

# VICTORIAN YEAR-BOOK,

1903.

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COMPILED FROM OFFICIAL INFORMATION

IN THE OFFICE OF

THE GOVERNMENT STATIST.

---

TWENTY-FOURTH ISSUE.

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BY AUTHORITY

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## E R R A T A .

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From later information it appears that all the land on the closer settlement estates has been taken up. The statement on page 323, that there is still available a balance of 6,606 acres, is therefore incorrect. The discrepancy arose through the schedules furnished by the settlers not showing full occupation, and is probably due to the fact that, in some instances, their holdings in the closer settlement estates were included with land held by them elsewhere.

On page 406, first table, second column, read "2,337,958," in place of "2,348,967;" and in fifth column read "294,906," in place of "283,897."

On page 480, in table relating to meat preserved, third column, read "2,653," in place of "7,237;" and in fourth column, read "17,380," in place of "12,796."

## PREFACE.

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THIS is the twenty-fourth issue of the Victorian Year-Book; and the information in regard to Victoria is brought up to the end of 1903. It is recognized that statistics are not of much practical use in every-day affairs unless they are up to date, and published as early as possible after the close of the latest period to which they refer. As each part of the work was completed, a number of copies were struck off and distributed, thus disseminating the information at the earliest possible date. On account of the early publication of these parts, some of the information referring to the other States necessarily referred to the year 1902, and many of the comparisons made were for that and previous years. All Australasian statistics for 1903, which were available up to the time of the issue of the complete work, will be found, however, in an Appendix.

In the part relating to Constitution and Government the reformed Constitution of Victoria, preceded by a short historical synopsis, is described.

The second part deals with Social Condition, which includes the Melbourne University, State school education, public libraries, charities, and cognate matters.

The population of Victoria and the other States, estimated according to a method agreed upon at a recent Conference of Statists, is shown for the latest date, and is compared with previous estimates and Census enumerations.

In the part relating to Finance, information is given in regard to revenue and expenditure, trust funds, Federal, State, and local taxation, railway deficits, cost of public instruction, loan expenditure; public debts, both general and local; and municipal finance.

Marriages, births, and deaths are dealt with in part "Vital Statistics." There has been a further decline in the birth rate in 1903. This question is thoroughly analysed, and it is shown that the decline is mainly attributable to natural causes; that the low birth rate is accompanied by a low death rate; and that in Australia and New Zealand the rates of infantile mortality, which largely affect the birth rate, are the lowest in the world.

The trade of Victoria, as shown in part "Interchange," is in a most satisfactory condition. A new classification of the Customs returns has been adopted for 1903, and the returns of all the States are now compiled on the same basis by the Government Statistician of New South Wales. The figures for 1903 have not yet been made available; but, from progress returns obtained from the Customs department, it is shown that the conditions of Victorian trade have entirely altered since the introduction of the Federal tariff. Consequent upon the establishment of Inter-state free trade, Melbourne would appear to be gradually regaining its distributive trade, and the exports of Victorian products to the other States show a remarkable increase.

Matters relating to wealth and the investment thereof will be found under the head "Accumulation." The returns of the Probate office are used as the basis of an estimate of the private wealth of the people. The capital value of rateable property shows a remarkable increase since 1900 according to the municipal returns, the principal increases being in the values of country lands. With the aid of these returns an estimate is given of the unimproved or ground value of the lands of the State. The recovery in Victorian banking business is also indicated; and the relative values placed upon various representative Colonial stocks by the British investor are shown by a computation of the interest return to the investor, based upon the latest market quotations.

Under "Law, Crime, &c." an extraordinary decline is shown in litigation; and crime and drunkenness in the States and New Zealand are fully dealt with. In connection with drunkenness an estimate is made of the drink bill of the Commonwealth, from which it appears that for spirits, wine, and beer the people spend over £14,000,000 annually.

The last section of the work is "Production," which involves an enormous amount of preparatory work in the collection and compilation of the returns, which relate to land settlement, water supply, irrigation, agriculture, dairying, and pastoral industries, mining, and manufactures.

A complete lexicographical index precedes the work.

W. McLEAN,  
Government Statist.

Office of the Government Statist,  
Melbourne, 12th September, 1904.

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# VICTORIAN YEAR-BOOK, 1903.

## INTRODUCTORY REMARKS.

Victoria is situated at the south-east extremity of the Australian continent, of which it occupies about a thirty-fourth part, and contains about 87,884 square miles, or 56,245,760 acres. It is bounded on the north and north-east by New South Wales, from which it is separated by the River Murray, and by a right line running in a south-easterly direction from a place near the head-waters of that stream, called The Springs, on Forest Hill, to Cape Howe. On the west it is bounded by South Australia, the dividing line being about 242 geographical miles in length, approximating to the position of the 141st meridian of east longitude, and extending from the River Murray to the sea. On the south and south-east its shores are washed by the Southern Ocean, Bass's Straits, and the Pacific Ocean. It lies between the 34th and 39th parallels of south latitude, and the 141st and 150th meridians of east longitude. Its extreme length from east to west is about 420, its greatest breadth about 250, and its extent of coast-line nearly 600 geographical miles. Great Britain, exclusive of the islands in the British Seas, contains 88,309 square miles, and is therefore slightly larger than Victoria.

The southernmost point in Victoria, and, consequently, in the whole of Australia, is Wilson's Promontory, which lies in latitude  $39^{\circ} 8' S.$ , longitude  $145^{\circ} 26' E.$ ; the northernmost point is the place where the western boundary of the State meets the Murray, latitude  $34^{\circ} 2' S.$ , longitude  $140^{\circ} 58' E.$ , the point furthest east is Cape Howe, situated in latitude  $37^{\circ} 31' S.$ , longitude  $149^{\circ} 59' E.$ ; the most westerly point is the line of the whole western frontier, which, according to the latest correction, lies upon the meridian  $140^{\circ} 58' E.$ , and extends from latitude  $34^{\circ} 2' S.$  to latitude  $38^{\circ} 4' S.$ , or 242 geographical miles.

The area of the Australian Commonwealth is estimated to be somewhat under three million square miles; but that area, added to the area of New Zealand, amounts to nearly

three million one hundred thousand square miles. The following are the areas of the different States, as officially computed:—

AREA OF STATES AND NEW ZEALAND.

