	1.85	1.88	1.33	2.38	1.74	1.73	1.77	2.06	1.80	1.81	1.55
	35-44	4.48	4 36	3.54	3-26	4.25	4.12	3.32	3.16	4.20	4.25	8.43	3.21
	45-54	8:40	9.92	10.73	8.71	6 65	7 98	6.65	5 54	7.68	9.08	8.87	7.21
	55-64	15.39	20-17	22.91	19 62	10.47	12.83	12.92	13.47	13-29	16.98	18-51	16.81
	65-74	26.47	40.87	45.24	40.35	15.77	25.06	28.12	24-39	21.71	84 05	37 46	32.93
١.	75 and over	29-29	59-12	75-56	69-83	16.59	29 65	41.64	47.16	23-90	45-89	59-53	58.60
	Allages	3.62	5.16	6.12	5.34	2.63	3.33	3.67	3.00	3.16	4.29	4-98	4-49

VITAL STATISTICS.

Although the rates for all ages show a decided increase during the period reviewed, those for males under 45 and for females under 55 have decreased. The male rate at practically every age is 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 in Childbirth.

During 1922 the number of deaths of women resulting from various diseases and casualties incident to childbirth was 279, equivalent to a rate of 5 I per 1,000, or 1 death in every 196 births. Puerperal septicæmia caused 88 deaths, puerperal hæmorrhage 40; accidents of pregnancy 28, albuminuria and eclampsia 42, phlegmasia alba dolens, embolus, sudden death 17, and other casualties of childbirth 64. The experience of the five years 1918-22 shows that the average number of fatal cases per 1,000 births, for married and for single women are 5.2 and 10.4 respectively. Plural births are reckoned as single confinements.

Cause of Death.	Cause of Death.				Proportion per cent due to each Cause.		
		Married.	Single:	Total.	Married.	Single.	Total.
Accidents of Pregnancy		140	15	. 155	10.90	11.03	10-91
Puerperal Hæmorrhage		178	5	183	13.85	3.68	12.88
Puerperal Septicæmia	••••	417	31	448	32.45	22.79	
Albuminuria and Eclampsia		256	27	233	19.92	19 85	19.91
Phlegmasia Alba Dolens, Sudden Death.	Embolus,	91	2	93	7:08	1.47	6.54
Other Casualties of Childbirth		203	56	259	15.80	41.18	18 23
Total		1,285	136	1,421	100.00	100.00	100.00

More than any other cause of death during childbirth, puerperal septicæmia can be classed as a preventable disease, but over 31 per cent. of the 'deaths are due to this cause. During the last ten years the rates per 1,000 births were as follows:---

Year.	Puer	eral Septicæm	ia.	Total Deaths in Childbirth.				
Year.	Metropolis.	Remainder of State.	State.	Metropolis.	Remainder of State.	State.		
1913	3.8	1.9	2:7	7.4	5.6	6-3		
1914	25	1.5	1.9	6.0	5:2	5:5		
1915	2.2	1.8	2.0	5.0	5.2	5.1		
1916	2.9	1.7	2.2	6.7	5cL	57		
1917	1.6	2.1	1.9	6*4	6.1	62		
1918	2.6	1.4	1.8	6.5	4.5	5.3		
1919	2.4	•9	1.4	6.6	4.7	5.4		
1920	2.7	1.5	2.0	7.6	51	6.1		
1921	1.9]•4	16	5.8	47	5:1		
1922	1.6	1.6	1.6	5-9	4:6	51		

These rates are higher than those experienced in England and Wales, where 3.8 deaths per 1,000 births occurred in 1922, of which 1.4 per 1,000 were due to puerperal septicarnia.

From the foregoing it will be seen that the death-rate is almost invariably, higher in the metropolis than in the remainder of the State. This is contrary to expectation, as the metropolis has greater hospital facilities.

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The maternal mortality of New South Wales may be considered high, and shows no signs of declining. There has been a satisfactory reduction in infantile mortality, and a reduction in the death-rate of mothers would tend to lower still further the infantile rate, and ensure more babies being born alive.

Deaths from Violence.

Deaths from this cause in 1922 were 1,259 or 6.6 per cent. of the total deaths. This number includes 210 suicides, 939 accidents, 34 homicides, and 76 not classed (open verdicts). The rate, 5.85 per 10,000 living, was 8 per cent. lower than the rate for the preceding quinquennium, which was 6.34. In the year 1922 the males thus dying numbered 963, or 8.79 per 10,000 living, and the females 296, or 2.81 per 10,000, very little above a quarter of the male rate.

Deaths from Suicide.

The number of persons who took their own lives in 1922 was 210, or a rate of 0.98 per 10,000 living, and about 9 per cent. below the average for the preceding quinquennium. The number of male suicides was 169, or a rate of 1.54 per 10,000 living, and of female 41, or a rate of 0.39 per 10,000 living—the male rate thus being nearly four times that of the female.

The number of deaths from suicide and the rates per 10,000 living since 1884 are shown in the following table:—

	Males.		Fen	nales.	Total.		
Period.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000	
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	168	1.66	53	0.54	221	1.10	
1920	204	1.93	53	0.52	257	1.24	
1921	176	1.64	55	0.53	231	1.10	
1922	169	1.54	41	0.39	210	0.98	

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, 31 were by the agency of poison, 24 by cutting, 14 by hanging, 13 by shooting, and 10 by drowning.

Experience shows that the suicidal tendency is perhaps influenced by the seasons. During the ten years ended 1922 the proportion of male suicides per 1,000 was, during spring 260, summer 270, autumn 240, and winter 230. During the period named, in four of the ten years, January has headed the list for monthly suicides.

Female suicides, classified for the same periods, do not show anything like the wide divergence seen in the figures for males. The proportions per 1,000 suicides of females were during spring 259, summer 240, autumn 253, and winter 248. No particular month showed any preponderance, contrary to the experience of males.

VITAL STATISTICS.

Deaths from Accident.

During the year 1922 the number of fatal accidents was 939, viz., 715 of males and 224 of females, or equal to rates of 652 and 2.12 per 10,000 living of each sex, and the general rate was 4.37 per 10,000 living. Accidental deaths have always been numerically greater in the extra-metropolitan area. Of those registered during 1922, deaths from accident in the metropolis numbered 344, and in the remainder of the State 595. As a general rule, about two-thirds of the accidents occur in the latter division, which contains about 56 per cent. of the total population.

The number of deaths from accident and the rates per 10,000 since 1884 are shown in the table below.

Period.	М	ales.	Fer	nales.	Total.		
renoa.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000.	Deaths.	Rate per 10,000	
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	· S·83	1,114	2.77	5,005	5.94	
1914-18	3,814	7.86	1,075	2.31	4,889	5.14	
1919	705	6.94	232	2.35	937	4.68	
1920	720	6.81	217	2.12	937	4.53	
1921	789	7.34	185	1.79	974	4.62	
1922	715	6.52	224	2.12	939	4.37	

Although the death-rate from accidents is still high compared with that of more settled countries, it has decreased, the decline for males being more rapid than for females. For the years prior to 1894 the rates were really slightly lower than those shown in the table, because certain causes formerly classed as accidents now fall into different categories.

The experience of the past quinquennium shows that out of every 1,000 accidents 210 are due to vehicles and horses, 148 to drowning, 135 to falls, 126 to burns or scalds, 95 to railways and tramways, 29 to mines and quarries, and 30 to weather agencies, *i.e.*, excessive cold or heat, and lightning. Among males the greatest number of deaths are due to vehicles and horses, and among females to burns and scalds.

Out of 203 deaths caused by accidents with vehicles and horses motor vehicles figured in 84. In 48 cases pedestrians were the victims and in 36 the occupants of the car. Sixty deaths occurred in the metropolis and 24 in the remainder of the State.

THE SEASONAL PREVALENCE OF DISEASES.

The following table shows for each month of the year the proportion of deaths per 1,000 due to each of nine principal causes. The figures are based on the experience of the ten years 1913-22, and in order to make the results

Month.	Typhoid Fever.	In- fluenza.	Diph- theria and Croup.	Whoop- ing- Cough.	Phthisis.	Pneu- monia.	Bron- chitis.	Diarrhœa, Enteritis, and Dysentery.	Bright's Disease.
January	136	7	78	128	78	54	45	155	75
February	150	7	75	72	75	46	41	130	73
March	126	19	98	56	76	47	44	108	70
April	108	159	127	59	77	60	56	94	77
May	87	79	127	41	85	72	82	75	81
June	80	224	104	49	86	108	126	43	94
July	54	278	103	45	91	128	158	33	98
August	31	92	68	58	96	125	135	30	94
September.	38	56	63	82	94	128	114	28	96
October	31	45	53	124	85	95	89	42	85
November.	65	18	52	138	81	76	64	107	81
December	94	16	52	148	76	61	46	155	76
	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000

of the computation comparable, adjustments have been made to correct the inequality of the number of days in each month.

The chief features of the above table are exhibited in the contrast between the figures relating to typhoid fever, diarrhœa, and entiritis on the one hand, and to 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 mortality 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. The seasonal influence on influenza was obscured by the epidemic of 1919.

COMMERCE.

POWER to make laws with respect to trade and commerce with other countries and between the States vests in the Commonwealth Parliament, and in the year 1901 control of the Customs and Excise Department was transferred to the Commonwealth. Until the year 1910, particulars relating to interstate trade were recorded by the Federal Government, but it was decided to discontinue the records as from 13th September, 1910, therefore the figures in this chapter relate only to oversea trade—that is, to the trade of New South Wales with countries beyond Australia.

The first Commonwealth Act relating to Customs came into operation by proclamation on 4th October, 1901; it provided administrative machinery in relation to Customs, and prescribed the manner in which duties were to be computed and paid. Prior to the establishment of the Commonwealth 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 an l 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.

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 a sisted by the Commonwealth Board of Trade and the Tariff Board. The functions of the former, as now constituted, 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 Chambers of Commerce, the Chamber of Manufactures, and of other kindred organisations. The Minister for Trade and Customs is vice-president. Meetings are held alternately in Sydney and Melbourne.

The Tariff Board was appointed under an Act which commenced in March 1922, and will continue in force for three years. The Board consisted originally of three members, including an administrative officer of the Department of Trade and Customs as Chairman. The Act was amended in 1923 to authorise the appointment of an additional member. The Minister refers to the Board for investigation such matters as the classification of goods; the determination of the value of goods for duty; the necessity for new or increased or reduced duties, or for 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. 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 industry in relation to the tariff.

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Regulations under the Commerce (Trades Descriptions) Act, 1905, prohibit the importation and exportation of the following classes of goods if they do not bear a prescribed trade description, viz., articles used for food or drink by man, or used in the manufacture or preparation thereof; medicines; manures; apparel (including boots and shoes) and the material from which it is manufactured; jewellery; seeds and plants.

Customs officers are authorised to inspect imports and exports, and exporters may be required to give notice of intention to export. Special care is exercised in regard to the supervision and inspection of meat, and standard requirements are prescribed for abattoirs and premises where it is prepared for shipment. Goods approved for export are marked with an official stamp, butter and cheese are graded, and frozen meat, rabbits, etc., are classified.

OVERSEA TRADE.

The value of the goods imported and exported as shown in the following tables represents the official value as recorded by the Department of Trade The value of goods exported is the value in the principal and Customs. markets of New South Wales. The value of goods imported represents the amount on which duty is payable or would be payable if the duty were ad In accordance with a provision of the Customs Act of 1901-1922 valorem. value of goods subject to ad valorem duty is the sum of the following :—(a) the the actual price paid by the Australian importer plus any discount or other special deduction, or the current domestic value in 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). For the purpose of this provision, special deduction means any discount or other deduction allowed to the Australian importer which would not ordinarily have been allowed to any and every In the case of goods consigned for sale in Australia the value is purchaser. the amount which would be the value if the goods were sold at the date of exportation to an Australian importer.

In reference to the value of goods imported from foreign countries, the Customs Act of 1901 provides that where an invoice shows the value of goods in any currency other than British, the equivalent value in British currency is to be ascertained "according to a fair rate of exchange." Until December, 1920, it was the practice of the Customs authorities to assess the value as in the country of export at the time of shipment, and to convert foreign values on the basis of the mint par rate of exchange, *i.e.*, the standard value of the coin of the exporting country as compared with the pound sterling in gold coin.

This practice caused to be overrated the goods from countries with a depreciated exchange, with the contrary effect where the pound sterling was at a discount, and on 8th December, 1921, the method of converting foreign currencies was changed, in consequence of a decision of the High Court of Australia; so that the values for statistical purposes, as well as for duty, have since been based on the commercial rates of exchange at the date of expertation.

The total value of oversea imports and exports, as recorded by the Customs Department, during each year since 1913, is shown in the following table, with the value per head of population :---

* Year ended 31st December.

† Half-year ended 30th June.

Reference to a table of index numbers in Part "Food and Prices" of this Year Book indicates that the increase in the aggregate value of trade, as shown above, reflects enhanced prices rather than larger quantities.

The abnormally high value of imports during 1920-21 was due to extraordinary conditions affecting Australian trade. During the war years there had been considerable delay in the delivery in Australia of

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goods from abroad, and in many cases a curtailment of the quantities ordered. Anticipating the continuance of these conditions, Australian importers placed large orders during the period of trade expansion which immediately followed the cessation of hostilities. Then a period of depression in oversea countries caused a diminution in demand and the cancellation of contracts, so that the Australian ord-rs were delivered promptly and in full quantity, with the result that the value of imports expanded rapidly. The prompt delivery caused difficulty in financing drafts for payment abroad, and the local banks took action to restrict the issue of fresh credit, so that in the following year the value of imports dropped again. In 1922-23 trade having been stimulated by the good returns from wool, wheat, etc., of the previous seasons, there was another large increase and though the value did not reach the high figure of 1920-21 it was 27 per cent. above the value in the preceding year.

The value of the exports rose fairly constantly after the year 1914, when domestic production was low owing to a bad season. The figures for subsequent years do not reflect the seasonal conditions, as in normal times, because the most important items of export, e.g., wool, meat, wheat, etc., were purchased by the Imperial Government and stored in large quantities in Australia pending shipment, which under war conditions was effected gradually, and restrictions were placed upon the export of some commodities, owing to shortage of shipping and for other reasons. The value of exports reached a maximum in 1919-20, and has since declined, the decrease being due in a large measure to lower prices.

A comparison of the values of imports with those of exports shows that in each year of the period under review, except 1919-20 and 1922-23, there was an excess of exports. The value of exports, as shown above, does not include the value of exports in the form of ships' stores, which amounts to a considerable sum, as is shown on a later page.

The figures relating to imports and exports include bullion and specie. Gold is an important item of domestic produce in Australia, though New South Wales does not contribute so largely to the production as Western Australia, Queensland, and Victoria. During the period under review, large consignments of specie and bullion, classed as Australian produce, were consigned from New South Wales to countries having direct communication with Sydney, and the transactions are to be regarded as affecting the trade of the whole Commonwealth rather than of New South Wales.

	Imports of	Exports of Bullion and Specie.					
Year ended 20th June.	Bullion and Specie.	Australian Produce.	Other Produce.	Total.			
1915	£ 450.216	£ 1,240,749	£ 378, 3 35	£ 1,619,084			
1916	517,453	9,126,436	535,043	9,661,479			
1917	252,686	11,249,497	258,886	11,508,383			
1918	1,234,539	3,243,057	173,403	3,416,460			
1919	2,538,514	3,426,312	82,146	3,508,458			
1920	65,129	1,914,392	76,125	1,990,517			
1921	29,392	3,770,195	15,275	3,785,470			
1922	68,369	2,027,004	1,550	2,028,554			
1923	45,023	41,239	600	41,839			

COMMERCE.

In the year ended June, 1916, the value of bullion and specie included in the exports of New South Wales rose by eight millions storling, owing to the large consignments of gold to the United States; in the following year gold was sent to Canada and to the United States, and the value of the imports increased further by nearly two millions. In 1917–18 India received gold to the value of £2,189,000; in 1918–19 there was a contrary movement, and the importation from India of bullion to the value of £1,500,000 was recorded.

DIRECTION OF TRADE.

The direction of the oversea trade of New South Wales is indicated in the following statement, showing the value of imports to, and of exports from, the principal countries during the last two years in comparison with similar imformation for the year 1913. Particulars regarding the imports according to country of shipment are not available for the year 1922-23, and the figures shown below relate to the country of origin.

Country.	Insport	s (Country of	l Origin).		Exports,	a 11 - 1
Country.	1913.	1921-22.	1922-23.	1913.	19:1-22.	1922-23,
	£	£	£	£	£	t £
United Kingdom	15,367,428	19,969,726	26,651,718	11,904,424	18,805,323	14,757,084
Canada	359,022	1,183,943	2,011,073	145,875	258,139	232,887
South Africa	196,206	161,042	486,806	339,207	214, 61	144,381
India and the East	1,705,526	2,061,815	2,404,128	1,413,093	1,882,303	893,694
New Zealand	1,457,335	447,044	892,470	1,321,989	2,756,583	2,608,236
South Sea Islands	484,429	1,436,660	1,022,481	511,523	1,465,522	1,262,322
Other British Possesions	82,790	201,887	224,577	29,947	449,225	309,837
Total, British	19,652,736	25,482,115	33,693,253	15,666,058	25,831,856	20,238,441
Belgium	456,503	339,85:	401.496	2,769,661	1,451,002	1,386,882
France	894,186	1,138,509	1.232,233	4,649 474	4,446,678	5,284,278
Germany	2,834,038		222,663	3,659,676		
Italy	243,134		450,780		3,231,615	
Netherlands	149,599	907.495			596,796	
Norway	254,019	303.490	545,402	38	2,057	971
Sweden	344.833		672,455	4.825		
Switzerland	469,858					
Other European	276,239				397,751	1.998
United States & Hawai	5,331,032		11.468,179	1,949,388	4,701,154	5,312,213
Japan	467,666				3,638,134	
China and the East	632,249					
South Sea Islands	184.048					
Other Foreign	160,523				34,579	
Total, Foreign	12,607,927	17,859,363	21,316,830	17,173,731	22,180,999	22,343,481
Total, all Countries	32,350,663	43,321,478	55,010,033	32,839,789	48,012,855	12,581,922

The oversea trade of New South Wales is conducted principally with the United Kingdom; 48 per cent. of the imports in 1922-23 were the products of that country and 35 per cent. of the exports were shipped thereto. Next in importance was the trade with North American countries, the imports being valued at £13,500,000, or 24.5 per cent. and the exports at £5,500,000, or 13 per cent. European countries, other than the United Kingdom, were the source of imports valued at £5,100,000, or 9 per cent. and they received by direct shipment exports to the value of £10,800,000, or 25 per cent. Japanese goods represented nearly 4 per cent. of the imports, and exports to Japan were equivalent to 11.4 per cent. of the total, while the Eastern

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countries supplied $8\frac{1}{2}$ per cent. of the imports and received 4 per cent. of the exports. Imports from New Zealand and from the South Sea Islands showed a proportion to the total imports of 1.6 per cent. and 2 per cent. respectively, and exports to those parts were equivalent to 6.1 per cent. and 3.7 per cent.

The increase in the value of imports of the produce of the United Kingdcm between 1913 and 1922–23 amounted to £11,300,000, being more than sufficient to maintain the relative position of that country in regard to the import trade of the State. The value of the imports of other European goods, however, declined absolutely and relatively owing to war conditions which led to a marked development in trade with North America and the East. In 1913 nearly three-fourths of the exports were shipped to Europe; Canada and the United States received 6 per cent.; Eastern countries 10 per cent.; New Zealand and the South Sea Islands $7\frac{1}{2}$ per cent. In 1922–23 shipments to Europe represented only 60 per cent. of the total value of exports, North America provided markets for 13 per cent., and Eastern countries $15\frac{1}{2}$ per cent., New Zealand and other southern islands 10 per cent.

The statistics of the import trade of New South Wales in each year since 1913 are summarised in the following table in order to show the value of British and foreign goods imported :---

		British Empire.		Foreign	Total
Year ended 30th June.	United Kingdom.	Other British Countries.	Total.	Countries.	Imports.
1913* 1915 1916 1917 1918 1919 1920 1921 1922 1923	£ 15,367,428 13,016,787 13,629,280 14,250,293 9,356,813 13,978,376 15,591,284 32,960,437 19,969,726 26,651,718	£ 4,285,308 4,014,488 5,725,478 5,432,903 5,532,171 9,740,192 7,863,748 8,279,706 5,492,389 7,041,535	£ 19,652,736 17,031,275 19,354,758 19,663,196 14,888,984 23,718,568 23,455,032 41,240,143 25,462,115 33,603,253	£ 12,697,927 10,291,968 14,024,940 13,059,101 14,631,002 22,294,534 21,235,567 31,226,245 17,859,363 21,316,830	£ 32,350,663 27,323,243 33,379,698 52,742,297 29,519,986 46,013,102 44,690,599 72,466,388 43,321,478 55,010,083
		PER CENT. O	f Total Impor	гз.	
1913* 1915 1916 1917 1918 1919 1920 1921 1922 1923	$\begin{array}{c} 47.5 \\ 47.6 \\ 40.8 \\ 43.5 \\ 31.7 \\ 30.4 \\ 34.9 \\ 45.5 \\ 46.1 \\ 48.4 \end{array}$	$\begin{vmatrix} 13.2 \\ 14.7 \\ 17.2 \\ 16.6 \\ 18.7 \\ 21.2 \\ 17.6 \\ 11.4 \\ 12.7 \\ 12.8 \end{vmatrix}$	$\begin{array}{c} 60.7\\ 62.3\\ 58.0\\ 90.1\\ 50.4\\ 51.6\\ 52.5\\ 56.9\\ 58.8\\ 61.2\\ \end{array}$	$\begin{array}{c} 39 \cdot 3 \\ 37 \cdot 7 \\ 42 \cdot 0 \\ 39 \cdot 9 \\ 49 \cdot 6 \\ 48 \cdot 4 \\ 47 \cdot 5 \\ 43 \cdot 1 \\ 41 \cdot 2 \\ 38 \cdot 8 \end{array}$	100 100 100 100 100 100 100 100 100 100

* Year ended 31st December.

The percentage of imports of British origin declined by 17 per cent. between 1913 and 1918, then it rose in each year until in 1923 it exceeded the pre-war proportion. Fluctuations which occurred in the proportion of imports from British possessions during the war period were due mainly to variations in respect of imports from India. The proportion of foreign goods has decreased by 22 per cent. since 1917–18, when they represented almost half of the total imports.

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Year ended		British Empire.	· ·	Flowellaw	Total
30th June.	United Kingdom,	Other British Countries.	Total.	Foreign Countries.	Exports.
· · ·	£) £	£	£	£
1913*	11,904,424	3,761,634	15,666,058	17,173,731	32,839,789
1915	16,258,252	4,580,536	20,838,788	7,268,237	28,107,025
1916	15,320,054	5,076,785	20,396,839	20,578,577	40,975,416
1917	23,906,117	12,098,164	36,004,281	14,286,543	50,290,824
1918	17,267,342	10,661,804	27,929,146	11,689,947	39,619,09
1919	23,584,416	13,927,893	37,512,309	13,515,050	51,027,359
1920	26,009,277	10,965,772	36,975,049	18,042,016	55,017,06
1921	20,630,150	11,235,612	31,865,762	20,736,044	52,601,800
1922	18,805,323	7,026,533	25,831,856	22,180,999	48,012,85
1923	14,787,084	5,451,357	20,238,441	22,343,481	42,581,925
<u></u>	I	PER CENT. OF	FOTAL EXPORT	s.	
1913*	36.2	11.5	47.7	52.3	100
1915	57.8	16.3	74.1	25.9	100
1916	37.4	12.4	49.8	50.2	100
1917	47.5	24.1	71.6	28.4	100
1918	43.6	26.9	70.5	29.5	100
	46.2	27.3	73.5	26.5	100
1919		19.9	67.2	32.8	100
1919	47:3	13 3			
	47.3 39.2	21.4	60 6	39.4	100
1920			60 6 53 8	39·4 46·2	100

The value of the oversea exports from New South Wales to British and foreign countries in 1913, and in each of the last nine years, is shown below:—

* Year ended 31st December.

The proportionate distribution of the export trade between British and foreign countries fluctuated greatly after the outbreak of war, but the proportions for the year 1922-23 are fairly comparable with the pre-war figures. The United Kingdom receives more exports than any other country, but large quantities of the merchandise consigned to ports in Great Britain are reexported. Exportation to other British countries has been variable. 1916-17 the shipment of gold specie valued at £6,000,000 caused the proportion in this group to rise to 24 per cent., as compared with 12 per cent. in the previous year. In the following years large quantities of foodstuffs, etc., were sent for war purposes to British ports. In 1919-20 these exports diminished, but exports to New Zealand rose by £2,000,000, and remained at a high figure during the following year, then they dropped to the former level in 1921–22. The exports to foreign countries, which declined during the first year of the war, showed a marked increase in 1916, due to larger exports to the United States, including gold to the value of $\pounds7,500,000$; the proportion in that year rose to 50 per cent. During the succeeding three years it was under 30 per cent., then it began to rise steadily, but the increase is due in a measure to the fact that direct communication has been established between New South Wales and foreign countries to which exports were transshipped previously at British ports.

ARTICLES OF IMPORT.

A classification of the goods imported into New South Wales during the three years ended June, 1923, is shown in the following table. A new statistical classification of imports was adopted by the Department of Trade and Customs in 1922–23, and the figures for the preceding years as shown below, have been adjusted in regard to the principal items affected, so as to render them comparable with those for the year 1922-23:—

Classification of Imports.	1920-21.	1921-22.	1922-23.
	£	£	£
Foolstuffs of Animal Origin	489,715	684,110	735,014
Foodstuffs of Vegetable Origin, Beverages (non-			
alcoholic), etc	4,961,281	2,192,966	2.838,870
Spirituous and Alcoholic Liquors	950,572	829,223	918,319
Fobacco and Preparations thereof	2,833,079	1,636,745	1,474,117
Live Animals	52,512	72,215	76,405
Animal Substances net Foodstuffs	294.726	239,578	391,083
Vegetable Substances and Unmanufactured			
Fibres	2,496,274	1,975,176	1,837,986
Apparel	3,669,014	2,199,301	3,227,385
Textiles	14,877.948	10,098,454	12,285,389
Yarns and Manufactured Fibres	2562,728	1,470,278	2,041,921
Oils, Fats, and Waxes	3,256,307	2,047,162	2,377,892
Paints and Varnishes	294,054	189,820	219,226
Stones and Minerals (including Ores and Con-		,	
centrates)	168,734	104,093	157,960
Machines and Machinerv	5,175,851	3,938,987	4,170,004
Metals and Metal Manufactures other than			
Machinery	12,784,553	5,973,279	8,774,648
Rubber and Rubber Manofactures	841,397	539,490	949, 51
Leather and Leather Manufactures	374,273	150,842	242,558
Wood and Wicker	2,587,272	1,652,735	1,960,827
Earthenware, China, Glass, etc	1,336,809	\$55,686	901,595
Paper Stationery and Paper Manufactures	3, 127, 371	1,451,914	1,800.911
Stationery and Paper Manufactures	858,000	675,536	1,038,887
Jewellery, Timepieces, and Fancy Goods	1,345,558	886,220	1,149,931
Optical, Surgical, and Scientific Instruments	740,260	678,703	803,340
Drugs, Chemicals, and Fertilisers	2,146.337	1,344,886	1,398,407
Miscellaneous	4,165,901	1,360,019	3,192,76
Gold and Silver and Bronze Specie	22,822	64,060	48,02
Total Imports	72,466,388	43,321,478	55,010,08

The bulk of the imports consists of manufactured articles. The textile group *i.e.*, apparel, textiles, yarns, and manufactured fibres, is the most important in respect of value, and in 1922-23 represented 31.9 per cent. of the total value of imports; next in order were metals, metal manufactures and machinery, 23.5 per cent. Articles of food and drink and tobacco constituted an important class of imports, the value in 1922-23 being about 11 per cent. of the total, and paper, stationery, etc., represented over 5 per cent.

There were some notable increases in the imports of 1922-23 as compared with those of the year 1913; for instance, in the textile group the value of piece goods rose from £3,888,140 in 1913 to £10,089,938, and yarns from £80,008 to £1,080,758. Of the vegetable substances, the quantity and value of copra rose from 107,144 cwt., valued at £117,873, to 726,035 cwt., £786,018; and linseed from 72,535 centals, valued at £43,049, to 339,209 centals, £304,446. In some cases the increased value was due to higher prices as well as to larger quantities, thus 16,463,466 lb. of tea imported in 1913 were valued at £600,097, and 22,126,902 lb. in 1922-23 at £1,375,426; the figures for unmanufactured tobacco in the respective years were 8,656,932 lb., valued at £423,902, as compared with 10,526,722 lb., £1,276 540. The value of imports of vehicles and parts rose from £953,108 in 1913 to

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£3,178,456 in 1922-23, the chief item being motor vehicles; and in regard to petroleum spirits, benzine, etc., there was an increase from 3,845,682 gallons, valued at £194,420, to 17,246,790 gallons, valued at £1,291,013. The value of printing paper imported in 1913 was £450,167 as compared with £1,026,892 in 1922-23, and vessels transferred from abroad in the respective years numbered 15, valued at £250,950, and 38 valued at £1,586,248.

The chief items of the various classes of imports as in 1922-23, are shown below :---

Article	fa ue of import.	Årticles	Value of Import.
pparef, Textiles and Manufactured	£	Food, Beverages, and Tobacco-	£
Pieces Coode Cotten and Links		Tobacco, Cigars, etc	1,470,485
Silk and Velvet	4,757,927	Tea.	1,375,426
Woollen	1,889,519	Whisky	691,596
	1,876,652	Fish, in tins	367,947
Lace, etc.	318,229	Vegetable Substances and Unmanufac-	
Canvas and Duck	417,234	tured Fibres-	
Other	830,367	Copro	786,018
Bags and Sacks	867,004	Linseed	304,446
Sewing Cottons, etc	644,854	Kapok	216,077
Socks and Stockings	887,858	Paper and Stationerv-	~10,011
Trimmings and Ornaments	499,182	Printing Paper	1,026,892
Floor Coverings	991,801	Books (printed)	540.314
Yarns, Woollen	6.46.647	Writing Paper	272.340
		Oils, Fats, Waxes-	212,010
lachines and Manufactures of Metal-		Potrologin Wrights	1,291,013
Electrical Machinery and Appliances	1.529.167	Keresen	
Other Motive Power Machinery	5:36.275	Lubricating (Mineral) Oil	295,851
Printing Machinery	325,414	Other Classes-	270,300
Sewing Machines	229,443	Timber	1 505 600
Other Machinery	1.549.705	Voorela	1,737,930
Iron and Steel-	1,010,00		1,586,248
Bar, Rods, etc.	615.691	Fanna Coada	727,097
Plate and Sheet	1,413,569	Glass and Glassware	599,525
Wire	304.705		392,355
Metal Pipes and Tubes, etc	455,635	Musical Instruments and Parts	361,322
Foola of Fords		Jewellery and Precious Stones	353,809
V. histor and parta	342,016	Crockery and other Household Ware	314,316
venicies and pares	3,178,456	Films for Kinematographs	276,296

The United Kingdom is the main source of supply of nearly all the manufactured articles imported into New South Wales. The principal products of other European countries are as follow :- France and Switzerland, silk piece goods, lace and embroideries, trimmings and ornaments; Belgium, glass; Netherlands, electrical appliances; Norway, fish, paper, timber ; Sweden, paper, cream separators, timber, matches, and wood pulp ; Italy, motor chassis. The items of Eastern origin include the following :----From Japan, piece goods of silk and of cotton, chinaware, fancy goods, timber; from India, bags and sacks, hessian and other jute goods, tea, rice, linseed; from Ceylon, tea; from China, lace; from Netherlands East Indies, kapok, petroleum oils, tea. The products of the United States, which are imported in large quantities, include machines and machinery of various kinds, iron and steel, motor vehicles and parts, metal manufactures, oils, tobacco, films for kinematographs, timber, rubber tyres, musical instruments, and socks and stockings. The principal imports of Canadian origin are printing paper, tinned fish, metal manufactures, motor vehicles and parts, machinery, and timber. Undressed timber is the principal item of import from New Zealand. Copra is imported from various South Sea Islands, raw sugar from Fiji, rock phosphates from Nauru, and precious stones and maize from South Africa.

ARTICLES OF EXPORT.

The exports of Australian produce consist mainly of raw materials; particulars of the principal commodities exported during 1922-23 are shown below in comparison with the annual average during the the five years ended 30th June, 1222. In regard to such commodities as wool, wheat, etc., for

which there is constant demand, 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 trade in practically all the commodities enumerated in the table depends on the prices prevailing in the oversea markets :---

		Quan	tity.	Val	ue.	Per ce Total	
Commodity.		Annual Average, 1918–22.	1922-23.	Annual Average, 1918–22.	1922-23.	1918–22.	1922–2 3.
······································				£	£		
Wool-greasy	lb	184,804,937	241,057,990	11,405,064	17,964,324	24.8	44.7
scoured	1b.	38,038,906	40,611,306	3,381,793	3,803,226	7.4	9.5
tops	1b.	4,395,216	4,520,477	1,500,224	997,053	3.2	2.2
		227,239,059	286,189,773	16,287,081	22,764,603	35.4	56.7
Skins and hides	•••	•••		2,977,376	3,515,390	6.2	8.7
Meats-frozen-	1. 11.	28,604,916	63,027,852	685,880	1,659,327	1.5	4.1
Mutton and lam Other	0 10.	20,004,910	03,027,852	643,968	481,073	1.4	1.2
(m) 1 /	•••		•••	1,237,523	233,927	2.7	-6
í	•••	•••		764,474	398,546	1.7	1.0
m 11	cwt.	301,115	414,891	768,082	651,517	1.7	1.6
D 11	lb.		12,544,800	1,715,736	1,003,421	3.7	2.5
Wheat	cntl			4,854,777	767,964	10.6	1.9
Flour	cntl			1,466,524	1,168,822	3.2	2.9
Copper-Ingots and		2,010,000	1,000,012	1,100,021	1,100,022		
matte	cwt	391,937	126,231	2,017,079	462,876	4.4	1.2
Lead-Pig and mat		,, , ,	,				
2000 2780000000	ewt.	1,345,864	1,733,190	1,976,367	2,239,615	4.3	5.6
Tin-Ingots	cwt			624,613	174,665	1.3	-4
Coal	tons				1,200,092	2.0	3.0
Timber, undressed		1					
su	p. ft.	14,674,940	19,085,766	251,976	294,049	•5	1 .7
Bullion and specie	·			2,876,192	41,239	6.3	1
All other	••	••••		5,878,518	3,118,082	12.8	7.8
Total	•			45,964,218	40,175,208	100.0	100.0
÷ .			- E	ł	1	T j	

The value of the exports of domestic products depends mainly on the wool trade, which supplied 56.7 per cent. of the total value in 1922-23. The exports of wool in that year were considerably above the annual average during the previous five years, in regard to both quantity and value. The value of the wool sent to the United Kingdom was nearly $7\frac{3}{4}$ millions sterling, and the direct exports to Continental ports in the aggregate reached nearly nine millions sterling, including France £4,784,000, Germany £1,753,000, Belgium £1,236,000, and Italy £997,000; Japan purchased wool to the value of £3,849,000, and the United States £2,092,000.

Next in importance in 1922–23 were skins and hides representing 8.7 per cent. of the exports of Australian produce. The United States received the largest portion, viz., £2,297,664, the United Kingdom £633,018, and sheep-skins to the value of £333,368 were sent to France.

The exports of butter and of meat were equivalent to 5.9 per cent. and 2.5 per cent. respectively. The United Kingdom received the bulk of these products, and meat valued at $\pounds 132,478$ and butter $\pounds 151,177$ were sent to Eastern countries. Owing to unfavourable weather in the dairying districts

the quantity of butter available for export in 1922-23 was lower than the average of the previous quinquennium which included three seasons of high production.

Leather and tallow are important items of the export trade. The leather exported to the United Kingdom in 1922–23 was valued at £172,168, and to Eastern ports at £149,948. The principal countries to which tallow was consigned were Japan, £259,931, United Kingdom, £158,484, and Italy £102,005.

Wheat and flour represented 4.8 per cent. of the value of Australian products exported; the quantity of wheat in 1922-23 was less than one-fifth of the average of the previous five years, but the quantity of flour was only slightly lower. The value of wheat sent to the United Kingdom was $\pounds 229,135$, and to Italy $\pounds 537,148$. The principal markets for flour were United Kingdom $\pounds 216,595$, Egypt $\pounds 247,765$, Eastern countries $\pounds 558,939$, and South Sea Islands $\pounds 100,802$.

Among the industrial metals, copper, lead, and tin showed a proportion of 7.2 per cent. of the exports in 1922-23, as compared with 10 per cent. during the previous quinquennium. The bulk of the trade was with the United Kingdom, viz, copper £441,401, lead £1,564,117, and tin £62,664; Japan received pig lead to the value of £509,312. The figures for New South Wales, however, do not include the products of the Broken Hill mines which are dispatched oversea from South Australian ports. The value of the coal exported represented 3 per cent. in 1922–23. The oversea trade in this product has increased since the removal of war-time restrictions, but a valuable trade with South American countries, upon which an embargo was placed early in the war period, has not been regained. Only 24,745 tons of coal were exported to those countries in 1921-22 as compared with 750,937 tons in During 1922-23 there were signs of a revival, supplies from the 1913. United States having been curtailed during a strike of the miners in that country, and 126,245 tons of coal, valued at £133,581, were exported from New South Wales to South America, and 178,210 tons, valued at £190,416, to the United States and Hawaiian Islands. New Zealand, which usually provides the main outlet for coal, received quantities valued at $\pounds 428,313$, and the exports to Eastern ports amounted to $\pounds 397,632$.

There has been a marked decrease in the export trade in a number of food commodities such as tinned meat, condensed milk, jams, biscuits, etc., which were exported in large quantities during the war period. The readiness with which production was increased then to meet the extraordinary demand is evidence of the fact that there is ample scope for development, and the subsequent decline in trade points to the necessity of securing new markets.

There is a fairly large re-export trade in provisions and manufactured articles with New Zealand, New Caledonia, Fiji, and other South Sea. islands, but the principal item is copra, which is transhipped at Sydney to European ports. During the year ended June, 1923, copra to the value of £601,594 was re-exported, direct shipments to Netherlands being valued at £216,140; United Kingdom, £143,145; Germany, £108,570; and to France, £95,426. Other important items of foreign produce re-exported during the year were piece goods, £207,810; tea, £161,152; machinery £100,438; apparel attire, £99,254; rice, £94,665; oils, £75,437; sugar £73,869; spirits, £67,710; tobacco, cigars, and cigarettes, £62,624.

Exports-Ships' Stores.

The figures relating to the exports, as shown in the foregoing tables, do not include exports in the form of ships' stores. This branch of the trade

Year ended	S	nips' Stores Exporte	d.
30th June.	Australian Produce.	Other Produce.	Total.
· · · ·	£	£	·£
1919	920,981	120.615	1,041,596
1920	1.436.357	165.877	1,602,234
1921	2,028,728	300,969	2,329,697
1922	1.915.084	160,268	2,075,352
1923	2,018,821	116,703	2,137,524

of the State has increased in importance, as will be seen from the following statement of the value of ships' stores exported in each year since 1919:---

The most important items of Australian produce exported as ships' stores in 1922-23 were bunker coal, 1,300,826 tons, valued at £1,586,487; meat, fresh or smoked, 4,876,761 lb., £128,600; other meats, £170,956; butter, 338,466 lb., £31,765; milk, preserved, 347,596 lb., £15,735; flour, 45,823 centals, £16,187; ale and beer, 58,220 gallons, £14,709; potatoes, 21,641 cwt., £12,473; tobacco, etc., 31,474 lb., £11,305. The chief item of foreign produce was oil, 2,540,181 gallons, valued at £51,034.

CUSTOMS AND EXCISE TARIFFS.

When the Commonwealth was inaugurated in 1901 and control of customs and excise was transferred to the Federal Government, only a limited number of articles were subject to customs duty under the State tariff in New South Wales. At that time the tariffs in the other States, especially Victoria. were higher than in New South Wales, and in view of the provisions of the Constitution Act of the Commonwealth by which interstate trade became free, and the States were to be compensated for the loss of customs and excise revenue by the return of three-fourths of the revenue from this source collected by the Commonwealth, it was practically inevitable that the first Federal tariff, introduced in October, 1901, should involve a considerable increase, as compared with the New South Wales tariff, in the rates of duty and in the number of articles subject to duty. A feature of the tariff was the imposition of ad valorem duties, ranging up to 30 per cent. Nearly 88 per cent. of the goods imported into New South Wales in 1900 were on the free list, but as a result of the Federal tariff, the proportion, five years later, was only 32 per cent.; the average rate of duty on all dutiable goods had risen from 10.3 per cent. in 1900 to 16.5 per cent., and the rate on all goods except stimulants and narcotics from 4.3 per cent. to 10.9 per cent.

A Federal excise tariff also was introduced in October, 1901.

In 1906 an Act was passed to give effect to an arrangement with the Government of South Africa for a reciprocal preference, but it did not affect appreciably the customs revenue as importations from South Africa were relatively small. This was the first instance of a preferential tariff in New South Wales.

An important revision of the tariff was made in accordance with proposals introduced in the Commonwealth Parliament in August, 1907, and embodied in the Customs Tariff Act of 1908. The new tariff was designed to give a larger measure of protection to local industries. Preferential rates were provided in favour of certain products of the United Kingdom, the preferential duty in the case of *ad valorem* rates being usually less by five than the general tariff rates per cent. In December, 1911, alterations, generally in the direction of higher duties, were made in some of the rates; and during the war period the necessity for increased revenue in view of the heavy expenditure led to increases in the rates of customs and excise duties at various dates between December, 1914, and September, 1918.

In 1920 a complete revision of the tariff was commenced, the new rates being fixed with the object of fostering the development of local industries, and of giving preference to goods produced in the United Kingdom, reciprocal preference to goods produced elsewhere in the British Empire, and, in a lesser degree, to the products of foreign countries. The Minister for Customs, in introducing the tariff to Parliament, stated that it was the wish of the Government to see manufacturing industries established in the Commonwealth because primary production would be increased thereby and the growth of rural population stimulated. The proposals were introduced in March, 1920, and the revised tariff is contained in the Customs Tariff Act, 1921. The Act provides for 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.

The Act of 1921 does not affect the existing preferential tariff on South African goods, except to provide that the duty on such goods may not be higher than the general tariff rates. Reciprocity with New Zealand was established in 1922, the British preferential tariff has been applied generally to goods produced in New Zealand and special rates have been fixed in relation to certain commodities. Proposals regarding a preferential tariff treaty with Canada are under consideration.

The tariff list of 1920-21 included a number of duties to come into operation on specified dates subsequent to the 16th December, 1921, the date of assent to the Act, and it is provided that any of these duties 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. The items in respect of which deferred duties were imposed include iron and steel sheets, plain, corrugated, and galvanised; hoop-iron and other items of metal manufactures; aeroplanes; ships; soda, citric and tartaric acid, and cream of tartar; writing paper; woollen yarns.

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.

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, in respect of the following :---(Sec. 4) goods sold for export at less than the fair market value in the exporting country, or (Sec. 5) below the price which may be considered reasonable in view of the costs of production, etc.; (Secs. 6 and 11) goods consigned to Australia to be sold at less than a reasonable selling price; (Sec. 7) goods carried in subsidised ships, or as ballast at rates lower than the prevailing rates of freight, or carried freight free; (Sec. 8) goods from a country in which the exchange value of the currency has depreciated to such an extent as to enable goods to be sold to an importer in Australia at prices detrimental to Australian industries; (Sec. 9) goods of a kind produced in the United Kingdom which, by reason of a depreciation in the exchange value of the currency of the country of origin in comparison with the currency of the

United Kingdom, are sold to an importer in Australia at a price detrimental to British industry; (Sec. 10) goods manufactured from material supplied from a country, of which the currency has depreciated, and sold to an importer in Australia at a price below the price of similar goods made from material produced in the country of manufacture.

The amount of special duty under Section 7 is 5 per cent. of the fair market value of the goods at the time of shipment, and generally, the special duties under other sections are sufficient to remove the advantage which dumped goods would have in comparison with other goods of a similar nature, if the special rates were not imposed.

Up to the end of May, 1923, dumping duty had been imposed on 83 commodities, 71 being goods of German origin.

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 1921-22 and 1922-23, in comparison with the figures for 1913. Sydney is an important distributing centre for the whole of Australia, consequently the collections in New South Wales include receipts for goods which, in the course of trade, were transferred to and consumed in other States. On the other hand, they do not include receipts for goods transferred from other parts of Australia for consumption in New South Wales:---

		Net Collections.	
Tariff Division.	1913.	1921–2 2 .	1922-23.
Customs—	£	£	£
1 Stimulanta Ala Doon ata	1 040 594	980,337	1,123,73
9 Naraotian	577 000	1,071,270	1,109,48
9 Quanan	61 500	3,709	4,629
A Acmionitynal Deadwate and Onecomica	901 019	411,056	498,56
5 Append and Tentiles	0*1 040	1,857,294	2,352,53
A M.I.I		1,240,142	1,363,24
	700,277	172,338	225,230
7. Oils, Paints, and Varnishes 8. Earthenware, etc		230,911	223,46
9. Drugs and Chemicals		195,697	219,85
10. Wood, Wicker, etc		255,150	392,90
11. Jewellery and Fancy Goods		316,075	397,76
12, Leather and Rubber		190,172	554,72 348,28
13. Paper and Stationery		306,506	
14. Vehicles		282,471	621,96
15. Musical Instruments		92,490	121,18
16. Miscellaneous		219,995	322,06
Other Receipts	. 13,852	22,007	25,79
Total, Customs Duties	£5,222,677	£7,847,620	9,905,44
Excise—			
Beer	. 282,367	2,083,627	2,074,18
Spirits	188,281	631,657	656,10
Sugar	. 300,877		
Tobacco	. 204,805	661,383	628,75
Cigars	1,083	16,802	17,91
Cigarettes	. 383,989	1,659,345	1,517,18
Starch	1 -	() 5	
icenses-Tobacco		3,305	3,15
,, Other	Z.ZZI	{ 1,580	1,56
Total, Excise Duties	. £1,363,629	£5,057,694	£4,898,85
		£12,905,314	£14,804,29

The customs revenue increased by 90 per cent. during the period under review, and the excise revenue by 259 per cent.; the excise duties now contribute 33 per cent. of the customs and excise revenue as compared with 21 per cent. in 1913. Over 48 per cent. of the customs and excise revenue in 1922–23 was obtained from duties on stimulants, etc., and narcotics, viz.; $\pounds 7,127,349$, the figures for 1913 being $\pounds 2,878,877$ or 44 per cent.; these amounts were equivalent to $\pounds 3$ 5s. 8d., and $\pounds 1$ 11s. 8d., per head of population in the respective years.

The customs collections in respect of stimulants, etc., declined from $\pounds 1,240,524$ to $\pounds 1,123,733$, or by 9 per cent., notwithstanding the higher rates of duty. On the other hand, the excise on beer and spirits rose from $\pounds 470,648$ to $\pounds 2,730,281$. The excise revenue from tobacco and cigarettes also has increased in a remarkable degree. The duties in respect of the group apparel and textiles yielded the largest amount of the customs revenue in 1922-23, next in order being metals and machinery, stimulants, and narcotics.

The following table shows the net collections of Customs and Excise revenue during five years ended June, 1923:---

Collections.		Year	ended 30th	June.					
	1919.	1920.	1921.	1922.	1923.				
Customs Duties	£ 5,398,654	£ 6,604,913	£ 9,797,982	£ 7,847,620	£ 9,905,443				
Excise Duties	2,836,683	4,011,019	5,023,018	5,052,809	4,894,129				
Licenses	4,364	4,398	4,479	4,885	4,725				
Total £	8,239,701	10,620,330	14,825,479	12,905,314	14,804,297				
Per head of population	£ s. d. 4 3 9	£ s. d. 5 4 2	£ s. d. 7 1 10	£ s.d. 6 1 3	£ s. d. 6 16 3				

The increase in the collections during the year ended 30th June, 1920, was due to the fact that large quantities of goods were taken out of bond in anticipation of the new customs and excise tariffs which came into operation in March, when the proposals were laid before Parliament. The following year was characterised by abnormally heavy importations on which increased duties were collected, causing the customs revenue to rise by over 4 millions sterling.

TRADE REPRESENTATION IN OVERSEA COUNTRIES.

The future of the oversea trade of Australia depends to a large extent upon the opening of new outlets for staple exports, and the development of markets in oversea countries, and the question of providing official trade representation abroad has received special attention in recent years. While the bulk of the direct trade was with the United Kingdom, trade representation in other countries was left for the most part to private initiative, and the only official representation was in London. But the steady development of trade with America and with Eastern countries has rendered it advisable to extend the sphere of trade representation; in the East especially a rapid industrial expansion has created an enormous demand for raw materials, and New South Wales and the other Australian States should, by reason of natural conditions and geographical position, become most important sources of supply. In London New South Wales is represented by the Agent-General appointed by the State Government, and by the High Commissioner for Australia, who is the official representative of the Commonwealth. These officers undertake important administrative duties on behalf of the respective authorities, *e.g.*, the negotiation of loans, and the supervision of assisted immigration. Attention is given also to trade matters; commercial officers collect and supply trade intelligence and conduct investigations in regard to continental markets. A trade representative attached to the High Commissioner's office is stationed in Paris.

In 1918 the Commonwealth Government initiated a policy of extending its trade representation into foreign countries by the appointment of a Trade Commissioner in the United States, with headquarters in New York.

For many years New South Wales was represented in Eastern Asia by a Commercial Commissioner, with headquarters at Kobe, Japan, but in 1922 the office was abolished, the Commonwealth Government having made provision for trade representation in the Eastern Countries.

A Trade Commissioner, appointed by the British Board of Trade, is stationed at Sydney, and furnishes the Board with commercial information and advice with regard to openings for Imperial trade; a Trade Commissioner for France also resides in Sydney.

CHAMBERS OF COMMERCE.

Chambers of Commerce have been established by persons engaged in commercial pursuits in Sydney and in other trading centres throughout New South Wales, with the object of promoting the internal and external trade The Chambers consider and commerce and the industries of the State. questions connected with these matters, collect and circulate commercial and industrial information, undertake arbitration in trade disputes, and advance measures for the extension of commercial and industrial enterprise. In addition to individual members, the membership includes representatives of mercantile firms and societies and other organised bodies. There were 1,600 members of the Sydney Chamber of Commerce in 1923, and Chambers, numbering thirty-seven, in the following centres were affiliated :-- Newcastle, Albury, Auburn, Ballina, Bankstown, Bathurst, Bowral, Byron Bay, Campsie, Canterbury, Casino, Coff's Harbour, Copmanhurst and Upper Clarence, Cowra, Cronulla, Forbes, Goulburn, Grafton, Granville, Grenfell, Hornsby, Hurstville, Illawarra, Katoomba and Leura, Kempsey, Kogarah, Kyogle, Lismore, Liverpool, Maitland, Manilla, Molong, Mudgee, Orange, Parkes, Parramatta, and Rockdale.

SHIPPING.

Owns to the geographic position of New South Wales, the progress of the national industries is dependent to an unusual degree upon shipping facilities, and efficient transport services are essential to maintain regular and speedy communication and to place the staple products upon distant markets in a satisfactory condition without unduly increasing the cost. Improvement in the methods of carrying perishable products has promoted the growth of a permanent export trade in such commodities as frozen meat and butter; and in the construction of modern ships special provision is made for refrigerated cargo.

CONTROL OF SHIPPING.

Prior to the inauguration of the Commonweath 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 quarantime.

Special legislation relating to navigation and shipping is contained in the Federal Navigation Act, 1912–20. It is drafted on the lines of the Merchant Shipping Act and of the Navigation Acts of New South Wales and embodies the rules of an international convention for Safety of Life at Sea signed in London in 1914. The commencement of the Act was delayed on account of the war and it was brought into operation in sections as it contains provisions involving great changes in conditions, which if proclaimed simultaneously would cause difficulty in administration and would disorganise the shipping services.

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.

The portion of the Act relating to the coasting trade was proclaimed on 1st July, 1921. 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 raling in Australia, and, in the case of foreign vessels, to comply with the same conditions as to manning and accommodation for the crew as are imposed on British ships. The manning scale of officers and seamen which must be provided is set forth in schedules of the Act, and the employment of aliens on British ships is restricted. 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 accommodation, remuneration, and other conditions, as prescribed for licensed vessels in the coasting trade, are far in advance of the legal provisions for the well-being of the mercantile marine in any other country. Consequently the Navigation Act has the practical effect of excluding from trade between Australian ports all except Australian vessels, though it does not prohibit specifically the licensing of ships of other nationalities, unless in receipt of foreign subsidy.

A section of the Act prescribes that all vessels engaged in interstate and oversea trade, of at least 1,600 tons (gross), or carrying more than twelve passengers, must carry an approved wireless installation and one or more certificated operators and watchers according to the class of ship and the nature of the trade in which it is engaged.

On 1st March, 1922, sections of the Act relating to the employment of seamen became operative. Stringent provisions were made for regulating the engagement and discharge of seamen, and to guard against malpractices such as "crimping", to protect the rights of persons engaged in seafaring occupations, and to ensure efficiency in regard to rating.

Ships engaged in interstate and oversea trade carrying at least 100 persons on voyages where the distance between consecutive ports of call exceeds 650 miles are required to carry a duly qualified medical practitioner, or if carrying ten and less than 100 persons, a person qualified to render "first aid."

During 1923 sections of the Act were proclaimed in relation to the issue of certificates of competency to officers, the seaworthy condition of ships, provision for safety of life at sea, wrecks and salvage, Courts of Marine Inquiry, the supervision of the health of seamen, the protection of their property, and the relief of distress amongst seamen and their families. Practically the only important part of the Navigation Act which has not yet been brought into operation is that relating to pilotage, which 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 Wharfage and Tonnage 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, 1908-20, 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 oversea 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.

SHIPPING.

The liability of shipowners, charterers, etc , in regard to the transportation of goods is defined by the Sea Carriage Acts passed by the Commonwealth and the State Parliaments. The Commonwealth Act passed in 1904 applies in relation to the interstate trade and to the outward oversea trade of Australia, and the State Act passed in 1921 applies similar provisions to the intra-state trade. The Acts nullify clauses in bills of lading or similar documents which purport to relieve the shipowner or charterer from liability for loss or damage to goods arising from the improper condition of any part of the ship in which cargo is carried, or arising from negligence in the handling or care of the goods ; or to lessen the obligations of the shipowner or charterer to exercise due diligence, to man and equip the ship, to keep it seaworthy, and to keep in a fit state the hold, refrigerating chambers, and other parts in which cargo is carried ; or to lessen the obligations of the master, agent, or servants of a ship, to handle the goods carefully and to deliver them properly.

OVERSEA AND INTERSTATE 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 oversea 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 oversea 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	E	Intries.	Cl	Average Tonnage per Vessel. 1,498 1,828 2,177 2,392 2,149 1,978	
30th June.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	per
1901*	2,760	4,133,200	2,853	4,274,101	1,498
1906*	2,893	5,283,719	2,883	5,275,031	
1911*	3,127	6,822,135	3,146	6,833,782	
1913*	3,393	8,117,501	3,375	8.071.101	
1916	3,045	6,552,235	3,062	6,574,582	
1918	2,226	4,407,399	2,235	4,417,390	1.978
1921	3,019	7,123,331	3,023	7,122,209	2,358
1922	2,891	7,182,341	2,883	7,065,996	2,468
1923	3,031	8,326,182	3,012	8,260,309	2,745

* Year ended 31st December.

The shipping trade of New South Wales increased rapidly during the three years before the war, and the tonnage entered in 1913 was greater by 4,000,000, or by 96 per cent., than in 1901. During the war period, abnormal conditions caused the tonnage to decline in each year, until in 1917–18 it was only 274,000 tons greater than in 1901. Trade commenced to improve in 1919, and the improvement has continued so that in 1922–23, although the entries were 360 less, the net tonnage and the average tonnage per vessel were greater than in any previous year.

The average size of the vessels engaged in trade with New South Wales rose from 1,500 tons in 1901 to 2,400 tons in 1913, then declined to 1,900 tons during the war period, when scarcity of shipping caused smaller vessels to be commissioned for oversea voyages. The average has since risen above the pre-war figure, and in 1922-23 was 2,745 tons.

A noticeable feature of the shipping records of New South Wales is the large proportion of tonnage entering in ballast and the small proportion which clears without cargo. The majority of empty ships come from ports of the neighbouring States and New Zealand, where, in some cases, they have delivered a general cargo and have cleared for Newcastle, in this State, to load coal. In 1922-23 the tonnage entered in ballast amounted to 1,344,875 tons, or 16.2 per cent. of the total entries, and 493,752 tons, or 6 per cent., were cleared without cargo.

Sailing vessels are not engaged extensively in the trade of New South Wales, and they represented only 1 per cent. of the total tonnage in 1922-23 when the entries included 77 sailers with an aggregate tonnage of 89,028 tons, and the clearances 71 vessels, 80,618 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, 1923, exclusive of the coastal trade :--

	Oversea and Interstate.						
State.	E	atries.	Cle	Clearances,			
· · · · · · · · · · · · · · · · · · ·	 Vessels.	Tonnage.	Vessels.	Tonnage.			
New South Wales	3,031	8,326,182	3,012	8,260,309			
Victoria	 2,634	6,611,352	2,634	6,618,968			
Queensland	 954	2,713,019	966	2,752,716			
South Australia	 1,242	4,348,927	1,229	4,321,236			
Western Australia	 708	3,166,116	709	3,087,946			
Tasmania	 1,216	1,193,427	1,226	1,200,906			
Northern Territory	 37	99,955	37	99,955			

NATIONALITY OF VESSELS.

The trade of the State of New South Wales, to a very great extent, is carried 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 local shipowners. The table below distinguishes British and foreign shipping at intervals since 1901.

ended June.	1. E	fonnage Entere	d and Cleared		Percentage.			
Ycar e 30th Ji	Australian,	Other British.	Foreign.	Total.	Australian.	Other British.	Foreign	
1901*	3,348,502	3,714,217	1,344,582	8,407,301	39.8	44.2	16.0	
1905*	3,899,230	4,920,850	1,738,670	10,558,750	36 9	46.6	16.5	
1911*	4,645,195	6,594,649	2,416,073	13,655,917	34.0	48.3	17.7	
1913	5,711,398	7,470,714	3,006,490	16,188,602	35.3	46.1	18.6	
1916	5,503,406	6,079,371	1,544,040	13,126,817	41.9	46-3	11.8	
1917	4,833,745	5,438,016	1,334,343	11,606,134	41.6	46.9	11.5	
1918	4,265,496	3,348,204	1.211,089	8,824,789	48:4	37.9	13.7	
1919	3,703,322	3,732,713	1,317,586	8,753,621	42.3	42.6	15.1	
1920	3,329,412	5,755,223	1,652,154	10,736,789	31.0	53 6	15.4	
1921	4,739,555	6,739,914	2,766,071	14,245,540	33 3	47.3	19.4	
1922	5,659,061	6,823,443	1,765,833	14,248,337	39.7	47.9	12.4	
1923	5,824,691	8,348,022	2,413,775	16,586,491	35.1	50.3	14.6	

* Year ended 31st December.

SHIPPING.

The decline in the percentage of Australian tonnage between 1918 and 1920 was mainly the result of an arrangement by which the interstate steamers were requisitioned by the Commonwealth Government in April, 1918, and were run as one fleet. Thus it was possible to release from the interstate trade a number of vessels representing approximately 45 per cent. of the interstate tonnage, and to dispatch them to oversea ports. The steamers were released from Government control two years later, but the owners who are associated as the Australian Steamship Owners' Federation continue to run them as one fleet. During the last three years there has been a marked increase in the Australian tonnage and in the year ended June, 1923, it was larger than in 1913.

The "Other British" tonnage has increased largely since 1918, and the volume of foreign shipping shows a tendency to rise.

Particulars relating to the nationality of vessels engaged in trade with New South Wales in 1913, and in the last two years, are shown in greater detail in the following statement :---

A the definition of the second s	an an Beachar		Entries ar	nd Clearanc	æ s.		Para	Tonnage Percentage of each		
Nationality of Shipping.	1	913.*	192	1-22.	192	2-23.	Nationality		•	
1941 - Andrew State (1997) 1944 - Angele State (1997)	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	1913.*	1921-22.	192 2–23	
British							£.,			
Australian	3,231	5,711,398	3,249	5,659 ,0 61	3,680	5,824,694	35-3	39-7	351	
New Zealand	771	1,359,138	217	222,901	284	248,641	84	1.6	1.5	
Cnited Kingdom	1,589	6,081,117	1,542	6,281,834	1,682	7,548,841	37.5	44.1	45.5	
Other British	22	30,459	131	318,708	20?	550,540	•2	2.2	3.3	
Total	5,613	13,182,112	5,139	12,482,504	5,248	14,172,716	81.4	87.6	85•4	
Foreign -								-		
Denmark	2	768	15	54,785	18	62,317	•0	-4	•4	
France	150	313,252	82	149,378	110	230,629	1.9	1.1	1.4	
Germany	487	1,533,728			30	- 81,127	9.5		.5	
Italy	29	47,770	40	145,343	28	101,364	3	1.0	16	
Netherlands	52	128,870	90	307,563	- 111	397,372	-8	2.2	2.4	
Norway	183	353,843	87	174,958	93	247,778	2-2	1.2	15	
Sweden	23	57,643	38	118,223	59	166,964	-4	-8	1.0	
Japan	103	332,471	152	465,125	186	616,898	2.0	3.3	3.7	
United States of	50	140.000		010.070	-	473,728		2.2	2.9	
America	76	148,853	113	318,076			9		1 .	
Other Nationalities	50	89,292	18	32,377	17	\$5,598	•6	-2	-2	
Total	1,155	3,006,490	685	1,765,833	795	2,413,775	18.6	12.4	14.0	
Grand Total	f,768	16,188,602	5,774	14,248,337	6,043	16,586,491	100-0	100.0	100.0	

* Year ended 31st December.

The proportion of Australian tonnage in 1922-23 was equal to that in 1913, but the actual tonnage was somewhat higher. The tonnage owned in the United Kingdom was higher, absolutely and relatively, than before the war, and in 1922-23 was considerably above that of the preceding year, but there has been a decided decrease in New Zealand tonnage. The shipping classified as other British has increased mainly as a result of the inauguration of services by Canadian lines, of which the tonnage, 398,710, in 1922-23, represented 2.4 per cent. of the total entries and clearances, as against 1.7 in the previous year.

In 1913 the largest proportion of foreign tonnage was German, amounting to 9.5 per cent. of the total shipping. German ships were excluded in 1914, and did not re-enter the trade until 1922-23, when the records included 30 German ships, and their tonnage represented 5 per cent. of the total tonnage. During the war period Japanese and American tonnage began to take an important part in the oversea trade of New South Wales, and between 1913 and 1920-21 the Japanese tonnage rose from 2 per cent. to 8.1 per cent., and the United States from 9 per cent. to 4.2 per cent. In the succeeding two years there has been a decrease, especially in respect of the Japanese tonnage, indicating that much of the trade supplied by Japan as a result of the war conditions is reverting to other countries.

French tonnage has declined since the war, but steamers of that nationality are gradually resuming regular services to Australia. Italian lines are absorbing an increasing proportion of the oversea trade of the State, and have established a regular service between Genoa and Australia. Other European countries with increased tonnage in the Australian trade are the Netherlands, Denmark, and Sweden.

The foreign tonnage in 1922-23 was 14.6 per cent. of the total, as compared with 12.4 per cent. in the previous year, and 18.6 in 1913, but there are indications that foreign shipowners are endeavouring to increase the direct trade between Australia and their respective countries.

In 1922-23, of the Australian tonnage, 4,830,689 tons, or 83 per cent., represented entries and clearances in interstate, and 994,005 tons in oversea trade, the tonnage to and from the United Kingdom being 355,986 tons, and New Zealand 265,342. Of the other British tonnage, including ships owned in the United Kingdom, 3,162,392 tons were entered from, and cleared for, interstate ports, and 2,526,749 tons plied between Australia and the United Kingdom. The tonnage belonging to other nations was employed chiefly in the foreign trade.

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 oversea countries, grouped according to

		1913.		1921–1922.		922-23.
Country.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
Australian States	. 3,931	8,087,899	3,454	7,093,616	3,743	8,780,249
New Zealand	640	1,453,215	531	1,077,654	453	995,571
Europe	. 803	3,440,944	599	2,941,692	663	3,575,734
Africa	. 69	149,074	99	311,768	50	124,470
Asia and Pacific Islands .	734	1,566,433	815	1,799,395	751	1,706,334
North and Central America .	. 281	818,301	258	995,837	341	1,307,860
South America	301	672,736	18	28,375	42	96,273
Total	. 6,768	16,188,602	5,774	14,248,337	6,043	16,586,491
	1		l'	<u>l</u>	1	l

geographical position, indicates, as far as practicable, the growth or decline of shipping along the main trade routes since 1913 :---

Shipping to and from the other Australian States in 1922-23 was greater by 1,587,000 tons than in the previous year. There has been a continuous decline in respect of the New Zealand trade. Tonnage to and from the United Kingdom and other European countries was considerably higher than in 1921-22, and it showed an increase of 134,790 tons as compared with 1913. Trade along the Eastern and Pacific Island trade routes increased by 39 per cent. between 1913 and 1920-21, and has since then declined by 22 per cent. The tonnage engaged in trade with North and Central America was much higher than in 1913, but the South American trade, which was mainly for the export of coal, has lost its former importance.

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 in 1913, and in each of the last five years, 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 (Sydney).				Port Hunter (Newcastie).		ort mbla.	Other Ports.		
30th June.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage	
1913*	2,275	6,174,321	906	1 771,032	67	87,488	145	84,660	
1919	1,573	3,223,631	676	1,172,724	41	43,709	45	11,940	
1920	1,487	3,812,772	696	1,460,916	86	71,162	29	11,286	
1921	1,869	4,778,182	1,082	2,255,040	42	85,514	26	6,595	
1922	1,811	4,984,876	985	2,066,868	53	116,593	42	14,004	
1923	2,057	6,104,733	854	2,017,729	78	196,120	44	7,600	

* Year ended 31st December.

It is the practice of many vessels, including steamers engaged regularly in the trade of New South Wales, to discharge cargo at Sydney, then to 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 has increased

steadily during the last five years as a result of the establishment of important industries in the locality. The decline in the inward trade of other ports, as compared with the year 1913, is due mainly to the omission of Twofold Bay as a port of call for interstate vessels.

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 Bag, Port Jackson (Sydney Harbour) and Jervis Port Jackson ranks first by reason of extent, natural facilities, and Bav. Artificial harbours have been constructed at Coff's volume of trade. 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.

Sydney Harbour.

Port Jackson (Sydney Harbour) is the principal port of New South Wales. It has a safe entrance and deep waters, and its steep foreshores provide good shelter for vessels at anchor. It is almost landlocked, resembling a lake rather than a seaport. The entrance, which is three-quarters of a mile wide, lies between bluff headlands, and faces eastward, so that it is protected considerably from southerly gales, which expend their violence on North Head instead of sweeping directly into the harbour, to the inconvenience of shipping.

At the Heads the depth of water is 80 feet, and near the entrance the fairway divides into two channels about half a mile long, each having a depth of 40 feet, which could be increased if required, as the bottom is sand. The eastern channel is 700 feet wide, and is protected entirely by South Head, so that very little allowance need be made for scend. The channel is well lighted, and may be used by very large vessels by night as well as by day. The western channel is naturally shallower and narrower than the eastern, but it has been improved to give a depth of 40 feet and a width of at least 500 feet. As far as practicable the eastern channel is reserved for outgoing vessels and the western for incoming traffic.

The total area of Port Jackson is 14,260 acres, or about 22 square miles. The coastline, being irregular, is over 188 miles in length, and gives facilities for extensive wharfage. The area which may be designated the harbour proper, embraced by 75 miles of foreshores, *i.e.*, below the Iron Cove, Parramatta River, and Lane Cove bridges, and the Spit, Middle Harbour, covers 8,980 acres. About three thousand acres have a depth ranging from 35 to 160 feet at low water, ordinary spring tide, and excluding the fairway and the bays in which most of the shipping is accommodated at present, there are over 1,000 acres suitable for anchoring deep-sea vessels. The rise and fall of the tide in the harbour is from 3 feet to 6 feet. The control of the Port was vested in the Sydney Harbour Trust in the year 1901. Previously the wharves, with few exceptions, were under private control. The wharfage had been constructed and the foreshores laid out, without system or co-ordination, to meet individual requirements, and the condition of the waterside had become so insanitary as to constitute a serious menace to the health of the City. Therefore, the Government resumed all the wharves and adjoining properties and constituted the Trust. It 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 Trust was debited with the value of the resumed property and improvements, amounting to £4,700,000, and, by reason of extensive improvements effected under a comprehensive scheme of reconstruction, the capital doot, as at 30th June, 1923, was £10,129,000. The shipping accommodation has been largely remodelled, old wharves being replaced and new wharves and jetties and sheds constructed to keep pace with a rapidly increasing trade. The depth of water has been increased in various parts of the harbour, a sea-wall has been built, the approaches have been improved, and a roadway, 100 feet wide, has been constructed along portion of the water-front. Amongst the property under the administration of the Harbour Trust is a considerable area adjoining the water-front, embracing dwellings, shops, and stores. The area has been improved greatly by the demolition of old buildings to permit the widening of the streets and the ercetion of modern dweltings for waterside workers and of business premices and stores.

The principal wharves are situated in close proximity to the business centre of the city, about 4 or 5 miles from the Heads. Excluding ferry wharves and jettics used for private purposes, there are 57,950 feet of wharfage under the control of the Trust. The principal wharves are lessed to the various shipping companies whose vessels engage regularly in the trade of the port, and open wharves are reserved for vessels which visit the port cecasionally.

	Locality		Number of Berths,	Length of Berths,		
				!	1	ft.
Woolloomooloo I					13	5,810
Circular Quay	· · · ·	•••		•••	8	3,718
Walsh Bay				•••	11.	7,035
Darling Harbour					91	32,955
Blackwattle Bay					20	2,908
Rozelle Bay					- 11	1,984
White Bay	•••	•••		•••	9	3,540
	Total	•••			163	57,950

The location of the wharves and the berthing accommodation for oceangoing vessels are shown below :---

The berths in Woolloomooloo Bay are used in connection with a general oversea trade. Commodious sheds have been erected on the wharves and electric conveyors installed. The southern portion of Circular Quay is used exclusively for ferry traffic, but eight berths are available on the castern and western sides for large mail steamers. In Walsh Bay the waters are deep, and advantage was taken of the steep shore to increase the capacity of the jetties by erecting sheds of two storeys, the upper floors having access by means of bridges to streets on a higher level. Darling Harbour is the main shipping locality. It contains 91 berths of an aggregate length of 32,955 feet, and some of them are directly connected with the railway system.

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 in bulk. Grain brought by rail from the country districts may be unloaded from the trucks, at the rate of 80,000 bushels per hour, into a large terminal elevator, and it may be delivered from the elevator into the holds of vessels at the rate of 60,000 bushels per hour, four vessels being loaded simultaneously.

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 accommodation is reserved for the storage of copra and explosives. 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. In 1922 the Sydney Harbour Bridge Act was passed, and in accordance with its provisions tenders were invited for the construction of a bridge to span the harbour from Dawes Point to Milson's Point. A tender for the construction of an arch bridge was accepted, the contract price being $\pounds 4,217,721$. The bridge will provide for pedestrian, vehicular and railway traffic, and is expected to be completed in 1930. It is estimated that the approaches to the bridge will cost a further sum of $\pounds 1,275,000$, and land resumptions $\pounds 250,000$. When the bridge is built it is probable that wharfage will be provided on the northern shore.

There are nine islands in Port Jackson. Four are reserved as public pleasure resorts. Garden Island is used as a depôt by the Australian Navy, and Goat Island by the Harbour Trust, whose fire-fighting appliances, including three vessels, are stationed there. The principal docks are situated on Cockatoo Island, and Spectacle Island is used for the storage of explosives. Fort Denison, used formerly for defence purposes, is now a lighthouse.

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 223 as they include vessels engaged in the coastal trade, 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.		Oversea a	nd Interstate.	Tota	d Trade.		
	Number.	Net Tonnage.	Number.	Net Tonnage.	Numbe r .	Net Tonnage		
1919	5,577	1,305,751	1,922	3,846,915	7,499	5,152,666		
1920	5,803	1,415,525	1,742	4,387,859	7,545	5,803,384		
1921	6,493	1,634,493	2,205	5,601,760	8,698	7,236,253		
1922	6,240	1,532,243	2,242	6.009.118	8,482	7,541,361		
1923	5,874	1,611,531	2,503	7,201,901	8,377	8,813,432		

There was a marked increase in the number and tonnage of vessels entering the halbour in 1920-21, when the oversea trade of the State was exceptionally large. In the following years the tonnage was greater,

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though the number of vessels declined, as a decrease occurred in respect of the coastal trade. The net tonnage in 1922-23 was greater by 1,272,071 tons than in the previous year. The average net tonnage of the oversea and interstate steamers in 1922-23 was 2,921 tons, as compared with 2,620 in 1913.

The proportion of sailing vessels is decreasing rapidly, and the number which entered in 1922-23 was only 120, with a tonnage of 66,153, as compared with 332 vessels and a tonnage of 169,024 in 1917-18.

The following statement shows the latest tonnage figures, including coastwise, for the principal ports of Australasia and the United Kingdom. The figures include tonnage which arrived at the respective ports, although not recorded as entered by the Customs Department :---

	Tonnage. Arrivals incl. Coastwise.	Port.	Tonnage. Arrivals incl. Coastwise.
1		England-	17 960 11
• • • •			17,369,113
•••	7,015,030		
	4,662,155	Birkenhead)	
•••)	4,065,796		
	3.121.839	Newcastle and Shields	6,870,203
J	2.664.643	~	5,542,771
	1.172.515	Hull	4,040,355
	720,007	Newport	2,049,92
	557,733	a	1.1.1
			4,202,71
		Leith	1,509,69
	9 765 619	Ireland-	1 .
÷			2,718,48
•••			9 770 06
	•••	Arrivals incl. Coastwise, 8,813,432 7,015,030 4,662,155 4,662,155 2,664,643 1,172,515 720,007 557,733 591,193 2,765,619 1,046,049	Arrivals incl. Coastwise. Port. 8,813,432 London 4,662,155 Liverpool (including Birkenhead) 4,065,796 Cardiff 3,121,839 Neweastle and Shields 2,664,643 Southhampton 720,007 Newport 557,733 Scotland— 2,765,619 Ireland— 1,946,049 Dublin

The revenue and expenditure by the Sydney Harbour Trust during each of the last five years are shown in the following statement, also the capital debt at the end of each year :---

		1.		Expendi	iture.		
Year ended 30th June.	Capital Debt. Revenue.		Working Expenses,	Renewals and Re- placements.	Interest.	Total Ex- penditure.	Surplus.
	£	£	£	£	£	£	£
1919	8,691,972	618,901	159,821	20,078	336,823	516,722	102,17
1920	8,959,887	658,313	186,458	19,992	353,037	559,487	98,82
1921	9,449,213	797,211	224,676	20,088	438,210	682,974	114,23
1922	9,868,165	827,122	236,058	25,062	488,552	749,672	77,45
1923	10,129,113	852,242	229,849	23,766	514,756	768,371	83,87

During the year 1922-23, the revenue represented 8.52 per cent. of the capital debt, and the ratio of working expenses to the revenue was 26.9 per cent. After deducting interest charges and the expenditure from the Public Works Fund on renewals and replacements, there was a surplus on the year's transactions of £83,871.

The principal sources of revenue in 1922-23 were wharfage rates, which amounted to £517,741, and rents for wharves, jetties, stores, etc., £176,878. The chief items of expenditure were head office salaries and contingencies, £53,669, maintenance of property, £39,758, and dredging, £25,009.

Newcastle Harbour.

Newcastle Harbour (Port Hunter) is the second port of New South Wales and the third 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. It is proposed to increase 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 22,572 feet is provided; 10,138 feet are used for the shipment of coal, 7,295 feet for general cargo, 2,428 feet for Government purposes, and 2,711 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. The railway extends along the coal wharves also.

Other Ports.

The shipping trade of the ports of New South Wales, other than Sydney and Newcas'le, is relatively small, and only a brief account of these harbours and anchorages is given hereunder, in the order in which they occur along the coast. Particulars regarding the depth of water at the entrances and the wharfage accommodation were published in the 1921 issue of the "Year Book," at page 283.

The most northerly port is the estuary of the Tweed River. Its entrance is formed by breakwaters, but the channel is almost blocked by a sandy bar, where the average depth at low water is only 5 feet. Byron Bay provides fair shelter during off shore winds, the depth of water at the ocean jetty being 19 feet. The estuaries of the Richmond and Clarence Rivers are bar harbours. On the Richmond River bar the average dep h at low water is 12 feet, and the river is navigable by small vessels as far as Lismore, 65 miles from the sea. The bar at the entrance to the Clarence River is somewhat shallower, but vessels of 14 feet draught may navigate the river as far as Grafton (48 miles). Woolgoolga gives protection to small vessels in southerly weather. At Coff's Harbour breakwaters are under construction to form a harbour for the rich Dorrigo district by connecting small islands in the vicinity with the mainland. When complete, a harbour of 222 acres will be available, and 97 acres will give a minimum depth of 24 feet.

The bar harbours which form the estuaries of the Bellinger and Nambucca Rivers are used only by vessels of light draught. Trial Bay generally affords safe anchorage and shelter for coastal vessels. The Macleay River, which discharges into Trial Bay, is navigable by small vessels for 30 miles. Port

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Macquarie, at the mouth of the Hastings River, is a bar harbour for constal vessels, but the entrance is rendered somewhat dangerous by shifting banks of sand. Between Port Macquarie and Port Stephens small vessels are afforded shelter at Camden Haven, Crowdy Bay, Harrington Inlet (at the mouth of the Manning River), Cape Hawke Harbour (Point Forster), and Sugarloaf Bay.

Port Stephens is 21 nautical miles north of Newcastle. At the entrance the depth is 30 feet and the width between the headlands is about 60 chains, the navigable width being 20 chains. The port extends westward for about 11 miles and is from 1 to 3 miles broad. Excluding the Karuah and Myall Rivers, which discharge into Port Stephens, the area enclosed by a coastline of 92 miles is about 32,000 acres. The eastern portion is somewhat obstructed by sandbanks, but there are channels between them giving access to secure landlocked anchorages. Salamander Bay, 5 miles from the entrance, is a spacious, well sheltered anchorage, with a depth ranging from 36 to 54 feet. Outside Port Stephens there is an anchorage known as Fly Road, where vessels can obtain excellent shelter in exceptionally heavy southerly weather, if they experience difficulty in entering the port. On account of its natural advantages, its proximity to the Maitland coal-fields, and its favourable position for connection with trunk railways, Port Stephens could be transformed into an important shipping centre.

Broken Bay, at the mouth of the Hawkesbury River, is also a good natural harbour, but on account of its proximity to Sydney Harbour it has not been developed. Broken Bay has three large branches, Brisbane Water, Hawkesbury Mouth and Pittwater. The area below the bridge where the main Northern railway crosses the Hawkesbury River, excluding Cowan, Mullet and Cockle Creeks, and Brisbane Water, extends over 14,500 acres and has a coastline of 62 miles. The entrance to Broken Bay is 24 miles wide, with deep water. The Hawkesbury River is navigable for 70 miles. Vessels of 9 feet draught may enter Brisbane Water. Pittwater is deep, but the entrance is blocked by a bar with a fairway depth of 9 feet.

To the south of Sydney lies Botany Bay, used mainly as a fishing ground and tourist resort. At the roadsteads Bulli and Bellambi, occan jetties have have been constructed for the shipment of coal. Wollongong has a small artificial shipping basin connected by rail with the Illawarra coal mines. A few miles further south a harbour for deep-sea vessels has been built at Port The shipping area with a minimum depth of 24 feet is 256 acres, Kembla. and there are 166 acres with 36 feet of water. Shellharbour is fit for small At Kiama a small harbour is available for coastal steamers. vessels only. At Crookhaven good anchorage may be obtained in 6 fathoms of water. Jervis Bay is 82 miles south of Sydney Its area is about 48 square miles and the entrance is about 21 miles wide. About 38 square miles carry a depth over 24 feet, but only a small proportion of the area is suitable for anchorage in all weather, on account of the almost oval form of the bay and the few indentations in the coastline, which is only 31 miles in length. Darling Road and Montague Road are parts of the bay which afford shelter at all times. At Darling Road an area of land has been ceded to the Commonwealth Government as a port for Canberra, the Federal Capital.

Between Jervis and Twofold Bays there are a number of shipping places where small coastal steamers load dairy produce for the Sydney market, viz., Ulladulla, a small artifical harbour, Bateman Bay, Moruya River, Narooma (Wagonga Inlet), Bermagui, Tathra (the port of Bega), and Merimbula. Twofold Bay is near the southern extremity of the State. It affords good

anchorage for fairly large vessels, but on account of the great width at the entrance, viz., 3 miles, and the comparatively small area of the bay, 7,580 acres, it would require extensive improvement to convert it into an efficient harbour.

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 smaller steamers and launches.

The use of the inland rivers for navigation depends mainly on seasonal conditions and, 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 A scheme is in progress for the construction of storage dams, distance. 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. The scheme has been undertaken with the primary object of supplying water for the purposes of irrigation, but the agreement provides that except in times of unusual drought, sufficient water must be maintained in the weirs and locks to provide for navigation by vessels drawing 5 feet of water.

RATES OF FREIGHT.

Freight charges represent an important factor in the cost of marketing in oversea 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. In regard to this matter, it is considered that the establishment of the Commonwealth Government Line has had the effect of stabilising rates, as the declared policy of the management is against increases unless current rates have proved unprofitable.

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 \pounds 7 10s. per ton in 1920, and in the following year space was obtained at the rate of \pounds 2 6s. 8d. per ton. In each of the last two years, there was a further decline.

The following statement shows the range of rates for the carriage of various commodities by steamer from Sydney to London in the last four years, as compared with the rates in 1913-14:

	Arti	cle.			1913-14.	1919-20.	1920-21.	1921-22.	1922-23.
Butter	•••	••	box	56 lb.	2s. to 2s. 6d.	5s. 3d. to 5s. 4d.	6s.	6s. to 5s.	5s.
Copra		••		ton	42s. 6d.	+ 5%. 208s. to 225s.	225s. to 120s.	120s. to 80s.	80 s. to 61s. 3d.
Hides		•••		lb.	50s. to 60s.†	11d.	11d. to 1d.	1d. to Id.	ad, to ad.
Leather	••			ton	80s.	135s. to 270s.	270s. to 244s.	244s. to 200s.	200s. to 153s
Mutton-F	rczen	••		lb.	rad. to Hd.	13d. to 113d.	$1_{3}^{*}d. + 5\%$	13d. to 13d.	1§d. 10 1åd.
						+ 5 %.	- · · · ·	net.	net.
Rabbits-P	reserv	red		\mathbf{ton}	55s.	120s. to	120s. to 105s,	105s. to 85s.	85s. to 70s.
						167s. 6d. + 5 %.			
Tallow		••		,,	47s. 6d.	180s.	180s. to 170s.	170s. to 130s.	130s.to 78s.91
Wheat		••	·	,,	25s. to 37s. 6d.	120s. to 150s.,	120s. to 46s. 8d.	46s. 8d. to 35s.	35s. to 30s.
						less 5 %.			
Wool-Grea	asy	••	••	lb.	åd.	1{d.	1§d.	1§d. to 1§d.	1§d. to 17d.
Measureme	nt Go	ods-	-40 cu	1b. ft.	40s. to 45s.	120s.	120s. to 105s.	105s. to 95s.	95s. to 70s.
Timber		1	100 su	p. ft.	6s. 9d.	358.	35s. to 22s.	22s. to 15s.	15s. to 11s.

† Per ton.

* See section relating to Geography.

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A substantial decline occurred during the year ended June, 1923, but at the end of the season the rates were still much higher than in 1914. Wool was curried direct to Continental ports in Europe at the same rates as to London in 1922-23, and the rate from Sydney to Japan was 1⁴/₄d. per lb., less 10 per cent. rebate.

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 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 the seven pointed star of the Commonwealth and the five smaller white stars representing the Southern Cross.

The ports in New South Wales at which shipping registers are kept are Sydney and Newcastle. The following statement shows particulars regarding the shipping on the Registers, as at 30th June, 1923:—

	s	team.	Motor.		Sailing.		Total.	
Tonnage Class.	No.	Tonnage.	No.	Fonnage.	No.	Tonnage.	No.	Tonnage.
Under 5 tons 50 and under 500 500 ,, ,, 1,000 1,000 ,, ,, 2,000	32	6,026 33,600 18,031 51,569	197 3 	2,128 206 	$208 \\ 75 \\ 10 \\ 3$	$2,868 \\11,564 \\7,961 \\3,479$	666 288 35 35	11,022 45,370 25,992 55,048 51,021
2,000 and over Total	16 544	51,021 160,247	200	 2,334	296	 25,872	16 1,040	188,45

Changes in respect of the registration in consequence of sales show that forty-seven vessels, with an aggregate tonnage of 6,861 tons (net), were sold during the year 1922-23. Forty-six of a net tonnage of 6,647 tons being sold to British subjects, the transactions did not necessarily involve removal from the registers, as in the case of one vessel of 214 tons sold to foreigners. Twenty-five vessels were imported from the United Kingdom, their aggregate value being £1,545,600; one from Belgium, value £32,500; and one from the United States, value £8,000. Four vessels, of a total value of £14,300, were exported, viz., one to Fiji, one to France, one to Straits Settlements, and one built in Australia to Solomon Islands.

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 six 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. The Sutherland Dock is 633 fe-t long, and can accommodate a vessel with a breadth of 84 feet, and a draught of 30 feet. The Fitzroy Dock has an effective length of 490 feet, 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. Ninety-six vessels, including 46 warships, were docked at the Cockatoo Island docks during the year ended 30th June, 1923, their gross tonnage being 256,310 tons. The vessels slipped numbered 41 with a tonnage A large number of vessels, including warships, have been of 1,353 gross. constructed at Cockatoo Dockyard. The largest Australian-built steamer, the Fordsdale, 9,700 gross tonnage, was completed at Cockatoo Dockyard in February, 1924, for the Commonwealth Government Line. A sister ship, the Ferndale, will be launched during the year.

A private company, Mort's Dock and Engineering Company, Limited, owns two graving docks in Sydney Harbour, three floating docks and three patent slips. The Woolwich Dock is \$50 feet long, and at high tide can take vessels drawing 28 feet; Mort's Dock is 640 feet long, and vessels drawing 16½ feet may be floated into it. The largest of the slips is 270 feet long; it can take a vessel weighing 1,500 tons, 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 are two smaller docks, under private ownership, with a lifting power of 400 tons and 300 tons respectively, and the State Government maintains a slip with a lifting capacity of 100 tons.

At Newcastle there are two patent slips attached to the State Government Dockyard at Walsh Island, and three 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 had 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 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, 1923, 52 vessels, with a gross tonnage of 12,255 tons, were slipped at Walsh Island; 41 were dredges, tugs, punts, etc., belonging to the State, and 11 were privately owned.

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. Forty-eight vessels with a gross tonnage of 3,298 tons were docked at these ports during the year 1922-23.

SHIPPING.

Sailing.		Ste	am, ¹	. Mo	tor.	Total.	
Vessels,	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.	Vessels.	Tonnage.
1. S	ug.i	1-243	19	- 64		54	
20	931	126		24	364	170	9.094
2	184		355	6	146	16	685
4	365	5	8.032	8	104	17	8,501
2	300	6	4.132	5	380	13	4,812
1			4.085	. 4			4,567
2	248		31,105	14	487		31,840
1	7	8		6	84	15	899
4	37	10		10	82	24	6,738
5	1,433	30	27,831	6	243	41	29,507
	Vessels. 20 2 4 2 1 2 1 2 1 4	Vessels. Tonnage. 20 931 2 184 4 365 2 300 1 256 2 248 1 -7 4 37	Vessels. Tonnage. Vessels. 20 931 126 2 184 8 4 365 5 2 300 6 1 256 9 2 248 22 1 7 8 4 37 10	Vessels. Tonnage. Vessels. Tonnage. 20 931 126 7,799 2 184 8 -355 4 365 5 8,032 2 300 6 4,132 1 256 9 4,085 2 248 22 31,105 1 -7 8 -808 4 37 10 6,619	Vessels. Tonnage. Vessels. Tonnage. Vessels. 20 931 126 7,799 24 2 184 8 -355 6 4 365 5 8,032 8 2 300 6 4,132 5 1 256 9 4,085 4 2 248 22 31,105 14 1 -7 18 -808 6 4 37 10 6,619 10	Vessels. Tonnage. Vessels. Tonnage. Vessels. Tonnage. 20 931 126 7,799 24 364 2 184 8 .355 6 146 4 365 5 8,032 8 104 2 300 6 4,132 5 380 1 256 9 4,085 4 226 2 248 22 31,105 14 487 1 7 78 808 6 84 4 37 10 6,619 10 82	Vessels. Tonnage. Vessels. Tonnage. Vessels. Tonnage. Vessels. 20 931 126 7,799 24 364 170 2 184 8 .355 6 146 16 4 365 5 8,032 8 104 17 2 300 6 4,132 5 380 13 1 256 9 4,085 4 226 14 2 248 22 31,105 14 487 38 1 -7 '8 -808 6 84 15 4 37 10 6,619 10 82 24

The number and tonnage of steam and sailing vessels built in New South Wales are shown in the following statement for the period 1906–1923:---

Twenty-four steamers built in 1922-23 were made of steel, and the other vessels were of wood.

COMMONWEALTH GOVERNMENT SHIPPING AND SHIPBUILDING.

For the purpose of transporting to oversea markets the Australian produce which had accumulated as a result of the disorganisation of shipping due to the war, the Commonwealth Government Line of Steamers was inaugurated in July, 1916, by the purchase of a fleet of 15 cargo steamers with a carrying capacity of about 106,000 tons. The price was $\pounds 2,052,654$. Three sailing vessels also were bought for a sum of $\pounds 81,494$, and 18 ex-enemy ships were placed under the management of the line.

The world-wide shortage of shipping became more acute during the year 1917, and the Commonwealth Government considered it advisable to place orders for the construction of additional tonnage in oversea shipyards and to encourage the development of the shipbuilding industry in Australia. Orders were placed in America for the construction of 14 wooden cargo vessels. In Australia arrangements were made for building 21 steel cargo steamers and 24 wooden sailing vessels, of which 8 steamers and 18 sailers were to be built in New South Wales. After the signing of the armistice in November, 1918, it was found that the tonnage throughout the world was in excess of requirements, especially in respect of cargo vessels. Therefore the Government modified its plans. The wooden vessels built in America were sold, and the contracts for the construction of wooden vessels in Australia were cancelled.

In addition to the fleet of cargo carriers, 5 steamers of the Government Line were built in Great Britain for a passenger and cargo service between Australia and the United Kingdom. Insulated space is provided, and the passenger accommodation is designed to meet the requirements of the assisted immigration scheme. The steamers bear the names of Australian bays, and are known as the "Bay" Steamers. They have a displacement of 25,900 tons, and a tonnage of 13,850 gress, or 8,447 net. Provision is made for over 700 third-class passengers. The service was commenced in December, 1921, and the vessels sail at monthly intervals from Sydney, via Suez, making the voyage to London in 37 days.

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The number of vessels under the management of the Commonwealth Line, as at 30th June, 1923, was 50, including 17 ex-enemy steamers. The aggregate gross tonnage was 253,876, and the net tonnage 155,302.

In each of the first five years of its existence considerable profit was gained by the Commonwealth Government Line and the accumulated profits as at 30th June, 1921, amounted to £2,304,442. During the subsequent period of unusual depression in the shipping trade the financial results became unfavourable. There was a loss of £1,171,569 in 1921-22, and of £1,789,633 in the following year. In view of the circumstances a Board was appointed in August, 1923, to take over the management of the line and to control the Government Dock Yard at Cockatoo Island. The number of vessels vested in the Board was 54 with an aggregate net tonnage of 170,744, including 4 vessels, 15,442 tons, under construction. The transfer was effected upon the basis of the market value of the vessels, viz., £4,718,150 which is considerably below their cost. The Board decided to sell the cargo vessels which are not suitable for the class of trade undertaken by the line.

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				Discl	narges regis	tered.	Licenses to ship.			
30th June.	Sydney.	New- castle.	Total.	Sydney.	New- castle.	Total.	Sydney.	New- castle.	Total.	
									1 0 0 0	
1919	21,199	3,120	24,319	24,208	2,908	27,116	1,605	358	1,963	
1920	23,305	3,307	26,612	21,503	2,479	23,982	1,694	459	2,153	
1921	24,684	4.917	29,601	24.212	4,410	28,622	1,344	439	1,783	
1922	23,855	4.912	28,767	23,896	3,556	27.452	925	152	1,077	
1923	24,329	3,248	27,577	24,885	3,108	27,993	1,006	234	1,240	
-										

During the year 1922-23 the number of seamen reported as deserters from British vessels trading on foreign voyages was 246, viz., 164 at Sydney and 82 at Newcastle.

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. The rates for seamen are based on a labourer's basic wage* and an additional sum of £2 per month for skill.

* See Section relating to Wages in Part Employment and Production.

The monthly rates payable to officers and seamen vary according to the size of the vessels on which they are engaged. The rates ruling in February, 1924, were as follows :—

Occup	ation.	Occupation.							mon	th.
			. <u>}</u>	£	s.	d.		£	s.	d.
Officers-Chief				21	15	1.2	to	32	15	6
Second				. 19	15	6	••	29	15	6
Third				20	15	6	,,	26	15	6
Junior					1	E19	15s	s. 6	d.	
Engineers-Chief			·	30	12	6	\mathbf{to}	51	2	6
Second				.25	2	- 6	,,	33	2	6
Third	·	•••	•••	22	12	6	,,	27	12	6
Fourth				19	12	6	,,	24	12	6
Firemen	•••				£	18	88	. 2d	ι.	
Trimmers			·		£	:16	88	3. 2d	ł.	
Seamen-Steamers	•••				£	16	8s	. 2ċ	t.	
Cooks			·	14	1	0	to	22	11	0
Stewards	•••			14	2	6	, ,	16	12	6
Stewardesses	•••	•••	··	9	8	6	,,	10	11	6

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 seamen's unions.

Compensation to scamen is provided by the Seamen's Compensation Act, 1911, which applies to ships in the service of the Commonwealth (exclusive of naval or 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 indicated in regulations under the Act.

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 28 light-houses, and in the ports of Sydney, Newcastle, Port Kembla, and in many other shipping places, lighted beacons, leading lights, and other guides have been placed for the safety of harbour navigation.

The lights on the sea coast are under the control of the Commonwealth, and a description of the more important light-houses was published in the 1921 issue of this Year Book at page 274.

Pilotage is a State service as it has not yet been transferred to Federal authority. 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, formse 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.

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 do not include vessels which left the ports of New South Wales and were recorded as missing:--

Year		British	Vessels.		Total	Crewsand	
ended 30th June,	Steam.	Motor.	Sailing.	Total.	Tonnage.	Passen- gers.	Lives Lost
1919	5		1	6	1.214	64	30
1920	4	1		5	775	109	27
1921	6		1	7	1,475	133	36
1922	ĩ		1	2	- 200	-16	
1923†	6	1		7	3,862	193	46

† Exclusive of one ferry steamer which sank after being in collision and a small steamer which sank at the wharf, in Sydney Harbour, also a steamer stranded at Bate Bay and subsequently refloated.

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 in the year ended June, 1923, amounted to $\pounds 866$.

* See Part relating to Law Courts.

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 laws in force in New South Wales are derived from three sources, viz. :-English law introduced in 1828 as modified and supplemented by legislation of the State; valid enactments of the Federal Parliament (by virtue of the Commonwealth of Australia Constitution Act); and Acts of the Imperial Parliament expressly or implicitly binding in New South Wales as a part of the British Empire. The last-named, however, relate mainly to external affairs or matters of Imperial concern, the great body of laws operating in New South Wales being enacted by local legislatures-State and Federal.

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.

Development of the Present Legal System.

New South Wales was originally founded as a penal settlement, and it did not inherit at once the body of law in force in England, but only such as was expressly applied to it. At the first settlement a criminal court of justice, consisting of a Judge-Advocate and six military assessors, was established under authority of an Imperial statute of 1787 which authorised it to deal with offences against the criminal law of England. The commission of the Judge-Advocate empowered him to deal also with civil cases. In addition, a Vice-Admiral's Court was established, and several officers, including the Governor, were appointed Justices of the Peace, the Governor having power to commission other Justices. During the first twenty-six years of the colony's existence the courts of law were of a military character.

In 1814 independent courts of civil jurisdiction were established. These were called the "Supreme Court," and the "Governor's Courts," and, although they reformed many abuses of the older system, the administration of justice was not placed on a satisfactory basis until 1824, when, by virtue of the Charter of Justice, a Supreme Court was constituted with a Chief Justice having jurisdiction both civil and criminal; the jury system was introduced; and regular courts of Quarter Sessions were established.

Some uncertainty still existed as to how far English law and tradition applied, but in 1828 a momentous innovation was made by the introduction of the whole existing body of English laws (statutes, decisions of courts, and conventions) applicable to the circumstances of the colony at that date. Thus New South Wales was placed practically on the footing of a settled colony as

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regards its legal system. The present legal and judicial systems really date from these statutes of 1824 and 1828, and the exact applicability of English law under them has been decided, as occasion arose, by the Supreme Court of the State, the High Court of Australia, and the Judicial Committee of the Privy Council.

Thus there was adopted as the law of New South Wales the English Common Law relating to property, contract, tort, crime, personal freedom, and liberty of speech, in addition to much English statute law including such constitutional enactments and charters, as the Habeas Corpus Acts and the Bill of Rights.

PRESENT LEGAL SYSTEM.

The main features of the present legal system are that established law is enforced by public Law Courts presided over 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 in all matters. Minor cases are relegated to Courts of Petty Sessions usually sitting within the districts in which they arise, as a Small Debts Court in civil cases, and as a Police Court in criminal cases. Salaried magistrates or honorary justices preside over these courts. More important civil cases are heard before a judge of the District Court, who also presides in criminal jurisdiction over Courts of Quarter Sessions.

A number of courts of law have been established to deal with certain special matters. These are—Licensing Courts, Fair Rents Courts, Taxation Courts of Review, (Mining) Wardens' Courts, Courts of Marine Inquiry, and, among criminal courts of magisterial rank, Coroners' Courts and Children's Courts. A special jurisdiction has been established for Courts of Industrial Arbitration and the Board of Trade, presided over by judges with the status of judges of the District Court. Special matters arising under the various land laws of the State are dealt with by Local Land Boards. Appeals and other important questions relating to valuation are decided by the Land and Valuation Court, of which the judge is equal in status to judges of the Supreme Court.

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 exercises general powers of supervision over the administration of justice through its right to issue and enforce writs and to hear appeals.

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 other jurisdictions under State laws.

LOWER COURTS OF CIVIL JURISDICTION.

Courts of Petty Sessions (Small Debts Courts).

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 admitted and agreed upon, and such bailiffs as are appointed from time to time for the service and execution of orders and judgments.

Particulars of the transactions of the Courts in the past two years are shown below :----

	· · · ·	1921.			1922.	,
Transactions.	Up to £30	£30 to£50	Total.	Up to £30	£30 to £50	Total.
Cases brought before the Registrar- Judgments given for Plaintiff Not proceeded with	11,154 12,835	731 294	11,885 13,129	12,216 12,660	724 232	12,940 12,892
Cases brought before the Court- Verdicts for Plaintiff Verdicts for Defendant Withdrawn or struck out Nonsuits	4,514 273 6,860 272	288 16 301 19	4,802 289 7,161 291	4,797 365 7,186 296	162 11 166 13	4,959 376 7,352 309
Cases pending	8,595	335	8,930	10,014	143	10,157
Total Cases	44,503	1,984	46,487	47,534	1,451	48,985
Amount of Jadgments for Plaintiff £	90,027	21,565	111,592	103,207	24,920	128,127
Amount of Verdicts for Plaintiff £	28,249	5,335	33,584	30,255	5,421	35,676

The proportion of cases disposed of is usually about 18 per thousand of population, but the number does not represent individual litigants.

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 1922 numbered 1,868.

Oral examinations of judgment debtors in respect of debts due to them, ordered on the application of a judgment creditor, numbered 1,027 in 1922. Interpleader cases, relating to claims made to goods held under a writ of execution by a person not party to the suit, numbered 19.

Licensing Courts.

Under the Liquor Act of 1912, 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. Such licenses operate for one year unless some other period is specified.

In the metropolitan district the Court for granting licenses to sell intoxicants consists of three Stipendiary Magistrates, and in country districts of the local Police Magistrate and two specially-appointed Justices of the Peace. Where there is no Police Magistrate resident within 10 miles of the Court House a Licensing Magistrate may be appointed. An Act was passed in 1923 to provide for the reconstitution of the Licensing Court as from 1st July, 1924. Three Police or Stipendiary Magistrates will be appointed as Licensing Magistrates to constitute the Licensing Courts for all the districts of the State and to discharge the functions of the Licensing Reduction Board.

The particulars of licenses granted and fees collected in 1921 and 1922 are as follow :---

			19	21.	19	22.
Class of License.	Class of License.				Number of Licenses.	Amount of Fees.
Publicans Additional Bar Club Packet Booth or Stand Colonial Wine, etc.	···· ····	····	2,488 153 78 13 2,337 450	£ 98,952 2,891 1,123 130 4,674 1,350	2,470 143 81 -13 2,451 432	£ 100,884 2,794 595 126 4,902 1,279
Brewers Spirit Merchants	···· ····	•••	17 244	360 5,699	$17 \\ 247 \\ \}$	6,077
Total		-	5,780	115,170	5,854	116,657

Further particulars of the licenses and of the Licenses Reduction Board appointed under the Liquor Amendment Act, 1919, will be found in the chapter of this Year Book entitled "Social Condition."

Fair Rents Courts.

These courts, established under the Fair Rents Act, 1915-20, may determine, upon application, the fair rent of any dwelling-house let for a term not exceeding three years at a rental not exceeding the rate of £156 per annum. The courts sit in proclaimed districts, there being one court for the Metropolitan district, presided over by a special magistrate. Since 16th August, 1920, the jurisdiction has been exercised by a Police or Stipendiary Magistrate in country districts, where the total number of cases dealt with to the end of 1922 was 165. Of these 67 were withdrawn, in 22 cases the rent was fixed as at date of application, in 41 it was reduced, and in 35 increased.

The first sitting of the Court in the Metropolitan district was held on 13th March, 1916, the transactions during each year ended 31st March, being as follow :---

Year	Cases	Re			
ended 31st March.	withdrawn or struck out.	As at date of Application.	Increased.	Reduced.	Total Cases
1917	141	137	7	294	579
1918	53	49	19	102	223
1919	100	36	132	65	333
1920	225	47	254	141	667
1921	439	52	256	187	934
1922	478	75	237	245	1,035
1923	418	64	150	233	865
Fotal	1,854	460	1,055	1,267	4,636

Some further particulars of the operations of the Court are published in the chapter "Food and Prices" of this Year Book.

LAW COURTS.

Taxation Courts of Review.

All 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.

(Mining) Wardens' Courts.

By virtue of the Mining Act, 1906, mining wardens may hold courts to determine such disputes arising within their districts as 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 or, on points of law, to the Supreme Court.

Courts of Marine Inquiry.

Cases of shipwreck or casualty to British vessels, or the detention of any ship 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 findings of this Court are final, except when the responsible Minister directs a rehearing of the case where new evidence is available, or a miscarriage of justice is suspected.

The proceedings of the Court are governed by the Navigation Acts of the State and Commonwealth.

In 1922 inquiries were held regarding five cases, viz., two of stranding, one of beaching, and two in which the vessels were lost. As a result of the inquiries the certificates of two masters and one mate were suspended. One mate was found to be in fault, but as the case was not serious his certificate was not suspended. One master and one mate were exonerated.

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 1922 there were seven District Court Judges and sixty-one District Court districts. The courts sit during ten months of the year in the Metropolis, 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 one judge sitting alone, but a jury may be impanelled in any case under certain conditions. 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.

Litigants may be compelled in appropriate cases to apply to the District Court by the power of the Supreme Court to remit proper cases to it, and by the rule of the Supreme Court not to allow costs to parties who recover a sum not exceeding £30 in litigation before it.

The findings of the District Court are intended to be final, and all right of appeal may be excluded by written agreement between litigants, but new trials may be granted at the discretion of the Judge of the District Court.

Otherwise appeal may be made to the Supreme Court in cases involving more than $\pounds 10$ where a point of law or question of the admissibility of evidence is raised.

Particulars of suits brought in District Courts in their original jurisdictions during the last five years are given in the following table :---

		Causes	Tried.	Causes	Judgment for	Causes			Court
	Verdict for Plaintiff.	Verdict for Defendant (including Nonsuit, etc.).	Dis-	Plaintiff by Default, Con- fession, or Agree- ment.	referred	Causes Pending and in Arrear.	Total Amount of Claims.	Costs of Suits.	
		1	1	1	· · · ·		[£	£
1918	5,572	388	214	1,605	1,837	5	1,523	259,902	18,253
1919	6,221	465	207	1,835	1,949	14	1,751	333,539	17,207
1920	7,083	537	228	1,989	2,183	3	2,143	377,419	23,140
1921	8,697	595	267	2,152	2,929	2	2,752	475,816	29,227
1922	9,866	643	286	2,187	3,509	4	3,237	500,862	31,950

Of the causes heard during 1922, only 103 were tried by jury. During the same period there were 21 appeals to the District Court from judgments given in lower Courts. There were 7 motions for new trials, of which 2 were granted. The amount of judgment for plaintiffs during the year was $\pounds 188,104$.

The number of issues remitted for trial from the Supreme Court to District Courts in 1922 was 67 in Matrimonial Causes, 3 in Equity, and 10 in Probate. Under the Workmen's Compensation Act, there were 195 applications for arbitration, and 75 awards were made in favour of the applicants. Sums amounting in the aggregate to $\pounds 53,927$ were paid into court in respect of 118 cases of death, and there were 304 cases relating to agreements.

There were 3 appeals under the Mining Acts from decisions of the Wardens' Courts, 2 being dismissed and 1 settled. There were 5 appeals against rating by Local Government authorities; 3 were settled and 2 assessments were varied. Other appeals under the Local Government Acts numbered 11, of which 5 were upheld.

SUPREME COURT.

The Supreme Court of New South Wales was established in 1824 under the Charter of Justice. It is presided over by a Chief Justice and not more than seven 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 or to the Privy Council.

Particulars are given below of each division of the civil jurisdiction of the Court.

LAW COURTS.

Common Law Jurisdiction.

The present jurisdiction of the Supreme Court at Common Law dates from 1828. It extends to all 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.	1918.	1919.	1920,	1921.	1922.
Writs Issued	2,486	2,987	3,515	4,745	5,072
Judgments Signed	1,022	1,158	1,369	2,172	2,433
Causes Tried—		-,	1,000	2,172	2,100
Verdict for Plaintiff	114	127	175	191	166
", Defendant	28	36	39	50	45
Jury Disagreed			2	3	1
Nonsuits	• 5	6	9	18	8
Total	147	169	225	262	220
Causes— Not proceeded with	95	91	151	210	236
Referred to Arbitration	2	1	7	10	1
Total Causes dealt with	. 244	261	383	482	457
Fees paid into Consolidated Revenue Fund	£ 8,276	£ 10,514	£ 13,221	£ 19,408	£ 18,404
Cost of Litigation— Brought in at	33,514	32,637	48,545	58,752	53,315
Taxed off	S ,766	7,405	12,966	14,036	13,697
Amount Allowed	24,748	25,232	35,579	44,715	39,708
Court Costs of Taxation	449	510	719	1,121	1,013

The number of new causes set down for hearing in 1922 was 501, and 76 were pending from the previous year. The cases dealt with numbered 457, and 120 were pending at the end of 1922.

Between 1914 and 1917 there was a marked decrease in litigation in this jurisdiction, but since then activity has increased rapidly and the number of writs issued in 1922 was more than 63 per cent. greater than in 1914. The difference between the numbers of writs issued and judgments signed indicates the extent to which suits are settled out of court or not proceeded with. The difference between the number of judgments signed and the number of causes set down indicates the extent to which cases are settled without legal proceeding in court.

Equity Jurisdiction.

The present jurisdiction of the Supreme Court in Equity (which includes Infancy) dates from 1828. It is exercised by the Chief Judge in Equity, by the Judge in Bankruptcy sitting in Equity, or by either sitting on appeal 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 through the issue of injunctions, writs of specific performance, and the award of damages. 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.

Attached to the Court there is a Master in Equity who performs administrative duties and acts for the Judge where directed in determining certain minor matters, such as conducting inquiries and taxing costs. He is also Registrar of the Court, and controls the records and funds within its charge.

The numbers of the various transactions of the Court during each of the last five years were as follow :---

Year.	Statements of Claims.	Statements of Defence.	Petitions.	Summonses.	Motions.	Decrees, Orders, and Certificates.	Trust Funds Invested.
			1	[, 	£
1918	191	108	62	149	125	1,172	660,314
1919	227	164	67	118	225	1,076	594,105
1920	160	71	35	81	126	485	645,260
1921	298	181	94	125	199	852	712,687
1922	322	176	84	66	249	1.040	736,288

The amount of trust funds invested under Equity Jurisdiction was distributed chiefly among war loans, mortgages, and funded stock, the rates of interest ranging from 3 to 7 per cent.

The amount of court fees received in 1922 was £5,648.

Lunacy Juris liction.

Jurisdiction in Lunacy was conferred on the Supreme Court in 1824 by the Charter of Justice, and is now 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 the end of 1922 was $\pounds 468,751$.

Bankruptcy Jurisdiction.

Jurisdiction in Bankruptcy was conferred on the Supreme Court by statute in 1887. Bankruptcy law and procedure in New South Wales

LAW COURTS.

were virtually codified by the consolidating Act of 1898. Under the 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. The jurisdiction of the Court extends over all these matters and its functions are to guard against fraud on the part of bankrupts, to distribute assets, and to relieve debtors of overwhelming obligations.

There is one Judge in Bankruptcy who exercises general control over bankruptcy proceedings and determines questions of law, equity or fact affecting a bankrupt estate. Questions of fact may be tried before a jury.

The Registrar of the Bankruptcy Court performs administrative duties and duties delegated by the Judge. He may hear debtors' petitions, make full examination of bankrupts or of persons suspected to be indebted to a bankrupt, and make sequestration orders. Certain of these powers are delegated in country districts to police magistrates and registrars of District Courts, but appeal lies in all cases to the Judge in Bankruptcy and thence to the Full Court. An official assignee may be appointed by the Court to manage any assigned estate for the benefit of creditors.

Particulars of the operations of the Court in the past five years are given below :---

Heading.		1918.	1919.	1920.	1921.	1922.
Sequestrations Estates released		264 25	282 28	289 28	324 30	403 27
Certificates of granted	Discharge	45	54	53	49	41
Certificates of suspended Court Fees	Discharge	81 3.394	100 3,645	82 4,192	110 4,386	86 5,023

Further details of proceedings in bankruptcy are published in the chapter, Private Finance, of this Year Book.

Probate Jurisdiction.

Probate jurisdiction was conferred on the Supreme Court in part by the Charter of Justice in 1824. By the Wills, Probate and Administration Act, 1898, it extends over all property in New South Wales of deceased persons, whether testate or intestate. The jurisdiction is exercised by a Probate Judge (who is also Judge in Bankruptcy), or by any judge acting on his behalf. He may grant probate or letters of administration of deceased estates after due inquiry and compliance with laws as to stampduties. Formal duties in the granting of probate and letters of administration are delegated to a Registrar of Probates, in accordance with the rules of the Supreme Court, where estates do not exceed £1,000 in value, and where no contention has arisen. The Registrar may appoint local agents to receive applications for probate.

Until the granting of probate or letters of administration the property of deceased persons vests in the Judge, 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.

Administrative functions in regard to intestate estates are performed by the Public Trustee under an Act of 1913.

.]	Probates	Granted.	Letters of .	Administration.	Total.		
Year.	Number of Estates.	Value of Estates.	Number of Estates.	Value of Estates.	Number of Estates.	Value of Estates.	
1918	4,128	£ 12,335,103	3,140	£ 1,666,256	7,268	€ 14,001,359	
1919	4,428	16,819,772	3,265	1,241,091	7,693	18,060,863	
1920	3,570	26,191,030	2,428	1,514,783	5,998	27,705,81	
1921	3,765	14,495,600	2,080	2,042,306	5,845	16,537,900	
1922	3,892	14,477,829	1,905	1,323,310	5,797	15,801,139	

The following table shows the number and values of estates dealt with by the Court in the past five years :---

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.* Where estates are less than $\pounds 300$ in value probate or letters of administration may be granted on personal application to the Registrar, without the intervention of a solicitor. Included in the figures shown above for the year 1922, there were 283 such cases, the total value of estates being $\pounds 52,311$.

Jurisdiction in Matrimonial Causes (Divorce).

This jurisdiction was conferred on the Supreme Court by the Matrimonial Causes Act, 1873, prior to which 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 are as follow:—

Husband v. Wife.—Adultery; desertion or habitual drunkenness and neglect of domestic duties for three years; refusal to obey an order for restitution of conjugal rights; imprisonment for three years and upwards at date when petition is presented and under sentence for at least seven years; conviction for attempt to murder or to inflict grievous bodily harm; repeated assaults and cruel beatings during one year preceding the date of filing the petition.

Wife v. Husband.—Adultery; desertion for three years or upwards; habitual drunkenness, coupled with neglect to support or cruelty, for three years; refusal to obey an order for restitution of conjugal rights; imprison ment for three years and upwards at date when petition is presented and under sentence for at least seven years; imprisonment under frequent sentences aggregating three years within five years preceding the presentation of the petition; conviction for attempt to murder or to inflict grievous bodily harm; repeated assaults and cruel beatings within one year of petition.

* Further particulars are published in the chapter "Private Finance,"

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Cases are heard usually without a jury, but where dissolution of marriage is involved a jury of twelve to try issues of fact may be requisitioned by either party, or by the Court. Certain cases may be referred to the District Court of the district in which the case arose.

Usually, the petitioner must have been domiciled in the State for at least three years preceding the date of the petition. No relief is granted to persons who have resorted to New South Wales for the purpose of instituting proceedings.

Suits may be instituted for the purpose of obtaining restitution of conjugal rights, and failure to comply with a decree made in such a suit constitutes desertion, upon which a suit for divorce may be brought. A marriage may be declared null and void on the grounds that the respondent is incapable of consummating it, that the parties to the marriage are within the prohibited degrees of consanguinity, or that the parties are unable to contract a valid marriage. Such inability may arise from one of the parties being already married, having acted under duress, or being under marriageable age.

The following statement shows the number of petitions in matrimonial causes made and granted in New South Wales during the past five years in comparison with the average per year between 1908 and 1912:—

•			Restitution of Conjugal Rights.					
Year. Number Petitic	Total Number of Petitions	Divorces.			Nullity of	Marriage.		
	Lodged.	Decrees Nisi.	Decrees Absolute.	Judicial Separation	Decrees Nisi.	Decrees Absolute.	Petitions.	Decrees granted.
1908-12*	453	260	260	12	4	4	28	18
1918	796	383	376	- 11	4	4	138	57
1919	1,052	618	420	7	5	7	260	122
1920	1,155	624	553	11	8	3	275	163
1921	1,094	1.038	782	18	8	7	259	-217
1922	1,110	696	678	8	10	5	249	144

* Average per year.

The number of petitions lodged in forma pauperis during 1922 was 261, of which 236 were for divorce, 2 for nullity of marriage, 2 for judicial separation, and 21 for restitution of conjugal rights.

The numbers 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 were as follow :—

Year.	Number o	Number of Successful Petitions lodged by			Number of Successful Petitions lodged by			
	Husband.	Wife.	Total.	Year.	Husband.	Wife.	Total.	
1913	131	195	326	1918	167	224	391	
1914	126	377	303	1919	190	244	434	
1915	134	221	355	1920	267	300	567	
1916	141	231	372	1921	389	418	807	
1917	147	249	396	1922	295	396	691	

The number of marriages dissolved, or virtually dissolved in each year, more than doubled between 1918 and 1921, and the proportion of petitions lodged by husbands increased rapidly. In 1922 the number of successful petitions, though high, was 14 per cent. lower than in the previous year.

Ground of Suit.		1918.	1919.	1920.	1921.	1922.
Adultery	[104	119	202	263	205
,, coupled with Bigamy, Cruelty,	or					
Desertion		8	10	1.17	10	10
Cruelty and Repeated Assaults		2	1	3	1	2
", " Habitual Drunkenness		4	2	8	7	12
Desertion		188	248	255	359	318
	ip-					1
port	~ r	3	1	3	4	8
Habitual Drunkenness and Neglect of Domes	tie	•	-	Ĩ	-	Ĩ
Duties		5	3	5	6	
Imprisonment of Husband for Three Years		ĭ		. 1	3	1
	of	•		-	Ŭ	
	1	64	39	71	135	127
· · · · · · · · · · · · · · · · · · ·		1	4	1	100	
Impotency or Non-consummation	•••	1	*	T	· · ·	••••
TT- 4-1	1-	380	427	556	700	683
Total		200	42/	000	789	003

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 :—

In the cases in which decrees for divorce were made absolute during 1922, the mean duration of marriage was as follows :—Under 5 years, 39; 5–9 years, 212; 10–14 years, 211; 15–19 years, 103. In 89 cases the duration was between 20 and 30 years; in 21 it was between 30 and 40 years, and in two cases it was over 40 years. In the case of 214 marriages, there were no children; one child in 220 cases; two children, 124; three children, 50; four children, 29; and five or more children in 31 cases. In 10 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 Imperial Admiralty Act, 1890. The Court may sit also as a Prize Court by authority of a proclamation of August, 1914, under the Imperial Prize Court Act, 1894.

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, and Police Offences Act, 1901), 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, 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, 1902–18. These courts deal with minor offences, which may be treated summarily, while serious charges are investigated in the first instance, and the accused remanded to higher courts when a reasonable 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 court deals also with certain other cases, such as proceedings arising under the Master and Servants Act, the Deserted Wives and Children 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.

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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. Children's Courts may be established by proclamation. 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 decisions lies in proper cases to the District or Supreme Courts.

Separate statistics of the proceedings of Children's Courts are not now available, as they are included with those relating to ordinary Courts of Petty Sessions. Further particulars regarding the Children's Courts are published in part "Social Condition" of this Year Book.

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 cases in which bail was forfeited for non-appearance in court are included as convictions. Where multiple charges are preferred separate account is taken of each.

		Offences	Charged.			Per cent.			
Year.	Withdrawn or Discharged.	Convicted.	Committed to Higher Courts.	Total.	With- drawn,	Con- victed.	Com- mittted to Higher Courts.		
1906	10,702	59,900	1,459	72.061	14.9	83.1	2.0		
1911	8,878	65,058	1,178	75,114	11-8	86.6	1.6		
1916	11,765	68,615	1,656	\$2,036	14.4	83.6	2.0		
1920	12,666	74,667	2,239	89,572	14.1	83.4	2.5		
1921	11.877	80.214	2,594	94,685	12.6	84.7	2.7		
1922	12,231	82,263	2,495	96,989	12.6	84.8	2.6		

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 fixed at 5s., the usual penalty imposed. It has been increased to 10s. Approximately one-third of the cases of drunkenness are now dealt with in this manner.

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.	Against		Against Go	ood Order.	Other	Total
	the Person.	Against Property.	Drunken- ness.	Other.	Offences.	Summary Convictions
1906	1,619	3,857	25,253	15,920	13,251	59,900
1911	1,664	3,404	29,299	14,886	15,805	65,058
1920	1,925	5,772	25,843	14,180	26,947	74,667
1921	2,127	5,924	28,702	18,086	25,375	80,214
1922	2,043	5,692	30,723	18,386	25,419	82,263
	່ <u>1</u>	Per 1,000	of Mean	Populatio	on.	, .
1906	1.09	2.60	17·01	10.72	8.93	40.35
1911	1.00	2.04	17.60	8.94	9.49	39.07
1920	93	2.79	12.49	6.86	13.02	36.09
1921	1.01	2.81	13.61	8·58	12.04	38.05
1922	0.92	2.65	14.28	8.55	11.82	38.25

The number of minor offences leading to summary convictions declined during the war owing partly to the fact that large numbers of men were within military jurisdiction or on active service abroad, and to other factors connected with the war. By 1921 normal conditions had been practically restored, and, although a very large increase has occurred in the number of summary convictions, the proportion to the population is still smaller than in pre-war years. The decline was due principally to a diminution in the number of convictions for drunkenness in relation to the population, increases being shown in the number of offences against property and offences against administrative laws.

The offences classified under the heading "other offences" consist mainly of breaches of administrative laws, e.g., Local Government Acts and traffic regulations. Generally they are minor breaches, or are committed in ignorance of the law, and are met with the infliction of nominal fines. Thus the figures for the year 1922 included 5,357 offences against traffic regulations; 3,482 against Local Government Acts; 1,388 offences against revenue laws; 2,511 against liquor laws; 1,083 against laws for the suppression of gambling; 1,340 under the Factory Act; 900 against railway and tramway regulations; 865 under the Health Act; 571 under the Defence Act; 375 under the Education Act; and 1,237 against the Pastures Protection Act.

The amount of fines paid on summary conviction and the disposition thereof, during the last five years, are shown below :---

Classification.	1918.	1919.	1920.	1921.	1922.
Fines paid to-	£	£	£	£	£
Consolidated Revenue	30,756	32,596	43,993	40,839	46,582
Police Reward Fund	16,132	17,570	21,406	21,597	26,161
Municipalities and Shires	4,300	4,681	4,679	4,209	5,399
Informers	3,552	4,092	5,164	4,749	4,990
Other	5,748	5,330	5,036	4,050	6,386
Total, State £ Paid to Commonwealth Govern-	60,488	64,269	80,278	75,444	89,518
ment £	6,140	7,357	5,328	11,481	3,592

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LAW COURTS.

In addition to fines paid at the courts, a number are paid in part at the gaols by persons sent to prison in default of payment and a corresponding portion of the sentences are remitted. Particulars are shown on page 270.

Coroners' Courts.

The office of Coroner was established in New South Wales by letters patent in 1787, and is now 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 Justice of the Peace is usually appointed coroner.

At the discretion of the Coroner, inquiries are held into the causes of all violent or unnatural deaths, into the causes of all 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.

During 1922, 1,349 inquiries were held by coroners into causes of death and 197 into the origin of fires. Seventeen persons were committed for trial by coroners on charges of murder, 24 for manslaughter, and 12 for arson. It was found that 25 fires were accidental, 34 were caused wilfully, and in 138 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.

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 again 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 1923, courts being held usually at the conclusion of District Court sittings, three 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.

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Central Criminal Court and Circuit Courts.

The Central Criminal Court exercises the criminal jurisdiction of the Supreme Court in Sydney, and a Judge of the Supreme Court exercises at appointed circuit towns a similar jurisdiction. 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 Circuit Courts in the country, are tried at the Central Criminal Court. 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 shows for the years immediately preceding and succeeding the war, the number of distinct persons charged, and those convicted for each of the classes of more serious offences. Where two or more charges were preferred against the same person account is taken only of the principal charge.

			Convictions—Principal Offence.								
Year.	Distinct Persons	Not Guilty,		[Against		Total Persons Convicted				
	Charged.	etc.	Against Person.	Against Property.	Currency, and Forgery.	Other Offences.	Number.	Per 10,000 of Popula- tion.			
							1				
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			
1920	1,581	554	169	801	33	24	1,027	4-96			
1921	1,722	611	166	853	48	44	1,111	5.27			
1922	1,635	595	176	778	48	38	1,040	4.84			

In view of the fact 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 less than two-thirds of the persons charged are convicted, and in the case of offences against the person, this proportion is usually about one-half.

The number of offenders convicted for serious crime increased very considerably in proportion to the population during the three years preceding the outbreak of war, nevertheless the proportional number of convictions in the last three years showed a pronounced increase over pre-war proportions. Taking the classes of offences as shown above, the increase in post-war crime has occurred apparently in offences against property.

Of the persons convicted during 1922, the males numbered 959 and females 51. Approximately one male in every thousand was convicted for a serious criminal offence in 1922, the proportion of women being much less than one per ten thousand.

60	Number of Offenders Convicted.						
Offences.	1911.	1912.	1913.	1920.	1921.	1922.	
Murder	3	12	7	8	8	1	
Attempted Murder, Shooting with Intent	3	2	4	8	3	8	
Manslaughter	4	4	7	12	13	4	
Rape and other Offences against Females	29	33	38	34	21	26	
Unnatural Offences	2	3	9	17	23	13	
Abortion and Attempts to Procure	.3	1		4	2	1	
Bigamy	16	8	9	22	22	22	
Assault	80	66	106	64	63	88	
Burglary and Housebreaking	62	89	107	255	244	236	
Robbery and Stealing from the Person	14	39	51	50	35	- 30	
Stealing Horses, Cattle, Sheep	26	33	34	41	48	-38	
Embezzlement and Stealing by Servants	26	26	27	33	42	60	
Lareeny and Receiving	131	164	201	-330	376	308	
Fraud and False Pretences	38	37	36	55	80	67	
Arson		4	4	1	1	2	
Forgery, Uttering Forged Documents	41	38	55	-33 -	44	46	
Conspiracy	10	4.	10	7	16	16	
Perjury and Subornation	10	8	12	4	17	7	

The following table shows the number of persons convicted for specific offences included in the foregoing statement :---

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, there were in relation to the population pronounced increases in unnatural offences, bigamy, burglary and larceny. On the other hand considerable decreases took place in the proportionate number of assaults, cases of forgery, and offences against females.

OTHER COURTS OF STATE JURISDICTION.

Special courts have been established in New South Wales in other provinces of law. These are the Land and Valuation Court and Local Land Boards and the Industrial Arbitration Courts, with subsidiary Industrial Boards and the Board of Trade.

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 Act, and other matters referred by the Minister. Sittings are held as required at appointed places in each of thirteen Land Board Districts in the Eastern and Central Divisions of the State

During the year ended 30th June, 1923, the various Boards held 411 meetings, lasting 555 days. The various chairmen dealt with 9,794 cases, and full boards with 7,866.

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. Six courts lasting 7 days were held during 1922-23, and the cases numbered 33.

^{*}See, also, chapter on Land Legislation and Settlement.

Land and Valuation Court.*

The Land Court of Appeal, established originally in 1889, 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.

Broadly stated, the functions of the court are to hear and determine all the more important matters and appeals arising under the Crown Lands Acts and cognate acts, cases involving the ratableness of lands and the more important appeals from valuations made by the Valuer-General or by valuers under the Local Government Act.

During the year ended 30th June, 1923, the Land and Valuation Court dealt with 32 references and 41 appeals (17 being sustained) under various Land Acts; 5,169 objections to valuations under the Valuation of Land Act; 162 objections to Local Government assessments for rating, where the unimproved capital value exceeded $\pounds 5,000$, of which 4 were upheld, 71 dismissed and 87 settled otherwise; 24 claims relating to charges of local governing bodies in respect of rails, pipes, wires, etc., in public places; and 2 claims for compensation under the Public Works Act.

COURTS OF INDUSTRIAL ARBITRATION.

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 statutory basis of the present court is the Industrial Arbitration Act, 1912, with subsequent amendments. The court consists of a senior judge and three additional judges. Its functions are to make awards governing the working conditions of industries, to impose penalties in cases of illegal strikes, lockouts, or unlawful dismissal, and to vary or amend awards. It also hears appeals from the industrial registrar and industrial magistrates.

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.

The Board of Trade determines the amount of the living wage from time to time, also the conditions of apprenticeship in various industries. It is empowered to conduct inquiries into industrial matters and other questions referred to it by the Minister for Labour and Industry. The Board may conduct inquiries regarding monopolies and combinations in restraint of trade upon reference by the Attorney-General.

Details of the constitution and operations of these tribunals are published in the chapter relating to Employment and Production of this Year Book.

COURTS OF FEDERAL JURISDICTION.

By the Commonwealth Judiciary Act, 1903-1920, jurisdiction under Federal laws is vested in the several courts of the States within the limits of their several jurisdictions, as to locality, subject-matter, etc. Justices of the Peace are, however, precluded from exercising Federal jurisdiction. Certain acts (e.g., the Postal Act and Customs Act) also confer jurisdiction in special cases in State Courts.

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There are two Commonwealth courts which possess certain jurisdiction, exclusive of State courts, these are the High Court of Australia and the Commonwealth Court of Conciliation and Arbitration.*

High Court of Australia.

This Court was established in 1903 and consists of a Chief Justice and six 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.

COURTS OF APPELLATE JURISDICTION.

Generally speaking appellate jurisdiction is exercised, in cases where appeals are permitted, by the Courts of Quarter Sessions from Magistrates' Courts, by the Supreme Court from District Courts, 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 or Industrial Arbitration). 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 a new trial 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; (3) one judge may sit in chambers to hear applications for write of mandamus or prohibition, and to determine special cases stated by magistrates.

During 1922 there were 31 motions for new trials before the Full Court at Common Law, 6 being granted, 16 refused, 7 not proceeded with, and 2 were pending at the end of the year. Two appeals in Equity were sustained and 3 were disallowed. There was 1 appeal in Divorce, but it was not proceeded with. Of 8 appeals from judgments in District Courts, 1 was allowed, 3 dismissed, and 4 were not proceeded with. In addition, 4 writs of prohibition were granted, and 3 refused. Seven writs of mandamus were granted and 6 were refused, and in special cases stated by magistrates, the magisterial finding was sustained in 6 cases, and reversed in 6. Nine writs of prohibition were granted and 3 refused, by Judges in Chambers, and 1 writ of mandamus was granted, and 3 were refused, while in 4 special cases the decisions of Magistrates' Courts were upheld and in 3 reversed.

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 irrespective of whether any State law provides that the decision of the Supreme Court is final.

*Particulars of this court may be found in the chapter on "Employment and Production" of the Year Book. During 1922 the appeals heard by the High Court were as follow :--From a single judge exercising jurisdiction of the Supreme Court in Equity, 1 allowed, 8 dismissed, 1 settled otherwise; Divorce, 1 allowed. From the Full Court of the Supreme Court, 2 allowed, 8 dismissed, 1 settled otherwise In addition, 4 appeals were heard from assessments under the Federal Land Tax Act, and 1 was allowed and 3 dismissed.

Appeals to the Privy Council.

Appeals from dominion courts to the Crown-in-Council are now heard by the Judicial Committee of the Privy Council. Such appeals are heard 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.

The number of applications to the Privy Council for leave to appeal during the past ten years was 24, of which 22 were grarted. During the period 19 appeals were determined, 7 being upheld, and 12 dismissed.

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 recognisance 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.

The results of appeals from Courts of Petty Sessions during the last five years are shown below :---

Year.	Cases not	Cases in	Total Cases		
1 641.	Concluded.	Confirmed.	Varied.	Quashed.	Concluded.
1918	99	365	55	106	526
1919	105	312	39	139	490
1920	87	443	69	154	666
1921	107	456	109	154	719
1922	113	538	87	148	773

Appeals are made from less than 1 per cent. of the convictions in Magistrates' Courts. In 1922 convictions were quashed in 19 per cent. of the cases concluded, and varied in 11 per cent. of such cases.

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

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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.

	Application	ns to Judge.		Sentences				
Year.	Granted	Deferred	Convictions.		New Trials	Total	Varied (included in Convictions Affirmed).	
	Granted.	Granted. Refused.		Quashed.	Granted.	Cases.		
1918		1	19	3	4	26	2	
1919	·	***	19	3		22	2	
1920			40	2	6	48	3	
1921			39	2	3	44		
1922			33	ĩ	6	40	4	

The result of appeals during the last five years is shown hereunder :---

The number of appeal cases heard in 1922 was approximately 4 per cent. of the convictions of that year. In addition to the number shown in the table 16 appeals were abandoned during the year.

Administration of Law.

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." At least two members of the Cabinet are allotted the special functions involved in the administration of justice and in transacting the legal business of the State. 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. There is also a Crown Solicitor—a salaried public servant.

Attorney-General.

The Attorney-General is charged with the conduct of business relating to the High Courts (such as District and Supreme 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 Persons' Defence Act and the Poor Persons' Legal Aid 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.

Minister of Justice.

The Minister of Justice supervises the working of all 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.

OFFICE AND TENURE OF MEMBERS OF THE JUDICIARY.

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— $\pounds 3,500$ per annum to the Chief Justice and $\pounds 2,600$ per annum to each puisne judge. By these provisions the judiciary is rendered completely independent of the executive, but a judge may be removed from office by the Crown on the address of both Houses of Parliament.

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, and may exercise the jurisdiction of the Court in districts allotted by the Governor. Such persons when appointed hold office during ability and good behaviour at a salary of $\pounds 1,500$ per annum, which may not be reduced during their term of office. The Governor may remove from office any District Court Judge for inability or misbehaviour subject first to appeal to the Governorin-Council. A judge may not engage in practice of the legal profession.

Other Officers.

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 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.

Prothonotary.

The Prothonotary of the Supreme Court is its principal officer in the common law and criminal jurisdiction. He acts as registrar to 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 liberty of the subject.

Sheriff.

The office of Sheriff was first established in New South Wales in 1824, and is regulated now 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

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service is suitable for such office. Persons so appointed must have attained the full age of thirty-five years, have passed the prescribed examination in law, and be prepared to reside permanently in the district to which they are appointed. Magistrates are required to take the judicial oath and the oath of allegiance, and 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 has been 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, Licensing Magistrates, and Industrial Magistrates.

At 30th June, 1923, there were fourteen Stipendiary Magistrates with salaries ranging from $\pounds 685$ to $\pounds 960$ per annum, and eighteen Police Magistrates with salaries ranging from $\pounds 525$ to $\pounds 718$.

Justices of the Peace.

Any person of mature age and good character may be appointed a Justice 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 of appointees, but they must be persons of standing in the community and must take prescribed oaths. Women became eligible for the office under the Legal Status of Women 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.

At the end of 1923 there were approximately 15,000 Justices of the Peace in New South Wales, including 219 women.

Registrar-General.

The Office of Registrar-General in New South Wales is that of registrar of certain occurences 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. The Transfer of Records Acts, passed in October, 1923, provides for the transfer from the Supreme Court to the Office of the Registrar-General, records relating to bills of sale, affadavits, etc., under the Newspapers and the Printing Act, and certain other records. The documents are usually available to the public. Fees are charged in most cases for registration and for inspection. The amount collected as fees for inspection and searches, and for public documents sold by the Registrar-General during 1922, was $\pounds 205,921$.

Public Trustee.

Under the Public Trustee Act, 1913, which was amended in 1923, the functions of the Curator of Intestate Estates were taken over by the Public Trustee on 1st January, 1914. The Public Trustee may act as trustee under a will, or marriage or other settlement; executor of a will; administrator of 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. 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 renairs, 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.	1919.	1920.	1921.*	1922.•	1923.*
New Estates Administered—	-		[
As Administrator	1,599	1.256	1,024	981	1,761
As Executor or Trustee	78	82	74	80	93
As Attorney or Agent		3	3	11	12
, , , , , , , , , , , , , , , , , , ,	£	£	£	£	£
Amount Received +	740.612	736,538	649,972	658,232	829,475
Amount Paidt	644,566	710,884	687,668	657.639	789,355
Commission and Fees	18,036	20,145	26,994	22,880	31,761
Unclaimed Money—					
Paid into Treasury	7,375	7.070	2,985	3,243	3,822
Subsequently Claimed	241	594	1,210	1,231	995
Credit Balances of Estates*	1,797,318	2,091,235	2,189,090	2,425,477	2,887,43

* Year ended 30th June. + On behalf of estates.

During the year ended 30th June, 1923, the operations resulted in a profit of $\pounds 7,903$, which increased the accumulated profits to $\pounds 11,744$. The aggregate value of the estates subject to administration from the inception of the office of Public Trustee on 1st January, 1914, to 30th June, 1923, amounted to $\pounds 7,740,000$.

Poor Persons' Legal Expenses.

Under the Poor Prisoners' Defence Act, 1907, any 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.

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PATENTS, COPYRIGHTS, TRADE MARKS, AND DESIGNS.

The administration of the statutes relating to Patents, Copyrights, Trade Marks, and Designs, devolves upon the Federal authorities, and a patent granted under the Commonwealth law is thus 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 Federal Acts, arrangements may be made 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.

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 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 costs of suits are in certain instances 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.	n	Solicitors.					
	Barristers.	Sydney.	Country.	Total.			
1911	156	603	411	1,014			
1918	169	629	429	1,058			
1920	174	666	423	1,089			
1922	184	.717	439	1,156			
1923	199	754	440	1,194			

The number of barristers at the end of 1923 included 26 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 1,194 solicitors, and 73 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.

JURY SYSTEM.

The jury system was first introduced into New South Wales in 1824, but was not converted to its present form until 1839.

All 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 Juries Act, 1912, but other Acts regulate special cases.

Persons liable to service on juries include, with certain exceptions, any person 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. Persons specially exempt include judges, members of parliament, certain public officers, clergymen, barristers, solicitors, magistrates, police officers, doctors, chemists, schoolmasters, certain employees of banks, incapacitated persons, and persons above the age of 60 years who claim exemption.

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 or their prosecutors each have the right to challenge eight jurors in criminal cases, or 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 again 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.

HABITUAL CRIMINALS AND PREVENTIVE DETENTION.

The Habitual Criminals Act, 1905, 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 definite sentence imposed for the last conviction is first served, and the offender is then detained for an indefinite term, until he is deemed fit for freedom.

This system of treatment acts as a deterrent to the existence of professional criminals, and confers an incalculable benefit on society by removing the force of criminal example. The benefits accruing from the system of indeterminate sentences, as initiated in New South Wales, have led to its adoption in other communities.

Six men were declared habitual criminals during 1922, the total number so declared since the inception of the Act being 90, including 1 woman. Of this number, 47 men and 1 woman were released on probation, 5 being recommitted to gaol, 5 died, 7 were released on medical grounds, 3 were removed to the Hospital for Criminal Insane, and in 7 cases the declaration of an habitual criminal was remitted. At the end of 1922 there were under detention 8 men who had not yet completed the definite period, and 23 men who had passed into the indeterminate stage.

On the completion of the definite term under the ordinary prison regulations, the habitual criminal passes to the indeterminate stage, which • is divided into three grades—intermediate, higher, and special. A minimum

LAW COURTS.

period of 4 years and 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.

An important proviso of the Habitual Criminals Act prescribes that while under detention as an habitual criminal every prisoner must work at some useful trade, and receive at least one-half 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.

FIRST OFFENDERS.

Special provision is made by the Crimes Act, 1900, for lenience towards any person convicted of a minor offence and sentenced to penal servitude or imprisonment therefor, provided such person has not been convicted previously of an indictable offence. The term "minor offence" includes, in this connection, all offences punishable summarily, and any other offence to which the court applies the provisions of the Act. In such cases sentence is pronounced in the ordinary way, and execution thereof suspended upon the offender entering into recognisance to be of good behaviour for a fixed period of at least twelve months. Such persons are required to undergo an examination to facilitate future identification, and to report quarterly to the police. They may be arrested and committed to prison for the term of sentence imposed, for any breach of the conditions of their release during the period of probation.

Special provision was made in 1918 for observing privacy in hearing the cases of female first offenders.

The following table shows the particulars available concerning persons released as first offenders in the last six years (cases of children being excluded) :---

Year.	First Offenders dealt with by Higher Courts.	First Offenders Released on Probation by Magistrates Courts.	Total Firs Offenders Released of Probation		
1917	84	219	303		
1918	120	269	389		
1919	151	282	433		
1920	217	241	458		
1921	246	395	641		
1922	136	543	679		

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). Subject to local inquiry and committal, any person charged with an offence punishable by imprisonment for twelve months or more may be arrested under a warrant locally endorsed, or under a provisional warrant in cases of suspicion, and extradited. 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. Various acts are in force. As regards New South Wales, application for the surrender of a foreign criminal is made to the Governor-General by the foreign consul or government concerned. No person, however, may be surrendered without due inquiry into the charge laid against him, and when surrendered he must not be tried for any other offence. Persons charged with political offences only may not be extradited. Application to foreign countries for surrender of a criminal to New South Wales are usually made by the Attorney-General.

The number of fugitive offenders arrested in New South Wales and remanded to other States or countries during 1922 was 40, and the number arrested in other States or countries and returned to New South Wales was 17.

CAPITAL PUNISHMENT.

The following table shows the total number of death sentences pronounced and sentences of death recorded, and executions during the years 1917-22 :--

Year.	Death Sen- tences Pronounced and Sentences of Death Recorded.	Executions.	Year.	Death Sen- tences Pronounced and Sentences of Death Recorded.	"Executions.	
1917	8	2	1920	14		
1918	4	•••	1921	8		
1919	3		1922	3		

At the close of 1922, there were in gaol 56 persons serving life sentences, and one under sentence of death.

POLICE.

The police force of New South Wales is organised under the Police Regulation Acts of 1899 and 1906. The Inspector-General 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 Goernor as subordinates of the Inspector-General. Sergeants and constables are appointed as required by the Inspector-General, 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.

Members of the force must take an oath of faithful and impartial service, and may be punished by fine in Courts of Petty Sessions for failure or refusal of duty. They remain in office until the age of 60 years (or 65 with special permission), unless previously discharged. They may resign on giving three months' notice.

The powers of police officers rest on the common law, with certain express additions made thereto by statute. 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; they collect revenue, such as taxes in respect of moter vehicles; they revise the electoral lists, and collect a large volume of statistical returns.

The State is divided into 88 police districts, which are subdivided into 530 patrol districts, containing 644 police stations, at the end of 1922, and a police force numbering 2,837. The distribution of the force in 1922 was as follows :---

:	Classi	fication.			Inspector Gen. and Superin- tendents.	In- spectors.	Ser- geants.	Con- stables.	Track- ers.	Total.
General	•••		•••		13	50	544	1,954*	34	2,595*
Detective				A		2	25	21	• • •	48
Water					• • • •	1	9	43 [.]		53
Fra ffic	•••		•••	•••	1	2	. 9	129	•••	141
	Total]	14	55	587	2,147*	34	2,837*

*Including 8 women, viz., 4 Searchers and 4 Special Constables.

The following statement shows for various years since 1896 the strength of the police establishment (exclusive of trackers and women police) in relation to the population. In 1900 the function of regulating the metropolitan street traffic was transferred to the police, and with a greater volume of administrative legislation their duties have been increased.

Year.	Number of Police.	Inhabitants to each Policeman.	Year.	Number of Police.	Inhabitan to each Policeman.
1896	1,874	682	1916	2,587	729
1901	2,172	634	1917	2,557	751
1906	2,342	640	1918	2,480	792
1911	2,487	684	1919	2,569	794
1912	2,554	700	1920	2,634	795
1913	2,582	715	1921	2,734	779
1914	2,627	717	1922	2,795	778
1915	2,613	725			

Since 1901 the police force has grown at a slower rate than the population.

Rates of Pay and Pensions.

The salaries paid to the police are as follow :—Inspector-General £1,500; superintendents, £533 to £633 per annum; inspectors, £408 to £458 per annum; sergeants, 18s. 1d. to 20s. 1d. per day; constables, 14s. 7d. to 17s. 7d. per day.

In addition officers not provided with quarters receive lodging allowances as follow:—Inspector-General £150; superintendents, £110 per annum; inspectors, £80 per annum. Other ranks—married men, 2s. 6d. per day; single men, 1s. 6d. per day. A clothing allowance of £20 per annum is made to plain-clothes police in lieu of uniform.

A deduction of 4 per cent. is made on account of contributions to a Superannuation Fund. Pension and gratuity rights are as follow :--- To police appointed before 1st February, 1907, with less than 15 years' service, a gratuity not exceeding one month's pay is payable for each year of service, and a further gratuity of a month's pay for each year of service after the tenth year; to officers with 15 years' and less than 20 years' service, a pension equal to half-pay, less 3 per cent., is payable; from 20 years' and less than 25 years' service, a pension equal to two-thirds, less 3 per cent.; from 25 years' and less than 30 years' service, a pension equal to three-quarters less 3 per cent.; and from 30 years and upwards, a pension equal to full pay, less 3 per cent. To officers appointed after 31st January, 1907, with less than 20 years' service, a gratuity not exceeding one month's pay for each year of service is payable; to officers with 20 years' service and upwards, a retiring allowance not exceeding one-fortieth of salary for each complete year of service, less 3 per cent., provided that such allowance shall not exceed three-quarters of salary, less 3 per cent.

The Police Regulation (Appeals) Act, 1923, which will come into operation on a date to be proclaimed, provides for the appointment of a Board, constituted by a District Court Judge, to hear appeals against the decisions of the Inspector-General of Police in regard to promotions or the imposition of punishments, consisting of fine, suspension, dismissal, reduction in rank or pay, or transfer. Any party to an appeal may require it to be heard before the judge, and two members of the police as assessors, one being nominated by the Inspector-General and one by the Police Force. The decisions of the Board are subject to review by the Colonial Secretary, as the responsible Minister of State, and his decision shall be final.

POLICE.

REGULATION OF TRAFFIC.

In the metropolitan district the Traffic Police inspect public vehicles, test taximeters, regulate and control the use of motor vehicles upon public streets, besides exercising a general control over all street traffic.

In traffic accidents reported in the metropolitan district during 1922 the number of persons killed was 76, and 1,972 were injured. There were 1,878 accidents in which no person was injured. The corresponding figures for 1921 were: Killed, 62; injured, 1,616; and accidents in which no one sustained injury, 1,199. These figures show that there has been a substantial increase in street accidents.

The police reported also 126 accidents caused by motor vehicles in public streets outside the metropolitan traffic district. Ninety-one persons were injured and 20 were killed.

As regards the services of the police in cases of accident, it is of interest to note that in 1922, 863 police officers held First Aid Certificates and 325 held Life Saving Certificates.

Traffic Licenses.

The following table shows licenses granted for vehicles and drivers under the Metropolitan Traffic Act and the Motor Traffic Act during the years 1921 and 1922 :--

License.		1921.	1922.	License. 192	1. 1922.
Metropolitan Traffic Ad	st			Metrop. Traffic Act-ctd.	
Horse Cab		643	607		23 811
Motor Cab	• •••	407	419	Horse-bus Driver	18 16
Horse Van	•••	1,623	1,520	Motor-bus Driver 44	1 803
Motor Van		376	579		
Horse Omnibus		8	10	Motor Traffic Act-	
Motor Omnibus		180	308	Motor Vehicle	9 39,227
Horse-cab Driver		756	678	Motor Vehicle Driver	
Motor-cab Driver		627	635	Motor Cycle 11,29	
Horse-van Driver	•••	1,884	1,777	Motor Cycle Rider 16,11	1.

The revenue obtained under the Metropolitan Traffic Act was $\pounds 4,834$ in 1921 and $\pounds 5,418$ in 1922; under the Motor Traffic Act $\pounds 51,711$ in 1921, and $\pounds 62,673$ in 1922; and under the Motor Vehicles (Taxation) Act $\pounds 131,025$ in 1921, and $\pounds 161,874$ in 1922.

PRISON SERVICES.

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 and Deputy Comptroller-General of Prisons are 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 on bread and water. 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 the end of 1922 there were 25 gaols in New South Wales. Six were principal, 8 minor, and 11 police gaols. Since 1901, when there were 59 gaols, 40 have been closed, and 5 opened. Parramatta gaol was reopened in 1922.

Grading of Establishments.

The prison establishments are graded with a view to the concentration of prison population in institutions large enough to ensure efficiency of supervision with economy of administration, and the maintenance of a strict and disciplinary organisation conducive to the highest ideals of reform.

The State Reformatory for Women at Long Bay is occupied by prisoners of all classes, and the State Penitentiary for Men at Long Bay is used as a place of detention for incapables from the city, and as a centre from which long-sentence prisoners are distributed to the principal country establishments. At the police gaols and lock-ups are detained only prisoners with sentences of less than fourteen days. The Prisoners' Afforestation Camp, Tuncurry, receives selected prisoners (first offenders) after portion of their sentence has been served. At the Emu Plains Prison Farm, young industrious prisoners, with suitable qualifications are treated on somewhat similar lines.

Classification of Prisoners.

In all the large establishments an inter-classification system is operative, which assures the segregation of the inmates in various classes according to age and conduct. For several years the principle of restricted association has been in operation, and has yielded successful results. Under present conditions association while at work, at exercise, and at religious instruction, is subject to the closest supervision. Cells are lighted, and literature is provided from the prison libraries.

PRISON POPULATION.

The number of gaol entries during the various years, and the number of prisoners in gaol, exclusive of inebriates, at the close of various years since 1901 are shown below :---

Year, Year, Year, Year, Year,	Number	Prisoners at end of Ycar.										
	Entries	Under S	sentence.	Awaiti	Awaiting Trial.		rotal.		Prisoners			
	during Year.	Males.	Females.	Males.	Females.	Males.	Females.	Total.	Sentence per 1,000 of Population.			
1901	14,361	1,499	197	106	10	1,605	207	1.812	12.3			
1911	9,532	1,066	107	68	8	1,134	115	1,249	6.9			
1916	9,999	1.251	200	64	10	1,315	210	1.525	7.9			
1917	8,169	1.154	138	81	4	1,235	142	1,377	6.7			
1918	7.804	854	105	59	7	913	112	1,025	5.9			
1919	7,373	835	60	85	6	920	66	986	4.4			
1920	8.784	1,056	72	m	9.	1.167	81	1,248	5.4			
1921	8.817	1.182	91	90	6	1.272	97	1.369	6.0			
1922	8,955	1,292	81	97	6	1,389	87	1,476	6.3			

The number of goal 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.

Of the prisoners in gaol under sentence at the end of 1922, there were 1,241 serving sentences of penal servitude, or of hard labour, including 56 serving life sentences, and 31 habitual criminals. One prisoner was under sentence of death, and 131 were serving sentences of imprisonment only. The terms of sentence were unspecified in 129 cases.

The number of convicted prisoners in gaols decreased in a marked degree between 1901 and 1911. At the end of the former year the number was 1,696 or 12.3 per 10,000 of population as compared with 1,173 or 6.9 per 10,000 of population in 1911. The prison population increased between 1911 and 1915, when, owing probably to circumstances brought about by the war, a further marked decline occurred, and at the end of 1919 the number of prisoners confined in gaols was the lowest since records were commenced in 1887. Since 1919 the number has increased.

The number of prisoners in gaols varies over lengthy periods under the influence of several variable factors, chiefly the number of offences for which imprisonment may be ordered and the severity of sentences imposed. There has, in recent years, been a growing tendency to lenient treatment. Therefore the number of confinees in any particular year does not necessarily reflect the amount of crime committed in that year.

	Convicted	in Higher Co	urts.	Convicted in	ourts f Petty	Sessions.	Other	
Year.		Total.	Sentenced to Prison	Imprisoned in default of paying Fine.	Total.	persons sentenced to Prison, *	Grand Total.	
1901	270	382	652	2,804	8,182	10,986	202	11,840
1906	287	325	612	1,957	6,853	8,810	149	9,571
1911	248	237	485	1,728	4,959	6,687	261	7,433
1912	238	261	499	2,357	5,844	8,201	259	8,959
1913	298	349	647	2,372	6,016	8,388	281	9,316
1914	243	412	655	2,426	6,299	8.725	416	9,796
1919	303	279	582	1,487	3.076	4,563	264	5,409
1920	390	418	808	1,630	3,724	5,354	40	6,202
1921	422	440	862	1,270	4.441	5.711	41	6,614
1922	405	452	857	1,440	4,226	5,666	42	6,565

The following statement shows the number of prisoners under sentence received into gaols during various years since 1901:---

* Includes persons imprisoned as debtors, as offenders against Federal laws, as naval and military offenders, and as a result of civil processes.

NEW SOUTH WALES OFFICIAL YEAR BOOK.

This table provides a comparison of recent years with those more remote, and of the pre-war and post-war periods. General features of the figures are (1) that usually more than half the crimes for which convictions are obtained in the higher courts (i.e. the more serious crimes) are committed by persons who have already been in prison, (2) approximately two thirds of the prisoners are committed to gaol in default of paying fines imposed in Courts of Petty Since 1901 the total number of persons committed to prison under Sessions. sentence has decreased heavily, especially when the growth of population is considered, the relative proportions per 1,000 of population being in 1901, 8.6; 1911, 4.5; 1921, 3.1; 1922, 3.5. This decrease is due mainly to a diminution in imprisonment for minor offences dealt with by Courts of Petty Sessions, where the decrease in the number of persons committed to prison without the option of paying a fine is particularly noticeable. Between 1911 and 1914 the number of persons imprisoned for serious crime was increasing, but was relatively less than in former years. The numerical increase since the war has not raised the proportion relatively to the population.

Imprisonment-Composition by Fine.

Under the Justices Act any persons committed to prison in default of payment of a fine may pay a portion of the fine under prison rules and be relieved of a proportionate part of the period of imprisonment. The extent to which prisoners have availed of this provision in various years since 1902, when it first became operative, is shown below :---

Particulars.	1902.	1911.	1920.	1921.	1922.
Persons committed to gaol in default of payment of fines	8,062	4,959	3,724	4,102	4,226
Prisoners subsequently released after pay- ing portion of fines	1,008	1,480	781	848	776
Days prisoners would have served if por- tion of fines had not been paid	30,768	41,104	27,017	32,323	25,140
Days remitted by part-payment of fines	20,179	30,120	16,602	18,464	10,761
Amount received at gaol as part-payment of fines £	2,198	3,153	2,721	3,157	2,840

In recent years the proportion of persons who took advantage of the provision has been about 20 per cent. of the total. In 1902 and 1911, the amount received at gaols per day's imprisonment remitted was approximately 2s., in 1922 it was over 5s.

Prisoners Released on License.

Persons eligible for remission of sentence for good conduct and industry may be released on license to be of good behaviour.

Licenses operate for the unexpired portion of the sentence and sureties are required. The licensee is required to report periodically, and a breach of the conditions of release may be punished by the cancellation of the license, and recommittal to gaol for the balance of the sentence. During 1922, licenses were granted under Prisons Regulation No. 75, to 411 men and 5 women, and under the Crimes Act to 61 men and 2 women.

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PRISON SERVICES.

Industrial Activity in Prison Establishments.

Ability to perform useful and remunerative labour is recognised as of equal importance with good conduct in demonstrating fitness for freedom. 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. In 1922 the value of prisoners' labour amounted to £62,011, viz. :--manu-

In 1922 the value of prisoners' labour amounted to $\pounds 62,011$, viz. :--manufactures, $\pounds 23,007$; agriculture, $\pounds 11,754$; buildings, $\pounds 5,876$; domestic employment, $\pounds 18,497$; and other employment, $\pounds 2,877$. Prisoners' labour supplies almost entirely the needs of the Department in forage and vegetables.

Sickness and Mortality in Gaols.

Visiting surgeons are attached to the various important establishments and modern systems of sanitation and hygiene are in vogue. Among the persons received into the institutions are included some whose physical condition is deplorable, persons in the last stages of disease, and aged and infirm persons, for whom a hospital or asylum is the befitting destination. Prisoners suffering from tuberculosis receive special treatment.

The medical statistics of prisons show that, with an average daily number of 1,488 inmates during 1922, the total number of cases of sickness treated in hospital was 498. Four prisoners died, and 12 were released on medical grounds. The death rate per 1,000 of the average number of inmates was 2.6.

Lock Hospitals.

Under the Prisoners Detention Act, 1908, prisoners found to be suffering from certain contagious diseases may be detained in Lock Hospitals attached to the gaols. In cases of imprisonment without option of fine, a stipendiary magistrate may cause the prisoner to be detained until certified by the medical officer as free from disease even after the definite sentence is served. In the case of imprisonment in lieu of payment of a fine, the Act did not provide for detention beyond the specified term of imprisonment until 1918, when an Act was passed to remedy this defect. All such prisoners may be treated now in the Lock Hospitals until free from contagion.

During 1922, 179 cases of venereal disease were treated, and orders for detention in the Lock Hospitals were obtained in the cases of 101 men and 23 women. Prisoners were detained for curative treatment during the year for periods ranging up to nine months after the expiration of their original sentence.

SPECIAL PRISON TREATMENT.

Upon the recommendation of the judge before whom they have been tried prisoners convicted of a misdemeanour under sentence of imprisonment without hard labour may be placed in a special class and treated similarly to those confined under civil process. Such prisoners are segregated and are allowed privileges regarding food, clothing, etc.

First Offenders.

The records of 857 persons received into gaol after conviction in the higher courts during 1922 show that 405 had not been imprisoned previously.

At Goulburn Gaol special reformative treatment is provided for first offenders through the provision of useful employment, educational facilities, physical drill, and strict classification in order to prevent association with prisoners of vicious tendencies. That this plan is an important factor in the deterrent influence of the prison system, is evinced by the small proportion of re-convictions of prisoners passing through the treatment.

Youthful Offenders.

In New South Wales a strict line of demarcation is drawn between offenders over and under the age of 25 years, great discrimination and special care being necessary to prevent such youthful offenders from becoming confirmed criminals. Offenders under age 25 are classified in age-groups, and according to length of sentence over or under 12 months, and divisional treatment is accorded. Special disciplinary, scholastic, religious, physical training, and industrial courses are provided.

Maintenance Confinees.

The Deserted Wives and Children Amending Act, 1913, empowers the Comptroller-General of Prisons to direct a prisoner committed to prison under the Deserted Wives and Children Act, 1901, or the Infant Protection Act, 1904, to perform any specified class of work. An estimate is made of the value of the work performed, and after a deduction for the prisoner's keep, the remainder is applied towards satisfaction of the order for maintenance under the Deserted Wives and Children Act 1901, or for maintenance or expenses under the Infant Protection Act, 1904.

During 1922 the number of maintenance confinees received into gaol was 367, as compared with 344 in the previous year.

Women in Prisons.

In August, 1909, the State Reformatory for Women was opened at Long Bay, and to this central institution are sent all prisoners from the metropolitan district, and all long-sentence prisoners from extra-metropolitan districts. At Long Bay an exhaustive system of classification is in force, accommodation being provided by means of 288 separate rooms. The industrial activity of the institution resulted in an output of manufactures, which, with the work of gardening and domestic services, was valued at £2,728. During 1922 the daily average at the Reformatory for Women was 94.

In 1922, at all gaols of New South Wales, 1,084 female prisoners were received under sentence, the majority being detained at Long Bay. The daily average number of women under detention, including untried prisoners, was 104.

Approximately 74 per cent. of the women received at the gaols were committed on sentences of one month and less, consequently there was little opportunity for the application of reformative measures.

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 in this way come 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.

Special provision has been made, at the State Penitentiary, for men, and, at the State Reformatory, for women detained under the Inebriates Act, who have been convicted previously for other offences. Since March, 1915, those of the non-criminal class have been treated at a separate establishment, the Shaftesbury Inebriate Institution.

In 1917 arrangements were made for the admission of voluntary paying patients to the Shaftesbury Institution. These patients may, under certain conditions, leave the institution daily to follow their usual occupation. During 1922, 37 men and 9 women were admitted as voluntary patients, and 7 men and 1 woman were remaining on 31st December.

The power of detaining inebriates in State Institutions was first exercised in 1907, and the majority of admissions have been of chronic offenders over 40 years of age, who for many years prior to admission had served frequent sentences under the repeated short sentence system, and who in consequence had drifted into a condition from which reformation seemed almost hopeless. In view of this fact the results attained by the operation of the Acts may be considered encouraging.

During the period dating from the first reception in August, 1907, to 31st December, 1922, the total number of original receptions amounted to 1,140-511 men and 629 women; 1,483 licenses for release were issued-574 to men, and 909 to women; 191 issued to men, and 388 to women, have been cancelled, and the licensees recommitted to institutions.

The number of persons admitted to the inebriate institutions in 1922 was 127, viz.-54 men and 73 women. One man died, 56 men and 63 women were released on license, 5 men and 5 women were discharged, leaving 35 men and 42 women in the institutions at the end of the year.

The total expenditure on inebriate institutions during the year amounted to £4,852.

BIRTHPLACES AND RELIGIONS OF PRISONERS.

The number of persons serving sentences in gaols at the end of 1922 were distributed as follows in groups of birthplaces and religions :----

Birthplace.	Males.	Females.	Total.	Religion.	Males.	Females.	Total
New South Wales Other Australian	239	55 10	823 249	Church of England Roman Catholic		39 36	670 530
England and Wales Scotland	136 33	9 1	145 34	Methodist Presbyterian	34 82	2 4	36 - 86
Ireland Other British	$\frac{26}{22}$	3	29	Other Christian	13		56 13
Foreign Countries	6 8	2	23 70	Non-Christian No religion	20 18		20 18
Total	1,292	81	1,373	Total	1,292	81	1,373

Cost of Administration of Justice.

The following table shows the amount expended by the State in the administration of justice, and in the protection of property and punishment

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of criminals, in New South Wales during the last five years; also the amount of fines and fees, and net returns from prisoners' labour paid into the Consolidated Revenue —

Expenditure and Revenue.	1918-19.	1919-20.	1920-21,	1921-22.	1922-23.
Expenditure-	£	£	£	£	£
Law Administration— Salaries, Pensions, etc., of Judges Other	52,368 225,121	$53,870 \\ 232,176$	59,106 288,742	60,407 342,703	63,970 325,155
	277,489	286,046	347,848	403,110	389,125
Police Administration, etc Payments to Pension Fund	668,231 72,000	930,756 77,000	1,062,201 80,000	1,106,102 91,000	1,118,604 110,000
•	740,231	1,007,756	1,142,201	1,197,102	1,228,604
Prisons	87,875	92,781	113,882	120,317	146,359
Total Expenditure	1,105,595	1,386,583	1,603,931	1,720,529	1,764,088
Revenue Fees Fines and Forfeitures Value of Prisoners' Labour*	$69,174 \\ 35,280 \\ 499$	81,318 38,785 410	45,303	$111,720 \\ 45,723 \\ 662$	$119,331 \\ 54,422 \\ 604$
Total Revenue	101.059	120,513	146,151	158,105	174,357
Net Cost	. 1,000,642	1,266,070	1,457,780	1,562,424	1,589,731
Per Head of Mean Population— Law Administration Police Prisons Total Expenditure Revenue Net Cost	$\begin{array}{c c} 0 & 11 \\ 11 & 3 \\ 1 & 1 & 1 \\ 10 & 2 \end{array}$	s. d. 2 10 9 10 0 11 13 7 1 2 12 5	$ \begin{array}{c} \text{s. d.} \\ 3 & 4 \\ 10 & 11 \\ 1 & 1 \\ 15 & 4 \\ 1 & 5 \\ 13 & 11 \end{array} $	s. d. 3 9 11 3 1 2 16 2 1 6 14 8	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

* Exclusive of value of work done for Prisons and other Government Departments.

The expenditure on law administration includes the salaries, etc., of judges, and the expenditure of the Department 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 estimated to exceed in value $\pounds 200,000$ per annum.

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CURRENCY.

THE currency in New South Wales is 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, 1920, and the Bank Notes Tax Act passed in 1920.

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. The following is a summary of the results :---

	Cur	rency.			1901.	1996,	1911.	1916,	1921.	
Gold Silver Bronze	• • • •	•••• •••	•••• •••			£000 9,795, 831 53	£000 14,496 1,302 81	£000 11,006 1,513 99	±000 8,637 2,150 131	
Т	'otal M	etallic		-	8,789	10,679	15,879	12,618	10,918	
Bank N Austral		 tes	•••	- 	1,500	1,462	401 3,866	85 18,991	70 21,668	
Т	otal Pa	aper			1,500	1,462	4,267	19,076	21,738	
Т	otal Cr	irrenc	у	-	10,280	12,141	20,146	81,694	32,656	

The amount of metallic currency rose considerably between 1901 and 1911, and throughout the following decade the silver and bronze coinage continued to expand, while in the latter half the gold currency was withdrawn gradually from active circulation owing to war conditions. Bank notes were replaced by Australian notes after the enactment of Federal legislation in 1910, and the amount of paper currency increased fivefold between 1911 and 1921.

The distribution of the currency between the banks and the public is shown below. The amount of bank notes current and of the Australian notes held by banks were estimated from the statutory returns of the banks, and the value of Australian notes in the hands of the public was assumed to have been 40 per cent. of the amount so held in the Commonwealth.

Held by-			1991,	1906.	1911,	1916.	1921.
Banks— Gold Silver Bronze	•••		£000 6,040 345 10	£000 7,724 407 12	£000 12,202 450 15	£099 11,006 497 17	£000 8,637 599 26
Australian Notes	•••	•••			2,124	13,661	12,098
Total	•••	•••	6,395	8,143	14,791	25,181	21,360
Public— Gold Silver	••••	•••	1,967 384	2,071 424	2,294 852	1,016	1,551
Bronze Bank-notes Australian Notes	. 	••••	34 1,500 	41 1,462 	66 401 1,742	82 85 5,330	105 70 9,570
Tota		•••	3,885	3,998	5,355	6,513	11,296
Total Currenc	y	·	10,280	12,141	20,146	31,694	32,656

* 36225-A

The amount held by the banks was more than doubled between 1901 and 1911, and expanded by 70 per cent. during the succeeding five years, then showed a tendency to decline. After 1911 the increase was in the amount of Australian notes, and the quantity of gold decreased considerably. Shortly after the commencement of the war an arrangement was made by which the banks placed gold at the disposal of the Government and accepted in exchange Australian notes redeemable at the end of the war. The banks do not now require to hold gold against the issue of paper currency, the gold which is a reserve against the Australian notes having been held by the Treasury until December, 1920, and subsequently by the Note Issue Board.

The money in the hands of the public increased slowly between 1901 and 1916, then expanded rapidly during the succeeding quinquennium as prices and wages rose to an abnormal level. The increase in relation to the population is shown in the following table :---

					Money in active circulation per head of Population.														
	Cu	rrency.			1	901	•		1906	•]	1911.			191(3.	Ţ	1921	•
Gold Silver Bronze				•••	£ 1 0 0	s. 8 5 0	d. 7 7 6	£ 1 0 0	7 5	78	£ 1 0 0	s. 7 10 0	d. 6 4 9		s. 10 0	- 9		s. 14 1	
	Fotal N	letallic	·		1	14	8	1	13	10	1	18	7	0	11	7	0	15	9
Paper				•••	1	1	9	0	19	6	1	5	9	2	17	3	4	11	5
ŗ	l'otal C	urrency	y		2	16	5	2	13	4	3	4	4	3	8	10	5	7	2

The average amount of money in active circulation per head of population in 1921 was twice the amount in 1906, and was 56 per cent. higher than in 1916.

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.

A branch of the Royal Mint, London, was opened in Sydney on 14th May, 1855, for minting gold; other branches were opened subsequently 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 finencess is $\frac{11}{12}$ fine gold, $\frac{1}{12}$ alloy, or millesimal finencess 916.6; for silver coins, $\frac{37}{40}$ fine silver, $\frac{3}{40}$ alloy, or millesimal finencess 925; bronze coins are of mixed metal—copper, tin, and zinc. Thus, standard or sovereign gold has a finencess of 22 carats, and the gold contained in deposits sent to the Sydney Mint for melting, assaying, and coining is accounted for at the rate of £3 17s. $10\frac{1}{2}$ d., or 3.8937 sovereigns per oz.

The nominal value of one ounce of silver coined into eleven sixpences is 5s. 6d., and of one pound (avoirdupois) of bronze coined into pence 4s., and into half pence 3s. 4d.

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The denominations of Australian coins are similar to those of the Imperial coinage, the principal variation being the elimination of the half-crown. Until 1919 gold coins only were struck at the Sydney Mint, the silver and bronze coins issued being minted elsewhere. As the gold production decreased and gold coins were withdrawn from circulation, arrangements were made for minting other coins, viz., bronze in May, 1919, and silver in January, 1921.

Coins and bullion are distributed from the Sydney Mint upon the order of the Federal Treasurer; the issues during the year 1922 included sovereigns to the value of £578,000, silver coins to the value of £119,400, and bronze £8,200. In 1923, sovereigns to the value of £416,000 were issued, also silver coins to the value of £126,400, and bronze £32,510. Gold bullion is issued in the form of bars of fine gold for local banks, also small quantities of pure gold for industrial use, the quantity in 1922 being 11,189 oz., valued at £43,568, and in the following year 14,537 oz., valued at £56,602.

The value of gold coin and bullion issued by the Sydney Mint from the date of its establishment in 1855 to the end of 1923 was £149,346,421, viz., coin £142,159,500 and bullion £7,186,921. The value of Australian token coinage issued from 1910 to 1923 was £1,842,949, including silver £1,711,850, and bronze £131,099. Worn gold coins are received for re-coinage, the nominal value of those withdrawn from circulation to the end of 1923 being £1,090,997. British silver coins, worn and re-issuable, are withdrawn through the agency of the Mint, the aggregate value of the withdrawals to the end of 1923 being £1,084,772. No Australian coins have yet been withdrawn from circulation.

The coinage value of an ounce of silver being 5s. 6d., a substantial profit is usually made on the coinage, after the minting and other expenses have been deducted. Under normal conditions, the price of silver is determined by tranactions in the London market, and the average of the prices ruling there in each year since 1913 is shown below :---

Ycar.	Price of Silver per standard oz.	Year.	Price of Silver per standard oz.
	s. d.		s. d.
1913	2 3.56	1918	3 11.77
1914	2 1.19	1919	4 10.31
1915	$1 \ 11.67$	1920	5 1.21
1916	2 7.28	1921	3 0.90
1917	3 4.93	1922	2 10.45

In 1918 the price of silver in London was subject to regulation by the Imperial Government; it was decontrolled in May, 1919, and in the latter part of the year it commenced to rise rapidly until it exceeded the coinage value. The maximum was realised in February, 1921, when the average price for the month was 7s. 6d. per oz.; four months later it had fallen to 4s. 3d. At the beginning of 1921 it was 3s. 4d. per oz., and it fluctuated between 2s. $8\frac{1}{2}$ d. and 3s. $5\frac{1}{2}$ d. before the close of the year, when the average price was 2s. $11\frac{3}{4}$ d. per oz. There was a decline of $1\frac{3}{4}$ d. in price early in 1922. In April a rise occurred, and the average in May and June was about 3s. Then it dropped slowly until November, when the downward tendency became more marked, and the average in December was less than 2s. 10d. per oz.

Though the Sydney Mint is a branch of the Imperial institution and the coinage is under the control of the Commonwealth, the cost of maintenance

is borne by the State Government and the receipts are paid into the Consolidated Revenue of New South Wales, in accordance with arrangements A statutory endowsubsisting a' the inauguration of the Commonwealth. ment of £15,000 is set apart annually and additional appropriations are made when necessary. The profit in respect of the issue of Australian silver and bronze coinage accrues to the Federal Government. At a conference held in December, 1923, between representatives of the Commonwealth and State Treasuries, an arrangement was made by which the Sydney Mint is to coin 42 per cent and the Melbourne Mint 58 per cent, of the Australian The receipts of the Sydney Mint consist of charges for coining, fees coins. for assaying, etc., and profits on the sale of silver. The Mint retains the silver contained in the deposits treated, but payment is made for the quantity in excess of a certain proportion, which varies from 5 per cent. to 8 per cent. in accordance with the gross weight. The rate of payment is determined by the Deputy Master. The price since 1st January, 1923, has been 2s. per oz.

The disbursements by the State Government in respect of the Sydney Mint during 1922 amounted to £20,298, and the receipts to £14,853, the net loss being £5,445 The corresponding figures for 1923 were expenditure £19,445, receipts £6,391, and net loss £13,054. The expenditure by the State Government in connection with the Mint has exceeded the receipts paid into Consolidated Revenue in each year since 1907, except in 1918 when the Mint charges yielded a larger amount than usual as the result of the treatment of large consignments of gold from oversea.

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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 rotes, 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, 1923, the amount was £67,556.

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., $\pounds 1$, $\pounds 5$, $\pounds 10$, and multiples of $\pounds 10$, 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 gold reserve in respect of the notes was fixed at an amount not less than onefourth of the notes issued up to $\pounds 7,000,000$, and \pounds for \pounds 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 December, 1920, control of the Australian note issue was transferred to the Commonwealth Bank in which a Note Issue department was established under the management of 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. Since the transfer the notes have been issued by the Commonwealth Bank. The total value of the Australian notes in circulation in New South Wales and elsewhere, and the gold reserve, in each year since 1914, are shown below :---

		Gold R			erve.
On 30th June.		Notes in Circulation.	Total.	Proportion of Note Circulation.	
			£	£	Per cent.
1914			9,573,738	4,106,767	42.90
1915			32,128,302	11,034,703	34.34
1916		•••	44,609,546	16,112,943	36.12
1917	•••		47.201,564	15.244.592	32.29
1918	•••		52,535,959	17.659.754	33.61
-1919			55,567,423	24,273.622	43.68
1920			56,949,030	23,658,092	41.54
1921			58,225,787	23.478.128	40.32
1922	•••		53,556,698	23,534,181	43.94
1923			52,102,025	24 443,980	46.91

Of the notes current in June, 1923, the banks held £28,902,000, and £23,200,000 were in the hands of the public; in comparison with the figures for the previous year there was a reduction of £2,051,000 in the banks' holdings, and an increase of £597,000 in the notes in active circulation.

The value of the gold reserve is far above the proportion, 25 per cent., required by law, the excess in June, 1923, being £11,418,473.

Money Orders and Postal Notes.

Exchange by means of money orders and pose al 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 £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 :--

Money Orders issued in New South Wales for Payment in—				Wales for	Money Orders issued elsewhere, paid in New South Wales.				
ended 30th June.	New South Wales.	Other Australian States.	Other Countries,	Total.	In other Australian States.	Beyond the Common- wealth.	Total.		
1921 1922	£ 4,088,483 4,338,224 4,809,290 5,096,806 5,200,893	£ 477,915 532.745 605.471 683.111 635.472	£ 278,323 -364,440 414,997 -352,591 -361,705	£ 4,844,721 5,235,409 5,829,758 6,132,508 6,218,071	£ 611,033 720,392 806,808 779,264 822,959	£ 208,825 268.714 294,479 251,534 261,112	£ 819,858 959,106 1,101,287 1,030,798 1,084,671		

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.

	New Sout	Postal Notes of other Aus-		
Year ended 30th June,	New South Wales.	Other Australian States.	Total.	tralian States paid in New South Wales.
	£	£	£	£
1919	1,110,501	289,956	1,400,457	117,422
1920	1,141,341	327,033	1,468,374	122,295
1921	1,210,980	352,244	1,563,224	138,142
1922	1,296,463	348,809	1,645,272	150,578
1923	1.331.512	370,307	1.701.819	177,183

The maximum amount for which a single postal note is issued is $\pounds 1$, and particulars regarding them are shown below :—

The amount of money sent by postal notes to the other States is more than twice the aggregate value of the interstate postal notes paid in New South Wales. This method of transmitting small sums is used extensively for the purchase of shares in lotteries conducted in other States, the sale in New South Wales being prohibited.

BANKS.

Institutions which transact banking business are required under the Banks and Bank Holidays Act to furnish in a prescribed form, quarterly statements of their assets and liabilities; also, when required, to furnish special 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.

The banking institutions which transact ordinary business in New South Wales are seventeer in number. The head offices of six are in New South Wales, of three in Victoria, of one in Queensland, of one in South Australia, and of one in New Zealand. Three banks have head offices in London; and there are two foreign banks with headquarters in France and Japan respectively.

Capital and Profits.

The particulars relating to the capital and profits of the banks, as shown below, are exclusive of figures relating to five institutions, viz., the Commonwealth Bank, which has no share capital as the Federal Government is responsible for its liabilities; the Rural Bank, which is an adjunct to the State Government Savings Bank; the Primary Producers' Bank, a new institution of which the particulars are not yet available; and the French and Japanese banks, whose transactions in New South Wales represent only a very small proportion of their total business.

The following table shows the amount of the paid-up capital of the other institutions doing business in the State, also the reserve funds, net profits, and dividends, at intervals since 1895. The paid-up capital represents the total amount contributed, irrespective of the countries in which it was subscribed.

Number			Reserve fund and		Dividends.			
Year.	of Banks.	Capital paid up.	balance of Profit and Loss.	Net profits.	Total.	Percentage to paid-up capital.		
		£	£	í £	£	1		
1895	13	19,704,957	4,338,861	750,755	540,409	2.74		
19 00	13	16,807,069	4,742,026	1,257,403	689,969	4.10		
1910	14	16, 193, 550	9,292,715	2,085,004	1,297,885	8.01		
1920	14	22,944,369	18,217,298	3,442,582	2,299,379	10.02		
1922	12	28,714,942	21,720,280	4,312,508	2,887,692	10.06		
1923	12	30,200,746	23,169,699	4.571,475	3,166,360	10.48		

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During the first decade of the period under review the capital of some of the banks was written down. Between 1905 and 1910 two new institutions commenced operations in New South Wales and the capital of the existing banks was increased by calls on the shareholders. The increase has continued, $\pounds 7,256,377$ having been added during the last three years. The reserve funds were built up steadily between 1905 and 1920. During 1921 there was only a slight increase, but the reserves have been augmented since by $\pounds 1,449,419$. The reduction in the number of banks since 1920 is due to amalgamations.

In 1895 the banks had not recovered from the effects of the financial crisis of 1893; some did not pay a dividend, and others paid on preferential shares only, consequently the average rate was very low. Fifteen years later, conditions had improved greatly, and the banks were able to allocate a substantial sum to reserves, and to distribute a large portion of their profits, the average rate of dividend being nearly three times as great as in 1895. The financial position showed further improvement during the next decade, and in 1920, dividends increased by 55 per cent, notwithstanding that the total reserve funds had almost doubled during the period. The rate of dividend rose to slightly over 10 per cent. in 1920 and 1922, and in 1923 it was 10.48 per cent., in spite of heavy increases in costs and expenses of management.

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. Up to 1900 the figures for December quarter are given, from 1910 onward those for June quarter are shown, and since 1920 the interest-bearing deposits include savings banks deposits in the Commonwealth Bank of Australia :---

· · · ·		-	Deposits.		Total	
Year.	Notes.	At Interest.	Without Interest.	Total Deposits.	Other Liabilities.	Liabilities within N.S.W.
	£	£	£	£	£	£
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
1910	1.801.807	26,642,873	23,512,712	50,155,585	471,233	52,428,625
1920	73,266	50,495,134	52,878,126	103,373,260	2.562.273	106,008,799
1922	68,953	54,086,297	52,276,678	106,362,975	2,511,109	108,943,037
1923	67,556	62,163,919	54,005,932	116,169,851	2,097,534	118,334,941

The decline in the value of bank notes in circulation is the result of their replacement by Australian notes. The remarkable growth of deposits since 1910 reflects the large war expenditure and increases in prices.

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 :--

Year.	Coin, Bullion, and Australian notes.	Advances.	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
1910	12,980,593	37,482,907	1,824,349	1,014,456	53,302,305
1920	23,484,721	89,063,144	2,477,601	4,246,969	119,272,435
1922	20,794,662	98.335.071	2,620,237	3,625,187	125,375,15
1923	20,334,675	113,053,795	2,780,285	3,713,762	139,882,517

The experience of the financial institutions during the early nineties caused the banks to exercise caution and the aggregate amount of advances declined during the years 1890 to 1905, while the amount of coin and bullion showed an upward tendency. The advances increased rapidly after 1914, with the inflation of the currency and rising prices, as producers and traders required a larger amount of help in proportion to the volume of business. Another reason for the increase lies in the fact that the banks undertook various forms of advances to meet special emergencies arising from war conditions, *e.g.*, assistance to enable customers to invest in war loans, and advances in connection with the marketing of staple products.

During the period of trade activity and excessive importations in 1920-21, advances rose to a maximum, the aggregate being more than twice the amount in 1915. In the following year advances in respect of war loans and wheat declined, traders were forced to reduce their overdrafts, and the import trade diminished, consequently the total amount of advances declined by £6,364,000.

In 1923 the advances rose to a sum which was over eight millions higher than in 1921. The increase reflects a larger volume of importations, while adverse weather conditions in some parts of the State caused the wool and wheat growers to seek temporary assistance from the banks. Other reasons for the growth of the advances are the great activity in the building trade and industrial enterprise, and investment in real property.

The increase in the assets grouped as coin, bullion, and Australian notes since 1910 is due to increased holdings of notes, which ranged from less than $\pounds 2,000,000$ in 1914 to $\pounds 13,000,000$ in 1920; the amount has since declined to $\pounds 10,000,000$. The amount of coin and bullion was unusually high in 1914, viz., $\pounds 15,500,000$ sterling. It declined by $\pounds 3,500,000$ during the next two years, and a downward tendency was apparent until 1921, when the amount was nearly $\pounds 9,800,000$. The values in 1923 were coin $\pounds 9,917,391$, bullion $\pounds 362,257$, and Australian notes $\pounds 10,055,027$. The value of the assets grouped under the heading "Other Assets" fluctuates with variations n the amount of balances due from other banks.

The proportion of reserves which banking institutions should keep constantly on hand is not fixed by any enactment, and consequently it varies considerably. The ratios of coin, bullion, and Australian notes for various periods from 1895 are shown below :--

Year.	Propertion of Austral	Coin, Bullion, and an Notes –	Year.	Proportion of Coin, Bullion, and Australian Notes—		
	To Total Liabilities.	To Deposits at Call and Note Circulation.		To Total Liabilities,	To Deposits at Call and Note Circulation.	
	per cent.	per cent.		per cent.	per cent.	
1895	16.5	34:7	1920	19.7	44:4	
1900	18:0	44.8	1922	19.1	39-7	
1910	24.8	51-3	1923	17.2	37.6	

The ratio of reserves to total liabilities rose steadily from 16.5 per cent. in 1895 to 28.6 per cent. in 1915; then, as the banks were called upon to meet a heavy demand for accommodation, the ratio fell below 20 per cent. A similar movement is noticeable between "1895 and 1923 in the relation between reserves and deposits at call.

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The financial conditions in the later years, however, were dissimilar from those of the nineties, when the advances made by the banks were considerably in excess of deposits, whereas during the last twenty years a considerable margin of deposits has been maintained.

Deposits and Advances.

Under the head of advances are included notes and bills discounted, 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 following table shows the ratio of advances to deposits, and to total assets, at various dates from 1895 :—

			Ratio of	Amount of Advances per		
Year.	Deposits.	Advances.	To Deposits.	To Total Assets.	Lond of Dain	
	£	£	per cent.	per cent.	£ s. d.	
1895	30,629,258	35,707,153	116-6	78·3	$28 \ 5 \ 9$	
1900	32,233,591	34,385,388	101-2	79 ·9	25 4 0	
1910	50,155,585	37,482,907	74.7	70.3	23 4 6	
1920	103,373,260	89,063,144	86.2	74.7	43 0 11	
1922	106,362,975	98,335,071	92·4	78.4	45 14 11	
1923	116,169,851	113,053,795	97.3	80.9	51 12 0	

The amount of advances, which in 1890 showed an excess of 19 per cent. over deposits, was reduced steadily until 1905. Meanwhile, deposits increased with the development of the primary industries and of the external trade of the State, so that the ratio of advances to deposits dropped to 87.5 per cent. During the prosperous years which preceded the war, advances increased but not to the same extent as deposits, and the ratio declined to about 75 per cent. During the war period, banking transactions increased to a remarkable degree, but, despite the heavy strain upon the financial resources of the community, the margin of deposits did not fall below 25 per cent. until 1918. Then the demand for financial assistance became more insistent ; the Government was negotiating war loans locally, and the primary producers were in need of assistance to combat the ravages of drought; under these conditions the ratio of advances to deposits rose steadily. The inrush of imports in 1920-21 placed a further strain upon the banks, and though efforts were made to restrict credit without unduly hampering trade and industry, the ratio of advances rose to 97 per cent. before the effect of restrictive measures became evident. In 1922 the relation between advances and deposits showed a marked improvement; but the ratio rose to 97.3 per cent, in the following year, notwithstanding an increase of nearly 10 per cent. in the amount of deposits.

A classification of accounts according to the amount of deposit at or about 30th June, 1923, is shown below, the figures being exclusive of particulars of the Commonwealth Bank, which are not available. The absence of these particulars probably does not affect the table seriously, as the bulk of the accounts, both current and fixed, in the Commonwealth Bank consists

		Current Accounts.		Fixed Dep	osit Accounts.	Current and Fixed Deposit Accounts.	
Classification.	Nu	mber.	Amount at Ciedit.	Number.	Amount at Credit,	Number.	Amount at Credit.
			£		£		£
£200 and under	159	9,868	7,268,439	23,343	2,764,175	183,211	10,032,614
£201– £500	2	1,177	6,609,428	17,114	6,292,838	38,291	12,902,266
£501- £1,000		8,487	5,849,524	9,891	7,801,666	18,378	13,651,190
£1,001- £2,000		4,041	5,517,370	4,054	6,131,785	8,095	11,649,155
£2,001- £3,000		1,244	2,981,102	1,014	2,627,144	2,258	5,608,246
£3,001– £4,000	••••	513	1,758,248	397	1,470,464	910	3,228,712
£4,001– £5,000		300	1,325,639	500	2,498,479	800	3,824,118
£5,001-£10,000		469	3,094,035	511	4,071,477	980	7,165,512
£10,001–£15,000		121	1,429,973	110	1,389,541	231	2,819,514
£15,001–£20,000		61	1,043,893	57	1,098,230	118	2,142,123
Over £20,000	•••	117	9,403,632	128	12,171,258	245	21,574,890
Total	19	6,398	46,281,283	57,119	48,317,057	253,517	94,598,340

of large amounts, deposited by the Governments of the Commonwealth and of three of the States.

Eighty-seven per cent. of the accounts and 24 per cent. of the deposits were held in respect of those with balances not exceeding $\pounds 500$. Accounts of $\pounds 2,000$ and under represented 98 per cent. of the total accounts and 51 per cent. of the deposits, 49 per cent. of the aggregate amount of the deposits being held in 2 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 persons who have money in the banks.

The proportion of accounts and of deposits in each group are shown below :---

		Proportio	on of Accoun Group.	ts in each	Proportion of Deposits in each Group.			
Classification.		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		81.4	40.8	172.3	15.7	5.7	[−] 10·6	
£201- £500		10.8	30-0	$15 \cdot 1$	14.3	13.0	13.7	
£501- £1.000		4.3	17.3	7.2	12.6	16.2	14.4	
£1,001- £2,000		$2 \cdot 1$	7.1	$3\cdot 2$	11.9	12.7	12.3	
£2.001- £3,000		-6	1.8	.9	6.4	5.4	$5 \cdot 9$	
£3,001- £4,000			.7	•4	3.8	3.0	3.4	
£4,001- £5,000		\cdot 1	.9	.3	2.9	5.2	4.0	
£5.001-£10.000		•2	.9	•4	6.7	8.4	7.6	
£10.001-£15.000		•1	.2	•1	$3 \cdot 1$	$2\cdot\hat{9}$	3.0	
£15,001-£20,000	•••	<u> </u>	ſ ·Ĩ	b - c	2.3	2.3	2.3	
Over £20,000	•••• ••••	} •1	$\left\{ \cdot 2 \right\}$	} ·1{	20.3	25.2	22.8	
Total	•••	100	100	100	100	100	100	

Banks' Exchange Settlement.

The Banks' Exchange Settlement Office was established in Sydney on the 18th January, 1894, and exchanges are effected daily between the 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 credit with the "pool," and it is not permissible for the balance of any bank to remain below 25 per cent. of the fixed contribution. In the event of it reaching this margin, the bank is required to make up the deficiency with gold.

The growth in the volume of exchanges is shown in the following table :---

Year.	Amount of Exchanges.	Year.	Amount of Exchanges.
	L £		l £
1895	108,509,860	1921	709,734,554
1900	144,080,314	1922	726,582,809
1910	274,343,666	1923	805,032,221
1920	764,546,357		

The transactions have grown rapidly, and, in 1920, when prices were at the highest level, the amount of exchanges was more than twice the sum in 1915. In 1923 the figures reached a maximum, being 11 per cent. higher than in 1922. The increase was due partly to a rise in price levels as compared with 1922, but the volume of business also has expanded, the amount of exchanges in 1923 being 5 per cent. higher than in 1920.

Interest, Discount, and Exchange Rates.

The interest on fixed deposits during 1923 was 4 per cent. for sums deposited for six months; for twelve months' deposits the rate was $4\frac{1}{2}$ per cent., and for two years 5 per cent. Under normal conditions the rate of interest paid on fixed deposits is uniform for all banks, and discount and overdraft rates fluctuate with the interest paid to depositors.

The bank exchange rate on London, at sixty days' sight, is on the average about 1 per cent., but it is subject to some variations.

The interest rates allowed on deposits for twelve months, and charged on overdrafts, also the discount and exchange rates at intervals from 1890 to 1923 were as follow :—

	Bank Rates	of Interest.	Bank Disco	ount Rates.	Exchange Rate on London at 60 Days' Sight.		
Year.	Allowed on Deposits for Twelve Months.	Charged on Overdrafts.	Bills at Three Months.	Bills over Three Months.	Buying.	Selling.	
1890 1900 1910 1920 1921 1922 1923	$\begin{array}{c} \text{per cent.} \\ 4\frac{1}{2} \\ 3 \\ 4 \\ 4\frac{1}{2} \\ 4\frac{1}{2} \\ 4\frac{1}{2} \\ 4\frac{1}{2} \\ 4\frac{1}{2} \end{array}$	per cent. 9 6 to 7 6 ,, 7 <u>1</u> 6 ,, 8 6 ,, 8 6 ,, 8 6 ,, 8 6 ,, 8	per cent. 7 $5 \text{ to } 5\frac{1}{2}$ 5 ,, 6 5 ,, 6 5 ,, 6 5 ,, 6 5 ,, 6 5 ,, 6	per cent. 8 $5\frac{1}{2}$ to $6\frac{1}{2}$ 6 ,, 7 6 ,, 7 6 ,, 7 6 ,, 7 6 ,, 7	$98\frac{5}{4}, 99^{2}$ $98^{2}, 99\frac{5}{4}$	$\begin{array}{c} \text{per cent.} \\ 100 \ddagger \text{to } 101 \ddagger \\ 100 \ddagger , 100 \ddagger \\ 99 \ddagger , 99 \ddagger \\ 99 \ddagger , 99 \ddagger \\ 100 \ddagger , 100 \ddagger \\ 100 \ddagger , 100 \ddagger \\ 99 \ddagger , 100 \ddagger \\ 99 \ddagger \\ 99 \ddagger \\ \end{array}$	

Since 1920, interest rates have shown a tendency to rise, and overdraft rates, while keeping within a range of from 6 to 8 per cent., were moved upwards by some of the banks in order to check borrowing, in view of the expansion of advances. As the oversea export trade of New South Wales consists mainly of products of rural industries, the volume of trade varies with the seasons, and the exchange rate on London is liable to fluctuate accordingly.

The Commonwealth Bank of Australia.

The Commonwealth Bank of Australia was established under an Act passed in 1911, by the Federal Parliament, and the Commonwealth is responsible for the payment of all moneys due by the bank. The Act confers on the bank authority to conduct general banking business, to exercise the functions of an ordinary bank of issue and to transact savings bank business. The management is entrusted to a governor who, with a deputy-governor, is appointed for a term of seven years and is eligible for reappointment. The affairs of the bank are subject to audit and inspection by the Auditor-General of the Commonwealth. The capital was fixed by the 1911 Act at £1,000,000 to be raised by the issue and sale of debentures, but no debentures have been issued though the amount authorised was raised to £10,000,000 in 1914 by an amending Act which also empowered the bank to take over the business of banking corporations and of State savings banks.

The Commonwealth Bank commenced operations on 15th July, 1912, by the opening of a savings bank department but ordinary banking business was not commenced until 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, savings bank business being transacted at all the branches and at numerous post offices and agencies throughout Australia, Papua, New Guinea, the Solomon and other Pacific Islands.

While the control of the Australian note issue was in the hands of the Federal Treasurer, the bank was not allowed to issue bank notes, but in 1920 the note issue was placed under the management of a department of the bank which is separate from other departments, the figures relating to the bank, as shown in this section being exclusive of particulars of the transactions in connection with the note issue.

The total liabilities and assets of the bank at 30th June, 1913, amounted to $\pounds 5,055,382$, and at 30th June, 1923, they had increased to $\pounds 82,253,652$, excluding those of the Note Issue department; the aggregate net profit earned up to the latter date was $\pounds 4,403,987$, of which $\pounds 3,869,219$ were credited to the general bank and $\pounds 534,768$ to the savings bank department.

The following statement shows the liabilities and assets of the Commonwealth Bank in New South Wales in the June quarter of each of the last five years :---

Particulars.	1919.	1920.	1921.	1922.	1923.
Liabilities—	£	£	£	£	£
Deposits at interest—	-		-	-	
Savings Department	5,139,350	5,296,606	6,308,826	6.879,637	5,536,524
Ordinary	6,309,694	8,890,139	7,477,994	4,466,546	7,354,932
Deposits without interest	7,951,358	7,940,199	7,957,402	8,056,573	6,983,964
Total deposits	19,400,402	22,126,944	21,744,222	19,402,756	19,875,420
Other liabilities	386,370	119,409	176,645	34,216	45,558
Total Liabilities	19,786,772	22,246,353	21,920,867	19,436,972	19,920,978
Assets-					
Coin and Bullion	1,117,214	801,713	559,052	898,539	877,803
Australian Notes	1 070 011	1,319,167	1,618,772	1,652,075	1,173,372
Advances	18,112,713	18,938,721	21.855.509	20,754,495	19,678,334
Landed Property	607 001	303,336	335,054	310,461	333,715
Other Assets	3,357,828	1,994,964	1,646,467	1,790,806	1,286,224
Total Assets	27,725,957	23,357,901	26,014,854	25,406,376	23,349,448

SAVINGS BANKS.

Savings bank business in New South Wales is conducted by the Government Savings Bank and by the Commonwealth Bank, and extensive use is made of the facilities offered for the accumulation of small sums on which interest is paid, the deposits being used by the banks to promote the progress and development of the State.

The Government Savings Bank of New South Wales.

This institution was established in 1871 as a post office savings bank under the administration of the Postmaster-General. When the post office was transferred to the Commonwealth in 1901 the control of the bank was vested in the State Treasurer, but the use of the post offices for savings bank business was continued until 1912 under agreement with the Federal Government. Upon the establishment of the Commonwealth Bank, the State institution had to withdraw its agencies from the post offices and to establish separate branches and agencies.

In January, 1907, a change was made in administration, and the bank, being detached from the direct control of the Treasurer, was placed under the management of three Commissioners, who were authorised to conduct the savings bank and to take over the State business in connection with loans to landholders transacted previously by the Advances to Settlers Board. Each class of business was confined to a separate department and new departments were created subsequently, viz., the Closer Settlement Promotion Department, in terms of an Act passed in 1910, which authorised the bank to finance intending settlers out of the proceeds of debentures issued under Government guarantee by the Advance Department; and, in 1914, departments to lend money on the mortgage of irrigation farm leases, and to make advances to The work of the Closer Settlement enable persons to acquire homes. Department was transferred to the Department of Lands as from 1st July, 1919.

The importance of the Savings Bank Department was increased in 1914 by reason of the absorption of the Savings Bank of New South Wales, a smaller institution which had been established in 1832, and controlled by trustees nominated by the Government. The amalgamation took place on 1st May, 1914, the assets taken over by the Government bank being valued at £9,345,952. The deposits amounted to £8,835,266, and the depositors, numbering 150,838, were given the right under certain conditions to continue their accounts for a period of ten years, and to receive a slightly higher rate of interest than the depositors in the Government Savings Bank, if the latter became less than $3\frac{1}{2}$ per cent.

In 1921 the scope of the bank was enlarged in terms of an amending Act passed in the previous year. The departments dealing with advances to settlers and to irrigation farmers were reorganised as the Rural Bank Department, and the business of the institution is conducted now in three separate departments, viz., the Savings Bank, the Rural Bank, and the Advances for Homes.

In the Savings Bank Department the Commissioners may receive deposits and pay interest thereon at rates fixed by regulation, and they must hold 20 per cent. of the funds at call or short notice. In the Rural Bank the Commissioners are authorised to conduct the business of a rural bank and, with the approval of the Governor, they may extend the operations to include general banking business. The main purpose of the Rural Bank being to afford financial assistance to rural settlement and development, the Commissioners may grant advances on approved security to persons engaged in primary industries.

30th June.	Savings Bank.	Rural Bank,	Advances for Homes.	Total Loans by Govern- ment Savings Bank.
	£	£	£	£
1919	2,113,188	2,599,751	1,415,635	6,128,574
1920	1,929,974	2,903,885	2,176,583	7,010,442
1921	2,219,908	3,423,871	3,173,751	8,817,530
1922	2,177,973	4,525,374	4,223,505	10,926,852
1923	2,244,896	4,953,314	5,085,882	12,284,092

The following statement shows the loans current in each department of the bank at the end of the last five years :--

Figures relating to the ordinary banking business transacted by the Rural Bank are included in the tables relating to trading banks in this chapter, and further particulars relating to loans to farmers, etc., and to the advances for homes are published in the chapters of this volume which treat with agriculture and social condition respectively.

On 30th June, 1923, there were 156 branches and 511 agencies of the Government Savings Bank, and, under reciprocal arrangements, transfers may be made on benalf of depositors between the bank and similar institutions in other States of the Commonwealth and the Post Office Savings Banks of the United Kingdom and New Zealand.

The liabilities of the Savings Bank Department, as at 30th June, 1923, amounted to £58,799,896; this sum included deposits £56,643,452; reservefund £800,000; balance of profit and loss account £22,199; and other liabilities £1,334,245. The investments on behalf of the bank included Governmentsecurities and municipal loans £33,640,823, inscribed stock of the other departments of the bank £9,593,795, fixed deposits in banks and in the Treasury £8,903,404, and loans on mortgages and contracts of sale £2,244,896. The cash in hand and bank and Treasury deposits at calk and short notice amounted to £3,486,003; bank premises, £750,000; other assets, £180,975. The expenses of management during the year 1922-23 amounted to £311,594 or 10s. 11d. per cent. of average funds, as compared with 10s. 2³/₄d. during the preceding year.

Deposits in Savings Banks.

During the year ended 30th June, 1923, the rate of interest paid by the Governmert Savings Bank on deposits was 4 per cent. on balances up to £500, and $3\frac{1}{2}$ per cent. on any excess up to £1,000. On accounts of friendly societies, trade unions, and other associations not conducted for profit or trade, interest was allowed at 4 per cent. up to £1,000, and $3\frac{1}{2}$ per cent. on any excess. The amount of deposits received during the year was £52,503,501, and a sum of £2,025,248 was added as interest. The withdrawals amounted to £52,466,889, and the balance at credit at the end of the year was £56,643,452 held in 1,001,675 accounts. An amount of £10,673,337, or 18.8 per cent. of the total deposits, was held in 843,601 accounts not exceeding £100; £29,173,109, or 51.5 per cent., in 133,440 accounts between £100 and £500; and £16,794,006, or 29.7 per cent., in 24,634 accounts over £500.

The Commonwealth Bank in its savings bank department a epts deposits and pays interest at the rate of $3\frac{1}{2}$ per cent. up to £1,000 and 3 p m cent. on any additional balance up to £300. The number of accounts in New South Wales as at 30th June, 1923, was 244,516, the amount at the credit of the depositors being £7,681,217.

The following statement shows the number of accounts and the amount of deposits in the savings banks in New South Wales at the end of each financial year since 1914 :---

At 30th		Deposits.						
June,	Accounts.	Total.,	Per Account.	Per head of Population.				
	No.	£	£ s. d.	£ s.d.				
1914	717,737	33,167,523	46 4 3	17 13 11				
1915	755,835	35,562,649	47 1 0	18 16 1				
1916	806,882	37,363,272	46 6 1	19 14 10				
1917	872,351	40,836,747	46 16 3	21 8 8				
1918	920,337	43,039,012	46 15 3	22 3 1				
1919	984,951	47,070,342	47 15 9	23 11 3				
1920	1,053,893	49,933,535	47 7 9	24 2 8				
1921	1,126,157	57,394,441	50 19 4	2758				
1922	1,186,948	61,791,273	$52 \ 1 \ 2$	28 14 11				
1923 [·]	1,246,191	64,324,669	51 12 4	29 7 2				

The number of accounts does not represent individual depositors, as a certain amount of duplication is caused by persons having deposits in both banks, and by the inclusion of accounts of societies, of trusts, etc. whose members have personal accounts also. It is apparent, nevertheless, that a very large proportion of the people practise thrift through the medium of the savings banks. The aggregate amount of deposits has increased twofold during the last ten years. Notwithstanding the inflation of the currency, the average amount per deposit did not vary greatly until 1920 when an upward tendency became evident. The average amount per head of population rose steadily throughout the decennium.

The number of accounts and the amount of deposits in the savings banks of Australia is shown in the following table :---

		Deposits.							
State.	Accounts,	Total.	Per Account.	Per head of Population.					
	No.	£	£ s. d.	£.d					
New South Wales	1,246,101	64,324,670	51 12 4	29 7 2					
Victoria	1,188,437	56,101,260	47 4 1	34 18 0					
Queensland	. 355,902	20,483,581	57 11 1	25 8 6					
South Australia	432,438	18,249,540	42 4 0	3565					
Western Australia	. 250,214	7,852,741	31 7 8	22 11 2					
Tasmania	. 124,850	4,411,449	$35 \ 6 \ 8$	20 12 8					
Northern Territory	. 869	36,689	42 4 5	10 1 2					
Total	3,598,901	171,459,930	47 12 10	30 2 8					

The amount on deposit in the savings banks in New South Wales was far in excess of that in any other State, but the average per account was exceeded in Queensland, and the amount per head of population in South Australia and Victoria. In comparison with the figures for the previous year there was an increase of $\pounds 9,187,000$ in the savings bank deposits in Australia, the increase in New South Wales being $\pounds 2,533,000$.

Deposits in all Banks.

In June, 1923, the total amount of deposits in the savings and the trading banks in New South Wales was $\pounds 173,139,588$, or $\pounds 79$ 0s. 6d. per head of population. A comparative statement of each class of deposits is shown below. The amounts of interest-bearing deposits in the trading banks differ from the figures in preceding tables, which include the savings deposits in the Commonwealth Bank. The figures for the savings banks represent the deposits on 30th June in each year, and those for the trading banks are the averages of the June quarter.

	Depo	sits bearing Inte	rest.	Deposits	All Deposits.			
June	£ £ 314 35,167,523 35,562,649 37,363,272			not bearing Interest. Total,		Per head of Population.		
	£	£	£	£	£	£ s. d.		
1914	33,167,523	31,931,981	65,099,504	29,944,028	95,043,532	50 14 2		
1915	35,562,649	33,148,700	68,711,349	33,186,317	101,897,666	53 17 8		
1916	37,363,272	33,884,082	71,247,354	43,610,878	114,858,232	60 14 0		
1917	40,836,747	33,915,476	74,752,223	46,599,978	121,352,201	63 13 11		
1918	43,039,012	36,126,228	79,165,240	46,125,775	125,291,015	64 9 11		
1919	47,070,342	43,510,166	90,580,508	45,215,578	135,796,086	67 19 8		
1920	49,933,535	45,198,528	95,132,063	52,878,126	148,010,189	71 10 9		
1921	57,394,441	48,322,625	105,717,066	53,044,965	158,762,031	75 9 5		
1922	61,791,273	47,206,660	108,997,933	52,276,678	161,274,611	75 0 6		
1923	64,324,669	54,808,987	119,133,656	54.005.932	173,139,588	79 0 6		

The total amount of deposits increased by 82 per cent. between 1914 and 1923, and the amount per head by 56 per cent. The most rapid growth occurred in the savings bank deposits, namely, 94 per cent. The deposits at call in the trading banks were higher by 80 per cent., and the interestbearing deposits in the trading banks by 71 per cent.

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. These enactments follow the general provisions of Imperial Acts relating to companies, with deviations 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,

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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.

An important amendment of the company law was made in 1918, when the Companies (Registration of Securities) Act was passed to provide for the registration of debentures issued by companies.

Particulars relating to the registration of new companies and of increases of capital are shown below, the figures for the quinquennial periods representing the annual average :---

			Limited Companies.				No-Liability Mining Companies.				
Period.		New	New Companies.		Increases of Capital.		New Companies.		Increases of Capital.		
		No.	Nominal Capital.	No,	Nominal Amount.	No.	Nominal Capital.	No.	Nominal Amount.		
1	1		£		£	<u>'</u>	£	t	£		
*1901-05		113	3,104,766	13	483,990	25	301,766	5	24,175		
*1905-10		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		156	4,187,075	19	757,500	7	125,000				
1917]	159	5,918,267	19	494,500	8	77,500	2	15,000		
1918		221	6,428,907	60	1,950,190	15	238,500	2	20,000		
1919		267	9,137,360	78	3,071,100	12	118,255	2	4,000		
1920		801	61,654,857	291	11,848,073	26	862,100	1	18,000		
1921		462	20,255,150	93	5,454,507	-10	234,625	6	50,950		
1922		445	10.897.919	.81	4,868,357	.21	442,500	1	1,000		

*Average per annum.

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 the Federal Government passed regulations under the War Precautions Act to prohibit 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. In 1920 there was a remarkable outburst of company promotion, and the registrations of limited companies rose from 267 to 801, and the nominal capital from £9,137,360 to £61,654,857. The figures are inflated by reason of the reconstruction of many companies to meet altered conditions of industry and rises in prices and wages, but the Registrar General has estimated that 648 entirely new companies were registered during the year with a nominal capital of £38,700,000, as compared with an annual average of 383 registrations, including reconstructions during the quinquennium 1911-15, the nominal capital being £10,263,000.

Foreign companies, *i.e.*, those formed or incorporated in any place outside New South Wales, are required to be registered before commencing to carry on business in the State. During the period 1911 to 1919 the number of such registrations was, on an average, about 52 per annum. In 1920 there were 100 registrations, and 72 were effected during 1921, which was the first year in which the nominal capital was recorded, the aggregate amount being £31,121,396. During 1922 the number of foreign companies registered was 58, and the nominal capital, £29,143,312.

CO-OPERATIVE TRADING SOCIETIES.

Prior to the enactment of new legislation at the end of the year, 1923, co-operative trading and investment societies were registered under the Building and Co-operative Societies Act, 1901. Liability was limited, and a member was not permitted to hold an interest exceeding £200 in any society, though a limit was not placed on the amount of interest which a society might hold in any other registered co-operative society.

In view of the extent of industrial organisation in the State, it is remarkable that co-operation, which in other countries is supported largely by industrial workers, has not made greater progress in New South Wales. In 1922 there there were only ninety societies, with an aggregate membership of 48,232.

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, but societies of this class have been registered usually under the Companies Act, and were outside the scope of the Building and Co-operative Societies Act; in fact, registration under the latter enactment ceased when a society was constituted as a company under the Companies Act.

The law relating to co-operation as contained in the Building and Co-operative Societies Act of 1901 proved highly defective in regard to the encouragement of co-operative enterprise and the safeguarding of co-operative interests. It has been replaced by the Co-operation Community Settlement and Credit Act, 1923, which came into operation on 31st December, 1923. The new 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, though certain societies may receive deposits.

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 common service, *e.g.*, water, gas, electricity, transport; (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.

New co-operative societies may be formed only in accordance with the In regard to existing societies, seven permanent building societies Act. specified in a schedule, continue under the old Act, unless at their own option they obtain registration under the new law. Other existing societies are deemed to have applied for registration under the new Act, but except in regard to certain specified matters, they will be bound by the Act of 1901 until registered under the new Act. If such a society does not submit rules altered to conform with the new Act before 31st December, 1924, it may be wound up. Co-operative companies registered as limited companies under the Companies Act, 1899, may obtain registration under the Co-operation, Community Settlement and Credit Act. If they do not obtain such registration they must discontinue the use of the word "co-operative" as part of their title, unless its use is permitted by the Governor. The use of the word "co-operative" by any person or firm as part of a trade or business name is prohibited.

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,

PRIVATE FINANCE.

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. Liability is limited except in the case of rural credit societies, which may be formed either with limited or unlimited liability. A member may not hold more than one-fifth of the shares nor an interest exceeding £1,000. No dividend may be paid in respect of shares in a rural credit society with unlimited liability, and in other cases the maximum dividend is 8 per cent. per annum per share. 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.

The transactions of co-operative societies during the last five years are given in the following table :---

<u> </u>					
Particulars.	1918.	1919.	1920.	1921.	1922.
Number of Manhaun	44 43,239	50 43,381	62 48,313	79 49,670	90 48,232
Liabilities-	£	£	£	£	£
Change Chanitant	949.941	349,309	429,230	519,436	543,725
	101011	223,160	262,831	253,709	255,374
Other Fishilities	10/100	216,014	262,331 262,258	299,271	294,591
Other Maonthes	184,100	210,014	202,200	258,271	234,031
	£ 727,355	788,483	954,319	1,072,416	1,093,690
Assets Freehold, Plant, etc.	211,342	219,439	258.301	314,480	326,039
Q41-		377,946	450,817	471,824	457.991
	163,686	191,098	245,201	286,112	309,660
Total Assets	£ 727,355	788,483	954,319	1,072,416	1,093,690
Expenditure-					
	1,774,730	2,015,519	2,697,926	2,969,522	2,974,678
TA . T	293,426	326,512	413,866	500,924	518,723
······································]]
Total Expenditure .	. 2,068,156	2,342,031	3,111,792	3,470,446	3,493,401
Income-					
0.1	9 109 096	0 1-0 001	3,256,981	3,679,507	3,732,125
Dissources	. 2,193,036	2,478,801		40,995	46,097
Discounts, etc	22,652	23,339	34,211	40,980	40,097
Total income	2,215,688	2,502,140	3,291,192	3,720,502	3,778,222

The majority of the societies are consumers' distributive societies organised on the Rochdale plan of "dividend upon purchase," conducting retail stores, and they buy their supplies through the agency of a wholesale society with which they are affiliated. The societies have met with success in the Newcastle and other mining districts, and in the parts of the metropolitan area where large numbers of industrial workers reside.

The number of co-operative societies on the register, which had remained fairly constant for over ten years, began to increase in 1919, when people were seeking means to combat a rapid advance in prices. The registrations include some societies which lapsed after making preliminary arrangements, and did not actually engage in business, but evidence of a marked growth in regard to co-operation may be gained from the records of the financial transactions, the amount of sales having increased by £1,250,000, or by 50 per cent. in the last three years.

In 1922 the expenses, including interest and depreciation, amounted to $\pounds 518,723$, or 13.9 per cent. on the amount of sales, and the result of the year's trade was a net profit of $\pounds 280,718$, which is equal to a rate of 7.5 per cent. on the sales. A sum of $\pounds 26,105$ was paid as interest on shares, and $\pounds 255,197$ as dividends on purchases.

Benefit Building and Investment Societies.

The aggregate liabilities and assets of permanent building societies for the last five years are shown in the following statement :---

Particulars.	1918.	1919.	1920.	1921.	1922.
Number of Societies	8	8	8	8	8
Liabilities-	£	£	£	£	£
Deposits	485,910	485,764	496,298	506,603	509,763
Share Capital	293,012	298,920	327,322	338,644	347,603
Reserves	138,102	142,705	158,879	171,100	175,042
Other Liabilities	53,117	57,435	48,939	52,116	56,788
Balance of Profit	52,826	63, 171	67,666	65,882	76,257
Total	1,022,967	1,047,995	1,099,104	1,134,345	1,165,453
Assets-					
Advances	774,077	839,465	885,102	931,593	978,452
Other Assets	248,890	208,530	214,002	202,752	187,001
Total	1,022,967	1,047,995	1,099,104	1,134,345	1,165,453

There are only eight permanent building societies, including one in liquidation. The number has not increased throughout the period under review, though the volume of business has expanded. The income during the year 1922 amounted to £100,893, of which the largest item was interest, £97,450, and the expenditure, which amounted to £92,121, included £68,969, paid as interest on shares and deposits and as dividends, and £2,055 to reserves.

Starr-Bowkett building societies are terminating societies, in which the rights of members to appropriation are determined by ballot. Particulars relating to their operations during the last five years are shown below.

Particulars.	1918.	1919.	1920.	1921.	1922.
Number of Societies	114	119	133	140	145
Liabilities	£	£	£	£	£
Members' Subscriptions	1.333.832	1.443.803	1.562.735	1.689.360	1.862.101
Other Liabilities	60,000				
Balance of Profit	146,410				
Total	1,519,070	1,662,197	1,813,659	1,972,294	2,199,006
Assets-			**************************************		
Advances	1,401,392	1,521,008	1,656,706	1,800,483	2,035,995
Other Assets	117,678	141,189	156,953	171,811	163,011
Total	1,519,070	1,662,197	1,813,659	1,972,294	2,199,006

The subscriptions received from shareholders in 1922 amounted to $\pounds 301,562$, and the withdrawals to $\pounds 87,005$; the advances on mortgage amounted to $\pounds 539,230$, and repayments to $\pounds 296,535$, and the sum due on account of advances at the end of the year was $\pounds 2,035,995$. The average amount advanced is $\pounds 260$, and apparently about 2,070 members obtained advances during the year.

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, 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 on 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. The Act and its amendments were consolidated in 1912. Amending Acts passed in 1913, 1916, and 1920, render less rigid a clause which requires the moneys received or paid on account of a particular benefit to be kept in a separate account and to be used only for the specific purpose. Where the sickness and funeral funds of a society are administered by one central body for the whole society they may be treated now as one fund, and on valua tion being made the Registrar 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 of friendly societies, with the exception of the first, the experience of the societies in New South Wales during the nine years 1900–08 has been used as a basis. In the first valuation, as at 31st December, 1904, the monetary tables were based on the experience of the Manchester Unity Independent Order of Oddfellows of England, for the period 1866–1870, with 3 per cent. interest, except in the case of one society in which 4 per cent. interest was adopted. The valuation embraced eighteen affiliated societies, and thirteen single societies; 96,422 members were valued for sickness benefits, and 97,511 for funeral benefits, with 51,155 subsidiary funeral benefits. The results showed a net deficiency equal to 1s. 4d. per £1, only eight affiliated and three single societies being in a solvent condition.

After the valuation, measures were adopted to improve the financial position of the societies, with the result that the second valuation, as at December, 1909, disclosed a surplus equal to 4d. per \pounds of liabilities. The valuation was made on a $3\frac{1}{2}$ per cent rate, the number of societies being eighteen affiliated and twenty-five single. Sickness and funeral benefits were valued for 116,186 members, funeral benefits only for 5,258, and sickness benefits only for 13,109 members. In addition there were subsidiary risks on account of 54,391 persons, including members, their wives and children.

In the third valuation, as at 31st December, 1914, the risks valued for sickness and funeral benefits numbered 150,714, and there were 22,582 for sickness only, 8,055 for funeral only, and 67,635 for subsidiary risks. The assets disclosed by the valuation were equal to £1 0s. 7d. for every £1 of liabilities. During the five years which elapsed between the third and fourth valuations the effects of the war and of an epidemic of influenza caused a heavy drain on the funds of the societies, nevertheless the results showed an improvement in their financial condition in 1919 as compared with 1914. The total number of risks valued in 1919 was 259,155, viz., for sickness and funeral, 147,892; funeral only, 12,360; sickness only, 20,520; and subsidiary benefits to widows, children, etc., 78,383. The rate of interest assumed in respect of the funds of each society was determined on its experience during the quinquennium, being 4 per cent. in the case of eleven societies, and 34 per cent. in the other societies. Particulars relating to the benefits provided by the societies, the contributions payable, and the assistance afforded by the State since the passing of the Subventions to Friendly Societies Act, 1908, in respect of the cost of benefits for aged members, are shown elsewhere in this volume. The following summary shows the results of all the societies combined, as at each of the four valuations :---

	Liabilities.	- A - 1199	Assets.	Surplus.	Assets per	
Year. Value of Benefits.	Accumulated Funds.	Value of Future Contributions.	Total.		£ of Liabilities.	
1904 1909 1914 1919	\pounds 3,981,252 4,219,767 5,411,716 5,524,765	£ 809,133 1,214,889 1,658,066 1,973,642	£ 2,900,499 3,071,269 3,905,894 3,786,983	£ 3,709,632 4,286,158 5,563,960 5,760,625	£ (-) 271,620 66,391 152,244 235,860	s. d. 18 8 20 4 20 7 20 10

In 1919 the liabilities of the affiliated societies amounted to £5,439,641, and the assets to £5,663,084, showing a surplus of £223,443, or 10d. in the \pounds , but three of the societies showed deficiencies amounting in the aggregate to £67,810. The assets of the single societies amounted to £97,541, or £12,417 more than the liabilities, the surplus being 2s. 11d. per £, though four single societies showed deficiencies amounting to £2,019.

The funds for valuation purposes increased by over £315,000 during the quinquennium 1914-1919, and the average interest earnings rose from 4.7 per cent. to 5.4 per cent, as a result of the high interest rates prevailing, and the policy of centralising the control of the funds which had facilitated more profitable investment. The bulk of the funds, about 72 per cent., was invested in mortgages. On account of investments in war and peace loans, the proportion of the funds in Government securities rose from 4 per cent. in 1914 to 10.8 per cent. in 1919. Interest bearing bank deposits declined proportionately from 11 per cent. to 7 per cent. during the quinquennium, and there was a decrease in the amount in buildings and freehold properties, which do not generally give a satisfactory return.

The custom of making the valuations for all societies as at the same date, at intervals of five years, has been altered and about one-third of the societies are to be valued each year. The valuation of the first group, as at 31st December, 1922, is nearing completion.

Accumulated Funds.

The following statement illustrates the growth of the funds of the Friendly Societies since 1912:--

At	Sickness	Medical and		All Funds.		
At December.	and Funeral Funds.	Management Fund.	Other Funds.	Total.	Per Member.	
	£	£	£	£	£	
1912	1,463,502	82,538	51,715	1,597,755	8.88	
1913	1,559,102	87,446	52,171	1,698,719	9.01	
1914	1,641,704	88,256	54,971	1,784,931	9.79	
1915	1,734,858	89,421	52,548	1,876,827	10.20	
1916	1,820,708	101,092	48,471	1,970,271	11.02	
1917	1,916,846	122,759	55,067	2,094,672	11.79	
1918	1,954,085	190,995	63,102	2,208,182	12.21	
1919	1,953,336	199,115	65,345	2,217,796	12.04	
1921*	2,134,339	194,358	83,065	2,411,762	12.08	
1922*	2,268,655	204,304	105,978	2,578,937	12.61	
1923*	2,410,208	208,397	109,386	2,727,991	12.83	

*At 30th June.

PRIVATE FINANCE.

During the twelve months ended 30th June, 1923, the total funds of the societies increased by £149,054, the increase being fairly general in all the societies. The amount of the sickness and funeral funds, as stated in the table for the years 1914 and 1919, does not agree with the figures shown in the previous table, the difference being caused by allowances made in the valuations for State subvention due, but not received by the societies at the date of valuation.

Receipts and Expenditure.

The receipts and expenditure of the friendly societies since 1912 are shown in the following statement. The figures quoted for 1920-21 relate to the period of eighteen months ended 30th June, 1921, as a recent amendment of the Friendly Societies Act prescribes that the returns must be furnished in each year for the period ended 30th June and not for the calendar year as formerly :---

Receipts.					Expenditure.						
Year.	Contri- butions.	Interest.	Other.	Total.	Sick Pay.	Funeral Dona- tions.	Medical Atten- dance and Medicine.	Expenses of Manage- ment.	Other.	Total.	
	£	£	£	£	£	£	£	£	£	£	
1912	456,097	69,599	32,493	558,189	166,270	40,828	157,821	66,485	42,654	474,058	
1913	489,698	75,038	37,365	602,101	173,451	45,952	170,594	69,226	41,914	501,137	
1914	496,961	80,707	34,915	612,583	172,796	44,446	182,308	87,358	39,463	526,371	
1915	491,928	87,591	34,597	614,116	177,198	50,131	182,705	88,419	23,767	522,220	
1916	508,033	95,193	28,645	631,781	172,497	61,566	178,926	89,630	35,718	538,357	
1917	524,341	100,947	53,438	678,726	168,986	69,371	178,789	96,830	40,349	554,325	
1918	543,269	117,941	114,895	776,105	183,735	84,663	180,370	96,939	116,888	662,593	
1919	551,278	117,524	40,740	709,542	274,929	89,265	186,801	106, 115	42,818	699,928	
1920 - 21*	887,279	191,613	76,985	1,155,877	297,051	80,201	317,221	199,399	68,039	961,911	
1921 - 22	661,620	142,205	94,556	898,381	222,586	56,353	262,269	137,994	53,936	733,138	
1922 - 23	673,650	146,106	56,072	875,828	230,241	48,590	269,223	139,208	39,512	726,774	

* Eighteen months ended June, 1921.

The figures afford convincing evidence of the steadily increasing importance of the friendly societies. The total amount disbursed in benefits in the year ended June, 1923, was £548,054, as compared with £330,000 in 1911 and £551,000 in 1919. The cost of sick pay and funeral donations during 1922-23 was comparatively much lower than in 1919, when an epidemic of influenza caused a greater financial loss to the societies than the war. The cost of medical attendance and medicine was higher as additional charges were made by medical practitioners and pharmacists, and the average cost per adult member rose from 20s. 5d. in 1914 to 21s. 10d. in 1919, and to 27s. 7d. in 1922-23.

The large amounts grouped under the headings of "other receipts" and "other expenditure" in 1918 were due to transfers from the surplus sick and funeral funds of one society to the management fund. Absolutely and relatively, there has been a marked increase in the cost of management. In the year 1922–23 the total expenses, £139,208, were equal to 13s. 2d. per head of mean membership as compared with 9s. 5d. per head in 1914, and 11s. 7d. in 1919. In proportion to contributions and to total income, expenses in 1922–23 represented 20.7 per cent, and 15.9 per cent, respectively, as compared with 17.6 per cent. and 14.3 per cent. in 1914.

INSURANCE.

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 $\pounds 5$ in respect of children under 1 year to $\pounds 45$ 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.

LIFE ASSURANCE.

There were twenty-eight institutions transacting life assurance business in the State during 1922; eighteen were local, five had their head offices in Victoria, one in New Zealand, one in the United Kingdom, and three in the United States of America. Eight institutions are mutual, and twenty are partly proprietary companies, whose policy holders, however, participate to some extent in the profits. Several companies, with head offices outside the Commonwealth, unite life and other classes of insurance, and have local branches or agencies, but their transactions in life risks in this State are unimportant.

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.

When the age at entry is 25, the annual premium for a whole-life assurance of £100 varies from £1 17s. 7d. to £2 4s. 2d.; age 35, from £2 8s. 10d. to £2 17s. 6d; and age 45, from £3 7s. 3d. to £3 19s. 1d. For endowment assurance payable at age 60 or previous death, when the age at entry is 20 years, the rates are £2 2s. 8d. to £2 11s. 2d.; age 30, £2 19s. 4d. to £3 9s. 2d.; and age 40, £4 14s. 5d. to £5 8s. 1d.

All societies transacting business in New South Wales allow policy-holders a consideration on surrendering unmatured policies, provided a certain time has elapsed since issue, or a certain number of premiums has been paid. Three companies allow surrender values after the policy has been in force for a period of two years, but with other companies the period must be longer. For a whole-life assurance of £100, excluding bonus additions, the refund allowed after two annual premiums have been paid ranges from 12s. 1d. to £1 8s., when the age at entry is 25; 17s. 1d. to £1 18s. 10d. when the age at entry is 35; and £1 5s. 8d. to £2 17s. 1d. when the age at entry is 45. After five annual payments the surrender values for similiar ages of entry are respectively £1 17s. 1d. to £5 4s. 4d.; £2 11s. 1d. to £6 11s. 5d.; and £3 13s. 1d. to £9 4s. 5d. For endowment assurance payable at age 60 or previous death, after two annual premiums have been paid, the surrender values range from $\pounds 1$ 9s. 8d. to $\pounds 1$ 15s. 2d. when the age of entry is 20, and after five annual premiums have been paid £2 6s. 9d. to £5 11s. 2d. When the age of entry is 30, the values range from £1 9s. to £2 17s. after two years' duration, and £3 16s. 5d. to £9 6s. 7d. after five years.

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 during the year 1922 is shown below :--

Institutions with He Office in	ad	Policies in Force, exclusive of Annuities.	Amount Assured exclusive of Bonuses and Re-assurances.	Bonus Additions.	Total.	Annual Premiums Payable.
, <u>-</u>		No.	£	£	£	£
New South Wales		184.64?	52,569,205	8,261,314	e0,830,519	1,699,929
Victoria		54,642	12,985,836	303.543	13,289,379	495,026
New Zealand		775	84,300	•••	84,300	3,565
United Kingdom		109	33.511	*	33.511	1,051
United States		3,906	2,064,087	83,775	2,147,862	63,526
Total		244,074	67,736,939	8,648,632	76,385,571	2,263,097
· · · ·			* Not availab	lė.	· · · · ·	

Of the amount assured 97 per cent. is with Australasian societies, 78 per cent. being with institutions with head offices in New South Wales, and 19 per cent. with Victorian institutions; 3 per cent. is with American companies. The amount held by the British society is comparatively small, as it does not now accept life business in New South Wales. The average amount of assurance, exclusive of bonuses and re-assurances, per policy held in Australasian societies, is £273, in the British £307, and in the American £528.

The business (exclusive of annuities) 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.

Particulars regarding each class of assurance in the ordinary branch in force in 1921 and 1922 are shown below :---

		19	921.		1922.				
Classifi- cation.	Policies in Force.	A mount Assured exclusive of Bonuses and Re- assurances,	Bonus Addítions.	Annual Premiums Payable.	Policies in Force.	Amount Assured exclusive of Bonuses and Re- assurances.	Bonus Additions.	Annual Premiums Payable.	
Assurance	No. 98,728	£ 40,047,713	£ 5,780,0 6 5	£ 1,231,991	No. 96,334	£ 41,738,869	6,087,100	£ 1,261,980	
Endowment Assurance Pure	121,255	21,857,283	2,230,713	836,783	130,871	23,771,308	2,518,699	910,585	
Endowment	16,990	2,112,666	37,185	86,0 08	16,869	2,226,762	42,833	90,532	
Total	236,973	64,017,662	8.047.963	2,154,782	244.074	67,736,939	8,648,632	2,263,097	

The majority of the policies, viz., 54 per cent., represents endowment assurances; whole-life policies were 39 per cent., and endowments 7 per cent. of the total number. The amount assured under the whole-life policies represents 62 per cent. of the total (exclusive of bonus additions), the average per policy being £433; endowment assurance policies, with an average of £182 per policy, cover 35 per cent. of the total amount assured; and endowment policies, with an average of £132 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. The following table shows the industrial business in force in New South Wales at the close of 1922 :---

Institutions with Head Office in	Policies in Force, ex- clusive of Annuities.	Amount As- sured, inclusive of Bonuses.	Annual Premiums Payable,
	No.	1 ± 1	£
New South Wales .	261,716	9,389,733	548,671
Victoria	116,622	3,641,915	269,862
New Zealand	11,324	349,682	19,682
Total .	389,662	13,381,335	838,215

In the industrial branch 75 per cent. of the number of policies and 80 per cent. of the amount were held in the form of endowment assurance. Whole-life policies represented 20 per cent. of the number and 15 per cent. of the amount assured. The average amount per policy was $\pounds 34$, viz., assurance $\pounds 26$, endowment assurance $\pounds 37$, and endowment $\pounds 31$.

A classification of the industrial business in force in New South Wales is shown below :----

		1921.		1922.			
Classification.	Policies in Force.	Amount Assured inclusive of Bonus Additions.	Annual Premiums Payable.	Policies in Force.	Amount Assured inclusive of Bonus Additions.	Annual Premiums Payable.	
Assurance Endowment Assur-	No. 75,919	£ 1,882,420	£ 101,943	No. 79,537	£ 2,039,120	£ 117,090	
ance Pure Endowment	$265,580\ 16,994$	$9,285,116\ 544,197$	$594,495\ 34,123$	290,083 20,042	$10,720,739 \\ 621,476$	676,243 44,882	
Total	358,493	11,711,733	730,561	389,662	13,381,335	838,215	

Transactions in annuities are not numerous, the business in force in New South Wales in 1922 being 614 policies for an aggregate amount of £141,049 per annum in the ordinary branch, and six policies representing £376 per annum in the industrial department.

New Business.

		ordinary Branch	1.	Industrial Branch.			
	Number of Policies.	Amount Assured.	Annual Premiums Payable.	Number of Policies.	Amount Assured.	Annual Premiums Payable.	
		£	£	1	£) £	
1913	19,847	4,414,664	156.078	55,384	1,506,470	102,016	
1914	17,217	3,914,935	142,792	48,267	1,332,966	91,427	
1915	15,976	3,784,103	147.554	45,188	1,258,683	86,959	
1916	16,372	4,100,923	166.301	50,649	1.516.518	102,668	
1917	18,010	4.914.896	192,308	53,491	1,720,790	115,738	
1918	21,643	5.972.028	252,052	62,279	2,138,259	145.630	
1919	21,543	6,483,990	236,541	64,199	2,437,850	160,699	
1920	28,837	7,973,324	281,379	70.305	2.986.482	187,560	
1921 -	27,705	8,693,745	306,867	79,318	3.819.905	225,134	
1922	25,441	8,544,638	301,447	88,316	4,302,371	266,166	

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At the beginning of the period under review the volume of new business was increasing slowly, but the incidence of the war caused a decrease during 1914 and 1915. Then business began to improve, and the amount assured under new policies in the ordinary branch has risen since in each year by nearly 10 per cent., except in 1918 and in 1920, when there was a much more rapid growth, and the amount of new assurances rose by over 22 per The abnormal increase in 1918 was due in a large measure to arrangecent. ments made by some of the societies for combining life assurance with war loan subscriptions; in 1920 it was attributable to general expansion in business activities. In the industrial branch the movement in regard to new business was somewhat similar until 1916, then business began to expand at a remarkable rate, the amount of new assurances rising by over 20 per cent. in each year except in 1917 and 1919 when it increased by over 13 per cent. In 1921 the amount of new assurances in the ordinary branch was higher by £720,421, or 9 per cent., than in the previous year, and the new industrial assurances were greater by £833,423, or 28 per cent. In 1922 the amount of new assurances in the ordinary branch declined by $\pounds 149,107$, but the increase in the new industrial business continued, the amount being greater by £482,466, or 12.6 per cent. than in the previous year. The average amount per new policy in the ordinary branch increased from $\pounds 222$ in 1913 to £336 in 1922, the increase being fairly steady until 1918, after which it increased from $\pounds 276$ to $\pounds 301$ in 1919, then dropped in the following year to £276.

		Ordinary Branch	•	Industrial Branch.				
Year.	Policies.	Amount Assured.	Annual Premiums Payable.	Policies.	Amount Assured.	Annual Premiums Payable.		
	No.	£	£	No.	£	£		
1913	173,834	41,432,591	1,382,162	191,33 3	4,413,289	273,997		
1911	178,483	42,602,910	1,432,261	202,439	4,712,117	296,597		
1015	181,671	43,520,335	1,465,347	211,881	5,000,021	318,306		
1916	187,514	45,460,333	1,550,311	229,728	5,599,819	358,126		
1917	192,962	47,636,307	1,644,692	248,037	6,298,106	404,836		
1918	201,559	50,812,701	1,741,249	273,716	7,301,713	472,448		
ł919	207,906	53,953,151	1,828,780	294,573	8,275,956	535,666		
1920	222,166	58,510,165	1,973,347	323,386	9,742,791	621,908		
1921	236,973	64,017,662	2,154,782	358,493	11,711,733	730,561		
1922	244,074	67,736,939	2,263,097	389,662	13,374,191	838,215		

A comparative statement of the amount of ordinary and industrial business, excluding bonuses and annuities, in force during each of the last ten years is shown below :---

The amount assured in the ordinary branch has increased by nearly $26\frac{1}{3}$ millions, or by 63 per cent., since 1913, and in the industrial branch by nearly 9 millions, or by 203 per cent. The development of life assurance in

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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 A Head of P		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.	
1913	-94	104	22 8 10	2 7 10	238	23	7 19 0	1 8 8	
1914	-95	108	22 12 8	$2\ 10\ 1$	239	23	8 0 6	1 9 4	
1915	96	112	22 19 2	2 12 9	240	24	8 1 4	1 10 1	
1916	99	122	24 1 10	2 19 4	242	24	8 5 4	1 11 2	
1917	100	129	24 15 10	3 5 7	247	.25	8 10 6	1 12 8	
1918	103	139	25 17 7	3 14 5	252	27	8 12 9	1 14 6	
919	102	144	26 9 2	4 1 2	260	28	8 15 11	1 16 4	
192 0	106	154	27 19 1	4 13 1	260	30	8 17 8	1 18 6	
921	111	-168	30 1 3	5 10 0	270	33	9 1 10	2 0 9	
1922	112	179	31 3 0	6 3 0	277	34	9 5 5	2 3 0	

In 1922 one in every nine persons in the State held a policy in the ordinary branch, and one in every six an industrial policy, the amounts assured per head of population being £31 3s. in the ordinary branch and £6 3s in the industrial.

Australasian Assurance Societies-Total Business.

The life assurances undertaken in New South Wales by foreign companies represent only a small proportion of their total business, and particulars relating to their transactions have been omitted from the following statements, which relate mainly to the finances of the institutions.

A summary of the total business—ordinary and industrial—of the Australasian societies, and of the amount of receipts, expenditure, and accumulated funds, at intervals since 1895, is shown below :—

Year.	Societies.			:		ted Funds, Paid-up ital.	Interest.		
		Policies in Force.	Receipts.	Expendi- ture.	Additions during the Year.	Total Amount at end of Year.	Amount Received.	Average Rate Realised on Mean Funds.	
	No.	No.	£ 000	£ 000	£ 000	£ 000	£ 000	per cent	
1895	10	268,242	3,392	2,334	1.058	20,438	1.037	5.21	
1900	11	331,868	4.093	2,648	1,445	26,491	1,162	4.51	
1905	14	756,585	5,437	3,834	1,603	34,916	1,528	4.48	
1910	11	1,056,173	7,131	4.619	2,512	46,196	1,963	4.46	
1915	14	1,424,196	9,474	6,084	3,390	63,492	2,763	4.47	
1920	14	1,944,845	14,080	7,944	6,136	84,293	4,116	5.07	
1921	22	2,095,728	15,388	8,950	6,448	90,741	4,571	5.22	
1922	24	2,245,338	16,661	9,394	6,6.7	97,408	5,019	5:34	

The annual additions to the funds have shown a considerable increase since 1910, and there has been a gradual increase in earning power since that year, when 4.46 per cent. was realised, and the most recent rate, 5.34 per cent., is slightly higher than that of 1895, being the highest return during the

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period under review. A comparison with the bank rate of interest on fixed deposits, given on page 285, shows that diminished rates were general until a slight increase took place between the years 1910 and 1915, and con-

The following table shows details of the receipts and disbursements of the Australasian institutions during 1922 for both classes of business :----

tinued during following years, and the interest earned by the insurance

companies has held a correlation to the general tendency.

	Parti	ulars.				Ordinary Branch.	Industrial Branch.	Total.
leceipts—						10		£
Premiums— New	••••	• • • •				£ 1,215,2 52	£ 21,264	1,236,516
Renewal	• • • •	•••	···	•••		7,639,295	2,515,692	10,154,987
Consideratio	n for A	nnuiti	es	••••		62,267	•••	62,267
Interest			••••	••••		4,457,979	452,481	4,910,460
Rents and ot	her R	eccipts		• •••		262,722	34,097	296,819
	Tot	al Rece	eipts	• • •	•••	13,637,515	3,023,534	16,661,049
					·			-
Expenditure— Claims		•••		•••	•••	4,754,300	503,425	5,257,725
Surrenders		•••			•••	871,880	39,214	911,094
Annuities		•••				118,428	295	118,723
Cash Bonuse	es and	Divide	nds			338,264	73,424	411,688
Expenses			•••			1,874,716	997,671	2,872,387
Amount wr. serves, Tr			Depre	ciation, 	Re-	362,569	=60,002	422,571
	Tot	al Exp	enditu	ire		8,320,157	1,674,031	9,994,188

The receipts of the societies consist mainly of premiums on policies and of interest arising from investments. The former represented 69 per cent of the receipts in 1922 and the latter 29 per cent. Payments on account of death claims, policies matured and surrendered, and cash bonuses amounted in 1922 to $\pounds 6,082,872$, or 73 per cent. of the total expenditure in the ordinary branch, and $\pounds 616,358$, or 37 per cent, in the industrial branch. Expenses of management constituted 23 per cent of the expenditure in the ordinary branch, and 59 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

	Í			Managemer	nt Expenses	
Year.	Management	Premium	Gross Receipts.	Per cent. of-		
	Expenses.	Income.		Premium Income.	Gross Receipts.	
	£	£	£			
1895	438,524	2,380,167	3,392,423	18.42	12.93	
1900	565,380	2,799,512	4,093,376	20.19	13.81	
1905	858,741	3,500,448	5,437,589	24.53	15.79	
1910	1,016,153	5,074,204	7,131,250	20.03	14.25	
1915	1,252,438	6,591,572	9,474,126	19.00	13.22	
192)	2,222,218	9,870,814	14,079,302	22.51	15.78	
1921	2,643,403	10,649,745	15,387,948	24.82	17.18	
1922	2,872,387	11,453,770	16,661,049	25.08	17.29	

Australasian societies, the cost of management, including commission and taxes, and its proportion to premium income and gross receipts.

The expenses of management of the ordinary business in 1922 represented in the aggregate 13.8 per cent. of the total receipts, and 21 per cent. of the premium income, and of the industrial branch, 33 and 39.3 per cent. respectively.

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.

Particulars regarding the management expenses of the ordinary and industrial branches are stated separately in the following table for each year since 1915.

	Ordinary	Branch.	Industrial Branch.			
Year.	Prop	oortion of Manag	ement Expenses	to		
	Premium Income.	Total Receipts.	Premium Income.	Total Receipts.		
2	per cent.	per cent.	per cent.	per cent		
1915	15.39	10.32	38.86	34.12		
1916	15.45	10.28	38-82	33.82		
1917	16.34	10.86	38-23	33.21		
1918	16.62	11.05	38.06	32.80		
1919	18.06	11.91	38.33	32.90		
1920	18.60	12.48	38.40	32.80		
1921	20.88	13.80	39.20	33.40		
1922	21.02	13.75	39.32	33.00		

In the ordinary branch the lowest proportion of management expenses to premium income shown by any company in 1922 was 14.81 per cent. and to total receipts 9.43 per cent. In the industrial branch the lowest proportions were 32.47 per cent and 26.28 per cent respectively.

The proportions were highest in the case of companies established recently, whose disbursements exceeded premium income, owing to initial expenses, uch as the cost of foundation, organisation, brokerage, and other items which will not be incurred again.

Liabilities and Assets.

The following table gives a summary of the liabilities and assets of the Australasian societies in the year 1922 :---

Liabilities.	Assets.
Assurance Funds£	Loans— £
Participating in Profits 89,893,877	On Mortgage 21,080,797
Not participating in Profits 967,599	
Claims Investment Fund 46,351	Local Rates 12,331,576
Other Assurance Funds 4,303,171	,, Reversionary, Life, and
	Other Interests 543,322
Total 95,210,998	, Policies 9,970,883
,,,,,,,,, _	, Personal Security 41,073
Other Funds-	"Government Securities 681,312
Guarantee and Contingency	, Other Debentures and
Funds 45,218	Bonds 852,016
Investment Fluctuation	"Miscellaneous Loans 17,198
Fund 476,456	,,
Paid-up Capital 1,353,614	Total 45,518,207
Reserve Funds 322,111	100001
Total Funds 97,408,397	
Other Liabilities-	
Claims admitted but not	
paid 1,177,117	Government Securities 47,620,894
Outstanding Accounts 196,726	Real Estate 3,768,788
M	
Miscellaneous 3,945,039	Other Assets 5,420,986
Total Liabilities £102,328,875	Total Assets £102,328,875

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 recently attention has been given to Government securities and investments in shares, and since 1915 large sums have been 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 1922 being only £41,073.

The following comparison relating to liabilities and assets illustrates the rapid growth of the funds, etc. of the assurance societies :---

			Liabilities.		Assets.			
Year.	Societies.	Paid-up Capital and Accumulated Funds,	Other Liabilities.	Total.	Loans on Mortgages, Policies, etc.	Securities, Freehold Property, etc.	Total.	
	No.	£	£	£	£	£	£	
1895	10	21,497,059		21,497,059	15,600,229	5,896,839	21,497,059	
1900	11	27,471,223	· · · ·	27,471,223	19.013.579	8,457,644	27,471,223	
1905	11	35,867,362	•••	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	14	62.958.224	233,113	63,191,337	45,535,992	17,655,345	63, 191, 337	
192 0	14	83,759,999	6,260,956	90,020,955	40,127,817	49,893,138	90,020,955	
1921	22	90,207,633	6,533,051	96,740,684	42,073,513	54,667,171	96,740,684	
1922	24	97,408,397	4,920,478	102,328,875	45,518,207	56,810,668	102,328,875	

The aggregate amount of paid-up capital and accumulated funds has more than doubled since 1910. The ratio of loans on mortgages, etc., to total assets which was between 60 and 70 per cent. up to the year 1915, has been reduced since to 44 per cent., and Government securities which, in 1915, represented only 17 per cent. of the assets, showed a ratio of 47 per cent. in 1922.

FIRE, MARINE, AND GENERAL INSURANCE.

The companies transacting fire, marine, and general insurance (as distinct from life assurance) business in New South Wales during 1923 numbered 108, and some of the life companies issued accident and workmen's compensation policies also. In 1921 the aggregate liabilities in New South Wales and elsewhere amounted to £316,745,777, of which £34,653,765 represented paid-up capital; £29,253,314 reserve funds; £41,545,508 reserve for unearned premiums; £125,568,322 insurance and other funds; and £85,724,868 outstanding losses and other liabilities. The assets comprised the following items :—Mortgages and other loans, £15,819,219; Government securities and other investments, £211,721,485; land and house property, £21,792,800; cash on deposit, current account, and in hand, £21,541,908; and other assets, £45,870,365. These are the latest available figures relating to the balance-sheets of the general insurance companies, but further information is being obtained for the year 1924.

The nature of the local insurances effected during the year ended 30th June, 1923, is shown in the following table. The particulars relate to New South Wales risks only; that is, to all business written by the companies in their New South Wales books. 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.

				. 1	Expenditur	e,	•	
	Premiums less Re-	-	Expenses of Management.			Proportion of Premium Income.		
Nature of Insurance. insuranc and Return		less Re-	Com- mission and Agents' Charges	Other.	Total.	Losses.		
Fire	£ 1,862,063	£ 1,284,350	£ 287,063	£ 486,358	£ 2,057,781	percent. 68'97	percent. 15·42	percen 26·12
Marine	471,273	193,526	37,009	100,530	331,065	41.06	7-85	21.3
Accident	115,427	52,739	27,860	31,663	112,262	45'69	24.14	27.4
Employers' Liability and Workmen's Compensation		\$16,655	52,481	101,078	470,214	61.83	10.25	19.74
Public Risk, Third Party .	30,244	9,426	4,125	6,993	20,544	31-17	13:64	23.12
Plate-glass	48,456	14,873	8,656	10,991	34,520	30.69	17.86	22.68
Motor Car and Motor Cycle	. 25 3,281	148,002	39,650	55,871	243,523	58.44	15*66	22:06
Hailstone	31,152	6,328	5,957	7,540	19,925	20:31	19.12	24-20
Boiler Explosion	8,440	2,462	687	4,235	7,384	29.18	8.14	50.18
Live Stock	21,238	7,883	3,946	6,627	18,456	37:12	18.58	31-20
Burglary	37,674	19,393	5,832	8,918	34,143	51.47	15:48	23-67
Guarantee	13,961	6,468	2,519	2,631	11,618	46.33	18.04	18.84
Loss of Profits	55,468	10,298	6,721	13,382	30,401	18:56	12.12	24:13
Elevator	801	27	158	140	325	3:49	19:75	17.50
Sprinkler	1,334	258	156	288	702	19.34	11.69	21-59
Other	3,640	736	486	5,097	6,319	20.23	13:35	140.00
Total Premiums	3,466,603				•••	•••		
Total Interest, etc	165,920							
Total	3,632,523	2,073,434	483,306	842,342	3,399,082	59.81	13.94	24-30

The total premiums amounted to £3,466,603, and the losses to £2,073,434, the latter being 59.8 per cent. of the premiums. The expenses for commission and agents' charges were £483,306, and for general management £842,342, making a total of £1,325,648, or 38.2 per cent. of the premium income and 36.5 of the gross revenue.

The principal classes of insurance, according to the amount of net premiums in 1923, were fire, employers' liability and workmen's compensation, marine, motor vehicles, and accident. The premium receipts in respect of fire insurance increased largely in 1921, as insurers increased the amount of their policies in view of the increases in the value of property. They remained at a high figure during the following year but declined slightly in 1923.

Insurance relating to the liability of employers has grown rapidly as wages have risen, and legislation in 1920 extended the application of the Workmen's Compensation Act to higher paid employees. The net premium receipts rose from £206,448 in 1918 to £257,989 in 1920, and to £545,962 in 1922, then declined to £512,201 in 1923. The losses represent nearly 62 per cent. and expenses 30 per cent. of the premiums.

The insurance of motor cars is another class of business which has developed rapidly with the increased use and higher value of the vehicles. The premiums received in 1923 were more than four times the amount in 1918. The premiums for accident insurance have doubled during the last five years. Marine insurance business increased steadily from 1918 to 1921, then the premium receipts declined by 25 per cent. as a result of the decreased activity in the shipping trade.

In proportion to premium income the losses and expenses vary greatly in the different classes of insurance. The ratio of losses was highest in 1923 in regard to the following, in the order named—fire, employer's liability, motor vehicles, burglary, guarantee. The commission and agents' charges were highest in proportion to premiums in accident insurance. The proportion of other management expenses depends to a great extent on the volume of business transacted by the individual companies.

A summary of the revenue and expenditure in respect of general insurance transactions in New South Wales in each of the last five years is shown below :-Particulars. 1918-19. 1919-20. 1920-21. 1921-22. 1922-23.

Particulars.	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.
Revenue-	£	£	£	£	£
Net Premiums Interest, etc	2,165,742 72,590	2,465,372 83,296	3,565,989 108,018	3,497,395 148,993	3,466,603 165,920
Total	2,238,332	2,548,668	3,674,007	3,646,388	3,632,523
Expenditure Losses Management Commission and Agen		1,229,662	1,753,415	2,085,557	2,073,434
Commission and Agen Charges Other Expenses	262,247 614,557	286,284 685,951	471,187 795,370	471,090 860,853	483,306 842,342
Total	1,763,931	2,201,897	3,019,972	3,417,500	3,399,082
Proportion of Premium I	In- per cent.	per cent.	per cent.	per cent.	per cent.
Losses Expenses—	40.96	49.88	49.17	59.63	59.81
Commission, etc Other	12·19 28·38	$11.61 \\ 27.82$	13·21 22·30	13·47 24·61	$\begin{array}{c} 13 \hspace{0.1cm} 94 \\ 24 \hspace{0.1cm} 30 \end{array}$
		¥			and the second

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Fire business constitutes more than half of the general insurances. In 1919 the net premiums for fire risks were $\pounds 1,227,914$; the expenditure, including losses $\pounds 533,394$, amounted to $\pounds 1,076,271$. There was an apparent surplus of $\pounds 151,643$ as a result of the year's operations. In the next year the premium income increased, but the expenditure rose to a greater extent, and the apparent surplus in 1920 was less than $\pounds 51,000$. In 1921 a large increase brought the premium income to the sum of $\pounds 1,876,755$. The expenditure was $\pounds 1,721,194$, including losses $\pounds 998,280$, leaving a surplus of $\pounds 155,561$. In 1922 the net premiums were slightly higher, but losses showed a marked increase, and there was an apparent deficit of $\pounds 104,100$, and in the following year the premiums declined but losses increased and the apparent deficit amounted to $\pounds 195,718$.

Fire policies are generally for a period of twelve months, and the majority of the insurance companies set aside annually a reserve for unexpired risks usually an amount equal to 40 per cent. of the net premium income. By reviewing the figures to calculate a reserve on that basis, it will be found that fire business has steadily become less favourable to the companies in each of the last five years, that is, so far as business in New South Wales is concerned. There was a net underwriting profit of £107,617 in 1919, and thereafter there were net losses, viz., £10,074 in 1920, £43,109 in 1921, £107,207 in 1922, and £186,739 in 1923. The foregoing figures relating to fire business are exclusive of interest earnings.

The total amount of the fire insurance written in 1922 was £448,034,000, and in 1923 the value was £475,391,000. The measures taken for the prevention of fire are described in the chapter "Local Government."

BANKRUPTCY.

Statistics relating to the sequestration of estates by persons who are unable to pay their debts, afford in a general way an indication of the financial condition of the community. Petitions for sequestration orders may be made to the Supreme Court of New South Wales by the debtor, or by a creditor. The effect of an order is to vest the property of the bankrupt in an official assignee for division amongst the creditors, the bankrupt being required to lodge with the Registrar in Bankruptcy a statement of his affairs. Creditors may accept proposals for a composition in satisfaction of the debts due to them, or for a scheme of arrangement of the bankrupts' affairs, which becomes binding if approved by the Court and by a majority of creditors representing threefourths of the proved claims.

	Petition	Petitions in Bankruptcy.						
Year.	Voluntary.	Com- pulsory.	Total.	drawn, Refused, etc.	Orders Granted.	Liabilities.	Assets.	Ratio of Assels per £ of Liabilities.
						£	£	s. d.
1913	238	113	351	31	320	208,755	144,038	13 10
1914	282	123	405	30	375	323,111	141,068	8 9
1915	301	147	448	43	405	428,700	166,748	7 10
1916	248	145	393	43	350	383,448	303,893	15 10
1917	178	123	301	34	267	227,663	208,093	18 3
1918	184	113	297	33	264	221,928	115,776	10 5
1919	193	123	316	34	282	323,222	189,920	11 9
1920	210	134	344	55	289	204,594	139,550	13 8
1921	208	186	394	70	324	311,900	166,457	10 8
1922	247	234	481	78	403	440,856	251,185	11 5
•	ŧ			1 .	1 1 1			

PRIVATE FINANCE.

The combined effects of war and drought caused financial embarrassment in 1914 and 1915, and the number of petitions rose by nearly one-third. A marked improvement commenced in 1916 and continued for three years, then the numbers began to increase. The average amount of liability in each year is usually less than £1,000 per sequestration, but the figure in 1922 was £1,094. The ratio of assets to liabilities varies considerably, but the amounts stated in the table are taken from the bankrupts' schedules and differ widely from the values established after investigation by the Court.

A bankrupt may apply to the Court, three months after the date of sequestration, for a certificate of discharge to release him from his debts. Estates may be freed from sequestration also if the creditors accept a composition or a scheme of arrangement, or if they are paid in full or give a legal quittance of the debts due to them. It is remarkable, however, that a comparatively small proportion of the estates are freed, though the property of an uncertificated bankrupt, even if acquired after sequestration, is liable to seizure on behalf of unsatisfied creditors. The number of sequestrations during the ten years ended 1922 was 3,279, and only 1,001 estates were freed by certificates of discharge or release.

TRANSACTIONS IN REAL ESTATE.

The procedure in regard to land transfers is regulated under the Real Property Act, commonly known as the "Torrens" Act, which was passed in 1862 and, with its amendments, consolidated in 1900. Its main features are the transfer of real property by registration of title instead of by deeds, the absolute indefeasibility of the title when registered, and the protection afforded to owners against possessory claims, as the title issued 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 sold by the Crown since the passing of the Act have been conveyed to purchasers under 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 "Torrens" Act.

The area of Crown grants registered under the Real Property Act and the total consideration expressed in the grants in each year since 1917 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.	£	£	£	
1917	400.978	21.878	422,856	371,549	855,073	1,226,622	
1918	388,672	26,628	415,300	371,330	1,229,323	1,600,65:	
1919	568,750	32,358	601,108	563,670	1,878,792	2,442,462	
1920	1,022,601	30,060	1,052,661	981,996	1,800,904	2,782,900	
1921	624,089	44,613	668,702	640,499	1,838,971	2,479,470	
1922	1,012,374	65,287	1.077.661	960.425	2,322,420	3,282,84	

During the whole period since the Torrens Act came into operation 39,940,726 acres of Crown lands have been conveyed under its provisions, the total consideration expressed in the grants being £39,528,613. Of the private lands granted before 1862, a total area of 2,539,337 acres, valued at £51,050,240, has been brought under the Real Property Act, the deeds under earlier legislation being cancelled.

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Transactions in respect of transfers and conveyances of private lands usually reflect the general condition of business throughout the State, but the published records, showing the amount of consideration paid on sales, do not indicate the actual volume of the transactions, as the figures are swollen in some years by reason of inflation of values or the prevalency of speculation.

The following table shows for each year of the past decade the amount paid as money consideration on sales of private lands, estates sold on long terms being excluded.

	Convey	ances or Transfei	rs.	Year.	Conveyances or Transfers.			
Year.	Under Deeds Registration Act.	Under Real Property (Torrens) Act.	Total.		Under Deeds Registration Act.	Under Real Property (Torrens) Act.	Total.	
	£000	£000	£000		£000	£000	£000	
1913	4.726	16,079	20,805	1918	3,995	16,835	20,830	
1914	3,613	16,585	20,198	1919	4,859	21,070	25,929	
1915	3,153	11,850	15,003	1920	9,705	45,271	54,976	
1916	3,370	12,189	15,559	1921	9,298	35,966	45,264	
1917	3,979	11,619	15,598	1922	10,710	31,622	42,332	

There was an appreciable drop in the value of the land sales in 1913 and in 1915, and little advance was made until 1918, when the value rose in two years from £15,598,000 to £25,929,000, or by 66 per cent. The figures for 1920 reflect a condition of unusual activity, which has been noted in regard to other phases of the financial affairs of the State, and the consideration in respect of transfers, etc., was more than twice the figure for the previous year. The amount in 1921 was very high, although it was less by 18 per cent. than in 1920. In the following year there was a further decline of 5 per cent.

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, and 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 Funds, 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 pawnbrokers, 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 1922 was seventynine.

MORTGAGES AND BILLS OF SALE.

Mortgages, except those regulated by the Bills of Sale Acts and 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.

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The amount of consideration for which a mortgage stands as security is not always stated in the deeds, the words "valuable consideration" or "cash credit" being inserted in cases where the advances are liable to fluctuation, As this occurs frequently when the property mortgaged is of great value. an exact statement of the total advances against registered mortgages cannot be made.

Mortgages of land are registered under the Deeds Registration 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 special Acts. 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. Such advances do not usually reach large sums, as there is an element of uncertainty in the security offered.

Mortgages on personalty other than ships and shipping appliances, wool, live stock, and growing crops, are filed at the Supreme Court though the Transfer of Records Act, 1923, which will come into force on a date to be proclaimed, provides for the registration of bills of sale at the office of the Registrar-General. A bill of sale comprising household furniture actually in use 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 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. Transactions of this nature are divided into two classes, one in which the vessel is the sole security, and the other in which the advances are made on the security of the "account current," which may consist of ships, wharfage appliances, land, and other properties.

Particulars of the mortgages of land, crops, wool, and live stock, and of ships, effected during each of the last five years, are shown below. The figures relating to ships refer to the period of twelve months ended in June following the year stated :---

	Mortgages of Land.		Mortgages on Crops, Wool, and Live Stock.				Mortgages of Ships.	
Year.	Number.	Considera- tion.	Number.			Considera-	Num-	Considera-
			Crops.	Wool.	Live Stock.	tion.	ber.	tion.
		£			1	£	1	£
1918	22,625	16,401,662	1,426	1,023	3.017	1.764.928	8	31,535
1919	28,282	20,565,802	3,488	1,324	2.840	2,542,135	13	34,416
1920	39,016	35,423,499	4.620	1,198	2,855	3,055,843	15	23,494
1921	37,511	33,873,654	2,894	742	2,268	2,666,654	22	49,113
1922	41,573	33,930,821	3,057	1,177	4,387	2,585,435	16	8,450

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. 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.

PRIVATE WEALTH AND INCOMES.

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 brief summary of the estimates relating to private wealth at ten-year intervals since 1901, the total value of the main classes of property being shown, and the value per head :---

		Estimated Value.						
Item.	Total.			Per Head of Population.				
	1901.	1911.	1921.	1901.	1911.	1921.		
	£000	£000	£000	£	£	£		
Land (unimproved value)	112,895	169,232	263,363	82.6	101.7	12 4 ·9		
Houses, etc., and other permanent improvements Live Stock Coin and Rullion Merchandise	151,798 31,937 8,780 27,190	$213,057 \\ 41,999 \\ 15,879 \\ 47.268$	392,073 51,347 10,918 105,297	$ \begin{array}{r} 111 \cdot 1 \\ 23 \cdot 4 \\ 6 \cdot 4 \\ 19 \cdot 9 \end{array} $	$128.0 \\ 25.2 \\ 9.5 \\ 28.4 \\ $	$ \begin{array}{r} 186.0 \\ 24.4 \\ 5.2 \\ 50.0 \\ 50.0 \\ \end{array} $		
Private Railways		958	1,510	•4	·6 6·1	·7 6·4		
Mines and Mining Plant Machinery and Implements Shipping	10,448 2,528	10,120 19,777 2,910	$\begin{array}{r} 13,500 \\ 43,107 \\ 5,332 \end{array}$	5·1 7·6 1·8	11·9 1·8	$20.4 \\ 2.5$		
Household effects, Vehicles, etc. Personal effects	11,845 3,603	26,450 6,166	48,416 13,067	8·7 2·6	15.9 3.7	23·0 6·2		
Total Private Property	368,568	553,816	947,930	269.6	332.8	449.7		

The composition of the private wealth has changed little since 1901. In point of value, land has become a less important item of wealth, and permanent improvements to land have become the most valuable class of property. The proportions of the private wealth represented by trading stocks and machinery respectively, have increased considerably, and the relative values of livestock, metallic currency, and mining properties have declined. The large increase in the value of household and personal effects illustrates the growth of domestic and personal comfort.

Particulars of the distribution of wealth amongst the citizens of New South Wales may be obtained from the result of a census taken by the Commonwealth Government in 1915, when all persons aged 18 years and over were required to furnish returns if they possessed property, or held property, or were in receipt of income.

The results, which were published in detail in the 1918 and 1921 issues of the Year Book, indicate that 792,556 persons in New South Wales who furnished returns owned assets amounting in the aggregate to £468,994,322; 17.1 per cent. did not possess any assets; 80.9 per cent. had assets worth less than £5,000, constituting 48.3 per cent. of the aggregate value; and 2 per cent. owned 51.7 per cent. of the wealth. The figures are exclusive of the value of interest in trust estates, assurance policies and annuities, and prospective benefits from friendly societies, but they include assets located outside New South Wales owned by residents of the State.

Estates of Deceased Persons.

Further 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 of 1920, 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.

PRIVATE FINANCE.

Amount,	Estates.	Year ended 30th June.	Amount.	Estates.	Year ended 30th June.
1 £	No. 1		£	No.	· · · · · · · · · · · · · · · · · · ·
11,818,222	6.873	1919	10.439.256	4,631	1914
17,106,876	7,172	1920	9,997,615	4,438	1915
12,199,419	5,731	1921	10,783,406	5,107	1916
13,883,674	5,458	1922	11,554,726	5,310	1917
15,441,378	5,681	1923	11.859.375	6,476	1918

The following table shows the number of estates and the value as assessed for probate duty during the ten years ended 30th June, 1923, including intestate and other estates administered by the Public Trustee :---

Of the estates valued during the year ended June, 1923, the number belonging to female testators was 1,839, or 32.4 per cent. of the total, the value being £3,755,613 or 24.3 per cent. of the aggregate. The corresponding proportions in the previous year were 32.2 per cent. of the number and 19.4 per cent. of the value.

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	27.3		
1895-99	14.9	1921	27.2		
1900-04	17.0	1922	29.6		
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. A more convincing illustration is afforded by the next table, which shows the proportion of estates per 100 deaths of adult males. 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 is stated also.

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
188589	37.5	23.8	. 1915-19	71.3	42.1
1890-94	41.2	25.8	1920	67.6	39.5
1895-99	42.7	26.2	1921	66.3	38.4
1900-04	46.0	27.8	1922	69*5	39 · 9
1905-09	48.8	29.2			

The figures include the estates of persons who died abroad, but, except in the war years, the number was 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

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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, the apparent tendency is that the proportion of property-owners in the State is increasing.

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, 1923, have been graded according to value :---

			Number of Deceased	Value of Estates of	Proportion in each Group.			
Value of	Estate.			Persons leaving Property.	Deceased Persons.	Number.	Value.	
		· · · · · · · · · · · · · · · · · · ·		i	£	Per cent.	Per cent.	
Under £1,000				40.248	12,499,088	70.76	9.99	
£1,000 to £5,000	•••			12.043	27.050.511	21-17	21.63	
± 5.000 to ± 12.500	•••	•••		2.838	21.535.577	4.99	17.22	
£12,500 to £25,000	•••	•••	•••	1.038	17.691.621	1.83	14.14	
£12,500 to £25,000 £25,000 to £50,000		•••		451	15,288,402	0.79	12.22	
£50,000 to £50,000 £50,000 and over	••••	···	•••	259	31,018,748	0.46	24.80	
Total			•••	56,877	125,083,947	100	100	

The average value per estate during the period was £2,200, and of the property-owners who died 71 per cent. did not possess half that amount, the total value of their property being only 10 per cent. of the aggregate. On the other hand more than half the property devised was contained in 3 per cent. of the estates. These figures support the evidence of the War Census of 1915 concerning the unequal distribution of wealth in New South Wales.

Incomes.

Estimates of the total amount of income earned by residents of New South Wales were formulated from the results of the censuses taken in 1891 and 1901, and were as follow:—1892, £63,350,000; 1902, £63,927,000; or £54 and £46 respectively per head of population.

In the year 1915 particulars concerning incomes were collected at a War Census undertaken by the Federal Government, and it was ascertained that at 30th June, 1915, there were 792,556 persons in New South Wales receiving incomes which in the aggregate amounted to £94,538,137 per annum. Of this number 153,499 possessed incomes exceeding £156, amounting in all to £50,339,531. Further details were published in the 1918 issue of the Year Book.

Similar information relating to incomes in later years is not available. Returns furnished in connection with the income taxation should afford ample data for the formulation of estimates of the aggregate gross income of the people, but information relating to returns is not available from the State Department of Taxation since 1911, and, for various reasons, the particulars contained in the annual reports of the Federal Commissioner of Taxation do For instance, the statistical tables are not supply a satisfactory basis. compiled on the basis of taxable income, and there is not a fixed relation between taxable and gross income owing to the varying incidence of deductions Moreover, the total gross income of the persons who in individual cases. furnish returns does not necessarily bear a fixed relation to the total income of all the citizens, as returns are not collected from any person whose gross income does not exceed a certain limit. Details of the deductions and exemptions from income taxation are shown in the chapter "Public Finance."

The latest information published by the Federal Taxation Commissioner related to incomes earned in the year 1918–19, and a statement in relation to the incomes of taxpayers resident in New South Wales in that period was published in the 1922 issue of this Year Book at page 221.

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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. Full particulars of the subsequent growth of the various developments 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. The system extends over the Eastern and Central Land Divisions of the State, but the sparsely-populated Western Division is unincorporated, with the exception of the portions embraced by the municipalities of Bourke, Brewarrina, Broken Hill, Cobar, Wentworth, and Wilcannia, and part of the municipality of Balranald which lies within its boundaries.

Local governing areas are of two kinds, viz., municipalities and shires. There are 185 municipalities, including the City of Sydney, and their aggregate area is 1,821,134 acres. The smallest municipality is Darlington, a suburb of Sydney, with 44 acres, and the largest is Cudgegong, 192 square miles. There are 136 shires, extending over an area of 181,140 square miles. The smallest, Ku-ring-gai, 36 square miles, is in the metropolitan district, and the largest is Lachlan, with headquarters at Condobolin, 5,736 square miles.

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 area usually designated the metropolis, viz., the City of Sydney, forty suburban municipalities and the shire of Ku-ring-gai.

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 twenty-six aldermen, who are elected every third year, two for each of the thirteen wards. The Lord Mayor is elected annually by the aldermen from their own number, or failing an election the Governor-in-Council may appoint one of the aldermen to the position.

The right to be enrolled as a voter at elections of the City Council extends to every adult British subject who owns 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 either qualification may be placed on the roll for every ward

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in which he is so qualified, but may not then be enrolled in any ward in virtue of any other qualification. An adult British subject, who has occupied continuously for a period of six months a house, shop, or other building, or lodgings, of a yearly value of £10, may be placed on the roll for one ward only, and a person having more than one such qualification may choose the roll on which his name shall be placed. Any person qualified to vote is eligible for election as an alderman unless disqualified under the provisions of the Sydney Corporation Act of 1902.

The maintenance of the streets and other public ways of the city is vested in the Council, though the traffic is regulated by the police. 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. Under the provisions of the Municipal Council of Sydney Electric Lighting Acts of 1896 and 1920 the Council is authorised to generate and supply electricity for public and private purposes. In accordance with the provisions of the Metropolitan Water and Sewerage Acts the City Council elects two members of the Board of Water Supply and Sewerage, one being elected in every second year for a period of four tyears; such representatives must be aldermen of the Council. At the triennial elections of members of the Board of Fire Commissioners of New South Wales the City Council has the right to vote at the election of one member, who represents the councils of the City of Sydney and of the suburban municipalities.

Local Government Act.

The Local Government Act of 1919 and its amendments are administered by the Minister for Local Government, who is in charge of a State Department. Local governing areas are of two kinds, viz., municipalities and shires. Each area 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. Every adult naturalborn or naturalised British subject of either sex is qualified to be an elector, provided he or she is either a landowner, a rate-paying lessee, or has been continuously for the preceding three months 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 rents, or is a returned soldier or sailor. 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 1921 issue of the Year Book at page 332.

A municipality may be proclaimed as a city if it is an independent centre of population with an average population of at least 20,000 people and an average income of at least $\pounds 20,000$.

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, Ku-ring-gai. and Warringah, urban committees may be appointed to exercise within the 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.

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. 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.

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 each area 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 the year 1922 three county districts had been established. 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. Details of its operations are shown on page 342.

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, but no details of the financial transactions are at present available.

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, and preparations have been made to proceed with the works. During 1922 a sum of £127 was expended, principally for administrative charges, and at the close of the year the liabilities were £151 and the assets £24, the latter representing the cash balance.

A joint committee has been appointed under a Local Government ordinance to make arrangements for the maintenance, repair, etc., of the portion of the Parramatta-road which lies within the suburban municipalities of Petersham, Leichhardt, and Annandale.

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 1922 the incorporated area was 183,948 square miles, or 594 per cent. of the total area of_ the State (309,432 square miles). The population in municipalities and shires, as at 31st December, 1922, was 2,159,580 or 99 per cent. of the total population. The area, population, and unimproved capital value of ratable property in the incorporated areas are stated below, the particulars for the metropolitan and country districts being shown separately. The figures include the area and population of the Murrumbidgee Irrigation Area though it is administered by the Commissioner for Water Conservation and Irrigation, and is not within the jurisdiction of any local governing body.

Local Areas.		Area.	Population	Unimproved Capital Value.
Metropolitan Area City &f Sydney Suburbs (including Kuring-gai Shire)		acres. 3,327 114,972	No. 103,970 845,930	± 36,838,607 57,733,158
Total, Metropolis	•••	118,299	955,900	94,571,765
Extra-Metropolitan	••	329,878	109,890	9,479,677
Total, Metropolitan*		448,177	1,065,290	104,051,442
Country Municipalities Shires	•••	1,687,197 115,615,360	462,430 631,860	28,278,047 126,875,156
Total, Country	•••	117,302,557	1,094,290	155,153,203
Grand Total		117,750,734	2,159,580	259,204,645

* Schedule IV, Local Government Act, 1917.

The improved capital value of ratable property in the City of Sydney as at 31st December, 1922, was £103,667,740, and the assessed annual value £4,665,048. In the municipalities included in the metropolitan area, as defined by Schedule IV of the Local Government Act, the improved capital value was £166,939,627, and the assessed annual value £11,954,614. In the country municipalities the improved value was £79,294,804, and annual value £5,823,970. Similar particulars are not available for the shires.

The financial position of the municipalities and shires on the same date was as follows:----

and the second	1	otal Revenu	е.	Total	Total	Total	
Local Areas	Rates Levied.	Other.	Total.	Expendi- ture.	Liabilities.	Assets.	
Metropolitan Area—	£	£	£	£	£	E	
City of Sydney	729,096	1,619,758	2,348,854	2,187,856	15,037,651	15, 496, 718	
Suburbs (including Kuring gai Shire)	1,206,620	428,792	1,635,412	1,721,616	1,776,005	1,247,519	
Total, Metropolis	1,985,716	2,043,550	3,984,266	3,909,472	16,813,656	16,744,237	
Extra-Metropolitan	163,220	74,968	238,188	270,314	292,026	268,745	
Total, Metropolitan*	2,098,936	2,123,518	4,222,454	4,179,786	17,105,682	17,012,982	
Country					1		
Municipalities	749,571	818,672	1,568,243	1,465,981	3,117,624	4,290,680	
Shires	983,412	485,900	1,469,312	1,461,523	381,467	750,765	
Total, Country	1,732,983	1,304,572	3,037,555	2,927,504	3;499,091	5,011,115	
Grand Total	3,831,919	3,428,090	7,260,009	7,107,290	20;604,773	22,054,427	

* Schedule IV, Local Government Act, 1919.

Similar particulars of the operations of individual councils are published annually in the Statistical Register of New South Wales.

Valuation of Property in Local Areas.

The revenue of local governing bodies is derived mainly from the taxation of land and improvements thereon. The rates of taxation are fixed in proportion to the value, therefore it is necessary that periodic valuations be made of all ratable property. The Acts relating to local government prescribed that the valuations must be made at intervals not exceeding three years, and prior to the enactment of the Valuation of Land Act in 1916 the valuations were made by valuers appointed by the councils. This system was in operations 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 one authority, and a Valuer-General was appointed. The Act prescribes that rates and taxes based on land values must be levied on the values determined by the Valuer-General, and when he has delivered a valuation list the power of council to assess values ceases. A council may, however, ask the Valuer-General to revalue any land which it considers has not been correctly valued, and pending action by the Valuer-General the valuations are made by local assessors as formerly.

In municipalities the valuation of the unimproved capital value, the improved capital value, and the assessed annual value of ratable property is compulsory. In the shires the law requires the valuation of the unimproved capital value only, the collection 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 unimproved capital value is defined 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 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.

- (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 arrived at by multiplying the annual rental, if any, by twenty.

All lands, including areas vested in the Railway Commissioners and the Sydney Harbour Trust, are ratable, except the following:—Lands used for public cemetries, commons, reserves, libraries, hospitals, benevolent institutions, 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; land occupied by churches or places for public worship; and public roads, streets, wharves, etc.

In the following table are shown, in similar groups to those on page 318, the aggregate valuations of ratable property in local governing areas for the year 1922, together with a comparison of the unimproved values and the

	Unimprov	ed Valu	e of Lan	d.		Value of	Impro	vements.		
Division.	Total.	Per Head.	Per	Acre	 2.	Total.	Per Head.	Per I	Acre.	•
Sydney—City Suburbs*	£ 36,839,000 57,733,000	£ 333 68	£ 11,072 502	s. 14 3	d. 9 0	£ 66,829,000 106,364,000	£ 608 126	£ 20,086 925	s. 17 2	d. 4 7
Metropolis Extra-Metropolitan	94,572,000 49,480,000	99 87	799 28	8 14	8 9	173,193,000 12,682,000	181 116	1,464 38		7 10
Total, Metropolitan	104,032,000	98	232	3	4	185,875,000	174	414	15	2
Country–Municipalities	28,278,000 126,875,000	61 201	16 1	15 1	$\frac{2}{11}$	51,017,000 †126,875,000	110 201†	30 †1	4	-
Total Incorporated Areas	259,205,000	120	2	4	0	363,767,000	169	3	1	9
Western Division (par unincorporated)		3,508	0	4	0	9,000,000	1,960	0	2	3
Murrumbidgee Irriga tion Arca		193	5	11	5	1,500,000	144	4	1	4
Total, whole Stat		128	-	8	0	374,267,000	172	1	17	9

value of improvements. To complete the information for the whole State similar particulars are given regarding the unincorporated lands in the Western Division, and in the Murrumbidgee Irrigation Area:—

* Including Kuring-gai Shire. † Estimated.

The wide extent of local government has provided assessments of land values so comprehensive as to embrace practically the whole of the occupied lands of the State, and these provide a satisfactory basis for measuring the value of landed property in New South Wales.

Value of Ratable Property in Municipalities.

A comparative summary of the unimproved and improved capital values and the assessed annual value of ratable property in municipalities, as in 1912 and 1922, is shown in the following statement. The exclusion of the shires causes the figures for the metropolitan areas to differ from those shown in the preceding tables.

	· · · ·	1912.			1922,	
Municipalities.	Unimproved Capital Value.	Improved Capital Value.	Assessed Annual Value.	Unimproved Capital Value.	Improved Capital Value.	Assessed Annual Value.
City of Sydney Suburbs	± 23,988,480 27,935,494		£ 2,582,788 4,707,831	£ 36,838,607 54,642,223	£ 103,667,740 155,607,105	£ 4,665,048 11,206,756
Metropolis Extra	f	124,875,964	7,290,619		259,274,845 11,332,522	
Metropolitan	1,578,171	3,526,411	242,759	4,065,020		
Total, Metro- politan Country	53,502,145 18,774,302	128,402,375 45,287,792	7, 533,3 78 3,135,152	95,545,850 28,278,047	270,607,367 79,294,804	16,619,662 5,823,970
Total Munici palities	72,276,447	173,690,167	10,668,530	123,823,897	349,902,171	22,443,632

The ratio of assessed annual value to improved capital value in 1912 was 61 per cent., and in 1922, 64 per cent.; and as the assessed annual value is nine-tenths of the actual annual value, the proportions per cent. of annual value to improved value were, in 1912, 68 per cent. and in 1922, 71 per cent.

The relative increases during the ten years from 1912 to 1922 were as follows:----

	II	icrease per cei	nt.		
Mur.icipalities.	Unimproved Capital Value.	pital Capital			
City of Sydney Suburbs	53 6 95 6	80.6 130.6	80·6 138·0		
Metropolis Extra-Metropolitan		$107.6 \\ 221.4$	117·7 208·1		
Total Metropolitan Country	78.6 50 6	1+0·7 75·1	120.6 85.8		
Total Municipalities		101.4	110.4		

The value of improvements in the years 1912 and 1922, ascertained by deducting the unimproved from the improved values is shown in the following statement, and it will be seen that very great increases occurred in all divisions:---

- 7890 (C) Marintan Matri	Val	ue of Improveme	nts.
Municipalities.	1912.	1922.	Increase.
Sydney—	£	£	per cent.
City	33,406,808	66,829,133	100 0
Suburbs	39,545,182	100,964,882	155 3
Metropolis	72,951,990	$\frac{167,794,015}{7,267,502}$	130·0
Extra-Metropolitan	1,948,240		273 0
Total, Metropolitan	74,900,230	175,061,517	$133.7 \\ 92.4$
Country	26,51\$,490	51,016,757	
Total Municipalities	101,413,720	226,078,274	122.9

The ratio of increase in the unimproved capital value was highest in the extra metropolitan area, and lowest in the country municipalities. The former area also shows the highest ratio for the improved capital value and assessed annual value, while the lowest for these values appears in the country districts and the City of Sydney respectively.

These results are attributable largely to the operations of the Valuer-General, whose valuations in all cases were considerably higher than those assessed formerly by the councils' valuers.

The ratios of the assessed annual value to the improved capital value in the suburban and country municipalities were 7.2 and 7.3 per cent. respectively. The highest proportion of unimproved capital value occurred in the country municipalities, which yielded 20.6 per cent. The corresponding rates for the City of Sydney were only 4.5 per cent. and 12.7 per cent. the

NEW SOUTH WALES OFFICIAL YEAR BOOK.

	Asses		Ratio of Assessed Annual Value to -			
Municipalities.	Annual	vanie.		roved Value.		roved Value.
	1912.	1922.	1912.	1922.	1912.	1922.
City of Sydney Suburbs	£ 2,552,788 4,707,831	£ 4,665,048 11,206,756	per cent. 4:5 7:0	per cent. 4.5 7.2	per cent. 10.8 16.8	per cent. 12.7 20.5
Metropolis Extra-Metropolitan	949 750	15,871,804 747,858	5.8 6.9	6·1 6·6	14·0 15·5	17·4 18·4
Total, Metropolitan	. 7,533,378	16,619,662	5.9	6.1	14.1	17.4
Country	3,135,152	5,823,970	6.9	7.3	16.7	20.6
Total Municipalities	10,668,530	22,443,632	6.1	6.4	14.8	18.1

average for the whole of the municipalities being 64 per cent. and 181 per cent respectively.

During the period shown above, the rate of assessed annual value to the unimproved capital value increased in all the divisions, the highest occurring in the country municipalities and the lowest in the City of Sydney. Compared with the improved capital value, the rate remained stationary in the city and a slight decrease took place in the extra-metropolitan area, while the other groups show slight increases.

Value of Ratable Property in Shires.

It is not possible to give the improved capital value, or the assessed annual value of land in shires, as the shire councils are not compelled to make those valuations, and only a few record them.

The unimproved capital value of ratable property in shires in each year from 1912 to 1922 is shown below.

Year.		Unimproved Capital Value.	Year.		Unimproved Capital Value.
1912 1913 1914 1915 1916 1917	····	£ 97,661,000 99,452,000 103,451,000 104,746,000 105,698,00 107,695,600	1918 1919 1920 1921 1922	••••	£ 109,133,000 110,881,000 120,872,000 130,834,000 135,381,000

Between 1912 and 1922 the unimproved capital value of ratable property in the shires increased by $\pounds 37,720,000$, or by 38.6 per cent. As the area embraced remained practically unchanged, this represents approximately the assessed increment of rural land values in the period.

Valuations by the Valuer-General.

There has always been a tendency on the part of valuers appointed by councils to under-estimate the value of properties for purposes of rating, and the extent of this under-assessment can be gauged by a comparison of the valuations of the Valuer-General with those previously adopted by the local bodies. The returns have been revised to 31st December, 1923, and

relate to sixty municipalities and eleven shires, of which thirty-six municipalities were metropolitan, eleven were in the Newcastle district, thirteen in other country muncipalities, while three of the shires were within the metropolitan area. The Valuer-General's figures for unimproved capital value, improved capital value, and assessed annual value are on the average respectively 11 per cent., 11 per cent., and 16 per cent. higher than the municipal values, while in the shires dealt with the increase on the unimproved capital value was 16 per cent.

	ିସେ	Municipalitie	s.	1	11/Skires.	i da are Artici
Particulars.	Unimproved Capital Value.	Improved Capital Value.	Assessed Annual Value.	Un- improved Capital Value.	Improxed Capital Value.	Assessed Annual Value.
Council's Valuation £ 000	64,503	182,405	13,353	17,812	5. 	£#
Valuer-General £ 000	71,587	203,060	15,545	20,613	44,016	2,475
Increase £ 000		20,675	2,192	2,801		
Proportional increase %	11.0	11.3	16.4	15.7		1.44

* No valuation made.

Taxation by Local Governing Bodies.

The total revenue collected in 1922 by all the local governing bodies from rates and charges amounted to £5,651,287, equal to £2 12s. 4d. per head of the population residing in the taxable districts. This includes £2,721,516, rates collected by the municipalities; £1,110,403 rates collected by shires; and £1,819,368, rates collected by the various Water and Sewerage Boards referred to later. The distribution of the total amount is as follows:—

Local Bodies.	General Rates.	Special and Loan Rates.	Total.	Per head of population living in local areas.
	£	l £	£	1 £ s. d.
Municipalities (including City of Sydney)	2,331,530	389,986	2,721,516	1 17 0
Shires	1,023,324	87,079	1,110,403	1 12 3
Metropolitan water and sewerage charges	1,654,6t6		1,654,666	178
Hunter District water and sewerage charges.	159,627		159,627	1 2 9
Grafton and South Grafton Water Board	5,075		5,075	0 16 6
Total	5,174,222	477,065	5,651,287	2 12 4

The corresponding total amounts per head of population in 1911 and 1916 were £1 6s. and £1 15s. 4d. respectively.

A comparative statement of the total and *per capita* local government rates and charges imposed in each of the five years, 1919-23, will be found on pages 80 and 81 of this Year Book, where they are considered in relation to the total taxation imposed in the State. The total taxation per head in 1922-23 was about 70 per cent, higher than that of 1917-18, but the increase in local government taxation was only 14 per cent.

City of Sydney Ratings.

Under the provisions of the Sydney Corporation Act of 1902 the assessment of property in the city for the purpose of levying rates was according to a fair average annual rental, with a deduction for outgoings not exceeding 10 per cent., the average annual value of unoccupied land, being a sum not exceeding 6 per cent. of its capital value. The council was empowered to levy a city rate not exceeding 2s. in the \pounds to cover general expenditure, exclusive of lighting. The Act provided for special local rates not exceeding 6d. in the \pounds of annual value for any work for the particular benefit of a locality, but only if two-thirds of the ratepayers of the locality, petitioned for such work. Authority was given also for a rate payable by tenants or owners of buildings in any streets to cover the cost of watering.

In 1908 provision was made for levying a general rate of not less than 1d. in the £ on the unimproved capital value of ratable property on the condition that when the rate was imposed the land tax levied by the State Government would be suspended. This rate was additional to those under the Act of 1902 and it was prescribed that the total amount leviable under both Acts should not exceed the amount which would be yielded by a rate of 3d. in the £ on the unimproved capital value and 2s. in the £ on the assessed annual value.

In 1916 the law was amended to enable the City Council to adopt the principle, embodied in the Local Government Act of 1906, of levying rates for general expenditure upon the unimproved value. The maximum rate was fixed at 6d. in the £. The exemption from rating was removed from Crown lands, 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.

The following table shows the rates struck in the £, and the total amounts levied in the last eight years. Information for earlier periods was given in the 1922 issue of this Year Book at page 341.

Year.	Rate struck in the £. on u.c.v.	Total Amount Levied.	Year.	Rate struck in the £. on u.c.v.	Total Amount Levied.
1916 1917 1918 1919	pence. 4 31/2 31/2 31/2 41/2	£ 520,537 455,040 465,988 587,376	1920 1921 1922 1923	pence. 4 2 5 4 <u>3</u> 4 <u>3</u> 4 <u>3</u>	623,766 747,654 729,096 730,675

Suburban and Country Ratings.

Suburban and country municipalities may levy rates of four kinds, viz., general, special, local, and loan rates. 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 requirements 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. 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 limit of a rate as stated above is less than the amount required for the purpose of the rate the Governor may alter the limit by proclamation.

In 1922 the general rates levied in the metropolitan municipalities ranged from $\frac{11}{16}$ d. to 6d., and in the country from 1d. to 12d.

The majority of suburban councils in 1922 levied general rates between 4d. and 5d., the next in number being between 5d. and 6d., while in the country the highest proportion levied 4d. to 5d., the next in order being 6d. and over. The councils which levied 6d. and over in the £ during 1922 were Ballina, Barraba, Cootamundra, Dubbo, Greta, Gundagai, Narrabri, Adamstown, Nyngan, Port Macquarie, Raymond Terrace, Walcha, Warialda, Warren, and Wyalong, each 6d.; Coonamble, Goulburn, Manilla, Molong, Murrurundi, Wallsend, and Young, each 6½d.; Cooma, Deniliquin, Narromine, 6¾d.; Blayney, Moree, Mudgee, Orange, and Singleton, 7d.; Bathurst, Braidwood, and Hay, 7½d.; Aberdeen, Carcoar, Murrumburrah, Narrabri West, Scone, and Wentworth, each 8d.; Broken Hill, 8¾d.; Cobar, 9d.; Wilcannia, 11d.; Bourke, 11½d.; and Hillgrove, 12d. These rates are exclusive of the amounts levied on mines.

The first year in which the general rate was levied on the unimproved capital value was 1908, and a comparison of the general rate struck for various years since then is shown below.

The figures for the suburban municipalities includes all those in the metropolitan district as defined by Schedule IV of the Local Government Act of 1919:--

			Number of Municipalities.							
Gener	al Rate.	19	08.	19	16.	19	21.	19	22.	
		Subur- ban.	Coun- try.	Sabur- ban.	Coun- try.	Subur- ban.	Coun- try.	Subur- ban.	Coun- try.	
1d. under 2d. 2d. ,, 3a. 3d. ,, 4d. 4d. ,, 5d. 5d. ,, 6d. 6d. ,, 7d. 7d. ,, 8d. 8d. ,, 9d. 9d. and over	···· · · · · · · · · · · · · · · · · ·	4 11 21 9 3 3 	$ \begin{array}{c c} 28 \\ 36 \\ 38 \\ 26 \\ 9 \\ 2 \\ 2 \\ \dots \\ 1 \end{array} $	2 5 18 19 3 	21 28 41 29 16 4 1 1	1 7 20 18 1 	5 9 18 33 28 23 11 6 3	 1 10 18 17 1 	4 10 19 33 25 26 8 7 4	
Total	•••	48	142	47	142	47	136	47	136	
Amount o levied	of General Rate	£ 547,	110	954,	,340	1,505	,332	1,602	2,434	

There has been a marked 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.

One hundred and twenty-eight municipalities levied special, local, and loan rates on the unimproved capital value in 1922, ranging from $\frac{1}{32}$ d. to 24d. in the £, and eighteen on the improved capital value, ranging from $\frac{1}{3}$ d. to 3d. in the £.

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 \pounds 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 \pounds 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.

The number of shires and the general rates levied in various years since 1907 are shown in the following table:---

No. Comment Distant	Number of Shires.						
General Rate in £.	1907.	1911.	1920.	1921.	1922.		
d. 12	1	1 3					
12 55 88 33 4 4 7 5	3	2	<1	1	2		
1 ⁷ 5	104	 64	2 14	13	13		
$1\frac{1}{3}$	 10	3 23			15		
13 14	12	$\frac{1}{22}$	1 13	1	1 14		
13 15 14		1		17	 .9		
2		14	87	83 4	73		
21 23 3	•••		•••		4		
3	•••	••		6	13		
Tutal	134	134	136	136	136		
$\begin{array}{cc} \text{Amount of General} \\ \text{Rate levied} & \pounds \end{array}$	358,751	461,971	818,361	959,446	1,023,324		

The tendency towards higher taxation is very marked, as in 1907 only 25, or 18.7 per cent. of the shires imposed a general rate exceeding 1d., and 109 or 81.3 per cent. imposed a rate of 1d. or less, whereas in 1922 no fewer than 73, or 54 per cent., levied the maximum general rate of 2d. in the £, and 18 councils took advantage of the special provisions of the Act, and after inquiry were allowed to levy rates beyond that amount.

The general rates levied in 1922 and the unimproved capital value of the shires were as follow:---

General Rate No. of Shires.		Unimproved Capital Value.
d.	- 1	£
3	2	2,996,156
· 1* ·	13	19,574,506
11	1	838,698
11	5	6,049,556
13	i i	1,828,812
11	14	17,793,428
12	9	10,766,483
2^{4}	73	58,193,541
51	4	3,397,563
-2 93	i i	606,463
3	13	13,895,542
Total	136	135,380,748

On 43 per cent. of the ratable property in shires the general maximum rate of 2d, in the £ was levied in 1922, while 13 per cent. was subject to even higher rates.

In addition to the general rates, additional general, special, local, and loan rates were levied by fifty-five shires. They ranged upwards from $\frac{1}{20}$ d. in the £. Fourteen exceeded 3d. in the £, the highest being 13d. in the £.

The purposes for which these special, local, and loan rates were imposed were:—Roads and street improvements and maintenance, kerbing and guttering, water supply, drainage, electricity, street lighting, street watering, sanitary and garbage, parks, fire brigade, destruction of noxious weeds, foreshores improvement, town improvements, and payment of interest, etc., on loans current.

The total amount of general and additional general rates levied was $\pounds1,023,324$, equal to an average rate of 181d. in the \pounds , and of special and local rates $\pounds87,079$, equal to an average rate of 0.15d in the \pounds on the unimproved value of land. These amounts represent the rates actually levied in respect of the year 1922, and do not agree with the amount shown later, the difference being due to the inclusion of interest on rates in arrears.

FINANCE OF LOCAL GOVERNING BODIES.

Expenditure and Income.

A summary of the expenditure and income of all municipalities and shires is shown below for the year 1922:—

Particulars.	City of Sydney.	Other Muni- cipalities.	Shires.	Total.
in the second state of the		Expen	diture:	
General Fund-	£	£	£	£
Administration	88.987	228,017	168,802	483,186
Works	1	1,466,548	1,245,857	2,888,742
Health Administration	010 500	476,676	95,578	782,836
Public Services	110.047	250,171	32,205	401,323
Municipal or Shire Property	. 70,963	89,321	18,518	178,802
Miscellaneous	423,091	92,055	11,626	526,772
Trading Accounts	1,101,569	387,466	80,108	1,569,143
Special and Local Funds	•	265,299	11,187	276,486
Total Expenditure	. 2,187,856	3,255,553	1,663,881	7,107,290
	· · · · · · · · · · · · · · · · · · ·	Ine	ome.	
Comment Distance (in a Testamont)	F11 000	1 000 450	1 029 001	9 960 020
General Rates (inc. Interest)	. 711,662	1,623,456	1,033,921	3,369,039
Government Assistance		108,523	340,944	449,467
Other	. 1,637,192	1,531,069	173,282	3,341,543
Total Income	2,349,854	3,263,048	1,548,147	7,160,049

From the above figures it will be seen that there was a surplus of £160,998 in the City accounts, and of £7,495 in other municipalities, while the shires show a deficit of £115,734, the net result being a profit of £52,759 for all councils.

City of Sydney Finances.

Though 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 have been kept in the same manner as those of other local bodies.

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 receipts from the various funds in 1922 amounted to £2,348,854, the City Fund contributing £924,066, the Public Markets Fund £105,683, the Resumption Account £76,183, and the Electric Lighting Fund £1,242,922.

The disbursements in 1922 amounted to £2,187,856, viz.: City Fund, £795,984; Public Markets Fund, £111,542; Resumptions Account, £178,761; and Electric Lighting Fund, £1,101,569.

The following is a statement of the expenditure and income of the City Fund in the year 1922 under appropriate headings:—

Particulars.			Expenditure.	Income.
••••••••••••••••••••••••••••••••••••••		í	£	£
General Purposes			57,404	727,713
Works			151,152	41,385
Health Administration			210,582	42,475
Public Services			117,242	60,499
Municipal Property			56,023	20,731
Miscellaneous	•••	•••	203,581	31,263
Total			795,984	924,066

Salaries, which amounted to £31,294, absorbed a very large share of the expenses for General Purposes. Of the sum spent on Public Works, street maintenance accounted for £90,652, footpaths for £26,901, and wood-paving for £18,619. On City cleansing £133,244 were expended, and this was the main item in Health Administration. The large amount shown under "Miscellaneous" includes the annual debenture indebtedness, which was £78,764 for interest, commission, etc., and £21,520 for Sinking Fund contributions.

The receipts and disbursements of the Public Markets Fund were $\pounds 105,683$ and $\pounds 111,542$ respectively, the latter amount being inclusive of interest and sinking fund, showing a deficit of $\pounds 5,859$ on the year's transactions, which has been transferred to the City Fund. The Queen Victoria Markets brought in revenue to the extent of $\pounds 33,490$, or 32 per cent. of the total; and the receipts from the Municipal Markets amounted to $\pounds 40,577$, or about 38 per cent.

The receipts of the Resumption Account were $\pounds76,183$, and the disbursements $\pounds178,761$, showing a debit of $\pounds102,578$ after paying interest and contribution to sinking fund, and this amount was also carried to the City Fund.

City of Sydney-Balance-sheet.

The following is a summary of liabilities and assets of all funds of the City of Sydney as at 31st December, 1922:---

Liabilities.	Assets.
£ Debentures current 10,378,813 Bank Balances 616,532 Sordry Creditors 1,048,957 Sinking Funds 1,200,063 R38 :rves, Revenue, Accounts etc. 1,793,286 £15,037,651 £xcess of Assets	£ Bank Balances and Cash Landed Properties, Baths, and Sundries Stores, etc. Stores, etc. Sindry Debtors Sinking Funds Other Investments 459,670 Flotation Expenses and Sundries
£15,496,718	£15,496,718

Notwithstanding the large loan indebtedness the assets exceeded the liabilities by £459,067, and it should be noted that the debentures included £4,869,471 borrowed in connection with electric lighting, £3,102,294 for resumptions, and £979,048 for public markets. As the proceeds of those loans have been spent on reproductive municipal works, the undertakings referred to should provide the annual interest charges and sinking fund contributions, but they were not self-supporting in 1922. Landed properties, baths, etc., which comprise about 44 per cent. of the assets, include such large items as Public Markets, £1,455,538; Town Hall, etc., £885,738; Resumptions, £3,119,240; Electric Light, Land, and Buildings, £808,625. The accumulated Sinking Fund was £1,193,658, as against a Debenture Debt of £10,378,813.

Progress of City of Sydney.

The following table shows the progress of the City of Sydney since 1918:--

Particulars.	1918.	1919.	1920.	1921.	1922.
Area Acres Population No.	3,327 113,610	3,327 112,110	3,327 111,070	3,327 110,220	3,327 109,970
	c		e	£	£
Unimproved Capital Value	31.880.295	31,831,054	33,077,620	35,887,412	38,638,607
Improved Capital Value	82,027,200	82,808,760	84,580,400	99,647,060	103,667,740
Assessed Annual Value City Fund—	3,691,224	3,726,395	3,806,118	4,484,118	4,665,048
Income-Rates	466,558	587,809	624,083	747,654	729,096
Other sources	87,704	115,379	155,285	185,460	194,970
Total	554,262	703,188	779,368	933,114	924,068
Expenditure Public Markets Fund—	526,083	609,739	717,138	804,269	795,984
Income	87,370	103,977	110.306	108,200	105.683
Expenditure	89,891	99,082	105,876	111,101	111,542
Resumption Account-					
Income	78,720	75,667	78,672	81,870	76,183
Expenditure	161,207	163,589	170,527	176,548	178,761
Electricity Works Fund-	F 13 0 10	000 050	FF0 F 10	014.000	1 040 000
Income Expenditure	542,818 465,949	600,978 581,867	756,512 754,431	944,969 968,717	1,242,922 1,101,569
All Funds	405,848	001,007	104,401	200,117	1,101,003
Total Income	1,263,170	1,483,810	1,724,858	2,068,153	2,348,854
Total Expenditure	1,246,130	1,454,277	1,747,972	2,060,635	2,187,856
-					
Excess of Income All Funds—	17,010	29,533	(7,518	160,998
Liabilities	10,664,813	11,122,589	12,243,384	13,190,947	15,037,651
Assets	11,120,974	11,578,854	12,714,012	13,652,090	15,496,718
Excess of Assets	456,161	456,265	470,628	461,143	459,067
Loans outstanding	7,502,558	7,464,170	7,997,690	9,341,742	10,378,813
Sinking Fund	821,121	827,028	933,544	1,045,868	1,193,658

(-) Denotes excess of Expenditure.

The foregoing figures show that during the period under review the Unimproved Capital Value increased by 21.2 per cent.; the Improved Capital Value by 26.4 per cent.; and the Assessed Annual Value by 26.4 per cent. The total receipts were 85.9 per cent, higher in 1922 than in 1918, while the expenditure increased by 75.6 per cent. The total liabilities were larger by 41 per cent., and the assets by 39.3 per cent., the balance-

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sheet showing an excess of assets amounting to £459,067 for the year 1922. Comparing the loans outstanding, the total increased by 38.3 per cent., and the Sinking Fund by 45 per cent. The position of the last mentioned fund is very favourable, as in 1918 it represented 10.9 per cent. of the indebtedness, while in 1922 the ratio had risen to 11.5 per cent.

COUNTRY AND SUBURBAN MUNICIPALITIES' FINANCES,

The Local Government Act, 1919, 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 administered by the service to which they relate, and cannot be transferred from one fund to another, except by esthority 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 also 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 is also 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.

In the following tables the municipalities classified as metropolitan are those included in the area defined in Schedule IV of the Local Government Act of 1919, and the figures relating to municipalities for 1914 have been reclassified for the purpose of comparison.

Considerable increases in the transactions of the general fund, and decreases in the special, local, and loan funds, are apparent when compared with 1914, due to the application of the Local Government Act of 1919, under which many special, local, and loan funds were absorbed by the general fund.

Expenditure.

The gross expenditure during 1922 by the various municipalities under the Local Government Act amounted to $\pm 3,255,553$, which was $\pm 7,495$ less than the income. The following statement shows the expenditure allocated to the various funds in 1914 and 1922.

		1914.				
Funds.	Metro- politan. (Exc. City of Sydney)	Country.	Total.	Metro- politan. (Exc. Citv of Sydney)	Country.	Total.
A		•				
General Fund- Administrative ex-	£	£	£	£	£	£
	60,736	55.348	116.084	127,200	100,817	228,017
penses Public Works					380,304	1,466,548
Health Adminis-	422,617	213,158	635,775	1,086,244	300,304	1,400,940
	77,061	36,310	113,371	240,867	235,809	476,676
Public Services	99,098	42.720	141,818	168,452	81,719	250,171
Municipal Property		30,205	55,292	52,791	36,530	89.321
Miscellaneous	16,435	16,017	32,452	73,055	19,000	92,055
	701,034	393,758	1,094,792	1,748,609	854,179	2,602,788
Trading Accounts	66	91,443	91,509	13,353	374.113.	387,466
Special and Local Funds	61,832	240,164	301,996	27,610	237,689	265,299
Loan Funds	70,062	43,091	113,153	•••		
Gross Expenditure	832,994	768,456	1,601,450	1,789,572	1,465,981	3,255,553

The greatest expenditure was naturally from the general funds, which now include the loan funds, and in 1922 accounted for 80 per cent. of the whole. The trading concerns of the municipalities are gas and electricity; the Special and Local Funds relate to water supply, sewerage, sanitary and garbage, street-watering, street-lighting, footpaths, guttering, drainage, fire brigades, parks and reserves, and other miscellaneous matters.

The proportion of each class to the total expenditure and the rates per head of population in municipalities were as follows:—

Head of Expenditure.	19	14.	192	22.
Theat of Experiment.	Propertion to Total.	Per Head of Population.	Proportion to Total.	Per Head of Population.
Special and Local Lunds .	E.7	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	per cent. 79.9 11.9 8.2	£ s. d. 1 18 3 0 5 8 0 3 11
(TBastal)		1 9 6	100:0	2 7 10

In 1922, of the expenditure by municipalities from the general funds, 563 per cent. was on public works. The amount expended on the actual maintenance and construction of works of a public character, viz., roads, streets, bridges, culverts, drains, wharves, ferries, etc., amounted to $\pounds 1,355,197$, while the expenses of supervision, such as the salary of engineers, etc., amounted to $\pounds 47,127$, or 3.2 per cent. of the total amount expended.