	Sq. Miles.
Victoria ... ..	87,884
New South Wales ... ..	310,700
Queensland ... ..	668,497
South Australia ... ..	903,690
Western Australia ... ..	975,920
Tasmania... ..	26,215
Total Australia ... ..	2,972,906
New Zealand ... ..	104,471
Total Australasia ... ..	3,077,377

Position of  
Austral-  
asian  
capitals.

The following are the latitudes and longitudes of the capital cities of the different Australian States and New Zealand, the positions being the observatories at Melbourne, Sydney, Brisbane, and Adelaide, the Barracks Observatory at Hobart, the Survey Office Observatory at Wellington, and the Government House at Perth:—

POSITION OF CAPITAL CITIES.

State or Colony.	Capital City.						
	Name.	Latitude S.			Longitude E.		
		°	'	"	°	'	"
Victoria ... ..	Melbourne ...	37	49	53	144	58	32
New South Wales ... ..	Sydney ... ..	33	51	41	151	12	23
Queensland ... ..	Brisbane ... ..	27	28	0	153	1	36
South Australia ... ..	Adelaide ... ..	34	55	34	138	35	4
Western Australia ... ..	Perth ... ..	31	57	24	115	52	42
Tasmania ... ..	Hobart ... ..	42	53	25	147	19	57
New Zealand ... ..	Wellington ...	41	16	25	174	46	38

Climate.

From its geographical position, Victoria enjoys a climate more suitable to the European constitution than any other State upon the Continent of Australia. In the forty-six years ended with 1903, the maximum temperature in the shade recorded at the Melbourne Observatory was 111·2° Fahr., viz., on the 14th January, 1862; the minimum was 27°, viz., on the 21st July, 1869; and the mean was 57·4°. Upon the average, on four days during the year, the thermometer rises above 100° in the shade; and, generally, on about three nights during the year, it falls below freezing point. The maximum temperature in the sun ever recorded (i.e., since 1857) was

178·5°, viz., on the 4th January, 1862. The mean atmospheric pressure, noted at an Observatory 91 feet above the sea-level, was, in the forty-six years ended with 1903, 29·94 inches; the average number of days on which rain fell was 132, and the average yearly rainfall was 25·61 inches.

### PRINCIPAL EVENTS.

The following are the dates of some of the principal events connected with the history of Victoria since 1895. For principal events prior to that year the reader is referred to the issue of this work for 1895-8. A detailed statement of the discovery and early history of the State will be found in the issue for 1884-5, page 10, et seq.

1895. January ... Conférence at Hobart of the Premiers of Australia and Tasmania, at the instance of the Premier of New South Wales, to further consider the subject of Federation; at which it was agreed to commit the duty of framing a Federal Constitution to a convention strictly chosen by the electors, to whom it was afterwards to be referred for acceptance or rejection, and a draft *Enabling Bill* was adopted to give effect to this object.
1895. January 29th—First Income Tax Act passed, taxing all income received, with £200 exemption, except in case of an absentee; income from property charged double the rates of that derived from personal exertion.
1896. March 7th—Federal Enabling Act, on the lines just described, passed in Victoria. Similar measures were likewise passed about the same time by New South Wales, South Australia, Western Australia, and Tasmania.
- „ July 28th—Factory legislation passed providing for the appointment of Wages Boards, consisting of an equal number of members representative of the employers and employes respectively, to determine minimum rates of wages, &c.; and limiting the working hours in furniture factories where Chinese are employed—to from 7·30 a.m. to 5 p.m. on week days, and to not later than 2 p.m. on Saturdays, and lessening unfair competition in all factories.
1897. March 4th—Election by the people of delegates—ten for each colony—to the Australasian Federal Convention, held in Victoria, New South Wales, and Tasmania; and in South Australia on the 6th. The delegates for Western Australia were elected by members of Parliament.
- „ March 22nd—Australasian Federal Convention opened in Adelaide, at which the following colonies were represented: Victoria, New South Wales, South Australia, Western Australia, and Tasmania. The first session closed on 23rd April. The second session opened in Sydney on the 2nd and closed on 24th September. The third session opened in Melbourne on the 20th January, and closed on the 16th March, 1898. At this Convention a Draft Bill to constitute the Commonwealth of Australia was framed and adopted for submission to a popular referendum of the various States represented.

1898. June 3rd—Referendum to the electors in Victoria, New South Wales, and Tasmania, and in South Australia on the following day, for the acceptance or rejection of the Draft Bill drawn up by the Convention. The Bill was accepted by large majorities in three of the colonies, and by a majority of 5,000 in New South Wales; but as the statutory number of 80,000 affirmative votes required in New South Wales was not reached (71,600 being recorded) the Bill was considered as rejected by that colony.
1899. January 28th—Conference of the Premiers of all the Australian colonies and Tasmania held in Melbourne, to consider the amendments suggested in the Draft Commonwealth Bill by the Parliament of New South Wales, at which a provisional compromise was arrived at.
- „ July 27th—Enabling Acts having been passed by Victoria, New South Wales, Queensland, South Australia and Tasmania, the amended Draft Commonwealth Bill was submitted to the electors, who approved of same by large majorities, the voting in Victoria being 152,653 for, and 9,805 against.
- „ August 30th—Abolition of Plural Voting. Principle of “one man one vote,” introduced for the future elections to the Legislative Assembly.
1899. October 28th—Departure of the First Victorian Contingent (257 Mounted Rifles and Infantry) on the outbreak of war in South Africa between Great Britain and the Boers. Contingents also despatched by the other Australasian colonies and Canada.
1900. January 13th—Departure of Second Contingent of 264 mounted men for South Africa.
- „ February 22nd—Conference of Statisticians of the six Federating States in Sydney to estimate on a uniform basis the populations of the different States so as to decide the number of members of the House of Representatives to be allotted to each State in the first Federal Parliament.
- „ February 26th—Another statistical Conference, at which the New Zealand Statistician was also present, to arrange for the collection and compilation of the Census of 1901 upon a uniform principle. Conference closed on 3rd March.
- „ March 10th—Despatch of the Victorian Bushmen's Contingent and Cameron's Scouts (276 officers and men) for service in South Africa.
- „ May 1st—Departure of the Fourth (Imperial Bushmen's) Contingent of 629 officers and men for service in South Africa.
- „ July 9th—*The Commonwealth of Australia Constitution Act* passed, with several amendments, by the Imperial Parliament.
- „ July 31st—Departure of Naval Contingent for service in China—197 officers and men.
- „ „ „ Western Australia joins the Federation. Bill referred to and accepted by that State. Voting—for the Bill, 44,800; against the Bill, 19,691.
- „ October 29th—Appointment of Earl of Hopetoun as the first Governor-General of the Commonwealth.

1900. December 27th—First *Old Age Pensions Act* passed, making temporary provision out of the general revenue for the helpless poor, aged 65 or over, at a rate not exceeding 10s. per week for each unmarried, or 7s. 6d. for each married person. A more comprehensive permanent measure was subsequently passed on 11th December, 1901.
1901. January 1st—Proclamation and inauguration of the Commonwealth at Sydney, and swearing in of the Rt. Hon. E. Barton, first Prime Minister, and other members of the Ministry. Representatives from different parts of British Empire present, including representatives of Imperial and Indian regiments. State departments of Customs and Excise transferred, whilst those of the Post and Telegraph and Defence followed on 1st March.
- „ January 22nd—Death of Queen Victoria. Accession of King Edward VII. His Majesty's coronation took place on 9th August, 1902.
- „ February 15th—Despatch of Fifth (Imperial) Contingent—1,014 officers and men—for South Africa.
- „ March 31st—Eleventh census of Victoria, and third simultaneous census of Australia and New Zealand. Population enumerated:—  
In Victoria, 1,201,341, viz., 603,843 males and 597,458 females; in all the Australian States, 3,782,943, viz., 1,983,352 males and 1,799,591 females; and in New Zealand, 772,719, viz., 405,992 males, and 366,727 females (exclusive of 43,101 Maoris).
- „ May 9th—Opening of the first Parliament of the Commonwealth of Australia, in Melbourne, by His Royal Highness the Duke of Cornwall and York, Heir-Apparent to the Throne, under commission from His Majesty King Edward VII.
- „ October 8th—Interstate free trade established by the introduction of a provisional tariff by resolution of the Commonwealth House of Representatives.
1902. January 20th—Conference of Statisticians of all the Australian States and New Zealand, convened for the purpose of securing uniformity in the preparation of statistical returns, met in Hobart. Conference closed 12th February. This was the first Conference of the kind since 1875.
- „ September 16th—The Commonwealth Tariff finally passed.
1903. January 2nd—Death of Lieut.-Col. Sir Fredk. Sargood, Senator, formerly, M.L.C., one of the largest merchants of the Commonwealth, whilst on a trip through New Zealand. Accorded a public funeral.
- „ January 19th—Strike of coal miners of the Gippsland collieries. The immediate cause of the strike was a reduction of 1s. per day in their wages.
- „ February 7th—Re-organisation of the Cabinet; reduction of the number of Ministers from 9 to 7; and amalgamation of the two law departments.
- „ March 4th—Appointment of Mr. Thomas Tait, of Montreal, Canada, as Chief Commissioner of the Victorian Railways, announced by the Premier in the Legislative Assembly. Mr. W. Fitzpatrick, Acting Commissioner, and Mr. C. Hudson, General Manager of the Tasmanian Railways, appointed as subordinate Commissioners.

1903. March 16th—Preferential trade. Notice of motion by Mr. Chas. McArthur, M.P. for Liverpool in the House of Commons:—"That the recent developments in the fiscal and commercial policy of foreign countries which are ousting British trade, demand the serious consideration of the Government in concert with the Colonial Governments where necessary, with a view to safeguarding the trade of the Empire."
- " March 17th—Manning of the British Navy. The Naval Reserves Commission, Sir E. Gray, M.P., Chairman, recommends that the Colonies should give assistance in war time similar to that given to the army; and that a portion of the complement of every British man-of-war at a foreign station should consist of colonial reserve men.
- " April 15th to 22nd—Conference of Premiers, held at Sydney. Temporary settlement, pending appointment of the Interstate Commission, of the rival claims to the waters of the River Murray. The question of taking over of States' debts by the Commonwealth and several other matters were also considered.
- " May 9th—Railway Strike. The engine-drivers and firemen left their engines at midnight on 8th May. Traffic was for several days almost entirely suspended, a few suburban trains only being run. After two or three days a modified service was provided. The immediate ostensible cause of the strike was an order by the Government that the executives of the different societies of railway employees should withdraw from affiliation with the Trades Hall, which order most of the officers concerned refused to obey.
- " May 15th—Termination of the railway strike, the men surrendering unconditionally. The majority were allowed to resume their former duties.
- " " " Preferential trade. Speech by Rt. Hon. Jos. Chamberlain, Secretary of State for the Colonies, urging the necessity of British reciprocity with respect to preferential customs duties.
- " July 24th—Resignation of Right Hon. C. C. Kingston, Minister of Trade and Customs, from the Commonwealth Ministry. The principal point of difference between Mr. Kingston and his colleagues, which led up to his resignation, was the non-applicability of the proposed Conciliation and Arbitration Bill to vessels trading in Australian waters.
- " August 10th—Appointment of Lord Northcote as Governor-General of the Commonwealth officially announced.
- " August 22nd—Announcement of future policy by the Premier, the Hon. W. H. Irvine, at Nhill. To assist the development of Victoria closer settlement would receive special attention, to aid which compulsory land resumption would, if necessary, be resorted to; and improved mining tenures were promised. The *Factories Act* would be extended in a modified form.
- " September 12th—Death of the Hon. Duncan Gillies, Speaker of the State Legislative Assembly, and Premier of the colony from 18th February, 1886, to 5th November, 1890.