The relative cost of administration was largest in the country, being 11.8 per cent. of the total expenditure; the Metropolitan municipalities spent only 7.3 per cent. under the same heading, and the City of Sydney 7.2 per cent. So far as the municipalities are concerned, the figures relating to administrative expenses quoted above refer only to those payable for general purposes; other services, such as sanitary and garbage, etc., transfer their share of the administrative expenses to the general fund, and these amounts are not included in the above figures. The high relative cost of administration in the country is due to the sparse population and small revenue of many of the municipalities, as in such cases the expenses on account of salaries, etc., are larger proportionately than those in the more closely settled localities.

The Trading Accounts, which relate to the supply of gas or electricity, will be treated later under those headings, and the special Water and Sewerage Funds will also be discussed separately.

Income.

The gross income in 1922 of all the municipalities brought under the provision of the Local Government Act was £3,263,048, including £108,523 received as endowments or grants from the Government. Under the same funds as shown in the expenditure, the income in 1914 and 1922 was as follows:—

	[1914.			1922.	
Funds.	Metro- politan.	Country.	Total.	Metro- politan.	Country.	Total.
General Fund—	£	£	£	£	£	£
Rates levied (including in- terest)	596,465	301,305	897,770	1,102,489	520,967	1,623,456
Government Endowments, etc.	745	4,371	5,116	702	610	1,312
Sundries (General Purposes)		7,846	21,392	24,595	11,869	36,464
Public Works*	55,127	43,127	98,254		68,724	354,306
Health Administration*	23.373	14,035	37,408	130,495	199,488	329,983
Public Services*	16,450	13,307	29,757	29,480	27,785	57,265
Municipal Property	22,042	36,155	58,197	55,576	49,426	105,002
Miscellaneous	2,794	518	3,312	16,184	3,721	19,905
	730,542	420,664	1,151,206	1,645,103	832,590	2,527,693
Trading Accounts	12	124,369	124,381	21,386	426,909	448,295
Special and Local Funds	69,493	280,082			258,744	287,000
Loan Funds	63,993	61,566	125,559			
Gross Income	864,040	886,681	1,750,721	1,694,805	1,568,243	3,263, 048

* Including Government grants.

The amount of Government assistance included in the above income in 1922 amounted to £108,523, of which £1,312 represented special endowment, and the contributions to public works (roads, streets, bridges, etc.) were £102,639; while £2,856 was granted for health administration, chiefly contributions to inspectors' salary, etc., and £1,716 for public services.

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	19)14	1922.		
Source of Income.	Proportion to Total.	Per head of Population.	Proportion to Total.	Per head of Population.	
General Fund Trading Accounts Special and Local Funds Loan Funds	7.1 20.0 7.2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	per cent. 77.5 13.7 8.8 	£ s. d. 1 17 2 0 6 7 0 4 3 	
Total	. 100.0	1 12 3	100.0	2 8 0	

Stating the receipts from each source as a percentage of the total income, and also according to population, the following results are obtained:—

The bulk of the general fund income was received from rates, the average in 1922 for all municipalities being 64.2 per cent. The next important source of income was from health administration, which accounted for 13.1 per cent. of the total income, a large proportion of the revenue in this case being derived from sanitary and garbage fees. Income from public works represented 14 per cent. of the total receipts, but about 29 per cent. of the revenue from that source was provided by the Government as grants. In the suburbs, the Metropolitan Board of Water Supply and Sewerage levies charges in addition to those made by the municipalities, and reference to these is made later.

Special and Local Funds.

The expenditure and income of the Special and Local Funds in the years 1914 and 1922 are shown in the following table:—

				1922.			
Funds.	Metro- politan.	Country.	Total.	Metro- politan.	Country.	Total.	
Expenditure-	£	£	£	£	£	£	
Water Supply		84,733	84,733		145,195	145,195	
Sewerage and Drainage	4,887	6,131	11,018	27	48,120	48,147	
Sanitary and Garbage	39,553	118,818	158,371	4,627	10,120	4,627	
Street Lighting	90	23,476	23,566	14,960	38,449	53,409	
Street Watering	1,010	542	1,552	123	865	988	
Roads, Streets, Footpaths,							
and Gutters	· · · ·			7,702	4,063	11,765	
Miscellaneous	16,292	6,464	22,756	171	997	1,168	
				<u> </u>)	
Total	61,832	240,164	301,996	27,610	237,689	265,299	
Income							
Water Supply		93,699	93,699	157	166.954	167,111	
Sewerage and Drainage	5,561	6,490	12,051	8	47,926	47,934	
Sanitary and Garbage	39,634	126,149	165,783	4,553		4,553	
Street Lighting	83	25,554	25,637	15,531	37,557	53,088	
Street Watering	1,221	697	1,918	71	855	926	
Roads, Streets, Footpaths,	-						
and Gutters			••••••	7,850	4,164	12,014	
Miscellaneous	15,990	34,497	50,487	146	1,288	1,434	
Total	62,489	287,086	349,575	28,316	258,744	287,060	

The Water and Sewerage Services are the most important of those mentioned above so far as the country is concerned, the suburbs of Sydney being supplied by the Metropolitan Board of Water Supply and Sewerage.

Balance-sheet.

The following statement indicates the nature of the liabilities and assets of the municipalities as at 31st December, 1922, amounts due from one fund to another have been excluded:—

Funds.	Metropolitan.	Country.	Total,
	£	£	£
Liabilities—			1
Sundry creditors, including Loans outstanding and	· .		
interest thereon	1,591,945	1,007,395	2,599,340
Debts due to Government and interest thereon	137,294	1,922,471	2,059,76
Bank overdraft	156,207	102,679	258,880
Other (including Deposits on Contracts and unex-			
pended portion of Government grants)	34,097	85,079	119,17(
Total	1,919,543	3,117,624	5,037,167
Assets—			
Cash in hand and Bank balances	291,216	256.935	548,15
Outstanding rates and interest	1 .110 407	131,437	244,92
Sundry debtors	1	169,663	255,670
Furniture	01 -00	26,381	48,11
Stores and materials	00.007	72,252	100.589
Land, buildings, plant, and machinery	780,799	3,611,365	4,392,164
Other	90 700	22,647	61,35
Total	1,360,288	4,290,680	5,650,968
Excess of Assets		1,173,056	613,801
Excess of Liabilities	570 955 J		•••

Shires-Finance.

The accounts of the Shires are kept under the same system as those of municipalities, and the following statement shows the expenditure of shires during 1922 in comparison with the year 1914:---

	Expenditure.						
Particulars.		1914.			1922.		
	Total.	Per cent.	Per head of population in Shires.	Total.	Per cent.	Per head of population in Shires.	
General Fund	£		£ s. d.	£		£s.d.	
Administrative expenses	95,760	9.6	0 2 11	168,802	10.2	0 4 11	
Public works	001 540	80.5	1 4 8	1,245,857	74.9	1 16 2	
Health administration	0.000	0.8	0 0 3	95,578	5.7	029	
Public services	14 787	1.5	0 0 5	32,205	1.9	0 0 11	
Shire property	15,277	1.2	0 0 6	18,518	11	0 0 7	
Miscellaneous	9,275	0.9	0 0 0 4 -	11,626	07	0 0 4	
Special and local funds	51.796	5.2	0 1 7	80,108	4.8	0 2 4	
Trading Accounts	•••		•••	11,187	0.2	004	
Total Expenditure	996,471	100.0	1 10 8	1,663,881	100.0	2 8 4	

The total amount spent from the general funds of the shires upon public works included the cost of supervision (salaries of engineers, etc.), £76,847, and sundry expenses, £34,584. The actual amount spent on maintenance and construction was £1,134,926.

The principal heads of income of shires in 1922 were as follow, and the figures for 1914 are also shown :---

	Income.							
Particulars.		1914.			1922.			
	Total.	Per cent.	Per head of population in Shires.	Total.	Per cent.	Per head of population in Shires.		
General Fund-	£		£ s. d.	£		£s. d.		
	609.580	58-3	0 18 9	1,083,921	62:8	1 10 0		
	146,077	14.0	0 4 6	156.861	9*5	0 4 7		
	197.754	18.9	0 6 1	218,952	13.3	0.64		
Health administration	4,889	0.4	0 0 2	88,165	5.4	0 2 7		
Public services	10,069	1.0	-0 0 4	16.052	10	0 0 5		
Shire property	13,738	1.3	0 0 5	20,344	1.2	0 0 7		
Miscellaneous	5,171	0.2	0 0 2	13,852	0.8	0 0 5		
Special and local funds	57,714	5.6	0 1 9	81,341	4.9	0 2 4		
Trading Accounts	•••	•••	•••	18,619	1.1	0 0 7		
Total Income	1,044,992	100.0	1 12 2	1,648,107	100.0	2 7 10		

The principal item in the receipts during 1922 on account of public works was Government grants, which amounted to £183,712, while the same source was responsible for £351 for health administration. The total assistance from the Government amounted to £340,947, or 20.6 per cent. of the total income.

It is provided by the Local Government Act of 1919 that a sum of at least £150,000 per annum is to be paid to the shires as endowment from the public revenues of the State. The amount 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.

58 shires received no endowment.

8 shires received from £140 to £400 per annum.

5	,,	,,	£620 ,, £700	
8	,,	55	£750 " £900	"
9	"	* **	£920 ,, £1,200	
7	"	,,	£1,250 ,, £1,500	77
11	,,	,,,	£1,660 ,, £2,000	3.9
14	,,	53:5	£2,050 ,, £2,880	53
14	,,	,,	£3,400 ,, £5,000	591
2		£7,	000 each	99 ⁵

As a general rule, the highest amounts were allowed to the areas on the North Coast, and the shires which received £7,000 were Dorrigo and Tweed.

Balance-sheet.

The financial position of the shires on 31st December, 1922, was very satisfactory, as will be seen from the following figures, which show an excess of assets amounting to $\pounds 376,786:$ —

Liabilities.		Assets.	
	£		£
Sundry Creditors (including Loans		Cash in hand and bank balances	170.113
outstanding and interest		Outstanding rates and interest	131.071
thereon)	284,364	Sundry debtors	40,824
Bank overdraft	182,725	Furniture	17,679
Other (including deposits on Con- tracts and unexpended por-		Stores and materials Land, buildings, plant, and	32,285
tion of Government grants)	62,866	machinery	514,496
Excess of assets	376,786	Other	273
Total	906,741	Total	906,741

LOANS.

Loans borrowed by the City of Sydney are raised under the provisions of special Acts of Parliament, and those by other municipalities and by shires under the Local Government Act. A municipality may borrow to an amount which, with existing loans, does not exceed 20 per cent. of the unimproved capital value of ratable lands. If any municipality has exceeded the statutory maximum it cannot borrow further until the total amount owing falls below the limit.

Shire councils may borrow a sum equal to thrice the amount of the annual income. The loans are secured and charged upon the income of the general funds of the shire, and are repayable in annual or half-yearly instalments of principal and interest.

The following statement shows the loans by local governing bodies outstanding on 31st December, 1922, and the sinking funds set apart to meet them; the New South Wales figures include £2,692 raised in Victoria:---

and a second	Lo	ans Outstand		Interest paid	
Division.	New South Wales.	London.	Total.	Sinking Funds.	and due on Loans, 1922.
Municipalities— Sydney Other Metropolitan Country	£ 7,878,813 1,549,007 923,107	£ 2,500,000 11,500	£ 10,378,813 1,549,007 934,607	£ 1,190,587 6,850 17,764	£ 495,022 68,599 37,219
Total Municipal £ Shires	10,350,927 356,917	2,511,500	12,862,427 356,917	1,215,201 2,171	600,840 8, 3 01
Total £	10,707,844	2,511,500	13,219,344	1,217,372	609,141

Temporary loans, payable on demand, and overdrafts, amounting altogether to £466,029, which bear interest at current blank rates, are included in the above table.

The loans are redeemable at various periods after 1922, the amount to be repaid in London being £2,511,500, or about 19 per cent. of the total, and the debentures held locally were £10,707,844. The interest payable was £609,141, viz., £458,486 locally and £150,655 elsewhere.

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The total amount of loans raised by municipalities during 1922 was $\pounds 2,247,033$, including $\pounds 1,964,780$ borrowed by the City of Sydney, $\pounds 160,358$ by metropolitan, and $\pounds 121,895$ by country municipalities; while the sinking funds of the City of Sydney were increased by $\pounds 144,719$, and those of metropolitan and country municipalities by $\pounds 941$ and $\pounds 1,291$ respectively. Apart from the liability to the State under the Country Towns Water and Sewerage Act, the total amount of municipal loans outstanding at the close of the year was $\pounds 12,862,427$, and towards this amount there was at the credit of the sinking funds a sum of $\pounds 1,215,201$.

Rates of interest ranged from $3\frac{1}{2}$ per cent., which was carried by £20,000, to $7\frac{1}{2}$ per cent., which, however, was payable only on £688, and the amount paid and due as interest on loans during the year was £600,840, the average rate of interest on the total indebtedness being 4.67 per cent., viz., 4.77 per cent. on the loans of the City of Sydney, 4.43 per cent. on those of the metropolitan municipalities, and 3.98 per cent. on those of the ecuntry municipalities.

The average rate of interest payable on all loans is not, however, an index of the true value of municipal debentures to the investors, as out of the total debt of £12,862,427, a sum of £3,384,201 pays interest at 4 per cent., and £2,124,400 at $3\frac{7}{3}$ per cent., and of these amounts the metropolitan municipalities are responsible for £3,374,240 at 4 per cent., and the whole amount at $3\frac{7}{3}$ per cent. The country municipalities borrowed £235,841 at $4\frac{1}{2}$ per cent., £197,950 at $5\frac{1}{2}$ per cent., and £145,740 at 6 per cent.

The debt per head of population in municipallities on 31st December, 1922, amounted to £8 14s. 11d., without allowance being made for sinking funds, while the yearly charge for interest is 8s. 2d. per head. These sums, compared with the resources of the municipalities, are by no means formidable. The indebtedness per head in previous periods was as follows:--February, 1907, £3 5s. 2d.; December, 1911, £4 17s. 6d.; and December, 1916. £7 1s. 1d.

The following particulars relate to the loans of shires at the end of 1922, from which it will be seen that the indebtedness is small compared with the resources :--

Amount of Loans	outstan	ding				· £	;	£
Ordinary		•••	•••		•••	169,9		
Temporary			•••	•••	•••	186,9	21	
· · · · · · · · · · · · · · · · · · ·	Total		•••	•••	•••	•••	35	6,917
Total amount of S	inking.	Fund		•••	•••			2,171
Loans floated in 1	922				•••			11,400
Interest due in 19	22		•••	•••	•••	•••	***	8,301

The interest payable during 1922 amounted to £8,301, the rates of interest paid varying from $4\frac{1}{2}$ to 7 per cent. If loans amounting to £23,302 (mainly loans of a temporary character) be deducted from the total loans outstanding, on account of the rate of interest payable not being defined, the average rate of interest payable was 5.95 per cent.

The total indebtedness per head of the population in the shires amounted to 10s. 4d., while the yearly charge for interest was approximately 3d. per head, compared with 1s. 10d. and 1d. respectively in 1920. The debt per head in 1916 was 4s. 9d.

The whole of the shire loans were raised within New South Wales, and are redeemable at various periods from 1922 to 1941.

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. Twenty-one country municipalities have established. works for coal gas, and others have installed acetylene and other plants. The metropolitan districts are served by private companies.

The operations of the municipalities with coal gasworks in 1922 will be seen from the subjoined statements showing the trading undertaking revenue account and balance-sheet.

The following is the revenue account, and particulars for 1914 are appended for purposes of comparison :---

Expenditure.	1914.	1922.	Income.	1914.	1922.
	£	£		£	£
Manufacture	38,268	97,886	Rates levie 1		6,285
Distribution	4,363	9.320	Private lighting	56,808	115,887
Management expenses	10,032	20,050	Public lighting	10,914	15,198
Public lighting	3,083	5,274		ro-	
Sinking Fund and			ducts	7,312	12,570
Reserves		9,955	Athon	660	3,577
Other	911	7,553			
Balance	19,037	3,479			*.
Total £	75,694	153,517	Total	£ 75,694	153,517

On the total operations for 1922 there was a gross profit of £3,479. Seven municipalities made a loss on trading, and even where the undertaking was carried on at a profit, the gain in each case was small. The manufacture of gas accounted for 65.24 per cent. of the expenditure, as compared with 67.54 per cent. in 1914, and private lighting for 75.49 per cent. of the income, as against 75.05 per cent. in 1914.

The following is an analysis of the total expenditure in 1922, per 1,000 cubic feet of gas sold. The prices charged to private consumers ranged from 3s. 11d. to 11s. 11d. per thousand cubic feet, the average being 7s. 4d per thousand cubic feet.

A 1 1 1							s. d.
Manufacture	•••	•••		•••		•••	5 6
Distribution			••••				0 6
Management and	genera	al expe	nses.	includi	ng d	epre-	10 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
ciation						· · · ·	1 2
Public lighting				•••			0 4
Interest on loans		verdraf	ts				0 4
Sinking Fund and	l Rese	rves					0 1
Other				•••	•••	•••	0 6
Total	••••	•••		•••			8 5

The balance-sheet of the Gasworks Trading Undertakings for 1922 is given below:---

Liabilities.	Assets.			
£ Sundry creditors 11,433 Loans and overdrafts, including interest accrued due 119,915 Reserves 1,081 Excess of Assets 196,738	Buildings, land, stock, plant, etc. 277;311 Sundry debtors, including amounts due from other funds 36,000 Fixed deposits 3,856 Investments, Bank balance, and cash 12,000			
Total £329,167	Total£329,167			

The total excess of assets amounted to £196,738; and none of the municipalities showed a deficit at the close of 1922.

Municipal and Shire Electricity Works.

The supply of electricity for lighting and for power is undertaken 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 1904 the council of the City of Sydney commenced to supply electricity within the city, and subsequently the works were extended to enable the city undertaking to supply a large area beyond the city boundaries. In addition to the electricity generated at the council's works, supplies are purchased from the Railway Commissioners. In 1922 the undertaking distributed electricity direct to consumers in the city, and in thirty-two other municipalities and in the shire of Ku-ring-gai; and supplied it in bulk to the local councils of the municipalities of Manly, Fairfield, Prospect and Sherwood, and Dundas, and the shires of Warringah and Hornsby.

The expenditure and income of the city electricity undertaking in the year ended 31st December, 1922, are shown below:---

Expenditure.	Income.			
£″	£			
Generation of Electricity 306,978	Private Lighting 597,058			
Distribution 168,303	Public Lighting 80,859			
Management 98,690	Power Supply 500,348			
Purchase of Electricity 45,702	Rentals-Meters, Motors, Lamps, etc 52,763			
Miscellaneous 34,078	Miscellaneous 11,894			
Total £653,751	Miscentaneous in ingove			
Balance carried to Net Revenue Account 589,171				
Total £1,242,922	Total £1,242,922			

Generation forms the largest item of expenditure, accounting for 470 per cent. of the whole, or 50.5 per cent. of the total expenditure, less the electricity purchased. Distribution cost 25.7 per cent., management 15.1 per cent., electricity purchased 7.0 per cent., and miscellaneous 5.2 per cent. of the whole.

The gross profit, carried to the Net Revenue Account was £589,171. The charges against the profits were:—Interest on Debentures and Overdraft, £250,212; Sinking Fund contribution, £42,023; Depreciation Reserve Account, £130,681; written off flotation expenses, etc., £14,881; Fire Insurance contribution, £7,000; Bank Commission and Loan charges, £1,869; Miscollaneous, £1,152, making a total of £447,818. The net profit for the year 1922, after paying interest and Sinking Fund; and including debit balance from 1921, was therefore, £117,605, which was carried forward to Profit and Loss Account for 1923.

Liabilities.		Assets.
Debenture Loans	£ 4,869,471	£ Land, Buildings, Machinery,
Sinking Fund	315,037	Plant, etc 5,227,712 Sinking Fund Investments—
Reserve Accounts	1,013,881	Commonwealth Loans 90,900 New South Wales Treasury 24,996
Sundry Creditors	121,160	DebenturesSydney Munici- pal Council 137,200
Deposits (Consumers)	50,350	Commonwealth Bank 59,853 Stores, Materials, Coal, etc 332,776 Sundry Debtors, Consumers'
Commonwealth Bank	385,166	Balances, etc 196,394
Net Profit for year 1922	117,605	Other 802,889
Total	£6,872,720	Total £6,872,720

Below is a summary of the balance-sheet of the City Electricity Works Fund on 31st December, 1922:---

The loan capital, which forms 72.9 per cent. of the liabilities, returned about 12 per cent. profit for the year. Interest payments and Sinking Fund contribution for the year amounted to $\pounds 292,235$, and $\pounds 130,681$ were allowed for depreciation. The Sinking Fund was represented by investments of $\pounds 312,949$ in Government, Municipal, and Bank securities.

The following table shows the rapid growth of the City Electric Lighting Undertaking. The figures represent the actual profit or loss made in specified years, excluding balances brought forward:—`

Pa	rticulars.	1911.	1916.	1920.	1921.	1922,
Quantity	Sold—					<u> </u>
•	Light Units Power Units	9,748,373 8,019,837	22,549,706 25,983,195	33,580,044 62,641,641	37,480,978 70,696,065	43,239,103 87,847,716
	Total Units	17,768,210	48,532,901	96,221,685	108,177,043	131,086,819
Expenditu Income Surplus Charges ag Net gain	ure4 £ £ gainst Surplus £ £	172,693	211,263 433,996 222,733 192,071 30,662	503,643 756,512 252,869 250,788 2,081	639,483 943,125 303,642 329,234 () 25,592	653,751 1,242,922 589,171 447,818 141, 3 53

* Includes surplus of a purchased company, £17,596. (--) Denotes loss.

The councils which obtain electricity in bulk from the generating stations of the Railway Commissioners include Newcastle, West Maitland, and Tarro Shire, also the St. George County Council, of which details are shown on page 342. The Government electric power station at Port Kembla is another important source of the bulk supply of electricity. The municipality of Wollongong is supplied therefrom, and legislation was passed in 1922 to authorise the construction of transmission lines to convey electricity from Port Kembla to the towns of Mittagong, Bowral and Moss Vale on the southern highlands, and to South Coast towns between Port Kembla and Kiama.

A significant development in regard to electricity points to the utilisation of water-power in districts where coal is not available at low cost. The Dorrigo Shire Council has initiated a hydro-electric scheme, and the Clarence River County Council has been formed to carry out a scheme on the Nymboida River.

In addition to the areas which are supplied directly or indirectly from the City Electricity Undertaking, the following municipal councils have established electric light and power services —Albury, Broken Hill, Cooma, Corowa, Glen Innes, Goulburn, Inverell, Junee, Maitland West, Moss Vale, Murrumburrah, Murwillumbah, Narrabri, Narrandera, Newcastle, Penrith, Queanbeyan, Quirindi, Singleton, Tamworth, Temora, Tenterfield, Tumut, Wagga Wagga, Wollongong, and Young. The shires of Bland, Bulli, Crookwell, Kyogle, and Lake Macquarie have also established electric lighting plants.

The following statement shows the results of the trading operations of the electricity works during 1922 in respect of these municipalities and shires. The figures for municipalities in 1914 are included for comparative purposes.

	Municipalities.		Shires.	77	Munie	Shires.	
Income. Expenditur		Expenditure.	1914.	1922.	1922.		
· · · · · · · · · · · · · · · · · · ·	£	£	£		£	£	£
Rates levied		30,793	3,567	Generation	21,711	129,531	5,834
Private lighting	26,255	129,572	9,537	Distribution	3,058	16,382	1,138
Public lighting	10,252	20,396	2,518	Management, etc.	4,308	40,318	2,375
Power supply	9,064	77,751	1,884	Public lighting	1.541	5,027	193
Rents of meters.		1		Interest and Sink.			
etc	1,523	9,075	604	ing Fund		43,202	3,205
Other	1,593	23,993	478	Other	4,234	30,959	553
				Balance	13,835	26,161	5,320
Total	48,687	291,580	18,618	Total	48,687	291,580	18,618

Generation of electricity is the largest item of expenditure, accounting in 1922 for 48.5 per cent, of the whole. Distribution of the current cost 6.3 per cent., management 15.3 per cent., interest and sinking fund 16.7 per cent., and other expenses 13.2 per cent. The net profit of these concerns to the combined municipalities and shires was £31,481.

Setting out the expenditure in 1922 on the basis of the total units sold, the following result is obtained:—

		Item	1.		-		Munici- palities.	Shires.
· · · · · · · · · · · · · · · · · · ·	· · ·					.	pence.	pence.
						1	per unit.	
Generation	•••			•••			1.54	2.74
Distribution							0.20	0.53
Management	. cener	al, de	preciat	ion, et	e		0.52	1.12
Public lighti							0.06	0.09
Interest and	Sinkin				•••	•••	0.51	1.51
		ig r ui	10	•••	••••	••••		
Other	•••	•••	•••		•••	•••	0.33	0.26
• ***								
	Total						3.16	6.25

The figures for the shires are much higher than those for the municipalities; this is attributable to the fact that the municipalities are operating on a larger scale than the shires, with a consequent lessening of manufacturing costs and overhead charges per unit. The average price per unit charged to consumers in municipalities for lighting was 5.76d., and for power 1.34d.; the corresponding figures for shires were 9.50d. and 2.61d.

 Munici- palities.	Shires.	Assets.	Munici- palities.	Shires.
£	£		£	£
 82,759	15.196	Materials, stock, etc	730,157	67,711
605,008	59,489	Sundry debtors	53,101	6,056
	17,073			18,782
 930,057	92,549	Total	930,057	92,549
	£ £2,759 605,008 30,722 211,568	pairties. snires. £ £ 82,759 15,196 605,098 59,489 211,568 17,073	£ £ Assets.	palities. Snires. Assets. palities. £ £ 15,196 France £ 605,098 59,489 Sundry debtors 53,101 211,568 17,073 Fixed deposits, bank balance, and cash 143,799

The balance-sheet of the Trading Funds in 1922 was as follows:---

The combined liabilities of municipalities and shires were £793,965, and the total assets amounted to £1,022,606, leaving a credit balance of £228,641. As only six municipalities and one shire showed an excess of liabilities, the position with regard to the electricity works was very satisfactory.

St. George County Council.

The St. George Council supplies the municipalities of Bexley, Hurstville, Kogarah, and Rockdale with electric light and power, as previously mentioned, and the following statement shows the particulars of the revenue account for 1922:--

Receipts.			Expenditure.			
	£	£		£	£	
Loan Rates	12,523		Parchase of Electricity	84		
Sales of Electricity Interest on Investments.	170 10		Management and General Expenses	50		
Sale of Assets,	3,745	· ·	Transformers Votes to Councils	29 299		
Sundries	37		Loans—	233		
·	·		Interest	1,036		
			Reduction	2,188	0 000	
			Surplus		3,686 12,799	
Total		16,485	Total		16,485	

The total liabilities at the 31st December, 1922, were £46,557, consisting of £43,507 due to the Commonwealth Bank for loan and interest, and £3,050 to sundry creditors. The assets amounted to £59,356, of which £44,547 represented land, buildings, mains, meters, lights, stores, furniture, etc.; £1,244, outstanding rates; £1,557, invested funds; £2,255, promotion expenses; £9,617, bank and loan balances; and £136, sundry debtors, the surplus, as shown in the revenue account, being £12,799.

ELECTIONS.

	а 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 - 1917 -	Municipalities		Shi	res.
Particulars.	City of Sydney.	Suburbs (including extra Metro- politan).	Country.	Metro- politan.	Co untry.
	No.	No.	No.	No.	No.
Wards or Ridings	13	. 122	154	12	415
Aldermen constituting Council	26	501	1,197	36	829
Electors enrolled	45,491	267,953	136,118	32,192	177,772
Ratepayers enrolled	45,491	179,245	91,861	30,136	152,437
Contested seats-					
Number	20	447	1,038	36	537
Candidates	46	981	1,758	77	1,027
Electors enrolled	34,332	243,701	129,892	32,192	128,431
Electors who voted	19,613	83,710	48,896	10,979	59,927
Votes polled	39,236	455,795	460,141	32,895	125,585
Percentage of electors voting to enrolment	57.1	34:3	37 6	34.1	46.7

The qualifications of electors and ratepayers have already been specified on page 315, and the following statement gives details of the elections held in 1922 in the various districts:—

No contests took place in one suburban and eighteen country municipalities, and in eight shires.

BOARD OF FIRE COMMISSIONERS.

The Fire Brigades Act, 1909, provides for the establishment of a Board consisting of a president appointed by the Government, two members elected by the municipalities and shires specified in the schedules of the Act, one elected by the insurance companies, and one by the volunteer fire brigades, the four last mentioned holding office for three years. The Act applies to the City of Sydney, to forty-seven Metropolitan municipalities, to eightyfive country municipalities, and to parts of fourteen shires, while other districts may be added by proclamation.

The equipment includes thirty-three permanent and thirty-four volunteer stations in the metropolitan area (of which four permanent stations are within the boundaries of the City of Sydney), and 102 brigades in the country or extra-metropolitan divisions of New South Wales.

The Board exercises control in regard to fire prevention in declared districts, and may recover charges for attendance at fires outside such districts. It is also charged with the establishment and maintenance of permanent fire brigades, and the authorisation and subsidising of volunteer bodies. Funds are raised by contributions of one-third of the estimated requirements for each district, from insurance companies, from municipalities, and from the Government respectively; and *pro rata* charges are made on owners of property insured in companies not registered within the State. Annual returns must be supplied by municipalities, insurance companies, and property owners, in order to carry out the provisions of the Act.

Kev	enue.		Expenditure.		
		£	£		
Balance from 1921		13,066	Administration 8,576		
Subsidy from Govern		73,645	Salaries and Payments to Volun-		
Subsidy from Munic	inalities and	10,010	teers 123,406		
Shires		73,645	Repairs to Buildings, Plant, and		
Subsidy from Fire Ins		10,010	other expenses 63,050		
panies and Firms		73,645	Equipment and Property Charges 29,088		
Other Sources		5,705	Balance 15,586		
		0,100			
Total	·t	E239,706	Total£239,706		
Liab	ilities.		Assets.		
		£	£		
Fund Account	•••		\pounds Land and Buildings 189 670		
	••• •••	£ 48,468 311	Land and Buildings 189.670		
Trust Accounts		48,468 311	Land and Buildings 189,670 Plant Account and Fire Appliances 108,926		
Trust Accounts Debentures and Accr	ued Interest	48,468 311 101,500	Land and Buildings 189,670 Plant Account and Fire Appliances 108,926 Stocks on Hand 19,647		
Debentures and Accr Revenue and Expendi	ued Interest iture Account	48,468 311 101,500 15,536	Land and Buildings 189,670 Plant Account and Fire Appliances 108,926 Stocks on Hand 19,647 Petty Cash Account 164		
Trust Accounts Debentures and Accr Revenue and Expendi Property and Equipm	ued Interest iture Account nent Fund	48,468 311 101,500 15,536	Land and Buildings 189,670 Plant Account and Fire Appliances 108,926 Stocks on Hand 19,647 Petty Cash Account 164 Commercial Banking Co. of Syd-		
Trust Accounts Debentures and Accr	ued Interest iture Account nent Fund	48,468 311 101,500 15,586 164,532	Land and Buildings 189,670 Plant Account and Fire Appliances 108,926 Stocks on Hand 19,647 Petty Cash Account 164 Commercial Banking Co. of Syd-		

The estimates of revenue adopted by the Board for 1923 amounted to $\pounds 236,811$, being $\pounds 175,041$ for the Sydney District, and $\pounds 61,770$ for the Country Districts. For the municipalities and shires in the Sydney Fire District, the ratio of contributions to the assessed annual value was 6s. 10s. per £100 in 1922, as compared with 6s. 1d. in 1917.

Under the Act, the subsidies payable by insurance companies are proportionate to the annual premiums received or due; and in 1922 a sum of $\pounds73,086$ was received from 111 insurance companies, in addition to which contributions amounting to $\pounds559$ were received from 53 individual firms, who insured goods with companies not registered in New South Wales. The contributions to the Sydney Fire District in 1922 represented 5.54 per $\pounds100$ of premiums, and in the remaining districts the percentage ranged from 1.72 to 14.73.

WATER SUPPLY AND SEWERAGE SERVICES

The administration of water supply and sewerage services is a function of the local governing bodies in the country districts, but in the larger centres of population, where the reticulation works serve a number of local areas, the management is entrusted to Boards consisting of representatives of the central Government and of the local bodies concerned. In such cases the moneys for the construction of the works, etc., are provided by the central Government, and form part of the public debt of the State. The revenues collected by the Boards are payable into the Consolidated Revenue Fund. Therefore the undertakings are regarded as belonging to the sphere of national government rather than that of local government. Generally, the construction of the major works for these services is carried out by the State Department of Public Works, and upon completion they are transferred to the control of the Boards, by whom the reticulation works are undertaken. Under such conditions the Metropolitan Board of

Water Supply and Sewerage administers extensive works in the county of Cumberland, which includes Sydney and suburbs, and the Hunter District Water Supply and Sewerage Board exercises similar functions in Newcastle and surrounding districts.

Metropolitan Water Supply and Sewerage.

The Metropolitan Board of Water Supply and Sowerage consists of seven members, of whom three are appointed by the Government, two are elected by the City Council from amongst its members, and two are elected by the councils of the other municipalities and of the shires concerned. The term of membership is four years, but three of the members retire every two years. Under Act No. 37, 1923, the present members of the Board will remain in office until a date not later than 31st December, 1924.

The Board 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 number of towns outside the metropolitan area.

Metropolitan Water Supply.

The sources of the metropolitan water supply are the waters of the Neptan, Cataract, and Cordeaux Riverts, draining an area of 347 square miles, with a copious rainfall. The supply is regulated chiefly by two large reservoirs, viz., Prospect and Cataract. Their dimensions are shown in the following statement:—

	um.	al 13 	Height abové Sea-level.	Area.	Capacity.	Length of Dam.	Width at top.	Height.
Prospect	•••		ft. 196•7	acres. 1,266 1	gallons. 11,029,180,000*	ft. 7,300	ft. 30	ft. 85 3
Cataract	•••	•••	950	2,200	20,743,196,475	811	16 <u>1</u>	160
			1.12		5 1 L DO	1. A	1994 (F	an faran a

* When full, about half this quantity is available by gravitation.

The water flows from the Cataract Dam down the Cataract River to a weir at Broughton's Pass, where it enters a tunnel, and is conveyed by a system of open canals to the Prospect Reservoir. The total distance from Cataract to Sydney, *via* Prospect, is 66¹/₂ miles.

With a rapid development of the city and its environs during recent years the supply of water has become intadequate, and in dry seasons it has been necessary to impose restrictions upon the use of water. In order to augment the supply two large storage dams are in course of construction, viz., the Cordeaux Dam, commenced in 1916, to impound 15,858 million gallons; and the Avon Dam, authorised in 1919, to conserve 43,000 million gallons. It is estimated that the Cordeaux Dam will be completed by the end of 1925, and the Avon Dam towards the end of 1926. The Lupton Dam, near the Bargo Bailway, sanctioned under Act No. 50, 1923, to impound 11,600 million gallons, is now in the preliminary stages.

A description of the reservoirs, pumping stations, and mains in the reticulated area was given in the 1921 issue of this Year Book. The total length of water mains as at 30th June, 1923, was 3,100 miles.

<u></u>		Total Supply	Average Daily Supply.				
Year ended 30th June.	30th June. Supplied.		Total.	Per House.	Per head of population supplied.		
	No.	gallons.	gallons.	gallons.	gallons.		
1911	139,237	10,587,434,000	29,006,700	208	41.7		
1916	183,598	14,374,000,000	39,380,000	214	42.9		
1920	212,046	17,527,754,000	48,021,243	226	45.3		
1922	229,274	18,616,612,300	51,004,417 .	222	44.5		
1923	239,528	20,657,319,200	56,595,395	236	47.3		

The following statement shows the number of houses in the metropolitan area supplied with water in 1911, 1916, 1920, and during the last two years.

From 1910 to 1917 inclusive, the water rate levied on the assessed annual value was 6d. in the £ and the charges for water by meter were 11d. per 1,000 gallons up to 10,000,000, 10d. from 10 to 20 millions, and 9d. over 20 millions. During 1918 the first-mentioned rate was increased to $6\frac{1}{2}$ d., but the meter charges were not altered. During 1919 an increase of 1d. was imposed in each case, and in 1920 the rate was further increased to 9d. in the £ on the assessed annual value, and the charge by meter to 13d. per 1,000 gallons. In July, 1922, the charge for water by meter was reduced to 12d. per 1,000 gallons. The revenue from the Water Service branch during the year ended 30th June, 1923, was £992,702, and the expenditure, including interest on capital, £960,453. The net revenue showed a return of 5 44 per cent. on the capital debt of £12,019,600.

The following statement gives the financial transactions of the Metropolitan Water Supply in various years from 1911:---

Year ended 30th June.	Capital cost.	Revenue.	Working expendi- ture.	Interest.	Net return after paying working e xpenses.	Net profit after paying working expenses and interest.
	£	£	£	£	per cent.	£
1911	5,420,813	299,442	99,355	192,486	⁻ 3.€9	7,601
1916	7,192,472	470,744	165.210	261.335	4.24	44.199
1920	9,584,723	664.975	291.618	433,171	3.89	59,814*
1922	11.130.857	923.798	376.203	543.164	· 5·10	4.431
1923	12,019,600				5.44	32,249

* Loss.

THE HUNTER DISTRICT WATER SUPPLY.

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, under the authority of a special Act, a Board was established on similar lines to those of the Metropolitan Water and Sewerage Board, the number of members being the same—three being nominated by the Governor, one elected by the Municipal Council of Newcastle, two by the adjacent municipalities, and one by the municipalities of East and West Maitland and Morpeth.

The supply of water for the district is pumped from the Hunter River, about a mile and a half up stream from the Belmore Bridge, West Maitland, and the pumping engines are situated above flood-level, on a hill about 44 chains from the river. The filtered water is pumped from the clear-water tank into two summit reservoirs, one at Rutherford and one at Buttai. The former, with a capacity of 500,000 gallons, supplies East Maitland, West Maitland, Morpeth, Lorn, Bolwarra, Campbell's Hill, Rutherford, and neighbouring places. Buttai Reservoir has a capacity of 1,150,000 gallons, and supplies Newcastle and environs. Fifteen district reservoirs, which are supplied from Buttai, eleven by gravitation, and four by repumping, receive water for distribution.

The length of the mains at 30th June, 1923 was 477 miles.

The present system is being augmented by the construction of a dam of 5,000 million gallons capacity on the Chichester River at a point about 60 miles north from Newcastle.

Particulars relating to the water supply of the Board at intervals since 1911 are given below:—

Year ended	D		Average Daily Supply.			
30th June.		Supply during year.	Total.	Per Property.	Per Head	
	1	thousand	<u>_</u>	/		
	No.	gallons.	gallors.	gallons.	gallons.	
1911	17.164	675.214	1,849,900	108	21.5	
1916	22,056	1,283,754	3,507,500	159	31.8	
1920	24,864	1,580,906	4,319,414	174	34.7	
192.2	26,758	1,688,537	4,626,129	173	34.5	
1923	28,036	1,754,418	4,806,623	171	34.2	

A water rate of 10d. in the \pounds is payable on the assessed annual value of all properties over \pounds 12, but if valued at less than \pounds 12, the rate is 10s. per annum, and extra charges are made for water used for other than domestic purposes, the rates on which services range from 10s. to 40s. per annum. The charge by meter is 2s. per 1,000 gallons.

The following table shows the financial position for similar periods to those shown above:—

Year ended 30th June.	Capital Debt.	Revenue.	Expenditure.*	Return on Capital.
	£	£	£	per cent.
1911	495,747	45,711	45,420	3.55
1916	634,265	79,507	58,321	6.75
1920	1,045,504	97.469	88,488	3.98
1922	1,953,411	113,217	114,522	1.98
1923	2,467,540	110,076	116.837	1.08

* Including Interest and Instalments to Sinking Fund for Renewal of Works.

WATER SUPPLY FOR COUNTRY TOWNS.

The Country Towns Water Supply and Sewerage Acts of 1880, 1894, and 1905 were passed with the object of assisting councils to construct general systems of water supply and sewerage. These Acts were repealed by the Local Government Act of 1919, in which their provisions were embodied in a revised form. 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. Upon completion the works are transferred 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 the end of June, 1923, water supply services constructed under this arrangement were under the administration of the councils of fifty-eight municipalities and of three shires. The total amount of debts owing by these municipalities and shires on water works at the 30th June, 1923, was $\pounds1,499,423$, and the aggregate annual instalment repayable was $\pounds2,390$. The last-mentioned sum is approximate only, as in a few cases the payment has not been definitely fixed.

In one of the municipalities (Junee) the water is delivered by the Public Works Department into service reservoirs on the boundary of the town, and

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the council is responsible for its distribution to consumers. The foregoing figures are exclusive of towns served by the Metropolitan and Hunter District systems, also of Broken Hill, where the water supply services are administered by the Department of Public Works, and of the Grafton and South Grafton system, of which particulars are shown separately on this page.

The combined revenue accounts of the municipalities and shires which maintain waterworks, for the year ended 31st December, 1922, are shown below:----

Expenditure.	Munici- palities.	Shires.	Income.	Munici- palities.	Shires.
	£	£		£	£
Management	22,744	155		112,737	1,148
Working and maintenance	70,006	900	Rents (Meter and other)	2,154	
Interest payable to Govern		1	Water sales	43,074	462
ment	47,537	228	Garden charges, etc	8,790	395
Other	4,766	2	, and the second se		J
Balance	21,702	720			
Total £	166,755	2,005	Total £	166,755	2,005

With regard to the expenditure, management charges accounted for 15.6 per cent., working and maintenance for 48.5 per cent., interest payable to Government 32.6 per cent., and miscellaneous items 3.3 per cent.

The income figures show that rates contributed 67.5 per cent. of the receipts, rents 1.3 per cent., water sales 25.8 per cent., and garden charges, etc., 5.4 per cent.

The combined balance-sheet on 31st December, 1922, was as follows:----

Liabilities.	Munici- palities.	Shires.		unici- lities.	Shires.
	£	£		£	£
Capital Debt due to Government	1,323,164	6.007	Waterworks-plant, build- ings, etc 1,45	1 968	8,859
Interest due to Govern		0,001	Outstanding rates 2	1,136	262
ment			Bank balances, fixed de-	-	0.04
Sundry creditors		841		5,751	964
Excess of Assets	151,942	3,434		7,634 5,663	197
Total £	1,572,152	10,282	Total £1,57	2,152	10,282

The total amount advanced by the Government practically represents the present value of the services. The amount of rates outstanding on the date mentioned was £21,398, while the bank balances, cash in hand, investment in war loans, and fixed deposits were £56,715.

The Grafton and South Grafton waterworks are not under the direct control of the councils, but are administered by a corporate board consisting of three aldermen elected by the Grafton Council and three by the South Grafton Council, and its accounts are kept separately. During the year ended 31st December, 1922, the expenditure of the Board amounted to £4,155, of which £3,239 represented interest payable on the capital debt to the Government, and the income amounted to £5,531, showing a profit of £1,376. The capital debt at the end of the year was £80,664, against which the Board held assets to the value of £89,196, other liabilities amounted to £349, making a total liability of £81,013, the excess of assets being £8,183.

METROPOLITAN SEWERAGE WORKS.

The first sewerage works at Sydney were begun in 1853, and in 1889, the date of transfer to the Metropolitan Board of Water Supply and Sewerage, there were $70\frac{1}{4}$ 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. Another main outfall sewer is under construction, which will discharge into the ocean at North Point, in the quarantine area, and will serve the suburban areas on the northern shores of Sydney Harbour.

A description of the system appeared in the 1921 issue of this volume. The length of sewers in the Metropolitan District and the houses served during specified years from 1911, are shown below:—

Year ended 30th June.	Houses connected.	Length of Sewers.	Length of Storm-Water Drains.	Length of Ventilating Shafts.	Length of Sewers Ventilated
	No.	miles.	miles.	feet.	miles.
1911	108,012	825	49	376,900	795
1916	130,638	1,022	54	443,134	953
1920	145,304	1,162	64	503,362	1,096
1922	153,789	1,227	64	527,766	1,162
1923	159,390	1,274	66	532,470	1,176

The following statement of financial transactions relates to Metropolitan Sewerage during the years referred to in the previous table:—

Year ended 30th June.	Capital cost.	Revenue.	Working expendi- ture.	Interest.	Net return after paying working expenses.	Net profit after paying working expenses and interest.
	£	£	£	£	per cent.	£
1911	4,496,290	234,208	79,636	159,070	3.43	4,498*
1916	6,114,072	363,799	120,244	224,551	3.98	19,004
1920	7,124,813	512,621	202,360	328,239	4.39	17.978*
1922	7,553,906	683,434	244,916	373,671	5.94	64.847
1923	7,857,504	661.964	231.672	395,152	5.62	35,140

* Net loss.

The sewerage rate for the city of Sydney and the eastern suburbs up to 1903 was 7d. in the £ on the assessed annual value, the northern and the western suburbs being rated at 1s., but in 1904 a uniform rate of 11d. was imposed. In 1907 is was reduced to 10d. in the £, and in 1908 to 9½d. On the 1st July, 1917, it was increased to 10d., and to 11d. on 1st July, 1918, and to 12d. on 1st July, 1920. On the 1st July, 1922, the rate was lowered to $10\frac{1}{2}d$. In addition to the sewerage rate a storm-water drainage area of 1d. in the £ may be levied in respect of property in a drainage area. If not hiable to sewerage rate, property in proclaimed drainage areas may be charged with drainage rates varying from 2d. to 7d. in the £ on the assessed annual value.

NEWCASTLE AND SUBURBS SEWERAGE WORKS.

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 the Tarro Shire. The following table shows information relating to sewers under the control of the Hunter District Board in the years stated:—

Year ended 30th June.	Properties connected.	Length of Sewers.	Year ended 30th June.	Properties connected.	Length of Sewers.
1911 1916 1920	No. 1,465 7,240 11,338	miles. 30 84 133	1922 1923	No. 13,416 14,325	miles. 157 161

The particulars of cost, revenue, and expenditure in the same years are shown below:---

Year ended 30th June.	Capital cost— interest- bearing.	Revenue.	Working expendi- ture (including Sinking Fund).	Interest.	Net return after paying working expenses.	Net loss after paying working expenses and interest.
	£	£	£	£	per cent.	£
1911	170,151	8,975	4,217	2,902	· 2·79	1,856*
1916	411,332	18,582	9,820	11,623	2.13	2,861
1920	553,836	28,050	17,683	22,943	1.87	12,576
1922	613,249	39,477	24,645	28,664	2.45	13,832
1923	627,645	49,551	25,756	30,108	3.79	6,313

* Net profit.

A sewerage rate of 1s. in the \pounds on the annual rental value has been in force since 1st January, 1909.

Water and Sewerage Services.

The position of the combined water and sewerage services of the Metropolitan and of the Hunter Districts for the five years ended 30th June, 1923, are shown below. The figures for the Metropolitan District include the Richmond and the Wollongong water supply systems, and the working expenses for the Hunter District include the instalment paid to sinking fund for reconstruction of renewable works.

Year ended 30th June.	Capital Cost.	Revenue.	Working Expenses.	Interest on Capital.	Net return after paying working expenses.	Net profit after paying working expenses and interest.
		Metrop	olitan D	istrict.	· · ·	
- 1 ⁻¹ - 1	£	£	£	£	per cent.	£
1919		1,124,693	371.273	669,232	4.75	84,188
1920	16,709,536			761.410	4.09	(-)77,792
1921		1,471,366		815,565	5.07	79,062
1922	18,684,763	1,607,232	621,119	916,835	5.28	69,278
1923	19,877,104	1,654,666	594,774	992,503	5.35	67,389
		Hun	ter Dist	rict.		
1919	1,454,638	117,925	61,099	50,188	3.91	6,638
1920	1,599,340	125,519	73,554	55,560	3.25	() 3,595
1921	2,062,864	148,484	91,894	60,884	2.74	(-) 4,294
1922	2,566,660	152,694	99,162	68,669	2.68	()15,137
1923	3,095,188	159,627	99,203	73,498	1.98	()13,074
		ļ 		1	<u> </u>	·

(-) Denotes net loss.

SEWERAGE AND DRAINAGE WORKS.

Only twenty-one municipal councils have taken advantage of the Act providing for the construction of sewerage and drainage works in country

towns, and the capital debt and annual repayments on 30th June, 1923, were £528,353 and £21,975 respectively. Other sewerage systems are in existence in several places; but they have been constructed apart from the Act, and, with few exceptions, the operations have been on a minor scale.

Some of the municipalities do not levy special sewerage rates, and therefore do not keep a separate account. A summary of the revenue accounts of the twelve municipalities which published statements for the year ended 31st December, 1922, is shown below:—

Expenditure.	Income.
£ Management 7,19	£ Rates levied 33,81
Working and maintenance 9,73	Other 13,95
Interest payable to Government 19,08 Other 12,03	Balance 28
Total £48,05	Total£48,05

Practically the only source of income is from rates, the other receipts representing contributions to works, sales of fittings, etc. Of the expenditure, management charges represented 150 per cent., working and maintenance 203 per cent., interest payable to Government 397 per cent., and other expenses 250 per cent.

The combined balance-sheet was as follows:-

Liabilities.		Assets.		•
Capital Debt due to Government 4	£ 182,221	Works and Plant	••••	£ . 493,204
Interest due to Government	11,364	Outstanding rates	··· ·	3,596
Sundry creditors	16,253	Bank balance and cash	••••	20,305
Excess of Assets	24,514	Stores and materials		. 2,788
		Sundry debtors		14,459
Total $\overline{\pounds}$	534,352	Total	•••	.£534,352

DRAINAGE TRUSTS.

In addition to the water and sewerage works shown in the foregoing tables, thirty-three trusts for reclamation of swamp and other lands were in operation on the 30th June, 1923, with a total length of 123 miles, the total area served being 134,273 acres. The total cost as gazetted was £120,088, and the annual payments were £7,043. The owners of the lands improved by these works are responsible for the repayment of the capital expenditure, and are also required to provide for the cost and maintenance and administration.

ROADS, BRIDGES, AND FERRIES.

Main roads in New South Wales were first formed to connect the towns of Parramatta, Liverpool, Windsor, and Penrith with Sydney. All access to the interior of the country, was barred by the apparently insurmountable sandstone precipices rising on the farther side of the Nepean, and until the year 1813 no effort to cross the mountains was attended with success. In that year Blaxland, Lawson, and Wentworth succeeded in crossing the range, and discovered the rich pastures of the Bathurst Plains. Shortly after their return the construction of a track was begun, and the Great Western road was completed as far as Bathurst on 21st January, 1815.

The access to the fertile lands surrounding Bathurst, by means of this mountain road, gave such an impetus to settlement that it was found impossible to keep pace in the matter of road-making with the demands of the The authorities, therefore, for many years confined their attention settlers. to the maintenance of roads already constructed, and extended them in the direction of the principal centres of settlement. Had the progress of settlement subsequent to 1850 been as slow as that of the preceding years, this system would have sufficed; such, however, was not the case. The discovery of gold completely altered the circumstances, and during the period of excitement and change which followed, so many new roads were opened, and traffic increased to such an extent, that the general condition of the public highways was by no means good. The modern system of road-making may be said to have begun in the year 1857, consequent on the creation of the Roads Department: it was not, however, until 1864 that the whole of the roads, both main and subordinate, received consideration by the Government.

The principal main roads are :---

Northern Road—length, 405 miles, from Morpeth to Maryland, on the Queensland border.

- Western Road—length, 513 miles, from Sydney, through Bathurst, and many other important townships, to the Darling River, at Bourke.
- Southern Road—length, 385 miles, from Sydney, through Goulburn, and other important townships to the Murray River at Albury.

South Coast Road—length, 250 miles from Campbelltown, through Coal Cliff, and along the South Coast generally, as far as Bega, whence

it extends as a minor road to the southern limits of the State.

The roads have not so great an importance as they possessed before the opening of the railways, which for the greater part follow the direction of the main roads, and attract nearly all the through traffic. Thus many roads on which heavy expenditure has taken place have been more or less superseded, and the opening of new roads has been rendered necessary to act as feeders to the railways from outlying districts.

Control of Roads and Bridges.

Prior to 1906, when the Local Government Act came into effect, the State was divided into road districts, each of which was placed 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, as well as a portion of those within such limits. The road trusts 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.

The administration of the works under the control of the Roads and Bridges Department (with the exception of those in the unincorporated areas of the Western Division, and certain bridges and ferries proclaimed as "national works") was transferred by the operation of the Local Government Act to the shires and municipal councils.

The Act authorises payments by way of endowment to municipalities and shires, the minimum endowment payable to shires being fixed at £150,000 per annum, to be distributed in accordance with a classification made every third year. The Minister may withhold payment of endowment from a council if his requirements in respect of main roads are not satisfied.

Between 1906 and 1912 the amount of endowment allotted to shires rose from £150,000 to £360,000 approximately, but the expenditure on the important roadways has not been sufficient to maintain them in a serviceable condition. It was decided, therefore, to amend the conditions under which Government assistance is granted, by reducing the amount of general endowment, and distributing an additional sum as a special endowment for the upkeep of the main roads.

Length of Roads.

The length of roads under Government control on 30th June, 1906, prior to the transfer to the councils, was 48,311 miles, while 195 miles were under the care of road trusts, and 1,338 miles within the municipal areas were subsidised by the Government, making a total of 49,844 miles. There were also about 8,000 miles of roads and streets belonging to the municipal councils. Since 1906, statistics of roads, streets, bridges, and public ferries have been collected triennially, the date of the latest available returns being 1921. In that year the length of roads in the State was, approximately, 101,698 miles, of which 58 miles were controlled by the Government, 10,187 miles by the municipalities, 85,458 miles by the shires, and 5,995 miles were in the unincorporated areas of the Western Division. The nature of these roads may be seen in the following statement :—

Divisions.	Metalled, Gravelled, Ballasted, etc.	Formed only.	Cleared only.	Natural surface.	Total.
	miles.	miles.	miles.	miles.	miles.
National Municipalities Shires Western Division	4,474	16 1,912 12,200 147	2 2,162 26,538 3,435	1,639 29,504 2,240	58 10,187 85,458 5,995
Total	21,903	14,275	32,137	33,383	101,698

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 since 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 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 Councils are now empowered to control these bridges, with the exception of those classified as national works, which may be transferred by the Government at any time to the Council.

On 1st January, 1907, the bridges of 20 feet span and over, including those in course of construction, numbered 3,575. Of these, 256 bridges, with an aggregate length of 101,416 feet, which, by reason of their cost, size, and extra-local importance, constitute a strain on the resources of the local councils, were proclaimed as "national works," to be maintained by the Government. 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 are now free.

The particulars of the bridges, culverts, and ferries of the State as at 30th June, 1923. are shown below :---

		over 20 feet pan.	Cul	Ferries.	
Classification.	Number.	Length.	Number. Length.		Number
National Works Municipalities Shıres Western Division (unincorporated)	. 745 . 3,627	ft. 108,631 41,262 223,126 13,602	4,667 35,287 340	ft. 243,894 341,770 4,573	$\begin{array}{c} 23\\ 26\\ 175\\ 6\end{array}$
Total	. 4,754	386,621	40,294	590,237	230

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. No revenue is derived directly from roads, but their indirect advantages to the country are very great.

In view of the transfer of the administration of roads and bridges, with the exception of those noted previously, from State to local government control, the following return will be of interest. It shows the Government expenditure on works of a local character, such as roads, bridges, punts, ferries, public watering-places, etc., in various periods from 1905 to 1923.

Year ended	Expenditure	Endowmer	Total		
30th June.	on Services.	Shires.	Municipali- ties.	Total.	Expenditure
	£	£	£	£	£
1905	495,672		7,048	7,048	502,720
1915	175,726	288,053	40,314	328,367	F04,093
1920	160.679	296,511	56,366	352.877	513,556
1922	555,940	348,710	85,824	434,534	990,474
1923	345,997	378,661	124,031	502,692	848,689

PARKS AND RECREATION RESERVES.

It has always been the policy of the State to provide the residents of municipalities and shires with parks and reserves for public recreation. The city of Sydney contains within its boundaries a large extent of parks and public gardens, and suburban municipalities also are well served, full details regarding which will be found in part "Social Condition" of this volume.

In country districts, reserves have been proclaimed as temporary commons, and considerable areas have been dedicated from time to time as permanent commons attached to inland townships, which are also well provided with parks and reserves.

FOOD AND PRICES.

FOOD SUPPLY AND DISTRIBUTION.

New South Wales is practically independent of external sources of supply for the food commodities which enter most largely into daily consumption, such as meat, bread, milk and butter. Local supplies of many other productsare augmented by importation from neighbouring States, and the principal items which are imported in large quantities from oversea countries are, with the exception of tinned fish, tropical products; e.g., tea, rice, sago, etc.

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 and measures relating to the slaughtening of stock for food.

The administration of these 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 recommendations 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 affords protection to 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 solid by weight must be sold by avoirdupois weight. The exceptions are as follow:—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.

Special provision has been made to prevent fraud in respect of the weighing of coal and firewood. In the metropolitan and Parramatta police districts, and in other districts as proclaimed, coal and firewood must be sold by weight, though in case of quantities exceeding 5 cwt. they may be sold otherwise, with the written consent of the purchaser. Persons delivering coal or firewood are required under the regulations to carry weighing instruments, and,

*42975----

if requested by the purchaser, to check the weight of the goods delivered. Commodities for sale in packages must have the net weight or measure stamped thereon.

Weights and Measures Offices have been established in Sydney and in Newcastle, and the police act as inspectors to enforce the provisions of the Act in other districts.

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.

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 Sydney Municipal Council has established large markets in the city for vegetables, farm produce, fish, and poultry, the area and cost being as follows :----

. Market.	Floor Space.	Cost of Market.	Market.	Floor Space.	Cost of Market.
Vegetable	sq. ft. 95,560	£ 127,000	Fish	sq. ft. 47,517	£ 49,000
Produce Fruit	149.000	48,300 119,500	Poultry	12,200	27,500

Cold storage works have been constructed in the market area immediately adjoining the fruit markets. They are equipped with chilling and freezing rooms for the storage of fruit, dairy and farm produce, mutton and rabbits, and their cost was £99,000. The total storage capacity of the chambers, excluding passages and grading rooms, is 252,687 cubic feet. Provision is made to supply power for an ice-making plant, also for a further 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. During the recent period of rapidly rising prices public attention was directed towards the possibility of reducing the retail prices of goods by bringing the consumer into direct communication with the producer, thus eliminating excessive charges for distribution. As a result of the movement, a number of municipal markets were opened, but in the majority of cases the expenditure was small and there appears to have been little preliminary organisation. Consequently public interest waned as the general level of prices began to fall, and many of the markets were discontinued. Details relating to the markets were published in the 1921 issue of the "Year Book."

CONSUMPTION OF FOOD.

On the 13th September, 1910, the system of keeping records of interstate trade ceased, so that it became difficult to determine accurately the quantity of commodities consumed within the State. In view, however, of the special interest attached to the question of food consumption, particularly in relation to the cost of living, efforts have been made since 1916 to obtain the needed information from other sources, and in spite of the absence of official records of interstate trade, the following estimates are published with a large degree of confidence as indicating the consumption of the more important articles of diet.

FCOD AND PRICES.

In order to show the changes of regimen, the information is shown as at ten-year intervals since 1901. 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, 1907–09. The quotations for 1921 and 1923 relate to the twelve months ended 30th June :---

Commodity.	Consumption per head per annum.			Commodity.		Unit.	Consumption per head per annum.					
		1901.	1911.	1921.	1923.	Commodia	Commodity.		1901.	1911.	1921.	1923.
Meat—												
Beef	lb.	134.4	150.9		128.0	Bread _	••		105.0	102.0	99-0	961
Mutton	1b.	90.7	101.3	66-1	78-3			loaf.	1			
Pork	lb.	4.6	5.0	2.3	4.2	Rice	••	lb.	9.7	8.2	4.8	5
Bacon, Ham	lb.	9.0	10.7	S•4	9.7	Sago, Tapioco		1b.	1.9	2·0 7·6	1·8 4·9	1:
Total Meat	1b.	238.7	267.9	170.8	215.2	Oatmeal	••	lb. lb.	107.8	103.8	102.5	104
I Clai Meat	10.	400 /	201 8	110.0	219.2	Sugar Jam		10. 1b.	14.2	105 8	11.4	10:
Fish						Butter	••	1b.	19.6	26.1	27.8	281
Fresh, Smoked	1b.	4.8	6.4	10.9	9.0	Cheese	••	1b.	3.7	3.5	3.4	3
Preserved	lb.	4.7	4.3	2.8	3.1	Milk-	•••					
						Fresh		gal.	16.4	17.4	19.6	201
Total Fish.	lb.	· 9•5	10.2	13 7	12.1	Preserved		lb.	3.2	4.4	5.9	51
						Теа		lb.	7.9	7.8	8.1	7
Potatoes	1b.	197.7	181.0	104.9	117.8	Coffee and Cl	nicory	oz.	13.3	11.9	10.9	12
Flour	lb.	244.4	228•4	211.2	206.2		•					

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 used for seed are excluded. 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. 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.

Meat.

The quantity of meat consumed is large, though it is lower than in the years prior to 1914–15, when the combined effects of drought and war caused a decrease in supplies and a phenomenal rise in prices. Approximately one-third of the meat sold for consumption is bone and waste, and there is little doubt that more economy is exercised now in the use of meat than in earlier years when its cheapness caused a wasteful consumption. Therefore the actual decline in consumption has been less than is indicated by the figures in the following statement, which shows 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.
		1b.	1b.	1b.	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
	1916-17	93·6	68-8	3.5	9.5	175.4
	1917-18	83.9	61.6	3.9	10.0	159.4
	1918-19	79.9	66.7	6.3	8.3	161-2
	1919-20	90.8	68.1	2.7	8.6	170.2
	1920-21	94 0	66-1	2.3	8.4	170.8
	1921-22	112.6	86.1	4.4	10.2	213.3
£	1922-23	123 0	78.3	4.2	9.7	$215 \cdot 2$
-	•					

As a general rule fluctuations in the average consumption are the result of variations in prices, but the consumption showed an upward tendency during the two years ended June, 1921, notwithstanding a rise in prices. This was due probably to an increase in the spending capacity of the people, owing to higher rates of effective wages which for some years had lagged behind the rising cost of living. In 1921-22 the retail prices were, on an average, 30 per cent. lower than in the previous year, and there was an increase of 25 per cent. in the quantity consumed. The increase in the average consumption of meat has occurred mainly in regard to beef. Usually the average retail price of beef is about 2d. per lb. above the price of mutton. During the last two years, however, the difference has become smaller, and in 1923 it was only ¹/₂d. per lb.

The movement in the average retail prices of meat (including bacon and ham), and in the consumption per head of population are illustrated in the following table of index numbers, the average for the year 1901 being taken as 100 in each case.

¥ear.	Average Retail Price of meat.	Average Annual Con- sumption of meat,	Year.	Average Retail Price of mest.	Average Annual Con sumption of meat.
1901 1906 1911 1915–16 1916–17 1916–17 1917–18	100 101 101 223 227 238	100 102 112 75 73 67	1918–19 1919–20 1920–21 1921–22 1922–23	223 242 248 174 180	68 71 72 89 90

The decline in the consumption of meat has not apparently been counterbalanced by an increase in the consumption of fish, which as a food is inferior in every respect. It is, however, very probable that it has been offset to some extent by a growing consumption of rabbits. The local consumption of this type of food is difficult to ascertain, but is estimated to be now from 60,000 to 80,000 pairs per week, which is much greater than in the early years under review.

It is probable also that the diminution in the consumption of meat has been made good partially by an increased consumption of eggs. The number of eggs, however, used as food, either directly or as ingredients in cakes, pastry, puddings, etc., cannot be ascertained accurately.

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.

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 carease 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 midnight when it is despatched by rail to three depots for sale to the retail butchers. The central depot is situated 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. There are depots, with a capacity of 1,500 carcases of mutton, at St. Leonards and at Rockdale to facilitate delivery in the suburban districts.

The estimated number of livestock (cattle, sheep, and pigs) required for food in New South Wales in various years since 1901 is shown in the following statement.

Bullocks and Cows.	Calves.	Sheep and Lambs.	Piga.	
297,200	18,500	2,717,400	264,900	
412.300			335,400	
331,200		3,358,500	234,600	
304.700		2,941,000	304,800	
277.600	28,500		335,400	
			375,900	
401.600			286,100	
404.400			247,600	
			352,900	
557,300	116,500	4,072,800	363,700	
	apd Cows. 297,200 4 12,300 331,200 304,700 277,600 311,900 401,600 404,400 470,800	and Gows. Caives. 297,200 18,500 412,300 54,500 331,200 30,300 304,700 36,870 277,660 28,560 311,900 49,000 401,660 74,000 404,400 78,300 470,800 94,500	and Cows. Caives. Lambs. 297,200 18,500 2,717,400 412,300 54,500 4,068,300 331,200 30,300 3,258,500 304,700 36,810 2,941,000 277,600 28,500 2,436,400 311,900 49,000 2,975,600 404,600 74,000 3,514,200 404,600 78,300 3,483,500 470,800 94,500 4,099,700	

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.

Fish.

Fish is not an important article of diet in New South Wales, the quantity consumed in 1923 representing only 12.1 lb. per head, viz., fresh and smoked 9 lb. and preserved 3.1 lb.

The seaboard waters contain large supplies of edible fish, but an effective method of distributing fresh fish to private consumers has not been devised, and owing to the elimatic conditions it is not probable that fish will become a popular food until this difficulty has been overcome.

The State Trawling Industry was initiated in 1915, with the object of developing the deep-sea fisheries in order to provide a regular supply of cheap fish. The undertaking proved unprofitable and it ceased operations in February, 1923. The State fish shops, in which the bulk of the fish had been retailed, have been closed.

Private fishermen conduct operations mainly in the river estuaries and coastal lakes and inlets, and consign their catches to agents in Sydney. The Sydney Corporation (Fish Markets) Act, passed in November, 1922, prescribes 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 shine, 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 is to centralise the marketing of fish in Sydney in the Municipal Market where the sales are conducted by licensed agents. The Co-operative Fish Exchange, formerly a private concern, was acquired by the City Council and was closed in January, 1923. 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 is obtainable readily. The average consumption of bread in 1923, is estimated to have been about 96 loaves (21b.) per head. A decline from 102 loaves in 1911, to 96 in 1917, is attributed to the introduction of day-baking, as the bread was comparatively stale when baked on the day preceding delivery. Subsequently the hours of baking were adjusted and as fresher bread became available the consumption increased to 99 loaves in 1920. When the consumption of meat increased in 1921-22, there was apparently a reduction in the quantity of bread consumed and it dropped back to the level of 1917.

The supply of bread is sold for the most part by the bakers direct to the consumers. Baking between the hours of 8 p.m. and 6 a.m. was prohibited in 1919, also baking on Sunday. The prohibition was repealed by the Bread (Amendment) Act which was passed in November, 1923. In the following month the Court of Industrial Arbitration, in renewing awards for bakers, allowed employers the alternative of starting either at 6:30 a.m. as fixed by the previous award or at midnight. If baking is commenced at midnight the bakers must be paid higher rates of wages, e.g., in the court of Cumberland, £1 per week extra.

Before the prohibition of night-baking practically all the bread was delivered at the consumers' houses, but the practice became less common when 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 price of bread in Sydney is fixed by the Master Bakers' Association with relation to the price of flour, which is fixed ordinarily by an association of millers. During the war period—except during the months March to August, 1919—the prices of bread and flour were determined by Government proclamation.

The variations in the price of bread in Sydney since 1911 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 1906 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.

Date.	Price of 2 -lb. Loaf.	Cost of Flour per ton.	Date.	Price of 2 -lb. Loaf.	Cost of Flcur per ton.
1901 1906 1911 1912 1914 1915 1915 July 0ctober 1916 March 1917 June	$ \begin{array}{c} 3\\ 3\frac{1}{4}\\ 3\frac{1}{2}\\ 4\\ 5\\ 4\\ 3\frac{3}{4}\\ 4 \end{array} $	$\begin{array}{c} \pounds \text{ s. d.} \\ 6 15 0 \\ 9 0 0 \\ 8 15 0 \\ 9 15 0 \\ 11 17 6 \\ 17 5 0 \\ 11 17 6 \\ 11 5 0 \\ 11 0 0 \end{array}$	1919—March October Dccember 1920—January February 2 9 December 1921—September 1924—July	d. 44 45 54 64 64 5 5 5 5	£ s. d. 11 0 0 11 15 0 11 17 6 12 15 0 16 7 6 19 2 6 20 17 6 11 15 0 13 0 0

The price of bread was increased by 4d. per 2-lb. loaf in July, 1924.

The consumption of flour is stated at 206.2 lb. per head, including 156,000 tons, or 144 lb. per head, used for bread. In factories where biscuits are made for local consumption and for export, 12,486 tons of flour, or 11.5 lb. per head, were used, but the quantity used by pastrycooks is not available. Exclusive of the quantity used for bread, biscuits, etc., 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 since 1911 has declined, probably on account of an increased consumption of other breakfast foods. The consumption of sago and tapioca shows but slight alteration, and the quantity of rice has decreased from 9.7 lb. to 5.1 lb. per head. Rice is imported mainly from China and India, and dressed locally by a mechanical process.

FOOD AND PRICES.

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. The consumption of cheese is small, the average being less than $3\frac{1}{4}d$. Ib. per head per annum, and it varies very little from year to year.

The quantity of fresh milk consumed is 20.9 gallons per head per annum, or less than half-a-pint per day, which is far below the quantity which is considered essential to the well-being of the community. Medical opinion holds that infants should consume 1½ pints a day and older children at least a pint. For other persons, also, milk is 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. On account of its liability to deteriorate rapidly and to become contaminated, it is difficult, in a warm climate, to ensure the high standard of quality which is required for health reasons, and the difficulty increases with the distance between the place of production and the locality in which it is consumed.

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, and the Dairy Industry Act of 1915.

Since the Dairies Supervision Act became law in 1886 there has been a marked improvement in the condition of dairies and the provisions have been an important factor in effecting an improvement in the death-rates in respect of preventable diseases. The Act prescribes the registration of all dairymen and milk vendors, and of dairy premises. The duties of registration and of inspection are vested in the local authorities and the administration of the Act is supervised by a staff of inspectors attached to the Board of Health. Dairy premises are open to inspection at all reasonable times.

As at 31st December, 1923, there were 22,194 registered dairymen in the State, and the cattle in their dairy herds numbered 906,131. There were also 5,246 registered milk-vendors. In the metropolitan district there were 584 registered dairymen, with 12,438 cattle, and 4,304 registered milk-vendors. The standard for milk is fixed by regulation under the Pure Food Act which prescribes that it must be normal, clean and sweet, and taken from a cow which is healthy, fcd properly and milked regularly. It must contain 85 per cent. of solids, not fat, and 3.2 per cent. of milk-fat and must be free from any added substance. During 1923 inspectors collected 15,360 samples of milk, and 672 or 4.4 per cent. were found to be below standard. Prosecutions were instituted in 297 cases and penalties in fines and costs amounting to £1,508 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.

About one-third 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 who receive it within a few hours of milking, but the proportion of 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 four distributing companies who take delivery from the producers at country railway stations. The time occupied by the journey from the most distant stations is about ten hours, the average time between milking and arrival in Sydney being between sixteen and twenty-four hours. The country milk is pasteurised before distribution, and in 1922-23 the companies distributed over 14,400,000 gallons of pasteurised milk in the metropolitan districts.

The prices of milk in Sydney have been doubled since 1901, as indicated in the following statement, which shows the wholesale price paid by the distributing companies to the farmer for milk delivered on trucks at country railway stations, and the retail price charged to the householder for country milk, and for fresh milk from the Metropolitan dairies. The prices were subject to Government control between 1915 and 1922:—

Year.	Year. Wholesale.		Retail.		Wholesale.	Retail.		
1 041.	W notesale,	Country.	Fresh.	Year.	w noiesnie.	Country.	Fresb.	
1901 1906 1911 1916 1917 1918	per gal, d. d. 6 to 7 6 ,, 7 6 ,, 9 8 ,, 12 10 ,, 12 10 ,, 15	$\begin{array}{c} \text{per qt.} \\ \text{d.} \\ 4 \\ 4 \\ 4-5 \\ 5-5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5 \\ 5$	per qt. d. 4-5 4 5 6 6	1919 1920 1921 1922 1923	per gal. d. d. 15 ¹ / ₂ ,, 21 ¹ / ₂ 14,, 18 13,, 17 13,, 15 13,, 17	per qt. d. $5\frac{1}{2}-7\frac{1}{2}$ $7\frac{1}{2}-8\frac{1}{2}$ $7\frac{1}{2}-8\frac{1}{2}$ $7\frac{1}{2}-8\frac{1}{2}$ $8-8\frac{1}{3}$	per qt. d. 6-9 8-10 8½-10 8½-9 9	

In 1923 the retail price for country milk was raised in April from 8d. to $8\frac{1}{2}$ d. per quart and was reduced to 8d. in August. The price of local milk was raised in June, 1922, from $8\frac{1}{2}$ d. to 9d. and has not since been altered. The wholesale price was raised from 1s. 1d. per gallon to 1s. 3d. in January, 1923, and to 1s. 5d. in April. In August the price dropped to 1s. 3d. per gallon.

Sugar and Jam.

The quantity of sugar consumed (104.4 lb, per head) appears high, though it was 107.8 lb. or 3.4 lb. higher in 1901. The average consumption, as estimated, includes 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 1922-23 show that 6,169 tons of sugar (6.4 lb. per head) were used for jam and canned fruit; 3,162 tons (3.3 lb. per head) for biscuits; 5,099 tons (5.3 lb. per head) in breweries; 3,197 tons (3.3 lb. per head) in aerated water factories; 7,926 tons (8.2 lb. per head) in making confectionery; and 1,890 tons (1.9 lb. per head) in making condiments; pickles, sauces, etc.

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. In 1915, however, a shortage occurred, and in view of war conditions, the Commonwealth Government assumed control of the supply and made arrangements for im-

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portation, when necessary, and for the distribution of the total supply at fixed prices. Government control ceased in June, 1923, but an embargo has been placed upon the importation of sugar grown by black labour.

The prices for refined sugar were fixed in July, 1915, at £25 10s, per ton wholesale, and 3d. per lb. retail; in January, 1916, wholesale £29 5s. per ton, retail 31d. per lb.; in April, 1920, wholesale £49 per ton, and retail 6d. per lb.; in November, 1922, the wholesale price was reduced to £42 per ton, and the retail to 5d. per lb. In October, 1923, the retail price of sugar in Sydney was reduced to $4\frac{3}{4}d$. 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 7:2 lb. per head. Of coffee, on the other hand, the average was only 11 oz. per head. The consumption per head of tea has declined by nearly 1 lb. during the last two years.

The tea consumed in New South Wales is imported mainly from Ceylon and Netherlands East Indies. During the three years ended June, 1923, the Netherlands East Indies furnished about 07 per cent. of the total importations; 34 per cent. was imported from Ceylon, 6 per cent. from India, and less than 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 Netherlands East Indies, and India, and the importation from the Dutch territories has increased considerably since 1913.

Vegetables and Fruit.

The potato is the chief article of diet in the vegetable group, but it is subject to great fluctuation 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 12¹/₄d. per 14 lb. In 1921 it was 1s. 4¹/₂d., and in 1923 the average was 2s. 5d.

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 in recent years the Tweed River district of New South Wales has become the chief source of supply. The local industry is protected by a duty of 1d. per lb.

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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, half the space being reserved for the use of growers, and the remainder let to agents.

On account of the numerous varieties and grades of fruit and vegetables, it is extremely difficult to ascertain satisfactory average retail prices, and on account of the large quantities grown in home gardens, it is, if anything, more difficult to estimate the local consumption. Moreover, details are not available regarding the production of the different kinds of vegetables in market gardens, the figures being included under a general heading.

Information relating to the wholesale prices of potatoes and of onions is shown in the chapter relating to agriculture, and the following statement shows, in regard to a few other varieties, the average wholesale prices in Sydney during the last seven years:—

Fruit and Vegetables.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
Apples, per bushel	9s. to 13s. 9s. 6d. 7s. to 13s. 9s. 6d. 9s. 6d. 7s. 16s. 6d. 9s. 6s. to 7s. 8s. 8s. 5s. to 6s.	8s.	10s. to 15s. 10s. to 17s. 13s. 13s. 13s. 10s. 6d. 23s. 12s. 10s. 11s. 6d. 11s. 8s.	10s.	11s. 8s. 14s. 9s. 11s. 12s. 18s. 12s. 7s. 6d. 12s. 7s. 6d.	12s. 9s. 6d. 10s. 6d. 11s. 13s. 6d. 15s. 6d. 22s. 6d 14s. 12s. 13s. 6d. 2s. 9s.	12s. 9s. 11s. 10s. 6d. 14s. 23s. 12s. 6d. 11s. 12s. 6d. 12s. 12s. 6d. 12s. 10s.

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.

From the prices of 100 commodities which include the majority of items of importance in the economic life of the State, the index numbers shown in the following tables have been compiled to show the movement in wholesale prices in Sydney since 1901. 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.

Further 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.

The wholesale price index numbers in various years since 1901 are shown in the following statements. The numbers for intervening years not included in the tables 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.

FOOD AND PRICES.

	Ι.	п.	111.	IV.	v .	VI.	VII.	VIII.	AII
Year. Agricul- tural Produce.	tural Groceries Co	Wool, Cotton, Leather, Jute.	Metals and Coal.	Building Materials	Meat.	Dairy Produce.	Chemi- cals.	Commodi ties.*	
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	1099	1000	1000	1000
1912	1339	1036	968	1001	1079	1323	1133	980	1129
1913	1069	1033	1043	1039,	1107	1379	1098	1003	1092
1914	1135	1016	1009	1079	1105	1669	1128	1220	1137
1915	1648	1099	976	1270	1137	2596	1349	. 1426	1401
1916	1163	1245	1367	1725	1241	2896	1380	1617	1489
1917	1127	1298	2093	2358	1421	3007	1440	1956	1727
1918	1377	1405	2614	2740	1635	2613	1487	2605	1933
1919	1930	1492	2501	2454	1879	2873	1718	2089	2090
1920	2430	1714	3079	2602	2415	3113	2236	2301	2503
1921	1750	1941	1471	2511	2259	1921	2020	1863	1956
1922	1638	1859	1628	2164	2074	1513	1735	1668	1800
1923	1720	1754	2017	2131	1994	2121	1939	1531	1925

The index numbers of each group and of all groups combined are as follows; it should be noted that the indexes are not comparable between groups except to illustrate the respective changes in price:—

* Weighted average.

Prices were at the lowest point at the beginning of the period under review, and with some fluctuation they rose slowly until 1911. Subsequently the upward movement was almost constant until 1920 when the index number was 150 per cent. higher than in 1911. The greatest increases were 23 per cent. in 1915, 16 per cent. in 1917, and 20 per cent. in 1920. In 1921 there was a decrease of 22 per cent., a marked drop having taken place in several groups, viz., wool, cotton, etc., 52 per cent., meat 38 per cent. and agricultural produce 28 per cent. In 1922 there was a further decrease of 8 per cent., and the index numbers were lower in all the groups except wool, etc., which rose by 11 per cent. Meat prices were reduced, on an average, by 21 per cent., with smaller reductions in the other groups.

In 1923 there was a rise in the general level of wholesale prices amounting to 7 per cent. The upward movement was greatest in respect of meat, which rose by 40 per cent., and in the textile group, where there was an increase of 24 per cent. Other classes with higher price levels than in the previous year were dairy produce, 12 per cent., and agricultural produce, 5 per cent. higher. In four classes there were decreases ranging from 8 per cent. in chemicals to 2 per cent. in metals and coal. Groceries were lower by 6 per cent. and building materials by 4 per cent.

The general level of wholesale prices reached the maximum in July, 1920, viz., 170 per cent. higher than in the year 1911; then the index number dropped steadily until February, 1922, when it was 36 per cent. lower. Then a slow upward tendency became apparent in consequence of higher prices in the textile group and of seasonal variations in regard to meat and dairy produce. The rise continued until September, when the movement became irregular, but the index number at the end of the year 1922 was 6 per cent. higher than at the beginning. In the early months of the year 1923 there was a slight downward tendency in the general level of wholesale prices. In March the prices in nearly all the groups commenced to rise and the highest level of the year was reached in July when the index number was 104 per cent higher than in the year 1911. Then it commenced to fall, the decline being very slow, except in October when there was a drop of 5 per cent. followed by a slight rise. The most striking feature of the monthly price levels of 1923 was the movement in prices of meat. They showed a decided decrease in February but commenced to rise rapidly in April and during a period of four months the index number of the group rose by more than 100 per cent. In September and October meat became much cheaper then the prices began to fluctuate with an upward tendency. The prices of wool, cotton, etc., rose steadily in the latter part of the year.

The movement month by month may be gauged from the following table which gives the monthly index numbers for each group since January, 1923:---

		I.	u,	III.	IV.	v .	VI.	V11.	VIII.	All
Month.		Agricul- tural Produce.	Groceries	Wool, Cotton, Leather, Jute.		Building Materials	Meat.	Dairy Produce.	Chemi- cals.	Commodí ties.
1923.		1997 - 1998 - 1997 - 1998 1997 -								
January		1669	1778	1934	2124	2006	1772	1734	1565	1847
February		1639	1779	1981	2122	2001	1488	1818	1559	1827
March		1730	1775	2010	2139	2009	1554	1912	1546	1864
April		1772	1769	1932	2146	2009	1524	2099	1513	1888
May		1796	1 69	1915	2145	2006	1900	2123	1528	1922
June		1860	1770	2026	2135	2005	2398	2077	1507	1995
July		1814	1770	2062	2116	1997	3007	1997	1530	2039
August		1702	1770	1906	2114	1997	3100	1974	1520	1998
September		1703	1768	2094	2120	1994	2688	1938	1514	1982
October		1672	1741	2103	2124	1965	1852	1877	1528	1882
November		1693	1680	2292	2137	1967	2174	1807	1528	1930
December		1604	16:0	2430	2147	1967	1998	1915	1531	1926
1924.	ļ									í
January		1594	1674	2384	2143	2017	2362	1825	1537	1948
February		1537	1676	2368	2147	2020	2275	1743	1587	1918
March	-	1417	1673	2306	2151	2021	2193	1720	1514	1873
April		1393	1675	2418	2136	20:0	1990	1706	I523	1859
May	***	1429	1679	2425	2132	1988	1859	1842	1533	1867
June	in	1443	1677	24.9	2115	1987	1922	1720	1539	1861

The movement in the prices of Australian products is compared with the changes in respect of imported goods in the following statement. The prices of local products are affected to a great extent by local seasonal conditions, though the prices of such commodities as wool, wheat, and metals are practically fixed in the countries to which they are exported in large quantities :--

Year.	Australian Products.	Imported Goods,	All Com- modifies.	Year.	Australian Products.	Imported Goods.	All Com- modifies.
•							
1901	903	906	904	1919	1993	2283	2090
1906	955	955	955	1920	2354	2799	2503
1911	1000	1000	1000	1921	1866	2136	1956
1916	1481	1569	1489	1922	1722	1950	1800
1917	1580	2003	1727	1923	1892	1987	1925
1918	1675	2433	1933				

The increase in the prices of imported goods between 1911 and 1920 was more pronounced than the rise in prices of local products. After the end of the war the prices of imported goods fell for a time, but the upward movement of the prices of local products continued. In 1921 the price-level of Australian products decreased by 21 per cent. and of imported articles by 24 per cent., and in 1922 there were decreases of 8 per cent. and of 9 per cent. in the respective index numbers. In 1923 Australian products increased in price by 10 per cent. and imported articles by 2 per cent.

The average wholesale prices in Sydney 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 except in the case of wool and cotton. For the former it was not practicable to determine an average commercial price for the years when the Imperial purchase scheme was in operation, and the average import value into Great Britain of Australian woel is stated instead. For cotton Liverpool (England) prices are stated.

A second s							
Commodity.	1901.	1911.	1914.	1920.	1921.	1922.	1923.
Wheat, milling busb.	s. d. 2 8	s. d. 3•6	s. d. 4 1*4	s. d. 8 7.2	s. d. 8 79	s. đ. 5 8	s. d. 5 3 ⁻ 4
Flour ton	126 5	169 9	188 5	370 7	386 7	246 9	223 4
Chaff, wheaten ,,	65 0	81 0	100 7	212 11	128 9	136 8	144 3
Hay, oaten	75 0	94 5	97 2	233 9	t51 11	177 8	\$77 10
Potatoes "	10 1 10	111 5	94 7	246 3	119 0	152 6	9,29 3
Sugar,	442 5	437 6	430 10	881 3	980 0	956 8	822 10
Tobacco, dark plug lb.	4 0	5 0	50	7 8-3	82	8 2	82
Теа : "	1 1 5	1 1 5	115	2 1.9	21	2 1	21
Soap 40 lb.	14 6	18 4	18 4	33 10·5	28 9	27 6	27 6
Jam., 20 ,,	96	6 10	7 10	13 3	14 5	14 5	14 1
Kerosere 8½ gal.	63	73	7 11	20 9.8	20 7-8	14 0.5	13 0-4
Cotten Ib.	0 4.7	07.	0 6 4	2 1.8	0 10-4	1 07	1 4.8
Wool ,,	083	0 10-8	0 11-2	2 0 4	1 1.5	1 2.5	1 7.2
Leather, sole,	0.9.9	1 17	1 27	2 9 2	1 11-2	1 9.3	1 10 6
Woolpacks each	1 11.6	24	\$ 7	6 3 5	3 8 6	4 4 4	4 04
Iron-Pig, local	84 7 269 2 360 10	78 4 233 4 346 8	81 0 265 4 -387 6	165 5 706 8 1239 7	182 6 696 8 979 2	150 0 526 8 663 4	146 8 386 4 645 0
Copper, sheet lb.	12	0 10°5	0 11.8	2 2 5	2 1.5	16	16
Coal ton	11 9	13 10	14 2	26 8	30 4.9	31 1	30 11
Hardwood, local (3 x 2) 100 lin. ft.	60	86	9 5·5	18 0	18 0	17 4	17 0
Pine-Local (4 x 1) 100 sup. ft. N.Z (4 x 1) , Oregon (2 x 2) ,	$\begin{array}{ccc} 17 & 0 \\ 20 & 3 \\ 12 & 6 \end{array}$	25 5 22 2 15 7	27 5 24 0 18 1-5	61 2 60 4 64 2	62 0 62 0 47 1	61 0 58 7 35 5	59 0 48 2 93 9
Brieks 1,000	33 6	42 0	45 O	60 9	68 0	71 9	72 4
Beef—Fores Ib. Hinds ,	$\begin{array}{ccc} 0 & 2 \cdot 4 \\ 0 & 3 \cdot 4 \end{array}$	$\begin{array}{c} 0 & 1.7 \\ 0 & 2.7 \end{array}$	0 3 0 3 9	0 4 9 0 8 5	0 2 2 0 5 6	0 1·4 0 4	0 2.4 0 5.3
Mutton "	0 2.2	02	0 3.7	0 67	0 4 2	0 3-9	0 5 6
Butter,	0 10 6	0 10 6	0 11 6	21	1 9.6	1 7 1	1 10.6
Eggs, new laid doz.	1 3.4	14	1 4.6	246	2 3.8	21	1 95
Cream of tartar Ib.	0 10 6	0 11 2	18	54	20	1 5.6	1 3.8

During 1923 there were decreases in the average prices of wheat, flour, sugar, eggs, jam, kerosene, wool packs, iron and timber. The commodities which were dearer than in the previous year included chaff, potatoes, butter, meat, cotton, wool and bricks. There was no change in the average prices of tea, tobacco, soap, copper. Coal was about the same price as in 1922.

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 1911 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. [Department of Labour.]	United Kingdom. [Board of Trade.]	United. States of America. [Bureau of Labour.]
Number of Commodities.	100	92	106	271	45-150	234-404
1901	904	974	937	840	883	833
1906	955	948	1022	942	921	927
1911	1000	1000	1000	1000	1000	1000
1916	1489	1504	1388	1429	1705	1336
1917	1727	1662	1564	1860	2220	1862
1918	1933	1934	1820	2185	2443	2041
1919	2090	2055	1845	2302	2708	2167
1920	2503	2480	2198	2657	3273	2378
1921	1956	1903	2084	1933	2100	1546
1922	1800	1758	1843	1761	1691	1567
1923	1925	1944	1814	1760	1694	1620

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. As compared with the wholesale prices in 1913, the index number in 1923 was higher in all the countries enumerated, viz., United States by 54 per cent.; United Kingdom, 59 per cent.; Canada, 65 per cent.; New South Wales, 76 per cent.; Victoria, 79 per cent.; and New Zealand, 80 per cent.

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 pronounced, especially in the case of perishable produce. For such information readers are referred to the "Statistical Registers," where the average monthly prices are shown.

FOOD AND PRICES.

ta da ser en este en este este este este este est										
Commodity.	1901.	1911.	1913.	1916.	1918.	1919.	1920.	1921.	1932	1923.
Devel Official	s. d.	s. d.	s. d.	(s. d. 0 4.0	s. d.	8. d.	s.d. 0 59	s. d.	s. d. 0 4.7	s. d.
Bread 21b. loaf		0 3.5	0 3.5		3 7.4	3 10 1	6 0.4	6 1.6	4 4 1	3 11.6
Flour 25lb.	1 11.0	2 9.0	2 10.0	3 6.1		1 80	2 4.5	1 10.7	1 11-2	2 1.8
Tea Ib.	1 30	1 35	1 3.8	1 61		1 7.8	2 2.8	1 11.6	1 11 2	2 0.0
Coffee ,,	1 5.0	1 50	1 5.5	1 6.0			0 5.4		0 5.8	0 4.9
Sugar,	0 2.3	0 2.7	0 2.7	0 3.5	0 3.5	0 3.5			0 3.6	0 33
Rice,	0 2.2	0 2.7	0 3.0	0 3*2	0 3.4	0 5.2			0 3.6	0 17
Sago,	0 2.2	0 2.7	0 2.7	0 3*2	0 4.7	0 5.4	0 5.6	0 3.6	0 10.7	
Jam (Australian),	0 4.0	0 44	0 5.0	0 6.0	0 5.7	0 6.0	0 9.1	0 10.0		0 10.1
Oatmeal 5 lb.	0 11.3	1 0.2	1 2.3	1 2.6	1 5.6	1 10.6	2 2.1	1 8.0		
Raisins lb.	0 6.5	0 6.2	0 6.4	0 7.7	0 8.2	0 8.7	0 10.7	0 11.5	0 11.6	0 10.9
Currants,	0 6.6	0 7 0	0 7.2	0 9.1	0 8.6	0 8.9	0 11 0	0 11 1	0 11 2	0 9.4
Starch ,	0 40	0 5.2	0 5.4	0 6.4	0 6*9	0 7.8	0 10.5	0 9.7	0 85	0 8.7
Blue 12 squares	0 9 0	0 9.0	0.6 0	0 9.2	1 3.6	1 5.0	1 5.0	1 4.7	1 4.7	1 48
Candles 1b.	0 5.5	0 6 5	0 6.5	0 8.0	0 10.4	0 11.3	1 2.2	1 1.0	0 11.5	0 11.1
Soap ,,	0 2.2	0 30	0 3.3	0 3.4	0 4.4	0 5.3	0 7.0	0 5.0	0 4 5	0 4.3
Potatoes	0 11 3	1 0.2	1 0.8	1 6.5	1 5.2	2 8.9	2 2.2	1 4.5	1 9.2	2 4 9
Onions lb.	0 1.4	0 0.7	0 13	0 1.1	0 2.8	0 2.7	0 8.0	0 1.2	0 2.3	0 1.8
Kerosene gal.	0 10.1	0 11.1	1 0.2	1 6.7	2 2.7	2 3.5	2 8.6	2 10.9	2 28	2 0.5
Milk-local quart	0 4.5	0 50	0 6.0	0 6.0	0 6.0	0 7:1	0 9.6	0 8.8	0 88	0.6.0
,, country ,,	0 4.0	0 4.5	0 52	0 5.1	0 5.8	0 7.0	0 7 9	0.7.8	0 7.8	0 8.2
Butter lb.	1 0.2	1 1.7	1 1.8	1 5.3	1 7.0	1 9.9	2 4.4	2 0.7	1 10.2	2 1.8
Cheese ,,	0 7.5	0 8.7	0 9.5	1 0.1	1 1.3	1 3.8	1 5.5	1 3.9	1 1.9	1 64
Eggs, Fresh doz.	1 3.0	1 3.5	1 5.1	1 6.4	1 5.8	1 10.7	2 6.9	2 6.5	2 2.9	1 10 4
Bacon, Middle Cut Ib.	0 90	0 10.5	1 0.7	1 4.5	1 4.5	1 6*3	1 11.9	1 10.9	1 7.4	1 8.3
Shouldor	0 6.5	0 7.0	0 8.7	1 0.4	0 11.5	1 2.0	1 6.1	1 4.5	1 0.7	1 1.2
Uom	0 11.0	1 i o	1 2.0	1 5.5	1 5.9	1 81	2 20	2 0.9	1 9.9	2 0.9
Roof Sirloin	0 4.5	0 4.5	0 5.0	0 11.1	0 10.2	0 11.1	0 11.5	0 9.1	0 8.2	0 9.0
Diba	0 3.8	0 3.8	0 4.5	0 9.5	0 9.2	0 9.4	0 9.9	0 67	0 5.6	0 7-0
Chenter	0 2.0	0 30	0 3.5	0 7.6	0 7.2	0 6.3	0 7.2	0 4.8	0 2.8	0 3.8
Stoal Dum	0 7.0	0 7.0	0 7.9	1 1.8	1 2.8	1 4.0	1 4.9	1 2.0	1 0.9	1 2.0
Chouldon	0 3 5	0 3 5	0 3.5	0 85	0 8.8	0 9.1	0 10-1	0 6.9	0 4.7	0 5.8
Deef (Jermond Thermal	0 4.0	0 4 0	0 4.4	0 9.6	0 9.0	0 9.6	0 10.2	0 81	0 6 5	0 6.6
Matten Low	0 3.2	0 30	0 3.3	0 7.8	0 7.8	0 7.8	0 8.8	0 6.9	0 5.9	0 74
Shouldon	0 2.8	0 2 5	0 3.1	0 6.7	0 6.8	0 6.7	0 7.2	0 5 2	0 4.1	0 5.4
Loin	0 3.8	0 3.8	0 4.0	0 7.9	0 8.4	0 8 6	0 9.3	0 7.6	0 65	0 8.4
Noal	0 3.2	0 30	0 3.5	0 7.0	0 6.9	0 7.0	0 7.4	0 5.4	0 3.6	0 4 5
Chopg Loin		0 4.0	0 4.7	0 90	0 10 0	0 10 4	0 10 5	0 8.6	0 8.5	0 10 0
Log	$\begin{vmatrix} 0 & 4 \cdot 2 \\ 0 & 3 \cdot 8 \end{vmatrix}$	0 3.8	0 4.7	0 8.6	0 9.1	0 93	0 10 0	0 81	0 7.4	0 87
North	0 3 2	0.30	0 4.0	0 7.3	0 6.8	0 7.4	0 83	0 6.4	0 5.5	0 64
Doult Low	1			1 0.1	1 1.3	1 1.2	1 5.4	1 34	1 07	1 14
Pork, Leg,		0 7.8				1 2.1	1 60	1 58	1 20	1 2.4
Chops,	0 6.8	0 8.5	0 9.0	1 0.1	1 2.6	11 21	LT 00	11 0.0	-1 40	

The annual average of the retail prices of most food commodities reached a maximum in 1920, and prices in the following year were much lower. There were exceptions, however, and the upward movement was continued during 1921 in regard to the prices of commodities which are amongst the most important articles of diet, viz., bread, flour, sugar, jam, and milk. In 1922 the prices of nearly all the items, except tea, sugar, jam, potatoes, milk, and dried fruits, were lower than in the previous year. Potatoes were very dear in 1923, and there was a rise in the prices of meat and of dairy products; also of tea, coffee, sago, and starch.

HOUSE RENTS.

The average amount of rent paid by tenants of various types of houses in Sydney and suburbs in 1901 and later years is shown below. The figures represent the average predominant rents per week paid for each class of house. 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.

Year.	Under Four Rooms.	Four Rooms.	Five Rooms.	Six Rooms.	Seven Rooms.	Over Seven Rooms.	Weighted Average.
1901 1906 1911 1916 1917 1918 1919 1920 1921 1922 1923	$\begin{array}{c} \text{s. d.} \\ \text{9 0} \\ \text{9 2} \\ 111 4 \\ 12 3 \\ 12 3 \\ 12 6 \\ 12 8 \\ 13 10 \\ 14 2 \\ 15 5 \end{array}$	s. d. 11 1 11 7 14 5 14 8 14 9 15 4 15 9 17 8 18 4 19 6 19 10	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	s. d. 19 1 19 1 23 3 24 6 24 6 24 11 25 8 28 4 29 7 31 2 33 3	s. d. 22 2 22 6 26 10 29 8 29 4 29 7 31 2 34 3 35 9 36 3 39 4	s. d. 13 5 13 11 17 0 18 11 19 0 19 6 20 1 22 1 23 0 24 0 25 3

Note.-Kitchen is included as a room,

Between 1901 and 1914 rents in Sydney and suburbs increased by nearly 50 per cent., but the war had a steadying effect, and the next three years showed a slight decrease. The operations of the Fair Rents Court in Sydney tended to keep rents from rising above pre-war level; and regulations were issued by the Commonwealth Government under the War Precautions Act, prohibiting any increase in the rent of a house occupied by a member of the Expeditionary Forces, or by a parent or female dependent of a member, except by leave of a competent Court.

In 1918, however, the rents began to increase owing to a shortage of houses, the deficiency being attributed to the practical cessation of investment building, on account of the high price of both materials and labour. In 1920 there was a marked increase in building activities, but the supply was still short of the demand, and there was a rise of 10 per cent. in the average rental during the year. There was a further rise of 4 per cent. in each of the two following years, and of 5 per cent. in 1923, when the average was more than 25 per cent. higher than in 1914. The increase in 1923, however, occurred in the earlier part of the year, and the average remained constant during the period of nine months, April to December.

Information was collected at the Census of 1921 regarding the rents paid in various localities throughout the State, and the following statement contains a summary of the particulars relating to the rentals of private dwellings (excluding tenements, flats, and boarding-houses) containing from 3 to 6 rooms and occupied by tenants at the date of the Census, 4th April, 1921:--

	8 × 17	Average Bontal Values, 4th April, 1921.							
Districts.	Three B	Three Rooms.		ooms.	Five Room	s. Six Rooms.	Three to Six Rooms		
Metropolitan Urban Provincial Rural	10	d. 8 5 5	s. 17 12 9	d. 1 3 6	s. d. 20 10 14 4 11 0		s. d. 19 9 13 10 10 6		
Total, New South Wales .	. <u>n</u>	3	14	2	17 1	20 8	16 4		

The average rental values for the very small houses in the Metropolitan district at the Census in April, 1921, was somewhat lower than the average rentals in the year 1920, as shown in the preceding table of annual averages, though rents were rising slowly at that time. The difference is due to the fact that the Census records relate to all houses in the groups specified, while the annual averages relate to the predominant rents of ordinary houses in a fair situation, and in a good state of repair, exclusive of those whose value is enhanced by reason of favourable situation, or other special circumstances, and of houses which are old or inconveniently situated. Apparently the latter description applies to a larger proportion of the very small than of the larger houses.

In the Metropolitan district the average rental of houses containing from 3 to 6 rooms ranged from 13s. 9d. in Botany to £1 8s. 1d. in Manly. In the densely populated areas close to the city the average was from 15s. 2d. to 17s. 6d. In the residential suburbs within half-an-hour's journey along the western railway and tramway lines, the average was generally between £1 and £1 3s. In the suburbs clustering around the southern shores of the harbour and near the ocean beaches to the south of Port Jackson, the average was from £1 3s. to £1 6s. 6d. The average in the northern suburbs with access to the shores of the harbour or ocean was from £1 2s. per week to

£1 8s. per week. Along the Illawarra suburban railway line the rents showed a tendency to decrease as the distance from the city increased, the average in the nearer suburbs being about 20s. per week. Beyond the metropolis in the industrial areas from Lidcombe to Parramatta, the average was between 15s. 3d. and 16s. 9d.

In the district of Newcastle the average in the city was 17s. 9d. The more populous of the surrounding municipalities showed the following rates, viz., Waratah 19s. 2d., Hamilton 18s. 8d., Wickham 15s. 4d. The lowest average, 8s. 6d., was in Wallsend, distant 8 miles from the city, and in the other municipalities the average ranged from 10s. 9d. to 14s. 8d., except in Stockton, where it was 16s. 1d.

The average rentals in other important centres of population at the Census of 1921 were as follows:—Broken Hill 11s. 10d., Lithgow 15s. 8d., Goulburn 17s. 9d., Maitland, 11s. 9d., Bathurst 13s. 8d., Lismore 16s. 1d., Albury 17s., Wagga 17s. 3d.

Cost of Building.

The increased cost of building has been an important factor in causing the upward movement in house rents. The extent of the increase is indicated in the following comparison which shows the cost of building in Sydney, in various years since 1901, a plain brick cottage with 4 rooms, kitchen, bathroom, pantry, and back and front verandahs, complete with bath, laundry fittings, gas stove, fencing, water and sewerage. No allowance has been made for the builder's profit, and the cost of the land has not been included. The comparison is based on the assumption that award rates of wages were paid and that the quantity of materials and of labour, as in the month of July, was equal in each year, except that in the three years 1921-24, the estimates are based on the prices and rates ruling in the month of June.

Year.		Cost of-			on of Total ost.		Index-number of Cos 1911=1,000.			
1ear.	Materials.	Labour.	Total.	Materials.	Labour.	Materials.	Labour.	Total.		
	£	£	£	per cent.	per cent.					
1901	181	100	281	64	36	797	833	810		
1911	227	120	347	65	35	1000	1000	1000		
1914	255	133	388	66	34	1123	1108	1118		
1920	483	221	704	69	31	2128	1842	2029		
1921	482	225	707	68	32	2123	1875	2037		
1922	449	220	669	67	.33	1978	1833	1928		
1923	441	208	649	68	32	1943	1733	1870		
1924	449	212	661	68	32	1978	1767	1905		
	<u> </u>			1)					

Between 1901 and 1911 there was an increase of 23 per cent. in the cost of building, with a further rise of 12 per cent. during the succeeding three years. In 1920 the cost was 81 per cent. above pre-war level, and it was slightly higher in the following year, then a decrease of about 5 per cent. occurred. The cost of materials increased more than wages until 1920. Since that year materials and labour have become cheaper.

Particulars are given in the chapter relating to Social Condition concerning the number of new buildings erected and schemes for assisting people to build dwellings.

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.

The Act and its amendments provide for the determination of rents of dwellings leased for a term not exceeding three years, at a rent not exceeding £156 per annum, and of dwellings which had been let during the period of six months prior to the passing of the Act, at a rent not exceeding £156 per annum. It does not apply to houses ordinarily leased for summer residence. 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.

In accordance with the provisions of the Act, the fair rent is 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, taxes, repairs, maintenance, insurance, and depreciation. The capital value is 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, and, it has 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. It is prescribed, however, that, excepting where circumstances are proved which render an increase equitable, the fair rent may not exceed the rent which was charged for the dwelling on 1st January, 1915, and in the cases of dwellings leased at that date the Court allows only such increases as are necessary to cover increases in respect of rates, taxes, repairs, etc.

The determinations of the Court remain in force for a period not less than twelve months and not longer than three years as specifically stated, notwithstanding change of ownership or tenancy. During the pendency of an application or the period of six months after decision, the lessor may not determine the lease without reasonable cause if the lessee performs the conditions of his lease. The Court usually fixes the rentals for a term of twelve months.

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 applies promptly upon receiving notice of the landlord's intention to increase the rent, the "fair rent" as determined by the Court may be recorded as an increase on the rent at date of application, whereas it is 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, 1924, numbered 5,741, of which 2,458 were withdrawn or struck out, and in 3,283 cases the rentals were fixed. In the country districts the number of cases was comparatively small. Only 194 were concluded between August, 1920, and 31st December, 1923, 86 were withdrawn, and in 23 cases the rent was fixed as at date of application, in 45 it was reduced, in 40 it was increased. Further details regarding the number of cases are shown in the chapter relating to Law Courts.

The determinations of the Metropolitan Court in respect of cases in which the rentals were fixed during the year 1923-24 and during the period of

	Yeau	ended 31st	March, 192	24.	То	ial to 31st M	larch, 1924.	
Rent (at date of Application).	Fixed as at date of Applica- tion.	Increased.	Reduced.	Total.	Fixed as at date of Applica- tion.	Increased.	Reduced.	Total.
10s. and under		3		3	13	17	15	45
10s. 6d. to 12s. 6d.	2	9	12	23	25	62	71	158
133. to 158.	28	19	11.	38	74	156	214	444
15s. 6d. to 17s. 6d.	2	43	16	61	70	199	195	464
18s. to 203	9	37	54	80	- 111	196	230	537
20s. 6d. to 25s	29	17	58	104	133	321	318	772
25s. 6d. to 30s	15	17	50	82	62	157	205	424
30s. 6d. to 40s	7	5	57	69	29	64	194	287
40s. 6d. to 50s	3	7	20	30	12	19	76	107
50s. 6d. to 60s		1	6	7	6	2	28	36
Over 60s	•••		4	4	••••		9	9
Total ,	75	138	288	501	535	1,193	1,555	3,283

eight years since the commencement of its operations, are summarised in the following table :---

During 1923-24 the Court granted increases in 27 per cent. of the decisions, and reductions in 58 per cent. The total increases to 31st March, 1924, represented 36 per cent., and the total reductions 48 per cent.

The majority of dwellings affected by the decisions of the Court were small, and the rents did not exceed $\pounds 1$ 10s. per week. The average of the rentals reviewed in the Metropolitan Court during the year ended March, 1924, was 25s. 7d. per week, as compared with 25s. 1d. in the previous year.

The amount of reduction and of increase in the rents of dwellings in the Metropolitan district during the year 1922-23 may be seen in the following statement:—

Amount of Reduction, or of Increase.	Rents Increased.	Rents Reduced.	Amount of Reduction, or of Increase.	Rents Increased.	Rents Reduced.
6d. and under.	19	6	5s. and under 6s.	4	19
ls. ,, ls. 6d.	34	32	6s. ,, 7s. 6d.	7	18
s. 6d. " 2s.	7	14	7s 6d. ,, 10s.	6	39
2s. ,, 2s. 6d.	15	27	10s. ,, 15s.	1	27
e. 6d. ,, 3s.	16	28	15s. and over	1	17
ls. ,, 4s.	- 22	25			
ls. ,, 5s.	6	36	Total	138	288

The reductions during 1923-24 amounted to a sum of £83 3s. 1d. per week, which represents an average of 20.6 per cent., or 5s. 9d. per house per week. In 138 cases the rents were increased, the total increases amounting to £17 16s. 6d. per week, equal to 12 per cent., or 2s. 7d. per house.

The weekly rents reviewed by the Court during 1923-24 amounted in the aggregate to a sum of £610 12s. 1d., the net reduction being £65 6s. 7d., or 10.2 per cent.

RETAIL PRICE INDEX NUMBERS-FOOD AND RENT.

The index numbers of the prices of food and of rent shown in this section should not be used as a complete measure of variations in the cost of living, as 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. In measuring a movement in prices over a period of years, changes in dietary each year cannot be taken into account in computing the index numbers. The price of each food commodity must be weighted over a series of years in accordance with its relative importance in a fixed regimen as determined in or around the basic year. In reviewing prices over a long period there is a probability of a discrepancy between the rise or fall of the index numbers and the increase or decrease in the actual expenditure of a household on food. During abnormal years, when violent fluctuations in prices and supplies necessitate changes in the kinds, quality, and relative quantities of the various foods, and an adjustment of the family dietary, the discrepancy is likely to be wider than under normal conditions. Variations in the cost of food on the basis of a changed regimen are shown on page 377.

The index numbers of food and groceries, as shown below, are based upon the retail prices of forty commodities in every-day use, which are shown in the table on page 369, and the prices have been weighted according to the average annual consumption in the years 1906–10.

In the 1920 issue of the "Year Book," the retail price index numbers of food and rent in Sydney in each year from 1864 to 1920 were published, with a brief review of industrial conditions during the period. 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 :---

				Index	Amount required in each period to purchase the same			
	Yea	r.		Food and Groceries.			quantities of Food and Rent as would have cost, on the average, 20s. in 1911.	
			i	1		1	s. d.	
1901				896	789	848	17 0	
1906	••••	·	• • • •	967	819	901	18 0	
1911				1000	1000	1000	20 0	
1916				1503	1113	1328	26 7	
1917				1550	1118	1356	27 1	
1918				1560	1147	1375	27 6	
1919				1763	1181	1502	30 0	
1920				2121	1299	1752	35 0	
1921				1899	1353	1654	33 1	
1922				1743	1412	1594	31 11	
1923				1842	1485	1682	33 8	

Prices of food are affected largely by seasonal conditions, but, even before the war, the trend of prices was generally upwards, and when a bad season, e.g., in 1902 and in 1908, caused a marked rise, prices did not fall to the former level with the return of good seasons. The upward movement, being world-wide, cannot be ascribed to local causes. Rents also rose steadily during the period of prosperity which preceded the war.

In 1914 and subsequent years, when drought, enlistments, and disorganisation due to the war steadily reduced the productive activity of the population, prices rose abnormally on account of a strong oversea demand for raw materials, and of a scarcity of manufactured goods. From 1918 to June, 1920, unseasonable conditions existed, and the year 1920 marked the beginning of a general process of deflation.

In 1921 a favourable season was experienced and the wheat harvest was marketed at a high price, but the effects of world wide commercial and industrial depression were apparent, causing unemployment in many industries. A drop occurred in the prices of food and groceries, and the index number declined by 10 per cent.; rents continued to rise, and the cost of food and rent combined was 6 per cent. lower than in the previous year In 1922 the index number of food and groceries showed a further decline of 8 per cent., but rents rose by 4 per cent., and the index number of both groups combined was lower by 4 per cent. than in the previous year. In 1923 the price index of food and groceries was 5.5 per cent. higher, and rents were 5.2 per cent. higher, than in 1922.

The variations in the retail prices of food and groceries and in rents in each month since January, 1913, are shown below in comparison with the prices in July, 1914, the month before the outbreak of war.

Information regarding rent is obtained quarterly, therefore it has been assumed that the average rent for the quarter was the rent for the middle month of the quarter, and figures for the intervening months have been interpolated. The retail prices and rents in July, 1914, have been taken as a base and called 1000.

Year.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.
	··· ·			F	ood and	Groceri	es.			1		
1913	937	954	970	963	943	958	953	939	938	932	935	933
1914	953	984	1017	1007	1000	1003	1000	998	985	981 /	967	1027
1915	1049	1040	1057	1082	1119	1175	1269	1391	1332	1338	1273	1300
1916 1917	1288	1328	1313	1293	1310	1313	1336	1316	1316	1306	1316	1310
1917	1313	1338	1343	1348	1324	1316	1321	1381	1410	1405	1377	1359
1918	1372	1376	1362	1352	1362	1351	1343	13 H	1328	1368	1397	1426
1919	1470	1494	1512	1507	1519	1523	1529	1534	1518	1585	1639	1634
1920	1651	1698	1708	1812	1831	1912	1961	1963	2014	1930	1895	1858
1921	1852	1839	1760	1686	1649	1654	1629	1618	1608	1577	1557	1591
1922	1484	1461	1460	1482	1503	1498	1558	1595	1587	1553	1535	1545
1923	1547	1511	1499	1568	1586	1640	1665	1681	1689	1633	1652	1631
1924	1615	1561	1558	1530	1546	1507	1492		(₁ 1		r I	6 . A .
					Re	nt.						
1913	946	946 (946 (971 (971	971	971	971	971	992	992 (992
1914	992	932	996	1000	1000	1000	1300	1000	1000	1000	988	975
1915	959	954	950	946	946	946	946	946	946	946	942	938
1916	938	938	938	942	942	942	943	942	942	942	942	942
1917	912	942	942	942	9+2	942	942	942	942	946	850	954
1918	959	963	967	975	975	975	971	971	971	975	979	988
1919	988	988	983	938	992	936	1000	1004	1008	1012	1021	1029
1920	1016	1062	1079	1104	1101	1204	1104	1100	1100	1133	P138	1133
1921	1137	1137	1137	1137	1137	1141	1145	1149	1154	1154	1158	1)62
1922	1170	117+	1178	1185	1191	1197	1197	1199	1201	1201	1203	1212
1923	1220	1232	1245	1257	1266	1263	1 266	1236	1266	1266	1266	1270
1924	1278	1286	1290 I	- I F					. 1	·	÷ j	
						- · · ·						
			. Saus			Rent co						
J913	941	950	959	966	956	964	§61	953	953	960	961	960
1914	971	987	1007	1004	1000	1001	1000	999	992	990	977	1003
1915	1008	1001	1008	1020	1040	1071	1121	1188	1156	1159	1122	1134
1916	1128	1148	1142	1133	1142	1144	1156	1145	1145	1140	1145	1142
1917	1144	1157	1160	1163	1050	1145	1148	1180	1196	1196	1182	1174
1918	1183	1187	1181	1180	1185	1179	1173	1155	1165	1189	1206	1224
1919	1250	1263	1273	1270	1278	1282	1288	1292	1286	1324	1357	1358
1920	1374	1408	1421	1489	1499	1548	1570	1569	1597	1566	1542	1527
1921	1525	1518	1475	1435	1415	1404	1468	1404	1401	1383	1374	1346
1922	1341	1330	1331	1346	1360	1361	1393	1414	1411	1392	1384	1393
1923	1398	1384	1383	1426	1440	1469	1433	1492	1496	1465	1475	1466
1924	1461	1435	1436	ji ∙		۱. I	6 - I	10 A.			6 j	È.

In regard to food prices, the highest point was reached in September, 1920, viz., 101 per cent. above July, 1914. Subsequently the prices of food declined in each month until in March, 1922, they were lower than in February, 1919. Then the index number began to move upwards with some fluctuations until August, when it was higher than in any month since September of the previous year. The most pronounced movement took place in July, when such important commodities as milk, butter, and potatoes became much dearer. In 1923 food became dearer in April when was an increase in such important items as dairy products. In May meat prices began to increase rapidly in consequence of beneficial rains which terminated a period of drought in many pastoral districts. As graziers needed sheep and cattle for restocking, meat supplies became scarce, and the price level, which in April was only 17.2 per cent. above the pre-war figure, rose by 36 per cent. before it dropped again in October. At the end of the year meat prices were, on the average, 48 per cent. higher than in June, 1914, and other foods were 68 per cent. above that level.

Rents declined slowly from November, 1914, until the end of 1915, and they did not regain the pre-war level until July, 1919. Subsequently there was a gradual increase until the second quarter of 1923 when the average remained stationary at a high level, viz., 26.6 per cent. higher than in July, 1914. In 1924 the upward movement recommenced.

Comparison with other Countries.

The following statement shows the extent to which the war affected 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:—

	I	Percentage	e Increase	s in Retai	l Food Pri	ces since	July, 191	4.
Country,	July, 1917.	July, 1918.	July, 1919.	July, 1920.	July, 1921.	July, 1922.	July, 1923.	May, 1924.
New South Wales	32	34	53	96	63	56	66	55
Victoria	29	33	44	108	68	54	81	54
Queensland	31	41	63	99	67	51	63	60
South Australia	12	25	35	92	48	43	54	47
Western Australia	13	11	42	63	50	37	41	41
Tasmania	24	34	40	84	68	50	57	55
Australia	26	31	47	94	61	43	64	51
New Zealand	27	39	44	67	64	44	42	50 Apl
South Africa	28	34	39	97	39	16	16	22 Mar.
Holland (Amsterdam)	42	76	110	111	80	40	36	41 Feb
United States	43	64	86	115	45	39	44	41 Mar.
Canada	57	75	86	127	48	38	37	37 Apl.
United Kingdom	104	110	109	158	120	80	62	63
Denmark	66	87	112	153	136	84	88	94 Jan.
Sweden	81	168	210	197	132	79	60	59 Apl.
Norway	114*	179	189	219	195	133	118	140 Apl.
Italy (Milan)	110	221	201	345	406	392	396	424 Apl.
France (Paris)	83	106	161	273	206	197	221	280 Apl.

* June.

The price level of food commodities in New South Wales in recent months has been higher in comparison with July, 1914, than in the other Australian States except Queensland and Tasmania. The index numbers shown above may not be used for exact comparisons between countries owing to differences in the scope of the data, and in methods of compilation, but they indicate that the highest level in most of the countries cnumerated was reached in 1920.

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. The weight to be assigned to each group 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 living wage determination made by the Board of Trade 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. In comparison with these propertions the standard adopted by the Commonwealth Basic Wage Commission in 1920 is similar in respect of food, rent, and fuel, but the proportion is higher for clothing and lower for miscellaneous items. The Commission's standard was as follows: food and groceries, 40 per cent.; rent, 19 per cent.; fuel and light, 4 per cent.; clothing, 23 per cent.; miscellaneous, 14 per cent.

Cost of Food-Change in Regimen.

The index numbers on page 374 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, and 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 1923 is assumed to have been equivalent to the general average per head of population as shown on page 357, 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 potatocs, 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.

				1914,				1923.	
Article.		Unit of Quantity.	Weekly Consump- tion.	Average Price.		ekly ost.	Weekly Consump- tion.	Average Price.	Weekl Cost
				d.	s.	d.		d.	s
Beef		lb.	12.8	5.3	5	7.8	11.8	7.6	7 5
Mutton		lb.	8.1	4.8	3	2.9	7.5	7.2	4 6
Pork		lb.	•3	10.3	1	3.1	•4	13.9	5
Bacon and Ham		1b.	•9	11.0		9.9	9	18.3	14
Fish-Fresh, etc.		1b.	.8	9.5	}	7.6	.9	17.5	1 3
" Preserved		lb.	•4	10.5		4.2	.3	18.1	5
Potatoes		lb.	14.4	.9	1	1.0	11.3	2.1	111
Flour		lb.	4.0	1.4		5.6	4.0	1.9	7
Bread		2lb. loaf	10.0	3.2	2	11·0	9.2	4:7	3 7
Rice		lb.		3.0	-	2.4	5	4.9	i
Sago and Tapioca		1b.	•2	2.7		ិ៍ភ្នំ	•2	3.3	
Oatmeal		lb.	.5	26		1.3	·5	4.0	2
Sugar		lb.	6.0	2.7	1	4.2	60	4.9	2 5
Jam		lb.	1.6	5.0	1.1	8.0	1.0	10.1	10
Butter		1b.	2.9	14.2	3	5.2	2.8	25.8	6 0
Cheese		1b.	~·3	10.6	ľ	3.2	-3	18.4	5
Milk—Fresh		qt.	7.7	5.3	3	4.8	8.0	9.0	6 ŏ
Top		lb.	7	15.8	1.	11.1	.7	25.8	1 6
Coffee	•••• •••	oz.	1.3	1.1		1.4	1.2	Ĩ` š	1
Total			·		25	11.2	·		39 7

The weekly expenditure on the commedities enumerated rese from 25s. 114d. in 1914 to 39s. 74d. in 1923—an increase of 53 per cent. The meat bill increased from 9s. 114d. to 13s. 10d., while the expenditure on milk and butter rose from 6s. 10d. to 12s. 04d.

Taking rent into consideration—the average being 20s. in 1914 and 25s. 3d. in 1923—the total weekly expenditure was 45s. 114d. as compared with 64s. 104d., and the increase per week during the period amounted to 18s. 11d., which represents 41 per cent.

The price level of food in 1923, computed on the same basis as the index numbers shown in the table on page 374, is found to have been 62 per cent. higher than in 1914, and of food and rent combined 46 per cent. higher. The differences from the increases quoted above, viz., 53 and 41 per cent. respectively, are due to the fact that in computing the price levels the regimen was assumed to be constant. In other words it may be said that the increases in food prices and rent would have increased the average household expenditure on food and rent by 46 per cent. between 1914 and 1923, if that household had purchased the same quantities of the commodities in each year, whereas, owing to decreased quantities being consumed in the later year, the actual increase in expenditure was 41 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 shelter. 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.

The lists sent to the firms included forty-two of the principal articles of clothing for a man, woman, school boy, school girl, and a young child (not an infant in arms); also fourteen items of piece goods, sewing cotton and knitting wool. 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 each item 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 quotations of each firm to represent the annual replacements for a man, a woman, and for each child, the replacements of the various articles being approximately the same as those in the indicator list used by the Australian Basic Wage Commission in 1920. An average was taken of the January and July budgets for each unit of the family to obtain an average for each year. The averages were added to obtain an annual expenditure for a family, and the aggregates were used as the basis of the following index numbers, which were rounded-off and related to 1914 = 100.

Year.	Ind	lex Number.	Year.	Inde	x Number	
1914		100	1919	 	190	
1915	·	110	1920	 	215	
1916		120	1921	 	200	
1917	<i></i>	140	1922	 •••	175	
1918	·	160	1923	 •••	165	

The index numbers show that the cost of clothing rose by about 10 per cent. during 1915 and 1916, and the rate of increase was more rapid in the following years until 1920, when the index number was 115 per cent. higher than in 1914. In 1921 there was a decline which brought the prices back to a level just double the prices in 1914. In the succeeding years there were successive reductions of 12 per cent. and 6 per cent.

The method of taking as a basis of a price index 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 The period slowly and would not vary appreciably within a decade. 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 an expansion of the currency, heavy Government expenditure and an improvement in the return from primary production, created an atmosphere of artificial prosperity, and as wages increased it is reasonable to suppose that a higher standard of clothing became general amongst the majority of the In 1920 it became apparent that prices had reached a population. maximum, and consumers began to restrict their purchases in expectation of a decline.

The position in regard to clothing was affected in 1921 by excessive importations, but merchants, faced with the difficulty of selling a large supply of goods on a falling market, endeavoured to avoid drastic reductions in respect of goods which they had purchased when prices were abnormally high.

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. Kerosene and gas were cheaper in 1923 than in the previous year. Kerosene is included in the list of food and groeries, and the average retail prices are shown on page 369. Gas for household use in Sydney was raised by various increases from 3s, 6d. per 1,000 cubic feet in July, 1914, to 5s. 9d. in November, 1920. In 1922 the price was reduced to 5s. 8d. on 1st May and to 5s. 6d. on 4th August. On 1st January, 1923, a further reduction of 2d. per 1,000 cubic feet was made. Coal was about 75 per cent. dearer in 1923 than in 1914, having risen from 24s. 6d. per ton to 43s. 7d. in 1922. The price receded slightly during the year 1923. Firewood has increased from 28s. per ton in July, 1914, to 45s. in 1923.

Almost all the items of miscellaneous expenditure have become dearer; for instance, fares by train, train, 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, when the last important alteration was made. A slight reduction was made in May, 1924. Train fares up to 31st March, 1914, were charged at the rate of 1d. per section, then the fare for the second section was raised to $1\frac{1}{2}d$, the fare for two or more remaining unchanged. Since 6th November, 1920, train far-s have been charged at the following rates:—One section 2d., two sections 3d., three sections 4d., four sections 5d., five and six sections 6d. Increases have been made also in the fares charged on the majority of Sydney Harbour ferry routes. For instance, the monthly season ticket rates from Circular Quay to Milson's Point, were raised by successive increases from 4s. 9d. for men in July, 1914, to 8s. in August, 1921, when they reached the highest rate. The corresponding charges for women's tickets were 3s. 6d. and 6s. 9d. In August, 1922 a reluction of 1s. 3d. was made in respect of both rates, but in October, 1923, the prices were restored to the level of August, 1921. 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.

For postage, additional charges were imposed on letters, etc., in October, 1918, and further increases were made in October, 1920, when letter rat's were raised by $\frac{1}{2}$ d. per $\frac{1}{2}$ oz., and fees for telephone calls, except in small country exchanges, were increased by 25 per cent., and increases ranging up to 50 per cent. were mide in the charges for telegrams. Postal charges were reduced in October, 1923, the charge for letters being fixed at $1\frac{1}{2}$ d. per oz. Contributions to friendly societies amounted on an average to about 1s. 3d. per week in 1914 and to 1s. $7\frac{1}{2}$ d. in 1923. 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. since 1914. The average price of plug tobacco of popular brand was 10s. 6d. per lb. in 1923, as compared with 6s. in 1914.

Index numbers to represent the variations in the cost of fuel and light used by a family of moderate means are shown below. They have been calculated by weighting the average prices of coal, firewood, and gas, in accordance with the quantity consumed annually. The index numbers of miscellaneous items are approximate only, being based on the items enumerated above. Prices in 1914 were taken as a base and called 100.

Year.	Cost of Fuel.	Cost of Miscellaneous Expenses.	Ycar.	Cest of Fuel,	Cost of Miscellanecus Expenses.
1914	100	100	1919	130	115
1915	102	103	1920	140	140
1916	105	102	1921	160	145
1917	115	105	1922	165	140
1918	120	110	1923	165	135.

Increases in the cost of fuel and light up to 1921 were somewhat lower than the increases in food prices, and the index numbers continued to rise until the following year. Miscellaneous items apparently increased slowly until 1920, when they were about 40 per cent. above 1914 prices, and a further rise occurred in the following year. The index number has since dropped below the 1920 level.

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 weights applied in the following table are as follow:—Food and grocerics 41, rent 20, clothing 20, fuel and light 4, miscellaneous items 15. They represent an approximate mean of the ratios in the official standards of the Sydney living wage fixed by the Board of Trade in 1919 and the Sydney cost of living wage as determined by the Basic Wage Commission in 1920. It is not claimed that the results are an exact

Year.	Food and Groceries.	Rent.	Clothing.	Fuel.	Miscellaneous Items.	General Increase in Cost of Living since 1914.
1914 1915 1916 1917 1918 1919 1920 1921 1922 1923	$\begin{array}{c c} 100\\ 121\\ 132\\ 136\\ 137\\ 155\\ 166\\ 167\\ 153\\ 162\\ \end{array}$	100 95 95 97 100 110 115 120 126	$100 \\ 110 \\ 120 \\ 140 \\ 160 \\ 190 \\ 215 \\ 200 \\ 175 \\ 165$	100 102 105 115 120 130 140 160 165 165	100 162 102 105 110 115 140 145 140 135	about 10 per cent. , 15 ,, , 25 ,, , 30 ,, , 45 ,, , 70 ,, , 60 ,, , 50 ,,

measure of the changes, and they are put forth only as a rough indication of the movement in the general cost of living since 1914.

In the years 1915 and 1916 food prices increased more rapidly than the cost of any other group, while rents declined. Between 1916 and 1918 there was little change in the index number of food prices, but clothing prices advanced rapidly. Both these groups reached a maximum in 1920, when clothing prices were more than double the pre-war prices, and food was 86 per cent. higher. In the other groups the variation was not so marked, the rise being continuous throughout the period but slower. On the whole the cost of living, which rose by about 30 per cent. during the war period, 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 drop of about 5 per cent. In 1923 there was not an appreciable change in the general average cost. Food and rent were dearer, but clothing and other items were cheaper.

A comparison of the results obtained by measuring the movement in the c st of living since 1914 on the basis of the cost of (1) food and rent only, and (2) all items of family expenditure shows that in 1915 and 1916 and in 1923 both methods gave practically the same result, but in the intervening years the increase in the cost of all items was much greater than the increase in respect of food and rent only. Thus in 1917 and in 1918 the first method showed increases over the cost in 1914 of 15 per cent. and 20 per cent. approximately in the respective years, and the second method 25 per cent. and 30 per cent. Then the difference widened, and in 1920 and 1921 food and rent combined showed increases of about 50 per cent. and 40 per cent. respectively, while all items in 1920 were apparently about 70 per cent. dearer than in 1914 and in the following year 60 per cent. dearer. In 1922 the cost of food and rent was nearly 40 per cent. higher, and the cost of all items 50 per cent. higher than in 1914.

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.

The preliminary results of the last Census indicate that in April, 1921, the breadwinners numbered 884,104, of whom 713,169, or 81 per cent. were males. A summary of the statistics relating to occupations is shown below:—

	Num	ber of Pe	rsons.	Prop	ortion to I	lotal.
Occupations.	Males.	Females	Total.	Males.	Females	Total.
Professional	48,543	29,233	77,776	per cent. 4°57	per cent. 2*85	per cent. 8'72
Domestic	20,786	60,904	81,690	1.95	5.93	3-91
Commercial	. 107,474	31,270	138,744	10.11	3.04	6:64
Iransport and Communication .	. 81,826	2,693	84,519	7.70	•26	4 04
Industrial	243,862	40,805	284;668	22'94	8197	13.62
Primary Producers-		1				
Agricultural	. 93,598	.910	94,508	8.80	.09	4.52
Pastoral and Dairying	. 63,525	2,044	65,569	5 98	•20	3.14
Mining	. 32,841	76	32,917	3.09	•01	1.57
Other	15,593	123	15,716	1.47	•01	•75
Total Primary	205,557	3,153	208,710	19:34		9:98
Independent	5,121	2,876	7,997	-48	•28	•38
Total Breadwinners	. 713,169	170,985	884,104	67:09	16:64	42.29
Dependents	349,789	\$ 56 ,46 3	1,296,252	32:01	83-26	57.71
Not stated	8,543	1,472	10,015	····	••	•••
Total	1,071,501	1,028,870	2,100,371	100.00	100.00	100.00

The majority of the people are classified as dependents, the numerical importance of the group being due to the fact that it includes, as well as children, women engaged in domestic duties for which wages are not paid.

Returns regarding 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. It includes occupiers or managers and 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 distribution of the workers amongst the several branches of rural industry differs materially from the annual records which show the average number employed, whose distribution is determined usually in accordance with the main purposes for which each holding was used during the year.

In regard to the number of females employed in rural industries, consider, able 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 dependents. 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. Since 1919 greater care has been exercised in the collection of the annual returns in regard to women engaged in rural pursuits, and the collectors have been instructed to exclude women engaged primarily in domestic duties.

The following statement shows the number of persons engaged in the various branches of rural industry during each year since 1911. In regard to female employees, it is estimated that the returns for the years prior to 1919-20 included 12,000 women wholly employed in domestic duties, and the figures for those years have been amended, so that the numbers quoted in the table represent the numbers as returned, less 12,000 :---

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
1912	58,984	1.055	26.537	10.443	41,893	720	127,414	12,218	139,632
1913	61,525	1.160	25.961	11.478	40.543	790	128,029	13.428	141.457
1914-15	59,944	1.019	23,435	10,073	39,131	700	122,510	11,792	134,302
1915-16	59,256	1.049	21,979	10.378	38.042	720	119.277	12,147	131,424
1916-17	55.122	1.216	22.363	12.041	38,607	820	116.092	14.077	130,169
1917-18	50,490	1,287	21,071	12,749	40,988	868	112,549	14,904	127,453
1918-19	45,528	1,173	24.561	11,625	43,824	790	113,913	13,588	127,501
1919-20	48,942	1,161	24.685	12,678	53,282	867	126,909	14,706	141.61
1920-21	50,162	1.509	26,648	13,176	43,766	1,022	120,576	15,707	136.28
1921-22	48.571	1.411	29,660	14.571	42,674	860	120,905	16,842	137,74
1922-23	49,444	1,421	29,170	13.882	42,285	1.120	120,899	16,423	137,32

The number of workers in the rural industries, being affected by seasonal conditions, is subject to great fluctuation. The number engaged in cultivating, etc., has declined since 1911, though the area under cultivation has increased, the greater use of machinery 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 the agricultural industry.

The number of dairy workers decreased between 1911 and 1918, and has since increased considerably. In the pastoral industry the number does not usually vary greatly from year to year except in seasons such as 1919–20 when additional labour is required to tend the flocks and herds under severe drought conditions. On the whole the number of men engaged permanently in rural pursuits in 1922–23 was 5.7 per cent. less than the average of the three years prior to the war, and apparently the number of women has increased, the majority being engaged in dairying. The rural workers in 1922–23 included 69,681 working proprietors, viz., 67,660 men and 2,021 women; 18,277 men and 12,607 women were classed as relatives employed constantly, but not receiving wages; and 34,962 men and 1,795 women, including managers and relatives, were receiving wages.

Annual returns relating to employment are collected also in respect of mining and other primary industries and the manufacturing industries, and the figures for each year since 1911 are summarised in the following statement. The particulars for the last nine 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 any establishment with fewer than four persons have not been included unless machinery was used in the factory :---

Yeer.	Yee.r.			Manufacturing.			Total.		
	Total. Males.	Males.	Males.	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
1912	139,632	6,100	33,778	88,178	27,383	115,561	255,470	39,601	295,071
1913	141,457	6,200	34,510	93.036	27,364	120,400	261,775	40,792	302.567
1914-15	134,302	6,200	27,701	90,409	26,202	116,611	246,820	37,994	284,814
1915-16	131,424	6,300	27,994	87,724	28,677	116,401	241,295	40,824	282,119
1916-17	130,169	6,500	28,777	88,910	29,087	117,997	240,279	43,164	283,443
1917 - 18	127,453	6,800	29,913	90,025	30,529	120,554	239,287	45,433	284,720
1918-19	127,501	7,000	29,069	96,884	30,707	127,591	246,866	44,295	291,161
1919-20	141,615	6,800	27,273	109,836	34,618	144,454	270,818	49,324	320,142
1920 - 21	136,283	6,700	26,062	112,187	32,824	145,011	265,525	48,531	314,056
1921 - 22	137,747	6,900	25,820	112,362	36,514	148,876	265,987	53,356	319,343
1922 - 23	137,322	6,900	28,125	114,970	37,296	152,266	270,894	53,719	324,613
					;				

The figures relating to the mining industry are exclusive of employees engaged in treating minerals at the place of production, and already included in the returns of the manufacturing industries, viz., those engaged in the manufacture of coke at coke works, in the manufacture of lime, cement, etc., The number at limestone quarries, and in the treatment of cres at mines. of miners, as stated for the last three years, includes fossickers, viz., 450, 560, and 358 respectively. In view of the small output which they obtained it is probable that they were not wholly employed in fossicking. 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, but the number rose in each of last four years-23,054 men being employed in 1923. In other mines there was a steady decline in the number of miners from 16,120 in 1911 to 10,120 in 1915. Then the number rose with an increased demand for industrial metals until 1919, when an extensive industrial dislocation in the Broken Hill district caused employment to diminish. In later years the condition of the metal market was unsatisfactory, and the number employed in 1923 was only 5,071.

In the manufacturing industry a steady increase was interrupted by the outbreak of war and the consequent diminution in the supply of male labour. In 1918–19 the number of male employees rose above the pre-war level and continued to increase until the maximum was reached in 1922–23. There were increases, during 1922–23, in the number of men employed in printing, etc., in wood-working, in vehicle factories, and in stone, clay and glass works. A marked decrease took place in shipbuilding establishments. The number of females employed in manufacturing establishments increased in each year between 1914–15 and 1919–20, then slackness in the tailoring.

and dressmaking establishments caused a reduction, but in the last two years of the period under review the number increased beyond the former level. The majority of female factory workers are engaged in the clothing trades, and fluctuations in the number of employees reflect generally the conditions of those industries.

Government Employees.

In New South Wales there is a large number of persons employed by the State and Commonwealth Governments. In addition to services such as education, police, justice, health, lands, works, etc., the State owns railways, tramways, and wharves, and engages in various industrial enterprises, *e.g.*, sawmill, abattoirs, dockyards, quarries, brick and pipe works. Thus a large number of persons are in constant employment. The Commonwealth services include posts, telegraphs and telephones, customs, taxation, and defence.

The number of employees in New South Wales under the Crown as at 30th June, 1923, is shown below. The figures do not include persons employed in the Government Savings Bank of New South Wales nor in the Commonwealth Bank of Australia, nor those employed in connection with the Commonwealth Shipping Line and the Dockyard at Cockatoo Island :---

Services.	Perm	anent.	Temp	orary.		Tota ¹ .	
services.	Males.	Females	Males.	Females.	Males.	Females.	Total.
State		1	<u></u>	<u> </u>		<u>/</u>	
Public Service Board	10,186	5,847	$2,2^{-9}$	1,276	12,445	7,123	19,568
Railways and Tramways	34,656	775	13,864	601	48,520	1,379	49,899
Sydney Harbour Trust	209	17	1,023	8	1,232	25	1,257
Water Supply and Sewerage							
-Metropolitan and Hun-							
ter District	1,663	45	1,088	6	2,751	51	2,802
Water Conservation and							
Irrigation Commission	358	- 29	1,095	42	1,453	71	1,524
Metropolitan Meat Industry		1.11.2					
Board	548	19			548	19	567
Police	2,853	8		1	2,853	9	2,862
Other	513	40	5,458	114	5,971	154	6,125
Total	50,936	6,780	24,787	2,051	75,773	8,831	84,604
Commonwealth				·			
Public Service Commissioner	8,106	1,270	2,620	542	10,726	1,812	12,538
Department of the Navy	í 86		594	3	680	3	683
Defence Department	515				515		515
Repatriation Department	190	50	174	112	364	162	526
Total	8,897	1,320	3,388	657	12,285	1,977	14,263
Grand total	59,883	8,100	28,175	2,708	88,058	10,838	98,806

The figures in the table include the general labourers and navvies employed by the various public bodies. The wages staffs in the State services numbered 57,101 persons, viz., 43,706 employed in connection with the railways and tramways, of whom 5,600 were employed in the construction and duplication of lines; 7,358 on water conservation, sewerage, and harbour works, etc.; and 6,037 in other services. Of the Commonwealth employees there were about 4,300 employed on the wages staffs.

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. The number of persons unemployed in April, 1921, was 61,743, or 9.5 per cent. of the group embracing salary and

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wage earners and the unemployed combined. The male, numbered 54,092, or 10.6 per cent, and the females 7,651, or 5.5 per cent. At the previous census, in March, 1911, less than 4 per cent. of the male salary and wage earners, and 2.6 per cent. of the females were out of work. The proportions indicate that entirely different industrial conditions prevailed in those years, the census of 1911 being taken during a period of high productive activity, whereas in April, 1921, unemployment resulting from post-war disorganisation was probably at a maximum.

At the census of 1921, persons were asked to state the cause of their unemployment. The information was not supplied in respect of 3,131 persons. Of the remainder, 29,304 cases, or 50 per cent., were due to scarcity of employment; 14,573, or 25 per cent., to illness; 2,119, or 3.6 per cent., to industrial disputes; 1,852, or 3 per cent., to accident; and 863, or 1.5 per cent., to old age. The majority of males, viz. 53 per cent., were out of work on account of scarcity of employment, but illness was the principal cause of unemployment amongst women, 48 per cent. being idle for that reason. The duration of unemployment was stated in regard to 51,185 persons. Those unemployed for less than 5 weeks numbered 24,299, or 48 per cent.; from 5 to 10 weeks, 9,395, or 18 per cent.; from 10 to 15 weeks, 5,237, or 10 per cent.; over 15 weeks, 12,254, or 24 per cent.

In regard to intercensal periods, the available data are not sufficient to give a fair indication of the extent of unemployment. Periodical returns relating to the condition of employment amongst various classes of workers are supplied to the Department of Labour and Industry by secretaries of trade unions, but many unions do not furnish the returns regularly, and a large number, including unions of workers following unskilled occupations in which unemployment is most likely to occur, do not supply any information owing to lack of records.

Intermittency of Employment.

In many industries a considerable loss of working time occurs even in normal periods on account of intermittency arising from various causes, but information regarding its extent is available in respect of two industries only, viz., manufacturing and coal-mining.

In the manufacturing industry, in which over 152,000 persons are employed, returns show that the average time worked in all classes of factories is approximately $11\frac{1}{2}$ months per annum. The average has remained fairly constant over a period of years, but as the figure is based on data concerning each establishment, it affords little indication regarding the intermittency suffered by individual employees who may be engaged in more than one factory, or in more than one industry during the year.

In coal-mining intermittency is a constant factor, and for a number of years the Department of Labour and Industry has endeavoured to collect information relating to interruptions to work in the principal mines.

Particulars obtained from these records show that during the period of nine years—1915-23—the average number of work-days was 274 per annum, after making allowances for Sundays, pay Saturdays, and regular public holidays. The days on which operations were suspended numbered, on an average, 63 per annum, or 23 per cent. of the total work-days; 22 days, or 8 per cent., were lost through industrial disputes, and 41, or 15 per cent. through other causes. Slackness of trade, owing to restrictions imposed on the export of coal, was the cause of considerable loss during the war period.

EMPLOYMENT AND PRODUCTION.

The total loss of working time involved by the interruptions to work in the coal-mines during the last five years 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.

	Days Lost.									
Conner				1		1919-1923.				
Causes.	1919.	1920.	1921.	19 22 .	1923.	Average per Annum.	Per cent. of Total.			
Industrial disputes	238,644	307.349	355.922	468,358	849.918	444.038	36.7			
Truck shortage		102,962	47,775	13,753	30,022	51,617	4.3			
Slackness of trade										
and shortage of		1.)	1						
shipping	827,155	345.407	354.713	616.328	403.147	509,350	42.1			
Mine disabilities, etc.		36.851	110.296	120.348	121,478	84,349	7.0			
Deaths of employees		8,659	22,171	12,757	27.050	15,311	1.2			
Meetings, extra holi-		0,000		12,101	2.,000	10,011				
days	8,406	12,834	25.006	16.000	21.034	16.656	1.4			
Other causes	1.950	8.104	3.052	1.200	6.248	4,111				
Not stated	94,756	38,237	60,052	75,881	157,304	85,246	7.0			
Total	1,273,172	860,403	978,987	1,324,625	1,616,201	1,210.678	100			

The average number of days lost on account of dislocations in this industry during the period of five years amounted to 1,210,678 days per annum. Lack of trade or of shipping was responsible for 42 per cent. of the loss, and industrial disputes for nearly 37 per cent. Apparently trade was slack during two years of the period, viz., 1919 and 1922.

The loss through industrial disputes has shown an upward tendency throughout the period, and was greater in 1923 than in any of the preceding nine years. The loss, as stated in the table, represents the working days lost in each year through disputes which commenced in that year. The figures, therefore, are exclusive of days—amounting, on the average, to 4,148 per annum—which were lost during the five years 1919-23 through disputes which commenced prior to the year specified. Further details relating to the disputes are shown on a later page.

The number of employees in the coal-mining industry, as shown on an earlier page, is over 23,000, but as coal-mining is a fundamental industry, variations in the volume of production have a far-reaching effect on other industries and commercial enterprises.

Relief of Unemployment.

Measures for the relief of unemployment are undertaken by the State Department of Labour and Industry, and are 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.

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 employees and employees.

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State Labour Exchanges.

The State labour exchanges, which are situated in the main industrial centres, Sydney, Newcastle, and Broken Hill, are administered in conjunction with the office dealing with assisted immigration. The expenses of the exchanges 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 functions 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.

In terms of the Returned Soldiers and Sailors Employment Act, employers desiring to obtain employees are required to apply to a State labour exchange or to a committee dealing with the repatriation of soldiers and sailors.

The operations of the State labour exchanges during the last nine years are shown below :---

Year ended 30th June.	Applications for	Positions made avail-	Persons sent to	
	Employment.	able by Employers.	Work.	
1915 1916 1917 1918 1919 1920 1921 1922 1923	24,638 18,996 19,572 23,140 22,151 42,634 45,888 46,254 36,891	11,84219,01716,77116,26128,93734,01642,08136,72434,709	$10,228 \\13,668 \\11,428 \\11,679 \\19,821 \\27,198 \\36,177 \\32,314 \\29,029$	

During the year ended June, 1923, applications for employment were made by 31,159 men and 5,732 women. Positions were made available by employers for 22,866 men and 11,843 women, and 21,379 men and 7,650 women were placed in employment through the agency of the State labour exchanges.

For the relief of unemployed persons seeking temporary shelter and assistance a State Labour Depot is maintained at Randwick in proximity to the city.

Private Employment Agencies.

Private employment agencies are subject to supervision by the State authorities in terms of the Industrial Arbitration (Amendment) Act, 1918. 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 30th April, 1924, there were 64 private agencies on the register, viz., 38 in Sydney, 9 in the suburbs, and 17 in country 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 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 introduction of a system of industrial arbitration in 1901 led to an increase in the organisation of new trade unions, as registration of employees' unions to bring them within the scope of the system is granted only to organisations registered under the Trade Union Act of 1881. It should be clearly understood, however, that an industrial union of employees is the same organisation as the trade union bearing the same title, the term industrial union indicating merely that it has undergone dual registration for the purposes of the administration of the Industrial Arbitration Act.

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 :---

37	Unions		Members.		D t t	Expenditure.	Funds at end of
Year. of Employees	Males.	Females.	Total.	Receipts.	Expenditure.	Year.	
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
1917	218	216,553	15,726	232,279	252,613	289,426	149,78 3
1918	209	197,406	15,659	213,065	240.621	235,587	154,774
1919	199	208,684	17,052	225,736	276,382	269,056	156,018
1920	197	226,030	23,210	249,240	355,702	331,438	176,575
1921	197	234,898	23,965	258,863	363,067	345,854	194,360
1922	192	230,126	23,170	253,296	386,428	372,(*69	213,520

At the end of the year 1922 there were 192 registered trade unions of employees, with a membership of 253,296, and funds amounting to £213,520. The membership has increased considerably, the increase in the number of women members being a result of the extension of the industrial arbitration system. The receipts during 1922 amounted to £386,428, including contributions, £361,419. Of the total expenditure, payments in respect of benefits amounted to £128,325, and management and other expenses, including legal charges in connection with industrial awards, etc., to £243,744. 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 such assets as shares in Trades Halls and newspapers. In the case of unions which are branches of federated unions the balance of funds at the close of the year is usually transferred to the credit of the central executive.

The following statement shows the receipts, expenditure, accumulated funds, and membership of trade unions of employees, according to industrial classification, in the year 1922 :---

Industrial Classification.		lembership end of ye		Receipts.	Expendi- ture.	Funds at end of year.	Funds per member.
	Males.	Females.	Total.				_도¤
<u>han na han an a</u>	No.	No.	No.	£	£	£	s. d.
Engineering and Metal						1	
Working	27.058	26	27,084			22,439	16 7
Food, Drink, and Narcotics	18,487	4,886	.23,373			11,239	9 7
Clothing	4,876		12,119	8,175	7,265		17 11
Printing, Bookbinding, etc	4.327		5,367	10,596	8,629		77 2
Manufacturing, n.e.i	14,117		15,491	19,454	18,296		21 11
Building	27,255		27,317	23,381	22,073		18 2
Mining and Smelting	17,022		17,022	122,386	106,832		:39 3
Railways and Tramways	29,130		29,444		15,367		63
Other Land Transport	7,372		7,372	6,835	6,262	3,919	10 8
Shipping and Sea Transport	6,111		6,111		5,494	2,798	92
Pastoral	00000		27,830	31,475	32,554	18,013	12 11
Governmental, excluding Rail-							
ways and Tramways	00 100	3,952	24.114	24,070	20,918	13,598	11 3
Miscellaneous Industries	26,579		30.652			15,812	10 4
Labour Councils and Federa-		- - ,	1	'		1	
tions		1		1,102	1,099	151	
Eight-hour Committees				2,048		9,567	
Total Unions of Employees	230,126	23,170	253,290	386,428	372,069	213,520	16 10

The average membership per union is 1,362 but the majority of the unions are small. In 1922 there were 35 with less than 100 members; 84 with 100 to 1,000 members; 50 with 1,000 to 5,000 members; 9 with 5,000 to 10,000; and only 3 unions had more than 10,000 members.

A number of the unions are affiliated with Labour Councils, which have been formed in the main industrial centres, and efforts have been imade to effect closer organisation, but they have not been attended with general success.

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 1922 numbered 20. The membership at the end of the year was 9,198, the receipts during 1922 amounted to £41,171, and the expenditure to £43,081. The funds at the end of the year amounted to £15,584.

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.

For details regarding the development of industrial arbitration readers are referred to the 1921 issue of the Year Book, as only a brief outline of the main provisions of the existing legislation is published in this issue.

THE STATE SYSTEM OF INDUSTRIAL ARBITRATION.

The fundamental principle of the State system is compulsory arbitration by a judicial tribunal—the Court of Industrial Arbitration—which adjudicates upon claims made by employers on one hand and by registered organisations of employees on the other. Machinery is provided, however, for conciliation and for collective bargaining, and a notable feature of the system is the statutory provision made for the cetermination of a standard living wage, as the basis of all rates of wages prescribed under the arbitration law.

For the purpose of bringing an industry under the review of the 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. The principal exceptions are workers in roral industries, who are specifically excluded from the operation of the State industrial arbitration system, and domestic workers in private houses, who are unorganised.

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.

The Court of Industrial Arbitration is a superior Court and a Court of Record, governed in procedure and decisions by the dictates of equity and good conscience. Judges of the Court are appointed permanently by the Governor, and the Court is constituted by a single judge or, in certain cases, by two or more judges sitting together.

Industrial Boards, consisting of nominees of employers and employees and a chairman, which were an important factor in the arbitration system prior to 1916, are still appointed, but their functions are exercised by the Court, except in the district of Broken Hill, where, on account of distance from the industrial centres, the Court seldom sits, and the local boards continue their activities.

The jurisdiction of the Court and of the Industrial Boards extends over a wide range of industrial matters, including the determination of minimum wages and salaries up to £10 per week or £525 per annum, minimum prices for piece-work, hours, overtime rates, number of apprentices, and preference to unionists.

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 Ministerial head of the Department of Labour and Industry, and where the public interests are likely to be affected the Crown may intervene in any proceedings before a board or the Court, 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.

Awards are varied whenever a living wage declaration has been made by the Board of Trade, but it is a general rule that other variations should not be made during the currency of an award except in special cases, or by consent of the parties.

Appeal from an award of a board lies to the Court, but the pendency of an appeal does not suspend the operation of the award. Appeal from an award of a single judge lies to the Court constituted by three judges. Decisions of the Full Court are final.

Collective Bargaining and Conciliation.

Industrial 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 Board of Trade, and whenever a living wage is declared by the Board during the currency of an agreement the Court may vary its wage provisions.

Collective bargaining is practised also in regard to awards, and the terms in many cases are arranged, wholly or in part, by the parties before the cases are taken before the Court.

Under provisions respecting conciliation an officer of the Department of Labour and Industry has been appointed a Special Commissioner with authority to intervene in industrial disputes. Whenever a question has arisen that might lead to industrial strife, or when a dislocation has occurred, the Commissioner may summon the persons concerned to meet in conference, and many disputes have been settled during preliminary investigations by the Commissioner or the departmental inspectors.

Conciliation committees, consisting of a chairman and two or four members, equally representing employers and employees, may be appointed for certain industrial districts, and for occupations in which more than 100 employees are engaged. A conciliation committee may inquire into any industrial matter within its district or concerning the occupation to which it relates. It has no compulsory powers, but if an agreement is made and registered it has the effect of an industrial agreement. Since 1918, when general statutory provision was made for the constitution of conciliation committees, 27 have been appointed and 12 were in existence in December, 1923.

Industrial Awards and Agreements.

During the year ended 30th June, 1923, the Industrial Boards made 4 principal awards and 1 award of variation, and the Court of Industrial Arbitration made 69 principal awards, and 585 variations, and the industrial agreements filed with the Registrar numbered 62, including 15 variations. At the end of the period there were 299 awards and 118 agreements in force.

Year	Industria! Boards.		Awards mad	e by Boards.	Awards mae of Industrial	· · · · · · · · · · · ·	
ended 30th June.	In existence at 30th June.	Cost during the Year.	Principal.	Variation.	Principal.	Variation.	Agreements filed.
······	1	£		(]	1)
1916	233	14,211	151	135	·	66	40
1917	237	12,900	169	99	7	127	53
1918	237	1,543	18	15	75	116	31
1919	238	277	3	2	106	88	48
1920	252	345	5	Ĩ	136	269	76
1921	271	189	ğ	1	104	390	75
1922	276	101	ĭ	2	80	272	54
1923	274	37	4	1	69	585	62

The number of awards made by the boards and by the Court and the number of agreements filed during each of the last eight years is shown below :---

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.

During the year ended June, 1923, the Industrial Magistrates heard 2,018 cases, and the convictions numbered 1,423. An aggregate amount of £3,177 was ordered to be paid as penalties, wages, subscriptions, etc., and costs amounted to £1,462.

THE BOARD OF TRADE.

The Board of Trade, which was created in June, 1918, is composed of a president (who is a judge of the Court of Industrial Arbitration), a deputy president, and four commissioners, appointed for a term of five years.

Its most important administrative function is the determination of the living wages for men and for women, which are the bases of the wage determinations of the other industrial tribunals.

The Board declares the living wages, after public inquiry as to the increase or decrease in the average cost of living, at such times as it thinks fit, but at intervals of not less than three months. The rates declared for each sex are the lowest which may be prescribed by industrial awards or agreements, but under certain conditions which are stated on page 406, an industry may be excluded from the operation of an award or agreement.

The Board is authorised to exercise control over matters relating to apprentices and apprenticeship. Its other functions are advisory. Its powers were extended in 1923 by the Monopolies Act, which authorises it, upon reference by the Attorney-General, to make inquiries in respect of alleged monopolies or combinations to control supplies or prices, or to restrain trade in any commodity or service to the detriment of the public.

THE COMMONWEALTH SYSTEM OF INDUSTRIAL ARBITRATION.

The Commonwealth system of industrial arbitration applies only to disputes which extend beyond the limits of any State. It differs from the State system in many important features, *e.g.* powers of compulsory arbitration are exercised only when conciliation has failed, and the jurisdiction of the Court is limited to cases in which industrial disputes have occurred or are impending. Moreover, the Court has not the power to declare an award a common rule in an industry, and its determinations are binding only on the parties to the dispute, viz., the employees cited in a case and the members of the unions concerned who are employed by them. Organisations of employers and of employees, representing at least 100 employees, may be registered on compliance with prescribed conditions, registration being a necessary qualification to entitle unions to submit disputes to the Court, or to be represented in proceedings relating to disputes.

The Court of Conciliation and Arbitration consists of a President and Deputy-Presidents appointed by the Governor-General. The President is charged with the duty of endeavouring to reconcile the parties to industrial disputes, and for the purpose he may convene compulsory conferences.

The Court endeavours to induce the settlement of disputes by amicable agreement, or, failing an agreement, determines the disputes by award. Industrial agreements, when filed, 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 orders otherwise. Agreements continue unless rescinded, or terminated by notice.

The powers conferred upon the Federal Court include the power to determine rates of wages, hours, and other conditions of employment, and to grant preference to members of organisations.

The Industrial Peace Acts of 1920 provide for the appointment of special tribunals with powers to deal with industrial disputes similar to those exercised by the Court of Conciliation and Arbitration or by the President of the Court. A special tribunal consists of an equal number of representatives of employers and employees, and a chairman. 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.

Special tribunals have been appointed in connection with the coal and shale, the coke, and the shipbuilding industries, the first mentioned being of special importance in New South Wales, where most of the Au tralian coal is produced.

Among the important industries subject to Federal awards and agreements are shipping, pastoral, coal-mining, shipbuilding, timber trades, clothing factories, breweries, glass works, and rubber works.

At 30th June, 1923, there were 109 awards of the Commonwealth Court, and 457 industrial agreements in force, of which 64 awards and 68 agreements applied in New South Wales.

Crown Employees and Arbitration.

Under the State Arbitration system, employees of the State Government and of governmental agencies, with the exception of those employed in terms of the Public Service Acts and the police, have access to the industrial tribunals for the settlement of disputes and the regulation of the conditions of their employment.

In the case of employees under the Public Service Act, salaries up to £525 per annum are determined by salaries committees, consisting of representatives of the Public Service Board, the class of employees concerned, and the department in which they are engaged. Other matters are regulated by the Public Service Board. Appeal against the decisions of the committees lies to the Public Service Board or to a tribunal consisting of a Judge and two members of the Board.

An appeal tribunal is being constituted in relation to the police force, to determine appeals against decisions of the Inspector-General of Police in regard to promotions or 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 services. 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.

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, the former becoming 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, but fundamental differences in legislation prevent 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 arise in regard to wage determinations, which are liable to cause disaffection by disturbing the distinctions in grade, as expressed by wages, which have been recognised for many years amongst skilled workers. The overlapping of jurisdiction also tends to confusion, especially in industries giving employment to members of a number of craft unions, each working under a separate award or agreement.

An important question in regard to the relation between the State and Federal systems is the extent to which conditions of employment in State services and State industrial undertakings should be immune from interference by the Federal industrial authority. It has been established by High Court decision in a case relating to taxation by a State of salaries of Commonwealth employees that the Commonwealth in its jurisdiction is immune from State interference. This principle was applied reciprocally in a case in which the High Court decided that the Commonwealth Conciliation and Arbitration Act should not apply to disputes between the Governments of the States and the State railway employees. The latter judgment, however, was overruled in a subsequent case (The Amalgamated Society of Engineers), and the Commonwealth Arbitration Court has decided that it is bound to make an award in respect of employees of a State Government unless the rates paid and the conditions of work conform to the usual rules and conditions laid down by the Court.

Efforts have been made to devise a plan whereby the sphere of the State and Federal systems would be defined and the determinations harmonised, especially those affecting mages and hours. The matter is under consideration by the Federal Government and the Governments of the several States.

HOURS OF WORK.

The S-hour day has been recognised for many years as the standard working day in New South Wales, although the standard is more correctly expressed as the 4S-hour week, the usual working time being $8\frac{3}{4}$ hours on 5 days and $4\frac{1}{4}$ hours on Saturday, though some factories complete the week's work in 5 days, leaving Saturday a whole holiday.

The Factories and Shops Act prohibits 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 are restricted by 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, and 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.

In metalliferous mines, workmen may not be employed below ground for more than 8 hours during 24 hours, or 88 hours in 14 days, or 132 hours in 21 days. A shift may not exceed 6 hours, if, during 4 hours, the temperature is above 81 degrees Fahrenheit. In the coal-mining industry the hours as fixed by a special tribunal in 1916 are as follows:—Eight hours bank to bank, inclusive of one half-hour for meal time, on Monday to Friday, and 6 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 Eight Hours Act of 1916, and its amendments, provide that the ordinary working hours in industries generally may not exceed 8 per day on 6 consecutive days, or 48 per week, or 96 in 14 consecutive days,—as determined by industrial award or agreement. Overtime may be permitted by the terms of an award or agreement, and the ordinary hours may be increased by the Court of Industrial Arbitration if the public interest requires it, provided that the health of the employees will not be injured thereby.

The Court or an industrial board may reduce the working hours in an industry if the health, comfort, or wellbeing of the employees justify a reduction. A shorter working week than 48 hours may be awarded also in cases in which it is a well-established practice of the industry concerned.

In the 1921 and 1922 issues of the Year Book particulars were published regarding the introduction of a 44-hour week in many industries, and the reversion in 1922 to 48 hours. Since the latter date several applications have been made to the Court for a reduction of hours on the ground that the health and wellbeing of the employees require it. Some applications have been granted, but in most cases medical evidence is lacking, and the Court has referred them to the Attorney-General in order that a medical expert may conduct an independent inquiry into the health conditions for the guidance of the Court.

A short working week is prescribed for those trades which are recognised as unhealthy, such as rock-chopping and sewer-mining—for which the hours vary according to the working conditions, the minimum being 25 per week—for stone-masonry, and metalliferous mining (underground); and for industries in which the majority of the workers are women.

The general practice of the Commonwealth Court of Conciliation and Arbitration is to adhere to the standard hours of 48 per week, and shorter hours are 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. An award increasing the hours of work in any industry, or reducing them, unless they are over 48 per week, may be made only after the case has been heard by the President and at least two Deputy Presidents, and approved by a majority of the Court thus constituted.

PREFERENCE TO UNIONISTS.

It is a general rule of the Court of Industrial Arbitration to grant preference to a union which substantially represents the trade concerned.

Preference may not be granted to members of a trade or industrial union who shall have taken part in, aided, or abetted an illegal strike after the passing of the Industrial Arbitration (Amendment) Act, 1918. Any declaration granting preference may be cancelled by the Court if the union, or any substantial number of its members, takes part in a strike. If a lesser number takes part in a strike, the Court may suspend the declarations.

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. An award, order, or agreement under the arbitration systems may not operate to prevent the employment of returned soldiers or sailors.

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. An amendment of the Act was made in 1915 to protect the interests of apprentices enlisting for active naval or military service.

The Industrial Arbitration Act 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. Thus, the conditions in nearly all the skilled occupations in which apprenticeship is a recognised custom have been determined by industrial awards and agreements. It is provided, however, that when the Board of Trade exercises its powers in regard to the control of apprenticeship in any industry the relevant provisions of awards and agreements shall cease to have effect.

The Board of Trade, upon its establishment in 1918, was charged with important powers and functions in relation to apprenticeship which gave it virtual control of this phase of industrial employment, but its plans were not put into operation until 1923, when apprenticeship in a number of occupations became subject to its authority. A separate set of regulations is issued in respect to each occupation so that, while the same general principles may be observed, they may be modified to meet the special circumstances of any trade.

Contracts of apprenticeship must be registered with the Board. A short period of probation is allowed before indenture. The normal period of apprenticeship is usually five years in the case of boys entering the trade before reaching the age of 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 is allowed, with the Board's consent, 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 by regulation, and in others the Board undertakes to limit the proportion in the case of individual employers if the necessity arise. The rates of wages are prescribel for the apprentices in each trade. The hours and other conditions of employment are those determined by the industrial awards relating to the trade.

The occupations for which regulations had been issued by the Board of Trade, as at 31st March, 1924, are shown below. With two exceptions, they are connected with the building industry :- Boilermakers, bricklayers, carpenters and joiners, electrical fitters and electrical mechanics, fibrous plaster fixers, marble and slate workers, masons and polishers, metal ceiling fixers, painters and decorators, plasterers, plumbers, slaters, tilers and shinglers, stone cutters and setters, stone masons, polishers and tilelayers.

Provision is made under the Juvenile Migrants' Apprenticeship Act 1923, to establish a system of apprenticing juvenile assisted immigrants. Under certain conditions they may be apprenticed until they reach the age of 21 years, but the maximum period of apprenticeship to farming is three years. During indenture the apprentices are under the control of the Minister for Labour and Industry.

INDUSTRIAL DISLOCATIONS CONTINGENT UPON DISPUTES.

Within the jurisdiction of the Commonwealth Conciliation and Arbitration Act lockouts and strikes are prohibited under a penalty of £1,000. 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 a secret ballot to 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 $\pounds 1,000$, and for an illegal strike $\pounds 500$ in the case of a union, and $\pounds 50$, 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.

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 working days lost, only actual working days, viz., days on which work would ordinarily be performed, 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.

The following statement shows, so far as can be ascertained, the number of workers involved, and the time lost by industrial dislocations contingent upon disputes in each year since 1914. Particulars are shown separately regarding dislocations which originated during the year specified, and those which commenced at an earlier date:-----

Dislocations.			s.	Wo	rkers Invol	ved.	Working Days Lost during Year.			
Year.	An- terior,	New.	Total.	Anterior.	New.	Total	Auterior,	New.	Total.	
1914.	6	313	319	631	75:256	75.887	9.418	747,737	757,155	
1915	7	314	321	3.716	94,346	98,082	164,935	470,207	634,242	
1916	5	344	349	5,144	157,102	162,246	261, 387	895,338	1,157,225	
1917	5	289	294	1.294	144,704	145,998	18,813	2,857,515	2,876,328	
1918	1	152	1538	340	38,652	38.992	4,080	186,344	190.424	
1919	7	3061	313-	1.949	123,174	125,123	19,484	2,113,114	2,132,598	
1920	9	411	420	10.028.		161.041	1,558,634	741.744	2,300,378	
1921	4	555	559	20,597	169.510	190,107	227,645	438,273	665,918	
1922	3	479	482	358		189,219	733	587.726	588,459	
1923	2	250	252			89.696	28,143	861,419	889,562	

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 all other industries combined. The following statement shows the particulars in relation to each group of the dislocations which commenced in each year from 1914 to 1923. The working days lost 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 loss actually occurring during each year.

	Dis locations.			Wo	rkers Invol	ved.	Working Days Lost.			
Year.	Mining.	Non- mining.	Total.	Mining.	Non- mining.	Total.	Mining.	Non- mining.	Total.	
1914	220	93	313	56,372	18,884	75,256	732,294	179:478	911,772	
1915	225	89	314	66.211	28.135	94,346	576,109	162,386	738,495	
1916	209	135	344	129,920	27,182	157,102	649,292	258,458	907,750	
1917	185	104	289 -	77,147	67.557	144,704	1,184,594	1,677,001	2,861,595	
1918	106	46	152	30.246	8.406	38,652	104,751	101,077	205,828	
1919	228	78	306	86.778	36.396	123,174	2,958,056	713,692	3,671,748	
1920	351	60	411	109,464	41,554	151,018	316,823	652,566	969,389	
1921	531	24	555	145.282	24.228	169.510	360,652	78.354	439,006	
1922	417	62	479	171.327	17,534	188,561	479,972	144,897	615,869	
1923	197	53	250	86,110	2,629	88,739	*875,040	11,233	886,273	

* Includes days lost up to 30th June, 1924, in one dislocation pending at that date.

The dislocation which involved the greatest loss of working time in 1923 was the result of a dispute in the coal-mines of the Northern District. The number of workers involved was 11,532, and 394,179 days were lost.

It is difficult to obtain reliable information regarding the cost of industrial dislocations, especially during a period of abnormal industrial conditions and frequent changes in rates of wages, etc. An estimate of the losses in wages in each of the last ten years is shown below, the method adopted being as follows:—The working days lost were classified into the fourteen industrial groups for which the average rates of wages are shown sub-equently 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.

37	W	orking Days Lo	st.	Estimated Loss of Wages.				
Year.	Mining.	Non-mining.	All Industries.	Mining.	Non-mining.	All Industries.		
-	Days.	Days.	Days.	£	£	£		
1914	732,294	179,478	911,772	384,500	86,000	470,500		
1915	576,109	162,386	738,495	308,500	74,700	383,200		
1916	649,292	258,458	907,750	372,000	133,100	505,100		
1917	1,184,594	1,677,001	2,861,595	730,500	879,400	1,609,900		
1918	104,751	101.077	205,828	65,900	54,900	120,800		
1919	2,958,056	713.692	3.671.748	1.990,600	420,100	2,410,700		
1920	316,823	652,566	969,389	252,800	485,100	737,900		
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	875,040	11,233	886,273	762,000	9,000	771,000		

The above 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 the dislocations were relatively unimportant in industries in which the majority of the women and juvenile workers are employed. Another factor for which allowance cannot be made is the extent to which losses in wages during a dislocation were compensated by higher rates of pay or increased activity after resumption of work, e.g., in the coal-mining industry, where operations are affected in normal times by intermittency due to trade conditions or blocks in the transport system.

Information is given in the following table regarding the duration of the dislocations which originated during the year 1923:---

Duration in Working Days.	Dislocations.	Workers Involved.	Working Days Lost.
Under 1 day One day over 1 and not exceeding 7 y 14 yy y 14 y 21 yy 21 y 28 yy y 50 y 50 yy 100	19 109 85 9 10 3 3 7 5	3,050 47,573 17,613 2,173 2,740 361 525 13,635 1,069	1,288 47,573 57,792 20,213 33,917 9,172 16,200 566,125 133,993
Total	250	88,739	886,273

EMPLOYMENT AND PRODUCTION.

A very large proportion of the dislocations are of brief duration. The number of workers affected by dislocations lasting one day or less during 1923 was 50,623, and the loss of working days 48,861. These brief dislocations accounted for approximately 51 per cent. of the total number, 57 per cent. of the workers involved, and $5\frac{1}{2}$ per cent. of the working days lost.

The causes of the disputes which led to dislocations in the mining industries and in the non-mining group 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 underthe head of "trade unionism."

				Mining	•	Non-Mining.			All Industries.		
	Cause.		Disloca- tions.	Workers in- volved.	Work- ing days lost,	Disloca- tions.	Workers in- volved.	Work- ing days los t.	Disloca- tions.	Workers in- volved.	Work- ing days lost.
Wages		••	38	13,554	66,552	18	994	2,366	56	14,548	68,918
Hours Workin	g conditions	•••	12 61	14,511 19,074	400,591 132,381	8 6	549 408	4,603 1,488	20 70	15,060 19,482	405,194 133,869
or cla	yment of per asses of perso		31	7,176	170,049	17	481	2,368	48	7,657	172,417
Sympat		:	3 10	486 1,218	2,114 63,912	2	92	333	5 10	578 1,218	2,447 68,912
Miscell Not sta		•••	27 12	25,393 4,698	28,203 6,238	1	80 25	50 25	28 13	25,473 4,723	28,253 6,263
T	otal.	•	197	86,110	875,040	53	2,629	11,233	250	88,739	886,273

In the mining industries disagreements about hours involved the greatest loss of working time, during 1923, viz., 46 per cent. The greatest number of dislocations and of workers involved were in cases of disputes relating to working conditions, to which 15 per cent. of the loss was due. In the nonmining group the important cause of dissension was the question of hours of work, nearly 41 per cent. of the loss of working time being due to such disputes.

By extending the analysis of the causes of disputes over a period of ten years from 1914 to 1923, it is found that in the mining industries 35 per cent. of the time lost was due to disagreements in relation to trade unionism. Disputes arising out of the question of hours of work were the cause of 21 per cent., those grouped under the heading of "sympathy" were responsible for 14 per cent., and "wages" stands fourth on the list with 12 per cent.

In non-mining industries, on the other hand, wages was the subject of disputes, which were responsible for greater loss than those arising from any other cause, viz., 33 per cent. of the total, and sympathetic strikes showed the high proportion of 23 per cent., hours 20 per cent., and working conditions 18 per cent.

Taking all classes of industries together, the experience of the ten years shows that about one fourth of the loss of working time was incurred through disputes about trade unionism and one-fifth in disputes about hours. In regard to wages and sympathy the proportion was somewhat less than one-fifth in each group.

In 1923, matters in dispute in regard to 198 dislocations were adjusted by direct negotiation between the parties, after a loss of 170,046 days; 22 dislocations, involving a loss of 686,445 days, were brought to conclusion as the result of arbitration; and in 5 cases, with a loss of 357 working days, the workers were replaced. Of the balance, some were dislocations in which demands were not formulated, the cessation of work being for the purposes of demonstration, sympathy, etc., and in the other cases the method of settlement was not recorded.

Of the dislocations which commenced in 1923, twenty-three involving a loss of 423,240 working days, resulted in modifications more or less in accordance with the workers' claims, but modifications were not made in regard to 183 disputes, which caused a loss of 351,216 days. The results of the remaining cases were not recorded.

INDUSTRIAL HYGIENE.

Legislation, with the object of safeguarding industrial workers from accident and disease, is included in the Factories and Shops Act, 1912, the Shearers' Accommodation Act, 1901, the Scaffolding and Lifts Act, 1912, the Mines and Inspection Acts, 1901 and 1914, and the Coal Mines Regulation Acts, 1912 to 1922. The Acts relating to mining are administered by the Department of Mines. Otherwise, inspection with the object of securing compliance with the industrial laws is a function of the Department of Labour and Industry.

The Factories and Shops Act, 1912, which consolidates previous enactments, provides for the sanitation of factories, etc., the safeguarding of machinery, and protection from fire. Restrictions are placed upon the employment of women and of juveniles, especially in regard to overtime and in dangerous occupations. Occupiers of factories are required to keep and to supply to the inspectors full records regarding out-workers employed, and in terms of certain industrial awards the employment of out-workers is allowed only by special permission. Details relating to the employment of women and children in factories are shown in the chapter, "Manufacturing: Industry."

Under the Shearers' Accommodation Act, 1901, station owners are required to provide proper accommodation for shearers. The Act applies only toshearing-sheds where at least 6 shearers are employed.

The Scaffolding and Lifts Act, 1912, regulates the construction and use of scaffolding, lifts, cranes, hoists, and derricks. The Act operates in the Metropolitan Police District and in the Newcastle District. On 31st December, 1923, there were 2,803 lifts under supervision as compared with 2,682 in 1922. Since 1909 persons operating passenger lifts have been required to obtain certificates of competency.

Industrial Accidents.

In regard to the factories, accidents, fatal or otherwise, are reported to the factory inspectors, upon whom rests the responsibility of seeing that all dangerous portions of machinery are properly and securely fenced and guarded. Special regulations have been made regarding precautions against the risk of accident in connection with the use of steam boilers and other pressure vessels.

The following table shows the accidents reported in factories during the three years, 1920 to 1922, and the accident rate per 10,000 employees :---

Accidents.			Number.		Rate per 10,000 Employees.		
•		1920.	1921.	1922.	1920.	1921.	1922.
Dential dischlomont	•••	10 130	10 136	10 149	-82 10-70	-81 10-95	+81 12·14
Bamparan incompositation		644	598	620	53-02	48.14	50.52
Total	-	784	744	779	64.54	59.90	63.47

On the figures shown above, about $1\frac{1}{3}$ per cent. of the accidents were fatal, and over 80 per cent. caused temporary incapacitation. Records are not available to show the time lost through mishaps.

During the year 1922 there were 12 fatal and 44 non-fatal accidents in connection with lifts, scaffolding, cranes, and boilers. Particulars of accidents in mines and of railway and tramway accidents are shown in other chapters of this Year Book.

Industrial Diseases.

Reliable records relating to industrial diseases are not available, but certain occupations are, with good reason, regarded as unhealthy, and provision has been made under the Workmen's Compensation Acts in respect of certain occupational diseases. In the majority of unhealthy or noxious trades the hours are short and the wages are comparatively high. Regulations under the Factories and Shops Act have been framed with a view to minimising the risk of industrial diseases, and the use of white phosphorus in match factories has been prohibited by the White Phosphorus Matches Prohibition Act, 1915.

WORKMEN'S COMPENSATION.

The State law relating to workmen's compensation is contained in the Workmen's Compensation Acts, 1916 and 1920, the Workmen's Compensation (Silicosis) Act, 1920, the Workmen's Compensation (Broken Hill) Act, 1920, and the Workmen's Compensation (Lead Poisoning-Broken Hill) Act, 1922.

The Workmen's Compensation Acts, 1916 and 1920, relate to all employees whose remuneration does not exceed £525 per annum, the wage limit having been increased from £312 to £525 per annum in 1920. The exceptions are casual hands employed otherwise than for the purpose of the employer's trade or business, members of the police force, outworkers, and members of the employer's family dwelling in his house.

The Acts apply in respect of certain industrial diseases, as specified in a schedule, and in respect of accidents which cause disablement for at least one week. Seamen employed on ships whose first port of clearance and whose destination are in New South Wales may claim compensation under these Acts, if they agree not to proceed also under the Seamen's Compensation Act of the Commonwealth.

The amount of compensation in cases where death results from the injury is as follows :---

- If workman leaves persons wholly dependent upon his earnings, a sum equal to three years' earnings, or £300, whichever is the larger sum, but not exceeding £500.
 - If workman leaves persons in part dependent, a sum agreed upon or fixed by arbitration.
- If he leaves no dependents, expenses of medical attendance and burial up to £20.

Where total or partial incapacity for work results from the injury, a workman is entitled to a weekly payment during the incapacity not exceeding two-thirds of his average weekly earnings. Such weekly payment may not exceed £3, and the total liability in respect thereof may not exceed £750.

If a workman under 21 years of age is totally incapacitated he may be paid 100 per cent. of his average weekly earnings, but the weekly payment may not exceed 15s. Provision is made whereby an employer may contract with his workmen, that a scheme of compensation approved by the Registrar of Friendly Societies may be substituted for the provisions of the Acts.

The Workmen's Compensation (Lead Poisoning, Broken Hill) Act, 1922, extends the provisions for the payment of compensation to persons disabled by lead-poisoning in the Broken Hill mines. 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.

The following statement shows particulars regarding compensation in respect of accidents paid under the Workmen's Compensation Acts mentioned above during the five years, 1918 to 1922 :---

	[Acci	dents.	[Compe	nsation.	
Year.			ent Compen- d by—	Total.	Death.		nt Compen-	
	Death.	Lump Sum.	Weekly Payment.			Lump Sum.	Weekly Payment.	Total.
1918 1919 1920 1921 1922	96 115 104 120 101	147 194 157 167 248	11,529 11,793 12,976 16,079 17,015	11,772 12,102 13,237 16,366 17,263	£ 32,353 41,206 38,407 39,762 39,672	£ 18,383 25,381 26,105 28,417 38,989	£ 78,192 91,646 107,084 196,378 211,745	£ 128,928 158,233 171,596 264,557 290,406

In respect of fatal accidents in 1922, an amount of £36,149 was paid to persons wholly dependent, £3,269 to persons partially dependent, and £254 as medical and burial fees, etc.

Records relating to industrial diseases show that compensation under the foregoing Acts was raid in res_ect of 189 cases in 1922, viz., 66 cases which originated during the year, and 123 cases continued from previous years. Particulars for the five years 1918 to 1922 are as follows :---

		Cases.		· .	Diseases.		
Year.				Lead Po	bisoning.	Other	Compen- sation.
	Fatal.	Non-fatal.	Total	Mining.	Other Industries.	Diseases.	•
1918 1919 1920 1921 1922	1 14 11 10	17 40 82 162 179	17 41 96 173 189	39 63 145 143	10 1 19 5 10	7 1 14 23 36	$\begin{array}{c} \pm \\ 367 \\ 3,188 \\ 14,896 \\ 19,453 \\ 24,279 \end{array}$

All the fatal cases in 1922 were due to lead poisoning, including eight from the Broken Hill mines, one in the plumbing and one in the coachpainting trade. Of the non-fatal cases there were 34 cases of nystagmus in the coal-mining industry, 2 of chemical dermatitis in chemical factories, and 143 of lead poisoning, including 135 Broken Hill cases. The compensation paid in respect of lead poisoning amounted to £21,124, and on account of other diseases to £3,155.

In terms of the Workmen's Compensation (Broken Hill) Act, 1920, which will remain in force until September, 1928, a fund has been established for the relief of metalliferous miners, who, having contracted pneumoconiosis or tuberculosis, have been incapacitated from further work in the Broken

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Hill mines. The fund is maintained by contributions—one-half by the Government of New South Wales and one-half by the mine owners. The compensation paid in 1921 amounted to $\pounds 54,061$, in 1922 to $\pounds 56,336$, and in 1923 to $\pounds 60,750$. At the end of the year 1923 the beneficiaries numbered 1,034, viz., 319 mine workers and 745 dependents including 430 children. At the end of the previous year the beneficiaries numbered 993 including 397 children.

The Workmen's Compensation (Silicosis) Act, 1920, empowers the Government to establish a fund, to which employers may be required to contribute, 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 or other dust. As a fund has not yet been established, the Act remains inoperative.

In addition to the general enactments of the State, specific enactments 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.

WAGES.

The minimum rates of wages for nearly all classes of workers; male and female, adult and juvenile, are fixed by industrial tribunals exercising statutory authority.

Juvenile labour is protected also to some extent by a law 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.

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 the 1921 issue 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 the Board of Trade, after public inquiry regarding the average cost of living, and the declarations have statutory force as the basis of all industrial awards and agreements relating to wages. The Board's declarations were made annually until October, 1921. Subsequently the rates were reviewed at more frequent intervals, and in accordance with the most recent amendment of the Industrial Arbitration Act, passed in November, 1922, the Board may declare the living wages at intervals of not less than three months. An industrial award or agreement may not prescribe lower rates than those fixed by the Board, but the Court of Industrial Arbitration may refrain from making an award, or may cancel an award or agreement, if it is proved that serious unemployment in an industry may result from its operation. The Court may exempt from the provisions of an award or agreement employees entitled to benefit under a profitsharing or co-partnership scheme.

Prior to the establishment of the Board of Trade, the Court conducted an inquiry into the cost of living in Sydney, and in 1914 fixed a living wage for men, which it varied in the two following years.

For the purpose of the declarations, the living wage is defined as the standard wage which will 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.

The principle of a living wage was not applied to women's wages under the State industrial arbitration system until the Board of Trade conducted its first inquiry into the cost of living in 1918. The standard adopted is the minimum wage which will 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 variations in the living wages, as determined by the Court of Industrial Arbitration, and since 1918 by the Board of Trade, have been as follows. In 1919 and earlier years the declarations related to the metropolitan area only.

	Men.	à ,	Wome	n.
Year.	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	•••	€ 6x€ 49
1918	5th September	3 000	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	216

In March, and in August, 1924, the Board decided, after inquiry, not to vary the rates fixed in September, 1923. The declarations as shown in the table did not apply to employees in rural occupations.

The Commonwealth Court assesses a basic rate 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 is adjusted to cover variations in the cost of living so as to assure to the lowest paid worker the same standard of comfort as that rate gave in 1907.

In view of the fact that awards are made for extended periods, much difficulty has been experienced in devising a satisfactory method of adjustment. For some years after the Harvester wage was determined the movement in the cost of living was slow, and wages were fixed by the Court after consideration of the cost of living at the time of the award, on the

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basis of the evidence given in the Harvester case. In July, 1913, the President decided to assess the basic wage, by applying to the Harvester rate the index number of the cost of food, grocerics, and rent, as determined by the Commonwealth Statistician for the calendar year preceding the date when the award was made. Subsequently, as prices began to rise with increasing rapidity, it became the general practice to apply the index number for the twelve months immediately preceding the making of the award.

None of the foregoing methods, however, gave the desired result, and the Court decided that it was necessary in some cases to give awards a retrospective effect in order to relieve employees who had been receiving wages below a fair equivalent of the standard rate. Obviously, a system which involved retrospective pay had many disadvantages, and in 1921 the Court adopted a new rule to provide for the periodical adjustment of rates of wages during the term of an award. Under the existing method, introduced in December, 1921, it is a general rule to make the adjustments quarterly 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, 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.

A living wage for women workers has not been fixed by the Commonwealth Court, except in particular industries. In September, 1914, employees in the felt hat factories of New South Wales, Victoria, and South Australia were awarded 30s. a week—the full amount claimed. In May, 1917, a minimum Federal wage of 35s a week was awarded for unskilled labour by women employed as ticket sellers, cloak-room attendants, etc., in theatres and picture shows. Since 1919 the clothing industry, in which a large proportion of the female industrial workers are engaged, has been subject to Federal awards in all the States, except Western Australia. The living wage for women was fixed in the successive awards at the following rates:—October, 1919, £1 15s.; May, 1921, £2 5s. 9d.; November, 1923, £2 7s. 6d.

Living Wage in the other States.

In Queensland the Industrial Arbitration Court has adopted a practice of fixing a minimum wage for industries of average prosperity, and of determining a basic wage with regard to the particular circumstances of any industry of greater or less than average prosperity. In South Australia the standard living wage is fixed by the Board of Industry. 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, and the prescribed rates for unskilled labour vary accordingly. In Western Australia the Arbitration Court adjudicates in cases of disputes only, and assesses a basic rate for each case, using the same method of assessment as the Commonwealth tribunal.

The rates shown in the following statement for Melbourne, Perth, and Hobart are those which may be regarded as fair average or basic rates for unskilled labour at the respective dates specified in the table. The

WAGES.

quotations for the Commonwealth represent the rates which, in accordance with the practice of the Court, would have been used in determining rates of wages, if the Court had made awards for the capital cities as at the specified dates. The rate for July, 1914, was calculated by applying to the Harvester wage, 7s. per day in Melbourne in 1907, the index number of the cost of food, groceries, and rent in the capital cities during the preceding twelve months, and the rates as at the other dates specified, by applying the index numbers for the preceding quarter and adding to the result the sum of 3s. per week.

	· · · · · .	Living Wage—Adult Males.							
Metropolitan Areas.	1914 (Ju!y).	192 2 (May).	1923 (April).	1924. (March).					
	£ s. d.	£ s, d.	£ s. d.	£ s. d.					
Sydney	. 280	3 18 0	3 19 0	4 2 0					
Melbourne	. 250	3 19 6	3 18 0	4 3 6					
Brisbane	. 220	400	400	400					
Adelaide	. 280	3 17 6	3 17 6	3 18 6					
Perth	2 14 0	3 17 0	3 17 0	400					
Hobart	. 280	3 15 0	3 18 0	3 18 0					
Commonwealth	2136	3 17 6	4 0 6	450					

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, 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 wag-s 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

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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 since 1913:--

Occupation.	-1901.	1906.	1911.	1913.	1916.	1918.	1919.	1920.	1921.	1922.	1923.
Manufacturing — Cabinetmäker	s. d. 52 0	s. d. 52 0	s. d. 56 0	s. d. 60 0	s. d. 367 0	s. d. 79 0	s. d. 96 0	s. d. 104 0	s. d. 101 9	#. d. 98 0	s. el. 93 6
Boilermaker	60 0	60 0	66 0	66 0	78 0	85 6	85 6	110 6	107 6	103 6	107 6
Coppersmith	60 0	60 0	68 0	72 0	80 0	87 6	104 6	112 6	109 6	105 6	109 6
Fitter	60 0	60 0	64 0	70 0	78 0	85 6	102 6	110 6	107 6	103 6	107 6
" electrical	60 0	60 0	66 0	72 0	8 2 0	82 0	90 0	111 6	108 6	104 6	115 O
Baker	52 6	52 6	56 0	60 0	70 0	70 0	70 6	102 6	100 6	96 6	100 6
Bootclicker	45 0	45 0	54 0	54 0	66 0	72 0	82 0	98 6	98 6	95 9	94 9
Tailor (ready-made)	50 0	50 0	55 0	60 0	60 0	67 6	75 0	92 0	102 6	96 6	104 6
Compositor (jobbing)	52 0	52 0	60 0	65 0	C5 0	73_6	97 0	105 0	105 0	98 0	102 0
Building— Bricklayer	60 0	62 0	69 0	75 0	78 0	84 0	84 0	108 0	108 0	109 0	113 0
Carpenter	60 0	60 0	63 0	72 0	80 0	-80 0	80 0	110 0	110 0	103 0	107 6
Painter	54 0	55 0	·60 0·	64 0	75 ∙ 0	79 6	79 6	104 0	104 0	\$7 0	107 6
Plumber	60 0	60 0	66 0	72 0	72 0	80 0	80 0	110 0	110 0.	103 0	107 0
Mining— Coalminer, per ton (best coal)	4 2	3 6	4 2	4 2	4 6	5 210		6 11			6 11 #
Coalwheeler	42 0	38 0	42 0	51 0	{48 0 to	68 0 to	to	93 6 to	93 6 to	to	93 6 to
Silverminer	54 0	60 6	66 0	66 0	(546 779	70 0 77 9	88 6 87 0	106 6 99 0	106 6 99 0	106 6 99 0	106 6 99 0
Transport-										-	
Railway loco-driver {	66 0 to 90 0	66 0 to 90 0	66 0 to 90 0	72 0 150 96 0	72 0 to 96 0	74 6 to 96 0	84 0 to 108 0	to	106 0 to 130 0	to	106 0 130 0
Wharf-labourer per hour	1 0 to	1 1 3 10	1 6	16	19	19	19	23	29	29	2 11
(Rural industries	1 3 20 0	1 3 20 0) 24.0	24 0	24 0	30 0	30 0	40 0	40 0	35 0	38 O
Station-hand, with keep	20 0	25 0	25 0	25 0	25 0	40 0	40 0	42 0	48 0	48 0	48 0
Farm-labowrer, with keep {	15 0 to 20 0	15 0 to 20 0	20 0 to 25 0	20 0 to 25 0	20 0 to 35 0	30 0 to 40 0	30 0 to 40 0	30 0 to 40 0	} 42 0		30 0
Miscellaneous— Pick and shovel man	42 0	{	48 0	51 0	35 0 56 0	64 0	85 6	40 0 94 6	94 6	(50 0 86 6	
Standard minimum wage	*	*	45 0	45 0	55 6	60 0	77 0	85 0	82 0	78 0	82 0

· Standard not fixed.

As a result of the method of wage adjustment adopted by the industrial tribunals, the movement in the rates generally coincides with the rise or fall in the standard living wage. 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 living wage, 82s. per week, in 1923, showed an increase of 47s as compared with that rate, and a similar increase occurred in the wages of skilled artisans in the engineering and building trades for whom the predominant rate in 1901 was 60s. per week, as compared with a minimum award rate ranging from 107s. in 1923. A larger increase has occurred in some trades, e.g., printing, clothing, and bootmaking.

The wages of coalminers are based on contract rates which vary according to the conditions of the seams or places where the coal is mined, the rates

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being determined by a special tribunal. The rates shown in the table relate to the northern district where the bulk of the coal is produced.

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. The rates are generally higher than those fixed for most industrial occupations, but the increase since 1901 has been smaller than the increase in the other rates shown in the table. 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, contract rates for shearing and the wages of station hands are fixed by the Commonwealth Court of Conciliation and Arbitration. In September, 1923, the rate for shearing ordinary flock sheep was raised from 35s. per 100 to 38s. Higher rates must be paid for shearing stud sheep. The wages of farm labourers have not been fixed, except during the twelve months dating from October, 1921, when a rural living wage declaration of the Board of Trade was in force, the rate being 42s. per week for rural workers who were provided with board and lodging. The rates shown in the table for pick and shovel men relate to those engaged in the work of railway construction.

In order to show the extent to which charges in the rates for individual occupations have affected the average wage in various groups of industries, and in all industries combined, the following statement has been prepared in accordance with the method described on page 604 of the 1921 issue of the Year Book. 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. In the shipping, pastoral, and domestic industries, where food and lodging are supplied, the value of such has been added to the rates:—

		Average Weekly Rates of Wages.																				
	Group of Industries.		19)6 .	191	1.	191	3.	191	6.	191	8.	:191	9.	192	20.	192	1.	19	22.	192	23.
	Weod, Furniture, Sawmill, Timber Works, etc	s. d. 48 4																				
2.	Engineering, Shipbuilding, Smelting, Metal Works, etc.	49 4	49	8	55	4	57	8	64	0	68	11	29	- K	07	6	: 09	. 7	08		98	· 1
3.	Food, Drink, and Tobacco Manufacture and Distri-	47) 6 -														· ·)				÷		
4.	bution	44 11	45	3	51	4	56	0	62	3	66	s-1.	79	3	94	. 0	95	2	91	5	94	
	tiles, Rope, Cordage, etc. Boo s, Printing, Bookbind-	44 5	44	5	51	7	54	0	60	2	63	3	76	11	91	6	91	10	89	3	- 92	1
	ing, etc	53 1				4	65	9	67	9	75	2	86	0	105	11	106	. 3				
	Other Manufacturing Building	$\begin{array}{ccc} 44 & 10 \\ 56 & 2 \end{array}$	46	1	51	7	56	3	63	6	67	3	79	4	.95	6	97	- 7			96	
8.	Mining, Quarries, etc. Railway and Tramway Ser-	50 2 52 3	51	7	60	0	62	9	72	6	70 75	7	86	10	105	∴.4	104	. 4	101	2	105	Ċ
	vices		52	6	55	2	61	1	65	2	67	8	81									
11.	Other Land Transport Shipping, Wharf Labour, etc.			-8 -8		4 6	51 48	.4 9	59 58			1 5	78 76				92 100				91 100	Ę
12.	Pastoral, Agricultural, Bural, Horticultural, etc.	32 5	35	5	43	5	49	11	55	10	62	- 3	71	8	80	9	02	0	84	5	85	e
	Domestic, Hotels, etc Miscellaneous	$ \begin{array}{ccc} 37 & 11 \\ 43 & 5 \end{array} $	39		44;	3	45 53	5	53 59	- 3	57	2	71	5	88	10	89	0	83	7	87 92	1
	All Industries	48 11	45	4	51	5	55	9	61	11	65	n	76	9	94	0	95	10	91		94	

The average rate of wages in all industries combined rose slowly until in 1918 it was 28 per cent, higher than in 1911. In the next three years it rose by 46 per cent, and reached the highest point in 1921, when it was 86.4 per cent, above the average of 1911. In the following year there was a decline of 4.4 per cent.; then it rose again by 3 per cent. in 1923.

Prior to 1921 changes in the rates of wages did not alter materially the relative positions of the various groups, as indicated by the average rates. The highest averages were in the building, printing, and mining industries, which are strongly organised, and include a large proportion of skilled artisans. The next in order were usually the railway and tramway services, engineering, woodworking, and other manufacturing trades. The lowest averages were in the shipping, rural, and domestic groups. In the shipping industry, however, the average per week rose by 10s. 7d. in 1921, when other averages showed little or no increase, and some declined, and as a result the shipping group rose to fifth place. On the other hand the railway and tramway services group receded in position, the increase in the average rate, viz., 45s. between 1901 and 1923, being lower than in any other group. Between 1901 and 1923 the increase in average weekly rate in the various groups ranged from 45s. to 62s. ld. The classes with highest increases were shipping, 62s. 1d., pastoral, etc., 53s. 1d, and mining, 52s. 9d, wood and furniture trades 52s. 8d., and the lowest were in the railway group 45s., and the clothing trades 47s. 10d.

In nearly all the groups the average rates were at the maximum in the year 1921, in the following year they declined generally, but in 1923 they moved upwards again. In two classes, viz., the wool and furniture trades and the shipping group, the average rate rose to the level of the year 1921, and in three groups it was even higher, viz., railway and tramway services 1s. 9d. higher, clothing 5d., and the miscellaneous group 7d. higher. In the majority of the groups, however, the average rate in 1923 was lower than in 1921 by amounts ranging from 3d. to 11d. In the printing trades it was 2s. lower, and in rural occupations it was lower by 6s. 6d. The average in the lastmentioned group was affected by an award of the Commonwealth Court, which reduced the rates for shearers and other pastoral workers, and by the exclusion of rural workers from the purview of the New South Wales Board of Trade in respect of living wage determinations.

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 satisfactory records as to variations in the purchasing power of money 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 :—

	Average Nomi	nal Wage per Wcek.	Index Number of	Index Number of Effective Wage.		
Year.	Amount.	Index Number.	Food and Rent Combined.			
	s. d.		1			
1901	43 11	854	848	1007		
1906	45 4	882	901	979		
1911	51 5	1000	1000	1000		
1913	55 9	1084	1112	975		
1914	56 2	1092	1155	945		
1915	57 7	1120	1261	888		
1916	61 11	1204	1328	907		
1917	64 5	1253	1356	924		
1918	65 11	1282	1375	932		
1919	76 9	1493	1502	994		
1920	94 0	1828	1752	1043		
1921	95 10	1864	1654	1127		
1922	91 6	1782	1594	1118		
1923	94 6	1838	1682	1093		

In 1901 the effective wage was slightly higher, and in 1906 it was slightly lower, than in 1911. Thereafter it declined steadily as living became dearer, until in 1915 it was 11 per cent. lower than in 1911. Subsequently wages were increased at a faster rate than the cost of food and rent, and the effective wage index number rose in each year, but it was not until 1920 that the nominal wage had the same purchasing power as in 1911. In 1921 it was 12.7 per cent., and in the following year 11.8 per cent. higher than in 1911. In 1923 the average weekly wage was increased by nearly 3 per cent., but food and rent were $5\frac{1}{2}$ per cent. dearer ; so that the wage index was slightly lower than in 1922, but it was 9.3 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. Moreover conditions vary in different industries. In the building trade, for instance, there has been remarkable activity in recent years, and competent men have been receiving wages above the rates prescribed by awards, and have probably suffered less intermittency than in periods of normal trade, meanwhile some of the manufacturing industries have experienced unusual slackness.

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 here included in the production of the manufacturing industries, e.g., coke produced at coke works, also the value added to minerals in the manufactuure of lime and cement at limestone quarries; and in the treatment of ores at mines. The values shown for the three years are those supplied by the mine owners in returns collected under the Census Act, and they represent the estimated value at the mines of the minerals produced during each year. It was stated in the previous issue of this volume that the figures relating to mining production were to be regarded as tentative, pending further investigation, and the figures for the years 1921 and 1922 have been amended since by the exclusion of certain amounts representing value added by reason of the treatment of ores. Reference to the difficulty experienced in estimating the value of mining production is made in the chapter relating to the mining industry. The figures do not represent exact values, especially in the earlier years, but may be considered to be the best estimates to be made from the data available.

The value of the manufacturing production is taken as the value at the factory of the manufactured goods less the cost of raw materials and fuel, but returns are not collected as to the production in small establishments employing less than four hands and not using machinery, nor from bakehouses nor butchers' smallgoods factories.

For these 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 production from year to year, and as being the principal means available of measuring the growth of 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.

		· · · · · · · · · · · · · · · · · · ·			1					
Year.		Rural In	dustries.		Forests, Fisheries,		Total, Primary	Manu- facturing	Total, Primary and	
	Pastoral.	Agri- cultural.	Dairying and Farmyard.	Total, Rural Industries.	and Trap- ping.	Mining.	Indus- tries,	Industries.	Manu- facturing Industries	
	£ 000	£ 000	£ 000	£ 000	£ 000	£ 000	£.000	£ 000	£ 000	
1871	7,609	2,220	1,110	10,939	324	1,626	12,889	2,490	15,379	
1881	10,866	4,216	2,285	17,367	492	2,138	19,997	5,183	25,180	
1891	14,725	3,615	2,735	21,075	758	6,434	28,267	7,799	36,066	
1901	12,447	7,060	3,188	22,695	986	5,681	29,362	9,742	39,104	
1911	19,434	9,749	6,534	35,717	2,213	7,392	45,322	19,432	64,754	
1912	19,440	11,817	7,192	38,449	2,347	8,177	48,973	22,681	71,654	
1913	20,738	12,378	7,063	40,179	2,644	8,712	51,535	23,764	75,299	
1914-15	18,848	10,031	7,846	36,725	2,074	6,090	44,889	24,330	69,219	
1915-16	21,576	20,362	7,649	49,587	2,603	7,478	59,668	25,235	- 84,903	
1916-17	26,842	13,012	9,419	49,273	3,055	9,173	61,501	27,133	88,634	
1917-18	28,435	13,685	10,635	52,755	3,737	10,493	66,985	29,500	96,485	
1918-1 9	29,865	12,280	11,073	53,218	3,708	7,805	64,731	32,768	97,499	
1919- 20	33,972	13,582	11,793	59,347	7,760	9, 650	76,757	39,314	116,071	
192 0–21	20,057	32,373	16,447	68,877	4,089	10,192	83,158	43,128	126,286	
1921-22	23,657	20,261	12,914	56,832	3,628	9,666	70,126	46,746	116,872	
1922-23	34,009	21,301	13,445	68,755	4,810	10,419	83,984	51,492	135,476	

The total value of production increased by £10,000,000 in each decade from 1871 to 1891. During the early nineties there was a decline from which the recovery was slow. In 1901, however, the value of production was £3,000,000 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 upward movement being interrupted only in 1914–15, when the combined effects of drought and war caused a serious decline, and in 1918–19, when there was a diminution in the output of the mines. In . 1920–21 the total value £126,286,000 was nearly twice the value ten years earlier. In the following season the general level of prices was much lower, and there was a decline of £9,414,000, or over 7 per cent. in the value of production, though the pastoral and manufacturing industries yielded a higher return.

In 1922-23 the value of production was the highest on record, being 16 per cent. higher than in the previous year and 7 per cent. above the value in 1920-21. The yield from the pastoral industry was the highest yet recorded owing to the high prices obtained for wool. The returns from agriculture and from dairying were better than in the preceding year, though much lower than in 1920-21. The return from the rural industries as a whole was only £122,000 lower than the exceptionally high value which was realised two years earlier.

In 1901 the value of production of the primary industries represented 75 per cent. of the total value, the rural production being equivalent to 58 per cent. In 1911 the corresponding proportions were: primary industries 70 per cent, and rural 55 per cent., in 1921-22, 60 per cent. and 48 per cent. respectively, and in 1922-23, primary 62 per cent. and rural 51 per cent.

The value of rural production, especially in the agricultural industry, shows considerable fluctuation, for which the reasons are mainly seasonal. Therefore it is convenient to trace the development of the industries by reviewing the returns on the basis of the annual average of triennial periods. Thus a comparison of the averages shows that the annual value of rural production rose slowly from £35,900,000 during the three seasons ending in 1911, to £38,500,000 in the three seasons ending in 1915, and thereafter it increased more rapidly until it reached the sum of £60,500,000 in the period ended June, 1921. In the last triennium of the period the annual average was £64,800,000.

In the mining industry the condition of the oversea market usually exerts the most powerful influence on the production of metals, which fluctuates accordingly. The demand for coal is more regular, and has increased steadily with the use of power machinery, so that coal is now one of the most important items of primary production. Restrictions on the export of metals and coal affected production in the early years of the war period. As hostilities continued, arrangements were made for marketing the products, and, high prices being obtainable, the value of mineral production Subsequently the output of metals decreased reached a maximum in 1918. owing to industrial strife and to a decline in prices, but the coal trade experienced a period of increasing activity. With the restoration of industrial peace in the principal metalliferous mines, production has improved during the last three years; but the market conditions have not been favourable, and the output remains far below normal. The output of coal in 1921 was the largest on record. In the following years it was somewhat lower, owing mainly to depression in the iron and steel industries in 1922 and to industrial strife in the Maitland fields in 1923. The return from mining represents usually between 8 per cent, and 10 per cent. of the total value of production.

The figures relating to the manufacturing industries disclose a steady advance from the beginning of the period under review, when it was less than $\pounds 2,500,000$, and only 16 per cent. of the total production. In 1901 the return was four times that amount, and it represented 25 per cent. of the total value of production. In 1911 the value of production was almost equal to the return from the pastoral industry, and it has exceeded it in each subsequent year. The relative importance of the manufacturing production has risen from 30 per cent. of the total production in 1911 to 38 per cent. in 1922-23.

PRODUCTION.

				Value of	Production	per Head.				
	54 		Total							
Year.		Rural In	dustries.		Forests,		Total,	Manufac- turing Indus-	Primary and Manu-	
	Pastoral.	Agricul- tural.	Dairying and Farm- yard,	Total, Rural In- dustries.	Fisheries, and Trapping.	Mining.	Primary Indus tries,	tries	facturing Indus- tries.	
$\begin{array}{c} 1871\\ 1881\\ 1891\\ 1901\\ 1912\\ 1913\\ 1914-15\\ 1915-16\\ 1916-17\\ 1917-18\\ 1918-19\\ 1919-20\\ 1920-21\\ 1921-22\\ 1922-23\\ \end{array}$	$\begin{array}{c} \pounds \ {\rm s.} \ {\rm d.} \\ {\rm 14} \ {\rm 19} \ 5 \\ {\rm 14} \ {\rm 19} \ 5 \\ {\rm 14} \ {\rm 4} \ {\rm 0} \\ {\rm 9} \ {\rm 2} \ {\rm 1} \\ {\rm 11} \ {\rm 13} \ {\rm 5} \\ {\rm 11} \ {\rm 2} \ {\rm 11} \\ {\rm 11} \ {\rm 7} \ {\rm 11} \\ {\rm 10} \ {\rm 0} \ {\rm 1} \\ {\rm 11} \ {\rm 7} \ {\rm 11} \\ {\rm 10} \ {\rm 0} \ {\rm 1} \\ {\rm 14} \ {\rm 3} \ {\rm 5} \\ {\rm 14} \ {\rm 15} \ {\rm 7} \\ {\rm 15} \ {\rm 3} \\ {\rm 16} \ {\rm 13} \ {\rm 3} \\ {\rm 9} \ {\rm 11} \ {\rm 11} \\ {\rm 11} \ {\rm 2} \ {\rm 3} \\ {\rm 11} \ {\rm 2} \ {\rm 3} \\ {\rm 15} \ {\rm 13} \ {\rm 0} \end{array} $	$\begin{array}{c} \pounds & \text{s. d.} \\ 4 & 7 & 5 \\ 5 & 10 & 2 \\ 3 & 3 & 4 \\ 5 & 3 & 3 \\ 5 & 17 & 1 \\ 6 & 15 & 6 \\ 6 & 16 & 0 \\ 5 & 6 & 6 \\ 10 & 14 & 11 \\ 6 & 17 & 4 \\ 7 & 2 & 3 \\ 6 & 4 & 10 \\ 6 & 13 & 3 \\ 15 & 9 & 8 \\ 9 & 10 & 5 \\ 9 & 16 & 0 \end{array}$	$\begin{array}{c} \pounds \ {\rm s.} \ {\rm d.} \\ 2 \ 3 \ 8 \\ 2 \ 19 \ 9 \\ 2 \ 7 \ 11 \\ 2 \ 6 \ 8 \\ 3 \ 18 \ 6 \\ 4 \ 2 \ 6 \\ 8 \ 17 \ 7 \\ 4 \ 3 \ 3 \\ 4 \ 0 \ 9 \\ 5 \ 10 \ 7 \\ 5 \ 15 \ 8 \\ 7 \ 17 \ 4 \\ 6 \ 3 \ 9 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} \pounds \ s. \ d. \\ 0 \ 12 \ 9 \\ 0 \ 12 \ 11 \\ 1 \ 3 \ 3 \\ 0 \ 14 \ 5 \\ 1 \ 6 \ 7 \\ 1 \ 6 \ 11 \\ 1 \ 9 \ 1 \\ 1 \ 2 \ 1 \\ 1 \ 2 \ 1 \\ 1 \ 2 \ 1 \\ 1 \ 12 \ 10 \\ 1 \ 17 \ 8 \\ 16 \ 2 \\ 1 \ 19 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \\ 1 \ 10 \ 10 \ 10 \\ 1 \ 10 \ 10 \ 10 \\ 1 \ 10 \ 10 \ 10 \ 10 \\ 1 \ 10 \ $	$\begin{array}{c} \pounds & \text{s. d.} \\ 3 & 4 & 0 \\ 2 & 15 & 11 \\ 5 & 12 & 8 \\ 4 & 3 & 1 \\ 4 & 8 & 9 \\ 4 & 13 & 9 \\ 4 & 13 & 9 \\ 4 & 15 & 8 \\ 3 & 18 & 11 \\ 4 & 16 & 10 \\ 5 & 9 & 1 \\ 3 & 19 & 5 \\ 4 & 14 & 8 \\ 4 & 17 & 6 \\ 4 & 10 & 19 \\ 4 & 15 & 11 \end{array}$	£ s. d. 25 7 3 26 2 9 24 15 0 21 9 6 27 4 4 23 1 7 23 6 3 23 16 6 31 9 10 32 9 3 34 16 4 32 13 2 37 13 0 30 15 7 82 19 0 38 12 11	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} \pounds \ {\bf s.} \ {\bf d.} \\ {\bf 80} \ {\bf 5} \ {\bf 5} \\ {\bf 32} \ {\bf 18} \ {\bf 3} \\ {\bf 31} \ {\bf 11} \ {\bf 7} \\ {\bf 28} \ {\bf 12} \ {\bf 0} \\ {\bf 36} \ {\bf 17} \ {\bf 9} \\ {\bf 41} \ {\bf 1} \ {\bf 9} \\ {\bf 41} \ {\bf 1} \ {\bf 9} \\ {\bf 41} \ {\bf 1} \ {\bf 9} \\ {\bf 41} \ {\bf 6} \ {\bf 3} \\ {\bf 46} \ {\bf 15} \ {\bf 8} \\ {\bf 50} \ {\bf 8} \ {\bf 1} \\ {\bf 46} \ {\bf 15} \ {\bf 8} \\ {\bf 50} \ {\bf 8} \ {\bf 1} \\ {\bf 49} \ {\bf 11} \ {\bf 4} \\ {\bf 46} \ {\bf 18} \ {\bf 8} \\ {\bf 60} \ {\bf 8} \ {\bf 3} \\ {\bf 54} \ {\bf 18} \ {\bf 4} \\ {\bf 62} \ {\bf 6} \ {\bf 10} \end{array}$	

The value of production per head from the pastoral industry was considerably greater when sheep-raising was the staple industry of the colony than in subsequent years when the population had entered into other activities.

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, manufactories; 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.

During the fourteen years which preceded the war there was a fairly steady increase in the value of production per head, and the return in 1913 amounted to £41 7s. 5d., which is £12 15s. 5d., or 45 per cent. greater than in 1901. The increase in the value of rural production was 33 per cent. greater than the increase in the population. In the mining industry the increase was 15 per cent greater, and in the manufacturing 83 per cent. greater. The value per head declined by £4 12s. 8d., or 11 per cent, in the season 1914–15, then in the following year it rose above the former level, and increased in each year, with one exception, until it reached £60 8s. 3d. in 1920–21. After a decline in 1921–22 it rose to a higher level in the following year.

In 1922-23 the per capita value of production from the rural industries was 43 per cent. higher than in 1913, the return per head from the pastoral industry was 37 per cent. higher, from agriculture 44 per cent. higher, and fr. m dairying 59 per cent. higher. The return per head from the mining industry was about the same in both years, and in the manufacturing there was an increase of 81 per cent. The return per head from the primary industries was higher by 36 per cent., and from all industries by 51 per cent.

As compared with the previous season, all the industries showed a higher value per head in 1922–23. In the pastoral industry the increase amounted to 41 per cent.; in agriculture and dairying to 3 per cent.; and in all the rural industries combined to 18 per cent. The per capita return from mining

was 7 per cent. higher, and primary production per head was higher by about 17 per cent. The manufacturing industries showed an increase of 8 per cent., and the total value of production per head was 13 per cent. above that of 1921-22.

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, 1901-03 and 1921-23, in comparison with the three pre-war years, 1911-13, which were also years of high production :---

Product.		Annual Pro (000 omitted)	Average Production Per Head of Population.				
	1901–03.	1911-13.	1921-23.	190 1-03.	1911-13.	1921-23	
	o. 251,497	352,112	273,073	181.2	202.0	128:2	
Tallow cw	t. 312	698	609	•2	•4	•3	
Meat, Frozen (Exported)-	5,963	11.120	10,271	4:3	6.4	4.8	
Mutton	07 407	63,828	41,525	19.7	36.6	19.5	
Leather ,	14 970*	13,373	19,013	10.4	7.7	8.9	
D		· ·					
Chasse	, 35,912 , 4,245	79,198 5,845	86,222 6,324	25·9 3·1	45.4	40·5 3·0	
Decon and Ham	0 914	5,845 15,940	18,642	6.7	9.1	8.8	
· · · · · · · · · · · · · · · · · · ·							
Wheat bush		31,865	42,353	10.5	18.3	19.9	
Maize ,,	4,577	4,691	3,813	3.3	2.7	1.8	
Potatoes cw		1,824	1,046	6	1.0	·5 10·8	
Нау ,		18,612	23,098	7.7	1 C C	1.1	
Coal tor		9,664	10,485	4.4	5.5	4 9	
Coke cw		9,217	16,257	2.0	5:3	7.6	
Gold o		200	32	•2	.1	•0	
Silver ,		2,117 7,167	940	·6 5·5	1.2	·4 1·6	
Silver-lead-ore, etc cw	t. 7,647 151	10,290	3,299 5,796		4·1 5·9	2.7	
<i>"</i>		,		_			
Timber, Sawn sup. f		169,078	157,899	91.8	97.0	74.1	
Fish, Fresh ll		15,499	20,588	10:5	8.9	9.7	
Rabbit Skins (Exported) ,	, 756*	5,305	6,747	•5	3.0	3 2	
Iron, Pig cw		771	1,595	•1	•4	7	
Portland Cement ,,	372	2,374	3,528	•3	14	1.7	
Beer and Stout ga		21,665	25,740	10.4	12:4	12.1	
Tobacco 11		6,370	12,211	2.6	3.7	5.7	
Biscuits ,		24,175	39,244	7.3	13.9	18.4	
Boots and Shoes pair Bricks No		3,752	4,174	2.2	2.2	2·0 159·4	
011 11		$366,985 \\ 5.511$	339,721 4.596	130 4 2 4	210·5 3·2	159.4	
Gas		5,511 4,878	9, 990 9, 470	2.4	2.8	4.4	
Jam 11		27.767	26,767	14.0	15.9	12.6	
Soap ,	00 740	31,670	37,085	16.4	18.2	17.4	
Sugar, Refined cw		1.834	2,373	.9	10 2	1.1	
Meat, Preserved 11		25,501	4,320	11-3	14.6	20	
Tweed and Cloth yo		1,170	2,313	•4	•7	1.1	

* Estimated.

The statement shows in regard to 35 staple commodities that the quantity, produced per head between 1911-13 and 1921-23 increased in 12, decreased in 22 cases, and in one case the average was the same in both periods. Amongst those which decreased were the important commodities—wool, meat, butter, coal, silver-lead, and timber.

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 contained on a broader basis in the "Official Year Book, 1921." The following account of recent developments brings the matter up to date of publication.

1921-22.

As the year 1920 was the culminating point of the trade boom, which had assumed new vigour after the close of the war, 1921 was the fateful year in which the inevitable process of deflation began. In older countries, where the economic situation was more complex, the transition was sudden, and marked by serious disturbances in industry and commerce; but in New South Wales a policy of gradual deflation was pursued, and readjustments to meet the new conditions proceeded without grave disorders. Although conditions of employment became bad and remained bad, the shortage of work was not generally acute for any lengthy period. At the census in April, 1921, when the position was at its worst, the unemployed in the State numbered 61,743, equal to 7 per cent. of the total breadwinners, but of these only one-half were out of work through scarcity of employment. Financial losses in some cases were severe, but serious disorders were avoided, and there was no appreciable increase in the number or magnitude of bankruptcies-convincing proof of an efficient commercial and banking organisation, and of the financial strength of the community. On the whole, production increased in volume, and, as this increase more than counteracted the decline in prices, the value of production was greater in 1920-21 than in any previous year. The propitious seasons which followed the breaking of the drought in June, 1920, stimulated production, and helped to improve the difficult situation which was arising out of the decay of the unreal prosperity consequent upon the general fall in prices.

The decline first affected the State through a fall in the prices realised for pastoral products and metals, of which New South Wales is a seller, and for manufactured goods, of which it is a buyer. The smaller and slower realisations on all primary products, except wheat, caused a reduction in the national income during 1921, while, at the same time, the knowledge that the level of prices was at last falling produced a spirit of caution among the buying public. Although exports declined heavily, imports, in fulfilment of long-standing orders, grew to unprecedented heights in 1920–21. Commercial houses were faced with the troublesome problem of realising on large stocks of high-priced goods on falling markets in order to meet extraordinary commitments oversea, while the spending power of the public was weakening.

As the violent developments oversea dominated the local situation, the whole industrial organisation of the State felt the influence of price variations. Prices fell steadily for two years, and by July, 1922, had reached a point approximately 30 per cent. below the highest point reached in 1920. The volume of trade, as shown by monetary transactions, began to shrink. Bank advances had reached their maximum in March quarter, 1921, and deposits in the following quarter; thereafter both receded gradually. Deposits reached their lowest point by December, 1921, and advances six months later. A decline was apparent also in the business of the clearinghouse, the total of 1921 being more than 7 per cent. less than that of 1920, while in the early months of 1922 there was a further decline. The spirit

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of caution in spending had its counterpart in saving, and a new growth of deposits occurred in the savings banks. These increased by $\pounds 7,460,000$ in 1920-21—nearly double the increase of any preceding year. The diminution in earning-power was exhibited in the smaller earnings of public companies, some of which arranged to return portion of their capital to shareholders.

As the result of recommendations made by the special tribunal set up in February, 1921, to consider applications for a reduction in hours of work, a 44-hour working week was proclaimed in respect of many of the important industries regulated by awards of the State courts. This matter, the question of unemployment, and of reduction in the costs of production, became topics of much discussion. A joint economic conference of representative organisations of employers and employees assembled in Sydney in 1922 to consider the problems of the day, but failed to agree on general principles, and disbanded without formulating concrete proposals for the betterment of conditions. The price of coal and its cost of production were the subject of a subsequent conference, but agreement was not reached.

In October, 1921, the Board of Trade reconsidered the living wage, and declared in favour of a reduction from £4 5s. to £4 2s. per week, but the determination was not put into effect immediately, and the average effective wage of 1921 was 12.7 per cent. above that of 1911. In May, 1922, after the change of Government, the Board gave the matter further consideration, and declared another reduction to £3 18s. per week. During all these readjustments the industrial situation remained calm, and in 1921 strikes were in extent far below the average of the previous eight years. A number of industries, however, principally the metal and metalliferous mining enterprises, were dislocated by a fresh cause—the absence of profitable markets—and a number of establishments and mines suspended operations pending an improvement in markets or a reduction in costs of production.

With the advent of favourable seasons in June, 1920, the outlook for primary industries improved. The harvests of 1920-21 and of 1921-22 were unusually large, especially in the former year, and high prices were realised for wheat; the market for butter improved after a severe decline toward the end of 1921, and production increased to over 100,000,000 lb. in 1921-22; the sheep flocks recovered rapidly from the effects of the drought of 1920, and prices rose as the demand increased, so that the clip of 1921 was practically disposed of by the end of July, 1922, at very satisfactory The trials of the readjustment period found organisations prices. of producers, brought into being largely by the problems of recent years, ready to take combined action in their own interests, and the disturbed state of markets led to a continuance of the war-time expedient of "pooling" produce for market. Although wool reverted to a free market in 1921, control of the realisation of surplus wool from previous years was handed over to a company specially formed for the purpose. The wheatgrowers by ballot emphatically favoured a "voluntary pool" in connection with the harvest of 1921-22, and more than half of that harvest was entrusted to the new organisation. Butter was controlled by producers on co-operative principles, and a "fruit pool" was formed by the Commonwealth Government to handle fruit for canning. By these means primary producers were able to exercise more control in the marketing of their products, and to obtain better prices.

The general decline of prices, wages, and employment had a marked effect on the housing problem. Owing to high costs, building activity decreased during 1921, although housing needs had not been fully met; but the

INDUSTRIAL HISTORY OF NEW SOUTH WALES.

increase in rents, the fall in wages, and the slackness of employment, led to such economy in housing accommodation that, towards the middle of 1922, the effective demand for houses became less intense and notices of houses to let, which had been rare for some years, became familiar again in the columns of the press, but the rents required generally exceeded 25s. per week. At the same time reduced costs led to an expansion of building operations.

Although local rates of interest remained unchanged at a high level, monetary conditions oversea improved. Public loans were negotiated on improved terms in London. A loan of £5,000,000 issued at 95, bearing interest at the rate of $4\frac{1}{2}$ per cent. per annum, was raised by the Government of New South Wales in 1922. The extent of the improvement is apparent from the rise in the price of Consols, which had been quoted at 44 and rose to $58\frac{1}{2}$ in May, 1923, while New South Wales 3 per cent. stocks recovered from 58 to 82. The recovery of trade was further facilitated by a marked improvement in the exchange between London and New York.

Following upon the political crisis of December, 1921, general elections were held in March, 1922, and a change of Government was effected. The policy of the new administration included the abolition of all restrictions on trade and industry, reintroduction of a 48 hour working week, and land settlement.

1922-1923.

The depression which followed the post-war boom had passed its worst phase by the middle of 1922—nearly two years after the fall in values had commenced. More stability appeared in foreign markets which influenced local prices through imports and exports alike. An improvement in primary production in 1921-22 increased the effective purchasing power of the State and it was further strengthened as time passed, by the rising value of wool and the increasing production of butter.

In the latter part of 1922 the level of commodity prices in New South Wales assumed temporary stability at about 60 per cent. above the level of 1914, and a further rise commenced early in 1923. Trade rapidly adjusted itself to the new basis, wages and profits became steady with a tendency to rise, the velocity of exchange increased, and employment improved, but a cautious spirit continued in investment.

A further improvement in the rates of exchange with America, toward the end of 1922, facilitated trade, but the continental exchanges, notably with ex-enemy countries, and with France and Belgium receded further from parity. Trade with the principal ex-enemy countries was resumed on 1st August, 1922, and elaborate legislative provision was made to prevent the sale of imported goods produced under the advantage of depreciated exchanges at prices ruinous to the competition of local manufacturers. During 1922-23 the value of machinery and textiles imported amounted to nearly $\pounds 16,500,000$, but despite the increased value of wool exported the value of exports declined, owing to the smallness of the wheat crop; and during the year there was an excess of imports over exports amounting to more than $\pounds 12,000,000$. The revival in oversea trade, which was already occurring as exchanges improved, was stimulated further by the reduction of freights on ocean cargoes. This revival was evident in the steady increase in shipping after the war until, in 1922, the tonnage of vessels entering the ports of the State was equal to that of 1913, when it had reached a maximum.

It is probable that the return of prosperity deferred the fall in the rates of interest which would have accompanied a decline in profits. As it was, money accumulated rapidly in trading-banks at fixed deposit and Government stocks and other stable investments came into demand to such an extent

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that within twelve months their prices on the Stock Exchange rose by 7 per cent. The strength of the demand for well-established investments was indicated early in 1923 when a $5\frac{1}{2}$ per cent. loan of £1,000,000 at par issued by the Rural Bank attracted applications for four times the amount required. At the same time a Commonwealth loan of £5,000,000 at 5 per cent. for ten years, issued at 96 in London, was fully subscribed.

The tendency to revert to normal conditions in trade and finance was accompanied by a decrease in speculative enterprise. In 1922 the volume of company promotion was not greater than before the war. However, building operations in the Metropolis, which had slackened owing to high costs, increased very rapidly during the latter part of 1922 and the total value of buildings completed during the year (£8,755,000) was greater than in any previous year. The amount of building in other parts of the State was comparatively small. In regard to public works, the construction of the city and suburban electric railway was re-commenced in February, 1922, after an interval of $4\frac{1}{2}$ years, and Parliamentary sanction was given in November to the erection of a bridge across Sydney Harbour.

Despite the building activity in the metropolitan area, the house shortage remained and rents continued to rise throughout 1922. The continued decline in prices, however, was such that the cost of living decreased, and the reduction of the living wage to £3 18s. became operative in the latter part of 1922, but no actual reduction ensued in the standard of living from this cause as the effective wage-rate remained nearly 12 per cent. above that of 1911. However, it was reflected in the deposits in Savings Banks of which the total did not increase after June, 1922, while the average amount per depositor declined slightly. In May, 1923, in consequence of a slight rise in prices the living wage was increased by 1s. per week to £3 19s. These adjustments of wages proceeded concurrently with reversion to the 48-hour working-week in most industries where hours had been reduced n 1921, but comparatively little industrial dislocation resulted.

Important innovations were made in the policy of the Government in 1922. A far-reaching immigration scheme was approved between State and Commonwealth involving co-operation with the British Government in providing financial assistance necessary to the carrying out of a vigorous policy of immigration and Empire settlement. A new land policy was prepared to stimulate closer settlement through encouraging subdivision of large alienated holdings and promoting a spirit of self-help and co-operation in rural finance for the purpose of assisting bona-fide land seekers and established settlers. At a Premiers' conference in 1923 agreement was made with a view to delimiting Commonwealth spheres of taxation and arbitration and eliminating duplication in governmental activities.

1923-1924.

The steady improvement in the economic position was continued in 1923-24. Prices assumed a new stability, and even showed a tendency to rise. The dislocation of business passed away and unemployment decreased steadily. Wages, after a decline in 1922, advanced slightly in 1923, and, although there was a rise in the cost of living, the index number of effective wages remained 9 per cent. above the level of 1911. The living wage, fixed at $\pounds 4$ 2s. in September, 1923, remained unaltered in June, 1924. Concurrently the earnings of public companies increased, and, although the unusually high profits of 1920-21 were not reached, the improvement over 1921-22 was very pronounced. There was a slight diminution in the return from giltedged securities, but the value of industrial stocks rose appreciably.

INDUSTRIAL HISTORY OF NEW SOUTH WALES.

In the latter part of 1923 a rapid transformation occurred in the banking Deposits in ordinary trading banks fell from an average of position. £93,000,000 in June quarter to £89,000,000 in December quarter, while advances rose from £84,800,000 to £89,100,000. But an increase in deposits in March quarter, 1924, restored the position to normal. The operations of local banks and the provision of credit were hampered considerably by the accumulation of large Australian balances in London, which, in view of the restrictions upon the movement of gold, could be transferred and applied to local requirements only with very great difficulty. Indeed the cost of exchange placed a heavy impost upon the marketing of Australian products abroad, it being estimated that this cost in the early part of 1924 amounted in some cases to three per cent. of the value of the produce. While it was recognised that the situation was to some degree remediable only by reversion to the free movement of gold, several schemes to ameliorate the position were proposed. The posit o had become acute by the middle of 1924 and credits for developmental and other purposes not providing a speedy turnover were closely restricted.

The general volume of business as indicated by the returns of the banks' clearing-house expanded continuously and complaints were frequently made that the amount of currency was not sufficient to permit the convenient conduct of business. Nevertheless, the issue of Australian notes was not increased, it being held that such a step would tend to cause inflation.

The main factor in the business operations of the year was the high value of wool, for, although the quantity received into store indicated a heavy reduction in the clip for 1923-24, the value of wool sold at Sydney auctions was nearly £21,500,000, a sum £2,500,000 greater than in 1922-23. The average price realised for greasy wool was approximately 150 per cent. higher than in pre-war years.

But the other rural industries were adversely affected by bad seasons and low prices, so that the returns from them contributed little to the improvement of economic conditions. Still the manufacturing industry continued to expand, and operations in the building trades were very active both in the construction of dwellings and in the erection of large structures in Sydney. However, most of the activity in secondary industries was in the metropolitan area.

Although industrial conditions were not wholly unfavourable to the promotion of sectional interests by direct action, the sphere of industry was unusually peaceful. In 1923 there was not one strike or lock-out of considerable magnitude in non-mining industries and the mining industry itself was disturbed by only one strike of importance. It is noteworthy that wages have now become only a subsidiary cause of strikes, being responsible for only onefifth of the dislocations of the past five years. Disputes connected with trade union principles have been responsible for nearly half the total time lost. Disputes as to working conditions have involved most workers and caused more than one-quarter of the total dislocations, while disputes as to hours have been of greater magnitude than those concerning wages.

In the farming portions of the community active steps were taken to promote organisations to improve the conditions of rural life and to render rural industries more attractive. The fruitgrowers, especially those producing citrus fruits, resorted to co-operation with a view to effecting economies in the distribution of their product, grading it, and developing new markets. Agricultural bureaux continued to flourish and gradually extended their operations in co-operative buying. The scheme of stabilisation in connection with the dairying industry was definitely carried into the Federal sphere and a bill was drafted to give it legal sanction. The decline in the meat industry

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led to action being taken in the State sphere with a view to providing a new stimulus through a stockowners' council with power to levy upon pastoralists to defray expenditure for the common good. At the close of 1923 the law of co-operation was completely amended and modernised, and a legal basis was provided for rural credits and community settlement.

In addition, a new policy of rural development was put into operation. Executive sanction was given in a general way to measures for improving the conditions of rural life. The problem of closer settlement was approached from a new angle, and many large landholders were given facilities for subdividing their holdings and selling them in smaller areas. An agreement was made whereby the Victorian Government undertook the extension of three lines of railway into the south-western parts of the State, where considerable new settlement was at once promoted. By an agreement with the Queensland Government authority was given to construct a line of standard gauge connecting Grafton and Brisbane.

The question of establishing a new State in the north-eastern corner of New South Wales, which had been a source of agitation for years, was referred to a Royal Commission for inquiry and report.

MANUFACTURING INDUSTRY.

New Sourn Wales cannot yet be considered an important manufacturing country; nevertheless, its secondary industries are growing rapidly in importance. More than £72,000,000 have been invested in land, buildings, plant, &c., and employment is given to 152,000 persons. Most of the industries are concerned with the manufacture of articles required to house, feed, and clothe the community. Of manufacture for export, in the ordinary meaning of the term, there is very little, except of food commodities, leather, wool-tops, and small quantities of boots and shoes, tobacco, rubber goods, and metals.

The following table is a summary of the important facts relating to the establishments in New South Wales which came within the definition of a factory and furnished returns in 1901, 1911, and in the two years ended 30th June, 1921 and 1923. The figures for the last year are exclusive of particulars regarding the Commonwealth small arms factory.

Particulars	1901.*	1911.	1920-21.	1922-23.
Number of Establishments	3.367	5,039	5,837	6.702
(Mala	54,556		112,187	
Number of Employees { Female	11,674	26,541	32.824	
Total	66,230	108.624	145.011	152,266
Salaries and Wages paid Male £		8.917.583	22,766,216	
to Employees, + { Female £		1,130,079	2,852,375	3,594,309
Tofal f	4,952,000	10.047.662	25,618,591	27,050,730
Capital invested in Land, Buildings		10,011,002	20,010,092	21,000,100
and Fixtures (owned and rented) f	7,838,628	13,140,207	28,428,917	34,559,510
Value of Plant and Machinery	5,850,725	12,510,600	31,115,444	37.548.766
Machinery-Average Horse-power in	0,000,120	12,010,000	01,110,111	57,540,700
use h n	44,265	127.547	208,463	228.297
Value of Materials and Friel used 4	15,637,611	34,913,564	94,713,219	
Value added to Raw Materials in	10,007,011	01,010,001	019/10,410	01,240,400
process of Manufacture f	10,010,860	19,432,447	43,128,137	51,491,671
Total Value of Output	25,648,471			132,735,140
Average per Factory		1,010,011	101,041,000	102,400,130
Employees No.	19.7	21.6	24-8	22-7
Horse-power of Machinery h.p.	13.2	25.3	35.7	34:1
Land and Buildings £	2,328	2,608	4,870	5,157
Plant and Machinerv \pounds	1.740	2,483	5,331	5,603
Material and Fuel £	4,644	6,928	16,226	12,122
Value added in process of Manu-	-, •	0,020	10,440	109160
facture £	2,973	3,856	7.389	7,683
Total Output £	7,617	10,784	23,615	19,805
Average per Employee-	. 1		20,010	10,000
Time Worked months	11.32	11.55	11.52	11.47
(Male £	1	114	211	214
Salaries and Wages + { Female £	+	43	88	97
(Total f	81	96	182	184
Value of Materials and Fuel £	236	3213	653	534
Value added in Manufacture £	151	179	298	338
Total Output	387	500	954	872
			0.04	0.02

Excluding a number of small establishments in country districts (see Year Book, 1907-8, page 448).
 † Excluding drawings of working proprietors.
 ‡ Information not available.

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Returns relating to the manufacturing industry are collected annually under the authority of the Census Act, 1901, and must be furnished by every proprietor of a factory. The returns are used for statistical purposes only, and may not be produced in any court of law even under subpæna.

Prior to 1896 there was no uniformity in the method of collection in the various States, but in that year uniformity was secured with Victoria by agreement between the statisticians. A standard classification of factories was adopted at a conference of statisticians in 1902, and the statistics for all the States have since been compiled on the same basis.

The foregoing statement shows that the number of establishments has increased since 1901 by 99 per cent., and the number of employees by over 130 per cent. In 1901 the value of capital invested in land, buildings, fixtures plant, and machinery amounted to £13,699,353, and in 1922-23 it had increased to £72,108,276, or by over 426 per cent. The value of the output was considerably more than five times as great as in 1901; but this is due largely to the increase in the values of commodities, which are still much above pre-war levels. Side by side with this development the amount paid in wages increased by 446 per cent., and the expenditure on materials and fuel by 420 per cent.

The table provides a comparison over a period of twenty-two years, during which very great progress was made in the secondary industries of the State. It is interesting to compare the first and second periods of ten years. Between 1901 (the year in which the Australian States were federated) and 1911 the number of establishments increased by about 1,600, compared with 798 between 1911 and 1921; the size of establishments, however, grew appreciably faster in the latter period than in the former. Between 1901 and 1911 the number of employees increased by 41,000, as against 36,000 between 1911 and 1921, and the average annual wages paid per employee rcse from £81 in 1901 to £96 in 1911, and to £186 in 1921-22.

All things considered, the second period of ten years was slower in development in secondary industries than the previous decade. The rapid growth which occurred between 1906 and 1911 was not maintained during the next quinquennium, and though war conditions provided an especially favourable period for development in local manufactories, the exigencies of the period, particularly in regard to obtaining supplies of suitable labour and machinery, impeded progress.

GOVERNMENT AND PRIVATE WORKSHOPS AND FACTORIES.

Until twelve years ago, the establishments under Government control consisted almost entirely of railway workshops, dockyards, and other establishments engaged principally in the repair or renovation rather than in the actual manufacture of articles. Now, however, there are State factories producing such diverse articles as bricks and clothes. A complete statement of the operations of State industrial undertakings is given in the section of this Year Book which deals with Public Finance and the following table has been prepared to show the details of the operations of the State and Commonwealth

		:	Govern- mental.	Other.	Total.
Number of Establishments†	 Male		70 15,194	6,632 99,776	6,702 114,970
Number of Employees	Female		604	36,692	37,296
	Total		15,798	136,468	152,266
	(Male	£	3,780,349	19,676,072	23,456,421
Salaries and Wages paid to	Female	£	36,860	3,557,449	3,594,309
Employees.*	Total	£	3,817,209	23,233,521	27,050,730
Capital invested in Land, B		Fix-			
tures, owned by occupier		t,	3,936,314	19,319,001	23,255,315
Rent paid		t	4,939	748,674	753,613
Machinery—Average Horse-p		π	4,925,581	32,623,185	37 548,766
Value of Materials and Fuel u			75,603 3,046,738	276,174 78,196,731	351,774 81,243,469
Value added to Raw Materia		പ്പ	3,040,730	10,190,131	31,243,409
Manufacture	-	ſ	4,509,152	46,982,519	51,491,671
Total Value of Output		Ĩ		125, 179, 250	132,735,140

industrial undertakings in 1922-23, in comparison with those of other establishments :--

* Excluding drawings of working proprietors. † Each railway workshop is counted as a separate establishment.

Particulars relating to the Commonwealth small arms factory are not included in the table.

The results shown by Governmental and by other establishments, as shown above, cannot be compared fairly, because the former are nearly all engineering works, dockyards, or railway workshops, in which repair work constitutes a large proportion of the work done, while the latter comprise industries of all kinds. Moreover, in Government establishments the profit would appear in reducing the price of the product rather than in showing a large margin over cost.

CLASSIFICATION OF MANUFACTORIES.

The manufacturing industries have been arranged for purposes of reference and comparison into nineteen classes, in accordance with a standard classification adopted at a Conference of Statisticians.

The classes are as follow :---

CLASS I TREATING RAW MATERI-	CLASS IV WORKING IN WOOD.	CLASS VIFOOD AND DRINK, ETC.
ALS, THE PRODUCT OF AGRICUL- TURAL AND PASTORAL PURSUITS,	Boxes and Cases. Cooperage.	Bacon-curing.
ETC.	Joinery.	Butter Factories, Creameries, etc. Butterine and Margarine.
Boiling-down Tallow, Refining, etc.	Saw-mills. Wood-turning, Wood-carving, etc.	Cheese Factories. Condensed Milk.
Sausage Skins, etc. Tanneries.	CLASS VMETAL WORKS, MACHINERY, ETC.	Meat-preserving. Biscuits.
Wool-scouring, Fellmongering. Chaff-cutting, Corn-crushing, etc.	- Agricultural Implements. Art Metal Works.	Confectionery. Cornflour, Oatmeal, etc.
CLASS II OILS AND FATS, ETC.	Brass and Copper. Cutlery.	Flour-mills. Jam and Fruit-canning.
Oil and Grease. Soap and Candles.	Engineering. Galvanized Iron-working.	Pickles. Sauces, and Vinegar. Sugar Mills.
CLASS III STONE, CLAY, GLASS, ETC.	Ironworks and Foundries. Railway Carriages, Rolling-stock, etc.	Sugar Refining and Distilling. Aerated Waters, Cordials, etc.
Bricks and Tiles.	Railway and Tramway Work-	Breweries.
Glass (including Bottles). Glass (Ornamental).	shops. Snielting.	Condinients, Coffee, Spices, etc. Ice and Refrigerating.
Lime, Plaster, Cement, and Asphalt.	Stoves and Ovens. Tinsmithing.	Malbing.
Marble, Slate, etc.	Wire-working.	Tobacco, Cigars etc.
Pottery and Earthenware (includ- ing Modelling, etc.	Other Metal Works (including Nail and Lead Mills).	Animal, Poultry, and Stock Foods.
	•	

CLASSIFICATION OF MANUFACTORIES-continued.

CLASS VII.—CLOTHING, AND TEXTILE FARRICS, ETC. Woollen and Tweed Mills. Hosiery and Knitted Goods. Boots and Shoes. Clothing (Blop). Clothing (Tailoring). Clothing (Waterproof and Oilskin). Dressmaking and Millinery (Makers' Material). Dressmaking and Millinery (Clustomers' Material). Dyeworks and Cleaning. Furriers. Hate and Caps. Shirts, Ties, and Scarfs. Rope and Cordage. Sailmaking.

CLASS VIII.-BOOKS, PAPER, PRINTING, ETC. Electrotyping and Stereotyping. Paper-making, Paper Bexes,

Baper-making, Paper Boxes, Bags, etc. Photo-engraving.

Printing and Binding.

Newspapers, Magazines and Journals

CLASS IX. -- MUSICAL INSTRUMENTS, ETC.

Musical Instruments and Sewing Machines. CLASS X.—ARMS AND EXPLOSIVES. Arms and Explosives.

CLASS XL-VEHICLES, SADDLERY, HARNESS, ETC.

Coach and Waggon Building. Cycles and Motors. Perambuktors. Saddlery, Harness, etc. Spokes, etc. Whips.

CLASS XII.—SHIP AND BOAT BUILDING AND REPAIRING.

Docks and Slips. Ship-building and Repairing.

> CLASS XIII.-FURNITURE, BEDDING, ETC.

Bedding, Flock, and Upholstery. Chair-making. Furnishing, Drapery, etc. Furniture and Cabinet-making, and Billiard Tables. Picture Frames. Window Blinds.

CLASS XIV.—DRUGS AND CHEMICALS.

Chemicals, Drugs, and Medicines. Paints and Varnishes. Inks, Palishes, etc. . (including Fertilizers). CLASS XV.-SURBICAL AND OTHER SCIENTIFIC INSTRUMENTS.

Surgical, Optical, and other Scientific Instruments.

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

Electro-plating. Manufacturing Jewellery, etc.

CLASS XWIL-THEAT, LIGHT, AND POWER.

Coke-works. Electric Apparatus. Electric-light and Power. Gas-works and Kerosene. Lamps and Fittings, etc. Hydraulic Power.

CLASS XVIII. - LEATHERWARE (N.E.I.).

Leather Belting, Fancy Leather, Portmanteaux, and Bags.

CLASS XIX.-MINOR WARES (N.E.I.).

Basket and Wickerware, Matting, etc. Brooms and Bruchware.

Other Industries.

The returns relate to establishments employing four or more than four persons engaged directly or indirectly in working at certain handlerafts, or in preparing or manufacturing articles for trade or sale, and to establishments employing less than four persons, where machinery, operated by steam, gas, electric, water, wind, or horse power is used. Establishments with less than four hands, where manual labour only is need, do not furnish returns, with the exception of the following, from which returns are obtained in order that the total output of the various products may be ascentained, viz. :--aerated water, bacon, butter and cheese factories, brick, gas, and ime works, quarries, soap and candle factories, tanneries and boot factories.

The foregoing definition, based on the number of workers, applies uniformly to all other industries, and includes tailoring, bootmaking, dressmaking, and millinery establishments. It does not, however, cover shops engaged in retail trade only, and in the distribution or importation of goods; nor does it apply to bakeries, butcheries in which sausages and smallgoods are made, laundries, and waterworks.

With the exception of blacksmiths' and wheelwrights' shops, the definition covers establishments in which workers are engaged in repairing or in assembling manufactured parts of an article.

If a manufacturing business is conducted in conjunction with an importing or a retail business particulars relating to the manufacturing section only are obtained, and persons employed in the importing or retail branch of the business are not included. Where two or more industries are being conducted a return is furnished for each industry; if power from the same generating plant is used for more than one industry it is distributed proportionately. 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 value of production includes the products of educational, charitable, and reformatory or other public institutions, excluding penitentiaries.

MOTIVE POWER.

The power used for driving machinery in factories is derived almost entirely from steam. Other agencies, principally gas, are used only to a limited extent, and, although there are electric engines of considerable voltage, they are employed mainly for lighting and tramway purposes, and the generation of their power depends upon some other class of engine.

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

	Establish- ments	10000	Ho	rse-power of	Machinery	v (Average	used).	
Year.	using Machinery.	Steam.	Gas.	Electricity.	Water.	Oil.	Total ex- Electricity.	PerEstablish- ment using Machinery.
1901 1906 1911 1915-16 1920-21 1921-22 1922-23	1,969 2,496 3,550 4,077 5,002 5,470 5,806	$\begin{array}{r} 42,555\\70,192\\113,939\\177,162\\192,816\\201,806\\211,377\end{array}$	$1,577 \\ 4,212 \\ 12,201 \\ 13,926 \\ 13,242 \\ 13,211 \\ 14,400$	$\begin{array}{r} 330\\8,989\\20,671\\58,075\\103,846\\122,352\\123,477\end{array}$	97 75 222 319 24 50 48	36 277 1,185 1,689 2,381 2,365 2,472	$\begin{array}{r} 44,265\\74,756\\127,547\\193,096\\208,463\\217,432\\228,297\end{array}$	$22 \\ 30 \\ 36 \\ 47 \\ 41 \\ 40 \\ 39$

During the period under review the potential horse-power of the machinery in the State increased from 57,335 to 613,898; or exclusive of electric or secondarily-produced power, from 56,669 to 422,550. The development of electrical power is characteristic of the period, the full capacity of machinery so equipped advancing from 666 h.p. in 1901, to 191,348 h.p. in 1922-23. In all statements of the comparative horse-power of machinery it is, however, advisable to eliminate the electrical agency, as it is a reproduced or transmitted force originating from a primal source.

The actual average motive force, exclusive of electricity, employed in operating machinery, amounted in all the factories of the State, in 1901, to 44,265 h.p., and in 1922-23 to 228,297 h.p. The average horse-power per establishment increased from 22 to 39, or by 77 per cent. during the period.

Exclusive of electrical power the proportion of average motive force used in operating machinery to potential motive force was about 78 per cent. in 1901, and about 54 per cent. in 1922-23. Broadly speaking, the motive power of machinery is capable of supplying 85 per cent. more energy than that ordinarily operated.

ESTABLISHMENTS.

The following table shows the number of manufactories and works in the Metropolitan district and in the remainder of the State, together with the number of establishments in which machinery was installed :---

	Metropolitan District.			Rema	ainder of Sta	te.	New South Wales.		
Year.	With Machinery.	Without Machinery.	Total.	With Machinery.	Without Machinery.	Total.	With Machinery.	Without Machinery.	Total.
1901	754	661	1,415	1,215	737	1,952	1,969	1,398	3,367
1906	1,136	635	1,771	1,360	730	2,090	2,496	1,365	3,861
1911	1,793	717	2,510	1,757	772	2,529	3,550	1,489	5,039
1915-16	2,250	-565	2,815	1,827	568	2,395	4,077	1,133	5,210
1920-21	2,987	536	3,523	2,015	299	2,314	5,002	835	5,837
1921-22	3,389	583	3,972	2,081	303	2,384	5,470	886	6,356
1922-23	3,602	571	4,173	2,204	325	2,529	5,806	896	6,702

An excellent harbour and transport facilities have caused Sydney to be made the chief manufacturing centre of the State, but in some industries important works have been constructed in proximity to the coalfields at Newcastle and Lithgow. In the earliest days of the State's history, Sydney, as the first place of settlement, was the sole manufacturing town in the territory; in 1901, after more than a century of colonisation, the Metropolitan area contained over 42 per cent. of the manufacturing establishments in the State, and in 1923 the proportion had increased to 62 per cent.

In the country districts manufacturing enterprises are occupied mainly with the direct handling of primary products, but, at Newcastle, there have been constructed very extensive iron and steel works, a galvanised-iron works, a large ship building yard, a large ore-treating plant, and a number of other factories. At Lithgow an iron and steel foundry forms the nucleus of growing secondary industries, and large smelting and other works have been established at Port Kembla.

The most important group of secondary industries in the State consists of metal and machinery works, followed in order by clothing and textile factories, and those engaged in making articles of food and drink, and book, paper, and printing works. Most of the large textile and clothing factories are situated in the Metropolitan area, and about three-fifths of the work done in metal and machinery establishments is performed there. In country districts the order of precedence is much the same, metal works being most important, followed by food and drink, and wood-working establishments.

The following table shows the principal facts relating to each class of manufacturing industry conducted in the State and in the Metropolitan district during the year 1922-23:---

Class of Industry.	Establishments.		age Num Employee		Average Time worked per Employee.	Horse-power of Machinery Average used.	Value of Machinery, Tools, and Plant.	Total Salaries und Wages, exclusive of Drawings of Working Proprietors.
	Establi	Males.	Females	. Total.	Avera work Em]	Horse Mach Avera	Va Machine sud	Total Sa Wages, (of Dra Wor Propi
·								
		NEW S	SOUTH 7	VALES				
				, mm.				
Treating Raw Materials, &c Oils, Fats, &c Processes in Stone, Clay, Glass,	$241 \\ 39 \\ 326$	1,273	199 399 122	$\begin{array}{c} 4,177 \\ 1,672 \\ 8,303 \end{array}$	months. 11·16 11·88 11·62	hp. 9,647 1,885 21.646		285,209
&c. Working in Wood Metal Works, Machinery, &c Connected with Food, Drink, &c. Clothing, Textile Fabrics, &c. Books, Paper, Printing, &c. Musical Instruments, &c. Arms and Explosives		33,666 13,635 9,553 8,853 820 21	$ \begin{array}{r} 162\\793\\5,883\\22,705\\3,446\\68\\3\\275\end{array} $	$9,519 \\ 34,459 \\ 19,518 \\ 32,258 \\ 12,209 \\ 888 \\ 24 \\ 6,561$	$ \begin{array}{r} 10.97 \\ 11.77 \\ 11.23 \\ 11.76 \\ 11.95 \\ 11.93 \\ 12.00 \\ 11.65 \\ \end{array} $	$\begin{array}{c} 20,425\\72,872\\38,783\\8,603\\8,860\\516\\14\\3,295\end{array}$	$\begin{smallmatrix} 6,706,542\\ 1,753,891\\ 2,592,549\\ 52,522\\ 2,677 \end{smallmatrix}$	7,076,984 3,393,049 4,077,167 2,361,266 189,428 2,844
Vehicles and Fittings, Saddlery, &c. Ship and Boat-building, &c Furniture, Bedding, and Up- holstery. Drugs, Chemicais, and By-	40 342 135	4,887 4,105	41 620 985	4,928 4,725 2,780	11.03 11.95 11.78 11.79	3,295 9,085 3,401 3,246	1,815,227 226,940	1,182,922 810,913
products. Surgical and other Scientific Instruments.	18	163	52	215	12.00	75	15,647	39,550
Jewellery, Timepieces, and Plat- ed-ware. Heat, Light, and Power Leatherware, n.e.i Minor Wares, n.e.i	$80 \\ 258 \\ 40 \\ 107$		96 101 382 964	852 5,280 1,064 2,744	11.95 10.80 11.79 11.87	416 147,349 192 1,464	7,390,687 36,540	1,089,342 160,036
Total	6,702	114,970	37,296	152,266	11.47	351,774	37,548,766	27,050,730

Class o Industry.	Establishments.		rge Numb Employees		Average Time worked per Employee.	Horse-power of Machinery	Value of Machinery, Tools, and Plant.	Total Salaries and Wages, exclusive of Drawings of Working Proprietors.
	Establi	Males.	Females.	Total.	Avera worl	Horse- Mach Avera	Va Machine and	Total Si Wages, of Dra Wo Prop
	ME	TROPOL	ITAN D	ISTRICT	r.			
Treating Raw Materials, &c Oils, Fats, &c Processes in Stone, Clay, Glass.	$117 \\ 27 \\ 173$	$2,937 \\ 946 \\ 5,311$	$195 \\ 347 \\ 84$	2,132 1,293 5,395	$\begin{array}{c} 11.89 \\ 11.96 \\ 11.78 \end{array}$	7,840 1,308 9,554	459,485	224,838
&c. Working in Wood Metal Works, Machinery, &c Connected with Food, Drink, &c. Clothing, Textile Fabrics, &c Books, Paper, Printing, &c Musical Instruments, &c Arms and Explosives	$306 \\ 612 \\ 320 \\ 1,156 \\ 320 \\ 29 \\ 3$	$\begin{array}{r} 4,576\\ 21,925\\ 8,809\\ 8,344\\ 7,475\\ 820\\ 21\end{array}$	$93 \\ 718 \\ 5,253 \\ 20,782 \\ 3,290 \\ 68 \\ 3$	$\begin{array}{r} 4,669\\ 22,643\\ 14,062\\ 29,126\\ 10,765\\ 888\\ 24 \end{array}$	$11.70 \\ 11.92 \\ 11.88 \\ 11.78 \\ 11.95 \\ 11.93 \\ 12.00$	$10,439 \\19,130 \\22,053 \\7,642 \\7,994 \\516 \\14$	3,760,437 4,457,307 1,590,758 2,226,160 52,522	4,858,248 2,439,276 3,722,568 2,075,002
Vehicles and Fittings, Saddlery, &c.	332	4,196	188	4,384	$12.00 \\ 11.62$	1,828		
Ship and Boat-building, &c Furniture, Bedding, and Up- holstery.	$\begin{array}{c} 34 \\ 287 \end{array}$	$3,878 \\ 3,722$	$\begin{array}{c} 21 \\ 605 \end{array}$	$3,899 \\ 4,327$	$\frac{11.97}{11.81}$	5,438 3,029	1,387,847 207,259	
Drugs, Chemicals, and By- products.	123	1,550	958	2,518	11.80	2,516	476,306	427,048
Surgical and other Scientific Instruments.	18	163	52	215	12 ·00	75	15,647	89,550
Jewellery, Timepleces, and Plated-ware.	77	738	94	832	11.95	407	48,712	148,538
Heat, Light, and Power Leatherware, n.e.i Minor Wares, n.e.i	109 40 90	$2, \epsilon 67 \\ 682 \\ 1,727$	74 382 960	$2,941 \\ 1,064 \\ 2,687$	$11.92 \\ 11.79 \\ 11.88$	96,902 192 1,360	4,050,742 36,540 290,484	$\begin{array}{c} 623, 684 \\ 160, 036 \\ 424, 285 \end{array}$
Total	4,173	80,687	34,177	114,864	11.85	198,237	21,791,125	20,505,973

SIZE OF ESTABLISHMENTS.

The following statement shows the distribution of establishments, according to the number of persons engaged, in the Metropolitan district and in the remainder of New South Wales, at intervals since the year 1901 :--

	190	1.*	191	1.	1920-	-21.	1922	-23,
Establishments employing	Establish- ments.	† Em- ployees.						
		Мети	ROPOLITAN	V DISTRI	ICT.			
Under 4 employees	79	188	238	547	493	1083	80 0	1,643
4 employees	105	420	179	716	230	920	307	1,228
5 to 10 employees	429	3,036	743	5,336	1,072	7,566	1,132	7,970
11 ,, 20 ,,	334	4,939	520	7,834	684	10,118	763	11,241
21,, 50 ,,	279	8,564	477	14,655	639	20,437	734	23,245
51 ,,100 ,,	- 107	7,518	202	14,360	222	15,158	252	17,420
101 and upwards	82	17,750	151	34,144	183	49,270	185	52,117
Total	1,415	42,415	2,510	77,592	3,523	104,552	4,173	114,861
		Rem	IAINDER	OF STAT	Е.			
Under 4 employees,	439	1,094	538	1,282	513	1,173	639	1,436
4 employees	256	1,024	371	1,484	270	1,080	337	1,348
5 to 10 employees	768	5,333	993	6,817	864	5,896	919	6,368
11 ,, 20 ,,	294	4,236	381	5,390	380	5,351	354	5,087
21 ,, 50 ,,	142	4,612	164	4,874	181	5,569	172	5,106
51 ,,100 ,,	30	2,086	40	2,858	43	2,903	51	3,512
101 and upwards	23	5,430	42	8,327	63	18,487	57	14,545
Total	1,952	23,815	2,529	31,032	2,314	40,459	2,529	37,402
		NE	w South	WALES				
Under 4 employees	518	1,282	776	1,829		2,256	1,439	3,079
4 employees	361	1,444	550	2,200	500	2,000	644	2,576
5 to 10 employees	1,197	8,369	1,736	12,153		13,462	2,051	14,338
11 ,, 20 ,,	628	9,175	901	13,224	1,064	15,469	1,117	16,328
21,, 50 ,,	421	13,176	641	19,529		26,006	906	28,351
51 ,,100 ,,	137	9,604		17,218		18,061	303	20,932
101 and upwards	105	23,180	193	42,471	246	67,757	242	66,662
Total	3,367	66,230	5,039	108,624	5,837	145,011	6,702	152,266

* Excluding a number of small establishments in country districts (see Year Book 1907-8, page 448). † Including working proprietors. The establishments employing 10 hands or less represent 60 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 28 in the Metropolis, 15 in the remainder of the State, and 23 in the whole State; in 1901 the averages were 30, 12, and 20 respectively.

Throughout the period there has been a constant increase in the number of factories in the Metropolitan district, the increase since 1913 being very marked in respect of the small establishments. In the country districts the number of establishments increased between 1901 and 1913, and declined subsequently, though the number of very large works is greater now than before the war.

The relative position of each group of establishments in the Metropolitan and in the country districts is shown in the following statement :----

		Proportion of each Group to Total.									
Establishments employing		M	fetropolita	n District	•		Remainde	r of State.			
		1903.	1911.	1920-21.	1922-23.	1901.	1911.	1920-21.	1922-23.		
Under 4 employees 4 employees 5 to 10 employees 11 ,, 20 ,, 21 ,, 50 ,, 51 ,, 100 ,, 101 and upwards	····	per cent. 5.6 7.4 30.3 23.6 19.7 7.6 5.8	$\begin{array}{c} \text{per cent} \\ 9^{\cdot 5} \\ 7^{\cdot 1} \\ 29^{\cdot 6} \\ 20^{\cdot 7} \\ 19^{\cdot 0} \\ 8^{\cdot 1} \\ 6^{\cdot 0} \end{array}$	$\begin{array}{c} \text{per cent.} \\ 14.0 \\ 6.5 \\ 30.4 \\ 19.4 \\ 18.2 \\ 6.3 \\ 5.2 \end{array}$	$ \begin{array}{r} 19 \cdot 2 \\ 7 \cdot 4 \\ 27 \cdot 1 \end{array} $	per cent. 22.5 13.1 39.3 15.1 7.3 1.5 1.2	per cent. 21:3 14:7 39:2 15:1 6:5 1:6 1:6	per cent. 22·2 11·7 37·3 16·4 7·8 1·9 2·7	per cent. 25'3 13'3 36'3 14'0 6'8 2'0 2'3		
Total	••••	100:0	100.0	100.0	100.0	100.0	100.0	100.0	100:0		

In the Metropolitan district the tendency towards an increase in the number of small workshops and factories has caused the proportion of establishments employing less than 5 hands to rise from 16.6 per cent. in 1911 to 26.6 per cent. in 1922–23. In the country districts the proportion of small factories has increased from 36 to 38.6 per cent.

CAPITAL INVESTED IN PREMISES.

With regard to capital permanently invested in manufacturing industries, particulars are available only of the value of 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.

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 Establish-	Capital Value of Premises (owned	Value of Machinery Toole	Average per Establishment.		
1 (24).	men s.	and rented);	and Plant.	Value of Premises,	Value of Ma chinery, Tool and Plant.	
		£	£	£	£	
1901*	3,367	7,838,628	5,860,725	2.328	1,740	
1906	2,861	19,335,966	8,407,337	2,418	2.178	
1911	5,039	13,140,207	12,510,600	2.608	2,483	
1915-16	5,210	17,770,517	18,211,104	3,410	3,495	
1920-21	5,837	28,428,917	31,115,444	4,870	5.331	
1921-22	6;356	32,052,303	35,229,530	5,043	5,543	
1922-23	6,702	34,559,510	37,548,766	5,157	5,603	
Increases-Per cent.,					-	
1901-1923	99:0	340.9	540.7	121.5	222:0	

* Excluding a number of small country establishments. † Value in 1907.

The premises owned by the occupiers in 1922-23 were valued at $\pounds 23,255,315$, and rented premises at $\pounds 11,304,195$ the valuation of the latter being based on the rent paid, capitalised at fifteen years' purchase.

In 1914-15 the value of machinery and plant became greater than the value of premises and the excess in 1922-23 was nearly 9 per cent. The great advance in values, however, is due in part only to the extension cf industries.

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 manufactories and works amounted in 1922-23 to £27,050,730; male workers received £23,456,421, equal to £213 16s. 6d. er head; and female workers, £3,594,309, or £97 4s. 8d. 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 and the average time worked per employee. Similar information regarding each class of industry will be found in Part "Manufactories and Works" of the Statistical Register.

	Salaries and	Wages (exclusiv Proprie	e of drawings etors).	Level of Average	Wage. Average	
Year. Total.		Aver	age per Emplo	yee.	1911 = 100	0. time Worked per
	Total.	Male.	Female.	Total.	Males. Females	Total.
· .	tan £ sa	£ s. d.	£ s. d.	£ s. d.		months
1901	4,952,000	*	*	81 0 0	* *	839 11.32
1906	5,591,888	*	*	.77 9 .7	* *	804 11:45
1911	10,047,662	114 4 9	$43 \ 2 \ 1$	96 7 1	1000 1000	1000 11.55
1915–16	13,413,845	141 9 1	53 14 6	119 5 11	1238 1246	1238 11.56
1920-21	25,618,591	210 19 10	87 12 2	$182 \ 7 \ 10$	1847 2032	1893 11:52
1921-22	26,783,242	218 0 6	91 12 4	186 4 3	1908 2125	1933 11.53
1922-23	27,050,730	213 16 6	97 4 8	184 8 10	1872 2256	1914 11.47

* Not available.

Since 1911 the average wages of males have increased by over 87 per cent., and of females by 125 per cent. It should be noted, moreover, that the proportion of juvenile labour was slightly less in the earlier year, when boys under 16 represented 3 per cent. of the total males, compared with 3.5 per cent. in 1923, and girls under 16 represented 8.5 per cent. of all females employed, as against 11.5 per cent. in 1923. The average wage of males is highest in the printing and the shipbuilding industries, where a large proportion of highly-skilled labour is employed, the average amounts paid per male worker in 1922-23 being £243 8s. 7d. and £242 5s. 6d. respectively.

Of the female workers, those employed in the clothing industries received an average wage of $\pounds 100$ 3s. 4d. in 1922–23, being $\pounds 6$ 5s. 7d. more than was paid to employees engaged in printing, bookbinding, etc.

PROGRESS OF MANUFACTORIES.

The following statement shows the general progress of manufactories as regards the value of production, and the amount paid in wages during the period 1901 to 1923:—

			Value of-	Salaries and	Balance		
Year.	Materials Used.	Fuel Consumed, including Motive-power Rented.	Goods Manufactured, or Work Done.	Production, being Value added to Raw Materials.	Produc- tic-star hstar ploy-st	Wages paid, exclusive of Drawings of Working Proprietors.	(Output, le*s Materials and Wages).
1901	£ 15,140,896	£ 496,715	£ 25,648,471	£ 10,010,860	£ 151·2	£ 4,952,000	£ 5,058,860
1906	22,102,685	609,998	34,796,169	12,083,486	155'3	5,591,888	6,491,598
1911	33,670,951	1,242,613	54,346,011	19,432,447	178.9	10,047,662	9,384,785
1915-16	44,227,079	1,528,220	70,989,864	25,234,565	216.6	13,413,845	11,820,720
1920-21	91,104 505	3,608,744	137,841,386	43,128,137	297.4	25,618,591	17,509,546
1921-22	. 82,090,396	3,983,730	132,820,065	46,745,939	313-9	26,783,242	19,962,697
1922-23	77,222,401	4,021,068	132,735,140	51,491,671	338-2	27,050,730	24,440,941

The value of the output has grown from $\pounds 25,648,000$ in 1901 to $\pounds 132,735,000$ in 1923, and the value of production from $\pounds 10,011,000$ to $\pounds 51,492,000$.

Of the value of goods manufactured or work done in 1922-23, the cost of materials used and fuel consumed amounted to £81,243,469, and salaries and wages to £27,050,730.

Thus, on the average, out of every hundred pounds' worth of goods produced in manufactories in 1922-23 the materials and the fuel cost £61 4s., while the workers received £20 8s., leaving a balance of £18 8s. for the payment of overhead charges and for profits.

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 fairly reliable estimate with regard to some very important items, namely, depreciation, and interest on invested capital in factories other than Government establishments.

Excluding Government workshops and factories from consideration, the capital invested in lands, buildings, and fixtures in 1922-23 amounted to £19,319,000. Municipal valuations would 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 £12,557,000.

Factory buildings probably depreciate in value more quickly than any other class of buildings, and therefore 4 per cent. can 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 of some of the largest manufacturers 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 £502,000, and on plant and machinery £2,120,000, or a total of £2,622,000.

In addition to the allowance for depreciation, a further allowance should be made for interest on invested capital. The capital invested in machinery and plant is £32,623,000, and in land and buildings £19,319,000; to this must be added the capital represented by materials awaiting treatment and by manufactured goods awaiting disposal. It has been ascertained that the average value of materials on hand awaiting treatment represents about 21.5 per cent. (equal to about two and a half months' supply) of the value of all material used during the year, which would indicate that during 1922-23 approximately £16,812,000 were thus invested. The value of unsold stocks on hand is about 5 per cent. of the total value of the output, which would represent a further investment of capital to the extent of £6,259,000. The total capital invested in 1922-23, therefore, was about £75,013,000. Interest on this amount at 5¹/₂ per cent., which could have been obtained by investment in Government loans, would be £4,126,000. The estimated allowance to be made for depreciation and interest would therefore be £6,748,000, to which must be added cost of rented premises, £749,000, so that £7,497,000 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 £16,252,000, equal to 13.0 per cent. of the total output, or 11.4 per cent. of cost of all items mentioned above, and such items of expense as insurance, advertising, rates and taxes would still have to be paid.

The varying proportions of the items which make up the total value of output of the manufacturing industries in various years since 1901 have been as follow :—

Proportio				
Materials.	Fuel.	Salaries and Wages.	Profit and Overhead Charges.	Total.
59.0	2.0	19.3	19.7	100
64·0	1.8	16.1	18.1	100
61.9	$2\cdot 3$	18.6	17.2	100
62.3	2.2	18.9	16.6	100
61.8	3.0	20.2	15.0	100
58.2	3·0	2 0· 4	18.4	100
	Materials. 59·0 64·0 61·9 62·3 61·8	Amaterials. Fuel. 59.0 2.0 64.0 1.8 61.9 2.3 62.3 2.2 61.8 3.0	absorbed by- Materials. Fuel. Salaries and Wages. 59.0 2.0 19.3 64.0 1.8 16.1 61.9 2.3 18.6 62.3 2.2 18.9 61.8 3.0 20.2	Materials. Fuel. Salaries and Wages. Profit and Overhead Charges. 59.0 2.0 19.3 19.7 64.0 1.8 16.1 18.1 61.9 2.3 18.6 17.2 62.3 2.2 18.9 16.6 61.8 3.0 20.2 15.0

It is noteworthy that, after the outbreak of war, a decline occurred in the proportions absorbed by salaries and wages, and by other expenses and profits, but whereas a recovery in wages began in 1918–19, the proportion left for profit and overhead charges continued to diminish until 1921–22, and did not attain its pre-war dimensions until 1922–23.

The following table shows, in each class of industry, the value of goods manufactured and of work done, the cost of materials used and of fuel

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consumed, the amount paid in wages and salaries, and the proportion of the total value of output which each of these charges represented in the year 1922-23:

	Goods Manufac-		Fuel con- sumed,	ied, Salavior		ortionat ufactur presente	ed Good	18
Class of Industry.	tured, and Work done.	Materials used.	including Motive- power rented.	and Wages.	Materials used.	Fuel, etc.	Salaries and Wages.	Balance.
Treating Raw Material, Pastoral Products Oils and Fats, etc Processes in Stone, Clay, Glass,	£ 8,799,767 2,501,477	£ 6,925,316 1,697,955	£ 130,189 48,666	£ 860,272 285,309		$\begin{array}{c} \text{per} \\ \text{cent.} \\ 1.5 \\ 1.9 \end{array}$	per cent. 9.8 11.4	per cent. 10.0 18.8
etc	5,004,400	4,105,083	60,192	1.659,673	61.8	$ \begin{array}{c} 11.0 \\ 0.9 \\ 5.0 \end{array} $	$ \begin{array}{c} 33.9 \\ 25.0 \\ 27.5 \end{array} $	$27.2 \\ 12.3 \\ 15.0$
Connected with Food and Drink, etc Clothing and Textile Fabrics, etc.	41,751,398 14,195,473		569,828 103,291	3,393,049 4,077,167	74-3 51-6	1·3 0·7	8-1 28-7	
Books, Paper, Printing, etc Musical Instruments, etc Arms and Explosives	498,507		3,372		39.2	1.1 0·7 0·5	32.0 38·0 19·6	28.6 22.1 29.7
Vehicles, Fittings, and Saddlery, etc	2,793,337	1,147,683	34,775	1,085,172	41-1	1.2	38-8	18:9
Ship and Boat-building, &c Furniture, Bedding, and Uphol- stery	1,765,265	497,441		1,182,922 810,913		3·0	67*0 30:4	
Surgical and other Scientific In-	4,096,600	2,241,459		1	i	1.1	12.0	
struments	95,179	33,064	743	39,550	34.7	0.8	41.6	22 9
Jewellery Timepieces and Plated- ware	370,682 6,302,605 595,873	1,695,492 325,549	2 999,240	1,089,342 160,036	$26.9 \\ 54.7$	1·4 15·9 0·3 1·8	40.9 17.3 26.8 29.5	$\frac{39.9}{18.2}$
Total	132,735,140	77,222,401	4,021,068	27,050,730	58.2	3.0	20.4	18.4

*Exclusive of drawings of working proprietors.

It is interesting to note the extent to which the value of materials is enhanced by the processes of treatment. For all industries materials were 58.2 per cent. of the value of the output, but there was great diversity amongst the various classes, the proportion ranging from 26.9 per cent. in those industries dealing with heat, light, and power to 78.7 per cent. in those treating raw pastoral products. These variations can be understood readily when the wide difference between the operations of the industries is considered, and the value of the plant and machinery employed is taken into account. Extensive plant alone is not a factor in the creation of high values. this being rather the result of the extensive use of machinery, and the industries dealing with food and those engaged in shipbuilding may be cited as examples. In the former class materials represent 74.3 per cent. and wages only 8.1 per cent. of the total value, while in the latter class the total wages paid amount to a sum 138 per cent. in excess of the value of materials used, and represent 67.0 per cent. of the total value. In local shipyards a very large proportion of the work consists of repairs and renovations, in which the cost of materials is much less than in the actual manufacture, and owing to the nature of the employment little machinery is brought into requisition.

The ratio of the total amount of wages to the value of production, that is, the value added to raw materials, varied during the last ten years from 48.8 per cent. in 1917–18 to 59.3 per cent. in 1920–21, and in 1922–23 it represented 52.5 per cent. The ratio varies considerably in different industries, as will be seen in the following table, which covers the five years 1918–23.

Particulars relating to the Commonwealth Small rms Factory are not included in the table.

Class of Industry.	1918-19.	1919 -20.	1920-21.	1921-22.	1922-23,
	per cent.	per cent.	per cent.	per cent.	per cent
Treating Raw Material, etc	371	31.4	51.8	54.6	49.3
Other Party at a .		29:9	34.4	37.2	37.8
Distance in Okana Class Class	60-7	58.6	59.1	61.6	55.5
XXXX I LI . TH XXX I A	68.7	64.2.	66-0	69:6	66.8
Metal Works, Machinery, etc	57.1	78.3	73.2	66-8	64:6
	38.6	35:7	42.4	39:0	33.4
C1-11 . IT: 41 10-1	59.3	58.6	57.5	62.0	60.2
Dealer Demon Drinking and	59.6	57.2	61.6	61.5	52.8 -
Manipal Tratananta sta	60.8	61.7	58.8	64.4	63.2
A summer a series of the second	. 38.3	47.2	43.0	23.0	39.8
97-11-1 1 37-17-1 CL 331	. 70.0	67.1	69.6	68.0	67:4
ຕາະ ນວະເນີນີ້ ເ	90.7	91.2	88.2	90.2	97.4
	. 69:8	69.4	71.9	70.8	67.3
	. 25.5	31.2°	38.0	31.9	27.2
	. 50.7	64.8	70.0	59.8	64 4
Jewellery, Timepieces, and Plated-ware .	. 70.4	66.2	70.6	68.3	63.9
Hart Tight and Daman	. 27.6	33.6	39.5	35:4	30.2
Leatherware, N.E.I	. 53.3	59.3	62.9	54.2	59.6
Minor Wares, N.E.I	. 58.5	60'3	59.5	75.0	57:0
Total*	. 51.6	55·1	59:3	57.2	52.5

*Excluding Commonweal h Small Arms Factory,

FUEL CONSUMED.

The value of the fuel consumed in factories in 1922-23 was £2,689,312. 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 1922-23 were as follows :—

	Co	al.	Co	Coke. Wood		
Industry.	Quantity.	Value.	Quantity.	Value.	Quantity:	Value
	Tons.	£	Tons.	t	Tons,	í £
Treating Raw Materials, etc	57,398	\$8,476	401	523	7,322	5,340
Oils and Fats, etc	33,269	44,106	237.	278	386	355
Stone, Clay, Glass, etc	353,648	384,762	5,553	7,376	34,106	26,050
Working in Wood	7,307	9,152	293		16,871	10,145
Metal Works, Machinery, etc.	259,639	351,095	228,884	444.518	1.967	1,997
Food, Drink, etc	204,850	295,507	24,236	31,212	59,021	52,864
Clothing, Textile Fabrics, etc.	17,103	24,700	2,492	3,213	228	228
Books, Paper, Printing, etc	5,846	9,399	447	584	81	76
Musical Instruments, etc	205	328	284	286		
Arms and Explosives						
Vehicles, Saddlery, etc	3,224	5,442	£83	1,566	2,203	1,983
Shipbuilding and Repairing	15,465	21,324	3,044	4,791	115	117
Furniture, Bedding, and Up-	,	· · ·		,		
holstery	557	893	260	411	313	176
Drugs, Chemicals, and By-		000			010	110
products	10,206	15,864	3,963	3,598	55	65
Surgical and Scientific Instru-	10,200	20,002	0,000	3,000	00	00
ments	5	8	45	55	5	5
Jewellery, Timepieces, and		Ũ				
Plated-ware			182	243		· • .
Heat, Light, and Power	577,282	718,587	132,337	93,118	14,631	11,901
Leatherware, N.E.I.	5	110,001	62	74	2	4
Minor Wares, N.E.I.	10,707	0	75	122	500	623
141100 11 11 00, 114, 11 1.1 1.1						
Total	1,556,716	1 984 979	403 778	592,411	137 808	111,929

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The cost of fuel varies greatly in accordance with the proximity of the industry to the source of supply; for instance, much of the coke used for smelting iron at Lithgow is produced on the South Coast, and has to be hauled long distances by train.

EMPLOYMENT.

The relative importance of the different classes of manufacturing industries, based on their capacity to employ human labour, is shown in the following comparative statement of average number of persons engaged :--

Class of Industry.	P	ersons eng	aged, inch Proprietor	nding Wor	king
Class of Lifetsury.	1901.	1911.	1920-21.	1921-22.	1922-23.
Treating Raw Materials, Pastoral Products, etc.	2,981	3,890	3,840	4,182	4,177
Oils and Fats, Animal, Vegetable, etc.	698	889	1,584	1,686	1,672
Processes in Stone, Clay, Glass, etc	3,102	5,695	8,829	7,610	8,303
Working in Wood,	5,108	8,181	9,157	9,026	9,519
Metal Works, Machinery, etc	13,831	22,862	36,860	34,263	34,459
Connected with Food, Drink, etc	11,372	14,050	17,874	19, 140	19,518
Clothing, Textile Fabrics, etc	14,497	26,504	28,298	32, 036	32,258
Books, Paper, Printing, etc	5,573	9,134	10,527	11,282	12,299
Musical Instruments, etc	226	387	642	724	888
Arms and Explosives	11	33	850	612	24
Vehicles and Fittings, Saddlery, etc	2,541	4,416	5,267	5,617	6,561
Ship and Boat Building, etc	1,541	2,4 29	5,175	5,616	4,928
Furniture, Bedding, and Upholstery	2 ,1 4 0	3,534	4,312	4,352	4,725
Drugs, Chemicals, and By-products	450	1,460	2,659	2,809	2,780
Surgical and other Scientific Instruments	69	96	206	198	215
Jewellery, Timepieces, and Plated-ware	165	753	828	824	852
Heat, Light, and Power	1,417	2,795	5,038	5,076	5,280
Leatherware, N.E.I	117	461	919	1,113	1,064
Minor Wares, N.E.I	391	1,055	2,146	2,710	2,744
Total	66,230	108,624	145,011	148,876	152,266

During the quinquennial period, 1901-6, the increase in the number of persons engaged in manufacturing industries was 11,592; during the next quinquennial period, 1906-11, it amounted to 30,802. During the period 1911-16 it was only 7,777; owing to enlistments for war service, there was a decline of 3,789 persons during the two years 1913-15, and a further decline of 210 during 1915-16. The number has risen in each year since 1916, the rate of increase being greatest between 1917 and 1920.

MANUFACTURING INDUSTRY.

Since 1901 the number of employees in manufacturing industries has increased much faster than the total population, the annual rates being 3.9and 2.2 per cent. respectively. The very great proportionate growth of factories between 1906 and 1911, and the slockening between 1911 and 1916, are shown in the following comparison :--

	Increase in Fac	tory Employees.	Increase in Popu- lation-
Period.	Number.	Average Annual Rate.	Average Annual Rate.
		per cent.	per cent.
1901-06 (5 years)	11,592	3.3	1.7
1906-11 (5 years)	30,802	6.9	2.6
1911-16 (41 years)	7,777	1.2	2.4
1916-21 (5 years)	28,610	4.5	2.1
1921-23 (2 years)	7.255	2.5	2.1

The following table shows the average number of persons engaged in manufacturing industries in the Metropolitan area and in the remainder of the State since 1901 :---

		es (including V Proprietors).	Vorking	Year.		s (including Working Proprietors).		
Year.	ar. Metropolitan District. Remainder of State. Total.		Metropolitan District.	Remainder of State.	Total			
1901	42,415	23,815	66,230	1920-21	104,552	40,459	145,011	
1906	52,605	25,217	77,822	1921–22	110,589	38,287	148,876	
1911	77,592	31,032	108,624	1922-23	114,864	37,402	152,266	
1915-16	85,365	31,036	116,401					

During 1922-23 the number of workers in the Metropolitan area increased by 4,275, but there was a decrease of 885 workers in the country, and a net increase of 3,390 in the whole State.

Under the classification of "Remainder of State" are included such urban centres as Newcastle, Broken Hill, Parramatta, Granville, Lithgow, Wollongong, Goulburn, and Bathurst, yet it is significant that Sydney and its suburbs constitute the chief manufacturing centre of the State, and that whereas the number of employees in the Metropolitan district increased by 72,449, or 170.8 per cent., from 1901 to 1923 the increase in all other parts of the State was only 13,587 persons, or 57 per cent.

The increase in the number of employees of each sex during the period from **31st** December, 1913, to 30th June, 1923, is shown below :---

Year.	Metropolit	an District.	Remainder of State.		
Year.	Males.	Females.	Males.	Females	
1913	61,569	24,694	31,467	2,670	
1922–23 Increase per	80,687	34,177	34,283	3,119	
cent.	31.0	38.4	8.9	16.8	

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The proportion of females employed is far greater in the Metropolitan area than in the country districts, and in comparison with the increase in the employment of males, the rate of increase in the employment of females has been greater both in the metropolitan and country areas.

Average Time Worked per Employee.

The capacity of manufactories to afford employment depends to a certain extent upon the regularity of their working. Generally speaking, employment in the factories of New South Wales has been very constant during the past ten years. This may be illustrated by the following statement, which shows for each class of industry the average time worked per employee (inclusive of working proprietors) in representative years since 1911 :--

Class of Industry.	1911.	1915-16	1920-21.	1921-22.	1922-23.
Treating Raw Material	Months. . 10-11	Months. 10·10	Months. 10-83	Months. 11-05	Months. 11·16
Oils and Fats	. 11.38	11.89	11.78	.11-71	11:88
Stone, Clay, Glass	. 11-56	11.13	11:48	11.31	11.62
Working in Wood	. 10.82	10.82	11.00	10:89	10:97
Metal Works, Machinery	. 11.70	11.67.	11-49	11.51	11.17
Food, Drink, etc	. 11.10	11.33	11-07	11.15	11:23
Clothing, Textile Fabrics	. 11.64	1170	11.70	11.77	11.76
Books, Paper, Printing	. 11-89	11-98	11:87	11-90	11.95
Musical Instruments	. 12.00	12.00	11.77	11-93	11-93
Arms and Explosives	. 8.21	12:00	12.00	12.00	12.00
Vehicles, Saddlery	11.83	-11-84	11-60	311-70	11.65
Ship Building	. 11.98	11:99	11.98	12.00	11.95
Furniture, Bedding	11.58	11 6 6	11.73	11.78	11.78
Drugs, Chemicals		11:99	11-78	11-76	11.79
Surgical Instruments	12.00	12.00	12.00	12.00	12.00
Jewellery	11-98	11-95	11.65	11.95	11.95
Heat, Light, and Power .	11.81	11.68	11.75	11.18	10:80
Leatherware, N.E.I	11-91	11.75	11.90	11.67	11.79
Minor Wares, N.E.I	11:51	11-60	11-82	11-85	11:87
Mean of all Industries .	11.55	11.56	11.52	11.53	11.47

In a number of classes work is so regular as to be almost continuous; the factories in which employment is least regular are those working in wood and engaged in treating raw material.

MANUFACTURING INDUSTRY.

Sex and Age Distribution of Employees.

The following table shows the number of males and females employed in factories, and the ratio to the male and female population respectively during each year since 1913:—

Year.		M	ales.	Fe	males.	Total.		
		Number.	Average per 1,000 of Male Population.	Number.	Number. Average per 1,000 of Female Population.		Average per 1,000 of Total Population	
1913		93,036	96-9	27.364	31.8	120,400	66.1	
1914-15		90,409	91.7	26,202	29.2	116,611	61.9	
1915-16		87,724	∕90·1	28,677	$31 \cdot 1$	116,401	61.4	
1916-17		88,910	93.3	29,087	30.9	117,997	62.3	
1917–18		90,025	93.6	30,529	31.8	120,554	62.7	
1918–19		96,884	98.0	30,707	31.4	127,591	64.9	
1919-20		109,836	105.5	34,618	34.7	144,454	70-9	
1920-21		112.187	105.2	32,824	$32 \cdot 1$	145,011	69-4	
1921-22		112.332	103.6	36,514	35.0	148,876	69.9	
1922-23		114,970	103.8	37,296	35.0	152.266	70.1	

Manufacturing industries provide employment for about 7 per cent. of the total population; more than 10 per cent. of males find employment therein, but only about 3 per cent. of females. Proportionately the employment of males, which diminished during the earlier years of the war period, has since increased by 19 per cent.; the employment of females has fluctuated to a greater extent, but shows a tendency to increase.

The following table shows the age distribution of the persons of each sex engaged in manufactories in various years since 1907, the first year for which statistics respecting the employment of children are available :---

		Persons	Employed	in Manufa	ctories, in	duding W	orking Pro	prietors.	
Year.	Aged	Aged 18 years and over.			Children under 16 years of age.			Total.	
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1907	63,547	18,634	\$2,181	2,406	1,880	4,286	65,953	20,514	86,467
1911	79,609	24,274	103,883	2,474	2,267	4,741	82,083	26,541	108,624
1915-16	85,146	26,072	111,218	2,578	2,605	5,183	87,724	28,677	116,401
1920-21	108,514	29,214	137,728	3,673	3,610	7,283	112,187	32,824	145,011
1921-22	108,451	32,364	140,815	3,911	4,150	8,061	112 ,3 62	36,514	148,876
1922-23	110,975	33,008	143,983	3,995	4,288	8,283	114,970	37,296	152,266

During the year 1922-23 there was an increase of 2,608 in the number of male employees and of 782 in the number of females; of those aged 16 years and over, there was an increase of 2,524 males and 644 females; there were 222 more children in the factories than in the previous year, viz., 84 boys and 138 girls. Of the male employees in 1922-23, boys under 16 years numbered 3,995 or 3.5 per cent.; 16,696, or 14.5 per cent., were between 16 and 21 years, and 94,291, or 82.0 per cent., were adults. Of the females, the number and proportion in the respective groups were 4,288, or 11.5 per cent., 12,944, or 34.7 per cent., and 20,064, or 53.8 per cent.

Under a factory system of production, there is a tendency to increase the employment of women and children. In New South Wales legislation has been introduced to keep such employment within limits considered conducive to the general good of the community, and the proportion of female labour has remained fairly constant.

The following table shows, for the years 1911, 1921 and 1923, 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		Number of M mployed in t			of Women Males emp factory.	
	1911.	1920-21.	1922-23.	1911.	1920-21.	1922-23
Food, etc.—			i			
Aerated Waters	128	81	65	14	14	_11
Biscuits		822	944	121	102	109
Condiments, Coffee, and Spices		545	746	122	125	128
Confectionery		1,190	1,189	70	113	102
Cornflour, Oatmeal	1.	125	102	97	68	78
Jam and Fruit-canning		721	695	137	113	137
Meat-preserving		26	71	14	29	23
Pickles, Sauces, and Vinegar		230	226	195	163	166
Tobacco	746	1,262	1,210	128	131	130
Clothing, etc						
Dressmaking and Millinery		4,249	3,399	11,071	5,119	5,860
Hats and Caps		815	776	227	159	174
Waterproofs and Oilskins		106	178	539	505	456
Shirts, Ties, and Scarfs		1,817	2,267	1,859	1,781	1,585
Slop Clothing		3,798	4,959	601	632	642
Tailoring		2,927	2,966	163	276	276
Furriers	. 24	129	146	114	182	164
Woollen and Tweed Mills	561	∫ 793	854	} 172	£ 101	142
Hosiery and Knitted Goods	j i	້ 1,186	2,058	J	<u> </u>	462
Dyeworks and Cleaning		105	119	92	76	95
Tents and Tarpaulins		255	322	230	274	252
Boots and Shoes		1,612	1,931	61	61	61
Chemicals, Drugs, and Medicines		540	568	-89	79	96
Bedding, Flock, and Upholstery		-122	162	28	34	44
Brooms and Brushware		60	. 66	5	25	25
Furnishing, Drapery, etc	160	296	285	239	435	380
Inks, Polishes, etc		170	186	•••	93	85
Leatherware	56	279	343	16	57	60
Manufacturing Jewellery		51	51	11	12	14
Paper, Paper Bags, and Boxes		.827	969	201	119	123
Printing and Book-binding		1,711	1,902	29	34	34
Rubber Goods		344	604	28	57	86
Soap and Candles		286	340	39	59	63
Tinsmithing		195	212	5	29	25
Other Industries	815	1,927	2,400	2	3	3
Total	24,387	29,602	33,311	36	32	35

CHILD LABOUR.

The law regulating primary education prescribes that children must attend school until the completion of their fourteenth year, exception being made only in case of those who, prior to reaching that age, have obtained exemption certificates, which may be granted when the children have attained a certain standard of education, or, in special cases, when attendance at an

evening school is arranged. Since 1896 the Factories and Shops Act has prohibited the employment of children under the age of 14 in any factory, unless by special permission of the Minister for Labour and Industry, and such permission may not be given to a child under the age of 13 years. Permission is not granted, except in extreme circumstances, to any girl under the age of 14 years. Special permits were issued during 1923 to 226 children between the ages of 13 and 14 years, viz., to 151 boys and 73 girls in the Metropolitan district, and to 1 boy and 1 girl in Newcastle.

The employment in a factory of juveniles under the age of 16 years is conditional upon a medical certificate as to physical fitness being secured by the factory occupier. During the year 1922 certificates were issued to 7,563 juveniles as follows:—Metropolitan district, 3,111 boys and 3,777 girls; Newcastle, 231 boys and 272 girls; Broken Hill, 24 boys; and in the rest of the State, 91 boys and 57 girls.

Of 8,283 juveniles engaged in manufacturing, 7,052 were employed within the metropolitan area. A review of the statistics of juveniles shows that up to 1914 the boys outnumbered the girls, but in 1921–22 the number of girls was the greater. About 93 per cent. of the girls were working in Sydney and suburbs, but 23 per cent. of the boys were employed in establishments located outside the metropolitan area.

The following statement shows the proportion of boys and girls amongst the factory employees in various years since 1907 also the proportion of *t*hildren aged 13 to 15 years who are employed in factories :—

	Children employed in Factories.							
Year.	Boys per 1,000 Male Employees.	Male Female Em		Children per 1,000 of all Children aged 13 to 15.				
1907	36.2	91.6	49.6	45.9				
1911	25.2	76.4	37.4	49.9				
1915-16	29.4	90.8	44.5	48.6				
1920-21	32.7	110.0	50.1	62.8				
1921-22	34.8	113.7	54.1	68.4				
1922-23	34.7	115.0	54•4	68.2				

The proportion of children amongst the factory employees declined in a marked degree between 1907 and 1913; during the next five years it rose slowly, then dropped almost to the pre-war level; in 1919–20, when the basic wage was increased by 17s. per week in the case of males, and by 9s. in the case of females, a marked increase occurred, particularly in the clothing industries. The proportion of boys did not, however, reach the figure of the year 1907, and it has not increased during the last few years, but the proportion of girls amongst the female employees was 25 per cent. higher in 1923 than in 1907 and is increasing steadily. In 1907, on the average only 46 children per thousand were employed in factories, and the proportion did not exceed 49 until 1919–20, when it rose to 67 per 1,000, and in the last two years has attained 68 per 1000.

OCCUPATIONAL STATUS.

Of all the persons engaged in manufacturing industries during the year 1922–23, approximately 84 per cent. were actually employed in the different processes of manufacture, or in the sorting and packing of finished articles.

Class of Industry.	Working Proprietors, Managers, and Overseers.	Clerks, etc.	Engine-drivers,	Workers in Factory, Mill, etc.	Carters, Messengers, and others:	Persons regularly employed at their own homes.	Total.
Treating Raw Material, etc	371	141	159	3,323	183		4,177
Oils, Fats, etc	82	158	38	1,346	44	4	1,672
Processes in Stone, Clay, Glass. etc.	570	311		6,736	460	3	8,303
Working in Wood	1,139	523	387	7,173	297		9,519
Metal Works, Machinery, etc	1,835	1,255	473	30,716	179	1	34,459
Connected with Food, Drink, etc	1,309	1,547	812	15,338	512		19,518
Clothing, Textile Fabrics, etc	2,192	733	-50	28,551	212	520	32,258
Books, Paper, Printing, etc	1,005	1,545	14	9,499	234	2	12,299
Musical Instruments	44	67	2.	768	6	1	888
Arms and Explosives	5	1		18			24
Vehicles and Fittings; Saddlery, etc.	862	395	10	5,229	63	2	6,561
Ship and Boat Building, etc	169	296	94	4,320	49	•••	4,928
Furniture, Bedding, and Upholstery	518	130	12	4,022	40	3	4,725
Drugs, Chemicals, and By-products		306	40	2,132.	54	1	2,780
Surgical and other Scientific Instru- ments.	25	18	•••	170	2	•••	215
Jewellery, Timepieces, and Plated - ware.	112	52.	•••	658	27°	3	852.
Heat, Light, and Power	403°	236	750	3,847	44		5,280
Leatherware, N.E.I	74	- 69-×		914-	6	1	1,064
Minor Wares, N.E.I.	186	97	21	2,408	26	6	2,744
Total	11,148	7,880	3,085	127,168	2,438	547	152,266
Males	10,340	5,238	3,085	93,857	2,369	81	114,970
Females	808	2,642	••••	33,311	69-	466	37,296

The following statement shows the occupational status of the persons engaged in each class of industry in 1922-23:-

The status of workers employed varied greatly in the nineteen standard classes of manufacturing industry. The average proportion per cent. of working proprietors, managers, and overseers, was 7.3 for all classes, but it varied from 3.4 in ship and boat building, to 13.1 in those making vehicles fittings, saddlery, and harness.

The workers actually employed in mill, workshop, and factory, represented about 84 per cent. of the total number engaged, and nearly 62 per cent. were males.

Only 5.2 per cent. of the employees were clerical workers, and of these more than one-half were females. The practice of giving out work at piece rates is very limited. Workers employed in their own homes represented only 0.4 per cent. of the total number employed, and were almost entirely women engaged by clothing factories.

INDIVIDUAL INDUSTRIES.

The foregoing information relating to the manufacturing industry as a whole or to groups of industries serves to show the general development of the industry, 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, is not readily classifiable, and as the output is perhaps the most interesting item, it has been deemed advisable to confine the remarks in the following pages to industries whose importance merits special mention, and whose output may be shown in detail with regard to both quantity and value.

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MANUFACTURING INDUSTRY.

TANNERIES.

Skins and hides are exported in large quantities, and the tanning industry is steadily extending its operations. The bulk of the local hides are tanned in New South Wales, as well as a large number imported from other Australian States and from New Zealand. Besides maintaining an extensive export trade in leather, it provides practically all the raw material needed for local requirements and for a growing oversea trade in footwear and other leather goods. Two-thirds of the leather produced locally is sole leather, but the production of the finer sorts is receiving increasing attention; the exports of sole leather in 1923 were valued at £175,491, and of other leather £223,055. Fancy leathers are still imported in large quantities, thus 1,167,961 sq. feet, valued at £96,891, were imported into New South Wales in 1922-23, and practically the whole came from the United States of America. Two-thirds of the number of tanneries in operation in the State are

situated within the boundaries of the Metropolitan area.

Items.	1901.	1911.	1920-21.	1921-22;	1922-23.
Number of Establishments	108	76	80	80	78
Number of Employees	1,059	1,039	1,242	1,333	1,395
Average Horse-power used	. 711	1,044	2,688	2,974	2,827
Value of Land and Buildings $\pm \pounds$	115,752	105,990	265,166	274,946	\$94,597
Value of Plant and Machinery £	47,274	82,241	172,132	186,079	207,555
Total Amount of Wages paid \pounds	80,757	104,695	262,724	294,943	305,968
Value of Fuel £	4,893	7,160	17,855	21,516	23,045
Value of Materials used \pounds	578,164	786,817	1,684,791	1,373,056	1,424,513
Value of Output £	735,231	982,023	2,103,525	1,891,201	1,979,964
Value of Production $\dots \pounds$	152,174	188,046	400,879	496,629	532,406
Materials Treated—				,	
Hides Calf and Yearling No.	*	214,681	100,829	275,283	481,433
Other No.	*	317,025	692,335	,	
Hide-pieces cwt.	*	2,537	2,000	· · ·	
Sheep Pelts No.	*	4.642.865	3,813,618	3,912,006	4,450,426
Other Skins No.	*	125,576	284,632		
Bark tons	*	11,706	11,570	· · ·	
Articles Produced-		,		,	-,
Leather 1b.	*	13,945,005	17,707,065	17,851,680	21,413,476
Basils lb.	*	4,324,139	2,730,162	3,670,253	3,293,744
Pelts, pickled No.	祥	357,833	690,084	125,010	469,680
Other Skins, selling value \pounds	÷	17,151	255,535	155,681	145,589
Fleshings cwt.	*	*	64,467	76,526	83,372

The following table gives particulars of the industry for the year 1901 and at intervals thereafter :—

* Not available.

† Includes rented premises.

WOOL-SCOURING AND FELLMONGERING.

The wool-scouring and fellmongering industry has made rapid progress during recent years, but there is room for much greater development, as only one-sixth of the wool clip was scoured locally in 1922–23. The exports in 1922–23 of greasy wool were 241,058,000 lb., and of scoured wool 40,611,000 lb.

NEW SOUTH WALES OFFICIAL YEAR BOOK.

In the year 1920-21 the quantity of wool treated was less than usual, owing to the stagnant condition of the wool trade generally, but conditions improved considerably in 1921-22.

Items.	1901.	1911.	1920-21.	1921-22.	1922-23,
ber of Establishments		73 59	42	45	46
ber of Employees	1,4	59 1,603	1,461		
age Horse-power used		2,009	3,623	3,616	3,883
of Land and Buildings	$s \neq \pm 125,83$				254,315
e of Plant and Machine					387,166
amount of Wages paid				330,210	312,714
of Fuel	£ 9,05				52,658
of Materials used	\pounds 25,24				3,945,744
of Output	£ 150,61				4,698,885
of Production	$f{f} = f{f} = $	1 225,893	645,604	585,561	700,483
ials Treated					
asy Wool	lb. *		24,960,202		35,299,303
ured Wool	lb. *	*	5,738,701		
	No. *	5,180,335	4,088,690	4,211,273	4,061,741
es Produced—					
ured Wool	1b. *	33,283,378		32,417,583	
ol-tops and Noils	1b. *	*	5,623,414		
58	No. *	4,655,524	3,235,429	2,844,566	3,435,117
* Not ave			3,235,429		3,4

* Not available.

† Includes rented premises.

SOAP AND CANDLE FACTORIES.

Of the industries in which oils and fats are treated, soap and candle making is by far the most important. The industry has grown to such an extent that it supplies practically the whole of the local requirements of soap and candles, except fancy and medicated soaps, and even these are being supplied to an increasing extent. There is also a small export trade with the islands of the Pacific. The following table shows the chief particulars of the industry since 1901 :---

Items.	1901.	1911.	1920-21.	1921-22.	1922-23.
Number of Establishments	44	37	26	27	28
Number of Employees	533	658	946		
Average Horse-power used	503	785	964		
Value of Land and Buildings†£		165,218	223,423		
Value of Plant and Machinery £	89,147	150,453	287,714		352,744
Total amount of Wages paid £	37,681	49,555	141,135		
Value of Fuel £	5,932	12,205	40,160		
Value of Materials used £	208,676	359,096	859,555		
Value of Output £	322,036	597,544			1,242,704
Value of Production £	107,428	226,243	277,796		
Materials Treated-		-=0,210	-,,,,	200,710	100,011
Tallow cwt.	*	117,428	139,153	196,535	203,861
Alkali lb.	*	6,370,007±	4,516,054		
Wax lb.	*) £		2,671,599	
Resin cwt.	*		22,327		
Copra Oil ewt.	*		15,560		
Sand cwt.	*)	3,595		
Articles Produced—		-	0,000	,000	20,110
Soap cwt.	233,600	277,449	280,620	356,081	356,657
Soap Extract, Powders, &c. lb.	*	965,807	4,051,251	4,673,319	
Candles (including wax) lb.	3,895,468	5,388,848		4,844,718	
Glycerine lb.	631,680	*	1,882,423	1,886,422	
Soda Crystals £	*	14,014	3,456	6,824	
Oloino f	*	* *	26,714		
Stearine \ldots \ldots \pounds	*	*	25,500		
		. [_0,000	-,,-10	

* Not available.

† Includes rented premises.

‡ All factories.

MANUFACTURING INDUSTRY.

BRICK AND TILE WORKS.

Owing to the abundance of clay everywhere, brickworks have been established in all parts of the State. Only 200 more persons are employed in the Metropolitan district than in the remainder of the State, but the output of the metropolitan kilns is much greater and more varied. In a number of cases the industry is associated with tile making, so the figures for the two industries have been combined. The following figures present detailed information concerning the industry in 1901 and later years :---

Items.	1901.	1911.	1920-21.	1921-22.	1922-23.
Number of Establishments	182	222	159	162	159
Number of Employees	1,823	3,017	3,716	3,071	3,427
Average Horse-power used	1,228	4,865	9,181	9,320	9,643
Value of Land & Buildings† £	200,170	391,875	865,182	863,718	857,402
Value of Plant & Mach'ry £	108,589	449,100	1,114,500	1,201,735	1,238,838
Total Amount Wages paid £	149,342	322,781	777,536	592,874	673,661
Value of Fuel £	46,355	101,267	276,402	225,733	273,648
Value of Materials used £	32,199	70,881	189,150	212,650	259,922
Value of Output £	364,251	726,620	1,640,743	1,341,748	1,626,956
Value of Production £	285,697	554,472	1,175,191	903,365	1,093,386
Articles Produced— Bricks No.	157,999,000	327,864,000	360 ,092,0 05	289,285,368	367,339, 34 6
Tiles £	*	24,857	286,862	219,911	245,761
Pipes £	*	52,241	6,754	7,047	9,318
Pottery £	*	51,763		1,165	•••
Hollow Building Blocks £	*	3,864	4,159		•••
Fire Bricks, &c £	*	*	72,225	42,467	89,610

• Not available.

+ Includes rented premises.

In earlier years pottery making was also carried on in association with brick making, but it is now conducted in most cases as a separate industry. The manufacture of roofing tiles developed to such an extent during the war that practically all the tiles now used in the State are of local production.

State Brickworks, Homebush.

In the latter part of 1911 the Government established State Brickworks at Homebush, near Sydney, where a considerable area of suitable clay had been found.

The business results of the undertaking are highly satisfactory; at 30th June, 1923, the accumulated trading profit amounted to £137,378, and it was estimated that the Government had saved a sum of £124,431 by purchasing bricks from the works. The requirements of the different Government Departments are supplied and bricks are sold to the public at prices below those ruling in private brickyards.

The following table gives particulars of the operations of the State Brickworks at Homebush Bay for each of the last five years :---

Particulars	•		•	1919.	1920.	1921.	1922.	1923.
Bricks manufactured Used for Public Works				35,439,684 20,896,882	17,722,953	38,586,954 19,306,494	40,912,716	42,397,987 14,884,200
Sold to Private Purchasers Used at Works	••	•••	••	14,863,730 10,402	19,492,205 35,840	19,230,679 20,880	22,789,963 701,519	
Stocks at 30th June	·· • •	•••	••	257,067	373,278	402,179	285,917	275,342
Cost of Manufacture per 1,00	ю		••	£ s. d 1 14 9	£ s. d. 2 0 0	£ s. d 257	£ s. d. 2 7 2	£ s. d. 2 6 5
Sale price per 1,000-						ĺ		
Seconds	••	••	••	1 18 6	2 7 6	2 12 6	2 12 6	
Commons Face	•••		•••	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 10 0 4 3 0	$\begin{array}{cccc} 2 \ 15 & 0 \\ 4 & 8 & 0 \end{array}$	2150 480	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$

The sale prices as stated in the table were for bricks loaded into trucks at the yard, Homebush Bay.

SAWMILLS.

Sawmilling is an important industry in many parts of the State, the majority of the mills being situated in the forest areas.