1903. September 18th—Preferential trade. Resignation of Rt. Hon. Jos. Chamberlain from the Imperial Ministry. Mr. Chamberlain's colleagues were not prepared to go the whole length advocated by him in regard to fiscal reform. Mr. Chamberlain resigned to avoid embarrassing the Prime Minister, and in order to educate the people in regard to the preferential trade scheme, and the tax on food involved, which he could do more effectually in an unofficial capacity.
- „ October 6th—Inauguration of the Federal High Court, and the swearing in of Sir Samuel Griffith, late Chief Justice of Queensland, as Chief Justice, and of the Right Hon. Sir Edmund Barton, K.C., late Prime Minister of the Commonwealth, and the Hon. R. E. O'Connor, K.C., as judges.
- „ October 29th—Factories Bill. Conference between the two State Houses, to arrange a compromise. The Bill was agreed to in an amended form.
- „ October 29th—Speech at Ballarat by Hon. Alfred Deakin, new Prime Minister (formerly Attorney-General) of the Commonwealth, Opening of the election campaign and declaration of Ministerial policy. Preferential trade was fully dealt with, and the principle affirmed.
- „ November 24th—Departure of the State Governor, Sir Geo. Sydenham Clarke, he having been appointed as one of a committee of three to advise the Imperial authorities as to the re-organisation of the War Office.
- „ December 16th—Commonwealth elections. Female franchise exercised for the first time in Victoria.
- „ December 24th—Prorogation of the State Parliament. This is memorable as being the last meeting of the unreformed Parliament. The new Parliament is to consist of a smaller number of members, and the constitution of the Upper House is altered, and its franchise broadened. Several other reforms have also been provided for.
-

## CONSTITUTION AND GOVERNMENT.

Division of  
Govern-  
mental  
functions

Victoria is one of the six States forming the Commonwealth of Australia; and is, except as regards matters dealt with by the Federal Parliament, a self-governing colony under the British Crown. By the Victorian Constitution, the Parliament was empowered generally "to make laws in and for Victoria in all cases whatsoever"; and in addition was granted special powers to alter the Constitution, to impose customs duties, and to regulate mining and the sale and occupation of Crown lands. Such powers are merely restricted to this extent:—That certain measures are to be reserved for the Royal Assent, such, for instance, as matters inconsistent with treaty obligations, divorce, currency, military or naval discipline, imperial trade and shipping, and rights of British subjects not resident in the colony; but the Royal Assent is never withheld so long as such measures are not "repugnant to the law of England." The powers of the Victorian Parliament have been considerably curtailed by the federation of the Australian Colonies, and the transfer of various functions to the Commonwealth Parliament. Although the matters which will ultimately be dealt with by that body will abrogate from the State Parliament many of its present functions, the internal development of the State still depends upon the local Parliament; the power of taxation for State purposes (other than by Customs and Excise) is retained; Crown lands, agriculture, mining, and factory legislation also remain; neither the State railways nor the public debts have yet been touched by the Commonwealth; whilst it will probably be many years before that Parliament will be able to assume all the multifarious functions assigned to it, and which must in the interim be dealt with by the States. The Victorian Parliament has also delegated to municipal bodies certain matters of a local nature, and a complete system of municipal government has been established.

## THE CONSTITUTION OF VICTORIA.

Historical  
synopsis.

On the separation of the district of Port Phillip from the other part of New South Wales, in 1851, and its formation into the separate self-governing Colony of Victoria, the legislature established consisted of one chamber, a Legislative Council of thirty members, ten appointed by the Crown and twenty elected. The qualification for electors was the possession of a freehold estate of the clear value of £100 or a

leasehold of the clear annual value of £10. In December, 1852, a despatch was received from Sir John S. Pakington, then Secretary of State for the Colonies, inviting the Legislative Council to pass a Bill more nearly assimilating the form of the institutions of the colony to that prevailing in the mother country, particularly in reference to the creation of a second chamber. The suggestion was acted on, and in March, 1854, a Bill "to establish a constitution in and for the Colony of Victoria" was passed, submitted to the Lieutenant-Governor, and at once forwarded by him to the Secretary of State. The Bill was assented to by Her Majesty in Council on the 21st July, 1855; it came into force by proclamation on the 23rd November, 1855; and the first meeting of the new Parliament was held on the 21st November, 1856. Under the new constitution, which is still in force, although important amendments have from time to time been made, the widest powers of self-government were granted, the change to responsible government was made, and the bi-cameral and cabinet systems were introduced.

The first alteration made by the Victorian Parliament in the constitution was the abolition of the property qualification of members of the Legislative Assembly on 27th August, 1857, and the establishment of universal manhood suffrage on 24th November of the same year. On 17th December, 1858, the number of members of the Legislative Assembly was increased to 78, to be returned for 49 electoral districts. It was not until over ten years later, viz., on the 1st January, 1869, that another change was made, when the property qualification of members of the Legislative Council was reduced from £5,000 capital value or £500 annual value to half those amounts respectively, and that of electors from £1,000 capital value or £100 annual value to an annual value of £50, if the lands were rated to that amount in some municipal district or districts. On 2nd November, 1876, the number of members of the Legislative Assembly was increased to 86, and the districts to 55. The property qualification of members and electors of the Legislative Council was further reduced, on the 28th November, 1881, to a freehold of the annual rateable value of £100, free of all incumbrances in the case of a member, and to freehold of the annual rateable value of £10, or a leasehold originally created for not less than five years, or occupying tenancy of the rateable annual value of £25, in the case of an elector. By the same Act the number of members of the Council was increased from 30 to 42, the number of provinces from 6 to 14, whilst the tenure was reduced to six years. The final increase in the number of members was made on the 22nd December, 1888, when the number for the Council was increased to 48 and that for the Assembly to 95 for 84 districts.

Changes in  
the consti-  
tution.

Plural  
voting  
abolished.

On the 30th August, 1899, plural voting was abolished, it being provided that no person should on any one day vote in more than one electoral district at an election for the Assembly. Plural voting is still, however, permissible in elections for the Upper House, but owing to the large area of the provinces, it is improbable that the right is exercised to any extent.

Reform Act  
1903.

An Act "to provide for the Reform of the Constitution of Victoria" was passed and reserved for the Royal Assent on the 7th April, 1903. After an interval of some months the Royal Assent was proclaimed on the 26th November, 1903. This Act, entitled the "Constitution Act 1903," provides for a reduction in the number of responsible Ministers from 10 to 8, and their salaries from £10,400 to £8,400; in the number of members of the Legislative Council from 48 to 35, including one special representative for the State railways and public servants; but an increase in the number of Electoral Provinces from 14 to 17, each being now represented by 2 members elected for six years—1 retiring every three years by rotation, except at a general election, when one-half of the members are to be elected for only three years. The property qualification of members of the Council was reduced from £100 to £50 as the annual value of the freehold, and that of electors qualifying as lessees or occupying tenants from an annual value of £25 to one of £15. A reduction was also made in the number of members of the Legislative Assembly from 95 to 68—including 2 to be specially elected by the railway officers, and 1 by the State public servants, and in that of the electoral districts from 84 to 65.