Besides general sawmilling, moulding and planing are undertaken at some mills, also the cutting of wood-paving blocks. In the more important centres of population 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 1901 are as follow :—

Number of Employees4,0885,2055,6455,2605,283Average Horse-power used5,18910,28014,59713,93413,814Value of Land and317,193465,548 $811,830$ 785,284908,244Buildings* \pounds 317,193465,548 $811,830$ 785,284908,244Value of Plant andMachinery \pounds $273,883$ $526,909$ $908,192$ $874,702$ $889,067$ Total Amount of Wages $273,883$ $526,909$ $908,192$ $874,702$ $889,067$ Paid \dots \pounds $17,601$ $6,503$ $24,405$ $25,531$ $30,284$ Value of Fuel \dots \pounds $17,601$ $6,503$ $24,405$ $25,531$ $30,284$ Value of Materials used \pounds $824,065$ $1,309,549$ $2,732,656$ $2,379,072$ $2,535,133$ Value of Production \pounds $494,487$ $741,755$ $1,346,663$ $1,278,803$ $1,304,915$ Materials Treated— $12,3228,000$ $447,706,000$ $178,133,002$ $153,691,247$ $162,439,986$ Softwood $,,$ $213,228,000$ $447,706,000$ $178,133,002$ $153,691,247$ $162,439,986$ Articles Produced— $304,995$ $65,301,000$ $67,823,577$ $72,575,017$ $69,150,760$ Hardwood sup. ft. $180,028,000$ $100,079,000$ $117,781,837$ $101,165,777$ $108,939,955$	Items.	1901.	1911.	1920-21.	1921-22,	1922-23.
Average Horse-power used $5,189$ $10,280$ $14,597$ $13,934$ $13,814$ Nalue of Land andBuildings * \pounds $317,193$ $465,548$ $811,830$ $785,284$ $908,244$ Value of Plant andMachinery \pounds $273,883$ $526,909$ $908,192$ $874,702$ $889,067$ Total Amount of WagesPaid \pounds $17,601$ $6,503$ $24,405$ $25,531$ $30,280$ Value of Fuel \pounds $17,601$ $6,503$ $24,405$ $25,531$ $30,280$ Value of Materials used \pounds $824,065$ $1,309,549$ $2,732,656$ $2,379,072$ $2,535,133$ Value of Output \pounds $1,336,153$ $2,057,807$ $4,103,924$ $3,683,406$ $3,870,324$ Value of Production. \pounds $494,487$ $741,755$ $1,946,863$ $1,278,803$ $1,304,915$ Materials Treated— $123,228,000$ $147,706,000$ $178,133,002$ $153,691,247$ $162,439,986$ Softwood ,, 3 $213,228,000$ $100,079,000$ $117,781,837$ $101,165,777$ $108,939,955$ Hardwood sup. ft. $180,028,000$ $100,079,000$ $117,781,837$ $101,165,777$ $108,939,955$	Number of Establishment .	. 345	452	496	466	483
Average Horse-power used $5,189$ $10,280$ $14,597$ $13,934$ $13,814$ Walue of Land and Buildings* \pounds $317,193$ $465,548$ $811,830$ $785,284$ $908,244$ Value of Plant and Machinery \pounds $317,193$ $465,548$ $811,830$ $785,284$ $908,244$ Machinery \pounds $273,883$ $526,909$ $908,192$ $874,702$ $889,067$ Total Amount of Wages Paid \pounds $304,826$ $456,520$ $926,276$ $890,989$ $859,549$ Value of Fuel \pounds $17,601$ $6,503$ $24,405$ $25,531$ $30,286$ Value of Materials used \pounds $824,065$ $1,309,549$ $2,732,656$ $2,379,072$ $2,535,133$ Value of Output \pounds $494,487$ $741,755$ $1,946,863$ $1,278,803$ $1,304,915$ Materials Treated— Logs— Hardwood sup. ft. $213,228,000$ $147,706,000$ $178,133,002$ $153,691,247$ $162,439,986$ Softwood $,,$ $417,706,000$ $178,133,002$ $153,691,247$ $162,439,986$ Articles Produced— Sawn Timber— Hardwood sup. ft. $180,028,000$ $100,079,000$ $117,781,837$ $101,165,777$ $108,939,957$	Number of Employees .	4,088	5,205	5,645	5,260	5.289
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Average Horse-power used.					
$\begin{array}{c c c c c c c c c c c c c c c c c c c $		f 317 193	465 548	811 830	785 284	008 246
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	Value of Plant and		3100,010	.011,000	100,209	300,240
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	Machinery	£ 273,883	526,909	908,192	874,702	889,067
$\begin{array}{c c c c c c c c c c c c c c c c c c c $			120 200	000.050	000 000	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$						
Value of Production. £ 494,487 741,755 1,346,863 1,278,803 1,304,915 Materials Treated— Logs— 1,278,803 1,304,915 Hardwood sup. ft. 213,228,000 147,706,000 178,133,002 153,691,247 162,439,986 Articles Produced— Sawn Timber— 1,200,000 100,079,000 117,781,837 101,165,777 108,939,956	Value of Fuel	E 17,601				
Value of Production. £ 494,487 741,755 1,346,863 1,278,803 1,304,915 Materials Treated— Logs— 1,278,803 1,304,915 Hardwood sup. ft. 213,228,000 147,706,000 178,133,002 153,691,247 162,439,986 Articles Produced— Sawn Timber— 1,200,000 100,079,000 117,781,837 101,165,777 108,939,956	Value of Materials used	824,065				
Materials Treated— Logs— Hardwood sup. ft. } Softwood ,, Articles Produced— 123,228,000 Sawn Timber— 120,028,000 Hardwood sup. ft. 120,028,000 100,079,000 117,781,837 101,165,777 108,939,956	Value of Output					
$ \begin{array}{c c} Logs - & \\ Hardwood sup. ft. \\ Softwood \\ Hardwood \\ sup. ft. \\ Hardwood \\ sup. ft. \\ \end{array} \right\} 213,228,000 \begin{array}{c} 147,706,000 \\ 65,301,000 \\ 65,301,000 \\ 65,301,000 \\ 65,301,000 \\ 67,823,577 \\ 72,575,017 \\ 72,575,017 \\ 69,150,760 \\ 69,150,770 \\ 69,150,760 \\ 69,150,770 \\ 69,100,770 \\ 69,100,770 \\ 69,100,770 \\ 69,100,770 \\ 69,$		E 494,4 87	741,755	1,346,863	1,278,803	1,304,912
Hardwood sup. ft. 213,228,000 147,706,000 178,133,002 153,691,247 162,439,986 Softwood ,, 3 213,228,000 65,301,000 67,823,577 72,575,017 69,150,766 Articles Produced— Sawn Timber— 100,079,000 117,781,837 101,165,777 108,939,956		-				
Softwood ,, } 213,223,000 65,301,000 67,823,577 72,575,017 69,150,760 Articles Produced— Sawn Timber— Hardwood sup. ft. } 120,028,000 100,079,000 117,781,837 101,165,777 108,939,956						
Articles Produced— Sawn Timber— Hardwood sup. ft.		213 228 000				
Sawn Timber— Hardwood sup. ft.] 180,028,000 100,079,000 117,781,837 101,165,777 108,939,956		210,220,000	65,301,000	67,823,577	72,575,017	69,150,760
Hardwood sup. ft. 100,029,000 117,781,837 101,165,777 108,939,958					1. A.	
	Sawn Timber-	1	[
	Hardwood sup. ft.	100.000.000	100,079,000	117,781,837	101,165,777	108,939,958
Softwood ,, $(130,023,000,51,392,000,45,628,945,52,102,045,48,077,909,51,392,000,45,628,945,52,102,045,48,077,909,51,392,000,45,628,945,52,102,045,48,077,909,51,392,000,51,392,000,51,392,000,51,392,000,51,392,000,51,392,000,51,392,000,51,392,000,51,392,000,51,392,000,51,392,000,51,392,000,51,392,000,51,392,000,51,50,50,50,50,50,50,50,50,50,50,50,50,50,$	Softwood 7	150,028,000				

* Includes rented premises.

METAL WORKS, MACHINERY, ETC.

This group is by far 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

MANUFACTURING INDUSTRY.

Items.		Engineer- ing Works.	Ironworks and Foundries.	Railway and Tramway Workshops.	Smelting.	Other.	Total.
Number of Establishments	••••	272	125	35	17	351	800
Number of Employees		7,022:	5,484	10,455	2,849	8,649	34,459
Average Horse-power used	••••	7,672	22,408	6,476	24,334	11,982	72,872
Value of Land and Buildings*	£	1,263,199	896,614	1,468,606	465,128	1,748,279	5,841,826
Value of Plant and Machinery	£	1,237,235	2,394,497	1,708,904	2,790,449	1,678,844	9,809,929
Total amount of Wages paid	£	1,372,116	921,185	2,598,190	571,752	1,613,741	7,076,984
Value of Fuel	£	68,698	185,327	57,582	816,089	157,982	1,285,678
Value of Materials used	£	1,564,573	2,370,750	1,767,435	3,928,632	3,906,904	13,538,294
Value of Output	£	3,537,618	3,774,717	4,427,083	7,215,521	6,819,845	25,774,784
Value of Production	£	1,904,347	1,218,640	2,602.066	2 470 800	2,754,959	10,950,812

of the local requirements of manufactured metals and machinery. Details of the products are not available, but in view of their great importance the following particulars relating to the operations in 1922–23 are shown :—

* Includes rented premises.

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. An account of the situation and extent of the iron ore deposits was given in the 1917 issue of the Year Book, at page 174, and a short history of the development of the iron and steel industry in the 1921 issue, at page 345.

There are only two establishments which produce iron and steel, namely, the Eskbank (Hoskins) Iron Works, at Lithgow, and the Broken Hill Proprietary Company's Works at Newcastle. At Eskbank local iron ores are used, but the ore treated at Newcastle is imported from South Australia.

The following table shows the production of pig-iron in New South Wales at intervals since 1907 :---

Year,	From New South Wales Ores.	From Other Australian Ores.	Total.	Year.	From New South Wales Ores.	From Other Australian Ores.	Total.
1907 1911 1916	Tons. 18,631 36,354 52,556	Tons. 74,035	Tons. 18,631 36,354 126,591	$\begin{array}{c} 1920-21 \\ 1921-22 \\ 1922-23 \end{array}$	Tons. 99,790 66,141 75,781	Tons. 266,759 235,166 62,333	Tons. 366,549 301,367 138,114

The quantity of iron ore used in 1922-23 for the production of pig-iron was 233,823 tons, of which 126,970 tons were mined in New South Wales.

The particula	rs relatin	g to	the p	roduction	of steel in	the last fou	r years
are as follows :-	 .	~	-	1920.	1921.	1922.	1923.
				tons.	tons.	$\operatorname{tons.}$	tons.
Steel Rails	•••			54,170	41,353	90,545	27,691
,, Bars and	Sections		•••	133,373	102,291	73,494	42,132
", Plates			•••	4,417	1,865	80	•••
" Billets	•••	•••	•••	34,471	36,014	16,888	658

The decreased production in 1922-23 was due to the fact that the Broken Hill Company's steel works at Newcastle were closed down for nearly 9 months of the year.

Smelting.

Smelting, as a distinct industry, is carried on in several centres in New South Wales, and there are 17 establishments for the treatment of ores, one of the most important being at Port Kembla in the South Coast. There is a large smelting establishment at Cockle Creek, in the Newcastle district, but it was closed during 1922-23 and new plant was being constructed for the treatment of zinc concentrates.

The following statement shows the operations of New South Wales smelting companies in connection with both local and imported ores during 1922-23 :-

					Quantities of Metals extracted from Ores, Concentrates, etc., the produce $of-$									
	Met	al.	1.		N.S.W.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	N. Territory.	New Zealand.		
Silver			••••	02	135,578	13,885	28,710		27,982	115,32 5		4,784		
Copper				tons	1,212	1	6,143		579	5,443	•••	1		
Tin		••	•••	*7	626		404		80		2 4			
Iron—Pi	ς.		•••	,,	75,781			62,333						

BUTTER FACTORIES.

Butter-making is one of the chief industries connected with the preparation of articles of food; it gives employment to over 1,000 persons, and has an annual output valued at £6,281,000. Butter is an important item of the export trade, and nearly 94 per cent. of local production is made in factories.

Details concerning butter factories and their operations in various years since 1901 are as follow :---

Items.	1901.	1911.	1920-21.	1921-22.	1922-23.
Number of Establishments	130	150	126	129	123
Number of Employees	9 09	968	1,022	1,057	1,049
Average Horse-power used	1,765	2,161	3,843	3,787	4,262
Value of Land and Build-				-,	, · ·
ings † £	247,394	186,893	308.189	307,934	354,546
Value of Plant and			-		,
Machinery £	172,767	230,485	395,668	418,561	493,717
Total Amount of Wages		ŕ	ŕ	,	
paid £	74,176	110,617	225,392	257,828	240,289
Value of Fuel £	13,924	23,599	61,655	73,303	67,450
Value of Materials used £	1,260,920	3,205,863	8,017,379	5,678,989	5,690.32
Value of Output £	1,535,398	3,475,890	8,974,967	6,531,061	6,281,070
Value of Production £	260,554	246,428	895,933	778,769	523,293
Materials Treated-					
Milk gals.	. *	1,019,151±	145,084;	120,135	
Cream lb.	*		174,694,607±		150,392,828
Articles Produced-					
	34,282,214	78,421,512;	79,864,745‡	95,694,451	69,255,08

* Not available. † Includes rented premises. 2 Excludes small quantities in farm factories worked by farm employees.

In addition to the butter factories, there are a number of other establishments engaged in the treatment of dairy produce. Particulars relating to all such factories are given in the following table :--

Factories.					e of nery.	Machinery in use.				Persons Employed.					
Year.	Butter only.	Cream and Milk,	Cheese only.	Bacon and Hams only.	Butter and Cheese.	Condensed Milk.	Total.	Estimated Value of Plant and Machinery	En:	rines.	Butter Workers and Churns.*	Cream Separators.	Cheese Presses.	Males.	Females.
				-	1		1	£	1		No.	No.	No.	1	
1918-19	120	927	58	23	8	4	1,140	587,291	1,344	8,309	270	1,003	149	1,432	66
1919-20		970	52	22	8	4	1,174	570,051	1,361	8,693	262	1,027	128	1,476	$\frac{72}{72}$
1920 - 21		1,006	49	18	5	4	1.206	649,888	1,264		262	1,031	136	1,459	
1921 - 22		1,250	48	19	6	4	1,451	702,905	1,551	10,032	256	1,291	135	1,599	75
1922-23	119	1,250	48	21	6	2	1,446	782,863	1,533	10,415	266	1,180	117	1,538	64

* Includes combined churns and butter-workers,

Bacon, hams, butter, and cheese are made also on farms; the chapter in this Year Book dealing with the Dairying Industry should, therefore, be consulted for complete information regarding the production of these commodities.

MEAT-PRESERVING AND REFRIGERATING.

In 1919-20 there were nine establishments, with 1,109 persons employed in connection with meat-preserving, including one establishment in the country division, which was a rabbit cannery, but owing to depression in the meat trade only seven of these establishments, employing 439 persons, were in operation in 1922-23. The following table shows the number of carcases treated in establishments dealing with meat by canning and chilling at intervals since 1901:---

$f(k, k) = -k^{-1}$		Meat-preservin;	-				
Year.	Cattle.	Sheep and	Meat and 7 and Sun	l'ongues dries.	Refrigerating Works.		
	Cabble.	Lambs.	Quantity.	Value.	Cattle.	Sheep and Lambs.	
1901	No. 16,538	No. 732,094	lb.	£	No. 18,195	No. 963,614	
1911	61,596	925,475	3,023,931	31,978	10,188	1,469,923	
1920 - 21	4,740	13,988	2,429,345	25,811	34,147	491,198	
1921-22	9,362	192,226	7,038,867	43,403	46,630	727,423	
1922 - 23	12,601	83,465	7,550,851	51,079	36,183	1,394,484	

* Not avail able.

The total output in 1922-23 was valued at £263,721, the principal item being tinned meat, 4,459,504 lb., valued at £168,395.

The operations of the works are affected by a number of factors, most important being the seasons and the condition of world markets. In adverse seasons, or after a succession of good seasons, the pastoralists sell all the stock which is in marketable condition, but on the breaking of a drought stock are retained for fattening or breeding. An unusually severe drought broke in June, 1920, and for a time stock were withheld; a few months later the oversea meat markets became glutted, and prices fell below the cost of production, consequently operations in 1920-21 were much restricted. In the last two years there has been some recovery, but the output still remains far below normal.

	Live St	ock Trea	ted.		Frozen for Export.	Chilled.	Total.
Bullocks Calves	and (Cows	•••		No. 13,006 7,743	No. 6,237 9,177	No. 19,263 16,920
	T	otal	•••		20,749	15,434	36,183
Lambs	•••	····	•••	••••	968,629 403,843	$\begin{array}{r}16,480\\2,766\end{array}$	985,103 403,603
	ľ	otal	•••		1,372,472	19,246	1,391,718
Pigs	•••	•••	•••		1,685	2,143	3,828
	г	otal C	arcases		1,394,903	36,823	1,431,729

The detailed figures relating to the freezing and chilling of carcase meat at refrigerating works during the year 1922-23 were as follow :---

Particulars regarding the capacity of the refrigerating and chilling works are as follow: Refrigerating space 3,371,000 cub. ft.; storage capacity 3,529,500 cub. ft.; chilling space 587,000 cub. ft.; the storage caracity is sufficient for 1,283,000 carcases of mutton or 160,000 carcases of boef. In these establishments the temperature usually ranges between 16° and 36° Fahr.

BISCUIT FACTORIES.

There are in the State eleven establishments engaged in the manufacture of biscuits, of which nine are within the Metropolitan area. The industry has made rapid progress. The output of biscuits reaches nearly 40,000,000 lb. annually, with a value of £1,253,000. A growing export trade in biscuits is maintained with the islands of the Pacific; the total exports in 1922-23 amounted to 2,778,000 lb. Details for 1901 and other years, including 1922-23, are given below :—

Items.	1901.	1911.	1920-21.	1921-22.	1922-23.
Number of Establishments		6	10	12	11
Number of Employees	845	1,360	1,800	1,953	1,993
Average Horse-power used	131	556	1,115	1,198	1,224
Value of Land and Buildings + £	42,253	94,050	164,031	173.612	192,860
Value of Plant and Machinery \mathfrak{L}	29,066	86,192	135,285	121,663	118,508
Total Amount of Wages paid £	35,165	70,055	221,791	221,892	227,285
Value of Fuel £	1,862	7,104	23,614	26,880	25,908
Value of Materials used \pounds	126,891	332,341	936,747	857.588	763,206
Value of Output £	213,645	529,108	1,358,266	1,395,505	1,348,555
Value of Production £	84,892	189,663	397,905	511,037	559,441
Materials Treated-	-				
Flour tons	*	8,755	12,210	13,257	12,486
Sugar tons	*	*	3,024	3,068	3,162
Other-Value only \pounds	*	*	446,788	325,552	343,180
Articles Produced-		1		,	0.0,
Biscuits lb.	*	22,029,000	38,308,360	39,465,841	39,959,144
Cakes-Value only £	*	125	21,916	67,479	61,047
Other- ,, ,, £	· *	**	31,843	21,181	33,883
* Not available		† Includes re	nted premises	<u>}</u>	<u> </u>

FLOUR-MILLS.

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

Items.	1901.	1911.	1920-21.	1921-22.	1922-23.
· · · · · · · · · · · · · · · · · · ·]	1		[
Number of Establishments	- 89	73	60	62	60
Number of Employees	889	967	1,023	1,204	1,146
Average Horse-power used	3,149	4,670	6,384	6,789	6,724
Value of Land and Buildings + £		357,356	561,688	568,959	591,180
Value of Plant and Machinery £		340,316	572,456	714,796	752,301
Total Amount of Wages paid £		123,491	219,964	272,647	
Value of Fuel £		24,648	37,746	57,828	64,615
Value of Materials used £		2,211,263	-4,951,650	5,442,051	4,634,682
Value of Output £		2,538,331	5,590,405	6,229,607	5,412,427
Value of Production \pounds	280,115	302,420	601,009	729,728	713,130
Materials Treated—					
	9,369,534	12,616,111	11,595,807	16,020,143	17,035,285
Articles Produced-				1	
Flour tons	191,504	253,556	244,818	-386,572	354,704
Bran ,,	*	-65, 182	50,104	65,635	72,945
Pollard ,,	*	45,276	48,338	62,126	71,172
Sharps and Screenings ,,	*	2,308	2,103	2,847	2,789
Wheat Meal, etc cwt.	*	21,840	21,863	19,999	39,483
		1	1.1	1	1

Details concerning flour-milling at intervals since 1901 are as follow :---

* Not available.

† Includes rented premises.

SUGAR-MILLS.

The manufacture of sugar has been an important industry for half a century, and so far back as 1878 there were 50 small mills in the State. There are now only 3 mills, but they are large, though their operations have decreased considerably on account of a diminution in the area under sugar-cane in New South Wales. The cultivation of sugar-cane is confined practically to the lower valleys of the Richmond, the Tweed, the Frunswick, and the Clarence Rivers, and the area has diminished in places where other crops can be grown more profitably. In the last few years the presence of "bunchy top" in banana plantations has caused a reversion to sugar-planting in the areas affected. Queensland is the great sugar centre of Austrelia, on account of its immunity from the frosts, which retard the cultivation of the cane in higher latitudes.

The raw sugar manufactured in 1922-23 was valued at £559,782, and the molasses at £3,780.

Items.	1901.	1911.	1920-21.	1921-22.	1922-23.
Number of Establishments	4	4	3	- 3	3
Number of Employees	529	469	437	428	446
Average Horse-power used	2,578	3,000	1,279	1,324	1,921
Value of Land and Buildings £	12,177	52,480	106.070	107,734	108,672
Value of Plant and Machinery £	509,242	467,976	425,283	430,937	434,688
Total Amount of Wages paid £	31,764	38,004	63,003	74,452	68,980
Value of Fuel £	4,854	8,102	8,636	11.194	10,223
Value of Materials used \pounds	95,394	107,600	303,651	343,932	366,600
Value of Output £	197,137	206,277	476,405	540,115	563,562
Value of Production \dots £	96,889	90,575	164,118	184,989	186,739
Materials Treated—	,	00,010	101,110	101,000	100,700
Cane crushed tons	131,083	147,799	131,313	149,474	147,992
Articles produced—	101,000		101,010	170,717	141,004
ີ ກ ທີ່ ມ	296,200	345,978	302,480	356,126	371,596
	1,072,400	796,440			
Molasses gals.	1,012,400	130,440	649,800	940,700	816,720

Sugar Refinery.

There is but one sugar refinery in the State, and it treats both local and imported raw product. During the year 1922-23 it handled 2,600,840 cwt. of raw sugar, which gave an output of 2,533,840 cwt. of the refined article, valued at £5,366,750.

The three mills, which were situated respectively at Harwood Island, on the Clarence River, at Broadwater, on the Richmond, and at Condong, on the Tweed, together with the refinery at Pyrmont, Sydney, during the year 1922-23 furnished employment to 1,044 persons.

BREWERIES.

In 1922-23 there were in the State 16 establishments classed as breweries, of which 3, the largest and most important, were within the Metropolitan boundaries; the number has decreased since 1911, when there were 37, but the output has increased considerably.

Items.	1901.	1911.	1920-21.	1921-22,	1922-23.
Number of Establishments	51	37	17	17	16
Number of Employees	1,016	912	1,122	1,225	1,230
Average Horse-power used	1,105	1,035	3,289	3,432	3,389
Value of Land and Buildings* £	584,754	305,287	714,155	755,191	744,460
Value of Plant and Machinery \mathbf{f}	190,710	281,316	924,181	914,667	925,979
Total Amount of Wages paid \mathfrak{L}	119,099	120,540	286,685	346,599	344,794
Value of Fuel £	13,849	17,794	66,848	81,621	74,708
Value of Materials used £	282,128	494,219	1,316,561	1,230,097	1,161,652
Value of Output £	1,022,247	1,140,151	2,515,224	2,492,122	2,559,523
Value of Production $\dots $ £	726,270	528,138	1,131,815	1,180,404	1,323,163
Materials Treated-	-		k 		
Malt bshls.	532,930	667,457	832,850	831,427	826,804
Hops tb.	665,345	790,866	831,656	795,922	780,015
Sugar tons	3,927	4,421	5,477	5,055	5,099
Articles produced—		1	-		
Ale, Beer, Stout gals.	13,973,751	19,804,540	25,470,404	24,633,315	24,432,132

* Includes rented premises.

TOBACCO FACTORIES.

Twelve factories under this classification were in operation during the year 1922-23, all situated within the Metropolitan area; six were engaged in the manufacture of cigars, in two tobacco was manufactured, in three cigarettes, and in one cigars and cigarettes.

Only a small proportion of the tobacco manufactured was grown in the State, but local production is increasing. In 1922-23 tobacco was grown on 2,658 acres, and the year's crop was 27,122 cwt., valued at $\pm 204,230$.

Large quantities of manufactured tobacco and cigarettes are exported, but a considerable proportion of the trade consists of re-exports.

The following table shows details of the operations of tobacco factorics in New South Wales at intervals since 1901 :---

Items.	1901.	1911,	1920-21.	1921-22.	1922-23
Number of Establishments	20	26	16	15	12
					_
Number of Employees	1,061	1,462	2,394	2,299	2,311
Average Horse-power used	151	630	657	684	722
Value of Land and Buildings* £	$155,\!452$	182,569	291,604	286,735	299,913
Value of Plant and Machinery \pounds	69,124	92,138	226,043	259,798	272,389
Total Amount of Wages paid £	55,149	131,323	356,781	369,854	378,032
Value of Fuel £	1,288	1,067	11,697	13,814	14,369
Value of Materials used \pounds	389,148	776,302	3,403,517	3,338,418	3,070,568
Value of Output £	561,991	1,250,748	4,240,746	4,319,584	4,246,014
Value of Production £	171,555	473,379	825,532	967,352	1,161,077
Materials Treated					
Australian Leaf lb.	883,615	745,405	876,007	773,255	708,962
Imported Leaf ,,	2,114,456	4,617,756	9,546,861	10,091,076	10,176,857
Articles produced-		and the second se		-	
Tobacco lb.	2,524,231	3,996,471	6,622,540	7,660,960	7,926,088
Cigars ,,	67,128	87,818	146,433	125,552	132,204
Cigarettes ,,	457,276	1,899,462	5,072,903	4,552,947	4,145,528

* Includes rented premises.

WOOLLEN AND TWEED MILLS.

Although New South Wales is one of the greatest wool-producing countries in the world only a very small proportion of the woollen goods required in the State is manufactured locally, and those engaged in the manufacture of woollen materials numbered only 1,536 in 1922–23. Woollen mills were amongst the earliest established in the State, but the industry has progressed very slowly. The output of local tweed, however, is now nearly twice as great as in 1911, and the production of other articles is increasing, although there was a serious decline in 1922–23, due to slackness of trade.

Details of employment, output, and other items, at intervals since 1901, are shown in the following table:-----

Items.	1901.	1911.	1920-21.	192.1-22.	1922-23,
Number of Establishments	4	5	9	9	9
Number of Employees	234	738	1,650	1,570	1,536
Average Horse-power used	255	937	2,795	3,004	2,422
Value of Land and Buildings; £	29,780	96,821	224,474	247,831	306,624
Value of Plant and Machinery \pounds	26,650	122,927	384,662	447,529	488,187
Total amount of Wages paid £	12,459	66,536	235,668	227,540	234,636
Value of Fuel £	1,727	4,652	23,517	23,395	26,769
Value of Materials used £	30,272	142,915	745,848	648,111	508,205
Value of Output £	57,039	271,465	1,437,647	1,262,833	1,068,073
Value of Production £	25,040	122,918	668,282	591,327	533,099
			-		
Materials Treated-					
Scoured Wool Ib	. 685,240	1,225,470	3,603,448	3,324,112	2,441,370
Cotton ,,	+	+	332,501	280,410	131,212
Articles produced-		*			
Tweed and Cloth yds	. 525,020	1,054,845	2,494,417	2,514,167	1,929,916
Flannel and Blankets	(*)	07 010	198,504	169,553	185,601
Rugs and Shawls	e *)	95,313	23,000	24,117	23,579
Noils	5 +	 	14,588	8,626	5,992
Tops :	e +	+	55,084	24,059	
Yarn	e †	1	278,072	156,511	136,530

* 3,428 yards flannel, 5,000 pairs blankets, 200 rugs. † No available. ‡ Includes rented premises.

BOOT AND SHOE FACTORIES.

Practically the whole of the State's requirements in boots and shoes is supplied from local factories, and considerable quantities are exported, principally to New Zealand, South Africa, and Java.

Particulars	of the	e operation	\mathbf{of}	\mathbf{these}	factories	\mathbf{since}	1901	are	\mathbf{shown}	in
the following	table	; ⁻								

Items.	1901.	1911.	1920-21.‡	1921-22.‡	1922-23.‡
Number of Establishments	100	106	100	302	387
N	3,979	4,411	189 4,845		5,962
Among an House many and	300	855	1,520		1,939
Value of Land and Buildings $\dagger \pounds$	166,413	222,983	499,911		859,659
Value of Plant and Machinery $\hat{\mathbf{f}}$	85,571	156,643	202,881		309,606
Total Amount of Wages paid £	216,869	367,605	687.080		944,241
Value of Fuel £	2,978	5,298	11,696		16,038
Value of Materials used \pounds	398,309	709,818	1,557,225	1,524,027	1,530,321
Value of Output £	692,253	1,221,748	2,701,972	2,957,632	3,001,714
Value of Production \pounds	290,966	506,632	1,133,051	1,420,349	1,455,355
Materials Treated—					
Sole Leather lb.	*	5,189,000		5,624,404	5,792,964
Upper sq. ft.	*	8,010,000	7,286,382	9,029,092	8,533,643
Articles produced —					
		3,730,760		3,859,000	3,815,329
Slippers, &c ,,	512,584	439,428	609,401		423,325
Uppers, N.E.I ,,	•••	71,138	41,925	43,363	48,790

* Not available.

† Includes rented premises.

‡ Includes boot-repairing establishments.

In 1922-23 280 boot-repairing establishments were included; they employed 772 persons, and paid £88,888 in wages; materials to the value of £98,892 were used, including 596,253 lb. of sole leather, and 12,034 square feet of uppers; the output was valued at £301,515.

The number of boot and shoe factories was 107, of which 97 were situated within the Metropolitan area and 10 in the remainder of the State.

HAT AND CAP FACTORIES.

There has been considerable expansion in the industry organized for the manufacture of hats and caps, and Australian products have gained an important place in local markets as well as in the markets of New Zealand. Until 1898 fewer than 100 persons were employed in the industry, but in 1922–23 there were 1,372, of which number 60 per cent. were females.

There were 26 establishments listed under this classification in 1922-23, and all were situated in the Metropolitan area. Particulars of the operations since 1901 are as follows :--

Items.	1901.	1911.	1920-21.	1921-22,	1922-23.
Number of Establishments Number of Employees Average Horse-power used Value of Land and Buildings* £ Value of Plant and Machinery £ Total Amount of Wages paid £ Value of Fuel £ Value of Materials used £ Value of Output £ Value of Production £ Hats & Caps Manufactured No.	$\begin{array}{c} 10\\ 330\\ 21\\ 14,076\\ 7,034\\ 15,055\\ 314\\ 28,662\\ 54,662\\ 54,5722\\ 25,722\\ 563,976\end{array}$	$\begin{array}{r} 32\\ 1,566\\ 433\\ 108,936\\ 60,807\\ 96,498\\ 4,376\\ 127,494\\ 293,591\\ 161,721\\ 2,692,778\end{array}$	$\begin{array}{c} 28\\ 1,456\\ 764\\ 174,315\\ 88,817\\ 185,394\\ 7,574\\ 393,372\\ 747,545\\ 346,599\\ 2,284,572\end{array}$	$\begin{array}{c} 29\\ 1,325\\ 796\\ 204,760\\ 147,657\\ 178,436\\ 8,969\\ 362,132\\ 640,189\\ 269,088\\ 1,924,176\end{array}$	26 1,372 845 213,089 150,083 214,155 9,760 359,604 712,954 343,590 2,099,208

*42713-B

* Includes rented premises.

ELECTRIC LIGHT AND POWER WORKS.

The industries connected with the production and supply of electric light and power are making remarkable progress, and the establishments include a number of large municipal undertakings. The development since 1901 is shown by the details given in the next table :---

Items.		1901.	1911.	1920-21.	1921-22.	1922-23.
Number of Establishm	ents	51	104	117	113	121
Number of Employees.		245	929	1,353	1,439	1,532
Average Horse-power		3,494	54,734			
Value of Land and Bui		49,132	448,972			
Value of Plant and Ma		192,842	1,257,173			3,865,953
Total amount of Wage			134,884			
Value of Fuel	£	17,166	183,248			
Value of Materials use		21,123	69,484			85,058
Value of Output	£		896,607	1,697,763	2,101,102	2,745,831
Value of Production	£	48,952	643,875	1,052,395	1,284,346	1,815,049
Coal used	tons	*	259,239	510,088	524,367	569,764
Articles produced-			1.			
Electric Light	units	*	20,727,000	53,691,324	60,106,019	87,383,986
Power	units	*	114,610,000	288,844,906	314,292,557	355,897,250
		and four second s				
	Not availal	ole.	† Include	s rented premi	ses.	

A notable feature of the operations of recent years is the increasing efficiency of the plant, as indicated by the great increase in the number of units produced per horse-power of the engines used.

GASWORKS.

Items.	1901.	1911.	1920-21.	1921-22.	1922-23.	
Number of Establishments Number of Employees Value of Land and Buildings†£ Value of Plant and Machinery £ Total amount of Wages paid £ Value of Fuel£ Value of Materials used£ Value of Materials used£ Value of Production £ Materials treated— Coaltons Shaletons Oiltons Oil	480,533 80,654 18,000 123,440 583,815 442,375 * * * * * * *	$\begin{array}{r} 47\\ 1,053\\ 1,394\\ 564,387\\ 858,711\\ 154,426\\ 57,372\\ 277,861\\ 910,972\\ 575,739\\ 323,910\\ 55,621\\ *\\ 4,275,859\\ 176,728\\ 3,650,000\\ 3,365,000\\ *\\ *\end{array}$	$\begin{array}{c} 46\\ 1, 642\\ 3, 125\\ 1, 066, 074\\ 1, 892, 835\\ 437, 318\\ 112, 995\\ 829, 906\\ 2, 264, 644\\ 1, 321, 743\\ 564, 122\\ 27, 298\\ 3, 700, 462\\ 8, 131, 712\\ 346, 380\\ 9, 861, 830\\ 4, 216, 929\\ 1, 061\\ \end{array}$	3,587 904,0851 1,978,982 410,134 1,07,944 1,002,080 2,509,412 1,399,388 551,971 30,369 2,728,175 8,330,818 338,619 10,346,250 4,589,936	960,565 2,399,778 1,301,315 571,580 17,248 2,889,538 8,932,941 360,055 9,927,543 5,094,004	

* Not available.

† Includes rented premises.

As was noticed in the case of electric-light and power works, the greater efficiency of gas-making plant and improved methods of treatment have resulted in a remarkable increase in production. In 1911 the average production of gas per ton of coal used was 13,200 feet, but in 1921-22 it was 15,100 feet, and in the following year 15,600 feet.

In addition to the coke-making, which is incidental to the production of gas, large quantities of coke are made on the South Coast coalfields, where a large plant is installed. The total quantity of coke produced by all plants in 1922-23 was 725,363 tons.

MANUFACTORIES AND WORKS IN DIVISIONS OF THE STATE.

It has already been shown on page 430 that 62 per cent. of manufacturing establishments are situated in the Sydney metropolitan area; of the remainder, 8 per cent. are in the Hunter and Manning District, which includes Newcastle.

The magnitude of the operations in each district is indicated in the following table :---

Division.		No. of Estab- lishments.	Persons employed.	Value of Lands and Buildings and Fixtures.	Reut paid.	Value of Plant and Machinery.	Salaries and Wages paid.	Materials used.	Fuel and power consumed.	Value of Goods Manufactured or Work done.
	1		No.	£000	£	£000	£000	£000	£000	£000
Metropolis	••••	4,173	114,864	17,002	651,245	21,791	20,506	52,618	2,006	93,233
Balance of Cumberland		182	4,500	913	5,928	1,284	825	2,562	127	4,157
North Coast		325	3,378	512	11,088	1,081	594	4,557	91	5,817
Hunter and Manning		519	13,070	2,334	24,683	6,547	2,045	5,619	45 0	9,119
South Coast		224	2,648	535	10,366	1,147	512	3,214	139	4,792
North Tableland		127	745	105	5,113	188	115	348	15	547
Central Tableland		266	4,021	677	14,694	2,775	829	2,143	492	4,136
Southern Tableland		100	1,269	107	3,161	202	224	402	24	726
North-western Slopes]	96	622	87	3,783	151	112	430	16	645
Central-western Slopes		122	924	146	4,041	226	138	683	.21	963
South-western Slopes		204	1,784	269	7,876	517	324	1,127	44	1,736
Northern Plains		60	399	38	2,123	94	61	171	6	280
Central Plains		46	286	19	1,623	63	34	136	5	210
Riverina		154	1,519	274	3,986	322	192	822	35	1,236
Western Division		104	2,237	237	3,903	1,161	540	2,390	550	5,138
•		6,702	152,266	23,255	753,613	37,549	27,051	77,222	4,021	132,735

The number of factories of each class in the various districts in 1922-23 was as follows :—

Division,	Raw Material.	Stone, Clay, &c.	Wood.	Metals and Machinery.	Food, Drink, &c.	Clothing, &c.	Books, Printing,	Vehicles, Saddlery.	Furniture, &c.	Heat, Light, Power.	Other Classes.	Total.
NUMBER OF ESTABLISHMENTS.												
Cumberland-	(1	1	1	1	i	í i	1		-	1 1	
Metropolis Balance of North Coast Hunter and Manning South Coast	$ \begin{array}{c c} 117 \\ 21 \\ 2 \\ 12 \\ 4 \end{array} $	$ \begin{array}{r} 173 \\ 29 \\ 4 \\ 27 \\ 12 \end{array} $	$306 \\ 23 \\ 93 \\ 136 \\ 64$	$ \begin{array}{c c} 612 \\ 20 \\ 20 \\ 60 \\ 7 \end{array} $	$320 \\ 24 \\ 93 \\ 75 \\ 81$	$ \begin{array}{r} 1,156 \\ 14 \\ 16 \\ 68 \\ 6 \end{array} $	$320 \\ 13 \\ 22 \\ 30 \\ 12$	$ \begin{array}{r} 332 \\ 21 \\ 34 \\ 48 \\ 15 \end{array} $	287 5 18 22 	$ \begin{array}{c} 109 \\ 6 \\ 17 \\ 23 \\ 21 \end{array} $	$ \begin{array}{r} 441 \\ 6 \\ 6 \\ 18 \\ 2 \end{array} $	$\begin{array}{r} 4,173 \\ 182 \\ 325 \\ 519 \\ 224 \end{array}$
Tablelands	$\begin{array}{c} 6\\12\\4\end{array}$	$5 \\ 21 \\ 14$	$32 \\ 28 \\ 14$	$\begin{array}{c} 5\\22\\3\end{array}$	20 58 20	11 35 13	11 18 11	$24 \\ 41 \\ 16$	1 4 	$\begin{array}{c} 7\\22\\4\end{array}$	5 5 1	127 266 100
Western Slopes	4 9 7	$7 \\ 8 \\ 15$	$18 \\ 25 \\ 34$	$\begin{array}{c} 6\\7\\11\end{array}$	$26 \\ 26 \\ 44$	$ \begin{array}{c} 6 \\ 7 \\ 27 \end{array} $	$\begin{array}{c} 7\\11\\26\end{array}$	$ \begin{array}{c} 15 \\ 22 \\ 26 \end{array} $	••••	$7 \\ 5 \\ 13$	$\begin{array}{c} \\ 2 \\ 1 \end{array}$	96 122 204
Plains	2 5 31 5	2 8 1	$20 \\ 15 \\ 21 \\ 9$	$2 \\ 1 \\ 5 \\ 19$	$12 \\ 9 \\ 31 \\ 19$	5 2 10 15	7 6 11 6	6 7 27 12	$\begin{array}{c}1\\\\1\\3\end{array}$	$ \begin{array}{c} 3 \\ 1 \\ 9 \\ 11 \end{array} $	 4	$\begin{array}{c} 60 \\ 46 \\ 154 \\ 104 \end{array}$
Total	241	326	838	800	858	1,391	511	646	342	258	491	6,702

Division.	Raw Material.	Stone, Clay, &c.	Wood.	Metals and Machinery.	Food, Drink, &c.	Clothing, &c.	Books, Printing.	Vehicles, Saddlery.	Furniture, &c.	Heat, Light, Power.	Other Classes.	Total.
			N	UMBER	OF EMP	LOYEES.						
Cumberland Metropolis Balance of North Coast Tubleands Northern South Coast Tablelands Northern Southern Western Slopes North Plains Northern Central Riverina Western Division Total	221 2 92 16 23 87 59 6 58 80 15 59 287 40	5,395 1,068 32 382 148 32 940 109 33 47 74 5 34 47 8,303	$\begin{array}{c} 222\\ 1,117\\ 1,583\\ 506\\ 158\\ 118\\ 75\\ 246\\ 155\\ 246\\ 155\\ 97\\ 228\\ 119\\ \end{array}$	$1,362 \\ 206 \\ 5,511 \\ 917 \\ 69 \\ 1,342 \\ 360 \\ 125 \\ 72 \\ 276 \\ 39 \\ 7 \\ 54 \\ 1,476 \\ 1,476 \\ 1,476 \\ 1,476 \\ 1,136 $	$\begin{array}{c} 448\\ 1,305\\ 1,001\\ 371\\ 97\\ 415\\ 107\\ 174\\ 346\\ 395\\ 64\\ 51\\ 592\\ 90\\ \end{array}$	29,126 426 135 1,221 27 107 289 367 42 52 231 30 10 61 134 32,258	98 192 373 61 68 171 78 66 58 191 36 25 50 67	380 228 390 124 135 176 72 70 109 219 31 31 148 64	$\begin{array}{c} 21 \\ 83 \\ 237 \\ \cdots \\ 2 \\ 25 \\ \cdots \\ \cdots \\ 14 \\ 12 \\ \end{array}$	$\begin{array}{c} 29 \\ 61 \\ 960 \\ 401 \\ 42 \\ 439 \\ 29 \\ 35 \\ 23 \\ 68 \\ 10 \\ 68 \\ 10 \\ 61 \\ 175 \end{array}$	13,420 225 17 1,320 77 12 19 13 4 56 15,167	$\begin{array}{c} 114.864\\ 4,500\\ 3,378\\ 13,070\\ 2,648\\ 745\\ 4,021\\ 1,269\\ 924\\ 1,784\\ 399\\ 286\\ 1,519\\ 2,237\\ 152,266\end{array}$

The number of persons employed in each district is shown below :----

In the metropolitan district, clothing factories and metal machinery workshops 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 division, establishments in the Newcastle district, in which metals are treated and machinery manufactured, constitute the most important group. Further north where there are many large butter and bacon factories, food and drink factories are most prominent. In the South Coast division, the metal and other works in the vicinity of the Illawarra coalfields, give employment to a large number of employees. 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. The majority of factories in the Western Division are situated in the Broken Hill district, being subsidiary to the mining of the silver-lead deposits.

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 musical instruments, arms and explosives, surgical instruments, and leatherware, n.e.i., are located in the metropolitan district. Of the establishments in which oils and fat are treated, 27, with 2,193 employees, are in the metropolis; 1 with 146 employees elsewhere in the county of Cumberland; 3 with 196 employees. in the Hunter and Manning division; and there are 8 small factories in other divisions. Shipbuilding and repairing is conducted in two divisions only, viz., Metropolis, 34 establishments, 3,899 employees; and Hunter and Manning, 6, with 1,029 employees. The factories producing drugs and chemicals are distributed as follows :---Metropolis, 123, with 2,518 -employees; other parts of the county of Cumberland, 4 establishments, 378 employees; and 8 with 184 employees in other divisions. Of 80 jewellery establishments, 77, with 832 employees are in the metropolitan -area.

AGRICULTURE.

THE land of New South Wales, comprising an area of nearly two hundred million acres, is practically all under occupation. It embraces so great a variety of soils and climate that almost any kind of crop, whether specially the produce of temperate, and even cold, climates, or of sub-tropical regions, may be grown. The nature of the soil varies greatly in different parts of the country; but, except in the inaccessible or rugged portions of the mountain chains, and the more arid regions of the north-western districts, the soil is almost everywhere susceptible of cultivation. The variety of climate experienced extending through 8 degrees of latitude-from 29 degrees to 37 degrees south-causes a corresponding variety in the kinds of produce which may be grown successfully. The area absolutely unfit for occupation of any sort has been estimated roughly at less than 5,000,000 acres. Success in agricultural operations in New South Wales is, however, altogether independent of the mere fitness of the soil for cultivation. Up to the present, experience has shown that an irregular rainfall and a want of uniformity in the seasons, which are the chief characteristics of the climate of a large part of the interior, are the greatest drawbacks to the advance of agriculture, but research and experiment are extending steadily the areas on which agricultural pursuits may be followed with success.

The land adaptable to cultivation, under existing conditions, is found mainly in the Eastern and Central Divisions, which cover three-fifths of the area of the State; but, owing to the confined nature of their basins, the portions of the valleys of the coastal rivers adapted for agriculture are limited, and the region is given over principally to dairy-farming. Large tracts of the tablelands are hilly and rock-strewn, and are used mainly for sheep and cattle raising. In the northern hinterland there is very little agriculture, and sheep-raising is still the principal industry, although that division has a plentiful rainfall and large areas adaptable to wheat-culture. At present, therefore, agriculture is confined principally to the central and southern slopes and plains of the interior, but even in the extensive and well-named Riverina district only a small portion of the land has been cultivated, and great expansion is still possible.

The meagre rainfall and the absence of irrigation facilities in the Western Division, which includes eighty million acres, or two-fifths of the surface of the State, have hitherto rendered this great area practically unfit for cultivation, although it is eminently suited for raising merino sheep.

The agricultural potentialities of the more easterly areas have not yet been fully developed, but taking a long view, wheat-growing is steadily intensifying in the central districts, while mixed ferming, that is to cay wheatgrowing in conjunction with sheep-raising, is extending westward. Moreover, factors such as the evolution of improved plant types, the introduction of dry-farming and other improved methods of land tillage, the extension of irrigation facilities, and the development of the railway system, are expanding the area adaptable to successful agriculture and encouraging the cultivation of new areas.

43025 – A

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.

Rapid extension in the area cropped occurred toward the end of the last century, and yet more rapid expansion between 1910 and 1916. The decline in the three years 1918–1920 was due to the occurrence of bad seasons and to the uncertain outlook which faced the growing of wheat for export. The cultivation of maize and oats has also fallen off in recent years. Other crops are of small extent.

The progress of cultivation since 1891, in quinquennial periods, is shown in the following table :—

	Average Area	under-	Acres per Inhabitant under-			
Years ended June—	Cultivation, including Grasses.	Crops.	Cultivation.	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	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		

The area of land under sown grasses (1,925,450 acres) consists principally of lands in the coastal districts, cleared, and sometimes rudely cultivated and sown with grasses for the maintenance of dairy stock.

The season 1919-20 was particularly unfavourable to agriculturists, and the decline indicated since 1915-16 was due probably to seasonal and other special factors rather than to permanent causes. The area sown with wheat in the season 1923-24 was, approximately, 12,000 acres greater than in 1922-23, and it may be surmised that the total area under crop in 1923-24 was about the same as in 1922-23.

Particulars were obtained in 1923 of the area 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. The area so ascertained was 20,808,638 acres, or 33 per cent. of the area of alienated land occupied for agricultural and pastoral purposes. A certain proportion of the lands included in this area are situated in districts where the rainfall has not yet been found adequate for agricultural production.

'The following table shows	\mathbf{the}	distribution	of	agricultural	lands	during
the season 1922-23 :						

	Total		ienated and ads under—		Area of Alie in Holding	enated Lan s of 1 acre	d Occupied and over—
Division.	Area of Division.	Occupation in Holdings of 1 acre and over.	Crops.	Sown Grasses.	Suitable for Cultivation.	Under Crops, 1922-23.	Proportion of Suitable Area Cultivated.
·Coastal—	000 acres.	000 acres.	000 acres.	000 acres.	000 acres,	000 acres.	per cent.
North Coast	7,009	4,621	101	1,492	499	101	20.25
Hunter and Manning	8,355	5,452	91	238	435	91	20.00
Metropolitan	972	336	31	. 1	136	31	22.58
South Coast	6,089	2,603	47	162	296	46	15.78
Total	22,425	13,012	270	1,893	1,366	269	19.71
Tableland				:			
Northern	8,165	6,506	. 77	4	366	75	20.66
Central	10,897	7,454	372	. 7	1,379	368	26.68
Southern	7,597	6,214	49	1	306	47	15.27
Total	26,659	20,174	498	12	2,051	490	23.90
Western Slopes							
North	9,193	8,211	371	3	1,464	362	24.71
Central	7,839	6,773	947	3	3,751	913	24.35
South	11,230	9,280	1,231	9	3,699	1,172	31.68
Total	28,262	24,264	2,549	15	8,914	2,447	27.45
Central Plains-			1)	
North	9,500	7,841	100	1	898	87	9.75
Central	14,650	13,392	123		1,997	112	5.60
Total	24,150	21,233	223	1	2,895	199	6.88
Riverina	16,708	16,011	1,148	3	5,459	1,050	19.22
Western	80,319	77,444	6	1	124	3	2.52
All Divisions	198,523	172,138	4,694	1,925	20,809*	4,458	21.43

* Total area of alienated land in holdings of 1 acre and over used for pastoral and agricultural purposes 62,945,020 acres.

The divisions in this table, as formerly published, were arranged on a county basis, but as the statistics of 1922-23 were collected with the shire as the unit of area, a re-alignment of the territorial divisions had to be undertaken. This alteration produced considerable changes in the totals shown for individual divisions, and comparison of these with previous years is not possible.

NUMBER OF AGRICULTURAL HOLDINGS.

A consideration of the number of holdings on which land was cultivated, and the principal crop on each, affords guidance as to the popularity of the various crops. The number of farms on which wheat is sown, so far from exhibiting any permanent increase, declined after 1915-16, owing to bad seasons, but the area devoted to this crop has practically doubled in the past twenty years. Several minor industries have been languishing over lengthy periods, and less attention is being paid to maize, potatoes, and sugar-cane, than formerly. The cultivation of oats has extended, citrus fruit-growing is gaining rapidly in importance, and the occurrence of good seasons and high prices has given some stimulus to tobacco-growing.

Relatively to the area cultivated, the number of holdings on which maize is grown is greatly in excess of that of wheat, owing to the fact that many dairy-farmers crop small areas for use on the farms; whereas portion of the area under wheat—varying from one-fourth to one-seventh—is cultivated on the "shares" system, by which two or more growers cultivate one holding.

Number of Cultivated Holdings. Principal Crop. 1900-01. 1905-06. 1915-16, 1921-22. 1922-23. 22,453 Wheat 20,149 19,049 18,216 18,632 Maize 17,569 17,47514,869 15,969 15,333 Barley 2,246 1,755 2,538 1,461 2,214... 11,547 10,740 13,723 14,829 15,922Oats 8,552 4,643 9,521 4,356 3,571 Potatoes 98 97 171 196 31 Tobacco 1,214 1,113 694723792 Sugar-cane • • • 1,832 1,530 1,388 1,341 Grapes ... 1,845 Fruit-Citrus 1.905 2,385 5,787 6,2485,907 ... ••• 6,846 8,760 8,506 Other 8,064 7,830 • • • •• Market Gardens 2,2662,8423,301 2,180 2,220 •• 45,828 46,349 50,728 49,640 Total Cultivated Holdings* 49,830

The number of cultivated holdings, and the principal crops cultivated on them at intervals since 1900-01 are shown below.

* Holdings on which more than one crop was grown are included once only.

Maize and oats crops for market are grown on only a small proportion of the holdings where they are cultivated.

Although the number of cultivated holdings has not increased appreciably since 1901, the agricultural industry has grown very much, as may be seen from the comparison on page 467. The total number of holdings of one acre and upwards used for agricultural and postoral purposes in 1922-23

was 78,994, and on 49,640 holdings areas of varying sizes were cultivated. Only 11,402 holdings were used exclusively for agricultural purposes, and 1,838 were irrigated. In addition, however, 18,914 combined agricultural with pastoral pursuits, 5,266 combined agriculture with dairying, 1,642 combined all three pursuits, and a limited amount of cultivation of a non-commercial character was conducted in connection with other activities. There were, in all, 29,354 holdings without any cultivated land, and of these 25,430 were used for grazing purposes.

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 the area cultivated was greater than in any other season, has been included for comparative purposes.

Crop.	1915-16.	1919-20,	1920-21.	1921-22.	1922-23,
Wheat (grain)-]		
Area acres	4,188,865	1,474,174	3,127,377	3,194,949	2,942,857
Total yield bush.	66,764,910	4,388,022	55,625,000	42,767,000	28,667,949
Average yield p.a bush.	15.9	3.0	17.8	13.4	9.7
Maize-	1				
Area acres	154,130	136,509	144,105	146,687	138,169
Total yield bush.	3,773,600	4,052,025	4,176,000	3,976,300	3,287,523
Average yield p.a bush.	24.5	29 7	29.0	27.1	23.8
Oats (grain)-	1	1. A.	l ·		
Area acres	58,636	76,117	77,709	69,795	74,006
Total yield bush.	1,345,698	586,758	1,642,700	1,169,900	1,250,772
Average yield p.a bush.	23 0	7.7	21.1	16-8	16.9
Hav-					
Årea acres	1,108,919	938,400	854,263	750,928	889,457
Total yield tons	1,573,938	580,586	1,374,656	1,029,124	1,060,979
Average yield p a tons	1 42	62	1.61	1.37	1.2
Green Crops-					
Area acres	162,945	1,007,506	112 003	128,965	499.714
Potatoes-					
Area 2 cres	19,589	20,043	27,673	29,494	22,568
Total yield tons	44,445	49,986	63,256	57,835	35,726
Average yield p.a tons	2.27	2.49	2.29	1.96	1.6
Sugar-cane-		i i	(
Ärea cut acres	6,030	4,827	5,519	5,400	5,879
Total yield tons	157,748	91,321	131,313	149,474	147,992
Average yield p.a tons	26-16	18.92	23.79	27.68	25 17
Orchards, etc.				ł	
Area acres	63,823	82,388	87,342	89,194	87,774
Market Gardens-		-			
Area acres	10,967	9,872	9,915	8,244	7,761
Total yield £	400,860	511,311	556,887	623,243	621,082
Average yield p.a £	36.6	$51^{\circ}2$	56.2	75.6	80.2
Minor Crops-	1				
Area acres	26,843	23,741	21,203	24,114	28,790
Total Area* acres	5,800,747	3,773,577	4,467,109	4,447,770	4,696,459

* Including area double-cropped.

It will be observed that wheat is the only crop extensively grown. The larger part of the area devoted to hay is also under wheat, but considerable proportions are used for the production of oaten and lucerne hay.

In addition to the area shown as cultivated there were at 30th June, 1923, 1,925,450 acres under sown grasses; 36,107,797 acres of Crown Lands were

† See page 499.

ringbarked, partly cleared, and under native grasses; and 3,290,939 acres were ready for cultivation on alienated holdings, including 2,665,658 acres which had been cropped previously, 200,686 acres of new land cleared and prepared for ploughing, and 424,595 acres in fallow.

Value of Agricultural Production.

The estimated value of the agricultural production of the State during the last four seasons in comparison with 1915–16, the year of the greatest wheat harvest, 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 :----

-				Value.			Proportion per cent.						
Crop.		1915-16.	1919-20.	1920-21.	192122.	1922-23.	1915- 16,	1919- 20,	1920- 21.	1921- 22.	1922- 23.		
1	. 1	£	£	£	£	£	[Í		}		
Wheat		13,352,980	2,194,020	20,164,060	9,977,550	6,689,200	65.6	16.2	62.3	49.2	31.4		
Maize		723,270	1,502,900	974,260	\$94,670	890,260	3.6	11.1	3.0	4.4	4.2		
Barley	• • •	20,630	12,160	23,270	16,350	9,960	0.1	0.1	0.1	0.1	0.1		
Oats	• •	173,820	168,700	241,480	199,820	234,750	0.9	1.2	0.7	1.0	1.1		
Hay and Straw		3,897,910	5,468,005	7,494,209	5,531,750	8,923,500	19.1	40.3	23.2	27.3	41.9		
Green Food	• • •	367,820	1,002,770	437,888	477,188	792,060	1.8	7.4	1'3	2.4	3.7		
Potatoes		294,390	642,920	309,910	243,140	318,280	1.4	4.7	1.0	1.2	1.5		
Sugar-cane		205,070	152,452	287,250	325,110	347,780	1.0	1.1	0.9	1.6	1.6		
Grapes	• •	98,400	111,180	143,020	125,620		0.2	0.9	0.4	0.6	0.8		
Wine and Brandy		47,840	148,900	127,420	113,510		0.2	1.1	0.4	0.6	0.7		
Fruit-Citrus		252,170	534,530	477,580	530,380	628,100	1.2	3.9	15	2.6	2.9		
• Other	••	243,210	555,058	577,290	812.210		1.2	4.1	1.8	4.0	4.3		
Market-gardens	• •	400,860	511,310	556,887	623,243		2.0	3.7	1.7	3.1	2.9		
Other Crops	••	283,990	577,185	558,028	390,229	627,130	1.4	4.2	1.7	1.9	2.9		
Total	• •	20,362,360	13,582,090	32,372,550	20,260,770	21,300,860	100	100	100	100	100		

At prices prevailing in Sydney markets, the value of agricultural production in 1921-22 was £26,667,000, and in 1922-23 £25,297,590.

The agricultural wealth of New South Wales at present depends mainly on the return from wheat crops, including hay and straw, the value of these crops in 1922–23 being £12,118,250, or nearly 57 per cent. of the total. Maize is next in importance, but the returns from other crops are comparatively small.

Prior to 1920-21 the value of agricultural production reached its highest point in 1915-16, principally by reason of the largely augmented wheat yield of that year, which was supplemented by the occurrence of unusually high prices in the early part of the season as a consequence of the shortage in production caused by the drought in the previous year. In the years which followed, various causes, such as the uncertain condition of the wheat market, the derangement of oversea shipping, and the occurrence of indifferent seasons, combined to bring about a considerable decline in the volume of agricultural production, which reached its lowest point in the bad season which occurred in 1919-20. However, partly as a result of the scarcity due to bad seasons, and partly owing to factors connected with the war, prices of agricultural produce advanced considerably after 1917, and the monetary value of production remained fairly constant until 1920-21, when the remarkable yield of wheat which followed the breaking of the drought and the high price guaranteed by the Government, based on world's parity, produced by far the most valuable crop of wheat yet harvested in New South In 1921-22 neither the season nor the markets were so favourable Wales. for wheat, and the value of grain produced was less than half that in 1920-21. This decline, with the decrease in the value of hay crops, caused a drop of £12,000,000 in the value of agricultural production. The value of some minor crops, notably fruit; increased. In 1922-23 the wheat crop was only two-thirds of the quantity of the previous year, but the price did not increase.

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However, owing to an adverse pastoral season, there was a heavy demand for hay, which rose in price and proved by far the largest item in the value of agricultural production for the year.

Value of Production per Acre.

The following table, showing the value of production from agriculture, together with the average value 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
189296	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	5,163,030	13,011,530	2.10 5
1918	4,460,701	13,684,900	3 1 4
1919	3,890,844	12,280,190	3 3 1
1920	3,770,155	13,582,090	3 12 1
1921	4,464,342	32,372,550	7 5 0
1922	4,445,848	20,260,770	4 11 2
1923	4,694,088	21,300,860	4 10 9

The 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; cultivation was more intense than it has been in recent years, and the yield per acre usually higher. The increased value shown since 1918 has been due mainly to the high prices received for produce, but, in 1921, this factor was augmented by the record yield of wheat per acre. During the year ended 30th June, 1922, the value of production per acre for all the principal crops, except sugar-cane, was lower than in the previous year, but still considerably above previous levels. In 1922-23 the returns from wheat for grain declined very heavily, but the general average was sustained by a rise in value of all the other principal crops except sugar-cane.

The average value per acre of various crops during each of the last four seasons is shown below in comparison with the average for the ten years preceding 1922-23:--

		Average Value for 10 Years					
Crop.	1919–20.	1920-21.	1921-22.	192 2–23.	preceding 1922-23.		
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.		
Wheat for Grain	199	6 8 11	3 2 6	255	2 12 11		
Maize for Grain	11 0 2	6 15 2	6 2 0	6 8 10	5 17 6		
Oats for Grain	$2 \ 4 \ 4$	3 2 2	$2\ 17\ 3$	3 3 5	2 13 2		
Hay	$5 \ 16 \ 2$	8 14 1	7.6.4	10 0 4	512		
Potatoes	$32 \ 1 \ 6$	10 14 6	8 4 11	14 2 0	11 17 6		
Sugar-cane	31 11 8	52 1 0	$60 \ 4 \ 1$	$59 \ 2 \ 1$	38 6 5		
Vineyards	39 15 6	36 13 5	30 17 7	38 9 3	26 0 11		
Orchards	23 1 3	21 8 1	21 12 0	21 19 3	18 17 1		
Market-gardens	51 15 10	56 3 4	75 12 0	80 0 6	45 8 8		

This average value of production per acre measures the combined effect from year to year of yield obtained and prices realised, and may therefore be said to express the combined effect of market and season on the 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.

Between the 1915 and 1920 seasons the return from wheat grown for grain was far below the average. This fact shows clearly the serious effects of bad seasons, and of the uncertain market, on the growing of the principal agricultural product. A comparison with the returns obtained from hay crops (which are principally wheaten) adds weight to this point. Not only has the value per acre of hay products been far higher absolutely, but, from year to year, there has been a considerable improvement in the prices realised. This disparity was very pronounced in 1922-23. The market for hay, however, is local and limited. It is also apparent that wheat was almost unique in furnishing a decreasing return per acre until 1920-21, but the high yield and prices of that season afforded a large measure of compensation to growers. In 1921-22 there was an average yield of 13.4 bushels per acre with an average farm value of 4s. 8d. per bushel. This returned to growers approximately the amount per acre regarded as remunerative by the recent Agricultural Committee of the Legislative Council. In 1922-23 the price remained the same, but the average yield was only 9.7 bushels per acre. This resulted in diminished returns to the grower. Prices fell considerably The values of other crops, except lower during the first half of 1924. potatoes, have all shown sustained improvement. The return from potatoes is subject to market fluctuations.

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, and, therefore, show very great fluctuations. Wheat and flour, in which alone there is a foreign trade, were closely regulated in price between 1914 and 1922, and, except in the years 1915 and 1920, when low production rendered importation necessary, the prices were allowed to vary but little. In 1921, the prices of wheat and flour in New South Wales were maintained at a figure above world's parity in order to enable the payment to growers of the minimum price guaranteed by the Government—7s. 6d. per bushel. Wheat sold locally to millers for export as flour, up to 1920, however, brought considerably higher prices than the averages shown below. 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 by external market conditions.

The quotations here given represent the average prices obtained for farm products 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

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Comn	nodity	ъ.	1	917.		1918	3 . :-	19	19.		192	0.	:	192	L.,	:	1925	2.	1	923.	
Wheat Flour Bran Pollard Barley (Cape) Oats Maize Potatoes (local) Onions "	· · · · · · · · · · ·	bush. ton bush. , , , , , ,	0 11 0 0 0 0 0 0 10	s. d. 4 9 1 0 0 9 $\frac{1}{4}$ 1 0 $\frac{3}{4}$ 3 5 3 1 3 9 $\frac{3}{4}$ 10 9 5 0	$\begin{array}{c} 0\\11\\0\end{array}$	1 4 4 5 1	d. 9 9 1 1 7 7 8 9	0 11 0 0 0 0 0	$5 1 \\ 5 9 \\ 1 3 \\ 5 9 \\ 1 3 \\ 5 9 \\ 0 \\ 3 \\ 8 \\ 3 \\ 3 \\ 1 \\ 1 \\ 1 \\ 3 \\ 9 \\ 0 \\ 3 \\ 3 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1 \\ 1$		$\begin{array}{cccc} 0 & 8 \\ 8 & 10 \\ 0 & 1 \\ 0 & 2 \\ 0 & 7 \\ 0 & 5 \\ 0 & 8 \\ 2 & 6 \end{array}$	$7\frac{1}{2}$ 9^{3}_{4} 0 11 7 7	0 19 0 0 0 0 0 0 6	$ \begin{array}{c} 1 \\ 1 \\ 3 \\ 3 \end{array} $	8 77 7 8 7 5 3 24	0 12 0 0 0 0 0 0 0 6	5 6 1 3 4 4 15	d. 8 9 6 7 10 11 11 11 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 11 10 10	0 11 0 0 0 0 0 11	s. 5 1 1 3 4 6 9	31 1 1 1 2 3 3 3 4 7 8 1 2 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
Hay Oaten Lucerne	••	ton		16 0 12 0	6 4	4 17	2 9		9 - 2 9 - 7			8 10			103 53		17 13	8 1 74	8 9	17 1	
Chaff— Wheaten	•••	•• ,,	4	14	5	11	6	81	89	10) 12	11	6	8	8]	6	16	8 <u>1</u>	. 7	4	3

each month of the year are shown in the "Statistical Register." The figures are those quoted by the middleman, and not those obtained by the producers.

The relationship between the prices of wheat and flour have been nearly constant in the past four years—1 ton of flour selling for as much as from 42 to 44 bushels of wheat.

The combined price variations since 1901 of agricultural produce in Sydney markets, weighted according to the average consumption 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	1909	1134	1917	1127
1902	1265	1910	1012	1918	1377
1903	1181	1911	1000	1919	1990
1904	789	1912	1339	1920	2430
1905	972	1913	1069	1921	1750
1906	929	1914	1135	1922	1638
1907	1003	1915	1648	1923	1720
1908	1343	1916	1163		

It will be observed that, though seasonal causes operated to produce high prices in 1902, 1903, 1908, 1915, 1919, and 1920, there was, nevertheless, a marked rise in the price level due to other causes. 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 February, 1924, it was 1,537, and appeared to be declining.

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. It is, however, a matter of some debate whether this useful implement is adaptable to the conditions which will govern harvesting should the system of bulk-handling of grain receive extensive application.

Division.	Area under Cr	op. Value of Agricultural Machinery and Implements.	Value per Acre
	acres.	£	£ s, d.
Coastal	270,142	1,012,597	3 15 0
Tableland	497,867	1,191,278	2 7 10
Western Slopes	2,549,051	3,939,755	1 10 10
Central Plains and Riverina	1,370,724	2,323,246	1 13 11
Western	6,304	69,288	10 19 10
Total	4,694,088	8,536,164	1 16 4

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 1922-23 :---

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 there farmed is too small to give an average which might be considered 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. This matter is further discussed under the next heading.

AGRICULTURAL EMPLOYMENT.

The following table provides a comparison of the number of persons returned by land-holders as being constantly employed principally in cultivating rural holdings during each of the past ten seasons. Casual and itinerant workers are omitted from account, but, as two-thirds of rural labour is performed by permanent employees (according to statistics collected in 1922-23), the number of permanent employees is probably a reliable reflex of the fluctuation of agricultural employment. Comparisons of the area under crop and the value of machinery used are added.

Year.	Persons Per- manently Em- ployed.*	Area under Crop.	Value of Machinery Used.*	Year.	Persons Per- manently Em- ployed.*	Area under Crop.	Value of Machinery Used.*
$\begin{array}{r} 1913-14\\ 1914-15\\ 1915-16\\ 1916-17\\ 1917-18 \end{array}$	No, 59,813 58,020 56,904 52,758 48,384	acres. 4,568,841 4,808,627 5,794,835 5,163,030 4,460,701	£ 5,029,938 5,159,959 5,362,067 5,449,657 5,615,995	$1918-19 \\ 1919-20 \\ 1920-21 \\ 1921-22 \\ 1922-23$	No. 43,823 47,392 48,896 47,268 48,154	acres. 3,890,844 3,770,155 4,464,342 4,445,848 4,694,088	£ 5,696,916 6,128,753 7,120,381 7,884,713 8,536,164

* Principally in cultivating the soil.

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The decline in the number of persons engaged in agriculture during the first five years was doubtless due mainly to enlistments for military service, although the adverse conditions ruling in the industry probably had some effect. This latter cause doubtless operated to a marked extent during the drought which prevailed between 1918 and June, 1920. Although in 1919–20 there was an almost complete failure of the wheat crops of the State, and agricultural operations were considerably restricted, the number of persons engaged in agricultural employment increased as a result of the demobilisation of large numbers of the expeditionary forces.

Apparently the number of persons permanently engaged in cultivating rural holdings is now about 10,000 less than in the years immediately preceding the war, although the area cultivated is approximately the same. The increase in the value of machinery used, particularly during the last five years, suggests as 'an explanation that the improvements in farm plant render less human labour necessary. This explanation is strengthened by the considerations that the average area sown with wheat by each farmer is increasing and that the number of farms used only for agriculture increased from about 7,500 in pre-war years to 11,400 in 1922–23, indicating the rapid growth of a specialised class of agriculturists. Owing to the pronounced variations of seasonal factors, it is necessary in making comparisons to consider the average of periods when conditions were approximately the same.

The number of persons recorded at the Census of 1921 as being engaged in agricultural pursuits was 94,508, of whom 93,598 were males and 910 females. This represented an increase of 15,999 males and a decrease of 726 females since 1911, the net increase being 15,273 persons. In the same period the proportion of male breadwinners engaged in agricultural pursuits decreased slightly from 13.4 per cent. to 13.1 per cent., and the proportion of persons engaged in agricultural pursuits decreased from 4.8 per cent. to 4.5 per cent. of the total population.

The census classification includes persons whose employment is of a casual nature as well as certain Government officials, farm servants, and others connected with agricultural operations, but not actually engaged in cultivating the soil. The numbers recorded, therefore, are not comparable with those shown in the above table as permanently and principally employed in cultivating the soil.

FERTILISERS.

In New South Wales superphosphates is the only artificial fertiliser used extensively, the soils in the wheat areas being generally deficient Tests of manure conducted on the farmers' exin phosphoric acid. periment plots indicate that the benefits derived from the application of superphosphates to wheat-lands, as a general rule, are most marked in the southern portion of the wheat-belt, viz., the South-western Slope and the The beneficial results gradually diminish throughout the western Riverina. districts which form the central portion of the wheat-belt, and in the northwestern districts no advantage is gained by the use of this fertiliser. The results may be affected, however, by the fact that fallowing is more common in the south than in the west, and much more than in the north. In wheatgrowing the amount of superphosphates applied is generally only 56 lb. per acre, the average in 1922-23 was 50 lb. per acre.

and the second			Area		Manure	s Used.	
Division.	Area under Crop.	Total Area Manured.	Manured per cent, of Area under	Natural (only).	Natural an in Com	Artificial	
			Crop.		Natural.	Artificial.	
	acres.	acres.		loads.	loads.	ewt.	ewt.
Coastal	270,142	43,487	16.1	87,415	75,710	77.374	109.657
Tableland	497,867	110,237	22:1	11,103	1,039	546	64,585
Western Slopes .	. 2.549,051	1,253,990	49.2	2,827			507,947
Minhaid Diation	223,009	54,167	24.3	-350	800	100	17,948
Riverina	1,147,715	941,394	82.0	1,402	475	110	454,263
TT'	. 6,304	791	12.5	465	.70	20	10,579
Whole State.		2,404,066	51.2	103,562	78,094	78,150	1.164.979

The following table shows the area of land and the quantity of manure used during the year 1922-23:

The application of manures to agricultural lands is practised most extensively in the southern districts, the proportion of the cultivated area manured there in 1922–23 being 80 per cent. Only 24.3 per cent. of the lands cropped in the northern and central plains were manured.

In the pact four years the practice of fertilizing has extended, there being an increase of nearly 700,000 acres, or 40 per cent. in the area manured and of 18,500 tons, or 30 per cent., in the amount of artificial fertilisers used annually. The proportion of the area manured to the area under crop in 1922-23 was a record, being 51.2 per cent.

For the reasons explained on page 463 comparison between the totals for individual divisions in 1922-23 and previous years cannot be made.

The following table shows the total area cultivated, the total area manured, and the nature of the manures employed, in various years between 1907-8 and 1922-23.

		ъ.	Area Manured	Manures Used—		
Season.	Total Area under Crop.	Total Area Manured.	per cent. of Area under Crop	Natural.	Artificial.	
	acres.	acres.	(i	loads.	ewt.	
1907 - 08	2,570,137	-423,678	16.5	144,021	276,120	
1913-14	4,568,841	2,226,742	-148.7	166.753	1,010,596	
1915 - 16	5,794,835	2,753,431	47.5	177,788	1,132,446	
1918-19	3,890,844	1.780.254	45.7	180,734	856.074	
1919 - 20	3,770,155	1.708,762	44.5	172,878	871,836	
1920 - 21	4,464,342	1,998,429	44.8	160,361	998,191	
1921-22	4,445,848	2,104,329	47.3	176,327	1,053,710	
1922-23	4.694.088	2,404,066	51.2	181.656	1.243,129	

Extensive manurial trials are made regularly by the Department of Agriculture with the view of encouraging the adoption of better methods, and of demonstrating to farmers that largely-increased yields result from scientific cultivation. It is in this important respect that much hope rests for the ultimate improvement of the low average wheat yield at present obtaining.

The sale of artificial manures is regulated by the Fertilisers Act of 1904, under the provisions of which measure the vendor is required to furnish to the purchaser a statement as to their nature and chemical composition. Further legislation has been urged for the more adequate protection of farmers.

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SHARE-FARMING.

The system of working the land known as share-farming has played an important part in the development of agriculture in New South Wales. It teok its rise towards the end of the last century, and helped to overcome the difficulties which had retarded the extension of cultivation. Land-holders could not obtain workmen to till large areas of their land, while new settlers were impeded for lack of cleared land, and of the necessary farming facilities.

The principles of the system are as follow. 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 twothirds of the total product.

The following table shows particulars regarding the areas used for cultivation or dairying on shares during the past five years :---

C	Tralit and	Share- farmers.	Area Farmed on Shares,					
Season.	Holdings.		Cultivation	Dairying.	Total.			
	No.	No.	acres.	acres.	acres.			
1918 - 19	1,530	2,675	666,264	79,622	745,886			
1919 - 20	1,501	2,423	576,548	95,424	671,972			
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	935,557			

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 contracted more rapidly than other systems of cultivation. A marked revival has since occurred under the stimulus of the favourable seasons.

Of the areas cultivated in 1922-23 on the share system, 450,154 acres were in the Western Slopes Division and 178,704 acres were in the Riverina.

THE DEPARTMENT OF AGRICULTURE.

Considerable attention is paid by the Government to the development of the agricultural industry, but great scope still exists for educational and scientific work in the industry in order that the resources of the State may be used with full advantage to the community.

The Department of Agriculture, created in 1890 to advance the interests of the farmers and fruit-growers of New South Wales, deals with all matters essential to agriculture. Its practical functions include the collection of information by scientific investigation and practical experiments relating to the causes of the failure of crops, improved methods of cultivation, means of combating pests, the use of fertilisers, matters of drainage and irrigation, new plants and new implements, the disposal of surplus products, the transport of produce, and the promotion of a community spirit among farmers. Much information is placed at the disposal of the agricultural producers of the State through agricultural instructors, books and pamphlets, and other assistance is rendered to them.

The officials answer many inquiries for advice or assistance, and visit various parts of the country throughout the year to give demonstrations to the farmers, and to advise generally regarding agricultural methods. During the last few years the practical services of the Department have been extended greatly by conducting experiments with various crops, fertilisers, and cultivation methods on the lands of private farmers. These amount to demonstrations of the value and efficiency of the scientific methods recommended by the Department, and they are having a marked influence on farm practice in many parts of the State. Local officers of the Department supervise these trials and bring the results under the notice of farmers in the vicinity. In 1922-23, 431 experiments were conducted by 257 individual farmers throughout the State under the direction of an experiments supervision committee.

The Agricultural Gazette, the official organ of the Department, with a circulation of 10,600, is issued monthly. It is distributed free among farmers, and presents to them the results of scientific researches and of the investigations of official experts.

Numerous bulletins and leaflets are issued for the guidance of various classes of rural workers, and most of the publications of the Department are supplied free to persons engaged in rural industries. The numbers of various publications distributed during 1922-23 were—Bureau Records, 526,000; Poultry Notes, 34,100, and other free bulletins, leaflets, etc., 50,318.

Country newspapers are furnished weekly with notes describing the investigations and educational operations of the Department with respect to improved methods of agriculture, dairying, stock-raising, etc. Efforts have been made to develop many phases of primary production, fallowing, rotation in cropping, and the cultivation of maize being specially treated.

The principal heads of receipts and expenditure of the Department of Agriculture during the year ended 30th June, 1923, were as follow :---

0 0				
Receipts.		£	Expenditure.	£
Agricultural College, E Farms, etc Fees for fumigation, etc. Miscellaneous Stock Branch Path Unalling of Who	···· ··· ··· ···	$73,657 \\10,850 \\2,767 \\12,516$	Bulk Handling of Wheat, Grai Elevators	179,731
Bulk Handling of Whe Elevators		27,760 127,550 605	Less Refunds	1,039,6 3 0
				1,027,660
			Botanic Gardens, etc	0. 103,786 47,868 1,954
Total	£	126,945	Total *:	£1,181,268

* Including $\pm 6,320$ expended by the Stores Supply Department and $\pm 1,060$ by the Resumed Properties Department on behalf of the Department of Agriculture.

Agricultural Bureau.

An Agricultural Bureau has been established with the support and cooperation of the Department. Its object is to foster the establishment in rural centres of societies, which will encourage primary producers to meet together regularly for the purpose of exchanging ideas and experiences on every kind of subject that touches rural life, and it aims especially at making scientific methods more popular. Assistance is rendered by the officers of the Department, many of whom visit the branches from time to time to deliver lectures and conduct practical demonstrations in some subject of local interest. The movement has exhibited already a tendency toward co-operation in the purchase of stores. A large number of branches have reported successful transactions in "pool" buying, while several have registered as co-operative societies. Other branches have found it advantageous to purchase in bulk for members supplies of fertilisers, potatoes, molasses, blue-stone, machinery, oil, etc. The social side is not neglected, and some branches have ladies' sections. The bureau admits children, and definitely caters for them by providing competitions of various kinds and encouraging appreciation of civic responsibilities. In this way the bureau is assisting to make rural life more attractive.

Government assistance is granted in the form of subsidies payable to each branch at the rate of 10s. for every £1 of membership fees. Although the State assists the branches in this respect, the primary object of the Burean is to develop a spirit of self-help and co-operation in the widest sense of those terms. To facilitate this the control of each branch is placed entirely in the hands of its members, who may, therefore, develop their organisation along lines where united action is most useful. However, discussion of religious matters or party politics is not permitted in any branch. The bureau was established in 1911, and at the 30th June, 1923, there were 215 branches, of which 160 were reporting regular meetings. Periodically district and State conferences are held, and generally are largely attended.

In 1923 an Advisory Council was constituted, consisting of six representatives of the agricultural bureaux and four nominees of the Government.

AGRICULTURAL EDUCATION AND EXPERIMENTS.

The system of agricultural training in vogue in the educational institutions of New South Wales is not nearly so extensive as those of some other countries. In the primary schools pupils receive instruction in nature study and some training in elementary agriculture; school gardening also is commonly taught. Twelve rural schools with super-primary courses in agriculture have been established, and 540 students were enrolled in 1923. Specialised tuition is given at various schools in the Murrumbidgee Irrigation Area, several secondary schools include agriculture in their curriculum, and two agricultural high schools have been established, covering courses of three years, leading to Hawkesbury Agricultural College. A Faculty of Agriculture was established at the University in 1911, in which, in 1923, there were 28 students attending lectures and one research scholar.

In order to obtain a knowledge of local conditions and to afford an education in agriculture on scientific bases, the Government has established the Hawkesbury Agricultural College, a number of experiment farms, several viticultural nurseries, an apiary, a stud-horse farm, and an agricultural training farm, besides farmers' experiment plots throughout the State.

Facilities are afforded for the accommodation of students at the various experiment farms. In addition, schools of instruction for dairy factory workers are held periodically, and winter schools for students of both sexes are held annually at Hawkesbury Agricultural College.

Hawkesbury Agricultural College.

The Hawkesbury Agricultural College provides accommodation for resident students, and imparts theoretical and practical instruction in a threeyears' course, which embraces every department of agriculture. Instruction is given also in dairying, pig-raising, horse, sheep, and poultry-breeding; and experimental research work is conducted in connection with cereal and other crops, in cultivation with fertilisers, and in soil culture. All subsidiary branches of farm-labour are taught, including blacksmithing, carpentry, sheep killing, bee-keeping, and other occupations incidental to the pursuit of agriculture. In June, 1923, there were 126 students in residence.

Jersey dairy cattle and Romney Marsh sheep are bred, also stud pigs of various breeds, which are sold to farmers throughout the Commonwealth and New Zealand. In the poultry section the egg-laying competitions attract a large number of competitors from various parts of the State.

Experiment Farms.

Work of a general educational and research nature is conducted at the experiment farms, which have been established in several parts of the State with varying curricula, adjusted to meet local needs and climatic conditions. The aim is to disseminate better knowledge of the practice of agriculture in established industries, to encourage by example new activities suited to the locality, to demonstrate in a practical manner the agricultural possibilities of the State.

Accommodation is provided at a number of these farms for instruction in farming, but the facilities are not fully availed of by local boys. Farm apprentice schools are conducted at Glen Innes, Cowra, Grafton and Wollongbar farms for "Dreadnought" boys. The term is usually of six months' duration, and the accommodation for 100 boys is generally fully occupied.

The experiment farm at Yanco is utilised almost exclusively in training ex-soldiers who desire to take up farms on the Irrigation Areas. During 1922–23 the number of trainees who completed their tuition at experiment farms was 305.

				Y	'ear en	ded 30 1923.		June,		
	Farm,			Area.	Students in Residence.	Fe	es	Payable.		Special Purposes.
-				Acres,	No.					······································
Wagga Wag	ga	••	••	3,220	23	1st y 2nd			••	Specialises in seed wheat.
Bathurst Wollongbar	and Du	 sk Cre	ek -	752. 734	28 9	200	do			Orchard and soil culture, Stud farm—Dairy cattle and pigs,
Berry Howlong Vi	••			403 224						Stud farm—Dairy cattle, Phylloxera-resisting vines,
Grafton	••	••	•••	1,075	27	••	•••	••	••	Mixed farming suited to sub-tropical districts.
Glen Innes Cowra	••	••	•••	1,073 1,011	24 26	 	::			Mixed farming and fruit culture. Specialises in seed wheat and cross-
Pera	••	•	••	1,183			••		•3	breeding with sheep. Artesian-bore water applied to orchard culture.
Narara	••		••	100 2,045		·•	••		••	Phylloxera-resisting vines, Irrigation,
Yanco Nyngan			•••	2,045 5,049	 	•••	••		•••	Dry-farming, Merino sheep suitable for dry areas.
Coonamble	••	• •	••	1,945		••	•••	••	•••	Dry-farming. Wheat cultivation and sheep-farming.
Temora				1,606						Specialises in seed wheat,
Condobolin	••	••	••	1,348		••	••		• •	Dry-farming. Suitable varieties of wheat.
Trangie	••	••	••	9,736	1	· •	••		••	Stud-merino farm, also specialises in wheat culture.
Bangaroo	••			5,037			••	••	• •	Stud farm-Horses.
Glenfield	••	•••	••	112	1		••	••	•••	Veterinary experiments.
Griffith		••	••	59		· •	••	••	••	Mother - stock vineyard. Irrigated
Wauchope A	piary	••	•.•	36		••	••	••	••	Study of diseases among bees,
	Total	•.•	••	36,748	141		•••	••	•••	

Particulars relating to each farm are given in the following table :----

The revenue derived from experiment farms in 1922–23 amounted to £48,121 including £39,070 from sale of produce and £8,779 from sale of stock; the expenditure amounted to £40,933

Farrer Scholarships.

The Farrer memorial fund was established by public subscription in honour of the late William J. Farrer, whose work in the production of new wheats has afforded great benefit alike to the industry and to the community. The money subscribed has been vested in trustees, and the interest is used for the Farrer research scholarship, the specific object of which is the improvement of wheat cultivation. The scholarship is granted to a candidate selected by the trustees. At 30th June, 1923, the capital amount of the fund was approximately £2,400.

The selected scholar presents his results at the close of the year in the form of a paper, to be published by the trustces. At the end of the year the holder of the scholarship may be re-appointed, or a new selection made.

A Government Farrer scholarship of an annual value of £40 is offered for competition amongst first-year students at the Hawkesbury Agricultural College who desire to make a special study of wheat cultivation.

A Daily Telegraph Farrer scholarship consisting of a grant of books, apparatus, etc., to the value of £10, is given each year by the Daily Telegraph Newspaper Co., Ltd., to the best first-year wheat student at the Bathurst or Wagga experiment farm.

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-fifth of the rural holdings of the State, and three-quarters of the total area under crop are devoted to wheat. The farm value of production of wheat-crops (other than those used as green fodder) in 1922-23 was £12,118,250.

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 usually between March and August. Harvests are generally gathered between November and February.

The Wheat Belt.

The area suitable for wheat-growing in New South Wales may be defined roughly as those parts of the State where precipitation is not excessive, but which have sufficient rainfall to admit of ploughing operations at the right time of the year, to cover the growing period of the wheat plant and to fill the grain during the months of ripening. The minimum average requirement was formerly placed at 10 inches of rain during the seven months from April to October, but wheat is now grown successfully where the average rainfall in this period is 9 inches, and even less. Although the months April to October are the general period for wheat-growing, this period is by no means universal. The main wheat-growing districts extend for more than 500 miles in a north-westerly direction from the southern boundary, and have a maximum width of 130 miles; on the east they are distant almost uniformly about 120 miles from the coast. The coastal region is unsuited to wheat on account of the scarcity of suitable soils and of the liability to rust and other diseases occasioned by heavy rains. Only small areas on the Tablelands are suitable for wheatgrowing, and the far West has insufficient rainfall to make wheat-growing profitable except under extraordinary conditions. Between the Tablelands and the Western Division lie considerable tracts of slope and plain eminently adapted to the cultivation of wheat. It is in this area, and particularly in the southern and central portions, that most of the wheat of the State is grown, and it is here that the prospects of a large development in the wheat industry in the near future are brightest.

Most wheat is grown in districts where the average rainfall between Apri¹ and October is between 11 and 15 inches, and little is grown in eastern districts where it exceeds 20 inches in this period.

On the map forming the frontispiece of this Year Book are shown lines which represent the eastern and western limits of profitable wheatgrowing for grain, as determined by experience during the ten years ending 1922. These show how great has been the expansion westward due to improvement in the methods of cultivation, and to the production of improved varieties of wheat. Between 1904 and 1912 the area added to the wheat belt by extension westwards was approximately 13,500,000 acres, and between 1912 and 1922 a further area of 6,000,000 acres was added. The total area of land between the eastern and western lines existing in 1922 was 53,000,000 acres. Probably, however, not more than one-half of the land comprised in these areas is arable.

A most noticeable feature of the development of wheat-growing was the expansion in districts with a low average rainfall. In 1912 the wheat line extended but a short distance beyond the limit of 10-inch rainfall in the growing season, but, by 1922, wheat had been profitably grown on a commercial scale as far west as Hillston in the north, and Balranald in the south, with average rainfalls of 9.12 and 7.89 inches respectively in the growing period. In addition, wheat was grown profitably around Nevertire in the central-western plains, where the average rainfall between April and October is about $9\frac{1}{2}$ inches. The total area of land included in that part of the wheat belt where the average rainfall is less than 10 inches in the period April to October inclusive, is 5,000,000 acres.

Area Suitable for Wheat-growing.

In his evidence before the Select Committee of Inquiry into the Agricultural Industry in 1921, Mr. F. B. Guthrie, chemist, Department of Agriculture, stated that in his opinion approximately 26,000,000 acres of land could be cultivated profitably for wheat in New South Wales. Of this area he assumed that one-fifth would be cultivated for wheaten hay, leaving 21,000,000 acres as the maximum to be cropped for grain.

Particulars obtained by the Government Statistician in 1922 from owners and occupiers of agricultural and pastoral holdings showed that (exclusive of land required for farm stock) there were 17,905,000 acres of alienated land in the State which, in the opinion of the occupiers, were suitable for cultivation, and that of these 12,058,000 acres were within about 12 miles of certain railways in the wheat belt. In the same year the Chief Inspector of Agriculture estimated that of 34,000,000 acres of land (both Crown and freehold) within about 12 miles of certain railways in the wheat belt, 18,900,000 acres were arable.

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Further particulars of the extent and distribution of these areas, and of the number, size, and value of the alienated holdings comprised in them are shown in part Rural Settlement of the Year Book for 1922.

The total area of land in New South Wales on which wheat has been cultivated in recent years (including the new land sown in 1923) is approximately 7,600,000 acres, but of this area only about one-half is sown with wheat each season; the remainder is left partly in fallow, planted with other crops, or used for grazing purposes only. The total area of new land cultivated for wheat between 1911 and the end of 1923 was 3,364,000.

Development of Wheat Growing.

Wheat growing as an industry in New South Wales has progressed slowly during the period of thirty years; at present less than one-sixth of the area suitable to 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 unde	r Wheat.		Yie	eld.	Average ac		tity of t and e'p'rt'd ear fol-
	For Grain.	For Hay.	Fed-off.	Total.	Grain.	Hay.	Grain.	Hay.	Quantity of Wheat and Flour† e'p'rt'd oversea in cal-
	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	1,631,954	9,276	177	7.0	•57	437
1899-00	1,426,166	414,813	Ť	1,840,979	13,604	341	9.5	•82	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	312,858	j †	1,704,928	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	286,702	+	1,847,813	27,334	452	17.5	1.58	9,772
1904-05	1,775,955	284,367	Ť	2,060,322	16,464	207	9:3	•73	5,631
1905-06	1,939,447	313,582	(†	2,253,029	20,737	305	10.7	•97	5,338
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	490,828	104,202	1,989,086	15,483	427	11.1	•87	4,866
1909-10	1,990,180	380,784	5,825	2,376,789	28,532	566	14.3	1.49	12,111
1910-11	2,128,826	422,972	61,458	2,613,256	27,914	468	13.1	1.11	14,423
1911 - 12	2,380,710	440,243	80,731	2,901,684	25,088	423	10.2	•96	10,172
1912-13	2,231,514	704,221	81,557	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	588	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	36,598	814	9.6	1.28	21,262
1917-18	3,329,371	435,180	63,885	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	877,596	3,068,540	4,388	355	3.0	•49	427
1920-21	3,127,377	520,555	15,420	3,663,352	55,625	822	17.8	$1.58 \\ 1.23$	41,746
1921-22 1922-23	3,194,949	467,363	24,735	3,687,047	42,767	575	13·4 9·7	1.09	21,798
1922-23 1923-24 ⁺	2,942,857	593,184	350,968	3,892,009	28,668	649		1.09	8,904
1920-241	2,914,070	694,140	301,230	3,909,440	33,040	700	11.3	1.01	

* Flour has been expressed as wheat. † Information not available.

‡ Subject to revision.

From this record of twenty-seven years' experience it will be observed that a poor wheat yield was obtained at intervals of more or less regular recurrence, viz., in the years 1898–9, 1902–3, 1907–8, 1914–15, 1918–19 and 1919–20, and that unfavourable seasons were particularly prevalent between 1914 and 1919. The remarkable recuperative powers of the wheat lands in favourable seasons were demonstrated in the seasons 1903–04 and 1920–21, when, following severe droughts, record yields were obtained.

The area under wheat increased rapidly during the period 1912–15, when the maximum of over 5 million acres was reached. The decreases in later seasons were due mainly to a shortage of labour, unfavourable ploughing seasons, and

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difficulties in regard to the disposal of the harvest during the war period; moreover, the high prices obtainable for sheep and wool until the end of 1920 caused many farmers to substitute sheep-raising for wheat-growing. The splendid seasons and high prices of 1920-21 and 1921-22 encouraged growers to extend their operations, and, despite the adverse season in all districts in 1922 and in the central and northern divisions in 1923, the areas under wheat remained greater than in any preceding season except those of 1914, 1915, and 1916. A heavy fall in the price of wheat during the latter half of 1923 occurred too late to affect the area sown in that year.

Wheat Districts.

The principal wheat-producing districts of the State, arranged in order of importance, are the south-western slopes, the Riverina, the central-western slopes, the north-western slopes, and the central tablelands. This statement refers to the statistical divisions shown on the map on the frontispiece of this Year Book.

In the 1922–23 season a redistribution of statistical divisions was made on the basis of local government areas and, as this necessitated considerable alterations in the divisions previously adopted, the comparison formerly made* between the various divisions is not possible now.

However, as the changes are comparatively slight as regards the grouping of northern, central, and southern divisions, a comparison may be made on this basis, which 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, the southern in the winter months, while the rainfall of the central districts is non-seasonal in character, since it is subject, in some degree, to the two separate meteorological influences which determine the season of the rainfall in the other regions.

Differences of soil, geographical features, cultural methods and other factors also play a considerable part in determining the yields of the various divisions, but the following statement shows that wheat is most extensively and successfully grown in the southern districts, while the central divisions are superior to those of the north. The coastal districts and western division, neither of which are wheat-growing districts, are included to complete the total of the State.

	Area Harvested for Grai		Yield of	Grain.	Yield of Grain per Acre.	
Divisions,	Average, 1912–13 to 1921–22.	1922–23.	Average, 1912–13 to 1921-22.	1922-23.	Average 1912–13 to 1921–22,	-192223
	acres.	a arog	bushels.	bushels.	bushels.	bushels
Coastal	4 079	acres. 1.372	40.981	13.335	10.00	9.7
Northern	220 714	360.174	3,587,561	2,516,118	10.0	7-0
†Central	075 577	873.964	10,760,678	5,214,210	11.0	6.0
+Southern	1 660 0~1	1,706,801	20,154,083	20,922,117	12.1	12.3
Western Division	1,276	546	8,515	2,220	6.7	$4 \cdot 1$
Total	2,972,594	2,942,857	34,551,818	28,668,000	11.6	9.7

* fee Official Year Book, 1922, page 502.

† Includes Tablelands, Slopes, and Central Plains.

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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. The yields in 1922-23 were materially affected by the wide variations in the amount of rainfall received.

Average Yield of Wheat.

The average yield of wheat in New South Wales is subject to marked fluctuations by reason of the widely divergent nature of the seasons. The highest yields have been recorded in the 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 only surpassed in 1920-21, when, after the severe drought of 1918-20, a record average of 17.8 bushels per acre was obtained. The yield in recent years has been steadily increasing, but is considerably below that which was obtained prior to the expansion of the wheat industry, when probably only some of the best wheat lands were tilled. The general average for the last ten years shown below was reduced by the occurrence of no less than four adverse seasons. In decennial periods the average yields in New South Wales have been as follow :---

Period.	Average Yield per acre.	Period.	Average Yield per acre.
1872–1881 1882–1891 1892–1901	bushels. 14·71 13·30 10·02	1902–1911 1912–1921	bushels. 11.04 11.62

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 in recent years are shown below :---

Country.	Period.	Average Yield per acre.	Country.	-Period.	Average Yield per acre.
United Kingdom New Zealaud Canada United States	1914-1920 1914-1920 1914-1920 1914-1920	bushels. 31.6 26.1 15.4 14.6		1912–1921 1912–1920 1909–1918 1914–1920	bushels. 11.6 11.2 10.3 9.7

It is believed that, when more scientific methods of cultivation are widely adopted in New South Wales, and land is properly fallowed, tilled, and manured, the yield per acre will be increased considerably; and a further favouring factor exists in the great possibilities that are attached to 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.

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Fallowing and the Wheat Yield.

In 1923-24 statistics were collected for the first time 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 was 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 each of the divisions shown on page 480.

		Area.			Total Yield.			Average Yield per Acre.		
Division.	New Land.	Fallowed Land.	Stubble Land.	New Land.	Fallowed Land.	Stubble Land.	New Land.	Fallowed Land.	Stubble Land.	
	$35,334 \\ 44,499$	acres. 1,013 29,922 265,948 1,009,334 504	acres. 831 245,803 598,175 566,531 1,631	bushels. 29,766 251,013 608,322 5,187	bushels, 9,252 249,201 2,776,740 15,456,585 3,621	bushels. 8,403 1,677,471 5,069,721 6,889,680 5,889	bush. † 7·1 13·7 †	bushels. † 8·3 10·4 15·3 †	bushels. 6.8 8.5 12.2 †	
Total	86,309	1,306,721	1,412,971	894,288	18,495,399	13,651,164	10.4	14.1	9.6	

Owing to the widely scattered nature of the wheat belt, the above table does not provide a complete comparison of the results obtained from fallowed land in comparison with other land, because rainfall, cultural methods, soil, and other factors necessarily played an important part in determining the results. Moreover, the methods adopted by farmers differ very markedly and the results obtained from fallowed land throughout the State do not represent accurately the benefits which accrue from scientific agriculture. Still, it is apparent that even with present methods of fallow the grain improvement in the wheat yield is pronounced. The results in various districts were considerably affected in 1923-24 by the wide disparities in rainfall. Drought conditions prevailed in the whole of the northern district and in the western parts of the central districts.

The following statement shows the approximate areas of new land, of fallowed land, and of stubble land, sown with wheat in New South Wales during each of the past ten seasons :—

Season.	New Land.	Fallowed Land.	Remainder Stubble Land.	Total.
	acres.	acres.	acres.	acres.
1914-15	412,100	947,700	2,783,216	4,143,016
1915-16	554,600	994,000	3,573,645	5,122,245
1916-17	323,600	846,000	3,328,710	4,498,310
1917-18	251,700	831,000	2,745,736	3,828,436
1918-19	128,300	932,700	2,166,374	3,227,374
1919-20	91,100	847,100	2,130,340	3,068,540
1920-21	142,900	749,600	2,770,852	3,663,352
1921-22	232,700	935,200	2,519,147	3,687,047
1922 - 23	199,900	1,416,000	2,291,460	3.907.360
1923-24*	112,700	1,842,400	1,954,340	3,909,440

* Partly estimated.

Size of the Wheat Farms.

The expansion of the wheat industry has been brought about more by reason of the fact that growers have cultivated larger areas than by any marked increase in the number of growers, although in bad seasons, such as

1918-19-20, it was evident that many former growers did not plant crops. If it be considered that, in normal seasons, a farm of less than 250 acres devoted exclusively to wheat will not provide subsistence for a farmer and his family, it is apparent, in view of the low average area, that wheat-growing in many cases must be conducted in conjunction with other pursuits, and that in adverse seasons many farmers derive a living from sources other than agriculture.

The following table illustrates the recent development of wheat-growing in respect of number and average size of areas sown :---

Ycar.	Holdings on which Wheat was grown.	Total Area sown with Wheat.	Average Area per Holding devoted to Wheat.	
	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	
1918-19	17.281	3,227,374	187	
1919-20	16,266	3,068,540	188	
1920-21	17,790	3,663,352	206	
1921-22	18,216	3,687,047	202	
1922 23	18,632	3,892,009	209	

The following table provides a summary of the areas of holdings on which wheat was grown for grain in the season 1922-23, arranged in groups according to the area cropped for grain :---

		Wheat-grain.							
Area cropped for Grain.	Holdings.	Area cropped.		Average Yield per acre.					
			Production.	1922-23.	1921-22.	1920-21			
acres.	No.	acres.	bushels.	bus.	bus.	bus.			
1-49	2,818	62,267	571,911	10.8	11.7	17.2			
50-299	9,044	1,359,108	13,538,460	10.0	13.3	18.1			
300 - 999	2,893	1,278,476	12,116,649	9.5	13.7	17.7			
1,000 - 1,999	125	161,498	1,637,319	10.1	14.0	17.5			
2,000-10,484	25	81,508	803,610	9.9	11.5	16.3			
Total	14,905	2,942,857	28,667,949	9.7	13.4	17.8			

In this table wheat-farms are divided somewhat arbitrarily into five classes graded according to the area cultivated. Those where less than 50 acres are cultivated may be considered to be held by growers earning their livelihood principally in other directions; these number 2,818, or 18.9 per cent. of the total; where the areas cultivated range from 50 acres to 299 acres growers may be considered to draw their sustenance from wheatgrowing in a degree ranging from partial to complete dependence; these number 9,044, or 60.7 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.

In all, areas of less than 30 acres in extent were sown with wheat for grain on 1,840 farms. The total number of areas under 100 acres in extent sown with wheat for grain was 4,985; from 100 to 199 acres, 4,200; from 200 to 299 acres, 2,677; from 300 to 399 acres, 1,354; and from 400 to 499 acres, 690; the number in successive groups of 100 diminished rapidly thereafter. There were 25 wheat crops exceeding 2,000 acres in extent. The disparities between the average yields in area series in 1922-23 were not very pronounced. The most productive areas in 1921-22 were those between 1,000 and 2,000 acres in extent, while in 1920-21 the areas from 50 to 399 acres in extent were most productive. But in 1920-21 larger proportions of the smaller areas were cropped for hay and green fodder, and these usually embraced the inferior portions of the crop.

In 1922-23 3,727 farmers sowed wheat for hay or green fodder only, and 1,840 others cultivated less than 30 acres for grain. The number of farmers who cultivated wheat for grain on a commercial scale was, therefore, about 13,000.

Consumption of Wheat in N.S.W.

Since the abolition of the system of interstate book-keeping by the Commonwealth Department of Customs in 1910, it has been difficult to obtain information as to the extent of wheat movements interstate, and thus it has not been possible to estimate satisfactorily the consumption and export of wheat as regards New South Wales. Absolute accuracy, therefore, is not claimed for the estimates in the following table, but they are considered to be reliable. Since 1921 particulars of stocks and of interstate movements of wheat have been collected specially. Allowance for the carry-over between periods prior to 1921 has not been made, but it is likely that it is considerable only in special circumstances. A close approximation to the net average annual consumption may be made by choosing a lengthy period beginning and terminating in years when the carry-over was probably nil or negligible. Such periods are adopted in the table shown below. It seems probable that considerable stocks of wheat are carried on the farm in normal times to meet the exigencies of drought, etc. The records obtained of these stocks appear to be deficient, and on this account comparisons between individual years are unreliable.

As harvesting operations do not begin until November, and new wheat is not generally marketed before the end of the year, the consumption and export years have been made to coincide with the calendar years. The statement shows the yield, net exports, and apparent consumption per head in periods since 1892, flour being included at its equivalent in wheat.

		Average net	Арр	arent Consum	ption per ann	um.
Period.	Average Annual Crop.	Annual Export, Oversea	Including Se		leed Wheat at per acre.	
		and Interstate	Total.	Per head.	Total.	Per head.
	thousand	thousand	thousand		thousand	
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1892-1896	5,904	(-)2,310	8,214	6.6	7,231	5:9
1897-1903	10,694	791	9,903	7.3	8,237	6.1
1904-1908	19,102	7,505	11,597	7.8	9,514	6.4
1909-1915	25.765	11.958+	13,807	7:9	10,395	5.9
1916-1920	31,523*	14,179		8.8	13.688	6.9
1921-1923	42,353	27,6228	15,425	$7 \cdot 2$	11,528	5.4

* Excludes "stock adjustments" of wheat pools; average, 503,000 bushels per year. † Partly estimated. ‡ Allowing for stocks carried over. (--) Average net import. § Actual export.

The quantity of wheat used annually as flour for human consumption has varied from $4\frac{3}{4}$ to $5\frac{3}{4}$ bushels of wheat per head in the past five years. As the area under wheat grew steadily until 1915, a proportionate increase in the amount of grain required for seed purposes largely increased the

total requirements per head of population. The amount used for poultry and stock purposes is apparently very variable, being affected by seasonal conditions and by the conditions which govern export. It is probable that the quantity consumed in the period 1916–1920 was considerably above normal requirements. Not only were large quantities used for sheep fodder in the unusually severe drought of 1919–20, but great difficulty was experienced in disposing of wheat abroad, so that large quantities remained in the country for lengthy periods, and much damage was done to it by wet weather, mice, and weevils.

Including seed wheat, the maximum annual requirements for local consumption probably seldom exceeds 8 bushels per head of population, or approximately 17,500,000 bushels, of which about 4,000,000 bushels (depending on the area sown) are used for seed purposes. During the year 1921 the consumption appears to have heen only 14,400,000 bushels, which may be considered at present the minimum annual requirement.

Thus the effective demand for wheat for local consumption is very elastic. In special circumstances, such as those of the year 1921, when prices rose to phenomenal heights—wheat for local consumption being at 9s. per bushel for nearly the whole year—consumption decreased markedly, being estimated at 6.8 bushels per head of population. The quantity of wheat exported oversea was nearly twice as great as in any previous year. Economy among consumers had its counterpart among producers, who were stimulated by high prices to realise on every available bushel. From the records of the State Wheat Office it was ascertained that growers retained for their own use in 1921 only as much wheat as in 1920, when, as the yield was very low and the price very high, it may be assumed that all available wheat was marketed.

The extent to which economy in using wheat was practiced by growers in 1920 and 1921 was shown in the Year Book for 1921 at page 734.

The economy in human consumption of wheat as flour in New South Wales in the last five years has proceeded in two ways, -(a) in the actual quantity of flour consumed; (b) in the amount of flour manufactured from a bushel of wheat. These developments are apparent from the following table :---

Weight of Bushel of Wheat		Average Amount of Flour manufactured	consumed per	Amount of Wh	eat consumed as our.	
	of fair average quality.	from each bushel of wheat milled.	head of population.	Per head of Total.		
	1Ъ.	lb.	lb.	bushels.	bushels.	
1918-19	62.5	40.4	230	5.7	11,222,000	
1919 - 20	61.0	41.2	223	5.4	11,009,000	
1920 - 21	59.5	42.3	211	5.0	10,453,000	
1921 - 22	61.0	42.2	203	4.8	10,216,000	
1922 - 23	61.0	41.7	206	4.9	10,648,000	

In considering the relationship between the first two columns, it should be recollected that the average weight per bushel of wheat, shown in the first column, relates to the wheat grown in the season, such wheat not being available for milling until December; the returns of wheat-milling operations relate to the period July to June, and to a large extent therefore include particulars of wheat grown in the preceding season. Very little wheat grown in 1919-20 was available for milling. To some extent the wheat used for milling is selected. It is apparent that the average amount of flour derived from the wheat milled varies considerably, and that, at the same time, the consumption of wheat as flour has diminished very much. Despite a large increase in the population, the economy in the use of wheat so effected was very considerable.

Grading and Marketing Wheat.

A large proportion of every successful harvest must be exported, so that the maintenance and further development of the wheat industry in New South Wales are dependent largely on world demand, and on the efficiency of the facilities for gaining access to over-sea markets on such conditions that it will pay farmers to grow wheat in preference to other products. The price of wheat for export is determined by world's parity, and it fluctuates with the world 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. In 1923 the equivalent of approximately 11,450,000 bushels of wheat was exported from New South Wales, and of this quantity the equivalent of 8,050,000 bushels was in the form of flour. About 8,900,000 bushels were exported oversea and 2,550,000 bushels were sent to other Australian States, principally to Queensland. The further extension of the market for local wheat in Europe is in some measure affected by the competition of great wheat-producing countries nearer the market—the United States, Canada, and the Argentine, 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 some parts of these countries.

Australian 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 of two Government representatives. Samples obtained from each of the wheat districts are weighed on McQuirk's patent scale, and an average struck, which is used as a standard in all wheat export transactions.

Year.	Date Fixed.	Standard Bushel.	Year.	Date Fixed.	Standard Bushel,
1 914–15 1915–16 1916–17 1917–18 1918–19	15th Feb., 1915 21st , 1916 12th Mar., 1917 26th Feb., 1918 30th Jan., 1919	$ \begin{array}{c c} 1b. \\ 60\frac{1}{2} \\ 61 \\ 56\frac{3}{4} \\ 58\frac{1}{2} \\ 62\frac{1}{2} \end{array} $	1919–20 1920–21 1921–22 1922–23 1923–24	6th Feb., 1920 10th Mar., 1921 7th Feb., 1922 25th Jan., 1923 14th Feb., 1924	1b. 61 59 1 61 61 60 1

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 :---

At present most 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.

Bulk Handling.

The losses of grain, occasioned by wet weather and plagues of mice and weevils during the period of the war, in which large harvests had accumulated and shipping arrangements were dislocated, brought forcibly into public view the disadvantages of the handling and storage of wheat in bags. A Royal Commission of Inquiry was appointed by the Federal Government in 1917, and reported in favour of the erection of permanent storage facilities.

The Federal Government promptly passed a Wheat Storage Act, providing for advances to be made to the States for the construction of wheat elevators, and before the close of the year tenders had been called for the necessary work in New South Walcs.

The complete scheme provides for the erection of elevators at seventy-one country centres, with a total storage capacity at one filling of 15,200,000 bushels and of a terminal elevator in Sydney with a total storage capacity of 6,509,600 bushels. The estimated cost of the works to 30th June, 1924, was £3,475,000. Sufficient progress had been made to permit of some elevators being put into operation in the 1920-21 season for the first time. The system has been steadily developed, as shown in the following table :---

Season,	Number of Plants Available in Country Districts.	Storage Capacity of Plants Available in Country Districts.*	Wheat Received in Elevators	Proportion of Wheat Crop Received in Elevators.
		bushels.	bushels.	per cent.
1920 - 21	28	5,450,000	2,000,000	3.6
1921 - 22	28	5,450,000	4,335,000	10.1
1922 - 23	54	11,550,000	4,290,000	14.6
1923 - 24	58	12.550,000	6,414,500	19.4

*At one filling.

In addition to the terminal elevator, thirty-four country plants were completed, while twenty-four were operated with temportry elevating facilities. A large proportion of the wheat erop is taken direct to mills by road or is retained on the farm for seed and other purposes, and is not available for handling by the elevator.

During the season 1923-24 the Government grain elevators were under the control of the Silo Control Board, consisting of two members. Wheat of three kinds was received for handling in bulk, viz., fair average quality, red, and mixed red and white. The wheat is subject to a general lien for all charges due. A fee of 2d. per bushel is charged for receiving, handling and storing wheat at the terminal elevator until 31st August, 1924, with an additional $\frac{1}{3}$ d. per bushel per week for storage after that date. For receiving, storing and delivering into trucks at country elevators the charge is $1\frac{1}{2}$ d per bushel. The Silo Control Board pays rail freight incurred by them 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.

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, the bags being emptied and returned to the farmer for use in subsequent seasons. It is believed that as the system is becoming firmly established, farmers will acquire bulk waggons. For conveyance from country stations to the terminal, the Railway Commissioners converted a large number of 15-ton S trucks, and made them suitable for the carriage of grain in bulk. It has been decided to adopt as the standard design for handling bulk grain a 20-ton truck with a hoppered bottom, so that it will be self-discharging; a number of these are under construction.

The question of bulk handling of wheat in New South Wales with special reference to the transition from bag handling, was the subject of careful inquiry by a Select Committee of the Legislative Council in November, 1920, and a report has been issued. An analysis of the findings of this committee appears in the Year Book for 1920.

Wheat Freights.

In the conditions governing the marketing of wheat abroad, the availableness and cost of freight are very important factors. Owing to the greater distances to European markets, freight rates are much heavier on Australian than on American cargoes. But both must be sold at world's parity, or at approximately the same price.

A comparative statement is given below of the freights ruling for baggedwheat cargoes carried by steam vessels from Sydney to London in pre-war and recent years :---

Year ended			Yevr ended		Freight.			
30th June.	Per ton.	Equivalent persbushel:0	30th June.	Per to	1.	Equivalent per bushel,		
1912 1913 1914	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	di d. 61 to 11 31 to 131 9 to 133	1921 1922 1923	s. d. 120 0 to 46 8 to 35 0 to	s. d. 46 8 35 0 32 6	d. d. $43\frac{1}{2}$ to $16\frac{2}{3}$ $16\frac{3}{4}$ to $12\frac{1}{4}$ $12\frac{1}{4}$ to $11\frac{3}{4}$		

The following comparative rates of freight ruling on 8th February, 1924, were extracted from the reports of the International Institute of Agriculture. A comparison of the rates of freight per bushel is added in order to show the relative amounts of ocean freight paid on wheat from the principal exporting countries to the principal markets of the world :---

	Freight to United Kingdom.					
Exporting Country.	Original Rates.	Rate per bushel.				
Canada United States (northern range) Argentina (down river) British India (Karachi) Australia	4s. 0d. per 480 lb. 4s. 0d. per 480 lb. 32s. 6d. per 2,240 lb. 29s. 6d. per 2,240 lb. 47s. 6d: per 2,240 lb.	$\begin{array}{cccccccccccccccccccccccccccccccccccc$				

Compulsory Wheat Pools, 1915-1920.

An account of the circumstances which led to the creation of compulsory wheat pools by the Government, and of the basis upon which they were organised is contained in previous issues of the Year Book.

The whole of the wheat placed in the pools had been disposed of by the end of 1921, but as the necessary information regarding oversea sales from the later pools was not available, the whole of the accounts could not be

completed until 20th December, 1923, and until that date only estimates could be made of the financial position. These were published from time to time in previous Year Books.

A very small sum still remains to be distributed among growers in final settlement of accounts, but the following statement shows the exact financial position of the various pools as regards expenditure to 31st March, 1924 :----

				Excess of	Average Payments to Growers.		
Pool,	Pool. Advances to Growers.	Expenses Paid	Total Expenditure.	Expenditure over Income.	Total per Bushel.	Date Final Payment became available.	
	£	£	¢	£	s. d		
191516	12.387,801	1.952.841	14.340.642		4 10	30-9-1919	
1916-17	5.004.290	2,103,158	7,107,448	285,378	3 3	15 - 7 - 1918	
1917 - 18	7,353,225	1,567,660	8,920,885		4 9.0845	9-1-1924	
1918-19	3,284,639	644,409	3,929,048		5.1.096	9-1-1924	
1919-20	183,140	13,630	196,770		8 4.2225	9-1-1924	
1920 - 21	19,142,266	1,984,223	21,126,489	920,523	76	26-9-1921	
All pools.	47,355,361	8,265,921	55,621,282	1,304,826		•••	

The deficiencies due to excess of expenditure over income were made good by the State Government. Those of 1915-16 and 1916-17 were occasioned by payments to farmers before realisations oversea were completed, and that of 1920-21 by excess payments to farmers over actual realisations in terms of the Government guarantee to pay growers a minimum price of 7s. 6d, per bushel for wheat of fair average quality at country sidings.

The wheat placed in the 1916-17 pool was subjected to serious losses through wet weather, plagues of mice and weevil and other causes. In this regard the Government paid the pool a sum of £549,214 as compensation.

Smaller sums expended in reconditioning wheat of the other pools were as follow::--1915+16, £60,202; 1917-18, £92,489; 1918-19, £8,527; 1919-20, £13.

The final statement of the disposal of the wheat placed in each pool is as follows :---

Pool.	Quantity of Wheat for which	Gain (+) or Loss () in	Sales	of Wheat and Flo	our.*
1001.	Certificates were Issued.	Stocks.	Oversea.	Local.†	Total.
	bushels.	bushels.	bushels.	bushels.	bushels.
1915 - 16	58,187,226	(+) 264,525	44,724,493	13,727,258	58,451,751
1916-17	32,042,429	(-) 2,531,646	7,009,705	22,501,078	29,510,783
1917-18	33,713,910	(-) 226,292	14,495,613	18,992,005	33,487,618
1918-19	13,893,515	(+) 23,215	945,032	12,971,698	13,916,730
1919-20	460,964	() 3.643		457,321	457,321
1920-21	51,433,755	(+) 74.987	41,212,669	10,296,073	51,508,742

* Flour being expressed at its equivalent in wheat.

† Australia and Pacific Islands.

The gain or loss in stocks represents the difference between the quantity of wheat for which certificates were issued to growers and the quantity as ascertained when sales were effected. The causes of the disparity in 1916–17 are referred to above. These also applied, to a small degree, to the pool of the preceding and of the two succeeding years. Other cauces of the disparities are inexactness in measurement in the first instance and locs in transit, but doubtless they are due mainly to the effect of climatic conditions upon the weight of the wheat.

Receipts by Farmers from Pools.

The amounts deducted to cover dockages for inferior wheat and rail freights produced some divergence in the actual returns to individual farmers, but the following is an estimate of the average receipts per bushel by farmers for wheat placed in the various pools administered by the Government.

Total Amount Season, Paid	Average Ded	Average amount per bushel received by			
Season.	per bushel f.a.q. Wheat.	Estimated Freight.	Dockage for Inferior Wheat.	Other Charges.	Farmers at Railway Siding
	s. d.	d.	d.	d.	s. d.
1915-16	4 10	3.60	.05	3.25^{+}	4 3.1
1916-17	3 3	±	1.63	±	3 1.4
1917-18	4 9.0845	4.00	• 67	± ±	4 4 4
1918-19	5 1.096	4.30	•01	i ż	4 8.8
1919-20	8 4.2225	4.58	•11	İ	7 11.2
192021	7 6	1	·69	ŧ	7 5.3

+ Flat rate. ‡ Not deducted.

Voluntary Wheat Pools.

On the decision of the Government not to continue the compulsory pool system of handling wheat harvests, a committee of farmers' representatives was formed in November, 1921, and a "voluntary pool" hastily organised. Arrangements were entered into whereby the Commonwealth Government agreed to advance 3s. per bushel to growers and 8d. to the pool for handling charges on all wheat received into the pool. The system of issuing negotiable certificates as receipts for wheat pooled by farmers was continued.

In all, 22,785,560 bushels of wheat (53.4 per cent. of the 1921-22 crop) were pooled by 12,264 growers. The net realisations on this wheat amounted to £6,179,027, and the net receipts by farmers at railway sidings to £5,298,812. The average realisation per bushel f.a.q. was 5s. 5.17d., of which rail freight absorbed 5.40d. and other charges 3.87d., while an average of .09d. was deducted as a dockage for inferior wheat. The average amount received by farmers at railway sidings was 4s. 7.81d. per bushel.

Of the 1922-23 harvest, 11,655,800 bushels were pooled, equivalent to 40.8 per cent. of the total crop. The net amount realised at sales was £2,956,739, the net receipts by farmers at railway sidings being £2,492,129, or 4s. 3.32d. per bushel. The expenses included rail treight amounting to £260,753, or 5.37d. per bushel, agents' handling charges, £138,374, or 2.85d. per bushel, and administrative expenses, £11,135, or .22d. per bushel. The net average realisation by the pool per bushel f.a.q. was 5s. 1.35d. f.o.b. Sydney.

Prices of Wheat.

The following table gives the average prices per bushel ruling in the Sydney market 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 in Australasia. 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 price realised in London, which is usually equal to that ruling in Sydney, plus freight and charges; but from 1915 to the close of 1921 local prices were fixed by the Government.

The prices quoted are for imperial bushel in Sydney markets. The weight of a bushel is fixed each season (see page 486).

Year.	Febr	ruary.	Ma	rch.	Aver Valu Ye	e for	Year.	Febr	uary.	Ma	rch.	Val	erage ue foi ear.
	per b	ushel.	per b	ushel.	per b	ushel.		per b	ushel.	per b	ushel.	per b	ushe
	s.	d.	s.	d.	в.	d.		8.	d.	. S.	d.	5.	d.
1898	4	0	4	0	3	8	1912	.3	9 <u>1</u>	3	8 <u>1</u>	4	1
1899	2	7 <u>1</u>	2	9	2	9	1913	3	6 <u>1</u>	3	7	3	2‡
1900	2	9	2	8	2	81	1914	3	8	3	9 1	• 4	11/2
1901	2	7	2	7	2	8	1915†	5	6	5	6	5	5
1902	3	2	3	$2\frac{3}{4}$	4	5	1916†	5	14	5	0‡	4	10
1903	5	115*	5	94*	5	13*	1917‡	4	9	4	9	4	9
1904	3	$0\frac{1}{2}$	3	$0\frac{3}{4}$	3	2^{1}	1918‡	4	9	. 4	9	4	9
1905	3	4 <u>1</u>	3	$3\frac{3}{8}$	3	5	1919‡	5	0	5	0	5	11
1906	3	15	3	$2\frac{1}{4}$	3	$3\frac{1}{2}$	1920‡	8	5*	8	10*	8	71
1907	3	0^{7}_{8}	3	$1\frac{1}{2}$	3	10	1921‡	9	0	9	0	8	8
1908	4	4	4	$5\frac{1}{2}$	4	$3\frac{1}{2}$	1922‡	5	2	5	11	5	8
1909	4	$0\frac{3}{4}$	4	$6\frac{1}{2}$	4	9	1923‡	5	8	5	7	5	31
1910	4	$1\frac{3}{4}$	4	1	3	10	1924‡	4	7	4	7	4	95
1911	3	$.7^{3}_{4}$	3	5	3	6				-			
							1. s						

* Imported wheat. † Officially fixed.

‡ Price on trucks of wheat for flour for home consumption. § To June.

The high prices ruling in 1903 and 1920 were due to the almost entire failure of the previous season's crop, on account of which supplies were drawn from oversea and other States. In 1920 the price of 9s. per bushel was fixed for wheat for local consumption in accordance with the anticipated world's parity and in order to encourage farmers to continue wheat-growing. This price was maintained until the end of November, 1921.

In the latter part of 1923 the price fell precipitately owing to the large surplus of production over world requirements, and the price is now lower than in any year since the outbreak of war, although rather higher than in pre-war years. An interesting comparison between the prices realised for wheat by the growers of three important exporting countries and one important consuming country is made in the following table :---

~	Ave	ragé Farm Value	per Bushel of W	heat.
Crop Grown in —	United Kingdom.	United States.	Canada.	New South Wales.‡
	s. d.	s. d.	s. d.	s. d.
1914	4 0	38		5 5
1915	62	44	39	4 3
1916	67	53	$5 \cdot 5$	3 1
1917	93	8 4	8.1	4 4
1918	9 0	8 6	8 5	4 9
1919	91	8 10	7 10	7 11
1920	95	91	6 - 9	7 5
1921	8 3	48	3 4	4 8
1922	*	4 1	36	4 8
1923	× ₩	4 1†	$2 9\frac{1}{2}$	4 2†

* Not available. † Preliminary, subject to revision. † Crops in N.S.W. are marketed six months later than in countries of Northern Hemisphere.

The above averages have been taken from official publications of each country mentioned. Dollars have been converted at par rate of exchange, in the cases of United States and Canada. The marked disparity between the values in Canada and the United States since 1919 has been partly due to the abnormal conditions of the exchanges. A further powerful factor appears to be that, whereas about two-thirds of the United States harvest is used for home consumption, only about one-seventh of the Canadian crop of 1923 was required for local needs. Home consumption appears to operate in maintaining the value of local wheat, but there is another important consideration in that Australian wheat of average quality frequently commands a higher price in world markets than the first quality grains of either Canada or the United States. The average market value of Canadian wheat at Winnipeg in December, 1923, ranged through seven grades from 3s. 10¹/₂d. per bushel to 2s. 9d. per bushel.

It is evident that, although in the early years of the war prices of wheat rose precipitately abroad and furnished excellent returns to farmers, conditions in New South Wales were not favourable to such an increase. The price for local consumption was fixed at a point considerably below the price in world markets, although a large exportable surplus was produced in 1915-16 and subsequent years, the scarcity of shipping made it impossible to realise promptly or at favourable rates, with the result that the returns to farmers were low and were paid in small sums intermittently. The prices quoted above for New South Wales from 1918 to 1920 represent the total payments from the wheat pools less debentures. It was not until the scarcity caused by the bad season of 1919 that the price paid to the farmer in New South Wales rose to a level approaching that of other countries. A minimum price of 7s 6d, per bushel was guaranteed by the Government for the

1920 crop in order to stimulate production. During the past three seasons the position of the local wheat-grower as regards price per bushel has not improved, but cost of production and the average yield per acre also play an important part in determining the profitableness of wheat growing. The average yields of various countries are compared on page 481. The average yield per acre in 1923 for the three countries shown above were—United States, 13.4 bushels; Canada, 21.0 bushels; New South Wales, 11.3 bushels.

Cost of Growing Wheat in N.S.W..

The Select Committee on the Agricultural Industry in 1921 concluded from the data before it that proper harvesting and cultivation of wheat cannot be carried out under existing conditions at a lower cost than £3 5s. per acre (excluding insurance), and that it will 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" accrues to the wheat-grower only when the price realised exceeds this amount.

Various attempts have been made to secure the data necessary to form a trustworthy estimate of the 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.

However, estimates have been made by Mr. A. H. E. McDonald, Chief Inspector of Agriculture, of the average cost of producing wheat on unfallowed and on fallowed land. For the purposes 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 of fallowing, the total area of the farm would be at least 500 acres. The value of the land is assumed to be £6 per acre, and the value of the plant, £680.

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 is allowed at the rate of 6 per cent. per annum, and interest and depreciation on plant at 134 per cent. Annual allowances are made of $\pounds 20$ for repairs, etc., $\pounds 45$ for wages for extra help, and 9d. per bag for cartage to rail. In addition, the cost of $6\frac{1}{4}$ tons of superphosphates 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 market rates.

On these bases an instructive comparison may be made between the cost of producing wheat and the estimated return to farmers based on the average yields per acre in the past five seasons. In 1923-24 nearly one-half of the area sown had been fallowed. As particulars of the yield from the land was obtained, it is possible to publish separate estimates for the fallowed and

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unfallowed land in 1923–24. The following table provides an indication of the financial results of the operations of an average wheat-grower cropping annually an area of 230 acres for grain and 20 acres for hay for horse-feed.

Iter	Item.			1920-2 1 . †	1921-22.	1922-23.	1923-24.	
Average yield per acre	•• ••	bushels	3.0	17.8	13.4	9.7	9.6§	14.1§§
Costs Land-Interest Plant-Interest and J Repairs Wages-Extra help Fertiliser, 64 tons Bags Cartage to rail Seed Wheat-50 lb, p		· · · · · · · · · · · · · · · · · · ·		£ 90 20 45 44 78 46*5 104	£ 90 20 45 44 42'75 39 104	£ 90 20 45 44 * 31 28 78	£ 90 20 45 37 31 28 62*5	£ 135 90 20 45 37 45:5 40:5 62:5
Total cost of cropping 23	0 acres for gr	ain £	360.5	517.5	474.75	426	403.5	475-5
Cost of crop per acre Value at rail of crop per a	ere		£ s. d. 1 11 4 1 2 4*	$\begin{array}{c} \pounds \ { m s.} \ { m d.} \\ 2 \ 5 \ 0 \\ 6 \ 12 \ 5^{*} \end{array}$	£ s. d. 2 12 10 3 2 4*	£ s. d. 1 17 0 2 5 2	£ s. d. 1 15 1 1 19 2‡	£ s. d. 2 1 4 2 17 7
Apparent Net Return to cluding payment for		per acre 230 acres		4 7 5 £1,005	0 9 6 £109	0 8 2 £94	0 4 1‡ £47‡	0 16 3 £187‡

* Estimated from payments of wheat pool. \uparrow Abnormal costs occasioned by drought are excluded in these years. (--) Loss. \ddag Subject to revision. \S Unfallowed land. \S Fallowed land.

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 and seasons on the operations of wheat-farmers in recent years. While the returns of the season 1915–16 were high and those of 1920–21 remarkably high in view of the excellent prices and yields obtained, the four intervening seasons were disastrous, failing in every case to repay the cost of production and to remunerate the farmer for his labour.* Generally speaking, the returns to growers in the past three seasons have not been remunerative, and since it is a general rule that the extent of an industry will be maintained only if the returns it provides are adequate to maintain the least efficient producing unit, it is surprising that the area under wheat has not decreased.

However, in considering this statement, 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 fertiliser and fallow their land extensively. Favoured by the natural advantage of operating in a belt of winter rainfall, they generally obtain better yields than the farmers in the central and northern districts. Thus in 1923–24 the average yields in the Riverina and south-western slopes were 12.1 bushels from unfallowed land and 15.3 bushels from fallow, producing from 230 acres, on the basis of the above table, returns of £153 and £241 respectively. In the central western slopes in the same year, under drought conditions, the average yields were 7.7 bushels and 10.0 bushels per acre respectively, resulting in a net loss of £28 and a net gain of £22 respectively.

In view of the explanation given on page 482, these results do not reflect accurately the relative profitableness of the policy of fallowing.

* See Official Year Book, 1921, page 738.

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World's Production of Wheat.

Complete and uniform statistics of the whole of the wheat crops of the world in recent years are not available, and have been very defective in many countries since 1916. But for previous years returns were obtainable from nearly every country where wheat was grown extensively. From these, reliable estimates of the fluctuations of the world's wheat production may be made. In the past thirty years a continuous increase has been apparent, despite the fact that very considerable fluctuations have been shown from season to season. The annual averages, so far as reported, from 1891 to 1915 are shown below :-

Annual average Wheat Yield of World.

					Bushels.
1891 - 1900	•••	•••	 ••• •	•••	2,581,000,000
1901-1910			 		3,553,000,000
1911-1915	•••		 •••		3,837,000,000

Period.

The returns from which these totals are compiled do not include all wheatproducing countries. It is estimated by the International Institute of Agriculture that the average annual yield of wheat throughout the world is now approximately 4,600,000,000 bushels.

The following statement, based on information contained in the Year Book 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	Annual Production of Wheat in Thousand Bushels.			Southern	Annual Production of Wheat in Thousand Bushels.			
Hemisphere.	Average, 1909–13. ‡	1922. §	*1923. §	Hemisphere.	Average, 1909–10– 1913–14.	1922-23.	*1923–24	
Europe— Russia proper France Italv	$662,504 \\ 316,973 \\ 182,951$	$158,121 \\ 242,806 \\ 161,304$	$ \begin{array}{c} 1 \\ 290,478 \\ 224.840 \end{array} $	South America	$146,752 \\ 32,087$	$188,650 \\ 27,434$	248,756 11	
Spain Germany	129,174 151,868	$125,206 \\ 65,257$	$157,112 \\ 103,605$	Total S. America	178,839	216,084		
Roumania British Isles Hungary Bulgaria Czechoslovakia Poland Belgium Austria Serb-Croat-Slovene State.	87,608 59,850 169,289 42,086 14,863 67,381 14,715	$\begin{array}{c} 91,812\\ 65,113\\ 44,979\\ 37,526\\ 33,950\\ 42,362\\ 10,593\\ 7,540\\ 42,160\end{array}$	$\begin{array}{c} 102,521\\ 56,790 \\ 67,677\\ 38,783\\ 36,537\\ 48,267\\ 12,590\\ 8,826\\ 61,894 \end{array}$	Australasia— New South Wales Victoria South Australia Western Australia Queensland Tasmania Total, Australia	26,71727,65622,8435,6711,25080684,943	28,668 35,697 28,785 13,857 1,888 570 109,465	$\begin{array}{r} 33,047\\ 36,240\\ 35,853\\ 20,009\\ 149\\ 247\\ 125,545\end{array}$	
Other Countries	41,468	57,695	‡ ‡	New Zealand	7,885	8,395	4,250	
Total, Europe	1,940,730	1,186,424		Total, Australasia	92,828	117,860	129,795	
Asia— British India Japan Russia in Asia Other Countries	23,586 150,795	365,584 27,559 45,264 27,277	369,264 28,403 ‡‡ ‡‡	Southern Africa— Union of South Africa. Southern Rhodesia	6,264	6,682		
Total, Asia	532,472	465,684	•••	Total, S. Africa	6,276	6,682		
Northern Africa— Egypt Other Countries	34,039 60,415	$36,571 \\ 35,351$	40,654 69,081	Total, Southern Hemisphere.	277,943	340,626	-	
Total, N. Africa	94,454	.71,922	109,735	Total, The World, as	3 743 049	9 991 860		
North America		854,429 398,966 13,809	781,737 469,761 ‡‡	far as Reported. Countries which have not reported since		3,331,040	1	
Total, N. America Total, Northern Hemisphere.		1,267,204 2,991,234		1914 Turkey§§ China§§ Other	590,000	: •••• ^{1,17}	••••	

* Preliminary.

boundaries. 11 Not available.

† Omitting Scotland and the Irish Free State. ‡ Old boundaries, §§ Figures for one year only.

§ New

While the production in Europe in 1923 was still considerably below that of pre-war years, marked increases were apparent over the production of 1922 in every country from which reports are available. At the same time particularly large crops were harvested in Canada and Argentina. As a result, there was a considerable surplus of world supplies over requirements in 1923, estimated at 230,000,000 bushels. Preliminary reports indicated that in 1924 there was a slight decrease in the area of winter wheat cown in the northern hemisphere.

MAIZE.

Before the development of the wheat-exporting industry of New South Wales maize growing was the most extensive single agricultural pursuit. It now ranks second in importance amongst the crops of New South Wales. Its cultivation is small in comparison with that of wheat, and sufficient is not grown 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, and maize is gaining popularity as a profitable crop in rotation with hay.

Maize-growing reached its highest development locally in 1910, and since then, despite a distinct rise in the price level, production has been decreasing. The following statement exhibits a comparison of the extent of maize-growing since the season 1900–01, with the average price in Sydney markets for each crop :—

Season.	Area under	Produ	Average	
	Maize for Grain.	Total.	Average yield per Acre.	Price per Bushel, Syd- ney Markets
	1	thousand	1.	_
	acres.	bushels.	bushels.	s. d.
1900-01	206,051	6,293	30.5	28
1910-11	213,217	7,594	35.6	3 0
1915-16	154,130	3,774	24.5	4 6
1916-17	155,378	4,333	27.9	3 10
1917-18	145.754	3,500	24.0	5 7
1918-19	114,582	2,092	18.3	8 0
1919-20	136,509	4,052	29.7	8 7
1920 - 21	144,105	4,176	29.0	54
1921 - 22	146,687	3,976	27.1	5 5
1922 - 23	138,169	3,287	23.8	6 1

It is somewhat difficult to understand why maize-culture has declined so considerably in New South Wales, and why, so far from there being any export trade in this important grain, supplies have been regularly imported. Perhaps among the reasons may be included the competition of more profitable pursuits, such as dairy-farming, the absence of an outlet in the form of an export trade, and the vagaries of the local market. In pre-war years the international trade in maize was somewhat less than half the volume of that for wheat. In the United States of America, where approximately 70 per cent. of the world's supply of maize is grown, it is by far the largest crop, but only about 2 per cent. of it is exported. The pre-war consumption in England was approximately eighty million bushels annually, imported principally from the United States and the Argentine.

Particulars of the cost of production in these countries are not available, but in the last three years the gross returns to growers in New South Wales

have been far greater than in the United States. The estimated average farm value of maize per acre in the 1921 growing season was $\pounds 2$ 11s. 8d. in the United States, and $\pounds 6$ 1s. 11d. in New South Wales.

The following statement shows the area under maize for grain in New South Wales during the season 1922-23, with the production and average yield in each Division :---

	Division.			Area under Maize for Grain.	Yield.	
· ·				Total.	Total.	Per Acre.
Coastal—				acres.	bushels.	bushels.
North	••• •••			44,824	1,380,474	30.8
Hunter and	l Manning	•••		19,098	425,826	22.3
Metropolit	an			2 091	147,996	49.0
South		•••	••••	9,106	287,043	31.5
Tableland—	Total	,		. 76,049	2,241,339	29.5
Northern					408,408	18.0
Central				7,334	150,042	20.5
Southern	· · · · · ·	••••		361	7,641	21.2
	Total			30,423	566,091	18.6
Western Slopes Central Plains, Riverina, and Western				473,139	15.2	
Central Plat Divisions	uis, niverina	, and 	Wester	n 532	6,954	13.1
	All Divisions			138,169	3,287.523	23.8

During the ten years ended 1909, the average annual consumption of maize in New South Wales was 4.1 bushels per head of population. During late years, however, the production of maize has declined, and to maintain the consumption of earlier years an average annual import of about five million bushels would be necessary now. The average annual maize crop during the past five seasons has been 3,517,000 bushels. Since 1921, returns of interstate movements of maize have been collected. The net imports into New South Wales since that year have been as follow :—886,000 bushels in 1921, 743,000 bushels in 1922, and 2,268,000 bushels in 1923. In 1921 and 1922 the imports were principally interstate, but in 1923 approximately 1,800,000 bushels were imported oversea, chiefly in the latter part of the year.

It is apparent that a very great decline in consumption has taken place, the proportion per head of population being now less than $2\frac{1}{2}$ bushels. The total consumption in 1921 was 5,060,000 bushels, 4,720,000 bushels in 1922, and 5,560,000 bushels in 1923.

OATS.

The production of oats in New South Wales is not sufficient to supply the local demand, although where cultivation has been undertaken the return has been satisfactory. 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.

Omitting from account a small area in the Hunter and Manning Division, the highest average yield in 1922–23 (21.6 bushels per acre) was obtained from 2,083 acres in the Northern Tableland Division. In the whole of the Tableland Division 12,662 acres were under crop, and yielded 218,856 bushels, or 17.3 bushels per acre; on the Western Slopes, 35,394 acres gave 626,955 bushels, or 17.7 bushels per acre, while in the Riverina the production was 402,675 bushels from 25,671 acres, or 15.7 bushels per acre. These three Divisions accounted for about 99.8 per cent. of the total production.

The following table gives statistics of the cultivation of oats for grain since 1900-01:--

		Acres under	Produc	tion.	Price per Bushel,		
Season. Oats for Grain.		Oats for Grain.			Sydney Markets.		
dit a a a		1			s. d.		
	1900-01	29,383	593,548	20.2	24		
	1910-11	77,991	1,702,706	21.8	2 8		
	1915-16	58,636	1,345.698	23.0	2 101		
	1916 - 17	67,111	1.084.980	16.2	3 1		
	1917 - 18	82,591	1,455,111	17.6	4 7		
	1918-19	86,474	1,273,752	14.7	5 9		
	1919 - 20	76,117	586,758	7.7	5 7		
	1920 - 21	77,709	1,642,700	$21 \cdot 1$	4 05		
÷	1921 - 22	69,795	1,169,900	16.8	4 2		
	1922 - 23	74,006	1,250,800	16.9	4 5		

The cultivation of oats for grain developed rapidly in New South Wales until 1913, but has since declined. The area and yield have always been of small extent, local needs being supplied largely by importation from neighbouring States. Considerable areas, however, are sown with oats for hay and valuable crops produced. (See page 499.)

The local yield per acre is considerably below that of the important producing countries, and the total yield insignificant compared with the world production, which usually amounts to more than 4,000,000,000 bushels per year. Though most countries produce sufficient for their own requirements, considerable international trade is done in oats. The United Kingdom and France are the principal importers and Russia (formerly), but now the United States, Canada, and the Argentine are the principal world suppliers.

The return from the crop to growers in Canada and the United States may be gauged from the fact that, at farm prices, one acre of oats in the former country was, on the average (1915-19), worth £4 17s. 10d., and in the latter (1914-20) £3 16s. 6d., compared with an average of £2 11s. (1910-19) in New South Wales.

In the period 1900-09 the average consumption of oats was at the rate of 1.4 bushels per head of population. If this relationship still existed local requirements would now be, on the average, about 3 million bushels annually. It is estimated that the consumption of oats in New South Wales was 2,535,000 bushels in 1921, 2,108,000 bushels in 1922, and 2,943,000 bushels in 1923. In 1921, 892,300 bushels were imported, 939,000 bushels in 1922, and 1,692,200 bushels in 1923.

At present the market for oats is chiefly in the metropolitan district, and the demand depends mainly upon the price of maize.

BARLEY.

Barley is produced only on a moderate scale, and local supplies of barley and malt are practically all imported. Although there are several districts where the necessary conditions as to soil and drainage present inducements

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for cultivation, particularly with regard to the malting varieties, barley is grown mainly in the North-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.

	Area	Production.			Area	Production.		
Season.	under Barley for Grain.	Total.	Average per Aere.	Season.	under Barley for Grain.	Total.	Average per Acre	
	acres.	bushels.	bushels.		acres.	bushels.	bushels	
1900-01	9,435	114.228	12.1	1918-19	7,980	86,313	10.8	
1905-06	9,519	111.266	11.7	1919 - 20	5.354	38,892	7.2	
1910-11	7.082	82,005	11.6	1920 - 21	5,969	123,290	20.7	
1915 - 16	6,369	114,846	18.0	1921 - 22	5,031	83,950	16.7	
1916-17	5,195	73,370	14.1	1922 - 23	3,899	55,520	14.3	
1917-18	6,370	97,824	15.5					

The table shows considerable fluctuation as to the area cultivated, while the grain yield has varied greatly, ranging from 4 bushels per acre in 1902–3, when the crop practically failed, to the excellent rate of 21.9 bushels in 1886–7. The average crop during the last ten years has been about 15 bushels per acre.

OTHER CROPS.

Particulars are shown below of the remaining crops of the State :---

	Average	of 5 years endi June, 1922.	ing 30th	Year end	ed 30th June,	1923.
Crop.	Area.	Production.	Yield per agre.	Area.	Production.	Yield per acre.
Hav-	acres.	tons.	tons.	acres.	tons.	tons.
Wheaten	550,682	550,713	1.00	598.184	649.049	1.09
0.1	181,596	220,696	1.22	217,022	265.413	1.22
Ť.	61,247	130,669	2 13	72.427	144.611	2.00
01	2,313	2,362 £	1.02	1,824	1,906 £	1.04
Green Fodder	346,424	538,341	£1 11s.	499,714	792,122	£1 12s
Sown Grasses	1,638,622			1,925,450		
		bushels.	bushels.		bushels.	bushels.
Rye (Grain) Broom Millet—	1,420	17,933	12.6	1,379	18,990	13-8
Grain		12.855	5.4		(20.090	8.2
Grain	2,368	ewt.	ewt.	2,463	ewt.	cwt.
Fibre	2,000	11,322	4.8	-,	14,875	6.0
Root Crops-		tons.	tons.	J .	tons.	tons.
Potatoes	24,134	50,284	2.08	22,568	35,726	1.58
Other	1,140	4.098	3.60	1,092	4,155	3.80
Miscellaneous Crops-		ewt.	ewt.		ewt.	ewt.
Tobacco (Dried Lea		11.786	9.4	2,658	27,122	10.2
Sugar Cane-	-, -,	tons.	tons.		tons.	tons.
ď	5,180	130,445	25.18	5,879	147.992	-25.17
CL 1	5,983	100,110		8,704		•••
Grapes-						1
17 177	4,288	4,950	1.15	5,396	6,593	1.22
101 11 110		gallons.	gallons.	- /	gallons.	gallons
Wine Made		622,633	145		771,206	143
in monauto		tons.	tons.		tons.	tons.
For Table Use	2,120	2,475	1.17	2,189	3,513	1.60
FOI FRANC CRO	2,120	ewt.	ewt		ewt.	ewt.
For Drying Purpos	es 650	7,742	11.91	936	17,021	18.18
Young Vines	2.867	.,		5,213		
Toung Amos		£			£	
*Other Crops	14,806	698.067	£47 3s.	16,761	962,515	£57 8s.

*Made up of Market Gardens, Tomatoes, Peas and Beans, Pumpkins and Melons. Cabbages, Caellflowers, Asparagus, Cucumbers, Experimental Plots, Lucerne Seed, Nurseries and Flowers. Fodder crops are always extensive, but the areas cut for hay or used as green fodder, vary considerably from season to season. 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, and in recent years the area devoted to it has increased steadily. The area of land cultivated expressly for green fodder is not available. The area shown above, including such lands in addition to the areas which failed to mature for grain or hay, and were used as green fodder for stock. Lands sown with grasses are not usually cultivated, being used principally for grazing dairy cattle on the North Coast.

Potatoes are a staple article of diet in New South Wales, but proportions ranging from one-third to two-thirds of the local requirements have to be imported regularly from other States, principally Tasmania and Victoria. From 1919 to 1921 prices were very high, and consumption declined very rapidly. The local production in 1921–22 was only 31 per cent. of requirements, and there was a net import of 78,680 tons from other States.

Only about 10 per cent. of the tobacco and about 7 per cent. of the sugar used annually in New South Wales are grown within the State.

The vineyards of the State are not large, but new areas of considerable extent are being placed under grapes in the Murrumbidgee Irrigation Area. The most important viticultural district is in the Hunter and Manning Division. Full details of the various crops summarised above are published in the Statistical Register of New South Wales.

ENSILAGE.

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 ensilage, for use when natural pastures are exhausted. To facilitate such conservation the Department of Agriculture offers liberal assistance to farmers by erecting for them siles at actual cost, repayable by easy instalments without interest. Farmers may sink pits for the same purpose at small expense. In either case free advice concerning material and method is given by the Department.

The possession of stocks of ensilage is highly advantageous to the prosecution of dairy farming in the districts of the coast, where the climatic conditions are unfavourable to the growth of winter fodder.

The quantity of ensilage made in the State in 1922-23 was 12,191 tons, made on 116 farms, and valued at £19,338; 6,598 tons were made in coastal districts, and 3,877 tons on the Western Slopes.

The quantity of ensilage made varies considerably from year to year. The maximum production was in 1909, when 34,847 tons were made on 364 farms.

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 ensilage 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.

ORCHARDS.

In 1922-23 the area of land on which fruit (including grapes, bananas, and pineapples) was grown was 86,879 acres, and the value of fruit produced £1,698,650.

The cultivation of fruit is capable of considerable expansion. Both the soil and the climate of large areas throughout the State are well adapted to fruit-growing. A larger area of land is, however, being brought each year under fruit culture, and orchardists may obtain from the Department of Agriculture information as to the varieties which are recommended for planting in specified districts, and the prospects of ultimate success are thus greatly enhanced. With large areas of suitable soil and 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, oranges, peaches, plums, and passion-fruit are most generally planted. On the Tableland, apples, pears, apricots, and all the fruits from cool and temperate climates thrive well; in the west and in the south-west, figs, almonds, and raisin-grapes can be cultivated; and in the north coastal districts, bananas, pine-apples, and other tropical fruits grow excellently. Citrus fruits are cultivated extensively, and form the largest element in local production.

_	Area und	er Cultivatio Fruits.)	on (Citrus	Prod	uction.	Value of Production.*			
Season.	Productive.	Not bearing.			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		
1917-18	19,133	6,311	25,444	1,737,107	91	384,660	20 2 1		
1918-19	20,529	7,068	27,597	1,619,346	79	745,070	36 5 10		
1919–20	21,523	7,204	28,727	1,769,038	82	534,530	24 16 8		
192021	21,990	6,445	28,435	2,009,756	91	477,580	21 14 4		
1921-22	22,083	6,221	28,304	2,135,693	97	530,380	24 0 4		
1922-23	20,412	8,036	28,448	1,984,707	97	628,100	30 5 8		

Particulars of citrus orchards are shown in the following statement :---

* At Orchards.

Both the average yield per acre and the average value of the yield have increased very markedly. The value of citrus fruits per acre has been greater in the past five years than the value of other fruits.

The number of orchards in which citrus fruit was cultivated during the year 1922–23 was 5,907, and of these the average area was 4.8 acres.

The production of oranges and mandarins has attained such proportions that the growers are obliged to seek oversea markets, the supply, both in New South Wales and in the adjacent States, exceeding in some seasons the

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local demand. Steps are now being taken to organise the marketing of citrus products by the establishment of co-operative packing-sheds. During 1922-23 the oversea export of citrus fruits from New South Wales amounted to 43,560 centals, valued at £60,175. Approximately two-thirds of this export went to New Zealand and one-quarter to Canada and the United States.

The following table shows the area under orchards and fruit-gardens exclusive of citrus orchards, bananas and pineapples, together with the total value of each season's yield, at intervals since 1900-01 :---

_	Area under Culti	vation (Fruits other	than Citrus).	Value of	Production.		
Season.	Productive.	uctive. Not Bearing.		Total.	Average per Productive Acre		
	acres.	acres.	acres.	£	£ s, d,		
190001	25,766	5,503	31,269	270,081	÷10°10 0		
191 0–11	20,498	6,748	27,246	271,930	13 5 4		
1917-18	22,121	13,784	35,9 05	378,552	17 2 3		
1918-19	23, 795	12,970	36,765	586,470	.24 12 11		
1919-20	25,688	13,978	39,666	557,130	21 13 9		
1920-21	27,368	14,309	41,677	578,980	21 3 1		
1921-22	27,858	14,085	4 1,943	550,280	19 15 1		
1922-23	26,327	14,513	40,840	737,080	28 0 0		

Approximately one-fifth of the area devoted to fruit culture is in the county of Cumberland. At the Murrumbidgee irrigation settlement fruit-trees are being planted very extensively, especially peaches, apricots, and oranges.*

With the exception of oranges and mandarins, the fruit-production of New South Wales is far below average demands. In 1922-23 the quantity of fruit imported at Sydney by sea from other States was 1,549,185 cases, valued at £487,851. The value of fruit used for jam and fruit-canning in factories in New South Wales during 1922-23 was £190,767. Fresh fruit to the value of £98,807 was exported oversea in 1922-23 in addition to preserved fruit, pulp and juice valued at £64,509. Good seasons are rewarded by a glut of fruit, for which, apparently, there is no system of efficient handling; and while consumers are anxious to secure supplies of sound fruit, much of the produce is allowed to be wasted. The condition of the industry was investigated by the Select Committee on Agriculture in 1921, and much valuable information is contained in the report of that committee and the evidence taken by it.

*See pages 510 and 511.

AGRICULTUR 5.

· · · · · · · · · · · · · · · · · · ·								
		· · ·	1921-22.		· ·	1922+23.		
Fruit.		Number of Trees not	Trees of Be	Trees of Bearing Age.		Trees of Bearing Age.		
		yet Bearing.	Number.	Yield.	yet Bearing.	Number.	Yield.	
Oranges-	· · ·			bushels.			bushels.	
Seville	••••	24,581	79,462	78,212	14,112	38,914	42,923	
Washington	Navel	145,606	272,395	281,803	195,817	235,992	247,187	
Valencia		344,226	357,217	379,312	.221,098	389,980	403,908	
All other		82,645	547,476	596,301	72,758	506,180	557,928	
Lerrons		60,968	217,387	303,356	121,383	200,183	231,396	
Mandarins	•••	103,963	432,033	486,001	150,577	463,928	491,992	
Other Citrus		3,625	9,648	10,708	3,902	9,206	9,373	
Apples		387,282	774,365	528,712	378,662	708,064	723,522	
Pears-								
Williams		89,281	169,211	139,767	63,733	126,533	116,982	
All other		62,328	75,058	65,168	82,232	108,330	86,362	
Peaches-								
Early		82,991	457,519	439,519	64,422	343,462	370,887	
Canning		95,896	225,362	275,632	103,706	212,079	306,854	
Nectarines		10,310	31,269	27,548	9,805	30,026	31,526	
Plums		95,794	165,402	156,693	84,551	203,556	187,373	
Prunes		253,523	66,675	61,497	234,302	76,234	55,431	
Cherries	••• •••	90,711	165,670	66,796	89,551	152,380	82,217	
Apricots		52,571	106,053	112,866	63,941	123,468	163,382	
Quinces		9,820	22,681	30,963	11,768	33,023	32,611	
Persimmons		1,968	8,579	9,391	4,333	.14,001	12,105	
Passion Fruit		*52,972	*101,960	39,246	88,043	185,757	48,220	
†All other	•••			18,404			26,964	

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 :---

* Vines. + Excludes bananas and pineapples.

The above figures include returns from private orchards, which are, however, of comparatively small extent, ranging from 2 per cent. of the total orchards, in the case of citrus fruits, up to about 8 per cent. in the case of some stone-fruits.

Banana culture is an important industry in the Tweed River district of the North Coast division, but it is seriously menaced by a disease known as "bunchy top." In 1922–1923 the total area cultivated for bananas was 3,807 acres, a decrease of 1,661 acres since the preceding season; 3,300 acres were productive and yielded 233,526 cases of bananas, valued at £151,740, a decrease of 200,007 cases and £108,380 respectively since 1921–22. In 1922–23 the imports of bananas inter-State by sea amounted to 2,068 cases, valued at £1,240; the imports oversea were 352 cases, valued at £134.

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.

Kind and Variety.	Trees of Bearing Age.	Young Trees not Bearing.	Kind and Variety.		Trees of Bearing Age.	Young Trees not Bearing.
Apples— Granny Smith	No. 127,880	No. 88,700	Apricots Trevatt		No. 36,700	No. 47,000
Jonathan London Pippin (Five	140,500	63,200	Moorpark Newcastle	···· ····	31,300 12,100	4,400 1,700
Crown) Rome Beauty Carrington	$93,000 \\ 47,800 \\ 44,500$	$19,800 \\ 20,000 \\ 2,800$	All Varieties		127,300	61,000
All Varieties	698,400	310,200	Cherries— St. Marguerite		43,200	26,800
	`		Early Lyons Florence		$25,300 \\ 21,900$	12,300 8,900
Pears Williams (Bartlett)	100,400	34,500	All Varieties		156,700	78,600
Parkham's Triumph Winter Cole	38,900 21,800	24,000 7,700	Nectarines		10,200	5,400
All Varieties	250,400	121,700	All Varieties		27,600	8,500
Valencia Late Washington Navel Parramatta	385,300 227,100 244,400 52,200	205,000 190,700 11,600 21,100	Peaches— Elberta Pullar's Cling Brigg's Red May Golden Queen	···· ····	$143,400\\60,000\\32,300\\14,800$	$15,800 \\ 20,600 \\ 2,500 \\ 26,600$
Joppa All Varieties	$\frac{52,200}{1,151,500}$	474,300	All Varieties	••••	521,200	136,800
Mandarins — Emperor ·	432,700	133,200	Plums and Prunes— Prune d'Ogen Robe de Sergeant President	•••• ••••	34,300 28,900 23,500	132,100 83,200 19,300
All Varieties	469,600	143,900	All Varieties		198,600	277,100
Lemons Lisbon Sweet Rind	99,200 76,600	23,700 32,700	Plums (Japanese) Satsume (Blood) Wiekson Burbank	 	21,100 14,400 10,400	4,500 2,300 1,300
All Varieties	192,700	62,600	All Varieties		97,700	20,200

In some cases the variety of a considerable number of trees was not specified, and this factor affects the accuracy of the results.

Commonwealth Fruit Bounty.

Owing to the inability of the canning factories in Australia to purchase and dispose of the soft fruits available, the Commonwealth Government established what were termed "fruit pools" in the years 1920-21, 1921-22, and 1922-23. In effect the Government bought the fruit, processed it and sold it, thus financing the industry of fruit-growing over the very difficult period of post-war adjustments. The very weak local demand for canned fruits rendered large exports necessary, and as the British market proved very unfavourable in 1921-22 and the costs of canning were high, considerable losses were sustained. It is estimated that these were £88,000 in 1920-21, £370,000 in 1921-22, and £160,00 in 1922-23, or a total of £618,000.

The large stocks which had accumulated were practically cleared by the end of 1923, when the new season commenced.

Local consumption had improved rapidly after the middle of 1923, and in the 1923-24 season a change of policy was effected. The "pool" was discontinued and a bounty placed upon the production of canned fruits. The rates of bounty per dozen 30-oz. tins were as follow :--Apricots, 9d., with an additional bounty of 1s. 8d. on exports; peaches (clingstone), 9d. and 1s. 9d. respectively; pears, 9d. and 1s. 6d.; pineapples, 6d. and 1s., and peaches (freestone), 10d. with no addition for export. The canner receiving bounty is required to pay the growers a minimum of £10 per ton for apricots or pears, £9 for elingstone peaches, £7 for freestone peaches, and £6 for pineapples, in addition to rail freight. For the season 1923-24 approximately 20,500 tons of fruit (exclusive of 4,845 tons of summer pineapples) were canned in thirty-six factories in Australia under the bounty scheme, the amount of bounty paid being approximately £120,000.

The following statement shows the quantity and value of fruit canned in New South Wales during each of the past five years :----

	Fruit	Preserved,
Year.	Quantity.	Value at Cannery
	lb.	£
.918–19	5,237,491	196,057
.919-20	10,447,719	317,299
920-21	5,287,069	195,939
921-22	7,967,785	207,823
922-23	10,886,367	278,506

WATER CONSERVATION AND IRRIGATION.

The smallness and intermittency of the rainfall and the high evaporation over a wide area of New South Wales necessitate and at the same time restrict the work of conserving water for agricultural and pastoral purposes. On page 12 it is shown that approximately 78,250,000 acres of land in the western parts of the State—comprising nearly 40 per cent. of its total area receive an average annual rainfall of 15 inches or less. The possibilities of irrigation over this wide area are still further limited (except in the extreme south) by the lack of large permanent streams of water. For this reason not only agricultural but also pastoral activities are restricted on these lands, which embrace mostly the plains of the Western Division.

Adjoining these on the east is a strip of territory varying from about 50 to 150 miles in width, stretching through the whole length of the Central Plains and Riverina, and containing approximately 37,000,000 acres of land (18.6 per cent. of the area of the State) which receives on the average from 15 to 20 inches of rain per year. It is principally in this region, in more favoured districts further east, and in the Murray Valley to the south, that irrigation schemes have been put forward to supplement the deficient rainfall.

Across the northern and north-western hinterland there stretches an artesian water basin of 53,000,000 acres, and in the south-western corner there exists a sub-artesian basin rather smaller in extent. Artesian bores and wells have made this water available at a considerable number of places.

At 30th June, 1923, there were 2,252 irrigation farms on areas controlled by the State and about 1,696 operating under pumping licenses.

The relation of rainfall to productivity in the various districts of the State is discussed further in part "Rural Settlement" of this Year Book.

Policy and Control.

The initiation of successful irrigation projects necessitates exhaustive preliminary investigations, frequently over long periods, into the amount of rainfall, evaporation, river flow, seepage, etc., as well as the making of contour surveys and investigations by boring and the compilation of records.

The successful conduct of schemes involves constructional work of all kinds, provision and control of settlements, of community services, of factories for handling products, of finance and other important matters. The whole of these functions have been entrusted to the Water Conservation and Irrigation Commission, consisting of three members, including the Minister for Agriculture. This Commission controls the whole of the waterworks of the State (other than town and domestic supplies), except the storage works under construction in connection with the Murray River, which are supervised by an Interstate Commission, upon which a member of the New South Wales Commission sits.

Private waterworks are controlled for the most part under the Water Act, 1912, which consolidates the Acts relating to water rights, water and drainage, drainage promotion, and artesian wells. Part II of the Act vests in the Crown the right to the use, flow, and control of the water in all rivers and lakes which flow through or past or are situated within the land of two or more occupiers. Private rights have been abolished, and a system of

licenses established for the protection of private works, of water conservation, irrigation, and drainage, and the prevention of inundation of land.

Expenditure on Water Conservation and Irrigation Projects.

The expenditure by the State during 1922–23 on water conservation and irrigation projects and on administration and advances to settlers on irrigation areas is shown below :---

Heading.	Expenditure.*	Receipts, Repayments by Settlers, etc.	Net Expenditure.*
General Loan Account—	£	£	£
Burrinjuck Dam and Murrum- bidgee Irrigation Areas	264,407	68,032	196,375
Returned Soldiers' Settlement.			584,881
Curlings Invigation Area	731,833 3,208	$\begin{array}{r}146,952\\322\end{array}$	2,886
Doon Dowing	10,146	639	9,507
Shallow Boring	40,594	26,129	14,465
Total	1,050,188	242,074	808,114
Consolidated Revenue Fund- Salaries, Contingencies, etc	67,003)
Works, Investigation, Ad- vances, etc	18,406	•••	} 75,673
and Repayments	•••	9,736	J
Total	85,409	9,736	75,673
Public Works Fund Wentworth Irrigation Area	1,970		1,970
Grand total,	1,137,567	251,810	885,757

* Including advances to settlers.

In addition, New South Wales contributed a sum of $\pounds 216,026$ in 1922–23 for expenditure in connection with the River Murray Scheme, making a total net expenditure for the year of $\pounds 1,101,783$. A considerable proportion of this amount consisted of advances to settlers.

It is not possible to state the total amount of capital expenditure by the Government of New South Wales on irrigation and water conservation projects for farming purposes (as distinct from town supplies), but the following are particulars of certain items of capital expenditure to 30th June, 1923, omitting from account certain expenditure on investigations, etc.

Works.	Gross capital. expenditure.
Burrinjuck Dam and Murrumbidgee Irrigation	£
Areas*	7,691,970
Hume Reservoir and Murray River	536,093
Hay Irrigation Area, 1912-1923	12,237
Wentworth Irrigation Area (Curlwaa)	42,934
Deep Boringt	726,954
Shallow Boring	201,830
Weirs, &c., for Water Trusts	38,593
Weirs, Cuttings, &c. (National Works)	173,662
Total	9,424,273

* Including £1,613,158 outstanding advances to settlers.

† Including bores which failed.

IRRIGATION SETTLEMENTS.

The Murrumbidgee Irrigation Areas.

A large storage dam, capable of holding 771,640 acre-feet of water, has been constructed at the head of the Murrumbidgee River, to retain the flood waters, which are released for use 250 miles lower down the river on the extensive irrigation areas of Yanco and Mirrool. A movable diversion weir has been provided about 240 miles below the dam, to turn the required amount of water from the river into the main canal leading to the irrigation settlements. Particulars of the extent of the dam were published in the Year Book, 1921.

At 30th June, 1923, there were under occupation 2,064 farms, covering a total area of 119,610 acres, or more than one-fourth of the total area to be embraced in the completed scheme. It was proposed at the beginning of 1923 to make available an additional 2,700 farms within the next five years by the expenditure of £500,000 per annum. With the aid of irrigation the soil and climate are suitable for the profitable production of apricots, peaches, nectarines, prunes, pears, plums, certain varieties of apples, almonds, melons, cantaloupes, and citrus fruits; also wine and table grapes, raisins, sultanas, figs, olives, and most varieties of vegetables and fodder crops. Dairying and pig-raising are being conducted successfully by settlers in the areas, and stock are raised in the drier parts.

Farms varying in size from 1 acre to 250 acres are made available from time to time. The average agricultural farm is from 15 to 25 acres in extent, but to suit the requirements of dairymen and other stock farmers, blocks of larger areas have been made available. These include non-irrigable or "dry" areas, in addition to the irrigable portion. The tenure of all farms is perpetual leasehold, involving residence. The farmer may transfer his lease after five years' occupation. A specified number of acre-feet of water is allotted at a fixed charge to each holding. In 1922–23 the quantity of water distributed was 101,750 acre-feet, and the total charge £32,385. An aere-foot of water means such a quantity as would cover one acre with water 12 inches deep.

Subject to such conditions as to security and terms of repayment as the Commission may require, settlers may obtain an advance, or have suspended the payment of amounts owing. Such advances are limited to the total amount of funds made available by Parliament for this purpose. At 30th June, 1923, the amount of such advances outstanding was £1,613,158. The Rural Bank Commissioners also have statutory powers to make loans upon mortgage of irrigation farm leases. Financial assistance is provided for the settlement of returned soldiers.

To 30th June, 1923, the Commission had erected 113 dwellings, at a total cost of £86,576, and 65 other buildings were under the control of the Commission.

Towns and villages have been established at convenient centres on the Yanco and Mirrool irrigation areas. The principal settlements are Leeton, Griffith, Yanco and Yenda. At present the Commission performs municipal functions, but a project to establish Local Government areas in the form of shires, or alternatively to empower the Commission to impose certain rates, is receiving consideration.

Abattoirs, and butter, cheese, bacon, and fruit-canning tactories were established on the areas by the Commission to treat the produce of the settlers. The butter and bacon factories and the abattoirs were sold to co-operative societies on 1st July, 1921, and are now operated by the settlers. In 1922–23 there was a heavy reduction in the prices received for products, but the cannery made a profit of £296, after paying interest and depreciation.

WATER CONSERVATION.

The net loss of the Commission on its trading ventures during 1922-23 was £12,700 after paying £28,626 for interest and £24,424 for depreciation. In addition to industrial undertakings, the Commission has undertaken to provide such municipal services as domestic water and electricity supplies, accommodation houses, and to supervise matters of health and sanitation, besides engaging in trading operations to supply settlers with live-stock, stores, and nursery stock. Co-operative enterprise, however, is receiving every encouragement, and a number of co-operative organisations have been established to handle produce and supply the settlers' requirements.

The State nurseries at Leeton and Griffith supply fruit and other trees to the settlers, and an experiment farm is maintained at Yanco under the control of the Department of Agriculture; also a viticultural nursery at Griffith (in the Mirrool irrigation area) for the propagation of vines on phylloxera-resistant stocks. An Agricultural High School has been established by the Department of Education at North Yanco on the irrigated area.

During the season 1922-23 the total area of crops irrigated was 60,816 acres, including 16,635 acres of grass, stubble, etc., 11,290 acres of oats, 5,671 acres of stone fruit, 4,420 acres of luceme, 4,240 acres of wheat, 4,183 acres of vines, and 3,846 acres of citrus fruits. The average amount of water used per acre 1.7 acre-feet. Details of production will be found in a statement on the next page.

Hay Irrigation Area.

The irrigation area at Hay, on the Murrumbidgee River, consists of about 4,500 acres of land, part of which was made available in 1893. Prior to 30th June, 1912, the area was controlled by a trust appointed in 1897. It was placed under the control of the Commissioner of Water Conservation and Irrigation on 1st July, 1913. The area used for irrigation purposes on 30th June, 1923, was 1,035 acres, held by 65 settlers, in 108 irrigation blocks, ranging from 3 acres to 34 acres in size; generally the term of lease is thirty years, and the annual rental from 5s, to 12s. per acre. In addition, 2,698 acres of non-irrigated land had been taken up in 48 blocks for short terms up to five years' duration. The water-rate is fixed from time to time; during 1922-23 it was 30s. per acre per annum. The pumping machinery consists of a suction-gas plant, supplying two engines of about 55-brake horse-power each, working two centrifugal pumps, with an average combined capacity of about 4,000 gallons per minute. Dairying and pig-raising are the principal industries, the cultivation of fruit being very limited. The expenditure by the State for the year 1922-23 was £2,437 and the revenue £2,392.

Curlwaa Irrigation Area.

The Curlwaa irrigation area, situated at Wentworth, consists of 10,600 acres, made available in 1894, of which 1,945 acres were held in 146 irrigated holdings by 123 settlers on 30th June, 1923. Practically the whole of this area had been taken up in areas varying from 1½ acres to 37 acres. There are a number of non-irrigated blocks containing 7,718 acres. The remainder of the area was common land, about to be subdivided. During the year 1922-23 the area under fruit was 1,442 acres, of which 923 acres were bearing. Oranges, peaches, apricots, nectarines, pears, grapes, sultanas, and currants are grown, and it has been proved that the Curlwaa soil is eminently suited to fruit culture, some of the finest oranges grown in New South Wales being the product of this locality.

The pumping plant consists of a suction-gas engine of 120 horse-power, driving an 18-inch centrifugal pump, having a maximum capacity of 8,000 gallons per minute. The main channels measure about 9 miles and 10 chains in length.

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The land is leased for periods not exceeding thirty years, the annual rent at the present time varying generally from 1s. to 10s. per acre, though the rent is as much as 35s, per acre on blocks set apart in recent years. The rate for water is fixed from time to time by the Commission and is at present 20s. per acre per annum, except in a few special cases, and there is in addition a general rate of 10s. per acre in productive bearing. Each lessee is entitled to receive a quantity of water equivalent to a depth of 30 inches per annum, limited to 4 inches in any one month. During the year 1922-23 receipts were £1,370 less than expenditure.

The rainfall in the year ended 30th June, 1923, was below the average, being $9\frac{1}{4}$ inches, and the quantity of water pumped from the Murray River was 5,624 acre-feet.

PROGRESS OF IRRIGATION SETTLEMENTS.

Comparative statistics of the irrigation settlements 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:---

				1922	2–23.	
Particulars.	1910-11.	1915–16.	Murrum- bidgee.	Hay.	Curlwaa.	Total.
						• .
· · · · · ·			1 495	7	120	1,562
ultivated Holdings No	b. 86	771	1,435		120	1,004
rea under-			44,622	118	1.498	46.23
Crop Acre		22,488	44,022	110	1,400	4,05
Grain ,,		4,287			54	24,83
Hay and Green Food ,	399	13,631	24,683	90	- J	24,00
Grape Vines-	100	0.70	1,733		455	2,18
- Bearing ,				•••	290	3,26
Not yet Bearing ,	, 74	486	2,977	•••	230	5,20
Orchards—			5,286	18	468	5.77
Bearing , ,	, 58	440		2	1	5,86
Not yet Bearing	, 139	2,896	5,631	ے _	220	0,00
ive Stock—			0 = 19	161	356	7,23
Horses N	o. 239	3,300	6,713	100	300	1,20
Cattle—			*0.051	*532	*33	*6,8
Dairy ,	, 484					,ai
Other ,	, 530			451		6,80
Sheep ,	, 703		11,664	5,884	1	17,94
Swine ,	, 134	2,799	3,554	87	20	3,66
Production-						00 0
Wine gs	ul	650		•••		98,0
Sultanas cw	t.)	1 2,778		•••	4,123	7,29
Raisins ,	, <u>}</u> 1,009			•••	2,322	2,9
~ .	.)	(1,848	868	° • • • .	4,376	5,2
Oranges—						
Seville bus	h.)		(850	126		9
Washington Navel "	278	4,988) 70,145		23,362	93,5
Valencia, ,,		, 1,000	1 11,00.	10		45,5
All other ,,).		(9,003		703	9,7
Peaches						
Early ,,			(47,269	20		88,1
Canning	2,46	7 25,86		·	2,945	
Nectarines	1)		(4,237	5		6,0
Apricots ,,	2.90	5 10,690	96,930	20		
Milk g	al. 171,61	9 504,18]	12,013,069	118,79		2,160.8
	1b. 5,10	0 12,92	3 46,808	4,20	5 3,120	
	,, 82	0 8,86	5 11,866			11,8
Ducon and Linne (or think)	· · · ·			1	1	1

* Cows in Registered Dairies only.

The area devoted to fruit-growing is increasing steadily, but the orchards planted on more than half of the area have not yet reached the stage of production. 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 :---

·				1910-11.		191	5-16.	1922	-23.
	Fruit trees.			Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.	Pro- ductive.	Not yet Bearing.
Orange-	Seville	* 1 -1	•••	٦.				1,035	900
	Washington	Navel		202	3,606	6,509	67,020	∤ 82,99 9	124,550
	Valencia	· ••3	·••					43,536	72,049
	All other			119	136	439	9,388	9,276	4,370
Peach	Early		••••					(39,465	9,500
	Canning			1,752	4,503	16,812	101,113	{ 132,131	93,288
	Nectarine	•••		J				5,167	3,639
Apricot				2,033	2,969	5,927	42,066	67,939	52,047
Prune		•••		••	••••	•••	10,290	39,278	82,984
Plum		•••		98	282	682	5,897	10,978	3,647
Pear —	Williams	•••				2.070		(14,187	10 ,6 72
	Other			$\left\{ \begin{array}{c} 165 \\ \end{array} \right\}$	1,096	2,278	14,336	7,436	4,661
Apple			••••	400	718	1,256	3,065	6,206	22,530
Fig	••••	•••	•••	201	38	303	3,395	2,228	210
Almond	••• •••	•••	••••		140	582	5,446	9,662	9,864

It is noteworthy that while the growing of oranges is the most extensive activity, the development of peach-growing, especially for canning, has been very rapid, and that apricots, prunes, pears, and apples are also receiving considerable attention.

IRRIGATION PROJECTS.

Murray River.

This scheme is being carried out under agreement between representatives of the Commonwealth, New South Wales, Victorian and South Australian Governments, signed on 9th September, 1914, and an amending agreement, signed on 23rd November, 1920.

The outstanding matters provided by the original and amending agreements were :-(a) Provision of water for irrigation purposes; (b) preservation of facilities for navigation; (c) allotment of equitable proportions of the available

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water for use by settlers in New South Wales, Victoria, and South Australia; (d) equal apportionment of the costs between the four Governments ratifying the agreement; (e) the appointment of a joint commission to carry the agreement into effect. In 1922 a proposal was made to use the Hume Reservoir for hydro-electric development. The proposal is now under consideration.

The scheme agreed upon provides for the construction of (a) a dam and storage reservoir to be known as Hume Reservoir, with a capacity of one million acre-feet of water, at a cost of £1,353,000, situated on the Murray River 10 miles above the town of Albury; from this reservoir waters are to be released to supply the needs of irrigation settlements in New South Wales and Victoria, and to provide sufficient waters for permanent navigation on the river; (b) for storage works in connection with Lake Victoria near the western boundary of New South Wales, with a capacity of 500,000 acre-feet, at a revised cost of £320,066-the waters so impounded are to be utilised for irrigation purposes in South Australia, and to maintain the flow of the river for navigation purposes; (c) thirty-five weirs and locks, at intervals along the river and its tributaries, to control the flow of the river. The total cost of all joint works agreed upon was estimated originally at approximately £4,663,000, of which rather less than one-fourth is to be contributed by the Commonwealth Government, the remainder to be paid in equal proportions by the three State Governments concerned, each of which is a constructing authority for specified portions of works.

When the scheme is carried out the river will be " canalised," or converted into " a succession of pools," whose levels may be regulated so that they will furnish permanent supplies for irrigation, as well as a means of navigation on the most important waterway of Australia. A minimum depth of 5 feet of water will be maintained as far as Echuca, the present head of navigation. The allotment of the available water to the respective states was approximately two-fifths of the total each to New South Wales and Victoria, and one-fifth to South Australia.

The total area of land irrigable from the River Murray and its tributaries is estimated to be approximately 1,500,000 acres, and, an investigation is in progress to determine how the irrigable lands of New South Wales may be used most profitably.

The agreement was brought into operation on 31st January, 1917, and it was provided that the works were to be completed within twelve years of that date. Though minor operations on locks and weirs had been carried out in South Australia, construction of the main reservoir was not begun until the 28th November, 1919. It was stated in the report of the River Murray Commission (1920-21) that the work cannot be completed within the prescribed time. At 30th June, 1923, the Lake Victoria storage was sufficiently advanced to hold 200,000 acre-feet of water.

Considerable progress has now been made in the work of construction, and the total expenditure by all governments in connection with the scheme during 1922-23 was £833,235; the total expenditure to 30th June, 1923, was £2,081,569, of which amounts £216,026 and £519,720 respectively were contributed by New South Wales.

To 30th June, 1923, a sum of £743,363 had been expended on the Hume Reservoir, and £263,405 on the Lake Victoria storage.

WATER CONSERVATION.

The proposed expenditure for 1923-24 was £1,039,000, of which £272,062 was to be contributed by New South Wales. £525,000 was to be spent on the Hume Reservoir, and £80,000 on Lake Victoria storage.

The outflow of the Murray River at Renmark is on an average 8,500,000 acre-feet per year. In 1922-23, 573,310 acre-feet of water were artificially diverted from the river in New South Wales; 912,260 in Victoria, and 76,495 in South Australia.

Lachlan River.

Investigations into the irrigation possibilities in connection with this river have been conducted for a number of years, and in 1922 a full report was prepared by the Water Conservation and Irrigation Commission.

Two separate proposals were considered—the Wyangala Dam (situated 14 miles west of Cowra), to provide a storage of 273,694 acre-feet of water at an estimated cost of £1,312,000, including resumptions, and a proposal to increase the present storage at Lake Cudgellico from 28,643 acre-feet to 46,689 acre-feet at an estimated cost of £69,000, including land resumptions. The storage at the Wyangala Dam would be equal to 35 per cent. of that of Burrinjuck.

The absence of snow in the catchment area would leave the scheme entirely dependent upon intermittent rainfall, but under the Wyangala scheme the flow of the river could be made more regular.

Macquarie and Namoi Rivers.

A suitable site for a dam on the Macquarie River has been located at Burrendong, a short distance below the junction with the Cudgegong River, and the storage possibilities have been investigated. The capacity of the dam would be 407,000 acre-feet with water stored to a maximum depth of 120 feet; but if this were increased to 150 feet the storage would be 797,000 acre-feet.

Investigations are being made in respect of the Namoi and Peel Rivers. Sites at Blue Hole, above Manilla, and Keepit, near the junction of the Peel River, are being considered in connection with the Namoi River, and at Bowling Alley Point in connection with the Peel River.

WATERWORKS.

Provision is made by the Water Act, 1912, 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, 1923, 226 applications were received for new licenses, and 127 for the renewal of existing licenses; at the date mentioned 1,696 licenses were in force for pumps, dams, and other works, small fees being charged in each case.

Water Trusts and Bore Trusts.

Part III of the Water Act, 1912, empowers the State to construct works to provide supplies of water for irrigation, stock, or domestic purposes, and for drainage. The capital cost of such works are repaid by beneficiaries, with interest in instalments spread over a period of years. The works are administered by trustees appointed from among the beneficiaries under the Act, except in the case of trusts in the Western Division, when the Western Land Board is appointed as trustee.

For the supply of water under these conditions works have been carried out by the State, and local trusts have been constituted in connection with (a) 12 artesian wells, embracing an area of 324,947 acres, with 108 miles of drains; 63 artesian bores, embracing 4,171,852 acres, with 2,660 miles of drains, and 4 bores whose works are not yet completed; (b) 9 schemes for the improvement of natural off-takes of effluent channels, for the purpose of diverting supplies from the main rivers, the trust districts embracing 1,608,715 acres, and 5 similar schemes relating to 1,571,520 acres, whose works are incomplete.

The area included within these trusts is 7,814,657 acres.

The bores which are controlled by trusts are constructed by the Government, to whom the cost is repaid by the residents in instalments extending over 28 years. The rates levied by the trusts in their districts range from 1.06d. to 4.0d. per acre, and generally are between 14d. and 2d. per acre.

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**, 1923 :--

Bores.	Flowing.	Pumping.	Total.	Total Depth.
For Public Watering-places, Artesian Wells, etc. For Country Towns Water Supply For Improvement Leases	130 3 27	36 1 3	166 4 30	feet. 340,641 6,533 47,289
Total, Government Bores	160	40	200	394,463
Private Bores	224	84	308	454,638

The average depth of Government bores is 1,972 feet, and of private bores 1,476 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 891,180 gallons; another at Dolgelly has a depth of 4,086 feet, and a discharge of 520,010 gallons per day. The largest outflow at the present time is at the Wirrah bore, in the county of Benarba, which yields 1,027,366 gallons a day, and has a depth of 3,578 feet. Of the 556 bores which have been sunk, 384 are flowing, and 377 of these give an aggregate discharge of 82,731,703 gallons per day; 124 bores give a pumping supply, the balance of 48 being failures. The total depth bored is 910,043 feet.

The flow from 77 bores is utilised for supplying water for stock on holdings served in connection with bore-water trusts and artesian districts under the Water Act of 1912. The total flow from these bores amounts to 32,790,169 gallons per day, watering an area of 4,496,799 acres by means of 2,768 miles of distributing channels. The average rating by the bore trusts to repay the capital cost, with 4 per cent. interest, in twenty-eight years, is 1.5d. 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. It is anticipated that this action will materially reduce the rate of decrease in the future.

Private Artesian Bores.

Much has been done in the way of artesian boring by private enterprise. So far as can be ascertained, 332 private bores have been undertaken in New South Wales, of which 24 were failures. The yield of the flowing bores is estimated at 37 million gallons per day. No data are available regarding the pumping bores.

Shallow Boring.

Arrangements were made by the Government in 1912 to assist settlers by sinking shallow bores, and the scheme, which was described fully in the 1916 issue of this Year Book, has met with considerable success. Operations were commenced with one plant only, but the number has been increased gradually and 29 are now at work. During the year 1922–23, no less than 414 new applications were received for use of the plant of the Commission, and 221 bores were completed during the year.

Up to the 30th June, 1923, 1,193 bores had been sunk, but 209 proved failures, the total cost being £201,830. The total depth bored was 326,349 feet, the greatest depth of any bore being 1,000 feet. During the year £40,594 was expended on shallow boring operations, and £26,129 was repaid by settlers to the Government. The operations of the year resulted in a trading profit of £5,476, excluding concessions to settlers amounting to £2,800.

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. The fact that 52 of the bores put down in the Pilliga Scrub are giving a flowing supply is of special interest, as it indicates the possibility of tapping a small and hitherto unknown artesian basin.

Growth of Artesian Boring.

The rapid development which has occurred in utilising the underground water resources of the State in the past ten years is evident from the fact that the number of successful bores of all kinds increased from 458 in 1911 to 1,492 in 1923.

MINING INDUSTRY.

NEW SOUTH WALES contains extensive mineral deposits of great value and variety. Coal was discovered as early as 1797, 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 and coal and silver-lead have proved to be the richest sources of mineral production.

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.

Supervision of Mining, etc.

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.

LAND OCCUPIED FOR MINING.

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 rights 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 1923 was 10,477, and of business licenses 398. These figures show a marked decline in comparison with those for the year 1913 when 17,766 miners' rights and 1,039 business licenses were issued.

*46121-A

Crown lands may be granted as mining leases, which authorise mining on the land, and 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, 1 acre; gold, 25 acres; coal, shale, mineral oils, petroleum, or natural gas, 640 acres; other minerals, 60 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:—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.

Private Crown Lands. Nature of Holding. Total. Lands. acres. acres. acres. Leases-Mining ... 242,771 49,441 292.212 Mining Purposes 6,281 699 6,980 Dredging 721* 721 ••• ••• 70,505 Agreements 70,505 • • • ••• 86,630 86,630 Authority to Enter ••• 9.179 9,179 *** * 10,758 10,758 ••• ... *** Applications for Leases-121,889 34,175 87.714 Mining • •• Mining Purposes 1,596 948 648 Applications for Authority to Prospect 15,415 15.415... ... • * * Other Mining Titles 1,666* 1,666 321.914 295,637 617.551 Topal

The area under mining occupation in New South Wales at 31st December, 1923, was approximately 617,551 acres, made up as follows :---

* 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 rents for dredging leases are 2s. 6d. per acre in respect of Crown lands, and as assessed by the Warden 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.

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 1923 was £144,206, of which £201 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 to prospectors for the various minerals. The figures are for calendar years from 1887 to 1895, and thereafter for the years ended 30th June :---

		An	ounts allot	ted to Pros	pectors for	•— ·	
Period.	Gold.	Silver and Lead,	Copper.	Tin,	Coal.	Other Minerals.	Total.
	£	£	£	£	£	£	£
1887-1889	26,332	886	138	34	338	283	28,011
1890-1894	111,878	7.254	1,367	1.261	3,752	3,283	128,795
1895-1900	107,581	4.886	7.762	3,389	-,,	4,021	127,639
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	7,375	889	1,330	901	863	1,286	12,644
1922	9,052	1,537	1,250	1,663	850	659	15,011
1923	7,013	1,727	410	1,559	····	341	11,050
Total	471,874	42,155	62,154	29,629	6,243	22,840	634,895

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 1923 in encouraging prospecting was £542,049.

The Commonwealth Government has offered a reward of $\pounds 50,000$ for the discovery of petroleum oil in Australia. The Government of New South Wales has offered a reward of $\pounds 1,000$ for the discovery of a new mineral field, and has promised a bonus of $\pounds 10,000$ for the production of 100,000 gallons of petroleum in the State.

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

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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 last five years:—

e serie Literation	Coal and	Other Mines.								
Year.	Shale Mines.	Gold.	Silver, Lead, and Zinc.	Copper.	Tin.	Other.	Total.	number of men employed.		
1919	17.658	1,656	4,286	1,148	2,171	2,150	11,411	29,069		
1920	19,395	1,712	1,541	583	1,822	2,220	7,878	27,273		
1921	20,973	952	2,035	68	1,169	865	5,089	26,062		
1922	21,704	715	1,732	52	751	866	4,116	25,820		
1923	23,054	585	2,405	40	702	1,339	5,071	28,125		

The number of coal and shale miners has increased in each year of the period, but there has been a marked decline in the number of gold, copper, and tin miners. The decreases may not have been so great as indicated, because it is probable that the figures for the years 1919 and 1920 are overstated, the gross number of miners being included in some cases instead of the average number employed. The figures for later years represent the sum of the average number employed at each mine in operation. During 1923 there was a substantial increase in the number persons employed in silver, lead, and zinc mining as compared with the number in the previous year.

The number employed in each of the last three years, as stated above, includes "fossickers," viz.: 450 in 1921, 560 in 1922, and 358 in 1923. Their output was small and it is probable that they were not wholly engaged in mining.

The value of the machinery used in connection with mining in each of the three years 1921-23 is shown below :----

		1921.	· ·	<u>.</u>	1922.	-	1923.		
Machinery.	Coal and Shale Mines.	Other Mines.	Total.	Coal and Shale. Mines.	Other Mines.	Total.	Coal and Shale Mines.	Other Mines,	Total.
	£000£	£000	£000	£000	£000	£000	£000	£000	£000
Winning, Weighing Ventilating, etc		925	4,540	3,713	798	4,511	4,075	1,090	5,165
Hauling to Wharf or Railway Other	2,561	123 434	2,684 895	$2,573 \\ 568$	$\frac{116}{375}$	$2,689 \\ 943$	$2,682 \\ 448$	169 309	2,851 757
Total	6,637	1,482	8,119	6,854	1,289	8,143	7,205	1,568	8,773

The value of the machinery employed in mining operations during 1923 represented 59 per cent. of the total value; 33 per cent. was used for transporting the minerals from the surface of the mine to a wharf or railway station. In some cases mine owners have constructed railway lines for the purpose of connecting the mines with the State railway system or with wharves,

MINING INDUSTRY.

particulars being shown on page 134 of this Year Book. Machinery is used extensively in the coal mines, where 2,164,912 tons, or 22 per cent. of the total output, were cut by machines during 1923. Of 313 machines in use, 149 were operated by electricity, and 164 by compressed air.

PRICES OF MINERALS.

The prices of the principal metals are regulated by the world's production in relation to the world's demands, as the local demand is 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.	£sd	£ s. d.
1914	2 1.3	18 13 9	23 6 8	59 11 3	151 2 9
1915	1 11.7	22 17 8	66 13 8	72 12 9	164 4 0
1916	2 7.3	30 19 6	68 8 11	116 1 3	182 3 5
1917	3 4.9	30 0 0	52 3 6	$125 \ 2 \ 5$	237 13 1
1918	3 11.6	30 2 8	52 3 11	115 11 6	329 11 3
1919	4 9.1	28 3 11	42 5 3	190 19 4	257 9 8
1920	5 16	38 4 7	45 4 6	97 12 5	296 1 7
1921	3 0.9	22 14 4	26 4 1	69 8 7	165 6 7
1922	2 10.4	23 15 9	29 15 0	62 3 6	159 10 9
1923	2 7.4	26 16 4	32 18 6	65 18 1	202 5 1

The prices of metals rose to an abnormal height during the war period, then declined rapidly as the oversea demand decreased.

PRICES OF COAL.

Prices of coal depend to a greater extent upon local factors. The price varies considerably in the three districts in which coal is mined, the northers, coal being the dearest and the western the cheapest. The following statement shows the average value per ton at the pits' mouths in the various districts during the last ten years :---

District.		1914	.	19	15.	19	916.	19	17.	19	918.	18	919.	192	20.	19	21.	192	2.	192	3.
Southern	••••	s. 7 6 5	d. 8 4 6	s. 7 6 5	d. 7 11 6	s. 9 7 5	d. 1 2 7	s. 11 10 8	d. 5 0 0	s. 11 9 8		s. 13 11 9	$\begin{array}{c} 6\\ 10\end{array}$	s. 15 13 11	d. 3 4 8	17 16	d. 7 6 10	s. 17 16 12	di. 6 3 8	s. 17 16 11	d. 7 1 5
All Districts	••••	7	2	7	3	8	2.	10	8	10	11	12	7	14	5	16	10	16	9	16	5

The large increases in the prices of coal since 1916 have been due to decisions of tribunals appointed by the Commonwealth Covernment to regulate wages and prices in the industry.

MINERAL PRODUCTION.

The statistics relating to the production of 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 the years 1921 to 1923 collected from owners by the Government Statistician under the authority of the Census Act, 1901. The latter returns relate to the minerals actually mined during the year specified, whereas the records of the Department of Mines relate to the minerals won during the year, and in many instances include the value of metals won from minerals brought to grass in past years. It is extremely difficult to ascertain with a reasonable degree of accuracy the value of the annual output of metalliferons mines—that is, the value at the mines and before treatment of the minerals actually raised in each year. This value cannot be determined with exactitude until the minerals have been subjected to the final processes for the extraction of the metallic contents, and such operations extend over a long period, and in many cases are conducted in localities outside the State.

The value of the production of metalliferous mines, as stated by the Department of Mines, includes in many instances the value added by reason of ore-dressing operations, and it was recognised that the use of the Department's figures for years prior to 1921 involved duplication in regard to the mining and manufacturing industries. An endeavour was made to obviate this difficulty, when 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 where 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. In view of these difficulties the value of the production of metalliferous mines can be calculated only approximately, and attention is specially directed to the fact that the values as stated in this Year Book are to be regarded as estimates. In respect of coal-mining, the most important item of mineral production, there is little difficulty in ascertaining the value of the output, as the mineral need not be subjected to treatment before use.

Mining Operations.

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 the three years 1921 to 1923 :---

		1921.		-	1922.			1923.	
Particulars.	Coal and Shale Mines.	Other Mines.	Total.	Coal and Shale Mines.	Other Mines.	Total.	Coal and Shale Mines.	Other Mines.	Total.
Mines working Average time worked	143	350	493	148	352	500	146	330	470
Months	10-49	7.15	9-91	10-51	10-59	10-52	*201	*251	*209
Employees— Above ground	5,385	2.803	8,188	5,841	2,185	8.030	6,227	2,516	8,743
Below ground	15,588			15,863			16,827		19,382
Total	20,973	5,089	26,062	21,704	4,116	25,820	23,054	5,071	28,125
	£000	£000	£000	£000	£000	£000£	£000	£000	£000
Salaries and Wage paid Value of	5,704	727	6,431	5,571	773	6,344	5,540	993	6,533
Land, Building, etc.	3.223	206	3,429	3,502	203	3.705	3,781	266	4.047
Machinery	6,637	1,482							
Tools replaced, etc.	196	i 17			27	215			214
Materials used	926	154		833	295	1,128			1,155
Fuel consumed	347	130		309		460			
Quipart	9,036	1,156	10,192	8,293	1,373	9,666	8,351	2,068	10,419

5 22

* Days.

The average number of employees in the coal and shale mines has increased steadily since 1921, though the operations, as indicated by the value of materials, fuel, etc., and of the output, seem to have been on a lower scale.

The figures regarding employment in other mines includes fossickers. In 1921 the value of minerals won by 450 fossickers was £46,932; in 1922 there were 560, with an output of £31,156; and in 1923 the number was 358, and the value £26,897.

As stated above, the value of production represents the estimated value at the mines, and before treatment, of the output from the mines during each year. The figures relating to value of output, number of employees and wages paid during the years 1921 and 1922, as stated in the previous issue of the Year Book, are amended in this issue, subsequent investigation having shown that, notwithstanding special efforts to avoid duplication, the figures relating to metalliferous mines still included some of the value added to the output by treatment of ores, also a number of employees engaged in ore-dressing and the salaries and wages paid to them.

The value of the tools replaced includes the value of tools used by the mine employees in mining and the value of materials used in constructing or repairing the plant or machinery of the mines.

A statement showing the relation between the value of the output in each year and the various factors which comprise the value is not made, as it is difficult to make the dissection in regard to metalliferous mining.

Minerals Won--Value and Quantity.

Satisfactory statistics in regard to the production of the various minerals cannot be obtained. The values of the ores are estimated after assay, but many of the metals are associated in the same mineral matter, so that it is extremely difficult to make a reliable estimate of their quantity and value, especially in cases where the ores are exported before final treatment.

The figures shown in the following tables are based on those published in the annual reports of the Department of Mines, and the particulars regarding the output of iron made from scrap, Portland cement, lime, and coke have been deducted from the values shown in the reports, as they are included in the production of the manufacturing industry. The figures included in many cases, the value of the ores after treatment at the mines.

Period.	Average Annual Value of Production.	Period.	Average Annual Value of Production
	1 £ (<u></u>	L £
1856-1860	1,213,824	1896-1900	5,168,273
1861-1865	1,996,079	1901-1905	5,873,176
1866-1870	1,400,291	1906-1910	8,330,883
1871 - 1875	2,153,646	1911-1915	10,169,752
1876-1880	1,836,803	1916-1920	10,823,478
1881 - 1885	2,476,368	1921	12,066,370
1886-1890	3,728,080	1922	12,958,008
1891 - 1895	5,240,666	1923	14.232,019

The average annual value of the minerals won in each quinquennial period since 1856 is shown below :----

The value of the minerals won during 1923 was 40 per cent. higher than the average of the period 1911-1915, but the increase was due to higher prices rather than to larger output, except in the case of coal, of which the quantity has risen as well as the price.

		Е	stimated Va	alue of Min	erals Won.		
Mineral.	To the end of 1900.	1901 to 1910.	1911 to 1920.	1921.	1922.	1923.	To the end of 1923.
Metals	1 £000 i	£000	£000	£000	£000	£000	£000
Gold	. 48.740	9,251	4,865	217	107	80	63,26
Silver and lead	. 30,762	23,062	34,210	1,327	2,574	2,957	94,89
Copper	1 0 004	2,521	4.642	41	36	82	15,41
Zinc	157	4,201	9,057	284	1,158	1,411	16,26
Tin	6 700	1,894	3,660	164	154	181	12,84
Iron (Pig)		422	2,869	639	249	708	4,88
Non-Metals-					_		
Coal	. 37.316	24,945	43,607	9,078	8,508	8,608	132,06
Shale	1 090	322	298	77	61	3	2,69
Opal	457	781	260	13	15	3	1,52
Limestone flux	. 555	. 124	207	42	21	49	99
Other	500	652	1,282	184	75	150	2,92
Total	. 135,380	68,175	104,957	12,066	12,958	14,232	347,76
an each ann an	-) · · [L .

The estimated value of the minerals won from the commencement of mining operations to the end of the year 1923 is shown below :---

At the end of the year 1900 the value of the gold won 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 1923 the value of the coal production represented 38 per cent. of the total value, silver and lead 27 per cent., and gold 18 per cent.

The following statement shows the quantity of the various minerals won in the years 1921-23 in comparison with the average annual output in the prewar years 1909-13, also the total yield to the end of 1923 :---

		Annual	Output.		Total Output
Minerals.	Average, 1909–13.	1921.	1922.	1923.	to end of 1923.
0.14 ¢	177.000	51 170	07 000	10 099	14 000 550
Goldoz. fine		51,173	25,222	18,833	14,892,772
Silver ,,	1,968,696	1,963,379	749,904	107,682	45,301,521
Silver lead ore, etc tons	332,408	53,507	199,585	241,761	9,814,571
Lead-Pig, etc ,,	18,950	20,353	8,113	•••	326,621
Zinc-spelter and con-		1. A			1
centrates ,,	477,218	79,694	363,681	426,049	5,299,656
Copper ,,	10,490	499	625	1,261	263,506
Tin ingots and ore ,,	2,167	1,595	1,144	896	127,604
Iron—Pig (from local		{			1
ores) ,,	40,564	90,053	54,856	94,350	955,284
Iron oxide ,,	2,960	3,109	1,381	2,716	49,888
Ironstone flux "	1,659	7,473	980		132,655
Chrome iron ore "	135	62	529	1,192	36,433
Wolfram	175			2	2,262
Scheelite ,,	. 110			1	1,690
Platinum oz.	459	249	80	586	16,604
Molybdenite tons	46		2	9	810
A	88	125	· ~		19,032
Manganoga ora	. 00	3,515	2,398	2,556	28,384
Col	8,836,994	10,793,387	10,183,133	10,478,513	288,135,565
Chal-				1.207	
A1	59,024	32,489 520	23,467 185	998	1,919,043
	226				56,070
Limestone flux ,,	44,820	111,558	56,231	131,843	1,996,727
Diamondscarats	4,533	1,563	1,000	/ 175	201,674

MINING INDUSTRY.

With the exceptions of coal, pig-iron, chrome, manganese, platinum, alunite, and limestone flux, the output in 1923 of the minerals enumerated was below the average yield in the years 1909–13. The decline was due in many cases to decreased demand for industrial metals, for, with high costs of production, the margin over expenses was too low for the profitable exploitation of the mineral deposits.

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 goldfields 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 has been a steady decline, and the yield in 1923 was the lowest recorded in any year since 1851.

The following table shows the quantity and value of the gold won to the end of 1923 :---

Period.	Quantity.	Equivalent in oz. fine.	Value.
1851-1860	oz. crude. 3,280,963	oz. fine. 2,714,531	£ 11,530,58 3
1861-1870	3,542,912	3,219,628	13,676,102
1871-1880	2,253,259	2,019,116	8,576,655
1881-1890	1,173,885	1,013,846	4,306,541
1891-1900	2,867,337	2,432,387	10,332,120
1901-1910	2,669,670	2,252,851	9,569,492
1911-1920	1,333,796	1,145,185	4,864,440
1921	55,68 3	51,173	217,370
1922	27,581	25,222	107,139
1923	20,758	18,833	79,998
Total	17,225,844	14,892,772	63,260,440

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, the figures for the year 1923 being 7,694 oz. fine, valued at £32,683. Dredges are employed also for the recovery of stream tin; particulars are shown on page 529.

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. Up to the end of 1923 approximately 32,500,000 tons of ore had been raised, and it has been estimated that the reserves amount to at least 12,000,000 tons. 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 3½ 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 consisted 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 zine 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, zine 7 to 8 per cent., and sulphur 15 per cent. The zine concentrates contain zine, 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 zine concentrates is exported to the United Kingdom and other European countries or to Japan, but increasing quantities are being treated in Australia at Risdon, Tasmania.

During 1923 the output of ore from the Broken Hill mines amounted to 878,537 tons, viz., 16,684 tons of oxidised and 861,853 tons of sulphide ore; the value of the output, including the yield from the treatment of zinc tailings, was £4,672,331.

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.

It is difficult to assess the quantity and value of the various metals won from the silver-lead ores mined in New South Wales as the process of extracting the metallic contents is conducted for the most part outside the boundaries of the State. 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

MINING INDUSTRY.

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 :---

	D. J. D.	Silver.	Silver-sulphi lead, Or		Lead-Pig, in	Zinc
	Period.	Suver.	Ore Concen- trates, etc.	Metal.	Matte, etc.	Concentrates.
			Quanti	ty.		
		02.	tons.	tons.	tons.	tons.
	To 1885	1,730,297	7,073	191		•••
18	86-1890	2,481,253	165,756	94,002	648	307
18	91-1895	3,009,187	663,754	231,847	739	663
18	96-1900	2,352,092	1,771,983	86,005	13,293	137,931
19	01-1905	4,154,020	1,877,515	108.353	17,550	183,782
19	06-1910	8,310,962	1,709,173	42,578	71,435	1,460,138'
19	11-1915	12.460.553	1,694,834		114.375	2.093,783
19	16-1920	7.982.192	866,654		80,115	553,628
	1921	1,963,379	53,507		20,353	79,694
	1922	749,904	199,585		8,113	363,681
	1923	107,682	241,761			426,049
	Total .	45,301,521	9,251,595	562,976	326,621	5,299,656
		· · ·	Val	ue.)
		£	T t		£	£
	To 1885	382,884	23	7,810		•••
18	86-1890	464,081		8,515	8,298	3,366
18	391-1895	445,873	12.61	5.432	7.413	7,677
18	396-1900	269,663	9.59	2.856	258,874	146,023
19	01 - 1905	445.051		0.586	255,366	440,402
	06-1910	892,414	11.56		996.646	3,761,223
19	11-1915	1,302,510	14,30		1,899,601	6,861,489
	16-1920	. 1.426.886	12,920		2,358,625	2,195,599
_ 0	1921	325,163		9,339	462,862	283,455
	1922	112,077		7.319	194,712	1,157,458
	1923	15,461		1,401	•••	1,411,652
	Total .	6,082,063	82,36	7 6000	6,442,397	16,268,344

* Includes 2,758 tons of spelter.

The total value of the production, as shown above, amounted to £4,368,514 in 1923, as compared with £3,731,566 in the preceding year. The value was highest in 1918 when the market conditions were exceptionally favourable, but in the following year industrial troubles arose which caused a prolonged cessation of operations at Broken Hill, the mines being idle from May, 1919, until November, 1920, when there was a partial resumption. In the meantime prices had fallen considerably and for some time the operations were greatly restricted. In the last two years there has been a marked improvement.

As previously stated, 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 oversea 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

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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 allowed for them.

	Metal obtai from ores		nonwealth 1th Wales.				Total Value of Produc-			
Year.				Aggregate	Contents by average assay.			Assessed	tion from Silver-lead Ores of	
	Silver.	Lead.	Zinc,	Value.	Quantity	Silver.	Lead,	Zinc,	Value.	New South Wales.
1919 1920 1921 1922 1923	oz. fine. 5,836,947 196,111 3,624,413 6,648,\$25 7,233,236	tons. 80,175 1,749 47,426 97,867 124,570	tons. 7,119 10,565 1,425 23,724 41,153	£ 4,109,466 515,728 1,723,864 4,113,427 5,707,739	tons. 38,740 46,425 47,127 287,074 356,139	oz. fine. 417,871 479,221 617,477 3,264,102 4,834,718	tons. 2,425 3,025 6,539 19,328 40,906	tons. 18,146 21,742 19,272 132,186 149,319	£ 253,751 274,061 261,238 1,272,074 1,813,287	789,789 1,985,102 5,385,501

COPPER.

The ores of copper are distributed widely throughout New South Wales. The deposits of commercial value are situated for the most part in the central portion of the State, the most important fields being in the Cobar and Canbelego districts. Copper mining 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 since 1858, as estimated by the Department of Mines, is shown below :---

	Ingots, Matte, and Regulus.		O			
Period.	Quantity.	Value.	Quantity.	Value.	Total Value.	
	tons.	£	tons.	£	£	
1858-1879	14.877	1,015,206	2,102	52,464	1,067,670	
1880-1884	23,715	1,553,651	19	675	1,554,326	
1885-1889	15,160	771,867	537	6,937	778,804	
1890-1894	10,195	434,537	1,738	20,228	454,765	
1895-1899	25,408	1.280,841	852	5,253	1,286,094	
1900-1904	32,173	1,907,540	8,791	106,500	2,014,040	
1905-1909	41,425	2,940,886	3,057	31,367	2,972,253	
1910-1914	42,277	2,443,385	9,815	86,169	2,529,554	
1915-1919	22,626	2,403,884	5,064	66,710	2,470,594	
1920	1,290	127,978			127,978	
1921	499	41.267			41,267	
1922	575	35,583	50	650	36,233	
1923	1,182	81,203	79	1,172	82,375	
Total	231,402	15,037,828	32,104	378,125	15,415,958	

The marked decrease in the output of copper during the years 1920 and 1921 was not due to a decline in the productive capacity of the mines, but to a fall in price, which precluded profitable working under existing costs. In 1923 the price was somewhat higher, but the more important mines remained closed, the increased output being due to the extraction of the copper contents of Broken Hill silver-lead ores, which yielded 899 tons, valued at £61,761.

TIN.

Tin, unlike copper, is restricted in its geographical and petrological range, and is the rarest of the common metals in 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 are known to exist 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 are exploited by means of dredging in the northern rivers.

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.

The output and the value of production of tin since 1872 have been as follows :---

	Ing	Ingots.		re.	Total
Period.	Quantity.	Value.	Quantity.	Value.	Value.
2	tons.	£	tons.	£	£
1872-1879	18.364	1,386,764	12,995	628,643	2,015,407
1880-1884	22,842	2,056,778	2,700	137.755	2,194,533
1885-1889	12,974	1,330,326	1.635	85,048	1,415,374
1890-1894	7,196	623,096	1,040	49,296	677,392
1895-1899	4,608	336.015	197	6,488	342,503
1900-1904	4,220	536,084	1,222	81,362	617,446
1905-1909	5,567	851,956	3,712	339,679	1,191,635
1910-1914	4,258	785,900	6,952	775,841	1,561,741
1915-1919	5,203	1,188,995	5,793	723,477	1,912,472
1920	*	*	2,486	413,794	413,794
1921	*	*	1,595	163,451	163,451
1922	734	114,076	410	40,622	154,698
1923	896	180,789	•••	•••	180,789
Total	86,862	9,395,779	40,742	3,445,456	12,841,235

* Included under the heading, "Ore."

The output of ore in 1920 and 1921 includes ore from which were extracted 887 tons of metallic tin, valued at £257,514, and 816 tons, valued at £133,521, respectively.

In 1923, one bucket dredge and 41 pump dredges were employed in recovering tin in the northern districts. Operations were hampered by unfavourable weather conditions. The quantity of tin obtained was only 522 tons, valued at $\pounds 72,552$, as compared with 422 tons, valued at $\pounds 41,467$ in the previous year. The total yield by dredging since 1901 has been 23,965 tons, valued at $\pounds 2,902,582$.

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, the production of iron one has been on a more extensive scale since 1907, although only the Cadia, Carcoar, and smaller deposits have been mined.

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 :---

	, s	Minerals Used.	Pig-iron.			
Year.	Iron Ore.	Colse. Limestone.		Production.	Value.	
1907-11 1912-16 1917-21 1922 1923	tons. 263,477 486,929 671,153 110,972 173,507	tens. 191,589 385,014 578,938 75,876 142,719	tons. 11 3,360 1 72,532 282,984 30,397 86,985	tons. 1 52,627 2 83,264 370,187 54,856 94,350	£ 567,048 1,035,302 2,327,908 248,909 707,625	

Further details relating to the operations of ironworks are given in the section of this book relating to the manufacturing industries.

Ironstone Flux.

Iron ore is used as flux in smelting and iron works, and the estimated quantity of ironstone flux raised during the years 1899 to 1922 was 132,655 tons, and the value £108,791. The quantity produced during 1922 was 980 tons, and the value £1,274. There was no production during 1923, because smelting operations were suspended at Cockle Creek, where the bulk of the output had been used.

Iron Oxide.

Iron oxide is obtained in the Port Macquarie, Moss Vale, and Yass districts for use in purifying gas or as a pigment. The output during 1923 was 2,716 tons, valued at £3,081, and the total output to the end of 1923 was 49,888 tons, valued at £62,282.

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 1923 amounted to 16,604 oz., valued at £79,233, of which 586 oz., valued at £10,204, were obtained during 1923.

Chromite.—Chromite, or chromic iron ore, is the only commercially important ore of chromium. It is found usually in association with serpentine. The principal deposits are in the Gundagai and Turnut districts, and there are smaller quantities in the northern portion of the State. The quantity produced to the end of 1923 was 36,433 tons, valued at £115,004; the yield recorded in 1923 was 1,192 tons, valued at £3,082.

Tungsten ores.—These ores occur in many localities in New South Wales generally in association with tinstone (cassiterite), bismuth, and molybdenite. The output of scheelite since 1903 amounted to 1,690 tons, valued at £192,375, and of wolfram to 2,262 tons, valued at £267,514; there has been no production of scheelite since 1920.

Antimony.—This mineral may be obtained in a number of districts, the principal field being at Hillgrove. Owing to fluctuations in the price of the metal mining is spasmodic. The total output of antimony to the end of the year 1921 was 19,032 tons, valued at £344,588, and no ore was raised in later years.

Manganese. – Manganese ores have been discovered in various places but generally in localities which lack facilities for transport. During the year., 1923 the quantity obtained was 2,556 tons, valued at £7,748.

Bismuth.—Bismuth has been obtained chiefly in the neighbourhood of Clen Innes, and at Whipstick in the South Coast division, and in other districts bismuth is associated with molybdenite and wolfram ores. The quantity of bismuth produced in 1923 was 6 tons, valued at £1,640, the quantity produced to the end of 1923 being 779 tons of ore, valued at £226,419.

Molybdenum.— The production of molybdenite, the principal ore of molybdenum, in New South Wales during 1923 amounted to $9\frac{1}{2}$ tons, valued at £1,816. Since 1902 there have been produced $810\frac{1}{2}$ tons, valued at £207,636.

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 wrought profitably. No production of quicksilver has been recorded since 1916

COAL.

The coal-fields of New South Wales are the most important in Australia, both as regards extent and the quantity and quality of coal produced.

The main coal basin extends along the coast from Port Stephens on the north, to Ulladulla on the south, with a seaboard of 200 miles, which 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 Rylstone and Newcastle-100 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, and 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.

The Upper or Newcastle coal measures show the greatest surface development. In the northern field they are known to contain twelve seams, five 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 was worked for some years to a depth of nearly 3,000 feet. Then the mine was closed and it remained idle for nearly nine years until work was commenced again in September, 1923.

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 is a good steam coal, and it can be loaded into oversea steamers from a wharf near the pit's mouth.

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 nuch 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.

Coke-making is carried on in each of the three coal-mining districts, as well as in the gasworks in various parts of the State.

There were 163 coal-mines and 2 shale-mines working under the provisions of the Coal Mines Regulation Act during the year 1923. The employment of boys under 14 years of age or of women and girls in or about a mine is prohibited, and restrictions are placed upon the employment of youths.

In 1923 the number of boys between 14 and 16 years of age employed in coal and shale mines was 983, of whom 642 worked below ground, and 341 on the surface.

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, and work is in progress for the development of the mine. The output from the mine in 1922-23 was 185,749 tons.

Production of Coal.

The following table shows the quantity and value of coal raised in New South Wales to the close of 1923, the total production being 288,135,565 tons, valued at £132,061,847 :---

Period.	Coal Raised.	Value at Pit's Mouth.	Average value per ton.
	tons.	£	s. d.
Prior to 1890	46,803,983	22,787,156	99
1890-4	17,830,177	6,811,568	78
1895-9	21.334.976	6,048,281	58
1900-4	29,792,589	10,369,050	7 0
1905-9	39,083,328	13,234,796	6 9
1910-4	47,555,714	17,344,973	7 4
1915-9	43,563,766	21,548,442	9 11
1920	10,715,999	7,723,355	14 5
1921	10.793.387	9,078,383	16 10
1922	10,183,133	8,507,946	16 9
1923	10,478,513	8,607,892	16 5
Total	288,135,565	132,061,847	9 2

The bulk of production is obtained from the northern coal-fields. The output of each district during 1923 was:-Northern, 6,861,759 tons, valued -as £6,040,216; Southern, 2,170,699 tons, £1,743,318; Western, 1,446,055 tons, £824,358.

A statement regarding the value at the pit's mouth of the coal raised in each district is shown on page 521.

The following statement shows the quantity of New South Wales coal consumed in Australia, including bunker coal taken by interstate vessels, and the oversea exports, annually, since 1917 :---

Year.	Domestic Consumption	Sent to other Australian States.	Total quantity consumed in Australia.	Exported to Oversea Countries.	Total Production.
	tons.	tons.	tons.	tons.	tons.
1917	5,029,070	2,225,228	7,254,298	1,038,569	8,292,867
1918	5,641,500	2,697,033	8,338,533	724,643	9,063,176
1919	5,128,536	1,891,317	7,019,853	1,611,701	8,631,554
1920	5,729,208	2,270,556	7,999,764	2,716,235	10,715,999
1921	5,268,628	2,752,810	8,021,438	2,771,949	10,793,387
1922	4,943,736	2,841,253	7,784,989	2,398,144	10,183,133
1923	5,578,385	2,518,579	8,096,964	2,381,549	10,478,513
		Per cer	at. of Total.	•	
1917	60.7	26.8	87.5	12.5	100
1918	62.2	29.8	92.0	8.0	100
1919	59.4	21.9	81.3	18.7	100
1920	53.5	21.2	74.7	25.3	100
1921	48.8	25.5	74.3	25.7	100
1922	48.5	27.9	76.4	23.6	100
1923	53.2	24.1	77.3	22.7	100

The domestic consumption of coal decreased during 1921 and 1922 as a result of restricted operations in many important manufacturing industries, *e.g.*, iron and steel works. On the other hand the export trade was brisk as the result of industrial strife in Great Britain and in the United States in successive years.

In 1923 domestic consumption increased absolutely and relatively. There was a decline in the interstate trade, and the quantity sent abroad was somewhat lower than in the previous year.

Full particulars are not available to show the purposes for which the coal consumed locally was used. The information which is available indicates that 439,146 tons of coal were used as fuel in mines during 1923, and during the twelve months ended June, 1923, the quantity used as fuel in factories was 989,434 tons, on railways 1,113,438 tons, in electric light and power works -567,282 tons, in gas making 571,580 tons, and in coke making 557,177 tons.

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 1923, is shown in the following table :---

Period.	Quantity.	Total Value at Mines.	Average Price per ton at Mines.	Period.	Quantity.	Total Value at Mines,	Average Price per ton at Mines.
 · · ·	tons.	£	£ s. d.		tons.	£	£ s. d.
1865 - 84	370,217	828,195	249	1915-19	122,408	144.871	1 3 8
1885 - 89	186,465	406,255	237	1920	21.004	46,082	2 3.10
1890-94	247,387	451.344	1 16 6	1921	32,489	77.380	278
1895-99	191.763	222,690	1 3 3	1922	23,467	60,641	2 11 8
1900-04	213,163	177.246	0 16 8	1923	1,207	2.831	2 6 11
1905-09	213.024	131,456	0 12 4				
1910-14	296,449	140,757	0 9 6	Total	1,919,043	2.689.748	1 8 0

*46121-B

The reduction in the output in 1923 was due to the closure of the mines at Newnes in the Wolgan Valley.

In the years 1910-1913 the Commonwealth Government paid a bounty on kerosene and paraffin wax made from Australian shale, and since 1917 has provided a bounty on crude shale oil, but no bounty has been paid in New South Wales since 1922, as no oil has been produced.

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. In recent years the whole output has been from the latter district :---

Period.	Carats.	Value.	Period.	Carats.	Value.
1867-1885 1886-1890 1891-1895 1896-1900 1901-1905 1906-1910	2,856 8,120 19,743 69,384 54,206 16,651	£ 2,952 6,390 18,245 27,948 46,434 12,374	1911–1915 1916–1920 1921 1922 1923	16,003 11,973 1,563 1,000 175	£ 13,353 12,573 1,915 1, 300 2 30

OPAL.

Precious opal occurs in two geological formations in New South Wales, viz., in tertiary vesicular basalt and in 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 1923 :--

Period.	V alue.	Period.	Value.	
1890 1891–1895 1896–1900 1901–1905 1906–1910 1911–1915	£ 15,600 25,999 415,000 476,000 305,300 154,738	1916-1920 1921 1922 1923 Total	£ 105,547 13,020 15,150 3,040 1,529,394	

During 1923 the output was small. The market demand for opal was limited and mining operations were hampered by the temporary exhaustion of the water supply at Lightning Ridge.

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 almost entirely of alunite, of greater or less purity. Four varieties of alunite are recognised at the mines, but operations are confined mainly to the light-pink ore, the yield averaging about 80 per cent. of alum. In 1923 the production of alunite was 998 tons, valued at $\pounds 3,992$, and the quantity exported since 1890 was 56,070 tons, valued at $\pounds 200,319$. The whole of the output is exported to England.

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. The marble obtained during 1923 was valued at £1,510.

Limestone.—The quantity of limestone raised for flux in 1923 was 131,843 tons, valued at £49,441.

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.

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 1923 was 6,130 tons, valued at £5,699.

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, 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 obtained generally in places near the coast, whence it could be transported cheaply.

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

The quantity and value of building stone, ballast, etc., quarried during the year ended 30th June, 1923, are shown below :---

Description of Quarry.	Quantity of Stone raised.	Value of Stone raised.	Description of Quarry.	Quantity of Stone raised.	Value of Stone raised.
		£ 63,788 4,776 2,306 1,905 27,195 245,837 70,971 39,542	Macadam, Ballast, etc. — (continued). Sand Ironstone Shale and Clay Quartzite Trachyte Limestone, crude Magnesite Clay-Kaolin	24,370	£ 14,089 5,172 12,737 27,773 693 10,549 985 45

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., and it is provided that an inexperienced person may not be employed in getting coal or shale unless in company with an experienced miner. Special rules are established in each mine for the safety, convenience, and discipline of the employees.

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.

	-	Accide	nts.		Per 1,000 Employed.			
Year.	Coal and Shale Miners.		Other Miners.		Coal and Shale Miners.		Other Miners.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
1919 1920 1921 1922 1923	17 20 19 12 31	100 113 . 113 86 101	6 4 4 5 6	18 12 22 25 48	·94 1·00 ·89 ·55 1·35	5·50 5·66 5 ·31 3·97 4·39	•42 •44 •47 •54 •62	1.26 1.30 2.61 2.70 4.94

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

In 1923 a fire in a colliery in the northern district caused the death of twenty-one persons.

The accident rates are not based on the number of employees as shown on page 520. They relate to the total number of persons who are subject to the provisions of the Mining Acts, and include persons engaged in connection with treatment plant at the mines.

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

PASTORAL INDUSTRY.

In New South Wales the pastoral industry has always been the greatest source of primary production, but, within the past twenty years, agriculture and dairying have developed rapidly; and the pastoral industry has assumed a place second in importance to the manufacturing industry, as measured by the value of production \dagger

LIVE STOCK.

New South Wates 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 there is a small oversea trade in remounts. For many years cattle were produced only to supply local requirements of meat and dairy produce, but since the application of refrigeration to sea cargoes, an expert trade in these commodities has become possible, and considerable expansion has taken place in the number of cattle depastured. Figs 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 desennial period from 1861 to 1921 and in the last two years :--

Year.	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	44,947,287	371,093
1921*	663,178	3,375,267	33, 851 , 828	306,253
1922*	669,800	3,546,530	37,177,402	383,669
1923*	660,031	3,231,180	34,862,747	340,853

* At 30th June, previous years at 31st December.

Particulars of other live stock are shown on page 554.

To obtain an accurate 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

† See Chapter "Employment and Production" of this Year Book. 45631-A

Year.	Equivalent in Sheep of Live Stock grazed.	Year.	Equivalent in Sheep of Live Stock grazed.
1861	15,656,000	1911	76,013,000
1871	34,831,000	1921*	66,159,000
1881	60,559,000	1922*	70,907,000
1891	82,619,000	1923*	66,152,000
1901	62,135,000		

exactitude, but, adopting the arbitrary equivalent of eight sheep to each head of large stock as mentioned in Section 18 of the Pastures Protection Act, the following comparison is obtained :--

* At 30th June, previous years at 31st December.

It is apparent, therefore, that the grazing of live stock declined on the whole by about 20 per cent. between 1891 and 1923. The decline is attributable to a decrease in the number of sheep amounting to 44 per cent.

Comparison-Live Stock in the Commonwealth.

A comparison for 1922-23 of the number of horses, cattle, sheep, and swine in New South Wales and in the other States of the Commonwealth is shown in the following table. The figures for New South Wales and South Australia are as at 30th June, 1923, for Victoria and Tasmaria as at 1st March, 1923, and the others are as at 31st December, 1922.

State.	Horses.	Cattle.	Sheep.	Swine.
New South Wales	660,031	3,251,180	34,862,747	340,853
Victoria	494,947	1,785,660	11,765,520	294,962
Queensland	714,055	6,955,463	17,641,071	160,617
South Australia	264,150	425,811	6,305,133	75,520
Western Australia	181,159	939,596	6,664,135	67,561
Taşmania	37,313	218,197	1,558,494	46,056
Northern Territory	39,845	760,766	6,161	361
Australia	2,391,500	14,336,673	78,803,261	985,930

New South Wales contains the largest proportion of sheep in the Commonwealth, viz., 44 per cent., and of swine 35 per cent. Queensland contains more horses—30 per cent. of the total—and more cattle, 48.5 per cent., as compared with 28 per cent. and 23 per cent. respectively in New South Wales.

Distribution of Live Stock.

In order to indicate the parts of New South Wales in which the flocks and herds predominate, the following table has been prepared. It shows the number of live stock and the number per square mile in each Division at

Division.	Numt	er of Li	ve Stock	(000 om	itted).	Number per square mile.				
	1891.	1901.	1911.	1921.	1923.	1891.	1901.	1911.	1921.	1923.
SHEEP	1	1		1		1	1	1 .	1	
Coastal Belt Tableland	7,882	1,097 8,859 11,672	$1,433 \\ 8,961 \\ 11,199$	940 6,747 8,737	666 7,451	42.5 195.3 286.8	31.4 219.5 808.0	41.0 220.0 295.5	$26.9 \\ 167.2 \\ 230.6$	19.0 178.9 227.0
Western Plains	25,194	11,072 14,706 5,523	16,048 7,306	12,886 4,542	$\begin{array}{c c}10,023\\11,852\\4,871\end{array}$	$ \begin{array}{r} 280.8 \\ 351.8 \\ 130.6 \end{array} $	205·4 44·0	295.5 224.1 58.2	180·0 36·2	185·6 38·8
Whole State	61,831	41,857	44,947	33,852	34,863	199-2	134.9	144.8	109.1	112.4
CATTLE, DAIRYING- Coastal Belt	. 197	284	653	674	769	5.6	8.1	18.7	19.3	21.9
Tableland	1	70	107	73	52	1.7	1.7	2.7	1.8	1·3 1·0
C'l Plains & Riverina	37	40	78 48	59 36	43	1.0	1.1	$2.1 \\ 0.7$	1.6	0.2
Western Plains	7	4	9	.30	14	0.1	0.0	0.1	0.0	0.0
										}
Whole State	343*	418*	895	844	879	1.1	1.3	2.9	2.7	2.8
CATTLE, OTHER-				1			i	1		1
Coastal Belt	640	667	915	1,009	880	18.3	19.1	26.2	28.6	25.1
Tableland	1 0.17	501	550	580	525	11.5	12.4	13.6	14.4	12.6
Western Slopes C'l Plains & Riverina	247	306 115	422 302	441	481 341	6.5	8.1	11.1	$11.6 \\ 5.2$	10.9
Wortown Diaina) 64	41	110	369 132	145	4·7 0·7	1.6	4.2	11	1.2
				105			0.5	0.9	<u></u>	[
Whole State	1,785	1,630	2,299	2,531	2,372	5.8	5.3	7.4	8.2	7.6
HORSES-	1.						<u> </u>			
Coastal Belt	163	161	207	203	196	4.7	4.6	5.9	5.8	5.6
Tableland	. 92	112	127	112	111	2.3	2.8	3.1	2.8	2.7
Western Slopes	. 76	111	180	168	199	2.0	2.9	4.8	4.4	4.5
C'l Plains & Riverina	. 95	78	140	152	125	1.3	1.1	2.0	$2 \cdot 1$	2.0
Western Plains	. 44	25	35	28	29	0.4	0.2	0.3	0.2	0.5
Whole State	470	487	689	663	660	1.5	1.6	2.2	2.1	2.1

intervals since 1891. Particulars regarding their distribution according to the size of the holdings on which they were depastured, as at 30th June, 1922, were published in the previous issue of the Year Book.

* Cows in milk only; dry cows and springing heifers are included in the total of Other Cattle.

Sheep are depastured principally in the hinterland of the State, and are densest in the Western Slopes Division. Dairying cattle and, in fact, all cattle are more numerous in the coastal areas, though considerable numbers exist on the tablelands. Horses, too, are most numerous in the coastal belt, probably because farming needs are greatest there, and because of their accumulation in Sydney and other populous centres.

The figures as stated for 1923 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, and the change in geographical basis involved considerable alteration in the areas comprising the various divisions, especially the Western Slopes and the Western 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 was on the Central Plains and Riverina, where the numbers fell from 352 to 180 per square mile, and the greatest relative decline was on the Western Plains, where the falling-off was from 131 to 36 per square mile.

SHEEP.

A brief review of the rise of sheep-breeding in New South Wales was published on page 771 of the Year Book for 1921. The following table shows the number of sheep at the close of each quinquennial period from 1861 to 1911, and illustrates the vicissitudes of sheep-breeding in New South Wales in subsequent years :---

Year.	Sheep.	A verage Annual Rate of Increase.	Year.	Sheep.	Average Annual Rate of Increase.	Year.	Sheep.	Average Annual Rate of Increase.
1861	5,615,054		1901	41,857,099	(-) 2-8	1918*	38,621,196	6.5
1866	11.562.155	15.5	1906	44,132,421	11	1919*	37,381,874	(-) 3.2
1871	16,278,697	7.1	1911	44,947,287	0.4	1920*	29,249,253	(-)21 8
1876	25,269,755	9.2	1912	39.044.502	()13-1	1921*	33.851.828	15.7
1881	36,591.946	7-7	1913	39,850,223	2.1	1922*	37.177.402	9.8
1886	39.169.304	1.4	1915*	33,009,038	()11.8	1923*	34.862.747	() 6.2
1891	61 831.416	96	1916*	32,600,729	() 1.2			
1896	48,318 790	() 4.8	1917*	36,196,383	11-0	1	1	1 1 1 1

* At 30th June. (--) Denotes decrease.

The number of sheep was greatest in 1891 when there were nearly 62,000,000. In later years the rabbit pest had become so general as to aggravate the effects of dry weather through destruction of natural herbage, and the growth of the agricultural industry caused land to be diverted from the purpose of sheep breeding. But the main cause of the reduction in the number of sheep seems to have been a remarkable deterioration of seasons due to diminished rainfall in the present century. This may be illustrated briefly by stating that the weighted average annual rainfall of the State was about 31 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 sudden transition from very good to very bad seasons which occurred in the early nineties wrought such havoc among the flocks depastured on the immense western plains that by 1901 there had been a decrease from 16,400,000 to 5,500,000 sheep in the plains of the Western Division, and from 25,200,000 to 14,700,000 in the plains of the Central Division (see page 539), and in 1902 these flocks were further reduced by 1,900,000 and 7,600,000 respectively. Although the losses of 1902 were speedily regained, the general deterioration of subsequent seasons on the plains has been such that the flocks have not permanently exceeded the reduced numbers of 1901.

The extent of the diminution in the average rainfall approached 30 per cent. of the former average on the plains of the Western Division, and 20 per cent. on the plains of the Central Division. Since the rainfall in the far West before 1894 was already so low as to render pastoral occupation precarious, it now became inadequate except for the sparsest occupation.

The following statement shows the extent to which the flocks were affected by the various causes of increase and decrease during the last five seasons; the figures are approximate only :--

Year.	Lambs Marked during Year.	Sheep and Lambs slaughtered during Year.	Estimated No. of Deaths due to Seasonal and other Causes.	Excess of Imports (-+) or of Exports ().*	Net Increase (+) or Decrease ().	Sheep at 30th Jane.
·	000	000	000	000	000	000
1918-19	7,812	4.275	3,732	() 1.044	() 1,239	87.882
1919-20	4,532	5,537	5,751	() 1,377	() 8,133	29,249
1920-21	7,907	3,851	1,437	(+) 1,984	(+) 4,603	33,852
1921-22	9,881	5,230	1,479	(+) 153	(+) 3,325	37,177
1922-23	7,361	5,666	1.842	() 2.167	() 2,314	34,863

^{*} Principally overland.

The effect of adverse seasons on the sheep flocks is apparent in four directions, viz., lo ses 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. The deaths due to seasonal conditions, disease, and other causes during the period were on the average about 8 per cent. per annum, the sheep and lambs slaughtered about 14 per cent. per annum, while export and import varied irregularly according to the season, leaving a small excess of exports. The average annual number of lambs marked was 21-5 per sent. of the total flock. The greatest gross reduction of sheep flocks in any of the last five seasons was 14,130,000 in 1919-20, converted by lambing and importation to a net reduction of 8,133,000. Reference to the extent of slaughtering is made on page 557.

Interstate Movement of Sheep.

Apart from the seasonal movement of stock to and from agistment in other States, there appears to be a regular export of live stock from New South Wales to Victoria, and an import from Queensland to New South Wales borderwise. The interchange across the border with South Australia and with other States and countries by sea is very small. During the past five years 7,982,000 sheep have been moved from New South Wales to Victoria, and 3,063,000 from Victoria to New South Wales, leaving an excess of exports to Victoria of 4,919,000. In the same period 4,914,000 sheep have been imported from Queensland to New South Wales, and 1,530,000 have been exported from New South Wales to Queensland, leaving an excess of imports 3,384,000 to New South Wales from Queensland. The excess of exports to other destinations during the same period was 916,000, chiefly to South Australia, and the excess of exports of live sheep from New South Wales for the period 2,451,000. It is apparent that large numbers of sheep are sent from Queensland across New South Wales to Victoria, and small numbers to South Australia, or that pastoralists in New South Wales sell to Victorian and South Australian buyers and replenish their flocks from Queensland. In addition, it is apparent from the yearly movement that graziers in New South Wales made good part of their losses in the 1919-20 drought by large purchases in Queensland.

	Shee	p from Ne	w South Wa	ales.	She	Sheep to New South Wales.				
Year.	To Victoria.	T.o Queens- Iard.	To South Australia and by Sea.	Total.	From Victoria.	From Queens- land.	From South Australia and by Sca.	Total.	Excess of Imports (+) or of Exports ().	
	000	000	.060	000	.000	000	000	000	000	
1918-19	1,452	509		-[s #]	672	495		4	() 1,044	
1919-20	2,289	385	218	2,842		750	26	1,465	() 1,377	
1920-21	850	97	125	1,072	986	2,050	70	3,956	(+) 1,984	
1921-22	1,363	245	108	1,786	541	1,806	42	1,889	(+) 153	
1922-23	.2,008	344	386	2,738	2 25	313	33	571	() 2,167	

The following table shows the movement of sheep from and to New South Wales, so far as is recorded, in each of the past five seasons :---

*Not available

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 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. Particulars of lambing in the past five years are shown below :---

Year.	Ewes at beginning of Year.	Ewes Mated during Year.	Lambs Marked during Year.	Lambs (under 1 vear) surviving at end of Year (30th June).	Proportion of Lambs Marked to Ewes Mated.
		000 omi	tted.		t man cont
1918–19 1919–20 1920–21 1921–22 1922–23	20,711 19,984 16,776 17,620 18,882	15,537 11,931 14,196 15,452 13,970	7,812 4,532 7,907 9,881 7,361	6,951 3,808 7,084 8,824 6,356	per cent. 50·3 38·0 55·7 63·9 52·7

The difference between the numbers of lambs marked and lambs surviving at the end of the year is accounted for largely by slaughtering.

The season 1918-19 was bad, and severe drought conditions prevailed throughout 1919-20. Not only was the number of ewes mated heavily reduced, but the proportion of lambs marked to ewes mated fell as low as 38 per cent. This experience was in marked contrast with that of 1921-22, when abundant rains were received throughout the pastoral areas in the first half of the season. In 1922-23 the season was unfavourable for the autumn and winter lambing, as with a scanty rainfall, there was a scarcity of pasturage and water in the central and western districts.

The following table shows the relative extent of lambing and slaughtering in quinquennial periods during the last thirty years :---

Period.	No. of Lambs Marked.	No. of Sheep and Lambs Slaughtered.	Proportion of Slaughtering to Lambing.
	1	1	
			per cent.
1892-1896	50,758,000	34,880,000	68.7
1897-1901	41 090 000	25,130,000	57.8
1000 1000	44,314,000	19.737.000	44.5
	50,743,000	30.845.000	67.8
1010 1016 17	20 222 000	26,172,000	66-6
1912 - 1910 - 17 1917 - 18 - 1921 - 22.	39,395,000	22.095.000	56.1
	7,261,000	5,666,000	77.0

The fluctuations in lambing are very marked, the diminution during the past eleven seasons being particularly noteworthy. Slaughtering is the principal factor affecting natural increase, but losses from seasonal and other causes appear to have increased markedly in recent years, and to have contributed very much to the reduction in the number of sheep during the past five seasons.

Size of Flocks.

The decrease in the total number of sheep after 1891 was naturally accompanied by great changes in the size of individual flocks, partly as a result of losses and partly owing to the tendency among pastoralists to restrict their flocks to sizes where the risk of loss from drought was not so great. At the same time the large increase which occurred in the number of flocks took place principally among the small flocks. These changes may be traced in the following table, which gives an approximate classification of the flocks for various years, from 1891 to 1923—

		Number	of Flocks.	•	Number of Sheep.				
Size of Flocks.	1891.	1911.	1921.†	1923†.	1891.	1911.	1921.†	1923†.	
				· 	1	1	<u> </u>		
11,000	7,606	17,773	19,905	19,158	2,794,751	5,252,546	5,983.607	6,087,054	
1,001-2,000	1,954	3,510	3,459	3,626	2,979,168	5,149,618	4,882,170	5,094,257	
2,001-5,000	1,696	2,735	2,310	2,510	5,493,942	8,554,299	7,083,742	7,534,598	
5,001-10,000	686	847	722	776	4,943,221	5,977,233	4,955,413	5,442,820	
10,001-20,000	495	507	349	350	7,056,580	7,143,273	4,850,005	4,960,468	
20,001-50.000	491	296	149	127	15,553,774	8,737,927	4,185,143	3,960,144	
50,001	186	53.	26	24	12,617,206	3,434,698	1,688,675	1,573,940	
100,001 and over	73	6	2	2	10,392,774	697,693	223,073	209,460	
1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 - 1997 -						<u>, 75 - 7</u>			
	13,187	25,727	26,922	26,592	61,831,416	44,947,287	33,851,828	34,862,747	
and the second second		0.1	100 A.	1	i i i i i i i i i i i i i i i i i i i]	1 . 1		

† 30th June.

In 1891 there were only 13,187 holdings carrying sheep, but at 30th June, 1923 they numbered 26,592, although the sheep had decreased in numbers by 27,000,000. This development may be attributed largely to the combination of pastoral with agricultural pursuits.

It is significant that while in 1891 there were 73 holdings which each carried over 100,000 sheep, the number of such in 1901 was 12, and in 1923 only 2. The sheep in flocks of over 20,000 comprised 62 per cent. of the total in 1891, but only 16.5 per cent. in 1923. In 1891 the flocks under 2,000 comprised 9.3 per cent. of the total sheep compared with 32.1 per cent. in 1923. The greatest change has occurred since 1894, when a very large number of sheep perished, and pastoralists realised that one of the best methods of meeting seasons of drought lay in the subdivision of their large flocks. The closer settlement policy pursued since 1804 has led to some further subdivision of flocks.

Part of the cause, and perhaps part of the effect of this change, has been a steady increase in the number of holdings and the gradual disappearance of unwieldy pastoral areas over 100,000 acres in extent, whereon, formerly, sheep were left to roam with little attention, because of the dearth of labour and of the vast unpeopled spaces which existed in the earlier years.

Area Groups. (Alienated and: Crown: Lands	F	nber of locks.	Number	Number of Sheep.			6	f Sheep,
	1913	1923.	1913.	1923.	1913.	1923.	1913. 1923	
	.				per cent.	per cent.	per.	per cent.
Acres. 1 and under 51	89	5 403	22,074	16,209	3-6	1-5	•1	-1
51 ,, ,, 101	69	1 540	34,275	38,002	2.8	2.0	•1	•1
101 ,, ,, 501	5,42	1 5,374	824,096	972,114	21.7	20/2	2.1	2.8
501 ,, ,, 1,001	5,49	6,223	2,031,968	2,193,425	21-9	2374	5.1	6-3
1,001 ,, ,, 5,001	8,76	10,264	10,109,752	10,809,743	38-0	38+6	25,4	31-0
5,001 ,, ,, 10,001	1,60	6 1,774	5,653,864	5,247,939	6,4	61-7	14.2	15-0
10,001 ,, ,, 20,001	78	4 880	4,945,151	4,317,689	3.1	3.3	12.4	12.4
20,001 ,, ,, 50,001	52	2 635	6,193,193	4,521,286	2.1	2.4	15-5	13-0
50,001 ,, ,, 100,001	18	9 184	3,717,322	2,436,501	-8	•7	9-3	7-0
100.001 and upwards	22	4 186	6,192,852	4,258,726	.9	. 7	15.5	12-2
Ill-defined areas	42	8 129	125,676	51,113	1.7	•5	•3	-1
Total	25,02	3 26,592	39,850,223	34,862,747	100-0	100.0	100+0	100-0

A comparison over a period of ten years shows that this movement is progressing steadily. In the following table the holdings are classified according to the total area of alienated and Crown lands,

The number of holdings of each area group between 100 acres and 100,000 acres carrying sheep have increased, but the increase has been most marked in the area groups from 500 acres to 5,000 acres.

In 1913, 40.5 per cent. of the sheep were depastured on holdings of 20,001 acres and upwards, whilst in 1923 only 32.2 per cent. were so depastured. The holdings up to 20,000 acres carried 67.8 per cent. of the total number of sheep in 1923, having increased from 59.5 per cent. in 1913.

Breeds of Sheep.

The principal breed of sheep in New South Wales is the celebrated shortwoolled merino strain. Crosses of long-woolled breeds, mainly with the merino, are numerous and important, but the numbers of other breeds are small. English long-woolled sheep are represented chiefly by the Lincoln, Romney Marsh and Border Leicester breeds, while Suffolk and Dorset Horn sheep have been introduced for the raising of early-maturing lambs.

Lincolns, and their crosses with merinos, constitute the largest propertionate number of coarse-woolled varieties. The proportion of English and cross-bred sheep has increased considerably during recent years. In 1891 the ratio of coarse-woolled and cross-bred sheep to the total was 3 per cent., but with the development of mixed farming and the meat expert trade, it advanced to 31 per cent. in 1919. It has dropped since on account of the more favourable market for merino wool.

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At 31st December.			en de la composition br>La composition de la c			Per cent. of Total.		
At 318	t Decena	ber.	Merino.	Other.	Total.	Merino.	Other.	
1881			34.412.900	2.179.000	36,591,900	94	6	
1891			60,252,400	1.579,000	61,831,400	97	3	
1901			38,886,000	2.971.000	41,857,000	93	7	
1911			37,047,400	6,283,900	43,331,300*	85	15	
1918			26,786,100	12,233,800	39,018,900*	69 *	31	
1919			23,170,100	10.295,400	33,465,500*	69	31	
1920			21.987.000	8,909,800	30,896,800*	-71	29	
1921			25,994,700	8.771.400	34,766,100*	75	25	
1922		-	27,324,700	7,600,800	34,925,000*	78	22	

The following table shows the approximate number and proportion of merino and other sheep in the State during the past forty-one years :--

* Sheep on holdings with live-stock equivalent of more than 100 sheep.

Sheep Breeding.

The increased attention paid to cross-breeding in order to supply the demands of the frozen-mutton trade, and the increase in the number of settlers on small and moderate-sized holdings who combine grazing with agriculture, have emphasised the necessity of conducting scientific experiments in the matter of breeding, and of providing instruction for sheepfarmers. To meet this necessity a sheep and wool expert of the Department of Agriculture organises the class work conducted at State experiment farms, delivering lectures and giving demonstrations in country centres, besides issuing pamphlets containing the results of experiments and conveying general information on breeding matters to farmers.

Cross-breeding experiments on a comprehensive scale have been conducted in the interests of the farmer or the small grazier who has the facilities for breeding lambs for market. Both the long and the short-woolled breeds were crossed with the merino, with the object of obtaining the most desirable characteristics of each group, so that all these qualities could be incorporated in a single strain. The final results of the investigations, which form the subject of a special "Farmer's Bulletin," issued by the Department of Agriculture in August, 1920, favoured the mating of merino ewes with sires of British breeds, in view of the adaptableness of the former to seasonal conditions.

Experiments were made recently by mating first-cross Border Leicester x Merino and Lincoln x Merino ewes with rams of the South Down, Dorset Horn and Ryeland breeds. Of the resulting lambs, those of Dorset Horn sires were rather heavier and brought higher prices than those of the Ryeland, and much more so than those of South Down sires.

World's Sheep Flocks.

Amongst the sheep flocks of the world those of Australia constitute an important proportion, and, as shown on a previous page, New South Wales contains 44 per cent. of the Australian sheep. Particulars relating to the sheep flocks of the world are shown below, and some indication is given

SHE CHARLES BEERS HERDER STRATES

Continent.		No. of Sheep at t to-	Increase (+) or	
COntinento.		1911.	1922.	Decrease ().
Europe Asia Africa America, North and Central America, South	•••	No. 167,072,000 100,100,000 60,240,000 57,544,000 115,774,000	No. 157,235,000 96,971,000 75,203,000 41,002,000 83,970,000	$\begin{array}{c c} & \text{per cent.} \\ (-) & 5.9 \\ (-) & 3 \cdot 1 \\ (+) & 24 \cdot 8 \\ (-) & 28 \cdot 7 \\ (-) & 27 \cdot 5 \end{array}$
America, South Oceania Australia New Zealand Other Total, the World	••••	93,003,000 23,996,000 86,000	$78,803,000 \\ 23,081,000 \\ 51,000 \\ 556,316,000$	$\begin{array}{ccc} () & 15\cdot3 \\ () & 3\cdot8 \\ () & 40\cdot7 \\ \hline () & 10\cdot0 \end{array}$

Although these figures can be regarded only as approximate estimates, it is apparent that in recent years there has been a serious decline in the number of sheep in the leading produceng countries. The increase shown in Africa does not go very far towards counterbalancing the diminution in the world's flocks.

WOOL.

The prosperity of New South Wales for many years has depended very largely on its sheep flocks and upon the condition of the wool markets of the world, and the value of the wool-clip is still the most important factor of the year in the primary production of the State.

Production of Wool.

Wool is produced in New South Wales principally by shearing the live sheep, but also to a considerable extent by fellmongering-removing wool from skins of sheep slaughtered, and by picking the wool from the carcases of dead sheep on the holding.

Formerly considerable numbers of sheep were washed before being shorn, and, as particulars of the resultant wool were not recorded prior to 1876, only estimates of the quantity of wool produced up to that date are available. The output of wool is generally stated as in the grease, the equivalent being variable but approximating to 1 lb. of washed to 2 lb. of greasy wool.

The following table shows, in quinquennial periods since 1876 and annually during the past ten seasons, the total quantity of wool produced (as in the grease) in New South Wales, together with the aggregate value on f.o.b. basis Sydney, and the value to growers in the past nine seasons :---

	Wool Pro (000 omit			Wool produced (000 omitted).			
Period.	Quantity as in the Grease,	Value F.O.B. Sydney.	Year.	Quantity as in the Grease.	Value F.O.B. Sydney.	Value at place of Production	
	lb.			(1b.)	£	£	
1070 1000	718,397	31.298	1914-15	318,935	12,228	11,250	
1876–188)	943,814	40,563	1915-16	262.045	12,291	11,380	
1881-1885		44,773	1916-17	270,525	17.750	16,435	
1886-1890	1,294,781	49.025	1917-18	284,188	19,538	18.091	
1891-1895	1,813,630	49,023	1918-19	305,613	20,374	18,865	
1896-1900	1,408,240		1919-20	296.641	19.776	18,311	
1901-1905	1,302,585	46,719		240,231	13.763	12.744	
1906-1910	1,817,162	73,610	1920 - 21		15,703	14.194	
1911-1915*	1,507,080	57,956	1921 - 22	285,418			
1916-1920†	1,419,012	89,729	1922 - 23	293,571	21,896	20,274	

* 41 years ended 30th June, 1915.

† 5 years ended 30th June, 1920.

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PASTORAL INDUSTRY.

The decline in production in recent years has been due to the diminution in the number of sheep, although it has been offset in some measure by an increased yield of wool per sheep. The value of the output has increased under the influence of a marked rise in prices, the total value of wool during the period, 1916–1920, being more than twice as great as in the corresponding period, thirty years earlier, when the quantity produced was only 9 per cent. less.

The following statement shows particulars of the number of sheep shorn, the average weight of wool per sheep, and the respective amounts of shorn and other wool produced in each of the past ten years :---

		Wool from Shee Shorn (as in t		•		
Year. Sheep and Lambs Shorn.		Quantity. Average weight of Fleece (Sheep and Lambs).		Other Wool.*	Total Production of Wool.	
	1		1 . 1	<u>.</u> 9,7		
	No.	lb.	1b.	1b.	Ib.	
1913	37,903,000	300,721,000	7.93	57,264,000	357,985,000	
1914 - 15	37,300,000	268,476,000	7.20	50,459,000	318,935,000	
1915 - 16	30,904,000	219.234.000	7.09	42,811,000	262,045,000	
1916-17	32.075.000	237.112.000	7.39	33,413,000	270,525,000	
1917-18	35.559.000	251.652.000	7.08	32,536,000	284,188,000	
1918-19	36,960,000	263.585.000	7.13	42,028,000	305,613,000	
1919-20	34.468.000	242.274.000	7.03	54,367,000	296,641,000	
1920-21	29.327.000	203,140,000	6.93	37.091.000	240,231,000	
1921 - 22	32,981,000	247,162,000	7.49	38,256,000	285,418,000	
1922-23	34,635,000	250,754,000	7.24	42,817,000	293,571,000	

* Estimated quantity of dead wool and skin wool.

The quantities of skin wool and dead wool produced fluctuate according to slaughtering, and the mortality from other causes. Both are usually high in adverse seasons, e.g., 1914-15 and 1919-20. Favourable market conditions also lead to heavy slaughtering.

Shearing operations are usually carried out between June and November, and the average weight of the fleece apparently varies very greatly under the influence of the seasonal conditions ruling during the period in which the wool was grown. The proportion of merino sheep in the flocks is also an important factor affecting the average weight of the fleece.

The quantity of New South Wales wool exported and the quantity used locally, together with the proportion of the total production during each quinquennium since 1901 are shown below :---

	Quar	tity of Wool (000 omitte		Proportion of Tótal Productión,		
Period.	Exported or available for Export.	Used Locally.	Total Production.	Exported or available for Export.	Used Locally.	
	1b.	lb.	1b.	per cent.	per cent.	
1901-05	1,297,118	5,467	1,032,585	99.58	•42	
1906-10	1,811,746	5,416	1,817,162	99.70	•30	
1911-15	1,494,104	12,976	1,507,080	99.14		
1916-20	1,385,919	33,093	1,419,012	97.67	2.33	
1921	232,351	7,880	240,231	96-72	3.28	
1922	278,234	7,184	285,418	97.48	2.52	
1923	288,457	5,114	293,571	98.26	1.74	

Only a very small proportion of the wool produced in New South Wales is manufactured within the State.

NEW SOUTH WALES OFFICIAL FRAR ROOK.

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.

Sylney Wool Sales.

Sydney wool sales began to assume importance alout the year 1885, and at the time of the initiation of the Imperial Wool Purchase Scheme in November, 1916, about 85 per cent. of the successive wool clips of New South Wales was sold annually in Sydney to representatives of firms in practically every foreign country where woollen goods were manufactured on an extensive scale. Between November, 1916, and 30th June, 1920, all local wool was acquired by the Imperial Government by appraisement, and public wool sales were not resumed in Sydney until 5th October, 1920.

The following statement compiled from the records of the Sydney Wool Selling Brokers' Association, shows the absolute and relative magnitude of sales of wool in Sydney 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 :----

				tion of to		Des	escription of Wool Sold.					
Season. Weight. Value.	Arrivals			Breed		Growth.		Condition.				
	Value.	in Sydney.	Exports.	Merino.	Cress- bred.	Fleess	Lambs.	Greasy.	Scoured			
1913-14 1914-15 1915-16 1920-21 1921-22 1922-23 1923-24	lb.000 257,437 182,106 224,482 102,810 293,533 256,113 213,154	£000 10,333 6,739 10,430 5,610 14,755 18,922 21,445	Per cent. 96-4 69-3 101-1 54-4 117-7 108-3 101-4	Per cent. 91·3 75·0 84·1 55·7 90·3 87·8 96·6	Per cent. 89-0 83-8 84-5 89-1 73-2 79-0 83-9	Per cent. 11-0 16-2 15-5 10-9 26-8 21-0 16-1	Per cent. 94:4 95:4 95:8 95:8 95:7 94:3 96:6	Per cent. 5.6 4.6 4.2 1.1 4.3 5.7 3.4	Per cent. 88-7 92-0 86-7 93-7 93-7 93-3 92-6	Per cent 12-3 8-0 15-3 6-8 9-8 6-7 7-4		

* Greasy and Scoured.

The figures as to quantity and value in this table are not comparable with any others quoted herein by reason of the fact that they are not on the basis of wool in the grease, and that the wool produced in any season is not necessarily 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, 1923, there was practically no wool remaining unsold in Sydney.

Particulars of the Imperial Wool Purchase Scheme which operated during the years 1916-17 to 1919 20 were published in previous editions of this Year Book.

British Australian Wool Realisation Association Limited.

This Association was brought into being on 27th January, 1921, to dispose of a total surplus of 2,691,827 bales of Australian, New Zealand, and South African wool, which existed as a result of war-time operations.

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Details of the formation and early activities of this organisation may be found in the Year Book for 1921, at page 781.

During 1921, B.A.W.R.A. disposed of 801,449 bales of wool of which 242,015 bales of Australian merino and 88,100 bales of Australian crossbred owned by B.A.W.R.A. realised £6,394,821, equal to £19 7s. 5d. per bale. In 1922, sales were again extensive and a total of 977,119 bales were disposed of including 172,855 bales of Australian merino and 137,316 bales of Australian crossbred owned by B.A.W.R.A., which gave a gross return of £7,185,198, equal to £23 3s. 4d. per bale. In 1923 the sales of wool amounted to 703,601 bales; the quantity owned by B.A.W.R.A. being 196,420 bales of Australian wool which realised £4,587,066 or £23 7s. 1d. per bale.

The total payments by B.A.W.R.A. to shareholders up to December, 1923, amounted to £21,407,603, comprising approximately £10,000,000 for retirement of priority wool certificates and £11,000,000 in reduction of capital.

The balance sheet at 31st December, 1923, showed, among liabilities, capital payable to shareholders (12th February, 1924) £5,331,618, surplus at 31st December, 1923, £1,322;532; and among assets, wool stocks, valued as at date of acquisition, £968,449; Government securities, £3,888,855; cash at bankers, £5,213,432.

At the beginning of 1924, the stocks of wool on hand for disposal amounted to 209,614 bales, of which 43 bales of merino and 81,152 bales of crossbred were Australian wool, owned by B.A.W.R.A., the balance being principally Australian and New Zealand crossbred wools awaiting disposal on behalf of the British Government. The cales were concluded on 2nd May, 1924, when the last bale of wool carried over from the Imperial Wool Purchase Scheme was cold at auction.

A proposal was made in 1922 that B.A.W.R.A. be constituted as a permanent central organisation for the protection, stabilisation, and development of the Australian pastoral and agricultural industries. The proposal was submitted to a meeting of the shareholders and was rejected.

Prices of Wool.

On account of the very large number of varieties of wool and of the changing proportions of each in the total output, it is a matter of great difficulty to obtain price quotations which will show accurately the fluctuations of values from year to year.

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 1911, rising since 1912. These periods indicate the general trend only because in certain years, notably 1900, 1914-15, 1921. and 1922, prices varied irregularly.

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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 in the past twenty-six selling seasons :--

Season	Average P	rices per lb.	Season	Average P	rices per lb.	Season	Average P	rices per Ik
ended 30th June.		ended 30th June.	Greasy.	Scoured.	ended 30th June.	Greasy.	Scoured.	
1000	d.	d.	1000	d.	d.	1917	d.	d.
1899 1900	7 1 115	$13\frac{3}{4}$ $18\frac{3}{4}$	1908 1909	9 $7\frac{7}{8}$	$15\frac{1}{4}$ $13\frac{1}{4}$	1917 1918 1919	143 148	$20\frac{7}{8}$ $23\frac{3}{4}$
1901 1902	$5\frac{5}{8}$ $6\frac{1}{8}$	$10\frac{3}{8}$ $11\frac{1}{8}$	1910 1911	9 1 81	$15\frac{7}{8}$ $14\frac{7}{8}$	1920	$15 \\ 15 \\ 15 \\ 8 \\ 101$	253 261
$\frac{1903}{1904}$	8 8 1 8 8 88	$14\frac{1}{2}$ $14\frac{1}{2}$	1912 1913	8 1 9 5	14 16 3	1921 1922	$12\frac{1}{2}$ $12\frac{1}{4}$	25 14 §
$1905 \\ 1906$	8 <u>8</u> 9	141 161	1914 1915	$9\frac{1}{8}$ $8\frac{5}{8}$	$16\frac{3}{8}$ $15\frac{1}{8}$	$\begin{array}{c} 1923 \\ 1924 \end{array}$	$17\frac{1}{2}$ $23\frac{1}{2}$	23 36
1907	91	$15\frac{3}{4}$	1916	10 1	17			

These figures represent the average price of wool sold during the year, and are not comparable with those previously published in this part, representing the average value of wool as declared for Customs purposes on export.

A comparison of the average prices of wool on a basis of greasy wool is not entirely satisfactory, as the market price of the clip in any season is affected by the proportion of natural grease which the wool contains, as well as by the proportion of merino to cross-bred and of fleece to lambs' wool sold, and by such variable qualities as length, fineness, and soundness. Naturally, wool containing a high proportion of grease is sold at a lower price per lb. than wool of similar quality containing less grease. The quantity of grease varies according to the seasonal conditions, as wool grown in a good season carries more grease than in a dry period. The feeding of sheep on rich rations for the purposes of obtaining a weighty carcase for export also causes an increase in the proportion of grease in the wool.

Destination of Wool Shipped.

The following statement shows the destination of the oversea shipments of wool from New South Wales during the two years ended June, 1922 and 1923, 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 :---

			Oversea Exports of Wool (000 omitted).										
Greasy.			Scoured.	·	Тора.								
1913.	1921-22.	1922-23.	1913.	1921-22.	1922-23.	1913.	1921–22.	1922-23					
' lb.	Ів.	lb.	lb.	lb.	1b.	lb.	lb.	1b.					
50,120			10,609	31,156	24,020	40	145	•••					
7 007					75	*** 90	1	561					
					1 830			•••					
							1						
			132	292									
5,661	27,501	30,479	129	561	657	3,435	2,548	3,527					
•••	125	1,389	•••		349			•••					
		17,676					558						
23	622	499	2	140	78	58	9	419					
228,999	266,821	241,058	30,248	48,760	40,611	3,562	4,229	4,520					
	1b. 50,120 7,297 27,222 76,486 54,266 3,638 5,661 4,286 23	$\begin{array}{c ccccc} 1b, & & 1b, \\ 50, 120 & 93, 733 \\ & & 464 \\ 7, 297 & *257 \\ 27, 222 & 23, 106 \\ 76, 486 & 73, 587 \\ 54, 286 & 17, 737 \\ 3, 638 & 18, 291 \\ 5, 661 & 27, 501 \\ & & 1, 298 \\ 4, 286 & 11, 398 \\ 23 & 622 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $					

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The largest quantities of wool are sent to the United Kingdom, France. and Japan, in the order named. Some of the wool sent to the United Kingdom is transhipped to other countries.

Approximately 75 per cent. of the wool is shipped in the greasy state, though the weight is loaded thereby with extraneous matter amounting to as much as the wool itself. It is considered that scoured wool stored in tightly packed bales for a long period is more liable to deterioration than greasy wool. An important consideration in regard to the condition in which wool is shipped is the purpose for which the wool is needed. For certain classes of factories scoured wool is purchased, and in other cases manufacturers prefer to buy greasy wool and to subject it to special processes in classing and scouring.

CATTLE.

Cattle-raising, as connected with the dairying industry, is dealt with in later pages of this Year Book.

Other industries connected with cattle, such, for instance, as the export of beef, have never existed on a large scale in New South Wales. However, in recent years, an appreciable increase has been apparent in the number of cattle depastured, and the number in 1922 constituted a record for the State. Favoured by the rise of prices, the value of products derived from cattle increased rapidly during the war and subsequently until 1919–20. In the succeeding year the market weakened to such an extent that the value dropped by over 50 per cent. and was the lowest since 1914–15. The industry of raising cattle for the meat export trade is more responsive to fluctuations in the prices in oversea markets than in the case of the mutton trade. From sheep an annual yield of wool may be obtained, but cattle held for market are unprofitable. Particulars of the export trade in beef are shown on page 559.

Cattle. 32 Year. Year. Cattle. Year. Cattle. 1861 2,271,923 2,128,838 1918* 3,161,717 1891 1866 2,226,163 1919* 3,280,676 1,771,809 1896 1871 2,014,888 1901 2,047,454 1920* 3,084,332 1876 3,131,013 1906 2,549,944 1921*3,375,267 1922* 1881 2,597,348 3,546,530 1911 3,194,236 1886 1,367,844 2,405,770 1923* 3,251,180 1916*

The following table shows the total number of cattle in the State, including dairy cattle, at the close of each quinquennial period since 1861, and the numbers at 30th June of each of the last six years :--

* At 30th June.

The principal distinct breeds of cattle now in the State are the Durham or Shorthorn, Hereford, Jersey, Ayrshire, and Devon, but crosses from these breeds predominate. The number of pure and stud cattle in the State probably does not exceed 250,000.

At 30th June.	Bulls, 3 years and over.	Dairy Cows and other Milking Cows.	Other Cows, not in milk, and Steers over 3 years.	Steers and Young Dulls (1 to 9 years).	Catves, Ander 1 year.	Total.
<u> </u>	No.	No.	No.	240.	No.	No.
1919	37,105	970,448	1,104,824	562,482	665,857	3,280,676
1920	36,272	903:023	1.157,477	568,089	4739.521	3.084,332
1921	40,489	941 742	1,328,768	\$27,369	596,729	3.375.267
1922	43.381	974.087	1.385.427	529,083	613,702	3.546.530
1923	40,530	958 287	1.261.622*	501,634	489.107	3.251.180

The following table contains particulars of the sexes and ages of the cattle in the State in the last five years :--

* Includes 587,495 steers 3 years and over, and 674,127 cows not in registered dairies.

At 30th June, 1923, there were, apart from calves, 1,129,659 bulls and steers, and 1,632,414 cows and heifers in the State, the corresponding figures for June, 1922, being 1,274,101 bulls and steers, and 1,658,727 cows and heifers. Further details regarding milking cows are published on page 571. The number of calves under one year shows considerable variation on account of seasonal influences, and the lowness of the numbers recorded on 30th June, 1920 and 1923 may be attributed to dry seasons. During the past three seasons the number of calves dropped have been respectively 813,665, 995,128, and 961,154, and by comparison with the above table it is evident that only about two-thirds of these survive or are kept until the end of the 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 subject to special treatment should such become necessary within a fixed period thereafter.

The following statement shows the number of live cattle (se far as recorded) passing into and out of New South Wales during each of the past five years. The movement is principally overland, comparatively few cattle being transported by sea.

		From New	South Wale	.		To New South Wales.					
Year.	To Victoria.	To Queens- land.	To South Australia and by Sea.	Total.	From Victoria.	From Queens- land.	From South Australia and by Sea.	Total.			
	No.	No.	No.	No.	No.	No.	No.	No.			
1918-19	109,036	53,749	11,233	174,018	56,604	67,179	2,153	125,936			
1919-20	120,407	$\cdot 29,412$	6.546	156,365	59,219	117,263	2,855	179,337			
1920-21	100,508	19,240	6.976	126,724	142,958	375,597	4,780	523,335			
1921-22	158,834	24,740	12,355	195,929	43,318	204,830	1,153	249,301			
1041-24		22 088	17 249	150.907	44 457	109 555	2.785	156.797			

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. The large import to New South

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Wales in 1920-21 consisted principally of cattle for slaughtering purposes, as with the breaking of the drought in New South Wales in June, 1920, cattle were withheld from market for fattening and for breeding purposes.

During the five years covered in the table there was an excess of imports from Queensland of about 725,000 cattle, and an excess of exports to Victoria amounting to 254,000. The total net gain to New South Wales from all sources was about 431,000.

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 valving over deaths from coarses other than slaughtering. The operation of each of these during each of the past five years is shown below :—

Year.	Cattle at beginning of Year.	Net Imports of Cattle.	Cattle and Calves Slaughtered.	Cattle at end of Year.	Estimated Natural Increase.*
T918-19	3,161,717	() 48,082	437,187	3,280,676	604,228
1919-20	3,280,676	22,972	593,997	3,084,332	374,681
1920-21	3,084,332	396,611	526.055	3.375.267	420,379
1924-22	3,375,267	-53.372	631,789	3,546,530	749,680
1922 - 23	3.546.530	71.269	739,050	3.251.180	372,431

(--) Denotes excess of exports. * Excess of calves dropped over deaths other than by slaughtering.

Seasonal influences have a pronounced effect on imports, slaughtering, and natural increase. The natural increase in the bad season of 1919-20 was only about one-half as great as that of 1921-22, and it was lower in 1922-23. The natural increase, as shown above, represents only the excess of the number of calves born during the year over the number of eattle of all kinds which died during the year other than by skaughtering. The number of calves surviving at the end of each year is shown on a previous page.

HORSES.

There was a great advance in horse-breeding between 1910 and 1918, owing to the increased demand which arcse as a consequence of widening settlement, prosperous seasons, and defence requirements. During the past five years, however, there has been a marked decline due to the adverse seasons of 1918-20, the low prices prevailing, and probably to an increased use of motors for transport.

The following table shows the number of horses in New South Wales at the end of quinquennial periods since 1861, and at 30th June in each of the last six years :--

Year.	Horses.	Year.	Horses.	Year.	Horses.
1861	233,220	TOPI	100.047	10105	742.247
		1891	469,647	1918*	
1866	274,437	1896	510,636	1919*	722,723
1871	304,100	1901	486,716	1920*	662,264
1876	366,703	1906	537,762	1921*	663,178
1881	398,577	1911	689.004	1922*	669,800
1886	361,663	1916*	719.542	1923*	660.031

* At 30th June.

For purposes of classification the horses have been divided into draught and light, and the number of each particular kind, at the 31st December, 1922, so far as could be ascertained from returns collected by the Stock Department, was as follows:—

	Class.	 Thoroughbred.	Ordinary.	Total.
• Dra Lig	ught ht	 25,977 30,349	227,350 233,729	253,327 264,078
	Total	 56,326	461,079	517,405

The number of horses shown above represents only those on holdings which depasture ten or more horses, or live stock equivalent to 100 or more sheep.

New South Wales is specially suited to the breeding of saddle and lightharness stock, and it is doubtful whether, in these particular classes, the Australian horse cap be surpassed anywhere. Thoroughbred sires are kept on many of the large holdings, and their progeny combine speed with great powers of endurance. The possession of these qualities gives them great value as army remounts.

There is a small export trade to India, where the horses are required as remounts for the army. The number of horses sent there during the year ended 30th June, 1923, was 407, and the value was £11,730.

Horse Breeding.

During the three years between July, 1918, and June, 1921, approximately 93,000 foals were bred, while probably about 186,000 horses (including foals under 1 year) died. The number of foals dropped during normal years is, on the average, between 7 and 8 per stallion, but during 1918–19 and 1919–20 breeding was severely restricted, and the proportion of foals dropped in the succeeding seasons declined to about 5.

The following table shows the number of horses of each sex, and the number of foals at the end of each of the past five years :---

At 30th June.	Stallions.	Mares and Fillies.	Geldings and Colts.	Foals under 1 year.	Total.
1919	5,587	330.540	346.581	40.015	722,723
1919	4.609	305.211	327,689	24,755	662,264
1921	4,270	314,073	324,770	20,065	663,178
1922	4,318	314,276	321,521	29,685	669,800
1923	4,021	310,747	316,647	28,616	660,031

The pronounced decrease in the number of stallions during this period is reflected in the diminution of breeding operations. A Bill has been prepared to provide for certification and registration of stallions.

OTHER LIVE STOCK.

Particulars of the number of pigs in the State are shown on page 579. The number of goats in New South Wales in June, 1923, was 31,440 including 2,792 Angora goats, which are valued by pastoralists chiefly as effective scrub exterminators, although the dry climate of the western districts is eminently suited to the production of fine mohair. Under the provisions of the Dog and Goat Act, 1898, the use of dogs or goats for purposes of draught is prohibited.

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PASTORAL INDUSTRY.

Camels are used as carriers on the Western Plains, the number in June, 1923, being 819, 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 1923 being 11 of the former and 110 of the latter. It is claimed that mules have many points of advantage over horses for farm work, especially in areas of limited rainfall—for instance, longer period of utility, smaller cost of maintenance, greater adaptability to untoward conditions of labour, and comparative freedom from disease.

The climate of certain portions of the State is considered specially suitable for ostrich farming, though it is not conducted on an extensive scale. The number of ostriches at the end of June, 1923, was 148, as compared with 662 at the close of the year 1913.

PRICES OF LIVE STOCK.

The governing factor in the price of meat is the price paid for live stock at the metropolitan saleyards at Flemington, and that price is influenced by the world's market prices for meat, hides, skins, etc., and by local climatic conditions.

The following statement shows the average prices of fat stock during the years 1919 to 1923. The amounts stated are the means of the monthly prices which are published annually in the Statistical Register.

Stock.		1919	•	-	1920	•	<u> </u>	1921	•	<u> </u>	1922			1923.	
Cattle.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d٠	£	s.	d.
Bullocks and Steers—	1			1											
Mean of Prime and Good	18	8	0	18	7	0	9	14	0	7	18	0	10	3	6
Cows and Heifers-															
Prime	17	4	0	20	3	0*	- 9	9	0*	6	15	0*	10	5	6*
Calves, Vealers-	1 C.				$\langle \beta_{j} \rangle$				$\{ i \in I \}$	1		5 N. I	1		
Good	. 4	11	-3	4	7	6	3	10	6	2	6	3	2	5	0
Sheep.	-								·						· . ·
Cross-bred															
Wethers—									. 11						
Mean of Prime and Good	1	10	9	1	16	0	. 0	18	0	1	0	3	1	8.	9
Ewes	32												-		Ξ.
Mean of Prime and Good	1	9	0	1	12	9	0	15	0	. 0	15	0	1	5	6
Merino						-	- F		-						-
Wethers-															
Mean of Prime and Good	1	9.	3	1	15	9	Ó	18	9.	1	1	6	1	13	3
Ewes-		÷ .	•	_		~~S	-s:-₹.	· • •		-	-	Ŭ			•
Mean of Prime and Good	1	3	0	1	8	9	0	14	6	0	14	6	1	4	0
Lambs, Woolly	· •	С.,	*	• •	0	1	. •	11	Ŭ	U		Ň			· *
Mean of Prime and Good	1	2	0	1	7	3	ំ	14	0	0	17	à	1	1	۰ n
Pigs.		-	•	-					Ŭ.,		4.	. * :	-		
Porkers-				1. T		1.1			÷			1. A. A.			
Good		-	•		,			12			10	6		a ²	
	3	7.	3	4	4	0	3	14	5	2	18	6	3	2	6
Baconers-		1.			10			-	•					ci.	
Good	4	17	6	6	18	6	5	7	6	4	2	6	- 5	2	6

*Extra Prime and Prime.

Subject to the operation of other factors, the prices of stock in local markets are influenced largely by the nature of the seasons. During bad seasons stock are hastened to market and prices are low, but, when the dry weather breaks, efforts to re-stock cause a decrease in yardings, and prices for a time are abnormally high.

In July, 1920, when the drought had ended, a sharp rise occurred in the prices of fat stock, supplies at the saleyards having diminished when graziers began to re-stock their holdings. The abnormal prices lasted for about three months, then the yardings increased, and the prices fell more rapidly than they had risen. Throughout 1921 prices declined steadily, though sheep tended to become dearer towards the end of the year in response to the more favourable prospects of the wool trade. This tendency continued until September, 1922, when they were approximately 100 per cent. dearer than in October, 1921. A steep decline then occurred until the end of the year, when prices showed an upward tendency, but the rise was not sustained. The continued dry weather caused a large supply of stock to be placed on the market during the early months of 1923, and prices declined steadily. In May, however, the seasonal conditions improved and in the following month beneficial rains fell in the pastoral districts causing prices of stock to rise rapidly as graziers competed for supplies to replenish their flocks and herds. The upward movement lasted until August in the case of sheep, and September in the case of cattle.

In the meantime, as shearing progressed, an ample number of shorn sheep were ready for market. The condition of local cattle had improved and a large number were imported from Queensland. Therefore prices began to fall again. The rise had been so rapid that the average price of prime medium bullocks rose from £9 15s. in April to £22 14s. in September, and of prime wethers from 22s. 6d. for crossbred and 31s. for merinos in April, to 48s. and 55s. 6d. respectively in August. At the end of the year the corresponding prices were—bullocks £10 13s.; wethers—crossbred 29s. 3d., merino 28s. 6d. In regard to the monthly prices of sheep it should be noted that the quantity of wool carried by the stock is an important factor affecting the price. As a general rule sheep at market in January and February are shorn, during March and April they have growing fleece, from May to August they are woolly, and from September to December both shorn and woolly sheep are marketed.

MEAT TRADE.

The meat trade commenced to assume importance in New South Wales toward the end of the nineteenth century, when an export trade in frozen and chilled meat became possible through the provision of refrigerated space in ocean steamers.

Whereas, in the earlier years, surplus stock frequently found no better outlet than boiling-down works, and were, therefore, of no greater value than that of the hides or skins and tallow produced from them, an attractive oversea market for both frozen and canned meats has been opened. Boilingdown operations practically ceased, and the export trade grew steadily until it benefited from a sudden and strong impetus during the war period.

These developments were not without their effects on the local meat supply, and the opening, the expansion, and the boom of oversea trade, which occurred respectively about 1900, 1911, and from 1914 to 1921 caused substantial rises in the local prices of both beef and mutton. In the early part of 1921, however, as a consequence of a glut of meat in cold storage, values fell in the United Kingdom and a substantial reduction occurred in local meat prices, until by the middle of 1922 they were below the level prevailing in 1913. Reaction soon came, and a sudden rise occurred in July, 1922. Thereafter local prices remained fairly steady until February, 1923, when a downward tendency became apparent as a result of dry weather in the pastoral areas. Later in the year beneficial rains fell and prices rose almost to the level of the year 1920. In fact, fresh meat became so scarce that meat which had been frozen for export was released from cold stores for local consumption between June and September, when market supplies of stock again became adequate to meet the demand.

PASTORAL INDUSTRY.

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 numbers of slaughtering establishments and of employees, together with the total number of stock slaughtered in the State at intervals since 1901. The figures relating to the establishments and employees, prior to 1921, are in excess of the actual number, as they include a large number of butchers' shops in country districts and the shop hands employed therein.

*****	Slaughter-honses. Year.		Stock Slaughtered in Establishments and on Farms and Stations.								
rear.	No.	Employees.	Sheep.	Lambs.	Bullocks. †	Cows.	Calves.	Swine.			
1901	1,642	4,075	4,372,016	147,117	202,795	113;374	19,654	248,311			
1906	1,522	4,391	4,229,407	252,648	237,722	94,955	26,200	281,650			
1911	1,287	4,343	6,146,739	400,186	306,773	182,178	59,969	816,321			
1916*	1,071	3,722	3,815,477	361,831	187,882	165,134	31,986	219,306			
1921*	960	1,342	3,506,008	345,255	300,941	145,610	79,504	238,259			
1922*	1,061	1,758	4,598,814	631,035	407,029	120,877	103,883	336,369			
1923*	1,052	2,180	4,441,760	1,224,516	420,117	185,409	133,524	839,544			

* Year ended 30th June. † Includes a small number of bulls.

The majority of the stock, except swine, are slaughtered in the metropolitan establishments, though it is considered that many advantages would result if facilities were provided to treat all the stock in the districts where they are depastured. In 1922-23 the sheep and lambs slaughtered in the metropolitan district numbered 3,756,098, cattle 443,784, and swine 180,125. The corresponding figures for the country establishments, including stock slaughtered on stations and farms, were sheep and lambs 1,910,178, cattle 295,266, and swine 159,419.

The particulars stated above relate to the stock slaughtered for all purposes, and the following statement shows the number of sheep and cattle used for local consumption as fresh meat and those frozen for export or preserved during the last three years. During periods of shortage meat frozen or chilled for export is released for local consumption :--

	1920	-21.	1921	-22.	1922-28.		
Purpose for which slaughtered.	Sheep and Lambs.	Cattle (including Calves).	Sheep and Lambs.	Cattle (including Calves).	Sheep. and Lambs.	Cattle (including Calves).	
	No.	No.	No.	No.	No.	No.	
Used for local consumption Exported to other States or	3,293,8 62	478,140	4,197,101	565,306	4,056,872	672,782	
boiled down for tallow	22.175	2.834	25.645	4.300	28,705	4,763	
Frozen or chilled for export Required by meat-preserving	491,198	33,147	727,986	46,630	1,431,864	39,498	
establishments	44,028	11,934	279,117	15,553	148,835	22,007	
Total Slaughtered	3,851,263	526,055	5,229,849	631,789	5,666,276	739,050	

The comparison illustrates the fluctuations experienced in regard to the frozen and preserved meat industries. During the year ended June, 1921, there was a decline of 72 per cent. in the number of animals treated for those purposes, but there has since been an increase of over 170 per cent. During the three years reviewed in the table the numbers of carcases of frozen lamb and mutton exported were 466,942, 1,006,343, and 1,723,720 respectively.

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 local board, on similar lines to that now existent in Sydney.

In the metropolitan area stock is slaughtered at the State Abattoirs at Homebush Bay. Animals sold at Flemington are inspected before being killed and the 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 during recent years are shown in the following statement :---

Year ended 30th June.	Cattle.	Calves.	Sheep and Lambs.	Pigs.
1915	195,028	48,148	2,116,844	65,718
1916	100,794	19,137	1,309,810	64,884
1917	103,909	30.016	1,275,430	71,679
1918	101,084	23,132	1,061,471	93,567
1919	130,373	42,635	1,838,243	132,065
1920	209,649	65,824	2,542,348	94,595
1921	165,381	70.097	1,407,034	76,316
1922	210,927	88,102	2,260,196	114,766
1923	242,893	107,683	2.361.532	163.241

Of the stock slaughtered at the State Abattoirs in 1922-23 the following numbers and proportions were condemned :—Cattle 2,127, or .88 per cent.; calves 819. or .76 per cent.; sheep and lambs 4,323, or .18 per cent.; and pigs 1,875, or 1.15 per cent.

The following table shows the numbers of stock yarded annually at Flemington saleyards, where most of the stock slaughtered in Sydney are sold :---

Year ended 30th June.	Sheep.	Cattle.	Year ended 30th June.	Sheep.	Cattle.
1914	2,805,207	276.440	1919	2,684,652	178.140
1915	3,381,937	255,876	1920	2,792,879	260,306
1916	2,317,602	158,453	1921	2,255,970	251,065
1917	1,711,246	i49,604	1922	3,179,875	282,399
1918	1,756,301	146,630	1923	3,558,487	327,506

Meat Export Trade.

The meat export trade of New South Wales has now assumed considerable proportions, and particulars of the attention given to sheep-breeding for this purpose may be found on a previous page. 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 carcases 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 meat trade is a comparatively recent development, and 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 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 :---

1		Frozen o	Chilled.		Preser	ved.
Year.	Bcef.	Mutton and Lamb.	Total Weight.	Total Value.	Weight.	Value.
	ewt.	cwt.	cwt.	£	16.	e e
1891	*	*	105,013	101.823	6,509,928	85,02
1896	26,529	559,507	586,036	294,596	14,265,300	187.95
1901	115,050	351,516	466,566	541,525	10.086.940	209,69
1906	32,640	455,165	487,805	579.294	3,121,933	62.30
1911	65,097	535,259	600.356	758,155	20,783,779	401,38
1915-16	7,000	236,099	243,099	562,262	4,087,618	159,71
1917-18	33,464	77,864	114,328	362,846	21,522,696	1,230,08
1918-19	21,363	173,122	194,485	497,784	33,836,189	2,000.84
1919-20	55,460	476,491	531,951	1,341,004	20,687,722	1,305,12
1920 - 21	110,727	166,039	276,766	937,040	4,479,460	235,80
1921-22	95,579	383,479	479,058	1,152,637	5,112,612	184,19
1922 - 23	68,800	562,749	631,549	1,769,601	5,781,998	152,71
en de la composition br>En la composition de la composition de la composition de la composition de la composition de la composition de l	Lessie de la la la la la la la la la la la la la	- a. 94				

* Not available

There was, prior to the war, an encouraging development in the meat export trade, and the prospects of its establishment on a stable foundation appeared highly favourable. European countries were gradually opening their ports to frozen meat, and the trade in the East was increasing. The war, however, closed many markets and, through inability to secure freight space for commercial purposes, exports were hampered seriously. Early in 1915 arrangements were made in terms of the Meat Supply for Imperial Uses Act, for the purchase by the Imperial Government of the whole output of beef and mutton available for export during the period of the war. Details of the transactions were given on page 482 of the 1920 issue of this Year Book.

The Imperial Government ceased to purchase meat in New South Wales in October, 1920, but exports to the United Kingdom by private traders were restricted for some months to enable the stocks already purchased to be shipped oversea; exports to other countries were allowed under permit. Towards the end of 1921, when control by the Government ceased, the outlook for the trade appeared favourable. Although prices of frozen mutton and lamb in London had fallen, they were still much higher than in pre-war years, and supplies of fat stock in the local saleyards were readily obtainable. But the favourable anticipations were not realised, because the decline in the London market continued during 1922, and there was little improvement in the following year.

			Ere	zen Beef (Hinds) pe	rb.	1	rozen Mı	itton per l	b.
3	lonth.		1913.	1021.	1922.	1923.	1913.	1921 .	1922.	1923.
		1	d.	d.	d.	d.	d.	d.	d.	d.
January			$3\frac{1}{2}$	u.	48	42	41	9	51	73
February	•••	••••	3 <u>2</u> 3 <u>1</u>	111	41	-44 -44 -	4	9	61	73
March	•••	••••	31	911	- <u>-</u> 2 -4	5	33	9†	61 61 63 63	$6\frac{4}{4}$
April			- 25	21 21	41	*	4	8	63	6
Moer		·	31 31 32 32 32	61 51 51 51 51		-#	31	-8	61	
May		•••	-0 <u>2</u>	102	41			- *	6 <u>1</u> 53 5 5	$\frac{5\frac{1}{2}}{6}$
June	•••	•••	32	94	41	1	4	*	$0\frac{1}{4}$	
July		•••	4	5_{4}	41	51	4	*	19	6
August	•••		4	51	43 5	41	-4		5	61
September	***		4	51		4_{1}^{3}	4	*	$5\frac{3}{4}$	$6\frac{1}{4}$
October			41	$5\frac{1}{4}$	43	41	-4	*	$6\frac{1}{4}$	6^{1}_{4}
November			$4\frac{1}{2}$	5	$4\frac{3}{4}$ $4\frac{3}{4}$	$4\overline{2}$	4	43	7	6
December	•••		$4\frac{1}{2}$	5	$4\frac{1}{2}$	41	41	$4\frac{3}{4}$	71	$6\frac{1}{4}$
Annual	Average	,	·4	$6\frac{1}{2}$	4 <u>1</u>	4 <u>3</u>	4	$7\frac{1}{2}$	6 <u>1</u>	63

The movement of the London prices for Australian frozen meat during the last three years in comparison with 1913 is shown below. The quotations represent the monthly average of the weekly top prices.

* No-quotation. † Government control removed.

Two important changes occurred in the demand of the London market during 1921 and 1922-supplies of chilled beef from South America, which had been small since 1915, increased and exceeded their pre-war volume, while importations of frozen beef from all sources, including Australia, decreased heavily. In addition, the market demand favoured mutton and lamb, and beef was neglected, probably in reaction to its enforced consumption during the war period when mutton and lamb were scarce. As a consequence, supplies of beef were excessive during 1922 and 1923, and prices remained throughout the year at about the same level as in the latter part of 1913, and on account of increased freight and handling charges proved unprofitable to local growers. On the other hand, the demand for mutton was strong, and prices rose by 50 per cent. during the year 1922. In the following year the arrival of exceptionally heavy shipments had a depressing effect upon prices. At the end of December, 1923, the London prices per lb. of Australian frozen meats were-Beef (hinds), 41d.; mutton, 61d.; and lamb, 101d.

The following comparison of the imports of meat to the United Kingdom during the past three years in comparison with those preceding the war, shows the relative importance of the principal suppliers in relation to Australia :---

		Beef (000 omitted).				Mutton and Lamb (000 omitted).				
Year.	South American.	Australian.	Other.	Total.	Sonth American.	New Zealand.	Australian.	Total,		
	tons.	tons.	tons.	tons.	tons.	tons.	tons.	tons.		
1912	341	45	14	-400	86	108	49	243		
1913	380	67	13	460	67	110	83	260		
1914	336	78	28	-442	67	119	66	252		
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	637		

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PASTORAL INDUSTRY.

Year.	Best Scottish.	New Zealand.	Ans. tralian,	River Plate,	Year.	Best Scottish.	New Zéaland,	Aus- tralian.	River Piate.
	d.	d.	d.	d.	: 	d.	d.,	d.	d.
1914 1915	8 <u>1</u> 9§	51 61	41 57	45	1919 1920	14	12 9 1	12	12
1916	121	81	51 72	6 <u>1</u> 9	1920	19 1 18	81	9 <u>4</u> 7 <u>4</u>	9 1 71
1917	145	87	87	101	1922	161	75	61	71 71
1918	135	9	9	13 <u>1</u>	1923	15	8;	61	° 7 [;] ≣

The following statement shows the average wholesale prices per pound obtained during the past ten years for Scottish and frozen mutton sold in London :----

The relative importance of the meat export trade of New South Wales is illustrated in the following statement showing the value of the exports of meat, *i.e.*, fresh, frozen, preserved and salted beef, mutton, and park, during the past ten years.

Year.	Value of Meat exported Oversea.	Proportion of Total Oversea Exports.	Year:	Value of Mest Experted Overses.	Proportion of Total Oversea Expants.
1913 1914–15 1915–16 1916–17 1917–18	£ 2,204,165 3,204,025 771,562 1,374,973 1,673,323	Per cent. 708 12:24 2:00 2:87 4:49	1918-19 1919-20 1920-21 1921-22 1922-23	£ 2,733,699 2,761,015 1,225,354 1,382,275 1,965,624	Per cent. 562. 542 254 2.54 2.88 4.62

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 flictuations. Particulars of the numbers of sheep and cattle bandled in the various works, and of the output during the past five years are shown below :---

		Cam	ases etc.	Output of Mean Preserving Wool				
Year.	Refriger	ating Works.	1	Meat Prese	rving.	Tinn	By-Pro-	
	Cattle.	Sheep.	Cantle.	Sheep:	Meat and Sundries.	Weight.	Value.	Value.
	No.	No.	No.	No.	1b. (000).	th. (000).	£	£
1918-19	32,337	583,695	41,517	648,435	9,990	24,189	1,514,078	387,427
1919-20	50,218	1,419,569	44.828	449,533	9,822	18,770	910,264	341,654
1920 - 21	34,147	491,198	4.740	13.988	2,429	1,751	74,747	34,944
1921-22	46,630	727,423	9.362	192,226		6,748	170,751	131,979
1922-23	36,183	1.394.484	12,601	83,465		4,460	168.395	53,526

OTHER PASTORAL PRODUCTS AND BY-PRODUCTS.

The minor products accraing from pasteral 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 the Manufacturing Industry, and will be given only brief mention here. NEW SOUTH WALES OFFICIAL YEAR BOOK.

The oversea trade in these products is considerable, and though there was a marked decline in the volume of exports of many of the commodities during the war period owing to restrictions arising from war conditions, there was an increase in the total value, as higher prices were obtainable. Early in 1920, however, there was a pronounced drop in prices, and the trade experienced a serious setback. In the following year conditions improved, and the general tendency of prices was upward, though the movement was very irregular.

The following table contains particulars of the oversea exports of minor pastoral products at intervals since 1901:--

			Oversea Ex	ports.		1, 11 1
Producta.	1901.	1906.	1911.	1915-16.	1921–22.	1922-23.
Skins and Hides-						N
Cattle No.	91,084	72,743	263,306	431,731	270.636	318,673
Horse No.	472	722	1.392	706	1.000	
Rabbit and Hare lb.	: *	7,380,455	5,795,839	4.352.640	5,399,928	11,454,638
Sheep No.	*	2,706,027	2,410,543	3,447,212	1,429,403	2,722,735
Other \dots \mathcal{L}	184,522	140,050	296,672	272,622	1,058,919	751,080
Bonedust cwt.	66.473	56,415	116.733	71,795	32,301	54,385
Bones cwt.	3,207	2,431	6,807	6,963	13,024	13,866
Furs (not on the skin) £	767	180	117		600	3,472
Glue-pieces and Sinews cwt.	12,862	11,003	20,580	13,276	2,782	3,693
Glycerine and Lanoline lb.		336,586	138.347	218,673	3,482	271,950
Hair (other than human) lb.	165,562	142,636	255,819	336,765	28,635	88,852
Hoofs ewt.	2,215	2,839	3,733	4,518	4,987	6,082
Horns £	12,532	11.979	13,475	3,455	16,614	14,837
Lard and Refined Animal Fats 1b.	13,633	56.737	227,000	73,461	2,048,946	847,180
Leather £	374,541	411,030	334,996	551,026	408,610	398,546
Sausage-casings £	2,567	17,033	52,562	31,595	184,976	360,695
Tallow (unrefined) cwt.	305,227	357,031	612,911	128,290	411,520	414,891
Total Value of minor Pastoral Products exported - £		1,780,466	2,486,492	2,176,838	2,855,027	5,052,468

* Not available.

Skins and hides are the most important of the items included in the table and the increase in the total value in 1922-23 is due mainly to an expansion in the trade in skins and hides, their value in 1922-23 being £3,515,390, as compared with £1,473,559 in the previous year.

The bulk of the export trade in skins and hides is with the United States and the United Kingdom. The exports to the latter country in 1922-23 included 491,572 sheep skins, and 1,322,947lb. of rabbit and have skins. The United States received 143,815 calf and cattle hides, 748,828 sheepskins, 9,878,084 lb. of rabbit skins, and 1,509,903 lb. of other furred skins. Tallow was exported mainly to Japan, 163,522 cwt., and to the United Kingdom, 99,134 cwt.

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 four years are shown in the following table :---

Commodity.	1919-20.	1920-21.	1921-22.	1922-23.
Wool-Greasy, scoured and tops Meat Live stock Items listed in previous table	£ 19,121,726 2,761,015 78,367 9,827,842	$\begin{array}{r} \pounds \\ 12,821,572 \\ 1,225,354 \\ 70,308 \\ 3,385,838 \end{array}$	$\begin{array}{r} \pounds \\ 18,441,533 \\ 1,382,275 \\ 55,736 \\ 2,855,927 \end{array}$	
Total Proportion per cent. of value of all domestic exports oversea	31,788,950 62·4	<u>17,503,072</u> 36·2	22,735,471 50·8	29,835,130 74·3

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The decline in exports during 1920-21 was due to two causes—the reaction after the drought and the temporary stagnation which followed the post-war boom. In each of the succeeding years there has been a marked increase in the value of exports of pastoral products and their relative importance in the oversea trade of the State.

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.

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 value during the season 1922-1923 is estimated to be £34,009,000. The returns received from the different kinds of stock during various years since 1901 are shown in the following table :—

		Annual Val	lue of Pastoral	Production (00) omitted).	
∕ear.	Wool.	Sheep Slaughtered.	Cattle Slaughtered.	Horses (cast).	Total.	Fer head of Population.
·	£	£	£	E I	£	£ s. d.
1901	8,425	2.071	1,229	722	12,447	921
1903	13,793	3.514	1,520	885	19,711	13 5 6
1911	12,933	2.811	1.689	2,001	19,434	11 13 5
1915 - 16	11,380	4,295	3,729	2,172	21,576	11 7 9
1916-17	16,435	4,616	4.026	1.765	26,842	14 3 5
1917 - 18	18,001	3.978	4,702	1.664	28,435	14 15 7
1918 - 19	18,865	4,728	4,633	1,639	29,865	15 3 8
1919-20	18,311	7,450	6,192	2,019	33,972	16 13 3
1920-21	12,744	2,313	2,973	2,027	20,057	9 11 11
1921-22	14,194	4,144	3,278	2,041	23,657	11 2 3
1922 - 23	20,274	6,766	4,912	2,057	34,000	15 13 0

The value of the pastoral production depends mainly upon the prices obtainable for wool in the world's markets, and it is determined largely by the volume of production, which is dependent upon the seasons experienced in the State. The prices of wool rose considerably between 1914 and 1920, so that, while the quantity produced in 1919-20 was 7 per cent. less than in 1914-15, the total value was 62 per cent. higher. In 1922-23 the quantity showed a further reduction of over 10 per cent. as compared with the production in 1919-20, but the value was nearly 11 per cent. higher.

The prices of livestock generally decline in a dry season, as graziers are forced to sell, owing to scarcity of pasturage; but, with an improvement in climatic conditions, the prices rise again, owing to the demand for re-stocking.

The export prices of frozen meat began to rise steadily in 1911, and advanced at a rapid rate after the outbreak of war, to their highest level in 1918. During 1919 and 1920 there was a steady decline, and in 1921 the London prices, on which the export trade depends, fell precipitately. Prices of beef remained very low during 1922, but those for mutton and lamb rose to more favourable levels. In 1923 the average price of frozen mutton and lamb were practically the same as in the previous year, and the price of beef remained low.

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.

Rabbits.

Rabbits, which are the greatest pest to the pastoralists, found their way into this State from Victoria. Their presence first attracted serious attention in 1881, and they multiplied so rapidly that, in 1882, they were to be met on most of the holdings having frontages on the Murray River. A brief account of the measures taken to combat the pest was published on page 794 of the Year Book for 1921.

In order to check the migrations of rabbits the Government has erected The longest of these traverses the whole a number of rabbit-proof fences. State from north to south, proceeding from Barringun, on the Queensland border, to Bourke, and thence following the western side of the railway line, via Blayney and Murrumburrah, to Corowa, on the River Murray, a total distance of 696 miles. Another fence extends from the Murray northwards, 350 miles along the whole border between New South Wales and South Australia. A third, built at the joint expense of the Governments of Queensland and New South Wales, extends from Mungindi to the Namoi River, about 115 miles. The total length of rabbit-proof fences erected by the State to 30th June, 1923, was approximately 1,332 miles, at a cost of £69,888; by Pastures Protection Boards, 736 miles, at a cost of £28,224; and by landholders privately, about 112,875 miles, at a cost of about £6,763,700.

The evil wrought by the rabbits is incapable of measurement, but estimates indicate that the losses due to the pest have been large, and considerable expense has been incurred in coping with it. It is contended that the sheep-carrying capacity of the State has been reduced heavily as a consequence of the damage they cause to pastures, and this suggestion is supported by the facts that the number of sheep in the State has declined since their appearance, and that in every bad season there are heavy losses in sheep through lack of natural fodder.

Although the damage caused by rabbits is considerable, it is compensated to some extent by their local use for food and by the value of frozen rabbits and skins exported.

Within the State these animals form a common article of diet, both in the metropolis and in the country, especially during the winter months, when large numbers of men are engaged in their capture and treatment. At the census of 1921 the number of men returned as engaged in trapping and kindred callings was 1,692, most of whom were engaged in rabbit-catching. The local consumption of rabbits as food is estimated at 60,000 to 80,000 pairs per week. The fur of rabbits and hares is used largely in the manufacture of hats, and of ladies' fur garments.

	Exports Oversea.							
Year.	Frozen Rabbi	ts and Hares.	Rabbit and	Total				
	Quantity.	Value	Quantity.	Value.	Value.			
	pairs.	£	lb.					
1901	*	6.158	* · · · · · · · · · · · · · · · · · · ·	9.379	15.537			
1906	5,938,518	246,803	7,380,455	293,260	540,053			
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			
1917–18	8,978,377	670.269	6,986,837	1,036,188	1.706.457			
1918-19	3,956,877	221,632	10,110,540	1.103.575	1,325,207			
1919-20	6,890,636	537.877	9,927,240	2,702.652	3,240,529			
1920-21	2,830,315	301.615	3.387.480	609.570	911,185			
1921-22	4,399,272	371,491	5,399,928	559.463	930,954			
1922-23	4,096,054	339,189	11,454.638	1.701,921	2,011,110			

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 :--

* Not avaliable.

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. In the season of 1919-20 the value of the exports amounted to nearly £3,250,000. A boom in values occurred in that year, and in February, 1920, the best skins sold at 26s. 3d. per lb. on the London market. It is estimated that the skins and carcases exported during the year, added to the numbers killed for local consumption, represented about 100,000,000 dead rabbits. The corresponding figure for the previous year was perhaps greater still. During 1920-21 the value of skins was considerably lower, although still favourable, while the price of frozen rabbits improved. The decline in exports in that year is probably attributable to the scarcity of rabbits as the result of the severe drought in 1918–20 and the heavy slaughter in those years. This surmise is borne out by the fact that although values receded still further in 1921-22 when the season was favourable, the volume of exports increased, indicating apparently a rapid multiplication of rabbits. In 1922-23 the values rose again, and the quantity of rabbit and have skins exported amounted to nearly 11,500,000 lb.

Year.	No. of Districts in which rabbits were reported to be						
	Increasing.	Decreasing.	Stationary				
1918-19	7	51	9				
1919-20	2	61	4				
1920-21	19	39	.9				
1921-22	25	.30	12				
1922-23	5	58	4				

The following statement affords a summary of the observations of inspectors in the various parts of the State respecting rabbits in the past five years :----

The fluctuations indicated are due largely to seasonal causes, and in some measure to efforts made to combat the pest.

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 rabbitproof 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 wirenetting 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.

During 1922-23 the quantities of materials supplied to landholders under this scheme were 1,368 miles of wire-netting, 49 tons fencing wire, 22 tons barbed wire, in addition to sundry materials, of a total value of £65,004. Repayments during the year amounted to £28,824. A sum of £200,000 was voted by Parliament for these advances on the Loan estimates of 1922-23. At the close of the year the total of advances made since the inception of the scheme was £552,940, and the outstanding balances of the various Pastures Protection Boards as at 30th June, 1923, amounted to £172,589.

PASTURES PROTECTION BOARDS.

For the purpose of administering the Pastures Protection Act which relates to destruction of rabbits and noxious animals, diseases of sheep, travelling stock, importation of sheep, sheep brands and marks, and certain minor matters, the State is divided into 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 Inspector of Stock, appointed by the Governor, and 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.

PASTORAL INDUSTRY.

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.

During the year ended 31st December, 1922, there were in existence sixty-seven Pastures Protection Boards. The amount of rates (including arrears) collected by sixty-six of these boards (for which particulars are available), was £82,031, and during the year £9,301 were paid as bonuses for heads, scalps, etc. At the close of the year the boards possessed bank balances, fixed deposits, and other securities to the amount of £41,051.

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 the 143,000 registered brands in existence at the time of passing the principal Act, 43,229 were re-registered, and to 30th June, 1924, additional brands to the number of 11,506 had been registered, making the total number in existence at that date 54,735.

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.

Since that date measures have been continued, but not always with the close co-operation of landholders. A Tick Board of Control disburses large sums annually in efforts to eradicate the tick, and the problem was dealt with comprehensively by the chairman of the Board in an article in the New South Wales Agricultural Gazette of March, 1923.

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.

VETERINARY SURGEONS ACT.

The Veterinary Surgeons Act was passed in 1923 to provide for the registration of veterinary surgeons, and to regulate the practice of veterinary science. A Board of Veterinary Surgeons has been established to administer the Act, which specifies the qualifications necessary to obtain registration and prohibits practice by unregistered persons.

DAIRYING INDUSTRY.

The natural conditions in parts of New South Wales are highly favourable to the development of the Cairying 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 han1-feeding is necessary only in very dry seasons.

Dairying in New South Wales is said to have begun during the twenties of last century in the immediate vicinity of Sydney and in the Illawarra districts to supply the growing 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. Duirying is also an important industry on the Marrambidgee and Hay irrigation areas.

In the coastal division nearly 8,800 holdings are used exclasively for dairying, and about 6,400 for dairying and 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 wheat-farming and grazing—there being only 440 holdings used solely for dairying, and 2,770 for dairying and other purposes.

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, 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 not so generally as it should be, and the quantity made in each year varies considerably. The area of land devoted to sown grasses has been extended largely during recent years, and in June, 1923, amounted to 1,925,450 acres, of which 1,892,800 acres were in the coastal district. The produce of this land is used mainly as food for dairy cattle.

A Select Committee of the Legislative Council which investigated recently the condition of the dairying industry, emphasised the need for a better system of feeding, with due regard to conservation of fodder, im-

DAIRYING INDUSTRY.

provement 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. It was pointed out that by improved methods of feeding and by culling unprofitable animals an annual average increase of 10 lb. of butter per cow could reasonably be expected, which, after allowing for the cost of herd-testing and the increased cost of feeding, would represent a substantial gain to the producers.

SUPERVISION OF DAIRY PRODUCTS.

The manufacture, sale and export of dairy products, *i.e.*, milk, condensed milk, butter, cheese, also margarine, are subject to supervision in terms of the Dairy Industry Act passed in December, 1915.

Dairy factories and stores must be registered, and are under the supervision of 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 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 Act provides also for the computery grading, on a uniform basis, of butter for local consumption and for expertation.

The State has been divided into eight 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. 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 in the year ended 30th June, 1923, 95 per cent. of the total output was classed as choicest or first-grade, whereas, formerly, only 50 per cent. of the quantity exported reached this standard.

Particulars regarding the supervision of dairies supplying milk for consumption as fresh milk, are shown in the chapter, "Food and Prices."

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.

DAIRY INSTRUCTION.

Educational and experiment 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, Glen Innes and Yanco, Ayrshires; at Wagga Wagga and Bathurst, Jerseys: At the Hawkesbury Agricultural College, Jerseys hold a prominent place.

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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 1922-23, the students at the dairy science schools numbered 143.

HERD-TESTING.

The extension of the practice of herd-testing is of primary importance to the future development of the dairying industry in New South Wales. For many years prior to 1888 the importation of cattle from oversea was prohibited, and in the period of rapid expansion, which began about 1900, there was a shortage of high-class-stock, with the result that many dairy farmers used inferior animals for breeding. The lifting of the embargo and subsequent importations by the Government and by private breeders have given the farmers an opportunity of obtaining a better class of dairy stock, and they are encouraged to improve their herds and to cull all unprofitable animals.

Farmers who supply cream to factories are paid according to the results of the testing and grading of their consignments, but these results, representing averages, do not disclose the necessary records of individual animals. Therefore efforts are being made by the dairy instructors to promote herdtesting in each dairying centre.

For testing the ordinary dairy herds two schemes are conducted under the supervision of the Department of Agriculture. Under the first, the farmers form a co-operative society and employ a tester to visit their farms at regular intervals. Fees are subscribed by the farmers and are subsidised by the Department at the rate of 50 per cent. for the first year and 25 per cent. thereafter. Under the other scheme, officers of the Department conduct the tests. The farmers who participate pay an annual fee and a testing fee for each cow submitted. In the year ended June, 1924, the number of cows tested under the co-operative scheme was 8,000, and Government officers tested 5,000 cows. The total number of ordinary dairy cows tested from the inception of herd-testing in 1913 to 30th June 1924 was 115,000.

For a number of years the testing of stud dairy herds had been undertaken by the Department of Agriculture, in conjunction with the United Pure-bred Dairy Cattle Breeders' Association of New South Wales. This arrangement was superseded in 1923 by a scheme for testing all pure-bred dairy stock, which was formulated by the various Departments of Agriculture throughout Australia. The testing is done by Government officers and each owner who submits his cattle for test pays an annual fee and a fee for each cow submitted.

The standard lactation period is fixed at 273 days, but tests may be extended to 365 days. Certificates are issued by the Department of Agriculture, and records are published of all cows tested.

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 a large quantity of milk for human consumption as fresh milk, than for the purposes of butter-making.

The State Government, as well as private breeders, have imported a number of stud dairy stock with the object of improving the local herds. In 1898 the Government imported 24 bulls and 38 cows, including Shorthorns, Guernseys, Ayrshires, Kerry, Red Polls, and Holstein; additional Guernsey cattle were introduced later, viz., 22 cows in 1907, and 10 bulls and 15 cows in 1911. The importations by the State and by private breeders during the last twenty-three years included Jerseys, 29 bulls and 95 cows; Guernseys, 25 bulls and 81 cows; Ayrshires, 25 bulls and 29 cows; and during the last four years, Friesians, 14 bulls and 36 cows.