Both Houses were prorogued on 24th December, 1903, being several weeks after the Royal Assent to the Act had been proclaimed, Acts having been passed determining the boundaries of the new constituencies. Power is given to any Minister who is a member of the Assembly to sit in the Council—or vice versa—in order to explain the provisions of any measure connected with any department administered by him. The Council is empowered to suggest alterations in any Appropriation Bill once at each of three stages of the Bill, viz.—(a) when in Committee, (b) on the Report of the Committee, (c) on the third reading. The remedy provided to meet disagreements between the two Houses is the simultaneous dissolution of both after a Bill has been twice submitted to, and rejected by, the Council—viz., once before, and once after. a dissolution of the Assembly in consequence of such first rejection.

Voting by  
post at  
Elections.

To facilitate the exercise of the franchise in sparsely populated districts, the "Voting by Post Act 1900" was passed on the 17th October, 1900. This measure enables any elector,

who is resident, or is likely to be staying, on the polling day more than five miles from the nearest polling booth, or who is prevented by reason of sickness or infirmity from voting personally, to obtain a ballot paper entitling him to vote by post for any candidate in his district standing for either House of Parliament. This Act came into force on 1st December, 1900, and was to continue in force for three years, and thence until the end of the next ensuing session of Parliament. The first experience of the working of this Act was at the Commonwealth Elections held in March, 1901, at which 1,269 postal ballot papers were used in 18 out of the 19 contested districts for the House of Representatives, being about 1 per cent. of the total votes recorded. The number of electors who voted by post for the Senate throughout the whole State was 1,227 or 1 in every 114 who voted. Voting by post is also provided for in the "Commonwealth Electoral Act."

In cases where a person is entitled to become an elector and his name does not appear on the Ratepayers' or General Roll, such person could, by an Act passed in 1898, take out a Right at any time before the day of election, after giving seven days' notice, and apply to a Court of Petty Sessions for a Certificate enabling him to vote. The "Reform Act of 1903" has now, however, restricted the issue of these certificates. No certificate shall now be granted between the day of dissolution and the day of polling in the case of a Parliament dissolved before its expiry by effluxion of time; nor between thirty days before the time at which the Assembly would expire by effluxion of time, if not sooner dissolved, and the day of polling; nor between the day on which any member's seat becomes vacant and the day of polling.

Voters' Certificates.

## THE REFORMED CONSTITUTION.

The Governor acts under the authority of Letters Patent under the Great Seal of the United Kingdom, and according to Royal instructions issued by the Colonial Office. He is the official head of the Legislature, and assents in the name of the Crown to all Acts passed by the Parliament, reserving for the Royal Assent certain Bills already described. The only matters in which the exercise of any discretion is required on the part of the Governor are the assenting to or dissenting from, or reserving, of Bills passed by the Parliament; the granting or withholding of a dissolution of Parliament when requested by a Premier; or the appointment of a new Ministry.

The Governor.

When a Ministry is defeated in Parliament or at the polls, its members tender their resignations to the Governor, whose duty it is to announce his intention of accepting them.

Forming a new Ministry.

The outgoing Premier generally suggests to the Governor, as his successor, the name of the most prominent of his opponents, generally the leader of the Opposition. Thereupon the Governor "sends for" the individual suggested, who, if he feels in a position to carry on the Government, endeavours to form a Ministry. If he fails, he informs the Governor of the fact and some one else is applied to. The distribution of portfolios is first arranged by the proposed Ministers themselves, and submitted to the Governor for approval, who always adopts it, unless the list should contain the name of anyone against whom very serious objections exist, or proposes a new and revolutionary arrangement.

Granting  
a dissolution.

When a Ministry finds that it is unable to carry on the affairs of the country in the manner it deems essential for the well-being of the community, or when it is defeated on a measure which it considers vital, or when it has not a proper working majority, the Premier may, instead of advising the Governor to "send for" some one else, ask for a dissolution; and the principle which decides a Governor in granting or refusing such a request is the probability of success for the Ministry in the event of its being granted. In regard to these matters, however, the instructions issued to the Governor are elaborate and definite; and it is very rarely that any personal exercise of discretion is necessary. In other matters the Governor acts on the advice of the Executive Council.

The Execu-  
tive  
Council.

The Executive Council consists of two classes of members, viz.:—(a) Members forming the Ministry of the day, whether salaried or honorary; (b) all ex-Ministers who have not actually resigned or vacated their seats. These Executive Councillors take no active part, as such, in the deliberations of the Ministry, the title being merely an honorary distinction. The expression "Governor in Council," occurring so frequently in Victorian Acts, means the Governor by and with the advice of such members of the Executive Council as are included in the former category mentioned above. Even in its active phase, that of the existing Ministry, the Executive Council has two shapes, the formal and the informal. The latter, which is spoken of as the "Cabinet," is the real core and essence of the Government. In its private meetings at the Premier's office no one is admitted but the actual Ministry of the day, no records of the meetings transpire, and no official notice is ever taken of the proceedings. The former is presided over by the Governor, and attended by the Clerk of the Council, who keeps a formal record of its proceedings and deliberations, which are frequently published, with the names of its members prefixed. Here the decisions of the Cabinet are put into official form.

The number of salaried Ministers is now limited to eight, and the salaries to £8,400; and four at least must be members of the Council or Assembly, but not more than two shall be members of the Council nor more than six of the Assembly. Upon accepting salaried office a Minister vacates his seat in Parliament, but he is re-eligible, and a subsequent change from one office to another does not necessitate his re-election. Although only four Ministers are required to be members of either House, in practice all members of a Ministry are always members. The head of the Ministry—the Premier, a merely titular distinction—almost invariably fills the office either of Treasurer or Chief Secretary, but may occupy any office. The Hon. W. H. Irvine, the last Premier, during the greater portion of the last Parliament held the position of Attorney-General and Solicitor-General.

Responsible  
Ministers.

The Parliament consists of two Chambers, the Legislative Council and the Legislative Assembly. The general power of legislation is conferred upon "Her Majesty, by and with the advice and consent of the said Council and Assembly." By Sec. 56 of the "Constitution Act" it was provided that—"All Bills for appropriating any part of the Revenue of Victoria, and for imposing any duty, rate, tax, rent, return, or impost shall originate in the Assembly, and may be rejected, but not altered by the Council." There was great difference of opinion as to the interpretation of this section, it being held by many that the words "all Bills for appropriating" (revenue) "and for imposing" (taxes) signified Bills having for their principal object the authorizing of payments or the granting of supply; whilst others contended that legislation which merely incidentally or consequentially authorizes the collection of money or the payment of officials may be dealt with as ordinary legislation by the Council. This matter has now been dealt with by Sec. 30 of the "Reform Act of 1903," which declares that a Bill shall not be deemed for appropriating, &c., or for imposing, &c., by reason only of its containing provisions "for the imposition or appropriation of fines or other pecuniary penalties or for the demand or payment or appropriation of fees for licences or fees for services under such Bill." In regard to the latter portion of Sec. 56, providing that money bills must originate in the Assembly, and may be rejected but not altered by the Council, the new Act provides, as in the Commonwealth Constitution, that the Council may suggest alterations as mentioned previously.

The Parlia-  
ment.

It is also provided by Sec. 57 of the Constitution that Appropriation Bills must have been first recommended by a message of the Governor to the Assembly before they can be introduced. The Governor, of course, acts in this matter on the advice of the Ministry.

The Legis-  
lative  
Council.

The Council—called the Upper House—now consists of thirty-five members, one of whom is a representative of the State public officers and railways officers. The State is now divided into seventeen electoral provinces, each returning two members. The member in each constituency who, of the two elected, receives the highest number of votes retains his seat for six years, whilst the other member retains his seat for three years only, subject, of course, to the dissolution of both Houses in case of a deadlock, as previously described. One half of the members will thus retire every three years. To be qualified for membership, a candidate must be a male of the age of thirty years, either a natural-born subject or naturalized and resident in Victoria for ten years, and must have been beneficially entitled to a freehold estate in Victoria of the clear annual value of £50 for one year “previously to” his election. The following male persons aged twenty-one or over, if they are natural-born subjects or naturalized for three years and resident in Victoria for twelve months, are entitled to vote for the Council in that electoral division on the rolls of which their names appear:—The owner of a freehold rated at an annual value of £10; the owner of a leasehold, created originally for five years, or the occupying tenant, of land rated at £15 annual value; graduates of a British University, matriculated students of the University of Melbourne, barristers and solicitors, legally-qualified medical practitioners, duly appointed ministers of religion, certificated schoolmasters, naval and military officers, active and retired. All voters, except those claiming in respect of property, must take out electors’ rights in the division in which they reside.

The Legis-  
lative  
Assembly.

The Assembly, commonly called the Popular or Lower House, now consists of sixty-eight members, two of whom are special representatives of the railway officers, and one of whom is a special representative of the State Public Service proper, including the police and teachers of State schools. Officers employed under the Commonwealth and temporary officers under the State still retain the ordinary franchise. Provision is also made for the reduction of the railways representation to one member in the event of the number of officers not exceeding the quota by one-half. The quota is determined by dividing the total number of electors on the rolls for the Assembly by sixty-eight. For the other sixty-five seats single electorates are now provided. Each Assembly expires by effluxion of time at the end of three years from its first meeting, and may be sooner dissolved by the Governor. To be qualified for election to the Assembly, a candidate must be a natural-born subject or a person who has been naturalized for five years and resident in Victoria for two years. The following persons are ineligible:—Judges, ministers of religion, Government contractors, uncertificated insolvents,

holders of offices of profit under the Crown (except Ministers), and persons who have been attainted of treason, or convicted of felony or infamous offence in the British dominions. Moreover, a member vacates his seat if he resigns; is absent for a whole session without permission of the House; takes any oath or declaration of allegiance or adherence to a foreign power, or becomes a subject of a foreign State; becomes bankrupt, insolvent, or a public defaulter; is attainted of treason, or convicted of felony, &c.; becomes "non compos mentis"; or enters into a Government contract. Universal manhood suffrage is in force for the Assembly, all males over the age of twenty-one years, natural-born or naturalized, untainted by crime, being allowed a vote if they hold an elector's right and their names are on a general roll, and are resident in the State twelve months and in the district one month. If a person is on a ratepayers' roll it is unnecessary to take out an elector's right or to reside in the district, although the occupying tenant is entitled to be entered as the ratepayer in priority to the owner, and is in most cases so entered. Where a tenant finds that his landlord has paid the rates in his own name, and is consequently entered as the ratepayer in respect of the premises occupied by the tenant, an elector's right must be taken out. Even where the tenant is entered on the Ratepayers' Roll in respect of the premises occupied by him, and the property is of the capital value of £50 or the annual value of £5, the owner may take out an elector's right in respect thereof. There are consequently a large number of persons on the rolls for several districts who were formerly entitled to vote in all of such districts; but, in August, 1899, plural voting was abolished in respect of the Assembly, and now a vote is allowed in only one constituency, although the elector may, if on the roll for more than one district, choose which district he shall vote in. A member of the Assembly receives reimbursement of his expenses in relation to his attendance at the rate of £300 per annum. The Assembly is presided over by a Speaker, who is elected at the first meeting after every general election, and vacates his seat by expiry or dissolution of the House, and by death, resignation, or a removing vote of the House. When the Assembly resolves itself into a Committee of the whole House to consider the details of any measure, it is presided over by a Chairman of Committees. The Assembly cannot proceed to business unless twenty members, exclusive of the Speaker, are present; and the Speaker has a casting but no substantive vote.

By an Act (No. 1891) passed on the 24th December, 1903, it is provided that the electoral expenses (other than personal expenses of a candidate in travelling and attending election meetings) of a candidate for the Legislative Council and

Limitation  
of election  
expenses.

Assembly shall not exceed £400 and £150 respectively. A limitation is also placed upon the matters in respect of which such sums may be expended. No electoral expenses shall be incurred by or on behalf of a candidate except in respect of:—

- (1) The expenses of printing, advertising, publishing, issuing, and distributing addresses and notices, and purchase of rolls.
- (2) The expenses of stationery, messages, postage, and telegrams.
- (3) The expenses of holding public meetings, and hiring halls for that purpose.
- (4) The expenses of committee rooms.
- (5) One scrutineer at each polling-booth, and no more.
- (6) One agent for any electoral province or district.