The number of cows used for milking in the State in each year since 1916 is shown below :—

	Cows In Milk.			He	Total Cows	
As at 30th June.	In Registered Dairies.	Other.	Dry Cows.	Springing.	Other, over one Year.	used for milking.
	No.	No.	No.	No.	No.	No.
1916 1917	426,9 424,0		317,368 319,230	92,124 111,369	207,999 167.665	1,043,718 1,022,297
1918 1919	429, 445,	556	347,834 273,154	110,827 78,839	177,872 173,101	1,066,089 970,448
1920 1921	419, 475,7		277,888 282,208	72,311 86,381	133,092 97,368	903,023 941,742
$\begin{array}{c} 1922\\ 1923 \end{array}$	414,557 404,611	86,665 79,525	*314,771 *313,264	*68,222 *63,100	*89,872 *97,787	974,087 958,287

* In registered dairies only.

Although the basis of classification was improved in 1922 in order to provide the return of separate particulars of the cows in registered dairies, the figures of each column are substantially comparable with those of previous years.

The heavy decrease (163,000) in the total number of milking cows during the two years ended 30th June, 1920, was due to the severe drought, which caused breeding to be restricted and a number of cows to be slaughtered for beef in order to avoid the expense of feeding. The next two seasons were on the whole favourable, and an increase of 71,000 occurred in the number of cows kept for milking. In 1922-23 the adverse seasonal conditions caused the number to decline again.

The number of cows actually in milk at the time of taking the returns depends largely upon the period of the year—a greater number being in milk during the summer than during the winter and the number of dry cows being correspondingly smaller or larger. In addition the numbers of springing heifers are usually greater during June than December. A comparison of the average daily number of cows in milk during the past eight years is shown on a later page under the heading "Milk."

Dairy Farms and Registered Dairymen.

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. Many persons so registered, however, conduct operations on a very limited scale.

The following statement shows a comparison for the past six years of the number of registered dairymen in New South Wales, and the number of holdings of one acre and upwards used for dairying operations on a commercial scale :--

		† Hol	dings of one acro	e and upwards	used principally	y for—
Year.	*Registered Dairymen.	Dairying only.	Dairying and Agriculture.	Dairying and Grazing.	Dairying, Grazing and Agriculture.	Total used for Dairying
1918	18,435	6;794	5,150	1,810	1,463	15,217
1919	17,751	6,482	5,556	1,547	1,409	14,994
1920	18,449	6,799	4,859	2,377	1,425	15,460
1921	20,530	7,738	5,112	2,271	1,549	16,670
1922	20,748	0,092	5,214	2,342	1,818	18,466
1923	22,194	9,222	5,266	2,227	1,642	18,357

* At 31st December. † At 30th June.

It is apparent that less than one-half of the registered dairymen are dependent exclusively on milk products for their livelihood, but the proportion has increased very greatly in recent years. In 1923 the number of holdings used for dairying only constituted 11.7 per cent. of the total number of holdings 1 acre or more in extent.

Dairy Factories.

Nearly 95 per cent. of the milk products of the State are handled in factories (including farm factories), the balance being dealt with on the farms, principally for domestic paraposes.

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 establishments in the State treating dairy products are shown on page 451 of this Year Book. The large number of establishments there shown as producing cream or milk represents farms utilising power-driven machinery for separating and other purposes. Excluding such establishments the number of dairy factories utilising machinery or employing more than four persons in 1922–23 was 196, comprising 125 butter factories, etc., 48 cheese factories, 21 bacon and ham factories, and 2 producing condensed milk.

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 Aune, 1928 :--

Division.	Average No. of Dairy Cows in Milk during year.	Total yield of Milk.	Butter made	Cheese made.
Coastal-	No.	vallons.	<u>l</u> b.	lb.
North Coast	267,494	102.675.031	38,743,413	1,229,471
Hunter and Manning	108,509	41.477.713	14.323,181	227.706
Metropolitan	. 21,804	12,278,821	696,881	9,540
South Coast	. 75,188	31,487,081	8,010,729	3,326,540
Total	472,995	187,918,646	61,774,204	4,793,257
Tableland	-			
Northern	13,622	5.029.003	1,822,166	79,279
Central	3.8.83.0	6,421,358	1,600,007	166,730
Southern		3,463,570	1,173,225	500
Total	41,743	14,913,931	4,595,398	246,509
Western Slopes-		······································		
North	15,939	6,214,674	1,668,121	
Central	7 101	2.574.565	757,402	
South	10,000	7,026,615	2,907,938	159,009
Total	. 43,039	15,815,854	5,333,461	159,009
Plains-	-	······································	i an an an an an an an airte ile Cl	,
North Central	2.938	901,196	104.779	
Central	2,613	824.784	95.568	•••
Riverina	14.004	6,014,788	1,784,725	130
Total	. 19,855	7,740,768	1,985,072	130
Western Division	. 1,884	580,801	35,462	***
Total, New South Wales.	. 579,516	226,970,000	73,723,597	5,198,905

This statement illustrates the importance of the dairying activities in the coastal division as compared with the remainder of the State. In this area 80 per cent. of the cows are depastured, and more than 80 per cent. of the total output of milk, butter, and cheese is produced. The North Coast Division surpasses any other division, except in regard to cheese-making, of which the bulk is made in the South Ceast districts. The Hunter and Manning division is next in importance, then the South Coast. Formerly the last-mentioned division was the principal dairying region, but the industry has since made more rapid progress in the northern districts, where many large estates, used previously for raising cattle for beef, have been subdivided into dairy farms.

Milk.

Particulars of the consumption and supply of milk and milk products are published in part "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 animals considered unfit through being diseased. In 1923 inspections were made of 547,550 dairy cattle, or more than half of the total herds in registered dairies and of these, 1,155, or about two per thousand, were condemned- 809 for tuberculosis, 216 for actinomycosis, 112 for cancer, and 18 for other diseases. Standards of milk sold for human consumption are also prescribed. By these means the purity and wholesomeness of dairy products are protected.

The steps being taken to increase the yield of milk per cow are discussed in the earlier pages of this part. While sufficient information is not available to show the average annual production of milk per cow, it is certain that the average is very low, and that, with the natural climatic advantage of a mild winter, great improvement is possible in this respect in New South Wales.

The following statement shows the total quantity of milk produced in the State (upon holdings of 1 acre and upwards in extent) during each of the past nine years in comparison with the average daily number of cows in milk during the year. The average per cow, as determined by dividing the latter figure into the former is, therefore, a measure of the average annual rate of production per cow, and shows to the extent to which the production per cow varies under seasonal influences.

Year ended 30th June	Average Daily Num- ber of Cows in Milk during Year.	Total Yield of Milk. (000 omitted.)	Average Annual Rate per Cow.	Ye ar ended 30th June.	Average Daily Num- ber of Cows in Milk during Year.	Total Yield of Milk. (000omitted.)	Average Annual Rate per Cow.
	No.	gallons.	gallons.		No.	gallons.	gallons
1915	513,420	237,930	442		502,188*	259,563*	517*
1916	465,044	184,014	396	1922	78,745†	25,708†	326†
1917	551,623	226,004	410	l	580,933‡	285,271‡	491‡
1918	634,000	247,529	390		e generation		
1919	536,200	207,095	386	(503,944*	203,022*	403*
1920	511,064	203,797	399	1923	75,572†	23,948†	$317\dagger$
1921	542,092	250,203	461		579,516 <u>‡</u>	226,970‡	392İ

* Cows in registered dairies. † Other cows in milk. ‡ All cows in milk.

The estimate of the total yield of milk, shown above, is not absolutely accurate, but it is the best available. Few, if any, of the dairy farmers actually measure the yield of milk obtained from their cows, because they are concerned principally in producing cream. A large part of the yield of milk, therefore, is estimated from its cream content. The basis of estimation was improved in regard to the yield in 1921-22, and gave a slightly lower result than if methods formerly adopted had been used.

The yield of milk was lowest in 1916 when, owing to unfavourable weather, it fell to 184,014,000 gallons. In 1917 and 1918 there were substantial increases, but a severe drought caused a heavy falling off in the next two years. With a return to favourable climatic conditions a record was established in 1920-21, and a higher record in 1921-22. In the following year there was a marked decline, due to seasonal conditions. The number of cows milked was at its maximum in 1917-18, but the average yield was very low. A decline in both respects occurred in 1918-19 and 1919-20; then there was a marked improvement. In 1921-22 the production per cow was greater than in any previous year recorded, being about 18 per cent. greater than the mean of the previous geven years—the longest period for which particulars are available. In 1922-23 it was much lower than in the preceding three years. In registered dairies the average yield is very much greater than that of cows used for domestic purposes.

In the absence of information concerning the total number of cows milked and the periods for which they were milked during the year, it is not possible to ascertain definitely the average quantity of milk produced per dairy cow; but, for an assumed lactation period of 273 days, the yield of milk per cow in registered dairies during the year 1922-23 was on the average 303 gallons, equivalent to about 135 lb. of commercial butter. In the report of the Select Committee of Inquiry in 1921 it was stated that the most progressive countries now have an average of over 200 lb. of butter per cow, and some, like Denmark and the Netherlands, have an average as high as 300 lb.

An official test conducted recently in New South Wales illustrates in a practical manner the results which may be attained by the application of scientific methods to the dairying industry, and forms a sharp contrast to the low average yield per cow, as stated above. On 13th June, 1924, a Milking Shorthorn cow, Melba XV of Darbalara, completed a 365-days test under official auspices. During that time she gave $32,522\frac{1}{2}$ lb. of milk and 1,614 lb. of butter-fat, the quantity of butter-fat being the highest recorded throughout the world. The cow was bred at Darbalara, on the Murrumbidgee River, near Gundagai, where a stud was formed in 1899 with the object of breeding cattle of a dual purpose type, capable of yielding large quantities of rich milk as well as being suitable to be fattened for sale as beef.

Use of Milk.

The following statement shows the estimated amount of milk used for various purposes during the years 1916-17 and during the last two years.

Used for butter made on farms, ,, ,, in factories	1916–17. gallons. 12,640,000 166,095,000	1921–22. gallons. 14,805,000 208,399,000	1922–2 3 . gallons. 12,909,000 155,720,000
8	178,735,000	223,204,000	168,629,000
Used for cheese made on farms	2,186,000	332,000	228,000
,, ,, in factories	5,848,000	7,377,000	5,183,000
	8,034,000	7,709,000	5,411,000
Used for sweet cream	405,000	2,907,000	2,136,000
,, condensing	1,693,000	2,372,000	1,907,000
Pasteurised for metropolitan and			
Newcastle markets	11,368,000	$13,\!575,\!000$	14,756,000
Balance sold and used otherwise	25,769,000	35,504,000	34,131,000
Total	226,004,000	285,271,000	226,970,000

In 1922-23 the milk used for making butter represented 74 per cent. of the total production; 2 per cent. was used for cheese; less than 1 per cent. for condensed milk; and the balance was consumed as fresh milk or sweet cream, or used otherwise.

The quality of the milk as indicated by the percentage of butter-fat is very important, and it is satisfactory to note that, during adverse seasons, the quality is fairly well maintained. The following statement shows the quantity of commercial butter produced per 100 gallons of milk treated on famas and in factories during each of the last nine years :--

Year ended 30th	Quantity of Commercial Butter per 100 gallons of Milk treated.						
June.	On Farms.	In Factories,	On Farms and in Factories.				
	Ib.	- њ.	lb.				
1915	33.8	44.3	43.7				
1916	33-9	43.5	42.6				
1917	34.0	45.2	44.4				
1918	35-2	44-5	43.8				
1919	35-3	44-5	43-8				
1920	34-2	43-5	428				
1921	33-9	44-8	44.0				
1922	33.6	45-9	45.1				
1923	34.6	44.5	43.7				

The apparent increase in the quantity of butter made from nailk in factories in 1921-22 is attributable largely to the improvement effected in estimating the quantity of milk used in butter factories in 1921-22. The averages for previous years as shown are somewhat understated, but indicate the seasonal variations fairly closely.

In recent years it has become the practice to instal hand or small power separators on each farm. The number of farms with power separators in 1922-23 was approximately 1,250. Thus the farmers have been able to effect great economy of time and labour, as the cream need not be taken to the factory at such frequent intervals as formerly, and considerable advantage is derived by the supply of freshly separated milk for the farm stock.

Preserved Milk.

Three kinds of preserved milk are produced in New South Wales, viz., sweetened condensed milk, unsweetened condensed milk, and concentrated milk.

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 these milk products in Australasia, and some of the factories in New South Wales have been closed. For this reason the output in the last two years was lessened to a considerable extent, and the quantity made in 1921-22 was only 6,860,516 lb., and in the following year 3,702,485 lb.

Butter.

The following statement shows the quantity of butter made, and the milk used for that purpose, at intervals since 1901. In distinguishing between the milk treated on farms and in factories, the quantity used in farm-factories,

	On Farms.			I	n Factorie	s.	Total.		
Year.	Milk used.	Butter made.	Milk used per lb. of Butter.	Milk used.	Butter made.	Milk used perlb. of Butter.		Buiter made.	Milk used per lb. of Butter.
	(000 om	itted.)		(000 om	itted.)		(000.01	nitted.)	
<u>.</u>	gallons.	1b.	gal.	gallons.	lb.	gal.	gallons.	lb.	gal.
1991	14,168	4,775	2.97	82,304	34.282	2.40	96.472	39,057	2.47
1906	14,288	4,637	3.08	141.761	54,304	2.61	156.049	58,941	.2.65
1911	14,034	4.632	3.03	182,947	78.573	2.33	196,981	83,205	2.37
1916*	12,593	4,258	2.96	127,323	55.374	2.30	139,916	59,632	2.35
1917*	12,627	4.294	2.94	166,108	75.070	2.21	178,735	79,364	2.25
1918*	12.947	4,580	2-83	170.673	75.888	2.25	183,620	80,468	2.28
1919*	11.461	4.043	2.83	139.347	61,966	2.25	150.808	66,009	2.28
1920*	10,178	3,478	2.93	137,194	59.657	2.30	147,372	63,135	2.33
1921*	12,945	4,388	2.93	178.411	79.880	2.23	191.356	84,268	2.27
1922*	14,805	4,978		208,399	95.695	2.18	223,204	100.673	2.22
1923*	12,909	4,469	2.89	155.720	69,255	2.25	168,629	73,724	2.29

whether worked by a separate staff or by farm employees, has been included in the statistics relating to factories.

* Year ended 30th June.

For reasons explained above the decrease in the quantity of milk used per pound of butter in factories in 1921-22, as shown in this table, was more apparent than real, the previous averages being slightly overstated.

The proportion of factory-made butter in the total production has increased from 72 per cent. in 1895 to 94 per cent. during 1922-23, a result of the greater efficiency of factory as compared with farm methods. On the average nearly 3 gallons of milk were required to make a pound of butter on the farms, as compared with 24 gallons in the factories. Nearly all the factories dealing with cairy produce are established on the co-operative system.

The combined effects of a bad season and scarcity of shipping space for export trade caused a marked decrease in the butter produced in 1916. In the following year a most successful season was experienced, and the output rose to 79,364,471 lb., or 33 per cent. higher than in 1916. The improvement was maintained in 1918, when the production amounted to 80,468,007 lb. The reduced output in 1919 and 1920 was due largely to drought conditions prevailing in the coastal districts during the year, but in 1921 the production rose to a level slightly higher than in 1915, previously the highest on record. In 1921-22 the production exceeded 100,000,000 lb., constituting a record for the State. In 1922-23 the seasonal conditions were unfavourable during the greater part of the year, and the output was somewhat below the average of the previous five years.

Further particulars regarding butter factories are given in the chapter relating to Manufacturing Industry at page 450.

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.

The industry is retarded by the great disadvantages of cheese as an article of export. It matures quickly, and, unlike butter, cannot be frozen, and after a certain period decreases in value. 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. The Select Committee, to which reference was made above, assigns the unsatisfactory condition of this section of the dairying industry to the fact that there is not the legislative power to control adequately the manufacture of cheese, as in the case of butter. It should be made compulsory to grade the milk, and to pasteurise it; also to grade the cheese according to quality.

From a previous table showing the cheese made in the various divisions of the State, it will be seen that more than half of the total production during the 1922-23 scason was made in the South Coast Division.

The following table shows the production of cheese in factories and on farms at intervals since 1901.

	Production of Cheese.						
Year.	In Factories.	On Farms.	Total.				
	lb.	lb.	lb.				
1901	2,428,599	1,410,236	3,838,835				
1906	3,459,641	1,999,004	5,458,645				
1911	4.617.387	843,265	5,460,652				
1916*	4.969.374	1,010,262	5,979,636				
1918*	7.120.770	678,906	7,799,670				
1919*	5,500,298	481,822	5,982,120				
1920*	6,230,350	532,117	6,762,467				
1921*	5,965,715	441,494	6,407,209				
1922*	7.044.567	322,490	7,367,057				
1923*	4.978.037	220,868	5,198,905				

* Year ended 30th June.

During the five years, 1901-06, the production increased from less than 4,000,000 pounds to nearly 5,500,000, and it remained at that level until 1911. In 1916-17 purchases by the Imperial Government for the use of troops led to increased production, and the output of 7,830,239 lb. was the highest on record. In the adverse season of 1919 the production declined to the former level. It improved in later years, but showed a further decline in 1922-23. Cheese-making on farms was formerly extensive, but is now declining into insignificance. The output of factories during 1922-23 represented 96 per cent. of the total output.

SWINE.

The breeding of swine is conducted usually on dairy farms, where a large supply of separated milk is available for fattening the stock. Pigs are reared also in agricultural districts, where special crops of maize, peas, etc., are grown for them. Pigs increase rapidly, so that there is a danger of an oversupply on the market unless a steady export trade is developed. The export is small and variable, and for this reason pig-raising has not progressed to the same extent as the dairy industry.

The principal breeds of swine are the Berkshire, prized because it is fattened readily; the Poland China, which thrives in the North Coastal districts; the Tamworth, which is useful for crossing with fat breeds to secure a good bacon pig; and a type called the Middle Yorkshire, which has been fixed by crossing the Large and Small Yorkshires. Stocks of high-class strains may be purchased at the Government experiment farms and other institutions.

Year.	Swine.	Ycar.	Swine.	Year.	Swine.
	No.		No		No.
1891	253,189	1913	288,090	1919*	294,648
1896	214,581	1915*	286,704	1920*	253,910
1901	265,730	1916*	281,158	1921*	306,253
1906	243,370	1917*	359,763	1922*	383,669
1911	371,093	1918*	396,157	1923*	340,853
1912	293,653				

The following table shows the number of pigs in New South Wales at intervals since 1891 :---

* As at 30th June, previously as at 31st December.

The figures show remarkable fluctuations, but, since 1901, there has been a tendency to increase. In 1918 the number, 396,157, was the highest yet attained, but it declined to 253,910 in 1920, owing to adverse seasons. There was a substantial increase in 1921, and again in 1922. At 30th June, 1923, the pigs less than one year old included 5,637 boars, 54,553 sows, 67,606 barrows, and 129,569 suckers; and the pigs aged one year and over included 12,430 boars, 53,461 sows, and 17,597 barrows.

The following statement shows the number of pigs in various divisions of . the State and the production of bacon and ham at intervals since 1911 :---

	1911.		1	921.*	1923.*	
	Swine.	Bacon and Ham cured.	Swine.	Bacon and Ham cured.	Swine.	Bacon and Ham cured.
	No.	1b.	No.	lb.	No.	1b.
•••	255,361	13,845,520	208,903	14,781,094	244,883	17,422,792
	45,578	1,124,091	29,700	597,872	28,706	717,483
••••	42,258	666,173	39,599	422,712	44,700	553,365
	27,896	467,043	28,051	455,564	22,564	552,226
•••	371,093	16,102,827	306,253	18,257,242	349,853	19,245,866
	•••	Swine. No. 255,361 45,578 42,258 27,896	Swine. Bacon and Ham cured. No. lb. 255,361 13,845,520 45,578 1,124,091 42,258 666,173 27,896 467,043	Swine. Bacon and Ham cured. Swine. No. lb. No. 255,361 13,845,520 208,903 45,578 1,124,091 29,700' 42,258 666,173 39,599 27,896 467,043 28,051	Swine. Bacon and Ham cured. Swine. Bacon and Ham cured. No. lb. No. lb. 255,361 13,845,520 208,903 14,781,094 45,578 1,124,091 29,700 597,872 42,258 666,173 39,599 422,712 27,896 467,043 28,051 455,564	No. lb. No. lb. No. 45,578 1,124,091 29,700 597,872 28,706 42,258 666,173 39,599 422,712 44,700 27,896 467,043 28,051 455,564 22,564

This table shows that the production of bacon has increased since 1911 in the dairying districts of the coastal division, and 91 per cent. of the total production of bacon in 1922-23 was cured in those districts. In the tableland division there has been a marked decline, and little or no progress has been made in other parts of the State.

Interstate Morement 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

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and, on the whole, few pigs are brought into the State except for slaughtering in adverse seasons. There is on the other hand a regular movement of pigs from New South Wales to Queensland and, on a smaller scale, to Victoria.

Bacon and Hams.

The number of bacon factories has increased considerably since 1906, but the production of bacon in New South Wales is not usually sufficient for local requirements, and quantities are imported from other States. Such imports in 1922-23 exceeded 7,000,000 lb.

The output of bacon and hams from factories and farms at intervals since 1891 is shown hereunder :---

	Produ	Production of Bacon and Ham.						
Year.	Factory.	Farm.	Total Production.					
•	lb.	1b.	lb.					
1891	2,120,300	3,889,300	6,009,600					
1991	7,392,100	3,688,800	11,080,900					
1911	13,393,500	2,709,300	16,102,800					
1916*	11.637.900	1,938,700	13,576,600					
1919*	13.935.700	2,866,000	16,801,700					
1920*	14,938,300	1,731,300	16,669,600					
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					

* Year ended 30th June.

During the first decade of the period under review the production of bacon showed a substantial increase, but during the drought of 1902-03 there was a decline, and the industry did not recover from the effects for some years. During the ten years, 1901 to 1911, the output increased from 11,000,000 lb. to over 16,000,000 lb. In 1915-16 the production declined again, but it increased in later years. In 1921-22 the production exceeded 20,000,000 lb. for the first time.

Lard.

Statistics showing the total production of lard are not available. During the year ended 30th June, 1923, the quantity extracted in bacon factories amounted to 871,534 lb., valued at £25,243; 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, 1923, the oversea exports of lard and refined animal fats amounted to 847,180 lb., valued at £22,766, as compared with imports from oversea countries amounting to 324,769 lb., valued at £7,912. The bulk of the imports was the produce of New Zealand.

LOCAL CONSUMPTION OF DAIRY PRODUCTS.

The local consumption of dairy products in New South Wales is comparatively high; the average consumption per head in 1922-23 was as follows:—Fresh milk, 20.9 gallons, preserved milk 5.8 lb., butter 28.8 lb., cheese 3.2 lb., bacon and ham 9.7 lb. With a population of about 2,220,000, the local requirements amount to 46,000,000 gallons of fresh milk per annum, nearly 13,000,000 lb. of preserved milk, 63,500,000 lb. of butter, 7,000,000 lb. of cheese, and 21,500,000 lb. of bacon and ham. Comparison with the figures on the foregoing pages show that the State is self-supporting in regard to milk and butter, and that a proportion of the supplies of cheese and bacon is 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. Upon the request of the exporters, butter and cheese are graded and certificates as to quality are issued.

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, and exclude a small quantity of New South Wales produce exported through the States.

				Oversea 1	Exports.	÷		
Year.	Butter:		Cheese.		Milk—Preserved, Condensed, etc.		Bacon and Ham.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Ib. (000)	£•	1b. (000)	£	lb. (000)	£	Ib. (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*	12.545	1,003,421	176	8,608	341	17.384	507	42,885

* Year ended 30th June.

The decline in the exports in 1915-16 was due to shortage of shipping space. The export trade in butter is almost entirely with the United Kingdom. During the year 1920-21, the quantity available for export was higher than in any year of the war period, the season was good, and remunerative prices were obtainable in London. The exports of condensed milk increased rapidly during the war period, and have since declined.

The other dairy and farmyard products exported oversea in 1922-23 were as follows:—Frozen pork £5,981, frozen poultry £41,157, eggs £86,132, live pigs and poultry £1,150, making a total of £1,206,718, including the items listed above. The imports into the United Kingdom of butter produced in New South Wales during the last ten years are shown hereunder, and the proportion they bear to the total imports of butter.

Year.	Imports of Butter from New South Wales.	Propertion to Total Butter imported into United Kingdom.	Year.	Imports of Butter from New South Wales.	Proportion to Total Butter imported into United Kingdom.
	ewt.	per cent.		owt.	per cent.
1913	155,936	3:77	1918	198,751	12.59
1914	122,528	3.08	1919	118,974	7.63
1915	158,222	4.16	1920	74,166	4.36
1916	32575	1.20	1921	244,689	6.94
1917	169.024	9.36	1922	258,550	6.06

The freight on butter forwarded from Sydney to London during the 1922-23 season was 5s. per box of 56 lb. The rate has decreased by 1s. per box during the last two years, but it is still much higher than in June, 1914, when it ranged from 2s. to 2s. 6d. per box.

In 1917 arrangements were made to form a pool to negotiate the sale of the Australian butter available for export, and the whole of the surplus was purchased by the Imperial Government until 31st March, 1921. After that date the exports were handled by an association of the local distributing firms until October, 1921, when the open market was restored.

The price of Australian butter in London was fixed by Government proclamation in September, 1917, at 206s. per cwt.; in November of that year the price was raised to 220s. In January, 1918, the flat rate of 252s. per cwt. was fixed by the Government for all imported butter, and this rate remained constant until January, 1920. During 1920 the proclaimed price was raised by successive increments to 336s. per cwt. in October. In February, 1921, the rate was lowered to 298s., and it remained at that level until Government control ceased in April. The subsequent changes in the price are shown in the following statement of the general average top price for Australian butter of the choicest and first-grade quality in London (as reported by the "Statist") in comparison with the average monthly price of choicest butter in Sydney during the three years 1921-23:—

Month.		ce in Sydney tter per cwt.	of Choicest	Average Top Price in London of Choicest First-Grade Australian Butter per cwt.					
	1921. 1922.		1923.	1921.	1922,	1923.			
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.			
January	275 3	140 0	179 3	336 0	120 6	s. d. 192 6			
February	275 3	128 9	192 3	298 9	120 0	192 6			
March	225 9	126 3	201 6	298 9	136 0	198 0			
April	199 9	155 0	224 0	273 0	166 6	158 0			
May	196 0	192 3	224 0	206 0	157 9	139 6			
June	196 0	197 0	224 0	182 6	186 0	147 9			
July	198 6	219 6	224 0	208 0	209 3	153 0			
August	209 0	224 0	224 0	244 0	190 9	165 0			
September	204 6	224 0	224 0	222 0	199 6	186 0			
October	159 6	196 0	211 0	188 0	202 3	187 0			
November	142 0	171 6	196 0	170 0	194 9	196 6			
December	140 0	168 0	209 0	150 0	167 3	209 0			

DAIRYING INDUSTRY.

The price of butter in London has fluctuated violently during the last three years, there being a particularly severe decline during 1921. Early in 1922 the rate began to rise again and comparatively high prices were obtained during the latter part of the year. A temporary decline in December was followed by a prompt recovery, but in April, 1923, there was a sudden drop and the rate in the following month was the lowest since March, 1922. Thereafter the price rose slowly. The average at the end of the year was 70s. higher than in May.

During the greater part of 1923 the movement in local prices of butter was entirely different from that of London rates. In April, when a sudden drop occurred abroad, the Sydney price was dear, and it remained constant throughout the six months April to September. Consequently, the difference between the local and the oversea rates was so great, being as much as 84s. 6d. per cwt. in May, that exporters brought Australian butter back from London. In October, when London prices were moving upwards, local rates began to decline, and both rates were practically identical in November and December.

POULTRY-FARMING.

Poultry-farming was conducted formerly in conjunction with dairying; but the interests involved have become so important commercially in recent years that a distinct industry has been developed. Efforts are made to obtain the benefits of modern methods of poultry-farm management, and to secure the best egg-laying and table breeds. To assist poultry-farmers, the Department of Agriculture issues various publications treating of poultry culture, and employs a poultry expert to advise them. A Government Poultry Farm at Seven Hills is used for demonstration and educational purposes in connection with the Department's activities for the benefit of poultry-farmers. Accurate statistics of poultry production are not available, but a general estimate based on accessible returns shows that the value of production during 1922-23 was approximately £2,750,000. The value of eggs exported oversea was £86,000, almost entirely to the United Kingdom, and of frozen poultry £41,000, principally to the United States.

Special attention is devoted to improving the laying qualities of the different breeds, and egg-laying competitions, organised originally by private subscription, have been conducted since 1901 at the Hawkesbury Agricultural College, with the object of stimulating the poultry industry. These competitions have attracted widespread interest, and birds for competition are sent from all parts of New South Wales, from the other Australian States, from New Zealand, and some from America.

By such means much valuable information has been gained from practical experiment and research. Tests are arranged and records are kept of the cost of feeding, and of the results obtained from the various breeds of poultry, and by different methods of treatment. The expansion of poultry-raising in recent years has received a great impetus from this source, insomuch as it produced data, previously unobtainable, as to the possibilities of poultryfarming as a business, and stimulated the idea of breeding for high egg production.

An annual report in bulletin form, giving particulars and tabulated results of these competitions is issued by the Department of Agriculture.

BEE-KEEPING.

The bee-keeping industry is at the present time of small importance, though there is ample inducement for further expansion.

		Bee Hives.		{	Average Yield	
Season.	Productive. Un- productive.		Total.	Honey.	of Honey per productive Hive.	Beeswatz.
	No.	No.	No.	lb.	lb.	lb.
1910-11	55,958	14.308	70.266	2,765,618	49.4	72,617
1917-18	50.668	10.314	60,982	3.875.511	76-4	53,342
1918-19	27,629	16.230	43,859	879.776	31.8	19,231
1919-20	17.534	10.384	27.918	472,340	26-9	12,195
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

The production of honey and of beeswax varies considerably from year to year, as shown in the following table:--

The yield per productive hive improved considerably as a result of the enactment of the Apiaries Acts in 1916 and 1917, and the average in 1917–18, 76.4 lb., was 56 per cent. above the experience of the previous ten years. Subsequent seasons, with the exception of 1921–22, when the average production was 87.6 lb. per hive, have not been favourable to the industry.

Frame hives are now in general use, as the box-hive has been condemned. Special legislation which has been passed with reference to apiculture is more fully detailed at page 655 of the Year Book for 1918.

In 1922–23 the estimated value of the production from bees was £22,000, the quantity of production in each division being as follows :---

Division.	Honey.	Beeswax.		
Coastal Tableland Western Slopes Central Plains and Riverina Western Division	1b. 393,012 662,446 154,564 27,6 39 1,400	1b. 7,725 10,124 10,148 495 40		
Total	1,239,080	28,442		

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 1922-23 amounted to £13,445,000, or £6 3s. 9d. per head of population; the dairying industry yielded £9,697,000; swine £976,000, poultry £2,750,000, and bees £22,000. The value of production in each year since 1911 has been as follows :---

Year.	Milk for Butter.	Milk for Cheese.	Milk (not used for Butter or Cheese).	used for Milch Butter or Cows.		Poultry and Eggs.	Bees.	Total.
	(000)	(000)	(000)	(000)	(000)	(000)	(000)	(000)
	£	£	£	`£́	`£	£	£	£
1911	3.631	129	619	389	447	1,280	39	6,53
1912	3,895	168	750	406	539	1,401	33	7,19
1913	3,450	170	950	385	500	1,578	30	7,06
1914-15	4.038	170	962	523	538	1,597	18	7,84
1915-16	3.198	167	1.084	419	605	2,144	32	7,64
1910 - 10 1916 - 17	4.740	227	1,059	657	795	1,908	33	9.41
1910-17	4.954	250	1,618	668	990	2,082	73	10,63
1917-18	4,537	204	1,949	709	1.153	2,501	20	11.07
1919-20		204	2.132	721	1.121	2.814	15	11.79
	4,712		2,152	603	1,130	3.196	50	16,44
1920-21	8,411	306	2,151	899	925	2,650	53	12.91
1921-22	5,800	228			976	2,750	22	13,44
1922 - 23	5,805	198	2,558	1,136	L 970	4,100		10,3

DAIRYING INDUSTRY.

The value of production from these industries increased during the period under review from £6,534,000 to £16,447,000 in 1920-21, when boom values ruled and the drop in 1921-22 was occasioned by a return to lower values, although the quantity of production in the year was a record. The bulk of these commodities is produced for home consumption, and prices rise and fall in accordance with local seasonal conditions. For this reason the aunual value of production does not reflect a decreased yield in adverse seasons to the same extent as agricultural and pastoral products produced for the oversea market.

Butter is the principal item of dairy produce; the value of the milk used in the production of butter in 1922-23 was £5,805,000, as compared with £3,631,000 in 1911.

The return from poultry, which are kept on a great many holdings, is next in importance, though the production from the industry is somewhat understated, because records are not obtainable of the production on areas of less than one acre.

PRICES OF DAIRY PRODUCTS.

The average wholesale prices obtained during the last six years in the Sydney markets for the principal kinds of dairy and poultry farm produce 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.		191	1918.		1919.		1920.		1921.		1922.		1923.	
	s.	d.	s	d.	· 8.	d.	s.	d.	s.	d.,	, s.	d.	s.	d.	
Milkgal.	0	11_{4}^{3}	1	$2\frac{3}{4}$	1	6 <u>3</u>	1	9	1	8_{4}^{3}	1	8	1	10	
Butterlb.	0	111	1	$4\frac{3}{4}$	1	$7\frac{1}{4}$	2	1	1	$9\frac{1}{2}$. 1	7	1	10 <u>1</u>	
Cheese ,,	0	$7\frac{1}{2}$. 0	10	1	0^{3}_{4}	1	$3\frac{1}{4}$	1	03	0	10	1	$2\frac{1}{4}$	
Bacon ,,	0	9^{3}_{4}	. 1	0	1	11	1	6	1	$4\frac{1}{4}$	1	$0\frac{1}{2}$	1	11	
Eggs (case)doz.	1	1	1	2	1	$9\frac{1}{2}$	1	11	1	10	1	7 <u>‡</u>	1	5 <u>1</u>	
Poultry— Fowls—															
(Roosters)pr.	5	5	5	9	7	0	7	9	. 9	5	6	10	7	2	
Ducks-										1. 					
(English) ,,	4	5	4	9	5	10	7	4	8	11	6	10	10	2	
Geese ,,	6	8	. 9	9	10	5	11	9	14	10	10	8	10	7	
Turkeys (cocks) "	11	2	17	6	25	8	35	8	37	11	36	7	34	2	
Bee produce		4 4 4 5													
Honeylb.	0	3^{3}_{4}	0	41	0	6 1	0	8	0	5꽃	0	33	0	4 1	
Wax ,,	1	$2\frac{1}{2}$	1	101	2	-0	2	01	1	11	1	$8\frac{3}{4}$	1	81 81	

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Almost without exception prices increased in each year from 1914 to 1920, the greatest rises occurring in 1919 and 1920. In 1921 all the prices, except the quotations for poultry, were slightly lower than in the preceding year. In 1922 prices declined generally, but in 1923 the prices of dairy products rose, milk being dearer than in 1920. The average price of most kinds of poultry advanced also, but eggs were cheaper. In 1923 the average price of butter was 96 per cent. dearer than in 1914, milk 87 per cent., bacon 36 per cent., and eggs 35 per cent. dearer.

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, whilst 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.

Following the report of a Royal Commission appointed in 1907, a Forestry Department was established under the Forestry Act, 1909. This Act was repealed by the Forestry Act, 1916, which became law on the 1st November, 1916, and provided for the constitution of a Forestry Commission, consisting of three members, one being Chief Commissioner.

The Commission is charged with the administration of the Forestry Act, 1916, which provides for the control and management of the State forests and timber reserves, for the training of forest officers, for the conduct of research work, and for the collection of statistics in connection with forestry.

The Commission may dispose of timber and products of any State forest or timber reserve, and—

- (a) take and sell such timber and products;
- (b) convert any such timber into logs, sawn timber, or any other merchantable article, and sell the same;
- (c) convert any such products into merchantable articles, and sell the same;
- (d) construct roads, railways, and tram-lines and other works for the transport of timber; and purchase, rent, or charter and use vehicles and vessels, with the necessary motive power;
- (e) construct, purchase, or rent sawmills and other mills, with all the necessary machinery and plant for converting timber, and manufacturing articles from timber, and use such mills for those purposes.

One-half of the gross amount received from royalties, licenses, and permits, and from the sale of timber, other than the output of the mills as indicated in (e) above, is to be set apart for afforestation, reafforestation, survey and improvement of State forests and timber reserves, and for purposes incidental thereto, except that the expenditure of an amount exceeding £5,000 on any particular work is subject to the approval of the Minister.

The Government may purchase, resume, or appropriate land for the purpose of a State forest, and may dedicate Crown lands as State forests or timber reserves.

Timber-getters' and other licenses may be issued by the Commission, and exclusive rights to take timber products from specified areas of State forest or timber reserves may be granted also.

Every person conducting a sawmill for the treatment of timber must obtain a license, keep books and records, and make prescribed returns. Royaity must be paid on all timber felled and on all products taken from any State forest, timber reserve, Crown lands, or lands held under any tenure from the Crown which require the payment of royalty; but such royalty is **not** payable on timber exempted by terms of the license or by the regulations, or on timber required for use on any holding not comprised within a timber or forest reserve; allowance may be made also for any timber which is not marketable. Trees on any State forest, timber reserve, or Crown lands, with the exception of lands held under conditional lease granted before the passing of the Act, must not be ringbarked except under permit.

The Act provides for regulations on the following matters :—Licenses etc., and the fees and royalties payable; the periods and the conditions under which licenses, etc., may be granted; the protection and preservation of timber; the inspection, cutting, marking; and removal of timber; the kinds, sizes, and quantities which may be cut or removed; the conditions under which fires may be lighted in State forests; and the organisation of a system of education in scientific forestry.

The Act provides also for the classification of forest lands and for proclamation of State forests, and survey work is in progress for this purpose.

"The Australian Forestry Journal" is issued monthly by the Commission with the object of interesting the public in forestry, and it is distributed gratis among a large number of public bodies.

A large amount of regenerative work has been done in connection with the Murray River and the inland forests. Experimental works have been started in various parts of the coast and highlands to test the capacity of different classes of hardwood forest for reafforestation, and to ascertain the best methods of treatment; and stations have been selected for the promotion of afforestation by the establishment of State nurseries, with the object of utilising some of the waste lands of the State, of which about 300,000 acres are suitable for the purpose.

On 30th June, 1923, the total area of Crown lands proclaimed as State Forests was 5,315,689 acres, and the area of timber reserves was 1,561,270 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 :---

Particulars.	1919.	1920	1921.	1922.	1923.
State Forests-		<u> </u>			
Number	695	706	721	736	720
Area acres	5,043,800	5,085,050	5,194,298	5,371,994	5,315,689
State Plantations-				1 - T.	
Area acres	1.052	1.448	2.544	4.032	5.214
Timber Reserves—					-,
Number	495	530	504	494	548
Area acres	1.846.927	1,746,069	1.535.679	1,479,792	1.561.270

The area of the timber reserves has been reduced, as arrangements were made to dedicate suitable reserves as State forests, in order that they might be reserved permanently for forestry purposes, while reserves not adapted for forestry were made available for other uses.

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. The total area of effective plantations at the end of June, 1923, was 5,100 acres. In addition, about 1,400 acres had been prepared for planting, and there were 1,035,591 acres under working plans.

FORESTRY.

To supplement the supply of softwood in the State, afforestation is necessary 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 highlands disclose an area of 150,000 acres suitable for the growth of softwoods and indigenous hardwood, and as this land is used at present only for summer grazing there is a possibility of extension in afforestation.

Production and Consumption of Timber.

During the year ended 30th June, 1923, there were in operation 483 sawmills. The employees numbered 5,289, and the value of plant and machinery was estimated at \pounds 889,067. The output of native timber amounted to 147,108,217 superficial feet, valued at the mills at \pounds 1,838,804.

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. In these areas 6,228,000 superficial feet of timber were dealt with during 1922-23.

The following table shows the average annual output of native timber from sawmills in New South Wales in successive years since 1917, and the gross consumption of native and imported timbers as estimated by the Forestry Commission.

Year ended	Annual Output of Native Timber	Estimated Gross Consumption of Timber.						
30th June.	from Saw Mills. (000 omitted.)	Native.	Imported.	Total.				
		(000 om	itted.)					
	super feet.	super feet.	super feet.	super feet.				
1917	125.243	261,000	125,976	386.976				
1918	126.745	285,925	92,628	378,553				
1919	131.617	291,225	86,687	377,912				
1920	155,114	318,040	86,637	404.677				
1921	156,112	352,882	96,666	449,548				
1922	153,268	356,933	110,225	467,158				
1923	147,108	365,714	143,073	508,787				

In recent years there has been remarkable activity in the building trade, and the consumption of timber has increased rapidly. Most of the imported timber consists of softwoods. The native timber consumed in 1922-23 consisted of 201,181,000 superficial feet of hardwood, 64,992,000 superficial feet of pine, 5,940,000 superficial feet of brushwood, and 93,601,000 feet of fuel.

Value of Production from Forestry.

The estimated value of production from forestry in 1922–23 was £1,544,000, as at the place of production. The following table shows the value of forestry production in New South Wales at intervals since the year 1901 :--

Year.	Value. (000 omitted.)	Year.	Value. (000 omitted.)		
	£ 11		£		
1901	554	1919*	1,306		
1906	1.008	1920*	1,527		
1911	998	1921*	1.656		
1916*	1.045	1922*	1,585		
1917*	1.094	1923*	1,544		
1918*	1,093		-,		

*Year ended 30th June.

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. It is hoped, however, that eventually steps will be taken 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. A rapid increase in imports proceeded until the outbreak of war, indicating that a growing demand existed locally for soft-woods. Though the forests of the State abound in high-class hard-woods, it is not probable that the export trade will ever assume large proportions.

	Imports O	versea to N	ew South V	Experts of Australian Produce Oversea from New South Wales.					
Year.	Undres	s d.		Total	Undres	fed.	0	Total	
	Quantity.	Value.	Other.	Value.	Quantity.	Value.	Other.	Value.	
1901	sup. feet. 68,369,135	£ 322,642	£ 137,123	£ 459,765	sup. feet. 10,385,618	£ 66,346	£ 58,664	£ 125,010	
1906	84,771,918	444,563	81,850	526,413	29,321,865	325,805	9,361	335,166	
1911	164,379,875	955,344	209,028	1,164,372	28,397,961	250,990	17,949	268,939	
1915-16	119,232,376	814,102	74,305	888,407	15,098,981	144,486	10,965	155,451	
1917–18	93,936,763	815,700	39,245	854,945	11,292,281	167,364	7,897	175,261	
1918–19	83,187,747	1,089,288	56,580	1,145,868	8,613,784	126,135	9,820	135,955	
1919-20	85,975,377	1,442,511	60,245	1,502,756	9,964,984	168,828	25,520	194,348	
1920-21	93,303,145	1,904,064	174,910	2,078,974	23,202,315	447,653	17,072	464,725	
1921-22	96,848,347	1,254,616	160,219	1,414,83	5 20,301,336	349,898	5,059	354,957	
1922-23	123,028,001	1,398,702	339,228	1,737,930	0 19,085,766	294,049	5,220	299,269	

In addition there is a considerable interstate movement of timber by sea, complete records of which are not available. The quantity of timber imported at Sydney by sea from other Australian States in 1922–23 was 21,651,000 superficial feet, valued at £374,000.

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.

FORESTRY.

Year ended 30th June.	Sales, Rents, Fees, etc.	Royalty on Timber.	Total.	Year.	Sales, Rents, Fees, etc.	Royalty on Timber.	Total.
1911* 1916 1917 1918 1919	£ 11,153 8,701 9,136 12,938 26,705	£ 79,165 59,406 58,137 58,031 70,888	£ 90,318 68,107 67,273 70,969 97,593	1920 1921 1922 1923	£ 52,001 76,141 104,234 59,882	£ 95,040 114,601 113,607 108,816	£ 147,041 190,742 217,841 168,698

* Calendar year.

Included in the total for 1922-23 are sales of converted and confiscated material, $\pounds 26,132$; and rents from leased lands, $\pounds 25,455$.

The practice of forestry in Europe and America has shown that greater expenditure by the Government means increased profits, 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.						1918-19.	1919-20.	1920-21	1921-22.	1922-23
						£	£	£	£	£
Salaries, Travelling Expenses, etc						52,830	55,662	60,085	64,941	61,925
Survey, Re-a	, Organis fforestatio	ation, on	Affores 	tation, 	and 	65 ,3 19	71,196	113,507	119,513	65,249
Other	•••	•••	•••	•••	•••	3, 013	8,049	5,948	2,134	9,934
	Tatal									<u> </u>
	Total	•••	•••	•••	•••	121,162	134,907	179,540	186,588	137,108

FISHERIES.

THE waters along the coast of New South Wales contain numerous varieties of fish, but the fishing industry is being but slowly developed. The principal sources of the supply of marine fish are the coastal lakes and estuaries, the sea beaches and ocean waters, while Murray cod is obtained in the inland rivers. Fishermen generally confine their attention to the coastal lakes and estuaries.

The most extensive development may be expected in the ocean waters, where large shoals of deep-sea fish such as great tunnies, Spanish mackerel, bonito, mackerel, kingfish, tailer, salmon, and many other pelagic fishes travel in large shoals. There are also immense quantities of pilehards, sprats, and other "herring-kind," as well as sea garfish and others.

Crayfishing and the oyster industry also are capable of great development, and mussels could be farmed successfully in a way somewhat similar to oysters, and in many places where the oyster will not flourish. The expansion of the oyster industry depends to a certain extent upon a diffusion of the knowledge of successful oyster culture among oyster growers. Intense cultivation at Port Stephens has produced excellent results in recent years.

Whaling operations have been conducted intermittently, but it is considered that two shore stations with two steam whaling gunboats each could be maintained profitably on the coast of the State. The season begins in June and ends in November, though whales may be taken before and after that period.

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.

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 1923 was 2,905, and licenses were issued in respect of 1,707 fishing boats. The fees received amounted to $\pounds1,303$.

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. FISHERIES.

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 1923 applications for leases numbered 623, representing 156,389 yards of foreshore and 637 acres of off-shore leases. At the end of the year the existing leases numbered 4,265. The length of foreshores held was 1,131,725 yards, and there were deep-water leases to the extent of 2,084 acres. The deposits paid with the applications for leased areas amounted to $\pounds1,710$, and the rentals received during the year for leased areas to $\pounds8,842$.

PRODUCTION FROM FISHERIES.

The most important kinds of fish marketed are snapper, bream, blackfish, whiting, mullet, jewfish, flathead, garfish, and Murray cod—a freshwater fish; tailer, trevally, leather-jacket, and gurnard are readily saleablein the local markets.

Fish.—Exclusive of fish marketed by the State Trawling Industry, the quantity consigned to Sydney and Newcastle markets during 1923 amounted to 15,355,298 lb., of which 165,828 lb. were condemned. In addition 261,300 lb. of fish were consigned from the Tweed River to Brisbane, and 1,344,000 lb. are recorded as having been sold in various fishing centres in coastal areas, but these figures are incomplete. The total production of fish, as recorded during 1923, was 17,641,000 lb., of which 681,000 lb. were marketed by the State Trawling Industry during the two months (January and February) in which trawling operations were conducted.

The bulk of the supplies is obtained in the estuaries and lakes on the northern part of the coast-line. A small proportion, chiefly snapper, came from the ocean, and were obtained principally by long-line fishing. The main sources of the fresh fish supply during 1923 are indicated below :---

, .		1b.				lb.	
Clarence River		3,259,291	Botany Bay			483,567	
Wallis Lake		1,654,680	Richmond River			464,156	
		1,021,648	Hawkesbury River			447,536	Ċ
Lake Illawarra		764,337	Port Jackson			396,027	•
Tuggerah Lakes		743,207	Hastings River	·		243,106	2
Lake Macquarie	•. •••	706,942	Macleay River			236,220	ŝ
Camden Haven		664,573	St. George's Basin			218,427	
Manning River		638,047	Wollongong	•••	•,•	209,366	

Notwithstanding the immense shipping development and consequent increase of traffic, and the large reclamation of foreshores in recent years, the recorded production from Port Jackson was as much as 396,027 lb. The actual production was very much greater, because a considerable quantity was sold in the suburbs of Sydney without passing through the markets.

Crayfish.—The number of marine crayfish (Palinurus) marketed during 1923 was 79,850. The number captured was very much greater, but many were lost by death before marketing, and 380 were condemned. The principal source of supply was the northern crayfish grounds, from Newcastle to Port Macquarie. From Port Stephens alone over 22,644 were marketed.

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Prawns.—A quantity of approximately 300,165 lb. of marine prawns (*Penœus*) was marketed during 1923, and about 2,680 lb. were condemned. These figures do not include prawns sold for bait.

Crabs.—About 3,800 dozen of crabs were marketed. They comprised several species of swimming crabs, notably the Blue (Lupa) and the Mangrove (Scylla).

Oysters.—During the year 1923 the oyster production of the State amounted to 27,970 sacks of the Rock oyster (Ostrea cucullata). This output was principally the result of artificial cultivation.

Value of Production.

The value of the production from fisheries of New South Wales, as recorded during the year ended 30th June, 1923, was approximately £491,417, including fresh fish £394,977, oysters, crayfish, prawns, etc., £96,440.

The amount, £491,417, is exclusive of the value of fish condemned, or 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 value of fish, fresh and preserved, imported into the State of New South Wales from countries outside Australia during 1923 was £473,984. The value of exports was £18,025, including re-exports (tinned, potted, etc.) and fresh and smoked fish for ships' stores.

The following table shows the value of production from fisheries since the year 1911:---

Year ended June.	Value. (000 omitted).	Year ended June.	Value. (000 omitted)
	£		£
1911*	197	1918	307
1912*	220	1919	335
1912*	270	1920	470
1915	237	1921	491
1916	325	1922	538
1917	303	1923	491

* Calendar year.

STATE TRAWLING INDUSTRY.

An account of the State Trawling Industry appears in previous issues of this Year Book. Owing to the heavy losses incurred the undertaking was closed at the end of February, 1923. Some of the trawlers have been sold to local buyers and are operating along the coast.

FISH PRESERVING.

Many fishes especially 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 non-indigenous fishes, particularly trout, has met with success in New South Wales, and trout fishing constitutes an important attraction for tourists and sportsmen in many districts. Young fry are distributed annually from a trout hatchery at Prospect.

RURAL SETTLEMENT.

Spread of Settlement.

SOME knowledge of the history of settlement in New South Wales is necessary to a proper understanding of the position now existing in regard to rural settlement. Population spread very slowly during the first forty years which succeeded the foundation of the colony. Settlement was at first confined to coastal lands accessible from Sydney, and it was not until 1813 that a way was found across the Great Dividing Range to the fertile plains of the west. But even after that discovery, population was not sufficient for some years to promote a rapid spread of settlement despite the growing flocks of sheep which required new pastures. Even by 1830 the area settled did not extend more than 200 miles in any direction, and the boundaries within which settlers were allowed to select land embraced only 22,083,000 acres. But the steady infiltration of population, which occurred after 1815, placed an increasing strain upon the capacity of the settled region to supply a ready livelihood, and with the arrival of assisted immigrants in increasing numbers after 1828, certain bold and lawless spirits occupied extensive lands with their sheep beyond the arbitrary legal boundaries, in defiance of authority. This practice was termed "squatting."

Such occupation was at first illegal for another reason, namely, that until 1831 the use of land could be obtained only by grant from the Governor on special conditions. Unsuccessful attempts were made to dispossess the squatters" until 1832, when their right to remain was recognised, and grazing leases were granted at fixed rentals. At the same time an Imperial Act of 1831 provided for the sale of Crown lands in the colony at a fixed price of 5s. per acre with a nominal quit-rent. Thus the way was cleared A more rapid flow of immigration began, and a boom for rural settlement. in settlement occurred, with the attendant evils of land traffic. This boom did not end until the price of Crown land had been raised to 12s. per acre in 1839, and further to 20s. per acre in 1842 (where it remained until 1895). The system of free grants was terminated in 1840. By that year nearly 6,000,000 acres of land had been alienated, of which approximately one-third had been sold. In addition extensive areas were occupied as grazing leases.

The system of selling land was replaced by that of leasing, and the spread of settlement became more rapid. The State was divided arbitrarily into three districts—settled, intermediate, and unsettled—which remained until 1884. Leases were granted upon tender for areas of 25 square miles in the intermediate districts and 50 square miles in the unsettled districts. The grant in the intermediate districts carried the right to purchase 1 square mile in every 25 square miles leased. Under this system, practically the whole of the State was speedily occupied in extensive" runs," for the possession of which competition, not without malpractices, was very keen.

Although a steady flow of immigrants was maintained the population numbered only 178,668 in 1851, when the gold rushes commenced, bringing a rapid influx of eager fortune-hunters. By 1861 the gold fever was subsiding, and the number of inhabitants of the State had increased to 357,978. Men

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now began to seek anxiously for land on which to settle, and found it occupied in extensive runs held on lease and not available for purchase, except by the holders, in limited areas. The remedy applied by Parliament was expressed in the famous principle "free selection before survey," introduced in 1861. Very grave abuses arose in the bitter conflict which resulted between the competitors for land, and holdings were selected without classification and regardless of public interest. But a real development of rural settlement now occurred, and, before the Act expired in 1884, the population had reached 904,980, the State was occupied in pastoral holdings of varying sizes and had begun rapidly to assume importance as a principal source of the wool supply of the world. More than 35,000,000 acres had been alienated—of which 28,000,000 were sold between 1861 and 1884—and practically the whole of the remaining area of the State suitable for occupation was leased definitely for varying periods.

The Land Problem.

The nature of the demand for land now changed. A decline in the prices realised for wool, the rise of wheat-growing for export, and the growth of the dairying industry and mixed farming to supply oversea markets with butter and mutton, after the application of refrigeration to sea cargoes, led to a new and more intense development in rural settlement. In view of the immense areas of lands alienated and leased a difficult problem arose to which the Legislature has since devoted a large amount of attention.

Practically the whole State was occupied for the most part in large holdings on more or less stable tenures, and the problem of development assumed the form of re-settlement.

The State was divided into three new districts—Eastern, Central, and Western—and into Land Board districts in 1884 for purposes of administration. In 1895 the principles of classification of lands, survey before selection, one man one selection, and *bona fide* selection were introduced. Special provision for financial assistance to settlers was made in 1899, and in 1903 the closer settlement policy was entered upon whereby the State repurchased suitable lands, subdivided them, and sold "living areas" to settlers on easy terms. The Murrumbidgee irrigation project was initiated in 1906, aiming to provide more than 5,000 farms.

Meanwhile alicnation of Crown lands continued. In 1912 a number of leasehold tenures were introduced, but, in 1916, the right to convert certain leases into freehold tenures was extended. By June, 1923, between 80,000,000 and 90,000,000 acres of land had passed out of control of the Crown, in addition to extensive areas leased for long terms. The experience of settlers in the Western Division has been such that very little of that immense area comprising 80,318,708 acres may be considered available for intensive settlement. The total area of the State, including the Federal Territory, Lord Howe Island, and the area covered by water is 198,633,080 acres. Excluding the large reserves for public purposes, lands unfit for occupation, and the area occupied by water, towns, roads, and railways a suprisingly small area of land within range of practical rural settlement now remains within the disposal of the Crown.

Land Policy of the Government.

In January, 1923, the Government, after systematic investigation, prepared a scheme of rural development and appointed a Land Settlement Board to supervise its operation. The scheme should be considered in conjunction with the migration proposals described on page 146 of this Year Book.

The following statement is an outline of the present position :---

1. Crown Lands.—All available Crown lands are to be opened for settlement classified under the following headings:—Grazing, Mixed Farming, Wheat-growing, Dairying, and Fruit and Vegetable Growing. Such classification is to take into account soil, market and transport facilities and markets for products. It was stated, however, that only an additional 5,000,000 acres of Crown lands could be thrown open and this irrespective of suitability. In addition there were 2,871 blocks of a total area of 2,558,207 ccrcs available for settlement in January, 1923, but the bulk of this land was too unattractive to induce application.

2. Land within Reach of Railways.—There are 34,000,000 acres of land within about 12 miles of certain railways in the wheat belt; of this area approximately 24,940,000 acres were alienated as at 30th June, 1922, and of this alienated land 12,058,000 acres are considered suitable for cultivation, but only about 3,500,000 acres are cropped annually.

It is proposed by the Government to assist holders of large areas to subdivide voluntarily should they propose to do so within a given time, failing which it is possible that powers of taxation and resumption will be used to attain the object of closer settlement.

In the area mentioned there were at 30th June, 1922, 709 holdings exceeding 5,000 acres in area, embracing in all 9,655,000 acres of alienated land, of which 3,392,000 were considered suitable for cultivation, and 312,000 acres were under crop.

The Rural Bank in April, 1923, issued particulars of a scheme of advances to facilitate subdivision of private estates, and the first Rural Bank loan of £1,000,000 at $5\frac{1}{2}$ per cent. was raised locally for the purpose. The scheme is that the Bank is prepared, after inspection, to issue certificates as to the amount it is prepared to advance to purchasers of land under subdivisional plans approved by the Land Settlement Board and the Bank. Interest is charged at the rate of $6\frac{1}{4}$ per cent., and the maximum advance is £3,000 or two-thirds of the Bank's valuation of the property, whichever is the less. In the case of properties not fully improved the advance may be as great as 80 per cent. of the Bank's valuation subject to specified improvements being carried out at the purchaser's expense.

In addition the Land Settlement Committee issued special appeals to owners of selected estates to subdivide their properties and provided special facilities for such subdivisions.

By 30th June, 1924, Rural Bank certificates had been issued in connection with the proposed subdivision of sixty-two estates into 380 farms containing in all 279,930 acres valued at £1,136,215. The amount of loans covered by the certificates was £829,860. In all 138 estates, comprising 676,100 acres, had been submitted under the scheme, and of these 105, containing 560,460, had been inspected or recommended for inspection. In all 108 farms, covering 80,667 acres, had been selected under the scheme, and loans amounting to £207,180 had been applied for in connection with ninety of these.

The average area of farms in the proposed subdivisions was 736 acres; the average value $\pounds 2,990$, and the average amount of the loan certificate $\pounds 2,183$

In response to the appeals of the Board further subdivisions were undertaken without the assistance of the Rural Bank. To 28th June, 1924, an area of 603,726 acres, contained in eighty-one estates, had been subdivided into 853 farms, of which 562, containing 392,153 acres, had been selected, the approximate purchase price being £2,000,000. The average area of these a rms was 707 acres, and the average price per farm £3,574. In addition the owners of forty-seven estates, with an aggregate area of 1,320,792 acres, within 15 miles of the railways being constructed in New South Wales by the Victorian Government, were approached by the Land Settlement Board with the following results to 28th June, 1924 :---

Purpose of Farms made available.	No. of Estates Sub- divided.	Area Subdivided.	No. of Farms in Sub- division.	Farms Selected.	Area Selected.	Amount of Sales.
Mixed Farming Grazing	5 3	acre^. 64,390 253,554	53 .40	28 27	acres. 37,382 137,783	£ 144,998 252,660
Total	8	317,944	93	55	175,165	397,658

In addition ten holdings, containing in all 143,258 acres, more than 15 miles from the proposed railway lines, have been subdivided for grazing purposes.

The area of land remaining under proclamation limiting the value at which it might be resumed was approximately 2,300,000 acres at 30th June, 1924.

3. Developmental Railways.—Six developmental railway lines contemplated, in course of construction or recently completed, provide access to 1,693,000 acres of Crown Lands and 3,170,000 acres of alienated land partly covered by proclamations. It is estimated that 600 new settlers will be placed on these Crown Lands and that there is room for 1,000 more on the alienated lands in question. By agreement between the Governments of Victoria and New South Wales the former is constructing railways from Moam' to Balranald, from Gonn's Crossing to Stony Crossing, and from Euston to Lake Benance. In these districts considerable subdivision is taking place.

4. Irrigation Settlements.— Contingent upon market difficulties being overcome, projects approved will provide 4,000 additional irrigation farms on the Murrumbidgee and Murray rivers. New areas are to be opened up at Gol Gol, Nine Mile, and Lake Benance on the Murray, and when these have been developed successfully it is anticipated that from 5,000,000 to 10,000,000 acres of land in the vicinity will become available for dry-farming. Private irrigation projects are to be encouraged.

Full inquiry is to be made into the proposals for water conservation in connection with the Lachlan, Macquarie, Namoi, Peel, Hunter, and Warragamba rivers. Some particulars of these schemes are given on page 513 of this Year Book.

5. Applicants for land are being registered and classified with particulars of their resources and requirements. By 31st May, 1924, the number of persons registered as applicants for land in New South Wales in accordance with the Government scheme was 3,275.

6. Rural Finance.—The system of rural finance has been improved by the expansion of the Rural Bank and the provision for rural credit societies (see pages 618-621).

7. Rural Reforms.—More agricultural advisers and schools are to be provided; steps are being taken to improve telephone services; to assist the conservation of fodder; to encourage co-operation; to improve dairy herds; and to initiate hydro-electric schemes.

RURAL HOLDINGS.

The land of New South Wales is practically all occupied in rural holdings consisting 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, 1923, the number of holdings of 1 acre or more in extent used for agricultural and pastoral purposes was 78;994, including 1,180 unoccupied and 2,209 used only incidentally for agricultural and pastoral purposes. These holdings embraced a total area of 172,138,000 acres. At the same date the total area of alienated and leased land in the State was 176,907,600 acres, the difference consisting of approximately 2,327,000 acres of alienated land and 2,442,100 acres of leased land held in areas of less than one acre, or not used for agricultural and pastoral purposes.

The area of land neither alienated nor leased from the Crown-18,159,681 acres-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.

Purposes for which Holdings are Used.

The problem of rural development in New South Wales relates largely to the task of settling men permanently on the land as productive units of the population. In addition to human factors, this problem is complicated by the variations of seasons and by markets, which determine largely the profitableness 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 the nature of rural settlement :---

	Number of Holdings							
Main purpose for which holdings are used.	1908.	1911-12.	1915-16.	1920-21.	1921-22.	1972-23.		
Agriculture only	7,244	6.814	10,856	11,032	11,468	11,402		
Dairying only	3.575	3.157	6.074	7,738	9,092	9,222		
Grazing only	21,874	22,011	23,497	27,170	25,438	25.430		
Agriculture and Dairying	8.377	8.258	5.641	5.112	5,214	5,266		
Agriculture and Grazing	18,733	21,969	20,895	19,336	18,758	18,914		
Dairying and Grazing	1,818	2,099	1,402	2,271	2,342	2,227		
Agriculture, Dairying, and				1				
Grazing	3,312	4,362	1,537	1,549	1,818	1,642		
Ponltry, Pig, or Bee Farming	529	879	1,256	1,348	1,453	1,502		
Total Holdings of 1 acre and		1	,)]	1			
upwards used mainly for Agricultural and Pastoral								
purposes	65,462	69,549	71.158	75,556	75,583	75,605		

In addition, 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. These numbered 3,389 in 1922-23.

While the above table does not indicate the actual number of settlers occupying the land—because some holdings are held conjointly, and not a few landholders own more than one holding—the figures quoted may be considered a reliable index of the development of settlement. Despite seasonal variations a marked increase is apparent in the number of holdings used exclusively for each of the main pursuits, but the growth has been most marked in the case of dairying and agriculture. Grazing is still the predominant rural activity, but mixed farming, agriculture, and dairying are also of great importance.

It is especially noteworthy that the number of farmers engaged in agriculture only or dairying only have shown marked increases, while the numbers engaged in mixed farming have declined.

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, and the other in accordance with the total area of alienated and Crown land contained in each holding. The former is tabulated trienially, the latter annually.

The following table shows in area series as at the 30th June, 1922, the alienated area of holdings and of the Crown lands attached, classified according to the size of the privately-owned land.

Area of Holding	Area of Holding of Area Occupied.			Area Occupied. Proportion i area grou		
alienated.	Alienated Holdings.	Alienated.	Crown Lands Attached to Alienated.	Total.	Holdings.	Alienated Land.
acres.		acres.	acres.	acres.	per cent.	per cent.
1 50	. 15,180	340,947	1,550,078	1,891,025	21.0	0.6
#1 100	7,728	598,784	1,110,104	1,708,888	10.7	1.0
101 500	26,455	6,924,701	12,781,391	19,706,092	36.7	11.1
	11,087	7,802,003	13,526,556	21,328,559	15.4	12.6
1 001 0 000	8,339	13,770,808	21,064,813	34,835,621	11.6	22.2
	1,456	5,583,152	10,027,637	15,610,789	2.0	9.0
F 001 10 000	1,096	7,523,852	8,123,713	15,647,565	1.2	12:1
10,001 20,000	503	6.846.347	6,841,262	13,687,609	0.7	11.0
00'001 F0'000	219	6,356,816	3,753,607	10,110,423	0.3	10.2
	50	3,508,172	711,279	4,219,451	0.1	5.6
Ó 100 000	22	2,862,889	1,500,499	4,363,388	•••	4.0
Total*	72,135	62,118,471	\$0,990,939	143,109,410	100.0	100.0

*Exclusive of 7,083 holdings, embracing 29.281,405 scres of Crown lands only.

Owing to the wide variations between the productivity of the various divisions and even of parts of the same division, the size of holdings by itself is an indication orly of the intensity of settlement and does not measure in a reliable manner the scope for increased settlement. The above table, therefore, does not show how far the existence of large alienated holdings is impeding settlement. For such a purpose it would be necessary to consider the quality of the holdings concerned, the rainfall, situation in respect of market and transport facilities, and other matters which determine the productivity and profitable use of land.

It is clear, however, that the number of holdings in excess of a living area is very considerable and that they embrace a very large area of land. This is apparent from the fact that the maximum areas allowed for residential conditional purchases are 1,280 acres in the Eastern Land Division and 2,560 acres in the Central Land Division, the minimum being 40 acres in each case.

The following table shows for each statistical division of the State the number and area of holdings in area series, based on the aggregate area of alienated and Crown land in each holding. The boundary between the

Size of Trability	Number and Area of Holdings in Divisions.								
Size of Holding (Alienated and Crown Lands Combined).	Coastal.	Tabiclands.	Western Slopes.	Plains and Riverina.	Western Division.	Whole State.			
Acres.	9,321	2,678	2,086	1,563	237	15,88			
Under 51 Acres	199,281	66,461	56,475	35,013	4,134	361,36			
51- 100 No	4,660	1,390	999	353	37	7,43			
Acres	373,697	106,902	76,604	26,109	3,178	586,49			
101- 500 No	13,616	4,843	4,433	2,070	83	25,04			
Acres	3,202,917	1,307,343	1,370,301	646,560	21,881	6,549,00			
501-1,000 No	2,650	2,724	4.077	2,261	71	11,78			
Acres	1,840.927	1,965,071	2,923,320	1,624,191	47,860	8,401,30			
1,001 - 3,000 No	1,810	3,268	3,947	2,451	82	11,55			
\ Acres	2,849,138	5,525,336	6,776,275	4,453,277	134,760	19,738,78			
3,001-5,000 f No	268	692	865	1,019	38	2,88			
\ Acres	1,023,756	2,626,372	3,297,035	3,997,166	158,739	11,103,06			
5,001-10,000 J No	153	394	565	953	120	2,18			
Acres	1,033,140	2,734,897	3,895,081	6,319,511	949,650	14,932,27			
0,001-20,000∫ No	51	194	178	326	268	1,01			
A 9res	667,130	2,641,902	2,444,007	4,477,388	3,709,675	13,940,10			
0,001-50,000∫No	_30	78	81	197	385	77			
] Acres	935,703	2,142,636	2,326,747	6,045,873	11,965,064	23,446,02			
)ver 50,000 Š No	8	14	12	104	291	42			
Acres	856,319	1,056,815	1,098,311	9,619,288	60,448,953	73,079,68			
Total SNo	32,567	16,275	17,243	11,297	1,612	78,99			
AUTES	13,012,008	20,173,735	24,264,156	37,244,376	77,443,894	172,138,16			
Total Area of					20.210.000	198,522,00			
DivisionAcres	22,425,000*	26,659,000	28,261,000	40,858,000	80,319,000	100,022,00			

Eastern and Central Land Divisions passes through the Western Slopes Division as shown on the map in the frontispiece of this Year Book :----

* Excluding area of principal harbours and of Lord Howe Island.

Approximately 48,369, or 61 per cent. of the rural holdings of the State are less than 500 acres in extent, and occupy only 7,496,856 acres, or 4.4 per cent. of the total area used for agricultural and pastoral purposes. Of these 27,597 are in the coastal districts, 8,911 in the Tablelands Division, 7,518 in the Western Slopes, 3,986 on the plains of the Eastern Division, and 357 in the Western Division. Eighty-five per cent. of the holdings in the Coastal Division are less than 500 acres in extent, but they embrace less than 30 per cent. of the area occupied by rural holdings.

Holdings which exceed more than twice the maximum area prescribed for residential conditional purchases may be considered for purposes of discussion as large holdings. Their suitableness for subdivision could be determined only after individual consideration. Holdings exceeding 3,000 acres in extent number 510 in the Coastal Division and embrace 4,546,048 acres, and in the Tableland Division 1,372, embracing 11,202,622 acres. On the Western Slopes there are 836 holdings exceeding 5,000 acres in area, embracing a total of 9,764,146 acres of land, and on the plains of the Central land division (including the Riverina) 1,580 such holdings, embracing a total of 26,467,060 acres. Thus, in the Eastern and Central land divisions 54 per cent. of the total area occupied is contained in 5.6 per cent. of the holdings. Practically the whole of the land of the Western Division is occupied by 944 holdings, exceeding 10,000 acres in extent, and embrace 76,123,692 acres; of this area 53,279,027 acres are comprised in holdings exceeding 100,000 acres in area.

Number of Holdings and Average Area.

In the past sixty years land legislation in New South Wales has been directed principally towards producing an increase in the number of land holdings, and, at the same time, efforts have been made to discourage the aggregation of large areas under individual owners; for, when settlers had spread throughout the State, the existence of large estates began to prove an obstacle to further development. Since the first Crown Lands Act was passed in 1861 the Legislature has been frequently occupied with the problem of rural development, but only limited success has been achieved in promoting fresh settlement. Many varieties of tenure have been devised, but none has been found capable of attracting population effectively to the vast tracts of land in the interior. Large holdings over 5,000 acres in extent have increased, and far more land has been alienated than is necessary to maintain the number of settlers actually remaining upon it.

The whole story of rural settlement in recent years may be summed up as follows:—Between 1861 and 1920 the number of original selections made was approximately 13F,730, and this number does not include such holdings as Suburban, Returned Soldiers' Special, Residential on Goldfields, and Irrigation Farms, which are generally small in extent. At the lastnamed date there were in existence 61,794 alienated holdings over 30 acres in area. Allowing for the number of holdings already in existence in 1861 and remaining in existence in 1920, and for the inclusion in the number of original selections of some less than 30 acres in extent, it is clear that more than half of the individual selections made during the period have been disposed of and combined into large holdings either for the profit accruing from the sale, or through the financial or other disabilities of the original selectors.

Omitting holdings of less than 30 acres in extent, which are not important in relation to rural settlement, it is possible to trace from 1881 to 1922 the increase in the number of holdings in relation to the growth of population. This is shown in the following table :--

T	Alienate	Alienated Heldings-over 30 acres.					
Year. Number.	Area.	Average Area.	Mean Population				
		acres.	acres.				
1881	32,521	27,791.076	855	765,015			
1891	38,706	41.046.249	1.060	1,142,025			
1901	48:360	45,869,742	948	1,366,900			
1911	57.089	51,943,846	910	1,665,265			
1916	60,435	56,047,062	927	1.893.479			
1921	61,505	61.003.468	992	2,108,369			
1922	61,983	61,986,372	1.000	2,150.862			

Many of the holdings enumerated above have areas of Crown leases attached to them; but the areas shown relate to alienated land only. Where two or more holdings are owned by the same person they are enumerated separately.

The development of alienation has been shower since 1964 than previously. The relative growth of settlement, alienation, and population may be readily illustrated by reference to index-numbers in which, in each case, the year 1901 is chosen as base and called 100 :---

Year.	Index of Alie	Index		
I car.	Number.	Area.	Average Area.	of Mean Population
1881	67	610	90	56
1891	80	90	112	84
1901	100	100	160	100
1911	118	113	96	122
1916	125	122	98	139
1921	127	133	105	154
1922	128	135	105	157

RURAL SETTLEMENT.

It is significant that the population has grown at a much faster rate throughout than the number of alienated holdings. This fact is an enlightening commentary on the drift of population from rural to urban settlements.

The number of alienated holdings has increased at a slower rate than the area alienated, and the number of large holdings of alienated land has increased markedly during the past forty years. The increase, however, has not been uniform, and assumed a new phase in 1912, after the imposition of the Federal Land Tax. The following table which relates to individual holdings without regard to ownership, shows the number and area of the larger alienated holdings at intervals since 1891:--

	Number of Alienated Holdings 04			Area of Alienated Holdings of—				
Year.	5,000 to 20,000 acres.	Over 20,000 aqres.	iTotal, Over 5,000 acres.	5,000 to 20,000 acres.	Over 20,000 acres.	Total, Over 5,000 acres.		
1891	-865	32 0	1,185	acres. 8,459,384	. aores. 16,129,163	acros. 21,588,547		
1901	998	-357	1,295	9,283,972	17;203,765	26,499,737		
1911	1,081	.862	1,443	9,873,180	46,560,215	26,488,595		
/1921	1,558	.901	1,859	13,935,997	12,949,858	20,885,855		
1922	1,599	291	1,890	14,870,199	12,727,877	27,098,976		

The Federal Land Tax (particulars of which are published on page 85 of this Year Book) was first imposed in 1910 upon so much of the unimproved value of lands owned by residents of Australia as exceeded £5,000, and upon all lands owned by absentees. The value of land in New South Walcs owned by absentees is negligible, and the assessed value of lands held on lease from the Crown is relatively of small account. The incidence of the tax, therefore, has fallen mainly upon large alienated holdings.

Up to 1911 the increase in the number of large alienated holdings had progressed fairly regularly, but in 1912 there was a decrease from 362 to 335 in the number of alienated holdings exceeding 20,000 acres in area, and an increase from 1,081 to 1,201 in the number between 5,000 acres and 20,000 acres in extent. This change did not produce any reduction in the total area of alienated land contained in these large holdings and, although the number and area of alienated holdings containing more than 20,600 acres have continued to decline at an appreciable rate, the diminution has been offset by an increase of 120 in the number, and 4,497,000 acres in extent. The total area of alienated land embraced in holdings exceeding 5,000 acres in area was almost stationary between 1901 and 1911, but since 1911 it has increased by nearly 665,000 acres.

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 2.1 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; 95.7 per cent. of the total area alienated is occupied by its owners.

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The following table shows the area occupied in each Division of New South Wales, according to the class of tenure. Owing to rearrangement of the divisions on the basis of Local Government areas, divisional comparisons with the figures published in previous years cannot be made effectively.

	Area of	Alienated Ho	oldings.	Crown Lands occupied as	Total Area
Division.	Occupied by Owner.	Private Rented.	Total.	separate holdings or attached to alienated holdings.	in Holdings.
Coastal Tableland	11,877,869 17,240,418 20,249,186 1 729 803	acres. 1,244 493 799,410 751,934 852,685 52,561	acres. 9,391,154 12,677,279 17,992,352 21,101,871 1,782,364	acres. 3,620,854 7,496,456 6,271,804 16,142,505 75,661,530	acres. 13,012,008 20,173,735 24,204,156 37,244,376 77,443,894
Western	50 943 032	3,701,088	62,945,020	109,193,149	172,138,169

Of the total area occupied, 36 per cent. was freehold, and 64 per cent. was leased from the Crown. Nearly 70 per cent. of the Crown lands so leased were in the Western Division, and utilised almost exclusively for depasturing stock.

More than one-third of the land privately rented is situated in the Coastal Division, where it amounts to nearly 10 per cent. of the total area occupied in holdings. These farms are used chiefly for dairying, and the system of renting was subjected to adverse criticism in the report of the Select Committee of Inquiry into the Agricultural Industry in 1921.

The proportions of the total area of the respective Divisions, occupied in holdings of various classes are shown in the following table :----

	Area of	Alienated I	Ioldings.	Crown Lands occupied as separate	Total Area in
Division.	Occupied by Owner.	Private. Rented.	Total.	holdings or attached to alienated holdings.	Holdings.
Tableland	per cent. 36·38 44·55 61·00 49·56 2·15	per cent. 5.55 3.00 2.66 2.09 -07	per cent. 41.88 47.55 63.66 51.65 2.22	per cent. 16·15 28·12 22·19 39·50 94·20	per cent. 58:03 75:67 85:85 91:15 96:42
New South Wales	29.85	1.86	31.71	55.00	86.71

Slightly less than 87 per cent. of the total area contained within the boundaries of the State is occupied in holdings of one acre and upwards, used for agricultural or pastoral purposes. The highest proportion of absolute alienation, 64 per cent. of the area of the Division, has taken place in the Western Slopes, and the lowest, 2·2 per cent., in the Western Division, but taking the total area of holdings, the Western Division shows the largest proportion of its area—96·4 per cent.—under occupation; the proportions are high also in the Central Plains and Riverina, 91·1 per cent., and in the Western Slopes, 85·8 per cent.

If reference be made to the table on page 601 it will be seen that, contrary to expectation, the proportion of unoccupied lands in each division decreases as the intensity of settlement decreases; 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

RURAL SETTLEMENT.

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, as compared with 66 per cent. in the North Coast Division and 65 per cent. in the Hunter and Manning.

Crown Land Holdings.

Crown lands are held, as has been explained, either in conjunction with alienated land or as separate holdings. The total area held in conjunction with alienated lands is shown above. Particulars of holdings consisting of Crown lands only at 30th June, 1922, were as follow :---

Division.	Number of Holdings.	Area held.	Average area of Holdings.
		acres.	acres.
Coastal	611	497.787	8)4
Tableland	. 1,136	1,197,443	1,054
Western Slopes	1 097	1,614,563	1,557
Central Plains and Riverina	3,393	6,044,834	1,781
Western	000	19,926,778	21,994
New South Wales	. 7,083	29,281,405	4,134

It will be observed that the average area of the holdings is comparatively small in the Eastern and Central Land Divisions. In the Western Division, intense settlement has not yet been found practicable, and the area of holdings consisting of Crown lands only is very large.

VALUE OF ALIENATED RURAL LANDS.

Particulars of the improved and unimproved capital values of the freehold lands contained in agricultural and pastoral holdings were first collected in 1920–21. 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 were not available from owners, collectors were instructed to obtain them from the records of Shire Councils, and it is probable that local government assessments were returned as the unimproved value of the whole of the lands, 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, and may be considered a fairly correct statement of the actual improved value of the land in question. The unimproved and improved values as returned, therefore, are not comparable because they are apparently stated upon different bases and represent respectively the shire assessment of the unimproved value of the land and the owner's opinion of the value of the land and its improvements. The value of improvements cannot be deduced from them.

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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 total and average value of the alienated lands at 30th June, 1923. Comparisons cannot be made effectively with the divisional totals of previous years.

	Area of Alienated Land in	Unimprove Value of	l Capital Land.	Improved Valu		Area of
Division,	Occupation in Holdings over 1 acre in extent.	To tal.	Average per acre.	Totat.	Average per acre.	Crown Land.
	Acres.		1			Acres.
Coastal-	000.	£000.	£	£000.	£	000.
North Coast	3.101	10.862	3.5	33,629	10.8	1,520
Hunter and Manning		9.540	23	27.918	6.8	1,366
Metropolitan	994	3,028	9-1	7,015	21.0	2
South Coast	1 070	4,476	2:4	12,518	6.7	733
Total	9,391	27,906	3.0	81,080	8.6	3,621
Tahlelands- Northern	3.613	5.179	1.4	13.025	3.6	2,893
0 1		8,143	1.6	22.264	4.3	2,333
Southern	6044	4,641	1.2	13,389	3.4	2,270
Total	12,677	17,963	1.4	48,678	3.8	7,496
Western Slopes-	5,367	9,677	1.8	22,011	4.1	2.845
	P. 100	7,221	1.4	21.951	4.2	1.594
Central South		12,880	1.7	38,191	5.1	1,833
Total	17,993	29,778	1.7	82,153	4.6	6,272
Plains-		· · · · · · · · · · · · · · · · · · ·	المتنبه عبدهما		0.7	1 000
North-central	3,811	4,815	1.3	10,174	2.7	4,030
Central		5,273	1.0	11,606	2.2	8,189
Riverina	. 12,037	18,043	1.5	42,208	3.5	3,923
Total	. 21,102	28,131	1.3	63,988	3.0	16,142
Western Division	1,782	861	0-5	2,231	1.3	75,662
Whole State	. 62,945	104,639	1.7	278,130	4-4	109,193

Particulars of the rainfall, productivity, and population of each of these divisions are shown on page 609. It will be observed that 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 are by no means representative of the value of the extensive Crown lands situated further west.

Capital Invested in Rural Industries.

The capital value of farm property in New South Wales was approximately £3.8 000,000 at 30th June, 1923, made up as follows :---

	£
Alienated land and improvements thereto	 278,130,000
Capitalised value of lands leased from Crown	 13,000,000
Machinery and implements	 13,477,000
Live stock	 63,000,000

RURAL SETTLEMENT.

Al enated Holdings in Value Series.

The following is a statement of the unimproved value of land in alienated holdings in value series, and if in considering it the low basis of valuation be kept in mind, useful deductions may be drawn from it :---

Alienated Land.	Nö.	- - -	i	Average Value	Proportion per cent. of total.			
Unimproved Value Serieş.	of Alenated Value Value Hold- Area. Unimproved. per aere.		Number.	Area.	Unim- proved value.			
£	hier mexican statesh	acres.	£	£ 8.		<u>, 100 00 00 00 000 000</u>		
Under 500	34.922	5,411,802	6.971.259	1 6	47-2	8.7	6.7	
500 to 1,000	14.637	6.412.051	10.447.910	1 13	20.3	10.3	10.1	
1,000 2,009	13,161	0.832.358	18,010,040	1 18	18.2	15-4	17.4	
2,000 ,, 3,000	4.238	5,278,620	10,069,550	1 18	5.9	8.5	9.7	
3,000 , 5,000	2,890	6.049.350	10,804,070	1 16	4.0	9-7	10.5	
5,000 , 10,000	1,826	7.275.718	12,260,300	1 14	2.5	11.7	11.9	
10,000 ., 15,000	561	4,225,472	6,704,370	1 12	+8	6.8	6.5	
15,000 ,, 20,000	274	2.732.378	4.667.770	1 14	•4	4.4	4.5	
20,000 and over	536	15,200,222	23,506,430	1 11	•7	24.5	22-7	
Total	72,135*	62,118,471	103,141,890	1 13	100-0	100.0	100.0	

* Excludes 7,083 holdings consisting of Crown lands only.

A most striking feature of this statement is the very large number of holdings containing alienated land valued at less than £500 unimproved. These number 34,022, or 47 per cent. of the total, and 17,111, or approximately one-half of them, are in the coastal districts. In this category is included probably the whole of the holdings (numbering 2,680) used incidentally, but not mainly, for agricultural or pastoral purposes.

Nearly one-quarter of the alienated land is contained in holdings whose unimproved value exceeds £20,000. There are 3,197 large holdings (4.4 per cent. of the total) containing alienated land valued at more than £5,000. These embrace in all 29,434,290 acres of alienated land, valued at £47,138,870, which is 45 per cent: of the total value for the State. It is noteworthy that the average value per acre of large estates is fittle less than that of smaller areas.

It should be noted, however, that no account is taken of the value of Crown leases attached to alienated holdings, and that where two or more holdings are owned by the same individual they are, unless in close proximity to each other, treated as separate holdings.

Live Stock, Wheat; and Improved Value in Area Series.

Area Series	No. of	Alienated Land in Holdings.		Total Area	Area under Wheat	No. of Sheep at	No. of Cattle at 30th June, 1922.
(Alionated Land).	Hóld*' ings.	Improved Capital Value.	Capital Area		for Grain: 1921-22.	30th June, June, 1922.	
Acres.			aeres.	acres.	acres.		
	No.	£000.	000.	000.	000	000.	000.
0*	7,083*	r	··· .	29,282	12	3,241	197
1- 30	10,152			585	3	56	48
31- 320	31,572	50,333	4,598	14,247	207	1,384	990
321- 640	12,587	33,669 🖌	6,005	16,175	771	2,460	518
641- 1,280	9.077	37.224	8.318	21,027	896	4,300	451
1,281 - 2,000	3.348	21.547	5.335	14,738	405	2,989	233
2.001- 3.000	2,053-	19.234	5.049	12,698	287	3,123	183
3,001- 5,000	1,456	20,957	5,583	15.611	210	3,699	202
5.001-10.000	1.096	27,230	7.524	15.648	157	4,849	227
10.001- 50.000	722	39,837	13,203	23,798	117	8,219	357
50.001-109.000	50	8,187	3,508	4,219	6	1.458	48
Over 100,000	22	6,334	2,868	4,363	9	1,388	36
Total	79,218	\$71,948	€2 118	172,391	3,195	37,166†	3,48*†

* * Excluding live stock not on rural holdings.

In proportion to their area, holdings consisting of Crown lands only are used less than any group of alienated holdings.

More than 80 per cent. of the wheat is grown on holdings whose alienated area is below 3,000 acres, and these holdings also carry 53 per cent. of the live stock (38 per cent. of the sheep and 70 per cent. of the cattle), they embrace 47 per cent. of the alienated land and 62 per cent. of the attached Crown lands; while their improved value is 62 per cent. of the total.

More than half the wheat is grown on holdings whose alienated area is between 321 and 1,280 acres, and the proportion thereafter diminishes rapidly as the size of the holdings increases. The average improved value per acre varies throughout, inversely as the area of alienated land in the holding.

CHARACTER OF SETTLEMENT.

The character of the rural settlement of New South Wales has been determined largely by the geographical features of the land, the distribution of rainfall, fertility of the soil, accessibility of markets and local factors, such as water supply, timber growth, and means of communication.

Thus in contrast with many older countries where the distribution of settlement has been affected by considerations of defence, settlement in New South Wales has been determined almost exclusively by economic factors. The distribution of industrial activity is principally into pastoral, agricultural, dairying, mining, and manufacturing localities, and along lines of traffic.

The pastoral industry, which caused the original spread of settlement over the State, is still maintained in practically every part of it, although it diminishes in importance from the sole industry in the west to a secondary position in the central and eastern land divisions, where agriculture and dairying are assuming greater importance. From its nature it requires extensive areas and little labour, and it promotes settlement of a scattered nature characterised by small towns, which become smaller and more scattered towards the western boundary, where ultimately only isolated sheep and cattle stations exist.

Superimposed on the pastoral foundation in the central division the main belt of agricultural settlement stretches from the northern to the southern boundary of the State between the Great Dividing Range and a line to the west, which follows generally the line of 20-inch rainfall in the south, and the 25-inch line in the north. This extensive belt is roughly wedge-shaped, and diminishes from a breadth of about 200 miles in the extreme south to about 100 miles in the north. Practically the whole of the wheat crops of the State are produced here, but only a small portion of the suitable lands have been utilised for agriculture, and pastoral pursuits are still carried on extensively. Settlement in these central districts is more intense than in the west, and a number of flourishing towns with populations ranging from 2,000 to 10,000 exist.

East of the Dividing Range, in the coastal district, dairying is the staple industry, but there is also a certain amount of miscellaneous agriculture in the more fertile portions, and some cattle grazing in the more rugged and less accessible districts. Wheat-growing and sheep-raising are almost entirely absent. Population in the coastal districts is denser than in any other region of the State; the farms are usually small and intensively cultivated.

RURAL SETTLEMENT.

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.

	Range of	Popu-			Pro	duction of		. *
Division.	Average Annual Rainfall.	lation at Census, 1921.	Total Area.	Wool, 1922-23.	Wheat, 1922-23.	Butter, 1922-28.	Minerals, 1922– 2 3.	Manu- factur.s, 1922-23.
	inches.		acres.	1 16.	bushels.		£	j £
Coastal—		000	000	000	000	000	000	000
North Coast	. 35-76	124	7,009	- 15		38,743	.9	1,169
Hunter and					1			
Manning		245	8,355	3,450	13	14,323	5,692	3,050
Cumberland		1,060	972	72		697	6	40,077
South Coast	. 27-61	- 89	6,089	1,555	· ···	8,011	1,746	1,439
Total		1,518	22,425	5,092	13	61,774	7,453	45,735
Tablelands-				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·			1
Northern	. 30-38	51	8,165	16,399	72	1,822	107	185
Central	1.00	131	10,897	23,109	1.405	1,600	1.101	1,500
Southern†	1 10 00	48	7,597	21,390	148	1,173	12	299
Total		230	26,659	60,898	1,625	4,595	1,220	1,984
Western Slopes-	+							
North	24-33	52	9,193	24,625	2.022	1,668	91	199
Central	1 1 - 00	52	7,839	21,972	3,638	758	7	259
South	. 16-40	96	11,230	33,736	10,962	2,908	35	565
Total		200	28,262	80,333	16,622	5,334	133	1,023
Central Plains			`	· 		بیان شوند و از از از از از از از از از از از از از	<u>.</u>	
Northern	18-28	24	9,500	25,364	422	105	1	102
Central	15-19	20	14,650	30,509	172	95	19	70
Riverina	12-22	64	16,708	46,334	9,812	1,785	17	379
Total e	·	108	40,858	102,198	10,406	1,985	37	551
Western Division	8-19	48	80,319	45,050	2	36	1,576	2,199
Whole State†		2,104	198,523	293,571	28,668	73,724	10,419	51,492

* Value added in process of manufacture.
† Including Federal Territory.

Manufactories proper 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 silverlead fields at Broken Hill in the Western Division.

The five principal divisions are strips of territory running from the northern to the southern boundary in a south-westerly direction, and, except for the Western Plains, each is divided into three portions—northern, central, and southern—whereby fourteen subdivisions are secured, 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 isohyetals 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 northwestern 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.

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 considerable 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.

Pluvial circumstances exert a decisive effect on the nature of the pursuits followed and the extent of settlement in the various regions of the State, and explain their industrial characters.

For the purpose of considering rural settlement, the State may be distributed into five divisions, viz., Coest, Tableland, Western Slopes of the Great Dividing Range, Central Plains and Riverina, and the Western Division. The statistics for 1922-23 were collected upon the basis of Local Government areas instead of counties, as formerly, and this necessitated considerable rearrangement of divisional boundaries. Therefore the divisional totals are not comparable with those of previous years. The first four divisions, however, cover the Eastern and Central Land Divisions of the State, trending from north to south in the same general direction as the coast-line and principal mountain range.

The nature of the industries and 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 1922-23 are shown below :---

Coastal Districts.

	Total	Holdings	an a survey of a second of a	land occup for Agricu	oied in hol ltural and	dings of 1 l Pastoral	acre and Purposes	Allenated
[Division of Coast.	Area of Division.	of 1 acre and		Alienated.		Crown		Land suitable for
	Direston.	upwards.	Freehold.	Private Rented.	Total.	Lands.		Cultiva- tion.
	acres.	No.	acres.	acres.	acres.	acres.	acres.	acres.
North	0.955	11,882	2,663 3,672	438 414	3,101 4,086	1,520	4,621 5,452	499 434
Cumberland	6 090	4,978 5,163	272 1,540	62 330	334 1,870	2 733	336	136 296
Total	. 22,425	32,567	8,147	1,244	9,391	3,621	13,012	1,365

Apart from the small area in the county of Cumberland which surrounds the metropol's, the North Ceast is by far the most closely-settled part of

* Further particulars of rainfall and evaporation are published on pages 12 and 13 of this Year Book.

the Coastal Division. The average areas of holdings in the various divisions are—North Coast, 389 acres; Hunter and Manning, 517 acres; and South Coast, 504 acres. The proportion of the total area of each division occupied in holdings is 66 per cent. in the North Coast Division, 65 per cent. in that of Hunter and Manning, but only 43 per cent. on the South Coast. The system of privately renting land is more extensively practised in the coastal disticts than elsewhere in New South Wales. Over 13 per cent. of the alienated land is rented from private owners. Of the total land in occupation about 63 per cent. is used by its owners, 28 per cent. is leased from the Crown, and 9 per cent. is rented privately.

Included in the coastal districts are 599 holdings, on which 1,021 share farmers occupy 10,839 acres of cultivation and 198,752 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 onequarter was cultivated in 1922-23.

The following analysis of the main purposes for which these holdings were used in 1922-23 provides an instructive statement of the diversity of pursuits :--

	1	Number of Holdings in Division.						
Рикрове.		North Coast.	Hunter and Manning.	Cumber- land.	South Coast.	Total.		
Agriculture only		904	1,707	2,119	409	5,139		
Dairying only		5,205	1.543	319	1,715	8,782		
Grazing only		2,506	3,166	512	1,501	7,685		
Agriculture and dairying		1,933	1,734	140	354	4,161		
Agriculture and grazing		294	589	.228	254	1,365		
Dairying and grazing		470	701	42	283	1,496		
Agriculture, dairying, and grazing		273	314	57	64	708		
oultry only		6	129	1,034	74	1,243		
Poultry, Bees, Pigs, etc		12	24	83	13	132		
Unoccupied, or used mainly for o	ther	2 July 1 - 1		54.44				
purposes	•••	279	637	444	496	1,856		
Total		11,882	10,544	4,978	5,163	32,567		

The coast district contains 95 per cent. of the holdings used for dairying only in New South Wales, and the North Coast district contains 56 per cent. of the number. Dairying and mixed farming pursuits are the main activities of the population; but a considerable proportion of the farms is used for cattle-raising.

The number, extent and value of alienated holdings of various sizes, and the area of attached Crown lands in the whole coastal division on 30th June, 1922, were shown in the Official Year Book, 1922, at page 685.

Tablelands.

Most of the rugged portions of the State are contained in the tableland divisions and, although extensive plateaux exist, considerable areas are rockstrewn 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 alone 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, 1923:

				Area of upward	land occup is for agricu	pied in Holo ultural and	lings of 1 ac pastoral pu	ere and rposes.	Area of	
Division o Tableland	leland. area of and			Alienated	•	Crown		Alienated Land suitable for culti-		
			upwards.		Lands.	Total.	vation.			
		acres.	No.	acres.	acres.	acres.	acres.	acres.	acres.	
Northern Central	•••• ••••	8,165 10,897	$3,951 \\ 8,429$	3,488 4,750	125 370	3,613 5,120	2,894 2,333	6,507 7,453	366 1,379	
Southern	•••	7,597	3,895	3,640	301	3,944	2,270	6,214	306	
Total	••••	26,659	16,275	11,878	799	12,677	7,497	20,174	2,051	

While the proportion of land occupied in each division varies from 80 per cent. in the northern to 68 per cent. in the central, and 82 per cent. in the southern tablelands, rural settlement is densest in the central districts, which were the first to be occupied. Less than one-half of the total area of the tableland division is alienated, and nearly two-fifths of the area occupied is owned by the Crown. The system of private-renting is much less extensive than in the coastal districts, only 6.3 per cent. of the area alienated, or 4 per cent. of the total area occupied, being held in this way. In addition, there were 405 share-farmers on 288 holdings, comprising 52,401 acres of cultivation and 16,536 acres of dairy farms. As in the coastal division the proportion of alienated land suitable for cultivation is very small, but only about 25 per cent. of the arable land was cultivated in 1922-23.

The main purposes for which holdings were used in each division of the tablelands during 1922-23 are shown in the following table:—

		Number of	Holdings.		
Purpose.	Northern Tableland.	Central Tableland.	Southern Tableland.	Total.	
Agriculture only	271	1,421	137	1,829	
Dairying only	92	61	120	273	
Grazing only	2,045	3,038	2,607	7,690	
Agriculture and Dairying	161	241	44	446	
Agriculture and Grazing	952	2,800	671	4,423	
Dairying and Grazing	156	131	108	395	
Agriculture, Dairying, and Grazing	160	251	61	472	
Poultry, Bees, Pigs, etc	2	57	10	69	
Unoccupied and used for other purposes	112	429	137	678	
Total	3,951	8,429	3,895	16,275	

Grazing pursuits predominate throughout, but a considerable proportion of the holdings are used for agricultural purposes.

A statement relating to the whole tableland division and showing the number and extent of alienated holdings of various sizes, together with their total value and the area of Crown lands attached to them on 30th June, 1922, was published in the Official Year Book, 1922, at page 687.

RURAL SETTLEMENT.

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, 1923, are shown below :----

Division of Slopes.	Total		Area of L upwards f	Area of Alienated Land				
	Area of	of 1 acre and		Alienated	•	~	Total.	suitable for
	Division.	upwards.	Freehold	Private Rented.	Total.	Crown Lands.		Cultiva- tion.
	acres. 000	No.	acres. 000	acres.	acres.	acres.	acres.	acres.
North Western Central Western	$9,193 \\ 7,839$	4,630 4,656	$5,181 \\ 4.947$	$ \begin{array}{c} 185 \\ 232 \end{array} $	$5,366 \\ 5,179$	2,845 1,594	8,211 6,773	1,464 3,751
South Western	11,230	7,957	7,112	335	7,447	1,833	9,280	3,699
Total	28,262	17,243	17,240	752	17,992	6,272	24,264	8,914

In relation to area, settlement is most dense on the South Western Slope, but the highest proportion of occupied land is again greatest in the northern districts. The proportion of Crown lands occupied is 22 per cent. of the total; the system of private renting is less extensive than in the coastal or tableland districts, the area private rented being only 4.2 per cent. of the total area alienated and 3.1 per cent. of the area occupied. The area of arable land is very considerable, constituting over 42 per cent. of the total area of alienated land considered suitable for cultivation in the State. Almost 50 per cent. of the private lands of the division are arable, and this proportion is as great as 72 per cent. in the Central Western Slope. Over 27 per cent. of the arable land in alienated holdings in the Slopes division was under crop in 1922-23.

The following statement shows the principal purposes for which rural holdings were used in the Western Slopes Division in 1922-23:---

	Number of Holdings in Division.						
Purpose.	North Western Slope.	Central Western Slope.	South Western Slope.	Total.			
Agriculture only	. 500	409	1,229	2,138			
Dairying only	41	15	42	98			
Grazing only	1 915	861	1,921	4,597			
Agriculture and Dairying	. 901	42	137	470			
Agriculture and Grazing	1 691	3,115	3,977	8,773			
Dairying and Grazing	00	10	142	251			
Agriculture, Dairying, and Grazing	. 110	51	218	379			
Poultry, Bees, Pigs, etc	0	2	34	45			
Unoccupied and used for Other Purposes.		151	257	492			
Total	4,630	4,656	7,957	17,243			

Mixed farming-agricultural and grazing-is the principal rural activity, but grazing predominates on the North-western Slope, where the arable lands are relatively of small extent. The number of holdings used for agricultural purposes only is important, but dairying and small farming are not extensive.

The number and extent of alienated holdings of various sizes, together with their total value and the area of Crown lands attached to them, were shown in a statement relating to the whole of the Western Slopes Division in the Official Year Book, 1922, page 689.

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 their flow is irregular and, on account of their fewness, they do not supply water to a very extensive area. Railway facilities are not so good as in the more easterly districts, but they are being improve I steadily, particularly in the Riverina. Communication and transport to outlying districts depend mostly on motor conveyances, and horse-drawn coaches and waggons. 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, timure, and extent of holdings occupied for agricultural and pasteral purposes in the Division on 30th June, 1923 :--

Plains of Central Division, Division.		Holdings	Area of I upwards	Area of alienated				
	Area of	of 1 acre and upwards.	1	lienated.		Crown		Land suitable for
		Freehold.	Private rented.	Total.	Lands.	Total.	Cultiva- tion.	
	acres. 000	No.	acres.	acres.	acret.	acres. 000	acres. 000	acres.
North	9,500	2,054	3,720	91	3,811	4,030	7,841	898
Central	14,650	2,205	4,981	222	5,203	8,189	13,392	1,997
Riv e rina	16,708	7,033	11,548	540	12,088	3,923	16,011	5,459
Total	40.858	11.297	20,249	853	21,102	16,142	37,244	8,354

The existence of a closely-settled but comparatively small area of irrigated lands in the Riverina exaggerates the apparent density of settlement in that division. Little more than one-half of the total area occupied has been alienated, but while the proportion alienated is 43 per cent. of the total area in the northern districts it is 75 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 in all cases less than 5 per cent. of the total area alienated. The area of Crown lands occupied is very considerable in all divisions, but in the northern and central districts it greatly exceeds the area of occupied alienated lands.

Share-farming is not extensive in the north, but in the Riverina 382 holdings are occupied by 620 share-farmers, who had 178,704 acres in cultivation in

1922-23 in addition to 1,687 acres of dairy farms. Only 23 per cent: of the alienated land in the Northern Plains is considered arable, but the propertiens in the Central Plains and Riverina are 38 and 45 per cent. respectively.

The following table shows the main purposes for which the holdings in the above table were used in 1922-23 :---

Tribuning of	Number of Holdings in Plains of Central Division.						
Furpose.	North.	Central.	Riverina.	Total.			
Agriculture only	49	71	1,991	2,111			
Dairying only	4	3	48	55			
Grazing only	1,309	1,577	1,265	4,151			
Agriculture and Dairying	5	1.1	180	186			
Agriculture and Grazing	620	457	3,246	4,323			
Dairying and Grazing	7 .	2	75	84			
Agriculture, Dairying, and Grazing	8 °	2	75	83			
Poultry, Bees, Pigs, etc	•••	1	2	3			
Unoccupied and used for other purposes	52	91	158	301			
Total	2,054	2 205	7,038	11,297			

While grazing, with a very little mixed-farming and agriculture, predominates in the northern districts, agriculture assumes increasing importance in the south until, finally, 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 only 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.

The number, total area of alienated land and of Crown lands attached, and the value of alienated land in rural holdings in the plains of the Central Division (including the Riverina), as at 30th June, 1922, were shown in the Official Year Book, 1922, page 692.

Western Division.

It would appear that the plains of the Western Division, one-third of which receives less than 10 inches of rain per year and the remainder less than 15 inches, will never be developed into a productive region maintaining a population commensurate with its area. While 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 cast; but the climate is well suited to the production of high-grade merines. 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

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vast lake-reservoirs of the South Darling, or in the artesian water zone of the north, combined with some great advance in 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 arise seriously until the more attractive easterly regions have made very great advances in settlement. 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-seventh of the pastoral produce, but practically nothing besides, and supporting only 21,000 persons (one person to 6 square miles) or onehundredth part of the population. Near the western boundary, however, is situated one of the richest silver-lead fields of the world, which supports in the large mining town of Broken Hill, a population of 22,700 persons. In the eastern part of the division exist extensive copper deposits, which formerly maintained thriving settlements at Cobar, Canbelego, and Nymagee. For the rest, the division possesses only one town, Bourke, with a population exceeding 1,000, five exceeding 500, and about twenty smaller townships.

The following table shows the number and extent of holdings in the Western Division as at 30th June, 1923 :---

		East o	of Darling.	West of Darling.		
	Area Series (alienated and Crown lands combined).	No. of Area of Holdings.		No. of Holdings.	Area of Holdings.	
1. 1.	Acres.		Acres.		Acres.	
	1- 3,000	345	118,225	165	93,588	
	3,001- 10,000	88	611,719	70	496,670	
	10,001- 20,000	149	2,130,991	119	1,578,684	
	20,001- 50,000	221	6,651,744	164	5,313,320	
	50,001-100,000	54	3, 711,588	49	3, 458,338	
	Over 100,000	96	21,489,656	92	31,789,371	
	Total	953	34, 713,923	659	42,729,971	

Although the area west of the Darling constitutes more than one-half of the total area occupied, the number of holdings in all groups is less than in the eastern sector. Nearly 70 per cent. of the total area is occupied by 188 holdings exceeding 100,000 acres in extent.

The total area of alienated land in the rural holdings in the Western Division is only 1,782,364 acres and of this 52,561 acres are privately rented. The total area of Crown lands in rural holdings is 75,661,530 acres. Of the total area of land occupied only 6,304 acres were under crop in 1922-23, although 124,492 acres were considered by the occupiers to be suitable for cultivation. The unimproved value of the alienated land was returned as £860,801 and the improved value as £2,231,258.

VALUE OF MACHINERY USED IN RURAL INDUSTRIES.

A comparison of the value of farming implements and machinery in use during various years since 1901 is shown in the following table, allowance being made for depreciation :---

Season	Farming.	Dairying (in- cluding Factory Machinery).	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	
1919-20	6,128,750	812,070	3,016,070	9,956,890	
1920 - 21	7,120,380	910,260	3,141,030	11,171,670	
1921 - 22	7,884,710	1,042,100	3,419,040	12,345,850	
1922 - 23	8,536,170	1,124,960	3,816,250	13,477,380	

* Includes in many cases farming implements used on pastoral holdings.

AGRICULTURAL AND PASTORAL LABOUR.

Particulars of persons above the age of 14 years permanently employed in farm work on a rural holding are collected annually. These are classified according to status, and the amount of the salaries and wages paid to those employees in receipt of remuneration is also ascertained. Returns were also obtained in 1922–23 concerning temporary hands employed during harvesting and shearing operations, or by contractors doing rural work, or engaged in other work. There are many workers who earn their livelihood from such casual employment, but owing to the difficulty of tracing individuals their numbers cannot be stated. In 1922–23, however, the amount of wages paid to casual employees was about 36 per cent. of that paid to permanent employees, who numbered 36,757. Persons principally engaged in domestic work are excluded from account. The numbers of persons permanently employed in farm work on rural holdings during the year ended 30th June, 1923, are shown below together with the amount of wages paid to permanent and casual employees during the year:—

Capacity.	Males.	Females.	Total.	
Permanent Employees receiving wages	No. 67,660 34,962 18,277	No. 2,021 1,795 12,607	No. (9,681 36,757 30,884	
Wages paid (including value of board and lodging) :- Permanent Employees	120,899 £ 6,113,973 2,229,015	16,423 £ 182,659 17,398	137,322 £ 6,296,632 2,246,413	

Of the relatives not receiving wages, 8,324 males and 10,860 females above the age of 14 years were employed in the coastal districts, where dairying is the principal farming activity. This accounts for over 86 per cent. of the number of females employed; the remainder of the female relatives employed were uniformly distributed over the other divisions of the State.

The total amount of wages paid to permanent employees during the year was £4,696,252, in addition to board and lodging, etc., valued at £1,600,380

or a total of £6,296,632, the average remuneration being £175 per annum to males and £102 per annum to females. The wages paid to casual employees amounted to £1,882,901 in addition to "keep," valued at £363,512.

RURAL FINANCE.

The problem of promoting effective rural settlement in New South Wales for many years has been associated closely with that of rural finance. While comparatively few settlers have been possessed of 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 next twenty-three years than was sold at auction, and since 1889 alienation has been almost exclusively by conditional purchase. Beyond the introduction of this plan of selling Crown lands on terms, 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 destroying 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. In all, 22,845 advances amounting to £10,070,787 had been made to 30th June, 1923.

In 1901 a Closer Settlement policy was introduced by the Government, with a view to acquiring and subdividing large estates. In the next twentytwo years 2,523,994 acres were acquired at an average price of £4 7s. 1d. per acre, and allotted in 5.374 farms, with a total capital value of £11,207,718. In addition, by September, 1923, about 2,870,000 acres comprised in large holdings within 15 miles of railway lines, contemplated or recently constructed, had been placed under proclamation, limiting the value at which they might be resumed by the Government for purposes of closer settlement.

Of similar character was the entry by the Government upon a scheme of i rrigation in connection with the Murrumbidgee River (in 1906) to provide ultimately about 5,000 farms in perpetual lease, settlers being assisted financially and by the provision of factories to handle their products. Another large irrigation scheme has been initiated in connection with the Murray River. The Government also undertakes to finance the construction of shallow bores, weirs, etc., when settlers are willing to marage them, and in some cases, to repay by instalments the capital cost. The amount expended by the Government on water conservation and irrigation projects for farm purposes is shown on page 107 of this Year Book. The marketing difficulties of the war period necessitated a further extension of Government activity. The disposal of most of the primary products came within the purview of legislation, partly to assist settlers in their difficulties, and partly to secure control of supplies necessary for prosecuting the war. All Government control, however, had ceased by 1921.

In 1915 certain schemes of limited scope were initiated by the Departments of Land 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. These advances were administered by the Rural Industries Board, instituted in December, 1919. Particulars of these operations are shown below.

Rural Credit and Community Settlement Scheme.

In 1920 and 1921 a Select Committee of the Legislative Council sat under the chairmanship of Sir Joseph Carruthers to inquire into the condition of the agricultural industry in New South Wales. Among other matters exhaustively analysed was the system of rural finance. The Committee found the existing system of rural finance deficient in certain respects and recommended its improvement along co-operative lines.

During 1922 a Bill was prepared and submitted to Parliament by the former chairman of the Committee with a view to providing an efficient system of rural credit on co-operative principles, and to stimulating local development through community settlement. The scheme put forward provided for local co-operative societies and unions, and an extensive educational campaign was arranged through a series of conferences in the country districts to explain the proposed measure and to prepare the way for its adoption.

This Bill was amended extensively and its provisions—enlarged to embrace a complete scheme of co-operation—became law at the close of 1923. The keynote of the scheme is the formation of new organisations as corporate bodies with limited liability. The purposes for which societies may be formed include the provision of rural credit, the promotion of community settlement and development, and co-operative trading, marketing and transport. A rural co-operative association consisting of registered co-operative societies may be formed for the purposes of doing anything that a component society may do, of supervising the affairs of member-societies and of promoting co-operation.

Advances by Rural Industries Board.

The Rural Industries Board was formed on 1st December, 1919 (a) to take over, consolidate, and collect all advances by the State for droughtrelief, seed-wheat, and clearing land since 1915; and (b) to extend the scope of relief given to necessitous farmers. The total expenditure by the Board to 30th June, 1923, being £2,504,221, in addition to debits of £162,555 taken over from the Departments of Lands and Agriculture.

Under all schemes the amounts advanced each year were approximately \pounds 11,184 in 1915; £1,660 in 1916; £450 in 1917; £30,076 for fallowing in 1918–19–20; £111,558 in 1919; £1,550,000 in 1920; £29,242 in 1921; £113,548 in 1922, and £129,282 to 30th June, 1923—a grand total of about £2,377,000. Of this sum £1,930,000 had been repaid by farmers to the 30th June, 1923. Of the outstanding balance, £446,019, about £176,000 did not fall due for repayment until 1924.

Originally operations were restricted to assisting wheat growers, but in 1920 assistance was also afforded to dairy farmers and small graziers. Farmers are charged interest on the amounts advanced at the rate of 6 per cent. or 7 per cent., the amount collected from this source to 30th June, 1923, being £119,829. The amount of bad debts written off to the same date was £4.827.

The cost of administration in 1922-23 was £13,160, but this sum is not debited to farmers.

The expenditure by the Rural Industries Board between 1st December, 1919, and 30th June, 1923, was distributed as follows :---

Head of Exp		£		
Seed Wheat			•••	618,045
Fodder	•••			1,328,961
Household Supplies			•••	$65,762 \\ 251,550$
Cornsacks Cash Advances	••••	•••		198,222
Cash Advances Faltowing Advances				26,374
Miscellaneous	••		• · •	15,307
	Total	•••	£	2,504,221

Considerable stocks of fodder were on hand and in transit in June, 1920, when the drought broke, and were disposed of otherwise than by advance to farmers.

During 1922-23 drought conditions prevailed over a considerable area and applications were granted for assistance to 4,080 farmers, involving an expenditure of £216,429, of which £175,614 was paid by 30th June. It is estimated that the area to be planted as a result of this assistance will approach 500,000 acres.

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 sural bank in New South Wales. The new bank was placed under the direction of the Commissioners of the Government Savings Bank, and it continued on an extended basis the operations of the Advances to Settlers Department, which was discontinued.

The primary object of the bank is to afford more extensive financial assistance to primary producers than is usually obtainable from other institutions, and thus to promote rural settlement and development.

The Commissioners are 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 are made to repay existing encumbrances, to purchase land, to effect improvements, to utilise resources, or to build homes. By this means material assistance is afforded both to prospective and to established settlers.

Funds are obtainable from deposits at current account, fixed deposits, and the issue of deposit stock, rural bank debentures, and inscribed stock. Interest is allowed on fixed deposits at current bank rates, and current accounts are subject to trading bank conditions.

Loans are made only to persons engaged in primary production, or in closely-allied pursuits. The loans are of three kinds—(a) Overdrafts on current account; (b) instalment loans, repayable by equal half-yearly instalments of interest and principal extending over thirty-one years; and (c) fixed loans for limited terms. The security required may be land, either freehold or held under any Crown tenure, stock, plant, crops, wool, etc.

The Commissioners are empowered to make advances to assist the subdivision of large estates. Accordingly, leans up to 80 per cent. of the

market value of farms are made on lands which have a freehold or certificated conditional purchase title, and are partially improved. Individual loans, however, are limited to a maximum of £2,000. In order to facilitate negotiations of sale, the Bank, after inquiry, issues certificates either to vendors or purchasers as to the amount it is prepared to advance on any land.

More than 140 branches of the Bank have been opened throughout the State, usually in conjunction with a branch of the Savings Bank.

At 30th June, 1923, the amount of deposits with the Rural Bank was \pounds 1,481,206 at current account and \pounds 733,286 at fixed deposit, while outstanding advances amounted to \pounds 6,334,427.

The following table shows the transactions in long term and fixed loans by the Rural Bank in 1921–22 and 1922–23 in comparison with those of the Advances to Settlers Department in previous years :---

Year		Advances Mad	le.	Repayments.		Ba	lances Repay	able.
ended 30th June.	Number.	Total Amount.	Average.	Number.	Total Amount.	Number.	Total Amount.	Average.
		£	£		£		£	£
1911*	838	331,693	395	743	185,420	3,754	1,074,359	286
1913*	1,386	771,272	556	414	116,476	5,094	2,051,132	403
1915	860	387,715	451	436	171,617	5,860	2,514,078	429
1919	589	260,255	442	520	204,558	6,171	2,599,751	421
1920	1,102	642,170	583	819	338,035	6,454	2,903,886	449
1921	1,365	813,525	596	577	293,540	7,242	3,423,871	473
1922	1,774	1,340,490	756	433	238,987	8,583	4,525,374	527
1923	1,110	725,315	653	508	297,375	9,185	4,953,314	539

* 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. During the first year of operations (1921-22) the number of such advances was 1,383, amounting to £980,375. In 1922-23 there were 1,565 fresh advances amounting to £794,499, and at the end of the year there were 2,743 advances current for ε n amount of £1,381.113.

The net profit of the Bank for the year was $\pounds 22,092$, which was added to the reserve fund, making it $\pounds 161,445$.

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 on page 311 of this Year Book. During 1923 the number of such advances was 12,080, and the total consideration £3,417,965; approximately one-balf being mortgages on live stock.

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 previously 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 defined as political control through a permanent salaried staff.

Control of the lands of the Western Division is vested in the Western Land Board, consisting of three commissioners.

The Eastern and Central Divisions are subdivided into ninety-two Land Districts, in each of which is stationed a Crown Land Agent, whose duty it is to receive applications and furnish information regarding land. Groups of these districts are aranged in larger areas, under the control of thirteen local Land Boards. These 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.

Further particulars of Local Land Boards. and of the Land and Valuation Court, are published on pages 253 and 254 of this Year Book.

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 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, and at the present time special attention is being directed to this matter. 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.^{*}

PROGRESS OF ALIENATION.

A brief account of the spread of settlement appears on page 595 of this Year Book. Details are shown hereunder of the areas of Crown lands disposed of in various ways.

Der menter and aller hanningte ter lande aller af 1001	Acres.
. By grants, and sales by private tender to close of 1831	3,906,327
. By grants in virtue of promises of early Governors made prior to 1831, from 1832-40 inclusive	171,071
. By sales at auction, at 53., 7s. 6d., and 10s. per acre, from 1832-38 inclusive	1,450,508
By sales at auction, at 12s. and upwards per acre, at Governor's discretion, from 1839-41 inclusive	371 ,44
By sales at auction, at 20s. per acre, from 1842-46 inclusive	20,250
. By sales at auction and in respect of pre-emptive rights, from 1847-61 inclusive	1,219,375
By grants for public purposes, grants in virtue of promise of Governor made prior to the year 1831, and grants in exchange for lands resumed from 1841-61 inclusive	7,601
	7,146,579
•	from 1832-40 inclusive

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.

* See also page 615.

Alienation since 1861.

The area of land alienated by each of the principal methods from 1862 to 30th June, 1923, is as follows:— Acres.

Conditional Purchases for which deeds have	issued	• •	20,637,146
Auction Sale and After-auction Selection	••		11,579,687
Improvement and Special Purchases	••		2,840,903

In addition, approximately 1,000,000 acres have been alienated by various other means. The area shown above for Conditional Purchases excludes those purchases upon which payments have been completed, but for which deeds have not been issued; the area sold at Auction and After-auction includes a small area being paid for by instalments limited to a period of five years. The area of land in course of alienation consists principally of conditional purchases uncompleted or completed except for the issue of deeds, and these embraced 18,199,432 acres at 30th June, 1923.

In addition, there are considerable areas of leased lands over which the lessee has a right of purchase. The principal areas so leased are shown below:—

Perpetual Lease—		Acres.
Homestead Farms	 ••	 3,012,905
Homestead Selections and Grants	 • •	 $915,\!483$
Conditional Lease	 	 14,134,010
Conditional Purchase Lease	 	 293,013

The area of land under the principal leases over which lessees have the right to purchase such part as will not cause their total freehold substantially to exceed a home maintenance area is as follows—

					Acres.
Crown Lease	••	••	••	••	4,519,500
Settlement Lease	••	••	• •	••	3,953,363
Improvement Lease			••	••	$2,\!903,\!511$
Annual Lease	••	••			1,949,887
Scrub Lease	••	••	••		1,165,782

As the area allotted to individuals under the three tenures last mentioned may be very large, it is probable that a considerable part of the land involved will ultimately revert to the Crown for re-settlement.

Formerly figures were published purporting to show the area of land alienated and in course of alienation, but it has been ascertained that the information upon which they were based was inaccurate. As the work of adjustment is involved and likely to be protracted, these items have been omitted for the present, but it is hoped to publish the information in a revised form next year.

AREA LEASED AT 30TH JUNE, 1923.

The total area of Crown lands leased on various terms other than perpetual lease to settlers of various classes at the end of June, 1923, amounted to 111,635,254 acres (including leases to miners under the Mining Act). The leases were classified as follows:—

Type of Lease.	Area, Acres.	Type of Lease.	Area. Acres.
To outgoing Pastoral Lessees	399,944	Special	828,091
Occupation License	3,558,177	Inferior Land	59,787
Conditional	14, 134, 010	Western Lands	75,368,253
Conditional Purchase	293,013	Permissive Occupancy	2,063,273
Homestead	15,207	Prickly Pear	24,829
Annual	1,949,887	Mining Act	246,601
Settlement	3,953,363	Irrigation (Hay and Curlwaa)	13,264
Improvement	2,903,511	Other	12,742
Scrub	1,165,782		
Crown	4,519,500	-	
Snow Land	126,020	Total and this	111,635,254

Reserves.

The total area of reserved lands in the State as at 30th June, 1923, was 19,453,551 acres. Some of these lands are reserved for a number of purposes. The following is a classification of reserves according to the principal purpose for which reserved:—

Class of	Reserv	es.					Acres.
Travelling Stock				•••			5,443,615
Water	•••	•••		•••			781,586
Mining			•••	•••			1,365,918
Forest	•••				•••	• •••	3,278,697
Temporary Common		•••	•••	•••		•••	442,177
Railway		•••	•••	•••	•••	• • • •	52,269
Recreation and Park		. a	•••	•••	•••	•••	231,950
Pending Classificatio					•••	•••	3,928,974
For Conditional Pur	chase	, withii	a Gold-	neids	•••		641,282
Other	•••	•••	•••	•••	•••	•••	3,287,083
			Total				19,453,551

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 tenurcs shown above.

The total area of dedicated forest lands as at 30th June, 1923, was 5,315,689 acres, and in addition 1,561,270 acres were under timber reserve, making a total of 6,876,959 acres. Of the area dedicated, 2,345,645 acres of land, situated entirely within State forests, were leased to graziers by the Forestry Department, and further areas, comprising portions of leases not wholly within State forests, were administered by the Department of Lands.

Of the total area of reserves, 14,208,605 acres, or 73 per cent., were situated in the Eastern and Central Divisions of the State.

A revision of the reserved lands is being made in each Land District with the object of withdrawing from reserves 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, 1923:—

	Under Crown Lands Acts—	Area.
	Occupation license (including 44,449 acres in Western	Acres.
1	Division)	3,558,177
	Annual lease (including 49,350 acres in Western Division)	1,949,887
	Permissive occupancy	2,063,273
	Under Western Lands Act—	•
	Occupation license (including preferential)	5,500,447
	Permissive occupancy	831,839
		13,903,623

The area of land held under the above tenures at 30th June, 1922, was 13,297,250 acres.

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. To meet the demand for land, 996,519 acres, including 376,877 acres for Returned Soldiers, were made available during the year 1922-23 for the classes of holdings specified below:—

	For Ordinary Settlement.	For Returned Soldiers.	Total.
	Acres.	Acres.	Acres.
For Crown Lease	301,943	97,923	399,866
Homestead Farms	97,807	129,880	227,687
Suburban Holdings	3,757	•••••	3,757
Additional Holdings (ordinary)	122,516	10,259	132,775
Irrigation Farms and Allotments	1,495	8,758	10,253
Conditional Purchase (original)	333	•••	333
Conditional Purchase and Conditional Lease	3,185		3,185
Returned Soldiers' Special Holdings	••••	95.	95
Soldiers' Group Purchases	•••	15,412	15,412
Settlement Purchases	49,068	20,085	69,153
Area acquired under Promotion provisions of the Closer Settlement Act	7,068	65,589	72,657
Area constituit minute 2011 Turn 1020 had	587,172	348,001	935,173
Area gazetted prior to 30th June, 1923, but not available until after that date	32,470	28,876	61,346
	619,642	376,877	996,519

The total areas available for settlement under the various tenures on 30th June, 1923, were as follows:—

		For Ordinary Settlement. Acres.	For Returned Soldiers. Acres.	Total. Acres.
For Crown Lease		1,374,192	1,460	1,375,652
Homestead Farms		60,827	158,666	219,493
Suburban Holdings		15,754		15,754
Conditional Purchase (Original)		3,986,293		3,986,293
Additional Holdings (Generally)		676,815	887	677,702
Week-end Leases		574		574
Town Lands Leases	ì	53		53
Returned Soldiers' Special Holdings	•••	•••	304	304
Total		6,114,508	161,317	6,275,825

A considerable proportion of the lands comprised in these holdings have been available for years, but have remained unselected, being apparently of an unattractive character.

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.

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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 Absol	lute 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.	
Leases Alienable v	vholly 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	
320 acres).	Conditional purchase lease.
Annual lease.	Suburban holding.
Town lands lease.	Residential lease on goldfields.
Week-end lease.	Romestead lease.†
Prickly-pear lease.	Homestead leases
Leases not	Alienable
Occupation license.	Irrigation farm.
Permissive occupancy.	Pastoral lease.*
Occupation permit (forest lands).	Lease to outgoing pastoral lessees (section
Forestry lease.	
Snow lease.	18).
Mineral and auriferous lease. Church and school lands lease.	

* No holdings. † Holdings in Western Division only ‡ Perpetual. || With consent of Minister.

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. Other forms of sale are of small importance. All the principal leasehold tenures may be converted 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, leased for a term of years within 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.

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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 also permitted 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.

Applicants for lands under this tenure must have attained the age of 16 years if males, and 18 years if females, or 21 years in either case if the holding is non-residential. Alien applicants must have resided in New South Wales for at least twelve months, and must become naturalised within five years of acquiring the purchase.

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 may be made in fifteen equal annual instalments, including interest at the rate of 4 per cent.

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 at least 30 per cent. of the price of the land (but not exceeding £384) effected within three years, and to the value of 50 per cent. of the price of the land (but not exceeding £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 that of a residential purchase, and the term of payment is twenty-seven years. Fencing to the value of $\pounds 1$ per acre, or other improvements to the value of $\pounds 1$ 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 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 by the holder of a conditional purchase, subject to the various conditions set out above in respect of conditional purchases. The term of lease is forty years,

LAND LEGISLATION AND SETTLEMENT.

with the right to conversion of an area of not less than 40 acres to additional conditional purchase at any time after confirmation. The rent is payable annually at rates appraised by the Land Board, subject to reappraisement at the end of each period of fifteen years. (Further particulars are given on page 631.)

Number and Area of Conditional Purchases and Conditional Leases. Transactions in respect of original and additional conditional purchases, from 1862 to 30th June, 1923, were as follows:---

Vear	• end	ed 30t	h Jun	e.	Pur Appl	ditional chases — leations nade.	Con Pur	npleted ditional chases— ls issued.	Con	ompleted ditional rchases.	Conditional Leases Gazetted.		
					No.	Area.	No.	Area.	No.	Area.	No.	Area.	
						acres.	ſ	acres.		acres.		acres.	
1862-1913					286,555	40,610,108	119.411	15,638,374	92,183	17,307,305	33,163	16,763,434	
1914					512	65.306	2:333		91,935	17,837,702		571.458	
1915.					362	46,175	2,354		90,904	18,035,210		319,362	
1916.					216	22,495	2,462		89.670	18,315,095		259,802	
.917					168	25,761	2,881		88,493	18,693,429		122,137	
918.					271	32,085	2,861		87.651	19,225,738		184,093	
919					511	75,370	3,698		86,203	19,435,807	269	263,791	
920					773	126,179	5,397	686,385	82,938	19,365,856		221,153	
921					533	90,573	4,792		78,971	18,672,521	351	188,478	
922					311	59,878	4,882	741,263	75,532	18,436,627	370	201,866	
923			••		361	69,524	4,113	667,073	72,888	18,199,432	224	132,444	
Total (as at	30th	June,	1923)	290,573	41,223,454	155,189	20,637,146	72,888	18,199,432	23,527	14,030,087	

* Conditional Leases standing good, excluding 150 leases, comprising 103,923 acres; not gazetted.

In 1908 what is known as the Conversion Act was passed, and since 1909 the number of selections has been reduced by forfeitures, cancellations, conversions into homestead selections, etc., and increased by conversions from various other tenures under the Crown Lands Act, so that the land wholly alienated, or in process of alienation, by conditional purchase, on 30th June, 1923, amounted to 38,836,578 acres, contained in 228,077 purchases. The area of uncompleted conditional purchases includes a number upon which payments have been completed, although deeds have not yet been issued.

Applications for conversion to mineral conditional purchase may, under the 1910 Act, be annulled or withdrawn, and all moneys paid with the applications, less authorised deductions for cost, refunded.

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. 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 bought 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 1,007 acres were sold by aucton during 1922-23, realising £127,887. In addition, 563 acres were sold as after-auction purchases, realising £9,036.

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 1922-23 the area sold was 22 acres for a total sum of £673.

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 1922-23 was £12,384.

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:-

Years.		Auction Sales.	After-auction Sales.	Improvement Purchases.	Special Sales.	Total.
1900-04* 1905-09 1910-14 1915-19 1920 1921 1922 1923	····	acres. 261,328 80,430 16,768 20,527 5,661 296 241 1,007	$\begin{array}{c} \text{acres.}\\ 10,004\\ 15,801\\ 6,994\\ 2,709\\ 1,037\\ 360\\ 545\\ 563\end{array}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	acres. 3,782 5,817 9,976 9,743 1,642 2,036 2,118 2,674	acres. 276,056 102,229 34,007 33,220 8,368 2,714 2,955 4,266

* Calendar years. Subsequent years are for year ended 30th June.

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 to 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.

Applications received under this head during the year 1922-23 numbered 43, and there were 114 applications held over from previous years. Twenty-five applications, embracing 20,222 acres, were granted in 1922-23, and 16 were either refused or withdrawn, etc., and 116 cases were pending at 30th June, 1923.

Settlement Purchase.

Particulars of this method of acquiring land are shown in relation to Closer 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 farm, homestead selection, and homestead grant, annual lease, special lease, scrub lease, inferior lands lease, conditional purchase lease, prickly-pear lease, and homestead lease. Other leases of this class are suburban holding, residential lease, week-end lease, and lease of town lands.

Conditional Leases.

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, or 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 is for a period of forty years at a rent determined by the Land Board, payable yearly in advance. Further particulars of conditional leases are shown on page 628 in relation to conditional purchases.

Applications for 224 leases, of an area of 125,208 acres, were lodged during 1922-23, and 133, including applications outstanding from the previous year, representing 74,903 acres, were confirmed.

Conditional leases, to the number of 615, embracing 222,321 acres, were converted into conditional purchases, and conditional leases containing an area of 8,339 acres, were created by conversion. Leases in existence at 30th June, 1923, numbered (gazetted) 23,527, embracing 14,030,087 acres, rent £197,180, and not gazetted (under provisional rent), 150 leases of 103,923 acres, rent £866.

Crown Leases.

Crown leases were constituted under the Crown Lands Amendment Act, 1912, and lands are specially set apart by notification in the *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 14 per cent. of the capital value, as determined every fifteen years. 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. The lessee is required to reside on the land for five years, and during the last five years of the lease, unless debarred by notification setting the land apart, may apply to convert into a homested farm so much of the land as will not exceed a home-maintenance area. Upon expiration of a Corwn lease the last holder thereof possesses tenant rights in improvements other than Crown improvements. Under certain conditions, conversion may also be made into a conditional purchase, with or without a conditional lease. The lease may be protected against sale for debt in certain circumstances. Any person qualified to apply for homestead farm may apply for a Crown lease.

Operations under this class of lease during the past ten years were as follow:---

Year ended	A	pplication.	Co	nfirmed.	Leases current at 30th June.					
30th June.	No.	Area.	No,	Area.	No.	Area.	Rent.			
	<u></u>	acres.		acres.	<u> </u>	acres.) £			
1914	836	697,425	493	356,727	805	880,785	9,259			
1915	628	643,189	598	487.155	1.600	1,563,684	16,114			
1916	571	864,158	501	780.373	1,760	1,896,765	21,561			
1917	541	595,409	445^{*}	441,313	2,033	2,134,446	24,845			
1918	463	500.386	291*	285,248	2,337	2,449,587	28,292			
1919	628	934.072	313*	341,324	2,565	2,694,879	31,303			
1920	1.039	1,399,270	419*	593,554	2,841	3,092,904	34,521			
1921	686	790,926	548*	671.247	3,186	3,664,798	38,512			
1922	424	555.629	604*	700,419	3,384	4,128,533	38,860			
1923	496	790,775	308*	550.254	3,613	4,519,500	41,871			

* Includes 40 original leases of an area of 99,885 acres, and annual rental of £1,448, for returned soldiers in 1917; 21 of 66,197 acres, and rental £948, in 1918; 36 of 83,943 acres, and rental £1,190, in 1919; 61 of 171.882 acres, and rental £1,654, in 1920; 29 of 70,440 acres, and rental £619, in 1921, 24 of 41,317 acres, and rental £366 in 1922, and 29 of 108,637 acres, and rental £940 in 1923. In addition to these, additional areas were confirmed for 10,311 acres and rental £145, in 1919; 381 acres, rental £4, in 1920; 1,606 acres, rental £1, in 1921; and 380 acres, rental £4 in 1922.

Settlement Leases.

Under this tenure farms gazetted as available for settlement lease are obtainable on application, accompanied by a deposit consisting of six months' rent and at least one-tenth of survey fee. Successful applicants are required to reside for a term of five years upon their holding.

During 1922-23 one application was received for an original lease of 1,046 acres, and 17 applications for additional leases relating to 25,002 acres were lodged. Twenty applications of 19,753 acres were confirmed. Fifteen settlement leases of 4,298 acres were created by conversion, and 41 leases for an area of 107,486 acres were converted into other tenures. After making allowance for leases forfeited, etc., and subdivision, there remained current at 30th June, 1923, 1,490 leases, comprising 3,953,363 acres, and rent, £54,805.

Under the Crown Lands Act of 1908, the holder of a settlement lease may convert such lease into a conditional purchase, or into a conditional purchase and conditional lease under certain provisions, but the area of the land to be converted into conditional purchase may not exceed a homemaintenance area.

LAND LEGISLATION AND SETTLEMENT.

Improvement Lease.

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, after-auction tender, or aftertender tender. 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. Should the Advisory Board, constituted under the Closer Settlement Act, 1907, report that land comprised in an improvement lease or scrub lease is suitable for closer settlement, the Minister may resume the lease, the lessee being compensated.

During 1922-23 no leases were sold, and no leases under improvement conditions were granted; two leases of 8,127 acres were let by tender at a rental of £46 per annum. Ten improvement leases were converted into homestead selections. After allowance has been made for leases, which were forfeited, voided, surrendered, expired, resumed, or transferred to the Forestry Commission, there remained current at 30th June, 1923, 638 leases, with an area of 2,903,511 acres, and rental £18,700.

Homestead Farm.

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 reappraisement after the first twenty-five years and subsequently at intervals of twenty years.

Crown lands available for conditional purchases (unless otherwise notified in the Gazette) are also available 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 homemaintenance 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 homemaintenance areas.

A person—including an alien—of a minimum age of 16 years, if a male, or 18 years, if a female, may apply for a homestead farm, provided that the applicant does not hold under any tenure—except lease which has less than five years to run, and does not confer a right to purchase the freehold—an area of land which, added to the area of the homestead farm, would substantially exceed a home-maintenance area. In estimating what constitutes a home-maintenance area, the joint area held by husband and wife (unless judicially separated) is taken into account as lands held by one person. An alien becoming the holder of a homestead farm, suburban holding, Crown lease, or irrigation farm, must become naturalised within three years. A married woman may apply if possessed of a separate estate. Persons who have selected previously are disqualified in certain circumstances.

A condition of five years' residence is attached to every homestead farm, but in special cases residence in a town or village, or anywhere within reasonable working distance, may be allowed. Residence may be permitted on a holding of a member of the same family, or on another of the selector's holdings within reasonable working distance. Suspensions or remissions may be granted for such periods as determined by the Land Board. In certain cases a wife may carry out residence on her husband's holding, or, conversely, a husband may carry out residence on his wife's holding.

A perpetual lease grant is issued after the expiration of five years from confirmation of the application, if the holder has complied with all required conditions.

Applications received for homestead farms and those dealt with during the last ten years are as follow:---

	l	Applic	ations.		0	eated	Da	versal		Less— rfeited.	Hon	iestead	
Year ended 30th June.	Re	ceived.	Con	firmed.	by Conversion				deci area, vers	ease in and con- ions into tenures.	Farms in existence at end of year,		
	No	Area.	No,	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	
		acres.	(· ·	acres.		acres.		acres.		acres.		acres.	
1914	468	284,640	358	221,576	9	7,337			32	19,635	756	450,499	
1915	605	467,873	437	327,098	11	4,550		210		33,439	1,155	748,918	
1916	372	281,685	348	252,166	6	3,848			57	35,479	1,452	969,453	
1917	271	181,722	167*	115,259	2	1,209	2	486	75	49,722	1,548	1,036,685	
1918	245	186,853	158^{*}	89,020			4	2,783	82	46,866	1,628	1,081,622	
1919	498	572,713	339*	383,833	3	1,602	4	2,379	107	58,824	1,867	1,410,612	
1920	840	989,884	491*	507,417	5	3,211	1	857	76	32,988	2,288	1,889,109	
1921	573	562,797	449*	437,713	1	151	$\cdot 2$	1,056		31,181	2,671	2,296,848	
1922	473	570,582	375*	378,180	8	9,505	1	238	93	62,464	2,961	2,622,307	
1923	405	558,531	338*	460,502	12	10,690	7	7,537	90	88,131	3,228	3,012,905	

* Includes 82 original farms of 64,476 acres for Returned Soldiers in 1916-17: 51 of 36,208 acres in 1917-18, 164 of 275,011 in 1918-19, 273 of 315,520 in 1919-20, 194 of 244,393 in 1920-21, 86 of 110,952 in 1921-22, and 127 of 237,805 acres in 1922-23. Three applications for additional areas of 526 acres were also confirmed in 1915-18, 7 applications for 3,413 acres in 1918-19, 10 for 13,078 acres in 1919-20, 5 for 2,273 acres in 1922-21, 4 for 4,987 acres in 1921-22, and 11 for 3,483 acres in 1922-23.

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. A homestead farm may be protected against sale for debt in certain circumstances. 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. A homestead farm, which is a conversion of a settlement purchase under provision now repealed, may be reconverted into a settlement purchase.

Homestead Selection and Homestead Grant.

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. Certain residential and improvement conditions were imposed, and on compliance with these for a term of five years a homestead grant is issued.

Lands are not now made available for homestead selections, such tenure having been practically replaced by that of homestead farm. Applications dealt with after 1912, are either in connection with areas previously set apart for homestead selection, or as additional areas, principally the latter.

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A large number of persons have, however, selected under this form of holding, as will be seen from the following statement which shows the applications and confirmations in regard to homestead selections and homestead grants issued up to 30th June, 1923.

Vea	r ended		Homestead	Selection	ns.	Hamos	tead Grants	Homestead			
30th June.		\mathbf{Appl}	ications.	Confi	rmations.		sued.	Selections in existence.			
		No.	Acres.	No.	Acres.	No.	Acres.	No.	Acres.		
1895	to 1913	10,020	3,819,162	7,925	2,757,976	4,686	1,895,157	4.071	1,480,83		
1914		19	4.941	22	5,707	231	39,231	3,868	1,396,91		
1915		30	16,983	18	7,233	198	59,919	3,788	1,365,71		
1916		. 8	3,141	17	7,559	161	48,479	3.694	1,317,12		
1917		5	3,970	5	1,337	212	54,791	3,585	1,256,03		
1918		24	18,175	10	5,535	189	49.306	3,295	1,055,91		
1919		20	17,266	23	19,232	172	30,807	3,091	985,91		
1920	•••	23	15,365		9,690	55	20,502	2,936	912,57		
1921		21	14.069	21	7,819	25	9.004	2,863	895,33		
1922		15	9,090	9	7.507	33	17,896	2.803	895,29		
1923	•	14	10,080	15	9,124	33	11,973	2,779	915,48		
ľ	Fotal	10,199	3,932,242	8,073	2,838,719	5,995	2,237,065	2,779	915,48		
			1 1		l	4	1	1.1			

On account of adjustments for conversions to and from other tenures, forfeitures, etc., the number and area of homestead selections and grants in existence have been greatly reduced.

Under the Crown Lands (Amendment) Acts, of the years 1908 and 1912, a homestead selection or grant may be converted into a homestead farm, or a conditional purchase lease, or a conditional purchase, or a conditional purchase and conditional lease, provided the area contained in such conditional lease does not exceed three times the area in the conditional purchase.

Leases of Scrub and Inferior Lands.

Scrub leases may be obtained by application, by auction, by tender, by after-auction tender, or by after-tender tender, but inferior lands leases may be acquired only by auction or by tender, after-auction tender, or aftertender tender. There is no limitation as to area, and in the case of a scrub lease obtained by application the rent is appraised by the Local Land Board. The initial rent of an inferior-lands lease prevails throughout the whole term; but the terms of a scrub lease may be divided into periods, the rent for each period being determined by reappraisement. The term of each class of lease may not exceed twenty-one years, but may be extended to twenty-eight years. The holder of a scrub lease must take such steps as the Land Board may direct for the purpose of destroying the scrub, and keeping the land clear afterwards. During the last year of either class of lease, application may be made for a homestead grant of an area not in excess of a home-maintenance area, but where the lease does not substantially exceed a home-maintenance area it may be so converted at any time during its currency.

There were in existence at 30th June, 1923, 194 scrub leases with an area of 1,165,782 acres, and rental of £4,998, and 22 inferior land leases, embracing 59,787 acres, and rent, £201.

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. They may be obtained also by after-auction tender, or aftertender tender. No conditions of residence or improvement are attached to annual leases, which convey no 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 number of annual leases current at 30th June, 1923, was 4,885, embracing 1,949,887 acres, with an annual rent of £15,937.

Special Leases.

Special leases are issued chiefly to meet cases where land is required for some industrial or business purpose, but areas up to 1,920 acres may be made available for agriculture or grazing. A special lease may be obtained by application, auction, or otherwise, but the term of the lease may not exceed twenty-eight years. Conditions as to rent, residence, improvements, etc., in each case are 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 a homestead farm.

The number of special leases granted during 1922-23 numbered 836 with a total area of 131,098 acres; and 483 leases, representing 85,985 acres, were converted into other tenures. After allowance has been made for leases which were terminated, were forfeited, surrendered, etc., and those which expired by effluxion of time, 7,360 leases (exclusive of leases within the Commonwealth territory) with an area of 828,091 acres and rental of £44,884, were current at 30th June, 1923.

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. There are, however, considerable numbers of conditional purchase leases still in existence.

The tenure is leasehold for forty years, with rent at 2½ per cent. per annum of the capital value re-appraised at intervals of fifteen years. 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 are permitted.

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.

One application was received for an original lease of 286 acres, and three of 436 acres were received for additional conditional purchase leases during the year 1922-23; one additional lease of 126 acres was confirmed. Seven applications for 1,273 acres for special conditional purchase leases were also received, and one of 38 acres was confirmed during the year. No leases were forfeited nor converted from other tenures; one lease was added by subdivision and the area of existing leases was increased by 26 acres. Thirty-three leases of 29,725 acres were converted into conditional purchases. The leases holding good at 30th June, 1923, numbered 405, with an area of 293,013 acres, the annual rent amounting to $\pounds 8,295$.

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 21 years, subject to prescribed conditions as to improvements, rent, etc. At 30th June, 1923, the area so leased was 24,829 acres, at a total annual rental of £327.

Homestead Leases.

This form of tenure is rapidly becoming obsolete. Formerly it applied to large areas of land in the Western Division, which have now been brought under the Western Lands Act. At 30th June, 1923, there were two homestead leases under the Crown Lands Act, with a combined area of 15,207 acres, at an annual rental of £26. Both were situated in the Western Land Division.

Suburban Holdings.

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 tenure of a suburban holding is lease in perpetuity with certain conditions as to residence and perpetual payment of rent. Under certain conditions the leaseholder may be permitted to purchase his 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, to be appraised for each period of twenty years. Males under 16 years and females under 18 years are disqualified from applying. A married woman may apply in certain cases, provided her husband has not acquired a suburban holding. 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 10 years.

Yeare nded	Confir	mations.	in exist	an Holdings ence at the of year.	Annual Rent.	Purchases approved to the end of the year.						
30th June.	No.	Area.	No.	Arca.	Acito.	No.	Area.	Trt30,				
			1	a de la composición de la composición de la composición de la composición de la composición de la composición d				e de la maria				
1014	- HA	aeres.	000	acres.	£		acres.	.				
1914	570	13,415	902	22,114	2,473	•••		***				
1915	477	9,299	1,311	30,717	3,495	•••						
1916	400	6,775	1,535	34,110	. 4,043							
1917	230	2,937	1,662	36,631	4,246							
1918	186	3.318	1.804	38,354	4.381	11	289	914				
1919	183	3,226	1.809	39.170	4.670	136	2,057	12,035				
1920	181	4,073	1.826	40.198	4.401	259	4,252	23,207				
1921	282	6,764	1.995	45,475	4.830	333	5,169	30,446				
1922	415	9.121	2,260	51.071	5.470	397	6,382	35.535				
1923	272	5,130	2,389	55,025	5,818	468	7,253	40,566				

The number of confirmations of and purchases of suburban holdings during the past ten years were as under:—

The average size of suburban holdings in existence at 30th June, 1923, was 28 acres, the average size of such holdings sold was 15 acres, and the average price £5 10s. per acre.

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 twentyeight 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, purchase the land with the consent of the Minister.

There were 863 leases embracing 11,849 acres and a rental of £1,573 eurrent at 30th June, 1923.

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. Any adult (except a married woman not judicially separated from her husband) may apply, but persons who already hold land within areas 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, 1923, 34 applications for 253 acres were received, and confirmation was made in 26 cases with an area of 219 acres at an annual rental of £28. At 30th June, 1923, these leases numbered 163, of an area of 733 acres, and annual rental £166. In addition, deeds of purchase had been issued for 11 leases of 27 acres, and approval to purchase granted in the case of five leases of 36 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.

In the year 1922-23 after-auction tenders were received and accepted for 5 lots of an area of 2 acres, and annual rental of £4 11s. Deeds of purchase have been issued for 12 lots embracing 5 acres, and approval to purchase granted in 13 cases for an area of 3 acres. On 30th June, 1923, there were 427 leases, containing 149 acres, the annual rental being £497.

INALIENABLE LEASES.

The term "inalienable leases" is here used to signify that the conditions of the leases so classified do not permit the leaseholder 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 Section 18, Act of 1903, which has been repealed.

At 30th June, 1923, these leases, also known as "Leases to Outgoing Pastoral Lessees," numbered 73, with an area of 399,944 acres, and rental of £3,062. There were no pastoral leases in existence on 30th June, 1923, in the Western Division which had not been brought under the provisions of the Western Lands Act.

Irrigation Farms and Leases.

Particulars of these tenures and of lands held under them are shown on a later page where the irrigation areas are specially treated.

Forestry Leases and Occupation Permits.

Crown lands, whether leased or unoccupied, situated entirely within dedicated forests are controlled exclusively by the Forestry Commission, which has power to lease or otherwise permit their use for 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 fourteen years, have been granted for grazing, beefarming, and forest saw-mills. For grazing purposes the rent is usually fixed in relation to the grazing capacity of the land.

The total area of forestry leases and occupation permits wholly within State forests, at 30th June, 1923, was 2,229,024 acres under the Forestry Acts, and 116,621 acres under the Crown Lands Acts; in addition, there were portions of other leases not wholly within State forests, particulars of which are not available.

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, by afterauction tender, or by after-tender tender as snow leases. Not more than one snow lease may be held by the same person. The maximum area is 10,240 acres. The term of the lease is seven years, but may be extended for three years.

At 30th June, 1923, there were 19 leases current, embracing 126,020 acres; and rent, £1,097.

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Mineral and Auriferous Leases.

There were at 30th June, 1923, 245,435 acres held as mineral and auriferous leases, exclusive of leases to mine on private lands. Permits to mine under roads and reserves covered an area of 1,166 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, 1923, in the Eastern Division, was 11 acres, at a rental of £330 per annum, the subdivision being as follows:—

		No.	Area.	Rent.
Agricultural	***	1	é cres. l	s 1
Ninety-nine Year	•••	37	10	326
Water Races	•••	1	10 miles (about)	3
Total		39	11	330

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, after-auction tender, or after tender 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, 1923, by 546 ordinary licenses for 2,787,985 acres, rental £5,357; and 291 preferential licenses, representing 770,192 acres, and rent £5,181.

Permissive Occupancy.

This tenure 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, 1923, was 4,869, comprising 2,063,273 acres, with a rental of £10,955.

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

						New T	enu	re Gran	ted.						
Tenure of Holding Converted.	Conditional Purchase.		di Pu Ass di	Con- ditional Purchase and Associated Con- ditional Lease.		Con- ditional Leases.		Home- stead Selection.		Settle- ment Lease.		Home- stead Farm.		Total Confirma- tions.	
	No.	Arca.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	
Conditional Leases Conditional Purchase Leases Homestead Selections or Grants Settlement Leases Non-residential Condi- tional Purchases Special Leases Prickly-pear Leases Improvement Leases Improvement Leases Homestead Farms	615 32 63 15 3 421 35 16	acres. 222,321 29,725 24,995 25,704 505 61,708 19,521 9,170	 5 26	81,782 	23 	acres. 8,219 120 	··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	96 5,751	 1£ 	acres.	··· 1 ··· ii ··· ···	 †	33 69	34,994 107,486 505 85,985 96 5,751 37,056 46,281	
Total	1,201	393,649	43	115,421	24	8,339	27	46,973	15	4,298	13	11,412 †	1,323	580,092	

* Includes 43 associated Conditional Leases, 78,263 acres. † Including 1 Homestead Farm converted into a Settlement Purchase of 722 acres.

Particulars of the number and area of new tenures obtained by conversion during each of the past ten years are shown below:—

					N	ew Ten	ure C	onfirme	d.					
Year ended 30th June.	Conditional Purchase.*		Conditional Purchase and Associated Conditional Lease.†		Con- ditional and Con- ditional Purchase Lease.		Home- stead Selection.		Settle- ment Lease.		Home- stead Farm.		Total Confirmations,	
	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.	No.	Area.
1914 1915 1916 1917 1918 1919 1920 1921 1922 1923	$1,689 \\ 1,095 \\ 1,216 \\ 1,492 \\ 1,830 \\ 1,952 \\ 1,659 \\ 1,598 \\ 1,302 \\ 1,201 $	acres. 730,039 420,933 547,347 686,809 863,461 711,042 511,315 501,861 455,018 393,649	87 54 46 43 87 64 96 78 56 43	acres. 294,773 196,325 165,375 162,842 213,849 157,021 217,835 174,756 122,923 115,421	$ \begin{array}{c} 10\\ 12\\ 13\\ 25\\ 12\\ 32\\ 30\\ 34\\ 30\\ 24 \end{array} $	acres 1,367 2,265 5,092 15 831 4,272 20,213 6,099 11,074 8,297 8,339	$ \begin{array}{c} 11 \\ 12 \\ 6 \\ 1 \\ 7 \\ 23 \\ 29 \end{array} $	acres. 3,875 2,503 4,597 2,641 2,272 6,100 3,178 36,986 39,371 46,973	$ \begin{array}{c} 1 \\ 2 \\ 12 \\ \\ 1 \\ 3 \\ 23 \\ 23 \end{array} $	acres. 564 31 600 3,408 283 380 2,894 18,238 4,298	$ \begin{array}{c} 9 \\ 11 \\ 6 \\ 2 \\ \\ 3 \\ 5 \\ 1 \\ 8 \\ 12 \end{array} $	3,848 1,209 1,602 3,211 151 9,505	1,810 1,181 1,294 1,586 1,985 2,053 1,800 1,737 1,449 1,323	acres. 1,038,555 626,607 726,859 872,740 1,083,854 896,261 742,018 727,722 †653,801 †560,092

* 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.

WESTERN LAND DIVISION.

The lands of the Western Division, comprising more than 80,000,000 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 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 of 1901 and 1905"; in cases where application has not been made, such lease or license is treated as if the Acts had not been passed. Only 229,220 acres of leased land in the Western Division remained under the Crown Lands Acts at 30th June, 1923, and only 2,029,121 acres had been alienated at that date.

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 of 1901 and 1905," except special leases, expire on 30th June, 1943. 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, 1923, were classified as follow:--

Clas	s of Ho	lding.		Class of Holding.									
						No.	acres.	£					
Pastoral Leases		•••	• • •	•••		294	35,444,258	57,668					
Subdivision Leases	•••			•••		12	1,839,634	2,563					
Homestead Leases					••••	1,113	10,332,905	27,244					
Improvement Leases				•••		112	1,898,304	1,147					
Scrub Leases						3	17,431	31					
Inferior Lands Leases						2	186,450	40					
Settlement Leases						8	40,050	130					
Artesian Well Leases						31	317,111	501					
New Special Leases						324	754,441	1,826					
Special Leases (Convers	ion)					48	9,236	230					
Occupation Licenses						83	4,384,837	1,193					
Homestead Selections a						34	24,765	155					
Section 32, Western La						293	2,815,394	2,603					
Part VII, ,,		,,				585	15,246,066	15,380					
Preferential Occupation	Licer	ises				48	1,115,610	649					
Permissive Occupancies						58	831,839	631					
Conditional Leases	•••	•••				81	109,922	538					
	То	tal	•••	•••		3,129	75,368,253	112,529					

In addition, there were 2,029,121 acres of alienated land; 1,763,941 of unoccupied land of low grade; 976,405 acres of unalienated town lands, beds of rivers, commonages, etc.; and 51,721 acres of new leases being issued.

Of the above leases, 54,604,903 were granted under the Crown Lands Acts and subsequently brought under the Western Lands Acts, and 19,931,511 were new leases issued under the Western Lands Acts.

CLOSER SETTLEMENT.

The circumstances leading to the adoption of what is known as the "Closer Settlement policy" are described on page 596. Further reference to the subject may be found in previous Year Books.

The Closer Settlement Acts provide that the Minister for Lands may, with the sanction of the Governor and the approval of Parliament, 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 an improvement or scrub lease, or section 18 lease, may also be resumed or purchased under agreement for closer settlement upon the recommendation of the Closer Settlement Advisory Board.

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 in June, 1924, was 2,300,533 acres.

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.

Except in regard to Returned Soldiers' Settlement, operations under the Closer Settlement Acts are now confined to promotion proposals, *i.e.*, cases where owners agree to sell estates under closer settlement conditions.

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 puchase; 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

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of $6\frac{1}{2}$ 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 64 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[‡] 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 14 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 ¹ 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.

From the commencement of the Closer Settlement Promotion Act in September, 1910, till 30th June, 1923, promotion proposals were received in respect of 7,467 farms of a total area of 3,859,448 acres, the amount involved being £17,335,161, but many of these proposals were either withdrawn or refused. 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 Bank, from the Closer Settlement Fund as at 30th June, 1923, were 3,715 farms, representing 1,759,741 acres, valued at £8,205,718; 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 2,566 farms of an area of 1,288,637 acres, value £5,766,488. Included in the foregoing are 151 farms of a total area of 72,535 acres which were subsequently forfeited and were vacant at 30th June, 1923.

Value and Area of all Closer Settlement Lands.

The following statement affords a summary of the operations in respect of all lands acquired by the Government under the Closer Settlement Acts for the settlement of civilians and returned soldiers to 30th June. 1923:-

Particulars.	Area Acquired.	Purchase Money,	Con- tingent Expenses.	Total Expendi- ture.	Number of Estates.	of
Closer Settlement Estates acquired under the Act of 1904 Estates acquired under the Closer Settlement Acts for Group Soldier	764,253*	£ 2,790,289*	£ 113,042	£ 2,903,331*	33	1,707
Settlement	381,505	1,753,941	16,624	1,770,565	25	756
Estates acquired under the Promotion Act of 1910 Estates acquired under the Promotion sections of the Closer Settlement	471,104	2,439,230		2,439,230	199	1,149
Acts	1 000 007	5,766,488	43	5,766,531	1,463	2,566
Total (Estates) Improvement Leases, etc., acquired	2,905,499	12,749,948	129,709	12,879,657	1,720	6,178
under the Closer Settlement Acts [†] .		202,198	5,027	207,225	64	605
Total	3,470,194	12,952,146	134,736	13,086,882	1,784	6,783

* To these were added 96,958 acres of Crown Lands, with a capital value of £184,420, † These lands are not administered under the Closer Settlement Acts.

In addition, 22 estates containing an area of 46.203 acres were purchased at a cost of £251,502 under section 197 of the Crown Lands Act and divided into 403 farms for group soldier settlements. These included one estate

surrendered at nominal value for returned soldiers. Thirty estates containing 266,917 acres (179,674 acres being leasehold) were purchased under authority of the Executive Council at a cost of £466,387 and made available in 505 farms for group soldiers' settlement.

In all (exclusive of irrigation projects) 1,836 estates had been acquired by the Government for purposes of closer settlement of civilians and returned soldiers. These estates embraced 3,783,314 acres, for which the purchase price was £13,670,035, and there were added 96,958 acres of adjacent Crown lands with a capital value of £184,420. The total number of farms made available was 7,691.

The following table contains information regarding areas administered under the Closer Settlement Acts as at 30th June, 1923. Acquired improvement leases and estates acquired for group soldier settlement are excluded from account, but lands acquired for returned soldiers under the promotion section of the Closer Settlement Act are included-

		tained in S archase Arc	Price paid for Acquired Land.					
Estates acquired under—	Acquired Land.	Additional Crown Land.	Total.	Total.	Per Acre.			
Closer Settlement Act, 1904	acres. 764,253	acres. 96,958	acres. 861.211	£ 2,790,289	£ s. 3 13			
Promotion provisions of the Closer Settlement Acts	1,288,637		1,288,637	5,766,488	4 9			
Closer Settlement Promotion Act of 1910	471 104	•••	471,104	2,439,230	5 3	3 7		
Total	2,523,994	96,958	2,620,952	10,996,007	4 7	7 1		

Norg.-In addition to the above, 25 estates of an area of 331,505 a res, valued at £1,753,941 have been acquired and finally dealt with for Soldiers' Settlements.

Of the total area of lands dealt with under the Closer Settlement Acts shown above 27,003 acres have been reserved for roads and other purposes, and \$34,208 acres have been divided into 1,707 farms, the average area per farm being 489 acres.

Particulars of the subdivisions are shown in the following statement:-

Estates acquired under	ms.		al Value of ained in Fa		Farms allotted to 30th	Area	Capital value of
	Farms	Acquired Lands.	Crown Lands.	Total.	June, 1923.	allotted.	Farms allotted,
Closer Settlement Act, 1904 ^{‡‡} Promotion Provisions of the	No. 1,707*	£ 2,959,605	£ 181,420	£ 3,144,025	No. 1,659	acres. 796,040	£ 3,002,000
Closer Settlement Acts Closer Settlement Promotion	2,566	5,766,488	••	5,766,488	2,566†	1,288,637	5,766,488
Act, 1910	1,149	2,439,230	•••	2,439,230	1,149‡	471,104	2,439,230
Total .,	5,422	11,165,323	184,420	11,349,743	5,374	2,555,781	11,207,718

* Includes 22 farms of 17,857 acres (Forest Vale Estate), being utilised in connection with Government,

Includes 22 tarms of 17,557 acres (Forest Vale Estate), being durised in connection with dovernment, scheme of share-farms mich were subsequently forfeited and were vacant at 80th June 1923,
 T Includes 8 farms which were subsequently forfeited and were vacant at 30th June, 1923,
 T Includes 8 farms, containing 22,543 acres and valued at £102,929, have been converted into homestead farms.

On the 30th June, 1923, there were 48 farms containing 38,168 acres unallotted; of these 22 with 17,857 acres were being utilised in connection with a Government scheme of share-farming, and 26 farms of 20,311 acres were available for settlement.

The farms which have not yet been selected are let under permissive occupancy, and remain available for settlement purchase application.

The balances of purchase money in respect of the above farms under the Closer Settlement Acts, omitting group soldier settlements, as at 30th November, 1922, including deferred and postponed instalments and adjusting interest, amounted to £10,238,173. Arrears of instalments at the same date were £849,043.

SETTLEMENT OF RETURNED SOLDIERS.

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. Holdings.-Lease in perpetuity.

5. Irrigation Farm.-Lease in perpetuity.

6. Group purchase.

7. Settlement purchases.

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.

The maximum value of land and improvements which may be so purchased by any individual is £3,000; in special cases, however, this may be increased to £3,500 or £4,000 for purely grazing areas.

An advance not exceeding \$25 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 necessaries, or in the erection of buildings.

Terms of repayment are usually as follows:---

House and other Permanent Improvements.—By payments over 25 years, interest only being charged during first five years.

Stock and Implements.—Six years, interest only being charged during first year.

Seeds, Plants, etc.—One year.

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 $6\frac{1}{2}$ per cent.

If the circumstances so warrant, a returned soldier settler approved by the Department of Lands may obtain an allowance for sustenance from the Department of Repatriation for a period not exceeding six months, the rates being :--

For a Single Man.-EI per week inclusive of pension.

Married Man.-£1 10s. per week, plus 2s. 6d. for each child (up to 4) under 16 years of age (inclusive of pension).

The amount of such gifts to settlers in New South Wales for sustenance and other expenses to 50th June, 1923, was £123,980.

Subject to such conditions as to security and terms of repayment as the Commission may think fit to impose, soldier settlers on the Murrumbidgee Irrigation Areas may obtain an advance, or have payment of rent and water rates suspended.

The total area of land made available exclusively for the settlement of returned soldiers under the Returned Soldiers' Settlement Act, 1916, during

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LAND LEGISLATION AND SETTLEMENT.

the seven years ended 30th June, 1923, was 4,947,472 acres, of which 2,182,495 acres were homestead farms, 1,181,670 acres were under the Closer Settlement Group Act, 837,386 acres were Crown leases, and 514,331 acres were group purchases. These totals contain a certain amount of duplication, due to the fact that a number of holdings taken up have reverted to the Crown and have been made available a second time.

The number and area of holdings of certain lands which had been confirmed to 30th June, 1923, under the returned soldiers' settlement scheme were as follow:---

	Te	IINEC.				Orig	inal Areas.	Additional Areas.
Homestead Farms Crown Leases Irrigation Farms—		mbid	*** ***	• • •	•••	No. 977 240 897	atores. 1,284,365- 642,301 65.599	adres. 27,760 12,678
		tworth		4 4 4% #14 4 11		16	283	***

In addition, lands have been made available exclusively for returned soldiers as settlement purchases, conditional purchases, conditional leases, and under the group settlement and closer settlement promotion schemes, of which particulars appear below. The number of holdings in existence as returned soldiers' special holdings at 30th June, 1923, was 302, with a total area of 27,160 acres. Purchase had been completed and deeds issued in regard to 12 special holdings, containing 50 acres, and approval of purchase had been obtained in the case of 35, containing 1,066 acres.

The following table affords a summary of the number, area, and cost of private estates acquired for soldiers' settlement to 30th June, 1928:----

Class of Acquisition.	Number of Estates:	Агеа.	Purchase Memey.	Number of Farms made available.
Premotion Provisions Closer Settlement Acts Group Settlement - Closer Settlement Acts Section 197, Crown Lands Act	00	acres. 1,181,239 391,505 46,203*	£ 5,309,960 1,753,941 251,502*	2,367 756 403
Direct Parchase under authority of Executive Council	20	266,917†	466, 3 87†	505
Fotal	1,516‡	1,875,864	7,781,864	4,031

* Includes one estate surrendered at nominal value, practically as a gift. † Includes 179,674 acres long term leases at nominal value.
‡ Includes 947 single farms.

Particulars are not available as to the area of the land taken up by

returned soldiers, and it is understood that some of it has been made available for ordinary settlement.

The number of returned soldiers who had been placed upon the land up to 30th June, 1923, in New South Wales, through the agencies of the State in connection with the repatriation scheme, was 8,445, including 1,292 who had transferred, forfeited, or surrendered their holdings. This total includes 616 settlers on private holdings, who received financial assistance under the Returned Soldiers' Settlement Acts.

The total amount of commitments in regard to soldiers' settlement in New South Wales at 30th June, 1923, was £16,977,831, consisting of £7,956,784 for the acquisition of land, £5,634,633 advances to soldier settlers, £1,633,949 for railway construction, and £1,752,465 for irrigation works. The actual expenditure to the same date (exclusive of administrative expenses) was £16,910,089; including closer settlement debentures for £1,956,600.

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. To 30th June, 1923, irrigated farms had been developed over 125,260 acres, 11,200 acres were leased as dry farms, and 3,200 acres were under short leases limited to seven years.

The disposal of Crown lands within irrigation areas is regulated by the Crown Lands Consolidation Act, 1913, and the Irrigation Act, 1912. These areas are administered by the Water Conservation and Irrigation Commission. A special land board, with the powers and duties of a local land board, has been appointed in connection with certain provisions of the Crown Land Acts relating to lands within an irrigation area; the lands are classified as town, irrigable, and dry or non-irrigable lands. A person (except a married woman not separated from her husband by judicial decree) 16 years or over, if a male, or 18 years or over, if a female, or two or more such persons, may apply for an irrigation farm or block. An alien is not debarred, but he must become naturalised within three years under penalty of forfeiture. The title is perpetual lease, subject to perpetual payment of rent and performance of residence. The rent is at the rate of $2\frac{1}{2}$ per cent. of the capital value minimum for town land blocks, £1 per annum. At the expiration of five years after the granting of the application, a grant of the farm or block will be issued to the holder, provided that the required conditions have been observed. The holding may be protected against sale for debt in certain circumstances.

In respect of town land blocks, the conditions of residence are not imposed, and no person may hold more than three adjoining blocks for residence, or four adjoining blocks for business purposes.

On the 30th June, 1923, 2,064 farms were held, representing a total area of 119,610 acres and annual rental of £60,900. In addition, there were held 839 Town Land Blocks, comprising 204 acres, at a total rental of £7,573.

Irrigation settlements have been established also at Hay, and at Curlwaa near Wentworth. These were, in 1913, placed under the control of the Water Conservation and Irrigation Commission. The tenure under which farms are held in these two areas is leasehold, ranging from three to thirty years' duration, and the policy adopted has been to extend the tenures, subject to such conditions and reappraisement of rent as they may decide.

The Hay Irrigation Area consists of an area of 4,500 acres; and at 30th June, 1923, 3,733 acres were occupied by sixty-five lessees at an annual rental of £680. The Curlwaa Area comprises 10,600 acres; and at 30th June, 1923, 123 farms of an area of 9,531 acres were under occupation, at a rental of £967.

Year ended 30th June.			Murrumbi	idgee.	. H	ay.	Curlwaa.			
		Fa	rms.	Town	Blocks.	F	arms.	Farms.		
			. No. /	Acres.	No.	Acres.	No.	Acres.	No.	Acres.
1919		804 36,807		176	50	76	3,027	78	8,505	
1920			1.165	57,170	321	79	67*	3,724	92	8,532
1921			1.361	75.974	543	136	69	3,737	106	8,393
1922			1.781	108,240	732	175	70	3,737	120	9,531
1923			2,064	119,610	839	204	65*	3,733†	123	9,531

* Reduction in number of lessees is due to group settlers transferring to individuals. † 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.

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, Appropriations, and Purchases.	Gifts.	Total.
1919 1920 1921 1922 1923	$ \begin{vmatrix} a, & r, & p, \\ 3,411 & 2 & 10 \\ 27,840 & 1 & 22 \\ 8,605 & 0 & 28 \\ 6,582 & 1 & 35 \\ 39,002 & 3 & 27 \end{vmatrix} $	a r. p. 26 3 8 17 2 2 40 3 25 9 3 17 13 0 17	a. r. p. 3,438 1 18 27,857 3 24 8,646 0 13 6,592 1 12 39,016 0 4

The area of land appropriated in 1922-23 included 10,648 acres of Crown land.

The purposes of resumptions, appropriations, and purchases during 1922-23 were :---

weio.—	A	rea	.			Are	a.
1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 - 1 -	a.	r.	р.		a.	r.	р.
Bridge	6			Sanitary Depôt	36	0	25.50
Court House	0	2	0	Savings Bank	0	1	13.75
	230		34	Sewerage	37	0	23
Fire Station	0	0	20.50	Shire Quarry and Gravel			
	360	0	0	Reserve	3	1	3:25
Municipal Streets Depôts,	÷ .			Storm Water Channels			
etc	2	3	5·83	and Drainage	16	3	13.75
Police Stations	4	1	27.50	Water Storage and River			an an an an an an an an an an an an an a
Postal	4	3	34.85	Dam	36,451	- 0	0
Public Parks and Recrea-				Water Supply	39	3	0.22
tion Reserves	6	1	28.50				
Public School Sites 8	300	3	25	Total	39,016	0	3.70
Railways and Tramways 1,0)14	3	25.25				 .

The principal area acquired in 1922-23 was 36,450 acres for the Lake Victoria storage on the Murray River. Of this land 9,500 acres were appropriated and 26,950 acres—principally consisting of Western Lands Leases —were resumed.

Land resumptions, purchases, and gifts in quinquennial groups from the year 1900 inclusive, were as follow:—

Year.	Resumption Appropriations, Purchases.		· Gi	fts.	Total	L.
	a. r.	p.	a.	r. p.	ai	r. p.
1900-04	8,876 1		833	$3 \ 23$	9,710	1 20
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	27,840 1	22	17	2 2	27,857	3 24
1921	8,605 0	28	40	3 25	8.646	0 13
1922	6.582 1	35	9	3 17	6,592	1 12
1923	39,002 3	27	13	0 17	39.016	0 4

The total area of land dealt with in this way between 1890 and June, 1923, was approximately 555,000 acres, including about 270,000 acres for water

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conservation and irrigation projects, 52,000 acres for defence, 47,000 acres for railways and tramways, 31,000 acres for town water supplies, and 89,000 acres for closer settlement.

Dedication of Land.

The area and the purposes for which land was dedicated during 1922-23 were as follows:--

	Area.			2	дтев.
Church of England School Site General Cenetery Literary Institute Sites Mental Hospital Permanent Common Plantation Public High School Public Hospital Public Recreation	0208019	Public School Site Racecourse Racecourse, Public Rec tion and Show Grounds Show Grounds War Memorial Total	erea- d	148 74 161 119 73 0	3 88 1 12 1 2 0
I UDITE ISOCIOGEION					

REVENUE FROM PUBLIC LANDS, 1919-23.

The following statement shows the revenue received from public lands during the years ended 30th June, 1919, to 1923, also the revenue per capita:--

Head of Revenue.		191	8-19).	191	92 0		192	0-21	•	192	21-22	•	192	2 -2 3	
Anction and Special Sales		8	£ 1,4		7	£ 3,80		5	£ 8,5		4	£ 3,51		6	£ 9,2	
Conditional Purchases		97	8,4	48	1,05	2,3	38	1,19	1,1	66	1,09	9,40	35	96	5 ,9	88
Pastoral Occupation		48	2,3	61	48	1,10)6	54	1,4	19	5(13,21	30	51	0, P	92
Mining Occupation		14	4,6	62	15	7,9	55	15	68,3	13	14	6 ,5	74	16	8,2	00
Miscellaneous Land Receipts		17	4,9	3 9	:21	1,8	05	24	19,1	65	2	19,6	1 9	23	6,8	64
	-	1,86	1,8	85	1,9	6,5	69	2,11	98,6	58	2,0	52,4	38	1,95	0,3	80
Refunds	£	9	3,4	78	4	11,1	30	4	17,1	93	. 4	13,6	18	. 8	6,1	47
Net Revenue	£	1,828,407		1,915,430		430	2,151,465			2,008,820			1,914,23		33	
			R		NUE	PEF	-		A.							
Auction and Special Sales .		£ 0	s. 0	d. 10	£ 0	s. 0	d. 9	Ê 0	ុន. (10	d. 77	£	୍ଞ. 0	d. 5	E 0		d. 8
Conditional Purchases		.0	.9	11	.0	10	4	.0	11	5	.0	10	4	0	8	11
Pastoral Occupation		0	4	11	0	4	8	0	5	2	0	4	9	0	4	8
Mining Occupation		:0	1	6	10	1	4	0 0	1	6	0	1	5	0	1	6
Miscellaneous Land Receipts		ി	• 1	9	- 10	2	1	0	2	4	0	2	4	0	2	2
the second second second second second second second second second second second second second second second se	£	0	18	11	0	19	2	1	1	0	0	19	3	0	17	11
Refunds	£	:0	0	⊴4	0	10	:5	0	0	5	0	0	5	0	0	4
Net Revenue	£	0	18	7	0	18	0	1	0	7	0	18	10	0	17	. 7

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 the supply of food is sufficient for 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. Special provision is made to safeguard the welfare of juveniles and of women in industrial occupations.

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, and the tariff laws aim at the extension of local industries without any encroachment upon existing standards of industrial employment. The railways, being owned by the State, are used to develop national resources, and the burden of taxation is rendered proportionate to the means of the individual taxpayer, *e.g.*, by the graduated taxation of incomes. Legal restrictions have been placed upon gambling and upon the manufacture and and sale of intoxicating liquors and deleterious drugs in order to minimise the social evils attendant upon poverty and drunkenness. Primary education is free and illiteracy is unusual.

The mildness of the climate enables the people to engage in outdoor recreation at all times of the year and facilitates measures for the prevention of sickness and the encouragement of hygienic conditions of life which 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, which are a constant menace to health in some other countries. 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.

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 Their functions, though distinct, are closely co-ordinated of Public Health. as they are served by the same staff, and the Director-General, who is a permanent salaried officer of the Government, is ex officio President of the Board of Health. The Board consists of not less than seven and not more than ten members, including four 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 Department of Public Health controls the State institutions for the treatment of the sick and the infirm, and it contains a microbiological laboratory, which is engaged in important investigations.

Other Government Departments administer measures in connection with child welfare, assistance to public hospitals, and charitable relief, and a special department has been organised for the care of children who are under the supervision of the State.

*40639—A

The executive personnel of the Department of Public Health includes medical officers and sanitary inspectors. The former are permanent salaried officers, appointed by the Government, who devote the whole of their time to matters relating to public health in groups of populous districts. It was intended that all the more densely-populated districts should be placed under the supervision of medical officers, but up to the present they have been appointed in three areas only, viz., the Metropolitan district; the Hunter River district, which includes Newcastle; and the Broken Hill Outside these areas expert advice may be obtained from medical district. 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.

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, and pure food, and provisions of the Local Government Act which specify the powers and duties of the municipal and shire councils for ensuring the health of the incorporated areas. By the provisions of various Acts 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.

Government Expenditure on Charitable Relief.

The expenditure by the State on hospitals and charitable relief in 1922-23 amounted to £1.893.121.

The following statement shows the growth of expenditure in the five years ended 30th June, 1923:--

Payments from-	1919.	1920.	1921.	1922.	1923.
Consolidated Revenue Public Works Account	£ 1,283,114 77,132	£ 1,726,475 103,768	£ 1,803,287 117,185	£ 1,905,903 105,575	£ 1,740,160 152,961
Total £	1,360,246	1,830,243	1,920,472	2,011,478	1,893,121

The expenditure from Consolidated Revenue on hospitals and charities includes the cost of maintenance of the State institutions, also subsidies granted to other institutions. The expenditure on hospitals and charities during the years ended June, 1919 and 1920, was greatly augmented by reason of expenses in connection with an epidemic of influenza in 1919. Large sums were expended in providing treatment for persons affected with the disease and in compensating for the temporary closure of schools and businesses.

Adding to the expenditure from Consolidated Revenue, as stated above, the subvention paid by the State Government to friendly societies, the old-age and invalidity pensions and the maternity allowances provided by the Commonwealth Government, the expenditure from public revenue on eleemosynary objects in New South Wales in 1922-23 amounted to $\pounds4,120,386$ or $\pounds1$ 17s. 11d. per head. A classification of the items of expenditure during the last two years is shown below in comparison with the expenditure in 1911-12. Expenditure in connection with the medical inspection of school children is not included, nor are costs of administration, except in regard to the State Children Relief Department, the mental hospitals, and the protection of aborigines.

Head of Expenditure.	1911-12.	1921-22.	1922-23.
Rana and a state of the second second second second second second second second second second second second se	£	£	£
General Hospitals and Charitable Institutions	130,368	443,470	495,088
Mental Hospitals	212,616	537,096	513,315
Children's Relief	106,557	472,2(8	436,992
Government Asylums for the Infirm	87,708	164,848	157,943
Destitute Persons, Medical Services, Relief. etc.	32,281	225,902	92,677
Aborigines' Protection	16,475	22,506	22,415
Charitable Societies	4,624	6,628	4,352
Subvention to Friendly Societies	14,000	56,801	43,297
Miscellaneous	2,401	33,185	17,378
State	607,030	1,962,704	1,783,457
Old-age and Invalidity Pensions	821,993	2,029,077	2,058,544
Maternity Allowances	•••	277,065	278,385
Commonwealth	821,993	2,306,142	2,336,929
Total f	1,429,023	4,268,846	4,120,386
Per head of Population-	£ s. d.	£ s. d.	£ s. d.
State	072	0 18 5	0 16 -5
Commonwealth	098	1 1 8	1 1 6
Total £	0 16 10	2 0 1	1 17 11

The expenditure in 1922-23 was nearly three times the amount spent in 1911-12. The cost to the State per head of population increased from 7s. 2d. to 16s. 5d.

THE TREATMENT OF SICKNESS.

Institutions for the treatment of sickness and disease have been cstablished in various localities throughout the State. In addition to private hospitals which are owned entirely by private persons and conducted as business enterprises, public hospitals 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. There are also special hospitals, State and private, for the treatment of mental and nervous ailments, and a State lazaret for the segregation of patients afflicted with leprosy.

The State exercises a measure of supervision over the practice of professional persons engaged in the treatment of sickness and disease; medical

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practitioners, dentists, and pharmacists are required to register with a board established for each profession under statutory authority. At the end of the year 1923 there were on the registers 2,609 medical practitioners, 1,783 dentists, and 1,304 pharmacists. Members of the nursing profession are certificated by the Australasian Trained Nurses' Association, though the organisation has no legal status as to supervision. The number of certificated nurses who were financial members of the Accociation at the end of 1923 was 3,547, viz., 2,256 general nurses, 1,257 obstetric, and 34 mental.

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.

Private Hospitals.

A private hospital may not be conducted except under license in accordance with the Private Hospitals Act of 1908, which 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.

In 1923 the private hospitals numbered 580, viz., 225 in the metropolitan district and 355 in the country. The classification of the hospitals, according to the nature of the cases received and to the number of beds available, is shown in the following statement —

en de la construcción de la construcción de la construcción de la construcción de la construcción de la constru En esta de la construcción de la construcción de la construcción de la construcción de la construcción de la con			Classification.				Accommodation.				
	District.			Medical, Surgical, and Lying-in.	Medical and Surgical.	Lying- in.	Total.	1 to 3 Beds.	4 to 10 Beds.	11 to 20 Beds.	Over 20 Beds.
Sydney Country	•••			No. 63 134	No. 17 13	No. 145 208	No. 225 355	No. 68 130	No. 92 175	No. 36 42	No. 29 8
	Total	•••		197	30	353	580	198	267	78	37

There has been an increase of 137 in the number of private hospitals since 1911, when there were 114 in Sydney and 329 in the country.

Public Hospitals.

Public hospitals embrace all institutions for the care of the sick, except those owned and maintained entirely by private persons. Some are maintained wholly by the State, those in the metropolitan district being the Coast Hospital for medical, surgical and infectious cases; the Ledy Edeline Hospital for babies, two convalescent hospitals, and a number of institutions for maternity cases. There are two State institutions in the country, viz., the Waterfall Hospital for Consumptives and the David Berry Hospital at Berry for general treatment.

The Public Hospitals Act of 1898 and an amending Act passed in 1900 may be applied by proclamation to any hospital maintained partly by private contributions and partly by grants from the public funds. The Acts define the procedure for the election of officers for the management of the institution, and prescribe that a committee of management, trustees, auditors and other officers for each hospital must be elected annually by the contributors who have paid at least 10s. to the hospital during the preceding twelve months, or who have contributed £10 in one sum. The committee appoints the treasurer, secretary, medical officers and staff, and makes rules for the management and control of the hospital. Some of the public hospitals are under the ægis of religious denominations, and are conducted by committees nominated by subscribers or by religious communities who own the establishments. They are open to persons of all creeds, and are usually subsidised by the State.

In May, 1923, the Government covened a conference of persons experienced in the management of hospitals to consider the question of amending the law relating to public hospitals. The conference favoured a systematic distribution of the hospitals, in order to prevent overlapping and wasteful expenditure, by subdividing the State into hospital districts, by providing base hospitals, where necessary, to relieve the large metropolitan hospitals, and by eliminating superfluous hospitals.

In regard to finance the conference expressed its opinion that there was no need for a radical change in the present system of voluntary contributions and State subsidies, and, assuming that the necessary funds will be provided for subsidies and that the committees of management will include representatives of the State, the local governing bodies, and the industrial organisations contributing to local hospital funds, it recommended an alteration in the basis of paying subsidies. Under existing arrangements the Government pays subsidies at the rate of $\pounds 1$ for $\pounds 1$ on moneys raised by voluntary contributions. The conference suggested that a system be adopted whereby the grants would be based upon (1) the amount of work done, (2) sums raised by subscriptions, donations, bequests, and the proceeds of entertainments, (3) amounts contributed by employers and employees on the basis of weekly payments, (4) contributions by patients, and (5) contributions by local bodies as grants or as payment for the treatment of patients residing in their localities. It was recommended also that the Board of Health be empowered to administer the Government grant, to regulate the establishment of hospitals, to supervise the keeping of accounts, and to foster economy in administration; that an efficient ambulance transport service be established; and that the scheme of bush nursing be extended. A bill to smend the Hospitals Act has been prepared for submission to Parliament at an early date.

The figures shown in the following tables relating to public hospitals 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), the maternity hospitals and rest homes, the leper lazaret, and the five asylum hospitals. Excluding those institutions, there were 158 public hospitals in New South Wales at the end of 1922, viz., 26 in the metropolitan district, with 3,975 beds, and 132 in the country with 4,395 beds. The hospitals in the metropolitan district included 14 general hospitals, with 2,914 beds; 3 hospitals for children, 338 beds; 4 for women, 492 beds; 3 for incurable cases, 155 beds; one institution for convalescents, 76 beds; and a dental hospital. All the hospitals in the country provided general treatment. except four for consumptives, 536 beds, and one for convalescents, 110 beds. The extent to which the hospital services have increased since 1901 is shown below :----

	Pu	blic Hospital	ls.	Beds.				
Year.	Metro- politan.	Country.	Total.	Metro- politan.	Country.	Total.		
1901	1 15	103	118	1,453	1,938	3,391		
1906	20	114	134	1.833	2.419	4.252		
1911	21	120	141	2.113	2,976	5.089		
1916	26	125	151	2,596	3.469	6,065		
1921	26	128	154	3.841	4.234	8,075		
1922	26	132	158	3.975	4.395	8.370		

The figures show a remarkable expansion in regard to hospital accommodation, the tendency being to enlarge existing institutions rather than to establish new hospitals. The average number of beds per hospital in 1922 was 53, as compared with 28 in 1901. The accommodation as stated includes beds in the open air, which numbered 988 in 1922.

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. Of the nursing staffs the majority, about 54 per cent., are qualified nurses, and 39 per cent. are being trained. The following statement shows particulars of the medical and nursing staffs attached to the public hospitals during 1922 :—

· · · · · · · · · · · · · · · · · · ·	Medica	l Staff.	Nursing Staff.				
Hospitals,	Honorary.	Salaried.	Qualified Nurses.	Nurses Training.	Wardsmen & Wardsmaids.	Total.	
Metropolitan Country	900	112 132	827 578	543 475	92 91	1,462 1,144	
Total	743	244	1,405	1,018	183	2,606	

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 7,209 in 1922.

		Indoor Patients.								
Year.	Treated		Remain-	Average	Outdoor Patients treated during					
	during • the Year.	Died.	ing at end of Year.	Number.	Per 1,000 of mean popula- tion.	the Year.				
1901	1 32,012	2,477	2,247	2,045	1.50	80,259				
1906	41,552	2,576	2,574	2,636	1.78	83,390				
1911	56,564	3,550	3,409	3,302	1.98	116,346				
1916	75,856	5,027	4,187	4,729	2.50	178,439				
1917	76,660	4,627	4,143	4,655	2.44	166,994				
1918	77,253	4,818	4,220	4,784	2.46	244,006				
1919	86,884	6,624	4,657	4,959	2.48	195,289				
1920	91,768	5,710	4,987	5,466	2.64	238,332				
1921	97,034	5,493	4,859	5,763	2.73	250,035				
1922	97,059	5,502	5.145	5,779	2.69	274,177				

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 has risen by nearly 80 per cent. since 1901.

The increase does not indicate a larger degree of sickness in the community, but is due principally to a wider knowledge concerning the benefits to be derived from expert treatment which is provided in the hospitals and to the largely increased hospital accommodation. Also the increased cost of homenursing and the scarcity of domestic labour probably cause more patients to go to hospitals for treatment.

Of the indoor patients in 1922, the metropolitan hospitals provided treatment for 50,733, and 46,326 were accommodated in the country institutions, the corresponding figures in 1911 being 29,610 and 26,954.

The number of outdoor patients, as stated, represents the aggregate of the numbers of distinct persons who received outdoor relief at each hospital where records are kept. The number has increased more than threefold during the period under review. The bulk of the cases recorded in 1922 were treated at five metropolitan hospitals in or close to the city, viz., Sydney Hospital, 48,935, Royal Prince Alfred, 41,805, St. Vincent's, 33,352, Royal Alexandra for Children, 32,602, and Lewisham, 30,703; the total in the metropolitan district was 237,948, and in the country 36,229.

The following statement shows the revenue and expenditure of the public hospitals during the year 1922—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.

		Amount		Per cent. of Total.			
Items.	Metro- politan.	Country.	Total.	Metro- politan.	Country.	Total.	
Receipts-	£	£	£				
State Aid	267,349	228,391	495,740	45.2	46.6	45-8	
Subscriptions, Donations, and Entertainments	203.193	170.391	373,584	34.3	34.8	34.6	
Contributions by Patients	75,371	74,894	150,265	12.7	15.3	13.9	
Miscellaneous	43,040	15,990	62,030	7.8	2.3	5.7	
Total Receipts £	591,953	489,666	1,081,619	100	100	100	
Expenditure-							
Buildings and Repairs	94,120	61,000	155.120	15.7	13.3	14.7	
Salaries and Wages	231,328	175,219	406,547	38.6	38.2	<u>38·4</u>	
Provisions, Stores, and Out-	000.000	100 100	410 505	0.0 7	42.0	39.0	
patients	220,328	192,199	412,527	36.7	42·0 6·5		
Miscellaneous	54,123	29,545	83,668	9.0	0.9	7.9	
Total Expenditure \pounds	599,899	457,963	1,057,862	100	100	100	

The revenue and expenditure of the Thomas Walker Convalescent Hospital which is privately endowed, is excluded also

According to the hospital accounts the State aid received by the metropolitan institutions in 1922 amounted to £267,349, or $45 \cdot 2$ per cent. of the total receipts. Of this sum £80,079 represented the expenditure in connection with the Coast Hospital and the Lady Edeline Hospital; the Sydney Hospital received £48,409, and the Royal Prince Alfred £51,900; the balance, £86,961 was distributed amongst 19 institutions, and 3 hospitals

(including the Thomas Walker Convalescent Hospital) were unsubsidised. In the country districts State aid represented 46.6 of the receipts. The amount included £30,634 for the upkeep of the Waterfall Hospital for Consumptives and the David Barry Hospital. The Newcastle and Broken Hill Hospitals received £20,197 and £18,009 respectively, and £159,551 were granted to the other institutions, only two being unsubsidised.

Subscriptions, donations, bequests, and the proceeds of benefit entertainments, etc., yielded more than one-third of the hospital revenue, and contributions by patients represented 14 per cent.

The growth of hospital revenue and expenditure since 1901 is illustrated in the following statement :---

			Revenue.				Expendi	ture,	
Year.	State ald.	Subscriptions and Donations.	Contributions by Patients.	Other.	Total.	Buildings and Repairs.	Salaries and Waxes, Provi- sions, Stores, etc.	Other.	Total.
	£	£	£	£ 16,727	£ 182,727	£ 17,354	£ 141,399	£ 17,365	£ 176,118
1901	91,363	50,939	23,698		242,859	26,815	179,431	18,666	224,912
1906	109,296	85,421	31,525	16,617 22,867	363,357	50,902	263,037	34,877	348,816
1911	159,147	131,244	50,099			80,182	433,339	37,546	551,067
1916	285,385	163,018	85,551	24,981 27,933	558,935 590,635	85,997	473,148	43,496	602,641
1917	296,561	174,805 243,892	91,336	52,528	712,192	97,930	534,407	54,324	686,661
1918	318,291	243,234	97,481	50,874	776,105	132,589	619,536	65,470	817,595
1919	386,316	355,870	95,681 132,230	62.054	1,008,972	159,230	765,805	68,565	993,600
1920	458,818	344,253	132,250	62,368	1,062,645	160,499	818,715	80,067	1,059,281
1921 1921 - 1	507,268 495,740	373,584	150,265	62,030	1,031,619	1	819,074		1,057,862
- 1 22	· 490,140	1010,001	100,200	02,000	1,001,010				•
•	-		PEI	R HEAD	OF POPUL	ATION.			
*	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
_ 19 01	1 4	0 9	04	0 3	2 8	0 3	2 1	0 3	2 7
1906	16	1 1	0 5	0 3	3 3	0 4	2 5	0 3	3 0
1911	1 11	1 7	0 7	0 3	4 4	0 7	3 2	0 5	4 2
1916	3 0	1 9	0 11	0 3	5 11	0 10	4 7	05	5 10
1917	3 1	1 10	0 11	0 4	6 2	0 11	5 0	0 5	6.4
	3 3	2 6	1 0	0 7	74	1 0	5 6	0 7	7 1
1919	3 10	2 5	1 0	06	7 9	14	6 2	0 8	82
1920	4 5	3 5	14	.0 7	9.9	1 6	7.5	0 8	97
1921	4 10	3 3	1 5	0 7	10 1	1 7	7 9		10 1
1922	4 7	3 6	1.5	0 7	10 1	1.5	1 7 7	0.10	9 10
	1		: I		1		. <u> </u>	, <u>I</u>	1

The average amount of hospital revenue per head of population has risen by two and a third times during the last ten years, the amount in 1922 being 9s. 10d. per head, of which State aid represented 4s. 7d. Contributions by patients showed an average of 1s. 5d. 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.

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The average annual cost of maintenance per patient in hospitals, calculated on the average daily number of patients during 1922, was £151 4s., exclusive of the cost of buildings and repairs. The cost of out-door treatment and district nursing also is excluded where the information is available, but the amount is not recorded separately in the accounts of several hospitals where large numbers of out-door patients are treated, e.g., Sydney, St. Vincent's, and Lewisham. The following statement shows the annual cost in various groups of hospitals classified according to the number of patients :—

	19	921.	a 		1922.	1			
Average daily Number	Number	am han la man an a		Average cost per occupied bed.					
Resident.	nesident. of per occu	Averge cost per occu- pied bed.	Number of Hospitals.	Wages.	Provisions Stores, etc.	Miscel- laneous.	Total.		
· · · · · · · · · · · · · · · · · · ·	1	£	1	£	(£)	£	£		
Less than 1	5	1,437.55	7	1,121.08	553-01	$185 \cdot 54$	1,859.63		
1 to 3	7	404.33	9	229.99	138-63	32.71	401.33		
3,, 5	12	289.52	12	157-08	106.14	27.98	291.20		
5,,10	31	206.63	28	101.45	87.87	17.69	207.01		
10 , 15	16	164.30	22	69.19	73-25	13.54	155.98		
15 ,, 20	16	158.84	15	70.72	74.42	15.00	160.14		
20 ,, 25	3	136-23	9	47.83	62.85	7.95	118.63		
25 ,, 30	14	116.47	7	44.17	58.54	8.92	111.63		
30 ,, 35	5	146.10	5	51.21	61.97	7.66	120.84		
35 ,, 40	7	122.10	10	50-97	67.93	9.54	128.44		
40 ,, 100	21	110.29	20	52.12	60.79	12.94	125.85		
Over 100	12	169.83	11	79.12	66-31	15.93	161.36		
Total	149	153.38	156	69.99	66 95	14.25	151.19		

The average cost per occupied bed decreased as the number of patients increased up to 30, where the average was £111-12s. per annum. Apparently it was higher in the larger institutions situated in the metropolitan areas or in important centres of population where expensive equipment has been installed, and many accident cases are treated daily.

On account of increased prices, wages, etc., during recent years, difficulty has been experienced in respect of many hospitals in meeting obligations and in providing accommodation for all persons seeking admission.

During the year 1922 the debit balance of the current accounts of the metropolitan hospitals increased from £218,636 to £247,963, or by £29,327, and the invested funds increased from £212,601 to £233,982, or by £21,381. In regard to the country hospitals, however, the current accounts showed a credit balance of £18,503 at the beginning, and of £29,039, at the end of the year, and the invested funds grew from £135,289 to £156,456.

Hospitals.	Current	Account.	Invested Funds.			
nospitais.	At 1st Jan., 1922.	At 31st Dec., 1922.	At 1st Jan., 1922.	At 31st Dec., 1922.		
Metropolis . Country .	£ (-)218,636 (-)218,636	£ (-)247,963 29,039	£ 212,601 135,289	£ 233,982 156,456		
Total .		(-)218,924	347,890	390,438		

(--) Indicates debit balance

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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; and the Federal Government is responsible for the administration of the quarantine laws in respect of vessels, persons, and goods arriving from oversea ports.

Cases of such diseases as leprosy, bubonic plague, smallpox, scarlet fever, typhoid fever, diphtheria, infantile paralysis, cerebro-spinal meningitis, must be notified to the Board of Health; no case of typhus, yellow fever, or cholera has occurred in New South Wales, and cases of bubonic plague are rare, but an outbreak occurred between September, 1921, and July, 1922. The total number of cases reported was 35, and ten were fatal. One case which was fatal occurred in 1923. Cases of pulmonary tuberculosis must be notified in certain areas as proclaimed.

Where necessary, provision is made for the isolation of infectious cases. In the Metropolis the majority are treated at the Quarantine Station, or at the Coast Hospital; country cases are accommodated in special wards of the local hospitals.

The following table shows the notifications of the various diseases for five years, 1919–1923. Particulars relating to the deaths and death-rates are shown in the chapter relating to Vital Statistics.

						19	28.	
Disease.	1919. 1920.	1921.	1922.	Metro- politan. District.	Hunter River District.	Other Districts.	Total.	
Typhoid Fever Scalet Fever Diphtheria Infantile Paralysis Acute Malarial Fever	857 959 2,826 8 35	1,015 936 5,043 45	949 1,060 6,854 184 	706 1,153 4,094 33 	270 1,550 1,700 72 	112 398 295 2 	491 675 1,485 29 	873 2,623 3,480 103
Cerebro-Spinal Menin- gitis Pulmonary Tubercu- losis Leprosy Bubonic Plague	28 1,102 4 	34 1,509 4	30 1,240 2 2	21 1,045 3 33	16 1,029 1	2 71)⊚ 118 	27 1,218 1

Acute malarial fever was notifiable between March, 1915, and November, 1919, when the proclamation was revoked.

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. During 1922 three persons were admitted, two died, one was discharged as apparently cured, one was returned to Queencland, leaving 21-16 males and 5 females—in the lazaret on 31st December, 1922. The birthplaces of the inmates of European descent were New South Wales 5, Victoria 1, England 3, Sweden 1, Greece 1. There were 10 coloured inmates— 3 were born in China, 4 in the Pacific Islands, 1 in Java, 1 in India, and 1 is an Australian aboriginal. The cost of management was £3,540, or an average of £155 15s. per inmate.

Tuberculosis.

A remarkable reduction in the mortality from tuberculosis from 15 to 6 per 10,000 of population has been effected since the enactment of the Dairies Supervision Act of 1886, the Pure Food Act of 1908, and other legislation for the protection of the food supply from insanitary conditions, but the fact, as shown in the chapter Vital Statistics, that tuberculosis causes 6 per cent. of the deaths in New South Wales demonstrates the necessity for further drastic measures to prevent the spread of the disease.

Pulmonary tuberculosis was proclaimed as notifiable in the Metropolitan and Newcastle districts in 1915, and in the Blue Mountains tourist district in 1916. The Board of Health may prohibit affected persons from working in connection with preparation or packing of food.

For the treatment of cases of tuberculosis there are four special institutions which are classified as public hospitals, viz., the State Hospital at Waterfall, the Queen Victoria Homes for Consumptives at Wentworth Falls and Thirlmere, and the R. T. Hall Sanatorium at Hazelbrook. Tuberculous cases are received also at the Sacred Heart Hospice for the Dying, Sydney, and at private hospitals. At the hospitals attached to the State asylums at Rookwood and Newington, accommodation is reserved for a limited number of tuberculous patients, and 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 institution for the treatment of persons suffering from pulmonary tuberculosis. It contains 408 beds, and 638 males and 213 females were treated during 1922. The expenditure was £27,559; the average cost of treatment, excluding buildings, repairs, etc., was £75 10s. per occupied bed.

The dispensary system for the treatment of tuberculosis was inaugurated in Sydney in 1912 by the National Association for the Prevention and Cure of Consumption, when a dispensary was opened in the city. Throat and chest dispensaries have been established also in connection with three Metropolitan hospitals, and at Newcastle. Medical advice is given to patients, and nurses are employed to visit their homes and instruct the inmates in precautionary measures to protect 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 five metropolitan public hospitals, and free treatment is provided at all 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 Act was passed in 1923 to sanction the construction of an isolation block in connection with the Royal Prince Alfred Hospital. The notifications during the year 1922 numbered 6,298, of which 5,990 cases were notified in the metropolitan area. Public hospitals and clinics notified 3,507 cases, and 2,791 notifications were made by 262 private medical practitioners. Prisoners suffering from venercal disease are detained for treatment in lock hospitals, in terms of the Prisoners Detention Act. Particulars are given in the chapter relating to Prison Services.

NEW SOUTH WALES OFFICIAL YEAR BOOK.

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 to 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.

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; and, 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 nine Government mental hospitals, in addition to a hospital for criminal insane, and three 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, 1923, there were in the mental hospitals and licensed houses in New South Wales 7,432 patients—4,222 males and 3,210 females; in the South Australian hospitals there were 16 men and 18 women from this State; 218 men and 341 women were on leave from the institutions, so that the total number of persons under cognizance as being of unsound mind was 8,025, consisting of 4,456 males and 3,569 females. The number at intervals since 1901 is shown below :—-

	Numb	er of Mental Pa	atients.	Proportion per 1,000 of Population.			
At end of Year.	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	
1916	4,264	3,020	7,284	4.50	3.21	3.86	
1917	4.339	3,048	7.387	4.51	3.17	3.84	
1918	4.416	3,212	7.628	4.48	3.29	3.86	
1919	4,359	3,236	7,595	4.18	3.25	3.72	
1921*	4,510	3,432	7,942	4.21	3.33	3.78	
1922*	4,497	3,500	7,997	4.11	3.32	3.72	
1923*	4,456	3,569	8,025	3.99	3.32	3.66	

* At 30th June.

The proportion of the population who were under official cognizance as mental patients increased slowly until 1918. In the following year 180 patients died during an epidemic of influenza, and the proportion declined. During the last three years the rate has declined clowly. In order to accertain 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. It is considered a grave defect in the law that it 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 recently 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. During the year 1922-23 the number of resident patients under treatment was 311, and there were 94 in the institution at 30th June, 1923. Outdoor treatment is provided also.

Reception houses have been established in Sydney, Newcastle, and Kenmore (Goulburn), 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 1922–23 was 1,411, and 870 were transferred to mental hospitals. At the State Fenitentiary at Long Bay 63 persons were under observation during the year and 24 were sent to mental institutions.

Year.		Admissions.		Re-admissions.			
1 641.	Males.	Females.	Total,	Males.	Females.	Total.	
1918	670	493	1,163	150	145	295	
1919	726	560	1,286	104	94	198	
1921*	711	622	1,333	115	106	221	
1922*	684	552	1,236	135	106	241	
1923*	563	457	1,020	104	118	222	

The number of admissions and re-admissions to mental hospitals during the last five years are shown below :---

* Year ended 30th June.

Of the admissions and re-admissions in 1922–23, natives of New South Wales numbered 698, England 213, Ireland 66, Scotland 44, other British countries 163, foreign countries 58.

During 1922-23 the number of patients who died in mental hospitals was 519, or 7 per cent. of the average number resident; 532 persons, or 7.2 per cent., were discharged as recovered; and 157, or 2 per cent., as relieved.

The records of persons admitted during 1922-23 show that, among the exciting causes of insanity, mental anxiety and intemperance in drink 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 hospitals during the year 1922-23 was 24s. 5d. per patient, of which the State paid 20s. 9d., the balance being derived from private contributions. The following table shows the average weekly cost per patient during the last five years :--

	Annual Cost of	Cost of Maintenance of Patient per week.							
Year. Mainten- ance of Patients.		To State.	Private Contributions.	Total.					
	£	s. d.	s. d.	s. d.					
1918	335,559	15 6	2 10.4	18 4.4					
1910	391,517	18 2.1	2 11.9	21 2					
1920-21	512,797	23 9.9	33	27 0.9					
1921-22	497,711	21 - 6.7	4 0 9	25 7 6					
1922-23	476,181	20 9	3 8	24 5					

The increase in the cost of maintenance between 1918 and 1921 was due mainly to increased wages and to the higher cost of commodities. A decline in the prices of food, etc. is reflected in the cost during later years. The cost of voluntary patients is included.

DEAF-MUTISM AND BLINDNESS.

The number of persons who were deaf and dumb, as ascertained at the census of 1911, was 640, equivalent to one person to every 2,573 of the population, and the number of persons afflicted with blindness was 1,011, or one person in every 1,629. More recent information collected at the census of 1921 is not yet available.

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, and the Neglected Children and Juvenile Offenders Act, 1905.

The State Children Relief Act of 1901, which consolidated Acts passed in 1881 and 1896, provided for two forms of relief in regard to neglected and destitute children, viz., (1) for those children who by reason of the death

or neglect of parents and guardians, or for other reasons, have become wards of the State; and (2) the granting of assistance towards the maintenance in their own homes of the children of widows and deserted wives in necessitous circumstances. The administration of the Act was vested in the State Children Relief Board, which was dissolved by the Child Welfare Act, its powers being transferred to the Minister for Education. The Child Welfare Act contains statutory provision alco for boarding-out their own children to wives whose husbands are incapacitated or implisoned, and to unmarried mothers.

The Children's Protection Act, 1902, and the Infant Protection Act, 1904, contained provisions for protecting children from ill-treatment and neglect. for preventing their employment in dangerous occupations, and for regulating their employment in public performances, and the maintenance of young children spart from their parents in faster homes and in institutions. Legal proceedings for orders of affiliation were taken under the provisions of the Infant Protection Act.

The Neglected Children and Juvenile Offenders Acts of 1905 and 1913 related mainly to delinquent children, and to those who through lack of parental control or through bad environment were liable to acquire criminal habits; to special courts which deal with cases relating to children under 16 years of age; and to the supervision of children engaged in street trading. By the Child Welfare Act the jurisdiction of the Children's Courts in respect of negl cted children and juvenile offenders was extended to boys and girls up to 18 years of age, and the minimum age at which children are allowed to trade in the streets was raised from 10 to 12 years.

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 1913. Special legislation has been passed to facilitate reciprocity in respect to the enforcement of maintenance orders between New South Wales and other parts of the British Empire.

In relation to the preservation of infant life a Federal law, passed in 1912, authorises the payment of an allowance of £5 to mothers, which assists in defraying the expenses incidental to childbirth. 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. By this means cases in which advice or assistance is needed are brought under cognisance at a stage when measures to safeguard the health of infants are most efficacions.

The Royal Society for the Welfare of Mothers and Babies has been incorporated by an Act passed in 1919. It was established under the ægis of the Government in the previous year with the object of co-ordinating all measures for the welfare of mothers and babies. Associations of medical practitioners and of nurses, charitable organisations, and institutions for children are affiliated with the Society, the main objects being to save baby life, to ameliorate the conditions of life of children up to school age, and to ensure proper nursing and health conditions of mothers before and after childbirth.

The use of tobacco by juveniles and the supply of intoxicating liquor to them is prohibited under the Juvenile Smoking Suppression Act and the Liquor Act respectively, 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 the Manufacturing Industry and to Employment and Production.

Maternity Allowances.

The Maternity Allowances Act of the Commonwealth, which came into operation on 10th October, 1912, provides for the payment to mothers of a sum of £5 in respect of each birth occurring in Australia. Payments are made in respect of still-born children if they are viable, but one allowance only is payable in the case of plural births. The allowances may be paid only to women who are inhabitants, 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 each year up to 31st December, 1923, in comparison with the number of confinements :—

				Confinements,	Maternity A	llowances.
	Year.			(excluding Still- births).	Claims passed for payment.	Amount.
						£
1912, from	10th	October		13,304	5,604	28,020
1913				51,587	51,564	257,820
1914				53,042	53,690	268,450
1915				52,280	52,028	260,140
1916				51,511	51,992	259,960
1917				51,834	52,600	263,000
1918				50,149	50,320	251,600
1919				47,990	48,510	242,550
1920				53,368	54,710	273,550
1921				54,047	54,390	271,950
1922			·	54,641	55,900	279,500
1923			•••	53,602	54,600	273,000
	Tota	1	•••	587,355	585,908	2,929,540

It is apparent that all classes of the community, not only those in needy circumstances, claim the benefit provided by the Act, and since its introduction it has become customary to register births within a week, though the Registration Act allows a period of sixty days. In seven out of the last eight years 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 allowances are paid in respect of the births of viable children.

Baby Health Centres and Day Nurseries.

Facts relating to infant mortality, as shown in the chapter on Vital Statistics, indicate that a large proportion of the deaths are due to preventable causes, the result in many cases of parental ignorance. Recognising the need for reducing the wastage, the Sydney Municipal Council in 1904 inaugurated a movement for the instruction of mothers in hygiene, and appointed a trained nurse inspector to visit the homes of newly-born infants. As a result there was a marked improvement in the rate of infantile mortality in the district. Some years later a charitable organisation established a clinic where advice was given to mothers; and in 1914 the Government undertook the work and opened baby health centres in various parts of the city and suburbs.

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 April, 1924, there were 46 centres, viz., 27 in the metropolitan area, 8 in Newcastle, 3 in Wagga, 4 in Broken Hill, one in each of the towns Cessnock, Kurri Kurri, Maitland, and Lithgow. During the year 1923 the attendances numbered 136,236, and the nurses made 62,602 visits to cases within the areas served by the centres. The corresponding figures for the previous year were 136,596 attendances and 60,103 visits.

The Royal Society for the Welfare of Mothers and Children has established two welfare centres in the city, each with a baby health centre, day nursery, kindergarten, playground, and a milk and ice depôt. The Society conducts also two training schools, where nurses may receive post-graduate training in infant hygiene and mothercraft, the course being designed for the instruction of nurses attached to baby health centres.

Three 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 6d. per day. Food, clothing, and medical advice are provided, also kindergarten tuition. The average attendance is about 90 per day.

In the outlying country districts nurses engaged by the Bush Nursing Association afford assistance to mothers and advise them as to the feeding and treatment of children.

Adoption of Children.

The Child Welfare Act of 1923 makes legal provision for the permanent adoption of children upon order of the Supreme Court in its equitable jurisdiction. Application for an order of adoption of a girl under 16 years of age may be made by a husband and wife conjointly, by a married woman with the consent of her husband, by a woman who is at least 18 years older, or by a married man at least 30 years older than the child. Application for the adoption of a boy under 16 years may be made by a husband and wife conjointly, by a married man with the consent of his wife, by a man 18 years older, or a woman 30 years older, than the child. Before granting an application, the Court must be satisfied that the applicant is fit to have care of the child and to maintain him, and that the child's interests will be promoted by the adoption. If over 12 years of age, the child's consent is necessary. Consent must be obtained also of the parents, if living; of the mother of the child, if illegitimate; or of the guardian, if the child has a guardian. It is not necessary, however, to obtain the consent of any person who has deserted or abandoned the child.

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 is deemed to be the child of the adopting parents for all purposes, civil and criminal, and as regards all legal and equitable rights and liabilities, but does not acquire any right to inherit property under deed, will, etc., unless expressly stated in the document, nor to property limited to heirs of the body or transmitted to next of kin of a child or any kindred of the adopting parent. An adopted child takes the surname of his adopting parent in addition to his proper name.

Children under State Supervision.

The function of supervising the children under the care of the State was vested in the State Children Relief Board until the Child Welfare Act was proclaimed in December, 1923, and its powers were transferred to the Minister for Education. The executive functions of the Child Welfare Department are conducted by a secretary and staff of salaried officers, including a number of inspectors, and provision is made for the appointment of advisory committees to exercise such powers as may be prescribed. The gross amount expended by the Government during the year ended April, 1923, on account of the services of the State Children Relief Department, was £474,621. Of this amount, £138,854 represented the cost of maintenance of children boarded-out apart from their parents; and allowances to widows and deserted wives towards the support of their own children amounted to £289,201. Contributions by parents and relatives and repayments of maintenance allowance amounted to £11,210.

The following statement shows the expenditure of the Department at intervals since 1901-02:---

	Board	ing-out.		Children's Protection				
Year ended April.	nded Children		Cottage Homes.	Act and Supervision of School Attendance and of Juvenile Offenders.	Total Expenditure.	Contribu- tions by Parents and other Revenue.	Net Expenditure by Government.	
	£	£	£	£	£	£	£	
1902	43,010	19,262	3.371	73	65,716	1.542	64,174	
1912	46,001	33,742	13,243	10,187	103,173	4,361	98,812	
1916	57,996	76,989	11,599	10.047	156,631	6,357	150,274	
1917	64,378	79,405	17,892	12,828	174.503	5,880	168,623	
1918	63.534	89,364	14,428	16,030	183.356	6,580	176,776	
1919	73,680	108,228	12,729	16.870	211,507	7,679	203,837	
1920	85,554	133,390	20,628	17.794	257.366	6.674	250,692	
1921	109,963	223,583	27,661	29,445	390,652	7,713	382,939	
1922	133,555	263,945	30,185	29,941	457,626	8,921	448,705	
1923	138,854	289,201	20,120	26,446	474,621	11,210	463,411	

The increase in recent years in the amount expended in connection with the children boarded-out is due partly to an increase in the number of children, but in a greater degree to increases in the rates of payment, owing to higher cost of living. Thus, in April, 1916, the average rate of payment for children boarded-out apart from their parents was about 5s. 6d. per week, and for children with their mothers 4s. 6d. In April, 1923, the weekly rate for children apart from their mothers was 15s. up to one year of age and 10s. from 1 to 14 years, and the rates for children with their mothers ranged up to 10s.

The number of children under the supervision of the State, classified in accordance with the statutory provisions under which they were controlled, is shown below; the number as at 5th April, 1923, was 22,750, as compared with 21,476 in the previous year:—

Classification.	1911–12.	1915–16.	1919-20.	1920-21.	1921-22.	1922-23.
State Wards Children of Widows, etc	4,677	5,081	4,979	5,403	5,439 11,854	5,078
In institutions (Infant Protec-	4,453	7,310	10,797	12,839	11,094	11,852
tion Act) Foster homes (Children's Pro-	263	500	4 65	579	689	697
tection Act)	559	693	355	294	290	316
Employed in theatres	216	180	320	400	280	580
Engaged in street-trading On probation from Children's	856	695	1,216	1,058	1,543	1,836
Courts	1,148	1,566	1,783	1,679	1,381	2,391
Total	12,172	16,025	19,915	22,252	21,476	22,750

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 also children from the Children's Courts, and 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 1922 there were 3,243 children in these charitable institutions.

		(1922.			
Institutions.			1911.	1916.	1921.	Boys.	Girls.	Total.	
General Public		[467	318	405	251	212	463	
Church of England	•••		207	162	326	119	235	354	
Roman Catholic			1,051	1,178	1,575	670	987	1,657	
Methodist		••••	27	127	55	5	47	52	
Presbyterian	•••	•••	5	53	360	255	171	426	
Salvation Army	•••	••••	48	179	279	171	117	288	
Hebrew	•••	•••			3	2	1	3	
Total	•••	•••	1,805	2,017	3,003	1,473	1,770	3,243	

The figures in the foregoing table include the inmates under 7 years of age who were under the supervision of the State in terms of the Acts consolidated by the Child Welfare Act.

Particulars are shown below regarding the operations during the last five years under the clauses of the Children's Protection Act, which required the registration of foster homes in which children up to the age of 3 years were placed for payment.

Particulars.	1917.	1918.	1919.	1920.	1921.	1922.
Foster Homes Registered Children Registered ,, Died	$126 \\ 1,112 \\ 34$	110 927 8	$\begin{array}{r} 40\\762\\13\end{array}$	$30 \\ 693 \\ 15$	26 612 11	57 638 1
,, Discharged from Super- vision ,, under Supervision at 31st	579	488	394	384	311	321
December	499	431	355	294	290	316

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.

State Wards.

In New South Wales it is an accepted principle that when it is necessary for the State to interfere with the conditions of family life in the children's interests, the children should be reared in the natural surroundings of a home. Therefore the boarding-out system has been adopted in regard to State wards, and treatment in institutions is restricted to special cases.

The boarding-out system was inaugurated in 1881, control being vested in the State Children Relief Board. Under the Child Welfare Act the Minister for Education or person authorised by him is the authority to admit children to State control, and to board them out, etc. The supervision is undertaken 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 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. Preference is given to districts with favourable climatic conditions and with facilities for education and for supervision by inspectors.

The State wards may be apprenticed with suitable employers or they may be restored to the 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 being banked half-yearly to the credit of the apprentice. One-third of the accumulated amount is paid over on completion of the apprenticeship, the balance remaining at interest till age 21 is attained, unless exceptional circumstances arise, when the Board may allow the money to be paid earlier. The majority of the girls are apprenticed in domestic service, and the boys to farmers, orchardists, and artisans in country districts.

The State wards in April, 1923, consisted of 2,729 boys and 2,349 girls and they were distributed as follows :---

C	lassifica		Boys.	Girls.	Total.			
Boarders-Subsidised						1,944	1,576	3,520
Unsubsidis	ed	•••		•••		123	158	281
Adopted		•••				111	188	299
Apprentices		•••	•••			431	308	739
In cottage homes		•••				91	68	159
In depôts, etc	•••	•••	•••	•••		29	51	80
${ m Total}$	•••		•••	•••	-	2,729	2,349	5,078

The statement shows that of 5,078 children under care, 4,839 were living in private homes as boarders, apprentices, or adopted children, and apart from those in depots awaiting classification or transfer, only 159 were in institutions.

Relief of Children of Widows, etc.

A most important provision of the Child Welfare Act provides for contributions towards the support in their own homes of the children of widows in necessitous circumstances and of wives deprived of their husbands' support through desertion, illness, infirmity, or imprisonment. Relief in this form had been distributed by the State Children Relief Board before the Child Welfare Act came into operation, and the Act authorised the payment of contributions to mothers of illegitimate children also.

In April, 1923, the number of mothers receiving this form of relief was 4,437, including 2,696 widows, and 1,741 wives deprived of their husbands' support by reason of desertion, illness or imprisonment. The number of children in respect of whom payments were made was 11,852.

Deserted Children.

In cases of desertion of wife or of legitimate children, the husband or rather may be ordered, in terms of the Deserted Wives and Children Acts, to pay weekly or monthly contributions for their support. Cases in relation to illegitimate children were dealt with under the Infant Protection Act, which was consolidated by the Child Welfare Act. The father may be ordered to pay the expenses incidental to birth and to make periodical payments for maintenance. In certain cases the mother also may be required to contribute. 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.

The Interstate Destitute Persons Act of 1919, which was proclaimed in 1921, makes provision for reciprocity with the other Australian States for executing summonses for maintenance and for enforcing maintenance orders, and the Maintenance Orders (Facilities for Enforcement) Act, 1923, provides for reciprocity between New South Wales and other parts of the British Empire for the enforcement of such orders except orders of affiliation.

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 1922 :---

	Applic	ations for (orders.	Non-compliance with Orders.			
Cases.	Order made.	Order refused.	Case with- drawn.	Order obeyed subse- quently.	Defend- ant im- prisoned.	Case with- drawn or dis- missed.	
For maintenance—Wife	998	151	585	1,441	258	618	
Child)	609	28	404	2,763	97	411	
For expenses (Infant Protection)				4			
Act)	247	20	41	6	3	10	
Total	1,854	199	1,030	4,210	358	1,042	

In regard to two applications for orders, the mothers were respondents. In one case an order was made, and in the other it was refused. Only one woman was charged with non-compliance with an order, and the order was obeyed subsequently.

Delinquent Children.

Since 1905 cases of juvenile offenders under the age of 16 years have been dealt with in the Children's Courts, by magistrates with special qualifications for the treatment of delinquent children. Under the Child Welfare Act the jurisdiction of the Children's Courts extends to offenders up to 18 years of age.

Leniency is an outstanding feature in the treatment of the young offenders, and a large number are released after admonishment, 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.

While awaiting the determination of their cases, or transfer to institutions, the children are accommodated in shelters in proximity to the courts.

The disposal of the children brought before the Metropolitan Children's Court during the year ended April, 1923, is shown in the following statement:-

		Disp	osal.					Boys.	Girls.	Total.
Released on Pro	obation	to Pare	nts					439	35	474
,, ,,	••	othe	r Pers	sons				64	28	92
Committed to c	are of S	tate Ch	ildren	Relief	Board			6	9	15
	Fruant S							63		1 80
,, (Other In	stitutio	ons					223	29	252
Fined								337	2	\$39
Charge Withdr	awn							939	112	1,051
Charge Dismiss	ed	•••	•••			•••		31	4	35
				Total			••	2,119	219	2,338

Further particulars regarding offenders charged at the Children's Courts are given in the chapter of this volume relating to Law Courts.

The children on probation are under the supervision of the Child Wolfarefare Department.

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 about two months. The gross enrolment during 1922 was 213, and the average daily attendance 57.

The other State institutions for the reformation and training of delinquent children are the Farm Home for Boys at Mittagong, to which reference is made above, the Gosford Farm Home for Boys, and the Girls' Industrial School at Parramatta. 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 children who require treatment before being released on probation, and others guilty of minor delinquencies. The Gosford institution is for older boys, who need stricter 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 152 boys were admitted during the year ended April, 1923, and 165 were discharged, including 119 who were released on probation. The number at the end of the year was 145. At Mittagong there is a daily average of 320 boys, about 600 being admitted each year. The Industrial School for Girls at Parramatta is divided into two branches for the purpose of classifying the inmates, and a training home is attached. The institution receives uncontrollable girls between the ages of 13 and 16 years. During the year 1922-23 the number of girls admitted was 60, and 60 were discharged. The number remaining at 5th April, 1923, was 143.

Mentally-deficient Children.

There is not a comprehensive system for the treatment of feeble-minded children in New South Wales, though it is recognised that much juvenile delinquency is the result of mental deficiency, and a number of the children brought before the Children's Courts are tested mentally by medical officers.

Special accommodation is available in the State mental hospitals for children who may be classed as lunatics or idiots, and four of the cottage

homes for State wards are reserved for the feeble-minded, the older boys being trained in such trades as bootmaking, tailoring, toymaking, and carpentering, as well as in out-door work. Provision is necessary, however, for all children incapable of acquiring education in the ordinary schools, who with special tuition may be taught to engage in useful employment under supervision. The matter is receiving attention, and in July, 1923, a Board was appointed to consider methods of treating mental deficiency in children.

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 except under license, viz., in public theatrical performances and in street trading.

Theatre licenses were issued under the Children's Protection Act. In the Metropolitan district they were issued to children over 7 years of age, but children under 14 years were not allowed to travel with touring companies. Under the Child Welfare Act licenses may be issued in respect of children over seven 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.

Licenses to engage in street trading are issued under the Child Welfare Act, street trading being defined as hawking newspapers, matches, flowers or other articles, singing, or performing for profit, or any like occupation conducted in a public place. Girls are not allowed to engage in street trading, and all boys under 16 years must be licensed. The minimum age at which a license is granted is 12 years, and in case of certain occupations, 14 years. Licenses are renewable half-yearly, and licensees are required to wear a metalarm-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 12 and 14 may trade between the hours 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, the figures for theatre licenses being for the calendar years stated, and those relating to street trading licenses for the years ended three months later.

			Street Trading	Licenses.				
Year. Theatre Licenses		App	Applications by Boys.					
	issued.	Under 14 years of age.	14 to 16 years of age.	Total.	Licenses Granted.			
1918	276	570	420	99 0	902			
1919	320	882	374	1,256	1,216			
1920	400	749	369	1,118	1,058			
1921	280	990	595	1,585	1,543			
1922	580	1,169	721	1,890	1,836			
	1	.,∐,,, in the second s)					

The majority of the street trading licenses are issued to newspaper vendors; 1,814 applications in period ended March, 1923, were for hawking newspapers, and 76 for hawking other articles.

NEW SOUTH WALES OFFICIAL YEAR BOOK.

Medical Inspection of School Children.

A system of medical inspection of school children was organised in New South Wales in 1913, and arrangements have been made by means of triennial examinations to examine each child at least twice during the period of school attendance (which is compulsory between the ages of 7 and 14 years). The inspections are conducted by a staff attached to the Department of Education consisting of 19 medical officers, 19 dentists (including 8 only partly employed in school work), 8 nurses, and 15 dental assistants.

Parents are notified of their children's defects, and are urged to have them treated. In the Metropolitan district children may be treated as outdoor patients at hospitals, and a school dental clinic has been established to remedy dental defects. A travelling hospital visits remote and sparselypopulated districts, and eleven travelling dental clinics visit the larger country centres. The travelling hospital is staffed by a medical officer, a dentist, and a dental assistant. During 1922 the number of children examined by the staff of the travelling hospital was 2,942, and 14,875 were treated by the travelling dental clinics.

During the triennium 1920-22 the number of school pupils examined was 185,770. Of this number, 96,764, or 53 per cent., were found to have defects. The chief defects were dental, 74,476 cases, or 40 per cent. of the total defects; nose and throat, 25,152 cases, or 13 per cent.; vision, 10,598 cases, or 6 per cent.; hearing, 5,029 cases, or 3 per cent. The number of children treated subsequently was 52,065, or 53.8 per cent. of the number found to have defects. During the period, 50,448 children were treated free of charge by the school dentists, at a total cost of £30.395.

During the year 1923 the number of school children examined was 89,316, but the results are not yet available.

CHARITABLE RELIEF.

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.

The average number resident in the State asylums during the year 1922 was 3,249, as compared with 3,158 during the previous year. The average cost per inmate was £32 14s. 9d. In the hospitals attached to the three institutions 5,334 cases of illness were treated during 1922—males 4,297, and females 1,037—and at the end of the year 1,304 cases remained under treatment.

The total number of inmates in the charitable institutions during the year 1922 was 23,671 persons, including 8,915 children. The discharges numbered 14,811, and the deaths 875. The number remaining at the end of the year was 7,985, viz., 3,041 men, 1,403 women, and 3,536 children. The revenue

amounted to £814,014, including State aid, £618,320; and the expenditure to £856,816. The value of the outdoor relief afforded by the institution was estimated at £31,578.

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. 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 1922–23 the Hospital Saturday Fund collected voluntary subscriptions and donations amounting to £28,243, and the United Charities Fund £7,139.

The following is a comparative statement of the revenue and expenditure of the charitable institutions and societies :---

Particulars.	1901.	1911.	1916.	1921.	1922.
Institutions and Societies	160	190	202	204	205
Revenue— State Aid Subscriptions, etc. Other	41 000	£ 192,941 78,786 67,519	£ 317,429 109,901 81,841	£ 668,044 229,547 68,363	£ 654,444 212,788 75,916
Total	233,657	339,246	509,171	965,954	943,148
Expenditure— Buildings and Repairs Maintenance, Salaries, Wages Other	40,247 174,679 39,008	21,063 293,460 11,142	24,617 448,097 24,981	41,771 871,475 39,371	64,579 847,595 58,955
Total	253,934	325,665	497,695	952,617	971,129

Financial aid from the State in 1922 amounted to £654,444, or nearly 70 per cent. of the total revenue. It included £602,319 paid by the State in respect of Governmental charitable institutions, the Department charged with the supervision of the State Children, etc., and the Aborigines Protection Board.

PROTECTION OF THE ABORIGINES.

At a census taken by the Aborigines Protection Board on 4th April, 1923, there were in New South Wales 7,322 aborigines, viz., 1,214 full-bloods and 4,783 half-castes, 1,021 quadroons, and 304 octoroons.

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.

An area of over 21,000 acres has been set apart for aborigines in various localities. Dwellings have been erected on the reserves, the residents are encouraged to work, and assistance in the form of food and clothing is supplied when necessary. The number receiving aid in April, 1923, was 1,729.

Aboriginal children are required to attend school until the age of 14 years and a number of schools have been established for their exclusive use. The Board may assume control of the children and apprentice them, or place them in training homes. There are two training homes, one at Cootamundra for girls and one at Singleton for boys.

The expenditure by the Aborigines Protection Board during the year ended 30th June, 1923, amounted to $\pounds42,952$, including $\pounds22,649$ for general maintenance, $\pounds5,158$ for the purchase of stores, $\pounds9,409$ for educational purposes, and $\pounds605$ for medical attention. An amount of $\pounds4,582$ was expended in connection with products raised on the reserves, and $\pounds4,576$ were received as revenue from sales. The net expenditure during the year was $\pounds38,376$.

PENSIONS.

No general pension system is in operation in New South Wales, but pensions are provided for the aged, for the permanently invalided, for persons incapacitated during war service, and for the dependents of deceased soldiers and sailors. Provision is made also for superannuation in some sections of the Government services. Information relating to these pensions is shown in the following pages. Several of the banking companies and other firms have made arrangements for the superannuation of employees, but particulars are not available.

Old Age Pensions.

The payment of old-age pensions in New South Wales was initiated by the State Government on 1st August, 1901. The system was transferred subsequently to Federal control, and the Commonwealth Government commenced to pay old-age pensions to persons over 65 years of age on 1st July, 1909, and to women on attaining the age of 60 years on 15th December, 1910. The total amount paid for old-age pensions for the period of nine years during which the State system was in operation was £4,009,127, and the cost of administration £165,560 approximately. On introduction of the Commonwealth administration, 21,252 State pensions were transferred.

The conditions governing the payment of old-age pensions under the Commonwealth are similar to those under the State Act. The age qualification is 60 years for women and 65 years for men, with a reduction to 60 years in case of men permanently incapacitated. The period of residence qualification is twenty years in Australia, but absences amounting in the aggregate to one-tenth of the total period of residence are permitted. Naturalised persons are eligible for pensions, but aliens and aboriginal natives are disqualified.

The maximum pension was £26 per annum until 12th October, 1916, when it was raised to £32 10s. A further increase to £39 per annum was made as from 15th January, 1920, and on the 31st August, 1923, it was raised to £45 10s. A proportionate reduction is made in respect of any income or property of the claimant, so that the pensioner's income with the pension shall not exceed £78 per annum in the case of unmarried pensioners, whether male or female. In computing income, benefits accruing from friendly societies are not to be reckoned as income, nor gifts nor allowances from children or grandchildren. In assessing the value of property, the home in which the pensioner permanently resides is not included. Money payable to a pensioner while he is an inmate of a benevolent asylum or hospital may be paid to the institution for his benefit.

Year ended 30th June.	New Claims.	Old-age Pensions current in New South Wales at 30th June.			Average Weekly Rate	Estimated Annual	Estimated Annual Liability per
		Male.	Female.	Total,	of Pension, as at 30th June.	Liability, as at 30th June.	head of Population, as at S0th June.
					s. d.	£	s. d.
1912	4,763	13,639	16,029	29,668	97	$734,526^{\circ}$	87
1919	4,631	14,979	20,543	35,522	12 0	1,112,098	11 4
1920	6,231	15,515	21,843	37,358	14 6	1,405,534	13 9
1921	5,727	16,033	23,004	39,037	14 1	1,428,258	13 8
1922	5,280	16,498	23,567	40,065	14 3	1,484,678	13 11
1923	5,851	17,016	24.204	41,220	14 2	1.521.078	13 11

The following statement shows the applications received in New South Wales, the number of old-age pensions current, and the average rate and total liability for old-age pensions in recent years :---

The old-age pensioners in New South Wales, as at 30th June, 1923, represented 18.8 per thousand of population, and in the Commonwealth as a whole 19.1 per 1,000. Approximately one-third of the persons having the requisite age qualification are in receipt of old-age pensions.

Invalid Pensions.

Invalid pensions were first paid in New South Wales under the Invalidity and Accidents Pensions Act, passed by the State Parliament in 1907, which allowed pensions payable from Consolidated Revenue up to £26 a year to persons over 16 years of age permanently incapacitated for any work. The State system was maintained until the payment of invalidity pensions was undertaken by the Commonwealth on 15th December, 1910. The pensions paid during the currency of the State Act amounted to £235,012.

Pensions, up to a maximum rate of 17s. 6d. per week, are payable to persons who have resided 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. Invalid pensions are not payable to persons whose income or property exceeds the limits prescribed in the case of applicants for old-age pensions, or whose relations adequately maintain them. Aliens, Asiatics (except those born in Australia), and aboriginal natives of Australia, Africa, Pacific Islands, and New Zealand are not qualified to receive invalid pensions.

Particulars of transactions in New South Wales during the last five years are shown below in comparison with 1912, the first complete year of Commonwealth control.

Year ended 30th June.	New Claims.	Invalid Pensions current in New South Wales at 30th June.			Average Weekly rate of Pensiou	Estimated Annual Ljability	Estimated Annual Liability per head of
		Males.	Females.	Total.	as at 20th June.	às at 20th June.	Population as at 30th June,
			ł		s. d.	£	s. d.
1912	1,784	2.549	2,278	4,827	99	121,836	15
1919	2,659	6,086	7,012	13,098	12 4	419,692	4 3
1920	3,480	6,583	7,754	14,337	14 9	550,134	5 5
1921	31278	7,016	8.371	15.387	14 9	588,588	58
1922	2.924	7,166	8,731	15,897	14 8	606,788	58
1923	2,529	7,357		16,352	14 8	623,298	58

The invalid pensions current in New South Wales on 30th June, 1923, represented 7.5 per thousand of population, compared with 7.1 for the Commonwealth. On 30th June, 1912, the corresponding rates were 2.9 and 2.4 respectively.

The total expenditure by the Commonwealth on invalid and old-age pensions during the year ended 30th June, 1923, was $\pounds 5,511,926$, of which an amount of $\pounds 5,337,936$ was paid as pensions, and $\pounds 86,080$ to benevolent asylums for the maintenance of pensioners. The cost of administration amounted to $\pounds 87,910$.

War Pensions.

The Australian Soldiers' Repatriation Act, 1920, passed by the Commonwealth Parliament, provides for the grant of pensions upon the death or incapacity, as the result of warlike operations, of members of the Commonwealth naval or military forces. The general administration of the Act is entrusted to three commissioners appointed by the Governor-General, and a Board of three members in each State.

The rates of pension payable on total incapacity range from $\pounds 4$ 4s. to $\pounds 6$ 6s. per fortnight, according to rank. In cases of partial incapacity the rates are assessed by the Commissioners. The wife of a totally incapacitated member receives a pension ranging from $\pounds 1$ 16s. per fortnight to $\pounds 3$ per fortnight. Widows receive from $\pounds 2$ 7s. to $\pounds 6$ per fortnight. Widowed mothers receive pensions ranging from $\pounds 2$ to $\pounds 6$ per fortnight, and a pension is payable on account of each child under 16 years of age.

The loss of two or more limbs, of both legs, feet, arms, hands, or eyes, or of arm and leg, hand and foot, or one eye together with leg, foot, hand, or arm, or the loss of all fingers and thumls, or lunacy, or wounds, injuries, or disease involving total permanent disabling effects, and very severe facial disfigurements, are regarded as constituting total incapacitation. The amputation of a leg at the hip, or an arm at the shoulder joint, is held to constitute an incapacity of 80 per cent., while the loss of leg, foot, hand, or arm otherwise constitutes 75 per cent. disablement. Blinded soldiers receive a special pension at the rate of £8 per fortnight. A lump sum may be paid instead of a pension which is not more than 30 per cent. of the rate for total incapacity. In amputation cases, special allowances are paid.

	New Sou	th Wales.	Commonwealth.			
Pensioners.	Number of Pensioners.	Average Fortnightly Rate.	Number of Pensioners	Average Fortnightly Rate:		
Incapacitated Soldiers Dependents of Deceased Soldiers Dependents of Incapacitated Soldiers Total	12,623	$ \begin{array}{c} \pounds & \text{s. d.} \\ 1 & 6 & 7 \\ 0 & 18 & 11 \\ \hline 1 & 5 & 1 \end{array} $	74,692 45,635 111,828 232,155	$ \begin{array}{c} \pounds & \text{s. d.} \\ 1 & 13 & 8 \\ 0 & 17 & 11 \\ \hline 1 & 3 & 0 \end{array} $		

At 30th June, 1923, there were 71,567 war pensions current in New South Wales, and the annual liability was estimated to be £2,331,160. The actual expenditure on account of pensions in New South Wales during the year ended 30th June, 1923, was £2,418,636, the total cost to the Common-wealth Government being £7,284,551, including cost of administration, £149,584.

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 for pensions to judges, the amount paid from Consolidated Revenue during the year ended 30th June, 1923, being £6,503.

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 are 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. During the year 1922-23 the expenditure was £181,484, consisting of pensions, £170,936, and refunds of contributions, £10,548. Contributions by public servants amounted to £7,912. On 30th June, 1923, there were 794 officers in receipt of pensions amounting to £158,469. In addition, 148 officers, who had been transferred to the Commonwealth Service, were receiving pensions amounting to £33,398, a proportion being payable by the State and the balance by the Commonwealth Government. Certain Government officers received pensions from an annual appropriation in terms of the Constitution Act, the aggregate amount paid during 1922-23 being £1,133.

The existing Public Service Superannuation Fund was constituted by the provisions of the Superannuation Acts, 1916 and 1918, which provide a scheme of pensions and other benefits for employees of the New South Wales Government and other public bodies, except those subject to the Railway Service and Police Superannuation Acts. One-half of the cost of the scheme is borne by the employees, except where otherwise provided, and the balance by the employers. The age of retirement is 60 years, but women may elect to contribute for retirement at age 55. Upon the death of a contributor or pensioner his widow receives one-half of the amount of pension for which he has contributed, and £13 per annum for each child under 16 years of age. Contributions by employees are compulsory and vary in accordance with the age and salary of the contributor. Tables showing the rates of contributions and of pensions were published in the 1919 edition 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, 1923, the number of employees contributing to the fund was 17,636, viz., 11,575 men and 6,061 women. The pensions in force in respect of contributors numbered 664, amounting to £44,042 annually, and 1,622 pensions were payable in respect of persons who had not contributed to the fund, the annual amount being £114,473. During the year ended 30th June, 1923, the income of the fund amounted to £1,131,485, including £250,695 contributions due by employees and £689,792 by employers. Of the lastmentioned sum only £74,136 were actually paid into the fund during the

year. The funds of the Board at 30th June, 1923, amounted to $\pounds4,727,959$, including $\pounds2,147,235$ invested in securities and $\pounds2,545,219$ due for employers' contributions.

A pension fund for the police force was established in 1899, amending legislation being passed in 1906. 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 20th June, 1923, the receipts of the Police Superannuation and Reward Fund amounted to £173,659, including deductions from salaries, £63,659, and special appropriation from Consolidated Revenue, £110,000. The disbursements, £169,739, included pensions, £163,850; gratuities £5,554; and miscellaneous, £335.

The Railway Service Superannuation Fund was established in October, 1910. The contributions from employees of the railway and tramway services are at the rate of $1\frac{1}{2}$ per cent. of salary, and the State provides 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, 1923, there were 41,305 contributors. The number of pensions in force was 2,442, amounting in the aggregate to £180,802 per annum. The average rate of pension was £71 per annum. Since the inception of the fund 3,380 pensions have been granted, and 846 pensioners have died; 87 officers under 60 have been re-employed, and 5 pensions have been written off the books. During the year 1922-23 the receipts of the fund amounted to £173,655, including contributions by ϵ mployees, £153,432 and an amount of £19,100 from the Consolidated Revenue. The disbursements, representing pensions, gratuities, refunds, etc., amounted to £186,566. The total amount paid in pensions since the inception of the fund on 1st October, 1910, was £1,173,421, and the total subsidy from the Consolidated Revenue Fund amounted to £145,850.

In the Superannuation Fund of the Commonwealth Public Service Fund as at 30th June, 1923, there were 26,876 contributors, of whom 9,474 were in the State of New South Wales.

THRIFT.

The wages of even the lowest paid adult worker in New South Wales, as fixed by the Board of Trade, includes an allowance for life assurance, contributions to friendly societies, amusements, tobacco, intoxicating liquors, etc.; thus a widespread opportunity is afforded for thrift. Evidences that thrift is practised extensively are found in the strong position of friendly societies both in membership and finances; in the increasing proportion of savings bank depositors and larger average amounts at credit; in the flourishing condition of life assurance institutions, and in the growth of Starr-Bowkett Building Societies and co-operative trading societies.

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. So long ago as 1834 the first friendly society in New South Wales, the Australian Union Benefit Society, was established, and it is still operating.

The earliest societies were founded by former members of English orders who had emigrated to Australia before the business of friendly societies in Great Britain was placed on a scientific basis, and subjected to legal regulation. The first bodies, therefore, performed their functions with little supervision until 1899, when an Act of Parliament conferred on the Registrar power to inspect lodge-books and to prosecute in cases of defalcation, and authority to enforce the adoption of an adequate scale of contributions. In this way stability was ensured, and subsequent improvements in the administration have placed friendly societies on a sound basis.

The legislation affecting friendly societies was consolidated in the Act of 1912, but two amendments were made in 1913 and further amendments in 1916, 1920, and 1922. The more important provisions of the various Acts were outlined in the 1921 issue of this Year Book at page 483.

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, 10s. 6d. 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. There is a tendency to increase the sickness benefit and in several societies members are permitted to contribute for additional benefits up to 42s. per week. 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, 1923, there were 56 societies, including 20 Miscellaneous; 15 possessed branches, and 41, including 2 with juvenile branches, were classed as Single Societies.

	sification	Societies and Branches.	Members.	Funde.				
Friendly Societies Affiliated		r—				No.	No.	£ 2,662,830
Single	•••	•••	•••	•••	•••	2,120 23	210,774 3,889	65,161
Missellaneous Societies				••••	2,143 20	$214,663 \\ 103$	2,727,991 28,370	
		7	otal	· ···		2,163	214,766	2,756.361

The following summary shows the branches, membership, and funds as at 30th June, 1923 :---

The societies classified as "Friendly Societies proper" offer such a wide range and appeal so strongly to individual sympathies that the field of operations for new societies is limited, and only one new society has been established since 1913.

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, and thereafter a continuous development proceeded until the outbreak of war, when the number declined owing to enlistments and, subsequently, through deaths on active service. Each year since the termination of the war has shown an increase, however, and the progress since 1919 has been greater than in the pre-war years. This growth, the decline during the war period and the subsequent recovery are shown in the following table :---

	Aggregate	Membership.		Aggregate Membership.			
Year.	Members.	Percentage of Population.	Year.	Members.	Percentage of Population		
1899	78.245	5.9	1917	1 177,602	9.2		
1995	101,463	7.0	1918	180,896	9.2		
1910	149,579	9.1	1919	184.174	9.0		
1913	188,590	10.2	1921*	199,688	9.5		
1914	182,325	9.7	19-2*	209,133	9.7		
1915	178,705	9.4	1923*	214,663	9.8		
1916	178,877	9.5	1020				

* As at 30th June.

The number of members entitled to benefits at 30th June, 1923, was 195,386, the remainder being ineligible generally 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. It is estimated that probably 650,000 persons directly or indirectly share in these benefits.

The membership at 30th June, 1923, embraced 182,564 men, 15,704 women, and 16,395 juveniles. As compared with the membership at 30th June, 1922, there were increases of 5,061 men and 700 women, and a decrease of 231 juveniles, the total net increase being 5,530.

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, 1923, twenty miscellaneous societies registered under the Friendly Societies Act. Eighteen were medical institutions or dispensaries which supply medicine to all members whose names have been placed on their lists by contributing branches, and in some cases arrange for medical attendance.

The receipts of the dispensaries during the twelve months ended 30th June, 1923, were £51,032, and the expenditure was £44,526, so that there was an excess of receipts amounting to £6,506. These bodies have received liberal grants from the Government, and with this assistance have been able to purchase land and to erect buildings, the shares of the subscribing branches being covered by the issue of interest-bearing debentures. In addition to making the necessary interest payments, most of the dispensaries have been enabled to make substantial reductions in the principal.

The following particulars regarding Miscellaneous Friendly Societies relate to the year ended 30th June, 1923 :---

Classificati	on.	· .	Dispensaries.	Other Miscellaneous Societies.	Total.
Societies		No.	18	2	20
Membership		No.		103	103
Receipts		£	51,032	141	51,173
Expenditure		£	44,526	· 125	44,651
Funds		£	28,082	288	28,370

SOCIAL CONDITION.

State Subvention of Friendly Societies.

To enlarge the sphere of usefulness of the 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, the following monetary benefits payable from the Consolidated Revenue of the State :--

1. Sickness pay-

- (a) One-half of the cost in each year in respect of continuous sickness after twelve months from the commencement of such sickness, for male members less than 65, and for females less than 60 years of age—provided that the maximum cost to the State must not exceed 5s. per week for each case.
- (b) The whole cost of sickness pay in respect of male members aged 65 years and over, and of female members aged 60 years and over—subject to the same proviso as above.
- 2. Amount equal to contributions payable-
 - (a) on account of all male members 65 years and over, and of female members 60 years and over, for medicine and medical attendance, provided that such contributions shall not be more than those payable by members of the same society under the ages stated.
 - (b) under the rules of a society in respect of the aged members above mentioned, to assure payment of funeral allowance—not exceeding £50—at their death.

With the exception of the Irish National Foresters, all affiliated societies have become applicants under the Act.

The following is a summary of the claims from the beginning of the year 1918 to 30th June, 1923 :---

	es.		Siekne	ss Pay.			Contrib	utions.		44	
Year.	Continuous Sic Sickness. Aged			Sickness of Aged Members.		Medical.		Funeral.			
Applicant Societies. Members:	Amount.	Claimant Members.	Amount.	Claimants.	Amount.	Claimants.	Amount.	Total Amount of Claims.			
			£		£	/	£		£	£	
1918	29	1,105	5,564	2,165	14,238	6,318	8,835	6,986	3,553	32,190	
1919	28	1,134	6,186	2,448	15,023	6,799	9,818	7,449	3,838	34,865	
1921*	29	1,312	9,431	2,918	24,494	7,743	16,498	8,579	6,378	56,801	
1921 →22	27	1,194	6,489	2,694	17,810	8,062	14,310	8,895	4,688	43,297	
1922-23	27	1,276	6,739	2,818	19,232	9,124	16,017	9,852	5,141	47,129	

* Eighteen months ended 30th June.

Up to 30th June, 1923, the total amount paid as subvention to the societies was £398,735.

The system has been of benefit to all the societies, but more particularly to those in which the proportion of aged members is large.

The following table shows the average annual weeks of sickness per member in New South Wales at every fifth year of age during the years 1900-08 in comparison with the experience of the Manchester Unity Friendly

* **4**06**89--**B

Society of England, 1893-7, the South Australian Friendly Societies, 1895-1904, and the Victorian Friendly Societies, 1903-7 :---

Central Age.	New South Wales Friendly Societies, 1900–1908.	Manchester Unity, England, 1893–1897.	South Australian Friendly Societies, 1895–1904.	Victorian Friendly Societies, 1903–1907.
Years.				
18	-84	·95	•74	•91
23	•76	.90	77	•86
28	.74	.97	•75	·85
33	•75	1.10	•79	·89
38	.84	$1^{-}33$	·89	·99
43	1.02	1.62	1.04	1.50
48	1.32	2.11	1.32	1.46
53	1.85	2.98	1.80	2.10
58	2.94	4.41	2.84	3.82
63	4.63	7.15	4.44	6.26
		0		

A valuation of the assets and liabilities of the societies is made at intervals in the office of the Registrar. Particulars are given in the chapter of this volume relating to Private Finance, and the sickness experience and the mortality rate of the members of affiliated societies, exclusive of soldiers, were discussed on page 485 of the 1921 issue.

HOUSING.

A classification of the occupied dwellings in New South Wales, as disclosed by the Census of 1921, is shown in the following statement in comparison with similar particulars, as at the previous Census. A room or a suite of rooms occupied as a tenement or flat is classified as a separate dwelling :—

		Number o	f Dwellings	•	Per cent.	of Total.
Nature of Dwelling.	Census.		Census, 195	21.	1011	1001
	1911.	Metro- politan. Country.		Total.	1911.	1921.
Private house	317,462	160,558	236,061	396,619	95.38	91.16
Tenement or flat in private house	2,304	12,764	5,085	17,849	•69	4.10
Caretaker's quarters in store, office,						
etc	237	390	241	631	.07	·15
Hotel	2,795	659	1,982	2,641	•84	·61
Boarding house, lodging house,				-	[
coffee palace	5,966	8,819	3,904	12,723	1.79	2.92
Educational institution	229	156	307	463	•07	•11
Religious institution (non-educa-						
tional)	135	32	57	89	•04	.02
Hospital	479	226	509	735	•14	•17
Charitable institution (other than			(1
hospital)	159	49	50	99	.05	$\cdot 02$
Military or Naval establishment	112	18	15	- 33	•03	•01
Penal establishment	132	11	28	39	$\cdot 04$	•01
Police barracks	28	5	29	34	·01	01
Police station or quarters	534	38	488	526	·16	.12
Fire station	65	62	47	109	•02	•02
Other and unspecified	68	61	537	598	.02	j ·14
Wagon, van, camp	2,115	22	1,846	1,868	•64	•43
Aboriginal camp in which whites or						
half-castes were living	21		18	18	•01	•00
Total dwellings	332,841	183,870	251,204	435,074	100	100

SOCIAL CONDITION.

The most striking feature of the comparison is the increase in housesharing, which is a result of a shortage of houses, of high rents and building costs, and a scarcity of domestic labour. The number of tenements and flats increased from 2,304, or \cdot 69 per cent. in 1911, to 17,849, or $4\cdot$ 1 per cent. in 1921, and the number of boarding and lodging houses from 5,966, or $1\cdot$ 8 per cent., to 12,723, or $2\cdot$ 9 per cent. The proportion of private houses declined from 95.38 per cent to 91.16 per cent.

In addition to the occupied dwellings there were 18,619 unoccupied dwellings, and 2,724 in course of construction in New South Wales in April, 1921.

The total number of inmates of private dwellings, *i.e.*, private houses, tenements and flats, in 1921 was 1,872,579, or 89.6 per cent. of the total population, the corresponding figures in 1911 being 1,494,504 inmates, or 91.2 per cent.

A classification of these dwellings, according to the number of inmates, gives the following comparison :---

				Number of	Dwellings.	Proportion per cer			
Num	ber of In	mates.		1911.	1921.	1911.	1921.		
1				32,211	32,016	10-1	7.7		
2				37,648	53,838	11.8	13.0		
3				46,879	68,593	14.6	16.5		
4				50,122	72,779	15.7	17.6		
5				45,538	62,829	14.2	15.2		
6	•••]	36,714	46,978	11.5	11.3		
7	•••			26,640	31,632	8.3	7.6		
8	••••		••••	18,134	20,432	5.7	4.9		
9	•••			11,377	11,995	3.5	$2 \cdot 9$		
10	•••			6,593	6,645	$2 \cdot 1$	1.6		
l1 to 15				7,345	6,501	2.3	1.6		
Over 15	•••	•••		565	230	·2	·1		
	Total	•••	••••	319,766	414,468	100	100		

In 1921 over 62 per cent. of the private dwellings contained from 2 to 5 inmates, as compared with 56 per cent. in 1911. The number of dwellings with only one inmate declined in proportion from $10\cdot1$ per cent. to $7\cdot7$ per cent. during the intercensal period, and those with more than 5 inmates from $33\cdot6$ per cent. to 30 per cent.

The average number of inmates per private dwelling in 1921, viz., 4:52, was lower than the average 4:67 in 1911, and the decrease was accompanied by a decrease in the average size of the private dwellings from 5:04 rooms to 4:97 rooms. Since 1911 many large private houses have been converted into flats or have become occupied as boarding-houses, while, on account of the high cost of building and a scarcity of domestic labour, there has been a tendency to restrict the size of new buildings.

In the following comparison the private dwellings are classified according to the number of rooms. The kitchen is included as a room, but the rooms used as bathroom, pantry, or store, are excluded :---

Num	ber of Bo	Number of Rooms per Dwelling			Dwellings.	Per cent. of Total.		
	Dwelling			1911.	1921.	1911.	1921.	
1		•••		20,321	12,787	6.4	3.1	
2				14,596	14,072	4.6	$3\cdot 4$	
3		•••		24,288	30,132	7.6	$7 \cdot 2$	
4				70,241	$102,\!175$	22.0	24.6	
5	·	•••		75,063	124, 131	23.5	29.9	
6		•••		54,369	71,158	17.0	17.2	
7				26,993	29,292	8.4	7.1	
8		•••		14,766	13,627	4.6	3.3	
9				7,016	5,783	$2 \cdot 2$	1.4	
10 - 14				9,427	6.573	2.9	1.6	
15-19				964	626	•3	-2	
20 and 0	over			382	227	-1	· · · 1	
Unspeci	fied	•••		1,340	3,885	•4	•9	
	Total	•••		319,766	414,468	100	100	

The average number of inmates per room in private dwellings was 1.08 in 1911, and 1.10 in 1921.

The principal materials used in the construction of private dwellings are wood and bricks, wooden buildings being more numerous in the country districts. In 1921 the number of private dwellings with outer walls built of brick represented 40.2 per cent. of the total, and 48.9 per cent. had wooden walls.

	Materia	ls.		Ì	Number o Dwell		Per cent.	
•					1911.	1921.	1911.	1921.
Stone	•••	•••	•••		9,020	9,684	2.8	2.3
Brick		•••			114,679	166,558	35.9	40.2
Concrete	• • • •	•••			865	2,606	•3	•6
Iron		•••	•••		8,851	11,639	2.8	2.8
Wood	•••	•••	·		162,493	202,782	50.8	48.9
Sun-dried bricks		•••			1,875	1,162	•6	•3
Pisé		•••			1,741 [2,217	•6	•5
Lathe and plaste	er	•••			791	923	•2	·2
Wattle and dab			••••		744	771	•2	·2 ·2 ·7
Fibro cement	•••	•••	•••			3,063		
Bark		•••			1,290	906	-4	•2
Bushes, rushes,	etc.	• • •	•••		15	11		
Calico, canvas, l	iessian,	etc.			15,706	9,335	4.9	2.3
Rubberoid and	other co	mposit	ions		130	268		•1
Other materials				•••	· • • •	318	••••	•1
Unspecified	•••	• • • •	••••		1,566	2,225	•5	-6
To	tal				319,766	414,468	100	100

At the census of 1921, information was collected to show the material used for roofing the dwellings; the majority of private dwellings are roofed with iron, which is used for the bulk of the rural dwellings. In the urban

SOCIAL CONDITION.

areas slate is used more extensively than in the country districts; roofs of tiles are fairly numerous in the metropolitan district, but are rare in the country.

Material of Roof.		Private Dwellings, 1921.	Material of Roof.	Private Dwellings, 1921.	
Slate		50,319	Bushes, rushes, etc	14	
Tiles		45,326	Calico, canvas, hessian	8,317	
Concrete		234	Rubberoid, and other composi-		
Iron	••• •••	296,047	tions	2,213	
Wood		4,124	Other materials	288	
Thatch		.93	Unspecified	2,981	
Fibro cement		2,720	-		
Bark		1,792	Total	414,468	

In the metropolitan district the majority of the private dwellings are occupied by tenants, but owing to a great preponderance of owner-occupiers in the country districts approximately one half of the private dwellings in the State are occupied by owners or by prospective owners purchasing by instalments.

		Private		Per cent. of Total.		
Occupied by			1921,		1921.	
	1911.	Metro- politan. Country.		Total.		
Owner	129,423	43,451	104,032	147,483	40.5	35.6
Purchaser by instalments	11,322	25,394	21,559	46,953	3.5	11.3
Tenant	160,314	99,736	92,525	192,261	50.1	46.4
Other and unspecified	18,707	4,741	23,030	27,771	5.9	6.7
Total	319,766	173,322	241,146	414,468	100	100

The increase in the number of dwellings occupied by persons who are purchasing them by instalments is due to some extent to measures taken by the State and Federal Governments to assist people to acquire homes.

The problem of housing has assumed considerable importance in New South Wales in the past decade. In most country towns land is still comparatively cheap, and the inhabitants have generally been able to acquire adequate space for building hygienic dwellings; and, though close supervision of building was not inaugurated until 1919, such towns are free from the bad housing conditions which exist in some older countries. Nevertheless, in the city, in some of the large towns possessing an industrial population, and in mining centres, undesirable features have been allowed to obtrude, so that some parts have developed into "slum" areas.

In 1911 the Government decided to take action in the matter of housing, and a Select Committee was appointed by the Legislative Assembly to inquire into the increase in rents. In the following year the State Housing Scheme was launched, and a Royal Commissioner was appointed to investigate the question of the "Housing of Workmen." The report of the Commission drew attention to some little-recognised evils, including the "slum" areas of the city, the poor housing of towns, the absence of town-planning, and the proper supervision of town-building. A number of the points raised by the Commissioner were met by the Local Government Act, 1919, which conferred very extensive powers on municipal and shire councils, not only in supervising and regulating the construction of buildings, but in promoting schemes of town-planning on modern lines.

To assist the councils in their difficulties a Town Planning Advisory Board was appointed by proclamation of the Governor in October, 1918. The Board is actively engaged with the problems of metropolitan and country urban settlement. A Town Planning Association was formed in 1913 with the object of promoting legislation for the better laying-out of towns and of propagating knowledge of the advantages accruing from and the need for town-planning.

The Architects Act, 1921, was brought into operation on 1st August 1922, to establish a Board of Architects for the purpose of regulating the practice of architecture. The Board consists of eight members, including the head of the faculty of architecture in the University of Sydney, the president of the Institute of Architects and of the Architects' Association of New South Wales, and the lecturer in charge of the Department of Architecture at the Sydney Technical College. 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, 1924, there were 457 registered architects in New South Wales.

Brick buildings predominate in the city and suburbs, local sandstone is used also 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 improvements in regard to housing have been continous during recent years. In addition to the operations undertaken by private enterprise the City Council has been active in resuming and remodelling insanitary and congested areas.

The number of new buildings for which permission to erect was granted by the councils in the metropolitan district during the last five years is shown below :—

		New Buildings.							
Year.	Sydney.	Suburbs.	Total Metropolis.	Country Municipalities.	Population, Sydney and Suburbs.				
1919	147	6,969	7,116	*	45,470				
1920	143	8,524	8,667	3,859	31,700				
1921	92	5,475	5,567	3,131	25,780				
1922	139	8,445	8.584	4,629	29,300				
1923	186	10,825	11,011	5,926	25,500				

* Not available.

In 1923 there was extraordinary activity in building, and the number of new premises for which permits were obtained was nearly double the number in 1921. 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 whose erection permission was granted during the last three years. Only those municipalities are specified where permission was granted for the erection of more than seventy-five buildings in a year, and the other municipalities are grouped :---

Country Municipalities.	Estimated Population 31st Dec., 1922.		1921.	1922.		1923.	
Country Municipanties.	Estin Popul 31st 19	No.	Value.	No.	Value.	No.	Value.
		}.	£		£		£
Auburn	14,770	147	86,387	161	122,050	231	148,882
Bankstown	1 30 400	247	145,676	317	153,752	355	202,235
Cabramatta and Canley			140,010	011	100,102	0.00	100,000
Vale	9 9 9 9 0	41	14,335	62	24,639	98	30,909
Dundas	1 1010	46	44,000	70	70,600	77	67,084
Granville	14,370	112	69,688	170	99,814	184	172,342
Illawarra Central	1 2100	39	27,297	31	13,272	76	25,614
Lidcombe	11,040	94	58,032	135	76,383	227	133,128
Parramatta	15,050	38	32,517	89	64,751	109	73,045
Queanbeyan	2,110	7	2,450	18	11,771	79	24,938
Fairfield	5,760	67	29,015	148	49,169	119	57,566
Prospect and Sherwood		139	62,625	219	124,040	269	150,499
Lismore	9,220	83	63,005	141	102,362	135	101,699
Newcastle and suburbs	05 180	773	574,304	756	547,740	1,156	771,313
Taree	2,020	18	22,532	85	51,464	54	55,510
Katoomba	9,670	58	45,461	86	66,911	112	70,402
Lithgow	12,940	87	49,948	39	16,455	59	25,702
Albury	7,970	24	17,884	100	47,889	73	80,981
Wagga	8,200	54	43,147	187	110,615	228	150,882
Wollongong	6,980	*	*	*	*	125	66,145
Other Municipalities	293,740	1,057	589,806	1,815	924,722	2,160	1,383,244
T otal	536,050	3,131	1,979,109	4,629	2,678,399	5,926	3,793,126

* Information not supplied.

ASSISTANCE TO HOME BUILDERS.

State Operations.

In 1912, when the shortage of the smaller class of dwelling-houses was becoming acute in Sydney, the Government took steps to supplement the operations of private builders by undertaking the construction in the South Randwick district of a model suburb, which was named Dacevville.* The Housing Act was passed, under which the control of the operations was entrusted to a Housing Board consisting of three members, appointed by the Government. The Minister administering the Act was authorised, on the recommendation of the Board, to purchase and subdivide lands and to erect buildings for residential and other purposes and to sell or lease such buildings under certain conditions. In 1913 further provision was made for the assistance of home builders, and the Commissioners of the Government Savings Bank were authorised to make advances for the purpose.

As the shortage of houses became more acute towards the end of the war period, it was decided in 1919 to enlarge the scope of the State Housing scheme. Additional powers were given to the Housing Board, which was authorised to make advances, upon the application of persons desiring assistance for the purpose of erecting or adding to houses on land owned by

• See 1921 issue of Year Book at page 493.

them, or to erect dwellings for them on such land. The Board was empowered also to make advances to enable applicants to purchase dwellings already erected. Such advances might be made only to adult persons who did not own any other land or dwelling-house, exceeding £250 in value, and whose income did not exceed £400 per annum, and on the undertaking of the applicant that the house when erected would be used as a home for himself and his family.

The maximum amount of any advance was fixed by the statute at $\pounds 1,000$, and the Housing Board was not permitted to advance more than 95 per cent. of the value of any property. The leans are repayable by instalments spread over a period of thirty years for brick, and twenty years for wooden buildings, with interest at current rate. A purchaser is not permitted to sell, mortgage, or let any property purchased under the scheme before the expiration of seven years, unless with the approval of the Board.

Benefit building societies, whose objects include the provision of houses for their members, may be assisted by grants or loans, but no advances have been made as the societies were not willing to accept the terms offered by the Government. The Act authorised also the granting of assistance to the councils of municipalities and shires in regard to the erection of houses.

Under the original housing scheme it was the intention of the Government to erect cottages in model suburbs, *e.g.*, Daceyville, to be leased to the occupiers. Under later arrangements, introduced in 1919, the houses in the group settlements were built for sale only.

A number of sites, the majority being areas of Crown land, were set apart in the metropolitan district and in various country localities, as shown below. Usually the houses were erected by the Board and sold on extended payment terms, but in some cases the land was subdivided and allotted by ballot, and the persons who acquired it were given the option of erecting their own dwellings, the money being advanced by the Board, or of arranging with the Board to build the houses at a cost to be repaid in instalments.

Owing to the fact that the funds placed at the disposal of the Board were limited, the available moneys were devoted towards the object of relieving the shortage of houses, and no advances were made for the purchase of homes already built.

Site.	Area of Site.	No. of Dwell- ings erected.	Expenditure on Dwellings and Improvements on Land.	Site.	Area of Site.	No. of Dwell- lings erected.	Expenditure on Dwellings and Improvements on Land.
Metropolitan-	acres.		£		acres.		£
Daceyville	210	314	190,191	Hamilton		29	24,816
,, No. 1	16	64	50,379	Wollongong	11/2		12,216
", No. 2	48	64	92,967	Orange	1	8	8,087
Bunnerong	12	56	59,617	Forbes	$2\frac{1}{2}$	11:	14,244
Matraville	14	20	27,239			010	
The Warren	12	61	73,397		419	818	706,492
Gladesville	23	106	102,355	Private allotments (advances)		516	316,637
Country-							
Auburn	$2\frac{1}{2}$	14	12,193	Total		1,334	1,023,129
Stockton	72^{-}	61	38,791		ł		

The following statement shows particulars of the operations of the Housing Board from its inception to 30th June, 1923:----- During the year ended 30th June, 1923, the building of houses by the Board was suspended and only three advances were made for the erection of houses on private allotments.

In November 1923 a Select Committee of the Legislative Assembly was appointed to inquire into the administration of the Housing Board. The Committee's investigations revealed that by reason of mismanagement a large sum of money had been lost to the State and that further losses must be incurred. The Government decided therefore that the Board should be abolished and its business wound-up. To give effect to the decision an Act has been introduced into Parliament to vest the Board's powers in the Minister for Local Government to enable him to sell superfluous lands, to grant leases, to settle disputes with persons who made contracts of sale with the Board, to delegate his powers to other Government departments, and to transfer to the Government Savings Bank the business of collecting instalments of purchase money and advances.

In addition to the areas administered 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 invested amounted, as at 30th June, 1923, to £1,413,007. The revenue during the year 1922-23 was £90,057, and the expenditure, exclusive of interest on loan capital, was £18,971.

The Municipal Council of the city of Sydney also controls a housing area, on which a block of buildings, named the "Strickland Dwellings," was opened in April, 1914. It contains eight shops and 71 self-contained flats of two, four, or six rooms. The rents range from 155. 6d. to 355. per week. The total cost, including the land, was £49,814.

State Savings Bank—Advances for Homes.

The Commissioners of the Government Savings Bank may make advances to enable persons to erect or enlarge their homes or to purchase dwellings already constructed. The Bank may advance three-fourths of the value of the property to a maximum of £750, and the repayments in the case of new stone, concrete, or brick buildings are to be made within thirty years, and in the case of wooden structures within twenty years. No advance is made to any person who at the time of the application is the owner of another dwelling in the State.

The system came into operation on 1st July, 1914, and up to 30th June, 1923, the amount of £6,474,291 had been advanced to 13,690 borrowers, and the amount outstanding at the later date was £5,085,882, owing by 10,993 persons. The transactions during each year were as follow:—

Year ended			Yearrended	Advances made.		
30th June.	No.	Amount.	30th June.	No.	Amount.	
1915 1916 1917 1918 1919	575 794 783 875 1,373	£ 221,900 298,375 274,785 311,710 530,680	1920 1921 1922 1923	2,250 2,489 2,377 2,174	£ 1,009,500, 1,282,360 1,326,270, 1,218,711	

The average amount per advance was £561 in 1922-23. The scheme proved popular from its inception and the amount applied for in each year has greatly exceeded the available funds.

The rate of interest charged for advances was raised from $5\frac{1}{2}$ to 6 per cent. on 1st July, 1917, to $6\frac{1}{2}$ per cent. from 1st July, 1920, and to 7 per cent. from 1st July, 1921. It was reduced to $6\frac{1}{2}$ per cent. on 1st July, 1923.

Commonwealth Housing Operations.

The Commonwealth Government assists Australian sailors and soldiers and their female dependants to acquire homes, the operations being conducted under the Commonwealth War Service Homes Act, 1918-23.

The Commissioner charged with the administration of the Act is authorised to acquire land and dwellings, and to erect dwellings, etc. He may make advances on mortgage to eligible persons to enable them to acquire homes, or may sell homes to them on the rent-purchase system. The amount of an advance to any one person may not exceed £700, and the maximum rate of interest for repayments is 5 per cent.

A summary of the activities of the Commission in New South Wales up to 30th June, 1923, is shown in the following statement :---

Particulars.	No.	Amount.	Particulars.	No.
		£ 5,853,284 2,544,604 604,539	Homes built Under construction Arrangements pending, etc. Assisted to complete	$2,683 \\ 168 \\ 769 \\ 56$

The sums paid as instalments of principal and interest to 30th June, 1923, amounted to £941,267, and arrears of instalments amounted to £54,456.

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, whose authority extends over parks, children's playgrounds, drill grounds, sports grounds, and public gardens within their boundaries. The councils are empowered to preserve places of historical and scientific interest and natural scenery, and to provide buildings for public entertainments and refreshment-rooms, boats and boatsheds, pavilions, etc., public baths, gymnasia, and musical entertainments. All the towns of importance possess extensive parks and recreation reserves.

The city of Sydney contains within its boundaries 647 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, 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, 552 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.

The suburban municipalities contain, including the Centennial Park, about 3,700 acres of public parks and reserves, or about 4 per cent. of their aggregate area.

The Zoological Gardens at Taronga Park, on the northern side of the Harbour, were opened in 1916. The area is nearly 51 acres. In their preparation the natural formation has been retained as far as practicable, with the object of displaying the animals in natural surroundings.

Outside the metropolitan area 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 Coolah. 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), although outside the metropolis, 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 have been made permanent, but a large number are only temporary.

Particulars as to the areas reserved for parks and recreation reserves and for temporary commons at 30th June, 1910, and in the last four years are shown below.

Temporary Commons.	Parks and Recreation Reserves.
acres.	acres.
579,033	207,908
461,529	230,857
467,554	228,169
455,221	229,416
442,177	231,950
	Commons. acres. 579,033 461,529 467,554 455,221

The area of permanent commons as at 30th June, 1923, was 37,485 acres, including 4,259 acres in the Western Division. The area in the previous year was 37,445 acres.

PUBLIC ENTERTAINMENTS.

Theatres and Public Halls, etc.

All buildings in New South Wales, 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, and 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 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, 1923, there were 2,077 buildings to which the provisions of the Act applied, and they contained seating accommodation for approximately 937,000 persons. The total amount of fees received for licenses during 1923 was £3,639.

Kinematograph 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.

The conduct of race meetings is regulated mainly by district associations, with which most of the racing clubs are affiliated, and a certain amount of Government control is exercised through the Gaming and Betting Act, 1912. Raceeourses must be licensed annually, the minimum circumference of running grounds being fixed at 6 furlongs. The days on which races may be held are limited, and the number of licensed race-courses in the Metropolitan district, *i.e.*, within 40 miles of the General Post Office, and in Newcastle district may not exceed the number existing in 1906. Betting or wagering is prohibited on any ground except a licensed racecourse or coursing ground on which races or coursing matches are being held, and all registered racing clubs and associations are required to instal a totalizator.

If a racecourse is used for more than one class of racing—horse racing, pony racing, or trotting—a ceparate license must be obtained for each class. In 1923 the licensed racecourses numbered 446, and the licenses issued in respect thereto numbered 546. The maximum number of days on which it was permissible to hold race meetings in the metropolitan district during 1923 was 165, and in the district of Newcastle 59 days.

To facilitate the collection of betting taxes bookmakers are required to use stamped tickets and to keep a record of credit bets. During the year ended 30th June, 1923, the number of betting tickets issued to bookmakers was 15,048,700, and approximately 950,000 credit bets were recorded. The investments on totalisators during the same period amounted to £3,154,365. In the previous year 14,628,000 betting tickets were issued, 941,000 credit bets were recorded, and the totalizator investments amounted to £3,165,546. The amount of betting taxes is shown in the chapter relating to Public Finance.

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Expenditure on Public Entertainments.

A tax on public entertainments has been imposed by the Commonwealth Government since 1st January, 1917, and the records of the Taxation Department disclose interesting information regarding the expenditure of the community in respect of such amusements.

From 1st December, 1919, to 1st October, 1922, the tax was charged on the payments for admission at the rate of $\frac{1}{2}d$, 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 bours on three or more days in the week, nor for admission to entertainments intended only for children if the charge was under 6d. Since 2nd October, 1922, the tax has not been chargeable on payments lower than 1s. 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 philantrophic, religious, charitable, or educational purposes.

The payments for admission to taxable entertainments during the year ended 30th June, 1921, amounted to \pounds 3,228,758, and with the tax, \pounds 270,788, represented an average expenditure of \pounds 1 13s. 6d. per head of population. An amount of \pounds 2,123,707, with tax amounting to \pounds 190,651, was contributed by persons who paid less than 4s. for admission; \pounds 475,689 and tax \pounds 39,141 by those who paid 4s. and less than 10s.; and the corresponding amounts paid where the charge was 10s. and over were \pounds 629,362 and \pounds 40,996. The tax collected in 1921-22 was \pounds 277,043, in 1922-23 \pounds 257,338, and in 1923-24 \pounds 249,010.

REGULATION OF THE LIQUOR TRADE.

The sale of intoxicating liquor was one of the first subjects of legislation after the establishment of civil government in New South Wales. The first Liquor Act passed in 1825 introduced a system of licenses with the object of ensuring that the hotels would be kept by persons of good character, also for the purpose of taxation. Since that date the liquor laws of the State have been amended frequently, the trend of the legislation being towards greater restriction and closer regulation of the trade.

The existing law is contained in 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 spiritmerchant's and brewer's for the sale in quantities of not less than two gallons of the same kind of liquor.

The licenses in respect of railway refreshment rooms are issued under Executive authority, and the other licenses by Licensing Courts constituted for the purpose. Prior to 1st July, 1924 a Licensing Court, consisting of three members, was appointed in each district. The Metropolitan Court was constituted by three stipendiary magistrates under the presidency of the chairman of the bench of stipendiary magistrates; in the country districts the stipendiary or police magistrate usually presided.

The Liquor Amendment Act of 1923 provided for the reconstitution as from 1st July, 1924, of the Licensing Courts and of the Licenses Reduction Board, whose functions are described on the next page. The practical effect of the reconstitution is that one tribunal controls all matters relating to the issue and reduction of dicenses. Three persons, who were police or stipendiary magistrates, have been appointed to be licensing magistrates to constitute the licensing court in each district throughout the State and to discharge the functions of the Licenses Reduction Board. One of the magistrates is chairman of the courts and of the Board. The chairman and one other licensing magistrate form a quorum for the constitution of the licensing court, and any two members may exercise all powers of the board. The licensing magistrates, with the approval of the Minister of Justice, may delegate power in respect of granting a license to any two of their number and a stipendiary or police magistrate, and may delegate minor functions to one or more of their number or to a stipendiary or police magistrate.

Objections to the granting, renewal, transfer, or removal of licenses may be made to a licensing court by three or more residents of the district or by the police. Licenses may not be held by unmarried women. They may be granted to widows and, under certain conditions, to married women, but an Austrialian wine license may not be issued to a woman other than the widow of a licensee. The hours of liquor trading, which since 1881 had been from 6 a.m. to 11 p.m., were reduced in 1916 when the closing hour was fixed at 6 p.m.

In recent years restrictions have been placed upon the number of licenses. In 1905 it was enacted that the number of publicans' and wine licenses should not exceed the number existing in each electorate as at 1st January, 1906, and the number of licensed clubs was limited to the number formed before 1st November, 1905, of which the licenses were in force on 1st March, 1906. For many years prior to the passing of the Amending Act questions relating to the granting of new publicans' licenses and to the removal of existing licenses had been submitted at the municipal elections to the vote of ratepayers in the municipalities. But the Act of 1905 provided that the local option vote should be taken in electorates at the general elections of members of the Legislative Assembly, all qualified voters being entitled to vote for the continuance or the reduction of the number of existing licenses or for the termination of all licenses in the district. The Local Option vote was first taken in electorates in September, 1907, when there were in existence 3,023 hotels and 633 wine licenses: As the result of the Local Option vote in 1907, and in 1910 and 1913, orders were issued for the closing of 344 hotels and for the termination of 58 wine licenses.

In 1916 the Local Option vote was suspended, and in 1919 another method of regulating the number of licenses was introduced. Under the Liquor Amendment Act of that year and subsequent amendments in 1922 and 1923 it is provided that no new publican's or Australian wine license may be granted except on the grounds of a permanent increase of population and insufficiency of existing licensed premises to meet public requirements in the district, and then only on a petition signed by a majority of adult residents living within the radius of a mile from the premises for which a license is sought.

If a petition for a new license has been rejected by the licensing court, no petition for a license for any premises within a radius of a mile may be referred to the court until the expiration of three years unless there has been an abnormal increase in population in the area.

A publican's or Australian wine, or a spirit merchant's license may not be removed from one licensing district to another. The licensing court may allow such a license to be removed to other premises within a radius of one mile in the same licensing district, but in the Metropolitan and Newcastle licensing districts a license may not be removed from one electorate to another.

A Licenses Reduction Board was appointed under the Act of 1919 to reduce the number of publicans' licenses in any electorate where the existing licenses exceed the "statutory number," which is proportionate to the number of electors, viz. : In the nine electorates for which five members are returned to the Legislative Assembly, one license for each 250 of the first thousand electors on the electoral roll, and a further three for each subsequent two thousand, and in the fifteen electorates for which three members are returned, one license for each 250 of the first thousand electors, and a further one for each subsequent five hundred.

The Board may not reduce the publicans' licenses in an electorate below the statutory number nor by more than one-fourth of the number in force on 1st January, 1920. The term of the Board's operations was fixed in 1919 at three years: in December, 1922, it was extended for a further period of three years, and in 1923, until the taking of a referendum on the question of prohibition. In 1919 the Board was charged with the additional duty of reducing the Australian wine licenses in each electorate. The number of such reductions in an electorate may not exceed one-fourth of the number of wine licenses in force on 1st January, 1923, unless the Board considers that a greater reduction is necessary in the public interest. In determining the licenses which shall cease the Board takes into consideration the convenience of the public, the requirements of the several localities in the electorate, the class of accommodation provided, and the manner in which the business has been conducted. When deprived of their hotel licenses, the holders, owners, lessees, etc., of the premises are entitled to compensation as assessed by the Board. In the case of wine licenses, the licensees only are entitled to com-The funds for compensation are obtained by a levy on the pensation. amount spent by all licensees in purchasing supplies of liquor. For hotel licenses the levy is at the rate of 3 per cent., of which the licensee pays one-third and the owner two-thirds. For Australian wine licenses the rate is 1 per cent., but it may be increased to 2 per cent. if a lower rate does not yield an adequate sum. In cases where the owner's share of the compensation exceeds one-third of the rent the Board is empowered to refund him the amount of the excess.

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, that they were practically removed from the Board's jurisdiction. During the period of four years ended December, 1923, the Board deprived 190 hotels of licenses and accepted the surrender of 46 licenses. Sixty-eight of the hotels were situated in Sydney and suburbs, 23 in the electoral district of Newcastle, and 145 in other country districts. The compensation awarded in respect of 235 licenses amounted to \pounds 348,580, which was distributed as follows :—licensees, \pounds 89,100; owners (including those who were also licensees), \pounds 250,415; lessees, \pounds 8,665; and sub-lessees, \pounds 400. In respect of one hotel in the Murrumbidgee electorate the amount of compensation has not yet been determined. The compensation fees colected by the Board amounted to \pounds 163,965 in 1920, and to \pounds 207,799,

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£213,233, and £222,337 in the succeeding years. In addition to the hotel licenses terminated or ordered to close by the action of the Licenses Reduction Board, 54 licenses were terminated during the four years 1920-23 by reason of expiration, cancellation, surrender to the Licensing Courts, etc., and 7 new licenses were granted during the period.

On 1st January, 1923, there were 431 Australian wine licenses, of which 231 were in the metropolitan licensing district. The Board's action in respect of these licenses was delayed pending decision by the Supreme Court on a question of law. Therefore only 9 licensees in country districts were deprived of their licenses during 1923, and the Board accepted the surrender of one license. Compensation in respect of the ten licenses amounted to $\pounds 670$.

License.	1901.	1906.	1911.	1916.	1921.	1922.
D-11:	0.151	0.055	2,775	2,617	2,488	2,470
Publicans'		3,055	2,113	132	153	143
Club			76	76	78	81
Railway Refrestment	ൈ	24	24	27	29	31
Booth or Stand	. 1,787	2,014	1,829	1,816	2,337	2,451
Packet	. 20	25	24	21	13	13
Australian Wine, Cider, Perry.	. 675	647	532	487	450	432
Spirit Merchants'	225	207	198	193	244	247
Brewers'	. 53	40	39	24	17	17

The number of licenses for the sale of intoxicating liquor issued during various years since 1901 is shown below :---

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 these licenses the annual fees are assessed by the Licenses Reduction Board at the rate of 2 per cent. of the amount spent by the licensees in the purchase of liquor during the preceding year, except that spirit merchants do not pay on the liquor sold by them to persons I censed to sell liquor and they pay a minimum fee of £30 in the metropolitan district and £20 clsewhere. 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 are charged at the rate of £2 for each period up to seven The Liquor Act of 1922 prescribes that all licenses, except booth davs. 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.

Drunkenness.

Persons apprehended by the police for drunkenness in public places are 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

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imposed: If they do not appear for trial the deposits are forfeited, and further action is not taken. During the year 1923 the number of persons charged with drunkenness was 30,918, of which 2,313 were females. In the cases of 171 males and 24 females the charges were withdrawn or dismissed, 19,384 males and 1,327 females were convicted after trial by the Courts, and 9,050 males and 962 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 five years, 1918-1922:....

Year.	Convie	ctions.	Bail Forfeited.		Total Cases.			Cases per 1,000
	Males.	Females.	Males.	Females.	Males.	Females.	Total.	of mean popula- lation.
1918	13,016	1,712	5,168	590	18,184	2,302	20,486	10.54
1919	11,820	1,289	5,923	514	17,743	1,803	19,546	9.77
1920	14,527	1,554	9,029	733	23,556	2,287	25,843	12.49
1921	18,525	1,172	8,233	772	26,758	1,944	28,702	13.61
1922	19,384	1,327	9,050	962	28,434	2,289	30,723	14.28

From the statement it is apparent that the number of convictions for drunkenness amongst men was much lower in the earlier years under review. At that time, however, a considerable number of men undergoing military service were exempt from the jurisdiction of the civil courts in regard to such offences.

Particulars relating to the treatment of inebriates are shown in the chapter relating to Prison Services.

Consumption of Intoxicants.

It is estimated that the consumption of intoxicating liquors in New South Wales during the year ended June, 1923, was as follows:—Spirits, 966,300 proof gallons; beer, 24,301,400 gallons; and wine, 1,382,600 gallons. The quantity of beer was less than in the previous year by 164,600 gallons, but the quantities of spirits and of wine were greater by 61,300 gallons and 47,500 gallons respectively.

The figures show the proof alcoholic contents of the beverages sold as spirits, 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. Whisky and brandy of the best quality are retailed usually at about 23.5 per cent. under proof, and gin and rum at about 30 per cent. under proof. The standards under the Pure Food Act are whisky and brandy 25 per cent. under proof, gin and rum 35 per cent. 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 forvified wines, e.g., port, cleret, sherry; and from 20 to 24 per cent. in the case of dry wines, such as hock, chablis.

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Year.	Aggregat	e Consumption	of Spirits.	Per Head of Population.			
i ear.	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	
1906	132,900	1,030,700	1,163,600	•09	·69	•78	
1911	194,300	1,337,800	1,532,100	.12	•80	•92	
1913	285,600	1,449,300	1,734,900	·16	·79	·95	
1916-17	433,500	849,700	1,283,200	• •23	•45	·68	
1917-18	420,400	669,000	1,089,400	·22	•35	•57	
1918-19	290,700	451,700	742,400	·15	•23	·38	
1919-20	482,600	554,900	1,037,500	•24	•27	•51	
1920-21	451,100	456,500	907,609	·22	•21	•43	
1921-22	391,600	513,400	905,000	•19	-24	•43	
1922-23	407,500	558,800	966,300	·19	.25	•44	

The consumption of spirits, Australian and imported, in various years since 1901 is estimated to have been as follows :----

The consumption of spirits, which had been increasing slowly for five or six years, decreased by 60 per cent. during the five years following the outbreak of the war. In 1918–19 the decrease amounted to one-third, as compared with the previous year. In the following year there was a decided increase, and the consumption per head rose almost to the level of 1917–18. Then it declined by 16 per cent. to 43 proof gallon per head. In 1922–23 the consumption per head was about the same as in the preceding two years, though more foreign and less Australian spirits were consumed.

The consumption of beer as estimated for 1901 and subsequent years is shown below :----

Year.	Quant	ity of Beer cons	Per Head of Population.			
i car.	Australian.	Imported.	Total.	Australian.	Imported.	Total.
1901	gallons. 13,118,300	gallons. 1,757,900	gallons. 14,876,200	gallons. 9.60	gallons. 1·28	gallons
1906	12,716,800	812,400	13,529,200	8.56	•55	9.11
1911	18,332,900	1,200,100	19,533,000	11.01	•72	11.73
1913	22,973,400	1,338,000	24,311,400	12.62	•74	13.36
1916-17	21,159,200	204,000	21,363,200	11.17	.11	11-28
1917-18	21,978,500	88,600	22,067,100	11.43	·04	11.47
1918-19	23,923,000	53,100	23,976,100	12.10	.03	12.13
1919-20	26,724,100	92,000	26,816,100	13.11	·05	13-16
1920-21	25,163,500	129,800	25,293,300	12.04	•06	12.10
1921-22	24,412,000	54,000	24,466,000	11.47	.03	11.50
1922-23	24,192,600	108,800	24,301,400	11.13	:05	11.18

The consumption of beer per head increased considerably between 1901 and 1913, but after the commencement of the war it decreased. After 1918

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it rose for a few years, until in 1919-20 it was almost equal to that of 1913; it has since decreased by 15 per cent. N arly 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 two per cent. being imported.

ä			Consumption of Wine.									
Year.		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						
1906	916,600	39,400	956,000	.62	.02	•64						
1911	908,700	57,900	966,600	•55	.03	·58						
1913	927,800	58,50 0	. 986,300	•51	·03	•54						
1916-17	764,500	30,300	794,800	•40	·02	·42						
1917-18	839,500	22,000	861,500	•44	•01	•45						
1918-19	895,700	15,900	911,600	•45	•01	•46						
1919-20	1,321,100	33,200	1,354,300	·65	•01	·66						
1920-21	1,480,100	21,50 0	1,501,600	•71	•01	•72						
1921-22	1,312,500	22,600	1,335,100	-62	•01	•63						
1922-23	1,358,600	24,0 00	1,382,600	63	•01	•64						

Though the consumption of wine per head of population has declined since the year 1920-21, the average is higher than in 1913. The quartity of Australian wine consumed in 1922-23 was higher by 40 per cent. than it was four years ago.

The following statement shows the consumption per head of intoxicating liquors in various countries at the latest date for which the information is available :—

Country	7	Spirits.	Wine.	Beer.	
	•		gallons.	gallons.	gallons
New South Wales		1922-23	•44	64	11-18
South Australia		1922 - 23	·34	•75	10.59
Western Australia		1922-23	•36	1.09	13.29
Tasmania		1922	•24	•19	7.08
Australia		1921-22	-36	.50	11.49
New Zealand		1922	·29	·09	9.60
United Kingdom		1921	·36	-26	20.10
Canada		1920-21	·86	-08	3.95
United States		1921	·32	·19	2.61

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The Drink Bill.

The amount of money expended on intoxicating liquors in New South Wales in the year ended 30th June, 1923, is estimated to have been £11,054,009, or £5 1s. 9d. per head. The annual drink bill, as estimated for various years since 1901, is shown below :---

	Drink	Bill.		Drink Bill.			
Year,	Total.	Per Head of Population.	Year,	Total.	Per Head of Population.		
	£	£ s. d.		£	£ s. d.		
1901	5,000,000	3 13 2	1918-19	7,275,000	3 14 0		
1906	4,569,000	3 9 0	1919-20	10,251,000	507		
19 11	5,962,000	3 11 7	1920-21	11,034,000	5 5 7		
1913	7,001,000	3 16 11	1921-22	10,671,000	502		
1916-17	6,667,000	3 10 5	1922-23	11,054,000	5 1 9		
1917-18	7,223,000	3 15 1					

Between 1913 (the year before the commencement of the war) and 1916-17 the prices of intoxicants increased, and the consumption decreased in each year until in 1916-17 the decreased consumption offset the increased prices and caused a reduction in the total drink bill.

During 1917-18 and 1918-19 prices continued to rise, and with a slight increase in the average consumption of beer and wing the aggregate expenditure on intoxicants increased. The imposition of a new tariff in March, 1920, caused a further rise in prices, but there was a noticeable increase in the consumption of all kinds of intoxicants, and the drink bill rose by nearly £3,000,000 in 1919-20. But it should not be assumed that the average consumption was abnormally high, as it was somewhat less than in 1913. In 1920-21 there was a further increase in the drink bill, but it was due entirely to higher prices, as there was a substantial decline in the quantity of intoxicants consumed. In the following years prices were about the same as in 1920-21. The consumption diminished and the drink bill declined in 1921-22 by about 5s. 5d. per head. In 1922-23 the consumption of spirits and wines increased, and the drink bill roce by 1s. 7d. per head.

The drink bill of the United Kingdom in 1913 was estimated at £166,000,000, or £3 12s. per head. In 1920 it had increased to £469,700,000, or £10 per head, notwithstanding a decline of about 24 per cent. in the consumption measured in terms of absolute alcohol. Subsequently a marked decrease occurred, and the estimated expenditure in 1922 was £354,000,000, or about £7 8s. per head.

CONSUMPTION OF TOBACCO.

Under 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, persons who sell tobacco in New South Wales are required to obtain a license for which an annual fee of 5s, is charged. The number of licenses issued in 1922 was 18,378. The sale of tobacco to juveniles under the age of 16 years is prohibited.

17	Total	Consumpt	tion (000 omit	ted).	Per Head of Population.				
Year.	Tobacco.	Cigars.	Cigarettes.	Total.	Tobacco.	Cigars.	Cigarettes.	Tctal	
	lb,	lb.	1ь.	16.	lþ.	lb.	1ь.	lb.	
1901	2,977	2l5	368	3,560-	2/18	15	27	2.60	
.1906	3,603	203	559	4,365	2143	·13	:38	2'94	
1911	3,827	271	1,076	5,174	2:30	16	65	3-14	
1913	3,853	396	1,413	5,572	241	17	-78	3.06	
1916 - 17	4,098	263	1,283	5,614	2110	-14	•68	2.98	
1917-18	4,208	244	1,318	5,770	2:19	-13	-68	3:00	
1918-19	3,918	252	1,484	5,654	1499	•13	76	2.88	
1919 - 20	4,638	292	1,937	6.867	2:28	-14	-95	3.37	
1920-21	4.370	273	1,958	6,691	2409	.13	•94	3.10	
1921-22	5,039	252	1,855	7.146	2.37	-12	-87	3-36	
1922-23	4,950	234	1,713	6,897	2.28	•10	-79	3.17	

The quantity of tobacco consumed in New South Wales, as estimated at intervals since 1901, is shown in the following statement :---

The quantity of tobacco (including cigars and cigarettes) consumed in 1922-23 was 6,897,000 lb., which represents an average of 3.17 lb. per head of population. The annual consumption per head during the last three years was 4 per cent. higher than in the three years 1911-13, and it is estimated that the expenditure on tobacco in 1922-23 amounted to £5,152,000, or £2 7s. 5d. per head of population, as compared with £2,858,000, or £1 11s. 5d. per head in 1913.

As regards the description of tobacco used, the proportion of eigarettes advanced during the period under review from 10 to 25 per cent., and the proportion of ordinary tobacco declined from 84 to 72 per cent.

Of the total tobacco consumed in 1922-23, about 97 per cent. was manufactured in Australia, principally from imported leaf, viz., ordinary tobacco 99 per cent. made in Australia, cigarettes 94 per cent., and cigars 80 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, recond-hand dealers, fishermen, and persons who sell tobacco, conduct billiard and bagatelle tables, or engage in Sunday trading. Since the beginning of the year 1921 gun-dealers and persons having posterior of guns and firearms are required to take out licenses. Special gun licences are issued to those who desire to use gurs for the cole purpose of destroying noxious animals. A separate gun license must be obtained in respect of each weapon. A gun licence may not be issued to a percon under 16 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 a district £2. General licenses are available for all parts of the State. District licenses only cover the police district for which they are issued, but they are not issued for the Metropolitan district. Sales by auction are illegal after sunset or before sunrise, except in the Municipality of Albury, where, ander the Auctioneers' Licensing (Amendment) Act, 1915, wool may be put up to sale or sold after sunset. For pawnbrokers' licenses an annual fee of ± 10 is payable. The hours for receiving pledges are limited, with certain exceptions, to between 8 a.m. and 6 p.m., but no restriction is placed on the rate of interest charged.

The following table shows the principal licenses issued in the six years 1917-1922 :---

Occupation.		1917.	1918.	1919.	1920.	1921.	1922.
Auctioneers – General		287	344	344	391	\$91	349
District		1,745	1,909	1,995	2,200	2,132	1,995
Billiard		733	785	763	815	781	796
Tobacco		13,089	13,308	14,141	14,391	15,488	18,378
Pawnbrokers		102	100	102	95	102	105
Hawkers and Pedlars		1,149	1,224	1,479	1,440	1,951	2,610
Collectors		2,092	2,354	2,207	2,126	2,136	1,801
Second-hand Dealers		993	1,216	1.247	1,421	1,475	1,330
Stage Carriage		193	153	212	139	123	120
Sunday Trading		4,826	5,825	6,014	6,381	6,985	7,582
Fishermen		3,126	3,062	3,164	3,388	3,524	3,385
Fishing Posts]	1,658	1,663	1,703	1,816	1,863	1.76
Ovster Vendors	• • • •	314	306	232	240	238	252
Gun Licenses (ordinary)						64.682	57,61
/	••••	• •••			••••	36,961	34,650
Gun Dealers						684	60-

- The number of tobacco licence: as stated for each year from 1917 to 1921 is exclusive of those issued at the State Tre sury, which sumbered 2,247 in 1922.

STATUS OF WOMEN.

-In New South Wales women have had the right to exercise the franchise since 1902, and, in 1918, it was provided that sex should 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. Women have contested elections, but none has been elected. A number of women have been appointed justices of the peace and some have been admitted to the practice of the legal profession. Women may not act on juries. They are eligible for all degrees at the University of Sydney, but are not ordained as ministers of religion.

The employment of women in factories and shops is regulated specially by the Factories and Shops Act, 1912, which limits the continuous employment of women to five hours, restricts the amount of work they may do in excess of forty-eight hours per week and between 6 p.m. and 6 a.m., and limits the employment of girls under 18 years of age. 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 the Board of Trade, but a definite principle of equality or difference between the pay of women and men is not observed in the industrial awards and agreements.

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. Und r 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

SOCIAL CONDITION.

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 a 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 number of adherents of the principal religions, as disclosed by the census records, is shown in the following statement :---

T U U	Nu	Number of Persons.			Proportion per cent.		
Religion.	1901.	1911.	1921.	1901.	1911.	1921.	
Christian—	-			1			
Church of England	623,131	734,000	1,027,301	46.58	45.46	49.6 0	
Roman Catholic	347,286	412,013	502,815	25.96	25.54	24.27	
Methodist	137,638	151,274	181,977	10.29	9.37	8.79	
Presbyterian	132,617	182,911	219,932	9.91	11.33	10.62	
Congregational	24,834	22,655	22,235	1.86	1.40	1.07	
Baptist	15,441	20,679	24,722	1.15	1.28	1.19	
Lutheran	7,387	7.087	5,031	•55	•44	·24	
Unitarian		844	622	•06	.05	·03	
Salvation Army	9,585	7,413	9,490	.72	·46	·46	
Other Christians	14,812	55,453	49,072	1.10	3.44	2.37	
Total Christians	1,313,501	1,594,329	2,043,197	98·18	98.77	98 .64	
Others-		-	-				
Jew, Hebrew Buddhist, Confucian, Mohan	6,447 n-	7,660	10,150	·48	•47	·49	
and the second second	8,035	5,113	4,472	•60	$\cdot 32$	·22	
T. J. C. M. N. D. Ballander	9,829	7,163	13,572	.74	·44	•65	
Older the state	13,068	21,986	12,946	•••			
TImeneoified	3,966	10,483	16,034	•••			
Total, New South Wale	es 1,354,846	1,646,734	2,100,371	100	100	100	

In the table the persons returned as Catholic (undefined) have been included with "Roman Catholic," the number in 1921 being 20,240, and in 1911, 36,622.

POSTS AND TELEGRAPHS.

The postal, telegraph, and telephone services of New South Wales have been administered by the Commonwealth Government since 1st March, 1901. Previously the services in each State of the Commonwealth were organised separately under the various State Governments, and a variety of rates, charges, and other conditions were in operation. Since the amalgamation a large measure of uniformity has been introduced. 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

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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 traction, and aerial services are being established. The number of inland mail services in operation in New South Wales in 1922-23 was 1,981. The cost of road services amounted to £274,052, and of railway services to £123,266.

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 £130,000 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.

The number of post offices and the volume of postal business in New South Wales in various years since 1901 are shown below. Inland postal articles are counted once only :---

			Post	Postal			
Year.	Post Offices.		Letters, Post- cards, and Registered Articles.	Newspapers.	Packets.	Parcels.	Articles Per Head o Population
1901	1,684	524	82,783	52,318	14,480	736	109-9
1911	1,948	542	189,656	71,619	36,283	1,749	179.7
1915-16	2,074	566	219,526	72,067	33,343	2,538	172.9
1916-17	2.040	548	259.186	68,547	28,231	2,906	189.4
1917-18	2,031	548	255,177	62,321	24,844	2,923	179.5
1918-19	2.037	562	240,591	63,368	22,887	2,977	167-7
1919-20	2,034	559	256,062	61,408	20,038	2,951	167.0
1920-21	2.031	578	262.026	63.261	20,932	3.607	167.4
921-22	2.032	556	240.088	66,381	21,043	3,908	155.7
1922 - 23	2.040	559	254,196	66.647	30.296	4,273	163:6

During the year 1922-23 the average number of postal articles per head of population was as follows:—Letters, etc., 117; newspapers, 31; and packets and parcels, 16. The mail matter carried in 1922-23 included the following articles despatched to or received from countries outside Australia, viz., letters, postcards, and registered articles, 27,339,000; newspapers, 5,821,000; packets, 1,751,000; and parcels, 255,000. The total number of registered articles was 2,242,000, of which 329,000 were to or from other countries.

As compared with the preceding two years there was a decrease during 1921-22 in the number of letters, etc., for which reasons may be found in an increase in rates for postage, brought into operation in October, 1920, and in a decline in business activity, which had been unusually brisk during the period immediately following the cessation of war. In 1922-23 there was an increase, but the number remained below the figure for the years 1919-21. The postage rates were reduced as from 1st October, 1923.

Mainly for the convenience of people who reside at a distance from the trading centres a system of value-payable parcel post has been established. 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

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registered articles transmitted to or from Papua. During the year ended 30th June, 1923, the number of such parcels posted in New South Wales was 134,703, and the value collected was £237,209, the revenue, including postage, commission on value, registration, and money-order commission being £18,586.

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 Durban (South Africa), one in Bamfield (Canada), and two in Banjoewangie (Java). Lines have been laid also between the Australian mainland and Tasmania, New Zealand, and New Caledonia. The Pacific cable between Australia and Canada is maintained by the Governments of the United Kingdom, Canada, New Zealand, and Australia.

For cable messages to Great Britain the ordinary rate is 3s. per word, but messages may be transmitted *via* Pacific cable to Canada, and thence by wireless for 2s. 10d. 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 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 gives particulars relating to the telegraph business transacted in New South Wales since 1901 :---

		Telegrams			
Year.	Telegraph Stations.	Transmitte 1 and delivered (Inland counted once).	In Transit.	Total.	Revenue Received
		-			£
1901	978	3,275,197	174,118	3,449,315	186,135
1911	1,406	5,505,935	413,777	5,919,712	253,398
1915–16	2,107	6,402,092	624,992	7,027,084	331,924
1916-17	2,231	6,491,354	661,559	7,152,913	350,581
1917–18	2,237	6,870,263	728,154	7,598,417	386,919
1918–19	2,252	7,183,234	753,219	7,936,453	416,427
1919–20	2,247	8,283,993	760,105	9,044,098	455,014
1920–21	2,252	7,851,429	734,406	8,585,835	489,805
1921-22	2,324	7,381,205	734,377	8,115,582	500,116
1922-23	2,411	7,384,616	754,285	8,138,901	513,954
	-	~			-

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Excluding the messages in transit, the telegrams in 1922-23 represented 3.4 per head of population. The number of inland telegrams was 4,086,632, the interstate messages received and despatched numbered 2,742,042, and the cablegrams 555,942. Messages to and from Tasmania are classified as interstate telegrams and not as cablegrams.

Further particulars regarding the cable business transacted in New South Wales during the last five years are shown below, Messages in transit are not included :---

	Cable M	lessages.	Amount Collected.		
Year.	Sent from New South Wales.	Received in New South Wales.	Total,	Portion due to Commonwealth Government.	
			£	£	
1918-19	196,521	274,180	899,833	67,058	
1919-20	250,260	277,879	875,280	76,117	
1920-21	249,705	263,482	697,892	62,461	
1921-22	252,815	269,188	697,063	62,248	
1922-23	272,989	282,953	687,834	65,270	

WIRELESS TELEGRAPHY.

A chain of stations has been erected around the coast of Australia and in the Pacific Islands under the control of the Commonwealth to give wireless communication with shipping. Three of the stations, including the Sydney station, are capable of long distance communication. In May, 1922, the commercial radio stations were transferred to the Amalgamated Wireless (Australasia), Limited, under an agreement with the Federal Government. The Commonwealth has a controlling interest in the concern, and the company has undertaken to establish and maintain a direct commercial wireless service between Australia and the United Kingdom, and to erect a station in Canada capable of communicating with Australia.

Private installations for wireless communication and for broadcasting may be operated under license, but they are not permitted to compete in commercial traffic unless authorised to do so.

For wireless telegrams between telegraph offices in New South Wales and an Australian ship the charge is 6d. per word, and other ships 11d. per word. Messages are transmitted between Australian radio stations at the rate of 2s. Sd. for sixteen words and 2d. per additional word.

Telephones.

The telephone system was established in Sydney in 1880. Exchanges have since been provided in many other centres, and the system is being installed in country districts wherever practicable. 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.

Year.	Exchanges.	Number of Lines Connected.	Public Telephones.	Telephone Instruments connected.
1901	48	9,864	72	13,778
1911	268	34,551	722	43,032
1915-16	705	51,905	1,317	66,532
1916-17	765	57,553	1,421	70,058
1917-18	825	62,123	1,521	78,886
1918-19	853	65,734	1,558	84,118
1919-20	873	70,700	1,606	91,117
1920-21	921	74,490	1,693	96,710
1921-22	960	80,042	1,787	104,108
1921-23	1,026	87,352	1,815	113,645

The following table shows the growth of the telephone service in New South Wales since 1901:--

The annual ground rent for an exclusive telephone service ranges from $\pounds 3$ in respect of exchanges, where the number of subscribers lines does not exceed 300, to $\pounds 5$ where there are over 4,000 lines. For each effective outward call a charge of 14d. is made unless the number of lines connected with the exchange does not exceed 600, when the charge is 1d. per call.

Tests are being made of the capabilities of wireless telephony, but a commercial service has not yet been instituted.

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, 1923, are shown below:—

Branch,		Earnings.	Working Expenses.	Surplus.	Interest on Capital.	Net Profit.		
				£	£	£	£	£
Postal				2,118,068	1,585,213	532,855	40,875	491,980
${ m Telegraph}$			•••	526,294	496,938	29,356	41,531	(-) 12,175
Telephone				1,184,035	959,836	224,199	216,169	8,020
To	tal, All	Brancl	nes	3,828,397	3,041,987	786,410	298,575	487,825

The postal services in the whole Commonwealth, as well as in New South Wales, have earned a substantial surplus over expenses during each of the last five years, and there was a marked increase in the net profit as a result of higher charges introduced in 1920.

Year. ended 30th June.	Earnings.	Working Expenses.	Surplus.	Interest on Capital.	Net Profit.
	£	£	£	£	£
1919	6,158,571	5,043,891	1,114,680	590,035	524,645
1920	6,732,096	5,633,752	1,098,344	610,390	487,954
1921	8,511,494	6,724,543	1,786,951	643,183	1,143,768
1922	9,347,656	7,103,536	2,244,120	703,039	1,541,081
1923	9,898,158	7,651,864	2,246,294	780,235	1,466,059

A comparative statement of the financial results for the whole Commonwealth is shown in the following statement :---

The accounts are exclusive of the figures relating to wireless telegraphy.

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