### STATE ELECTIONS.

At the general State elections, held on 1st October, 1902, 25 of the 95 seats were uncontested. The number of electors on the rolls for the Assembly, including voters' certificates issued by the Court, was 290,241, of whom 74,178 were in uncontested districts; and of these 141,471 voted, being 65·47 per cent. of the number entitled. The following are the proportions who voted at the last fifteen general elections of the State Lower House in districts in which the election was contested:—

#### PROPORTION OF VOTERS AT GENERAL ELECTIONS FOR THE LEGISLATIVE ASSEMBLY, 1866 TO 1902.

Year of General Election.	Proportion of Electors of Contested Districts who voted.	Year of General Election.	Proportion of Electors of Contested Districts who voted.
	Per cent.		Per cent.
1866	55·10	1886	64·70
1868	61·59	1889	66·58
1871	65·02	1892	65·12
1874	61·00	1894	70·99
1877	62·29	1897	70·33
1880 (February)	66·56	1900	63·47
1880 (July)	65·85	1902	65·47
1883	64·96		

### STATE ACTS PASSED, 1903.

The following is a short synopsis of the Acts passed during 1903 by the Victorian Parliament:—

Act No.      Date.

1814.    February 5th—The *Ballarat Court House Land Act* 1902 revokes in part a Crown grant to the Ballarat municipality of certain land for market purposes, in order that a court house may be built upon it.

State elections, votes polled, &c

Acts passed during 1903.

1815. February 5th—The *Administration and Probate Act* 1903 amends, for the year 1903, the Administration and Probate Acts, by reducing the value of estates upon which duty is chargeable, to £100, and by increasing the rate per cent. on all estates, real and personal, according to a sliding scale given in a schedule. Provisions are also included dealing with refund of excess duty, additional particulars in statements, settlements, colorable gifts, joint transfers and investments, and duties payable in case of widows and children.
1816. February 6th—The *Seed Advances Act* 1903 authorizes the Minister to make advances, during 1903, not exceeding in value £65 where a mortgage is the security, or £40 where a preferable lien on crops is the security, of seed or fodder, or both, or to give an order for the same to any cultivator, for the purpose of cultivating his farm. To provide for these loans, authority is given to appropriate any loan moneys in hand up to £100,000, to be replaced by the issue of Government debentures. Four per cent. interest is to be charged on the advances.
1817. February 20th—The *Acting Victorian Railways Commissioner Act* 1903 gives the Governor-in-Council power to appoint an Acting Railways Commissioner for any period up to three months.
1818. February 27th—This Act applies £323,073 out of the consolidated revenue to the service of the year 1902-3.
1819. March 5th—The *Income Tax Act* 1903 declares the rates for 1903 of tax on taxable incomes—that is, on incomes over £125, with an exemption of £100, except in the case of companies, or of persons whose income is over £500. The rate is 4d. in the £ of the taxable amount of incomes derived from personal exertion, up to £500; 5d. on that between £500 and £1,000; 6d. on that between £1,000 and £1,500; 7d. on that between £1,500 and £2,000; and 8d. on anything over £2,000. On incomes derived from property double rates are charged. The Act also clearly sets forth the position of companies. These are taxable as persons, except mining companies, the shareholders of which pay on the dividends received. Special provision is made for the assessment and taxation of life, fire, fidelity, and guarantee assurance and insurance companies. Executors of the estates of deceased taxpayers are to make returns of such estates, or, if unable to do so, the Commissioner may make an assessment of the amount which he thinks ought to be taxed. The Income Tax Acts are continued in force until 31st December, 1903.
1820. April 6th—The *Railways Act* 1903 provides that special and deferred repairs to the extent of £60,000 may be effected in railway lines and works, and the cost thereof paid out of the Railway Accident Fund. The Railways Stores Suspense Account is not to be credited with the stores, to the value of £50,000 required for these repairs.
1821. April 6th—The *Church of England Act* 1903 places on a legal basis the first assemblies held in the dioceses of Ballarat, Bendigo, and Wangaratta, and declares that every lay representative who took part or voted at such first assembly is deemed to have been duly elected and qualified as a lay member thereof.
1822. April 6th—The *Mallee Land Account Act* 1903 authorizes the transfer before the 31st August, 1903, of the whole or any part of the sum standing to the credit of the Mallee land account, to the consolidated revenue, in the event of there being a deficit in the accounts of the year ending 30th June, 1903.

1823. April 6th—The *Income Tax Receipts Act* 1903 enacts that income tax collected in July and August shall be credited to the financial year 1902-3.
1824. April 6th—The *Patents Act* 1903 repeals the *Patents Act* 1890 in regard to setting out in the complete specification, and to a report by the Examiner, as to whether or not an invention was novel, or not already in possession of the public with the consent or allowance of the true and first inventor.
1825. April 6th—The *Victorian Railways Commissioners Act* 1903 provides for the appointment of three railways commissioners in place of one, and fixes their salaries, terms of office, and powers.
1826. April 6th—The *University Act* 1903 gives power to the University of Melbourne to grant new degrees, abolishing the restriction imposed by the Act of 1890, viz:—The granting only of degrees which can be conferred by any university in the British dominions.
1827. April 6th—The *Probate Charges Act* 1903 relates to the legal charges for obtaining probate or letters of administration. Obtaining a grant of probate of an estate of value not exceeding £600 is chargeable at £6, and for every additional £100 or part thereof up to £1,500, a further sum of 10s.; and for every addition of £500 or part thereof up to £5,000, a further charge of 10s. is added. For obtaining letters of administration of an estate of value not exceeding £1,000, the charge is £2 higher than the rates for obtaining probate; and where the property is in excess of £1,000 but below £5,000, the charge is £3 10s. higher than the probate charge. These charges do not include the cost of necessary advertising, fees, duty, or stamps, nor preparing and passing statement for duty; but for unusual work, a legal practitioner may have his bill of costs submitted to and taxed by the taxing officer.
1828. April 6th—The *Coroners Act* 1903 gives coroners and justices authority to hold inquests and inquiries without a jury. In special cases, however, provision is made for an inquest by jury.
1829. April 6th—The *Unlawful Assemblies and Processions Act* 1903 defines the boundaries within which it is illegal to hold meetings and processions in the vicinity of the State Parliament House.
1830. April 6th—The *Yea Racecourse and Public Recreation Reserve Land Act* 1903 provides for the sale of the Yea racecourse and public recreation reserve, and the purchase of other land in lieu thereof.
1831. April 6th—The *Land Act* 1903 relates to the selection and purchase of Crown land. Any unalienated land of the Crown may, before or after being classified, be made available for selection under grazing or agricultural allotment licence or grazing area lease. A provisional valuation and classification is to be made before the land is available, showing the rates of licence fee, rent, or purchase money payable therefor; and on the completion of a permanent survey the value may be determined by a classification board, and the fee, rent, and purchase money fixed to accord with the value as so determined; and these rates shall be substituted for those fixed by the *Land Act* 1901 for land of the same classification. Power is also given to the Governor-in-Council to increase the rates of fees, rent, or purchase money payable under the previous Act, for any unalienated land of the Crown.

1832. April 6th—The *Water Act* 1903 provides that holders of Crown leases within the Condah Swamp lands area for terms of twenty-one years shall be deemed to be the owners of the land for the purposes of the *Water Act*; but any petition to the Governor-in-Council by owners of land praying for the constitution of an irrigation or water supply district and the creation of a trust must be signed by owners of land, a majority of whom are freeholders.
1833. April 6th—The *Colac Market Land Act* 1903 revokes the reservation of portion of certain land in Colac as a site for a market. The land is to be dealt with as unoccupied Crown land.
1834. April 6th—The *Colac Library Act* 1903 revokes the reservation of certain land in Colac as a site for a public library and reading room, and authorizes its sale.
1835. April 6th—The *Registration of Births, Deaths, and Marriages Act* 1903 provides for the legitimation of illegitimate children whose parents have, or shall have, intermarried, provided there were no legal impediments to the marriage at the time of the child's birth, on production to a registrar of a statutory declaration of the parentage and marriage and non-existence of impediment. Children so legitimated are entitled to all the rights of a child born in wedlock; but accrued rights in property are not affected. To take the benefit of the Act, illegitimate children of parents married before the passing of the Act must have been registered by 6th October, 1903 (being six months after the passing of the Act), but children, whether born before or after the passing of the Act, whose parents marry after the passing of the Act, must be registered within six months after the marriage.
1836. April 6th—The *Insolvency Act* 1903, amending the law relating to insolvency, deals with fees and remuneration payable to assignees, with deeds of arrangement, distress for rent against assigned estates, and other matters.
1837. April 6th—The *Legal Profession Practice Act* 1903 removes from women any sex disability for admission to practise as barristers and solicitors of the Supreme Court.
1838. April 6th—The *Benalla Fire Brigade Station Land Act* 1903 revokes in part a proclamation of the year 1874, as a public road, of certain land in Benalla, and vests it in the Country Fire Brigades Board.
1839. April 6th—The *St. Arnaud Land Act* 1903 revokes a permanent reservation of the year 1860, of certain land at St. Arnaud as a site for a combined denominational school, and re-vests it in the Crown.
1840. April 6th—The *Dairying Companies Act* 1903 adds certain other companies to the list of companies named in the Schedule of the Act of 1900.
1841. April 6th—The *Melbourne Tramways Trust Act* 1903 restricts the transfer of debentures held by the Trust, representing the sinking fund of that body, by permitting the Trust's Secretary to endorse on the face of the document a statement that the debenture has ceased to be transferable. If it is desired to make the document again transferable and negotiable, a note to that effect is added, signed by the Secretary and two members of the Trust.

1842. April 6th—The *Mildura Irrigation Trusts Act* 1903 amends the Act of 1895. The rates which may be struck on rateable land are fixed for the different classes of land. The Commissioners of the first Mildura Irrigation Trust are empowered to make regulations for the keeping in repair of pipes and apparatus and preventing any tampering therewith, for preventing waste of water, and generally for carrying into effect the provisions of the Trusts Acts. Arrears of rates may be met by a refusal of supply, and, in certain cases, by the forfeiture of the property. There are also many other new provisions in connection with these Trusts.
1843. April 6th—The *Necropolis, Spring Vale, Act* 1903 incorporates Trustees for the institution, providing for their retirement or replacement or reappointment, giving them power to borrow up to £15,000, and fixing their fees for attendance at meetings. They are to permit poor persons to be buried without charge, upon an order signed by a justice.
1844. April 7th—This Act applies £977,416 out of the consolidated revenue for the service of the year ending 30th June, 1903, and appropriates the sums granted under this and other Supply Acts, amounting in the aggregate to £4,361,799 for the purposes of the government of the State.

## 2ND SESSION.

1845. May 22nd—This Act applies £903,711 out of the consolidated revenue to the service of the year 1903-4.
1846. May 22nd—The *Railway Employés Strike Act* 1903 enacts that strikers have ceased to be officers of the railway service, and have forfeited all pension rights or retiring allowances, and all legal rights previously secured to them by virtue of their position in the service. The Commissioners have power to reinstate strikers and restore their rights; also to permanently engage persons taken on during the strike, and to promote non-strikers. No action is to hold against the Commissioners for any loss or damage arising out of the strike.
1847. May 22nd—The *Treasury Bonds Act* 1903 authorizes the issue of Treasury bonds up to £5,000,000. The rate of interest is not to exceed 4 per cent. The moneys raised are to be applied only towards paying off, re-purchasing, or redeeming the debentures issued under *The Railway Loan Act* 1878.
1848. May 22nd—The *Melbourne and Metropolitan Board of Works Payment Act* 1903 directs the application of £233,673 6s. 11d., payable by the board to the State by an Act of 1890, towards meeting losses on the flotation and conversion into government stock, or of flotation into Treasury bonds of moneys falling due in London, or to the credit of the inscribed stock redemption fund.
1849. August 25—The *Ministers and Special and other Appropriations Retrenchment Act* 1902, which was reserved for the King's assent on 25th November, 1902, is decreed to have been in operation from the 1st August, 1902, to 30th June, 1903. It provides for the reduction of salaries of Ministers of the Crown, the Master-in-Equity, and certain other officers of the public service. Relative position and seniority in the service is not to be altered by the reductions, nor are pensions and allowances to be affected.

3RD SESSION.

1850. September 30th—This Act applies £383,212 out of the consolidated revenue to the service of the year 1903-4, and makes it available for any service voted by the Legislative Assembly in the session.
1851. October 13th—The *Dairying Companies Act* 1903 (No. 2) further adds to the companies specified in the Schedule to the Act of 1900.
1852. October 26th—This Act applies £43,992 out of the consolidated revenue to the service of the year 1902-1903.
1853. October 26th—The *Agricultural Colleges Act* 1903 empowers the Council of agricultural education to advance to the municipality of Castle Donnington £800 out of the Agricultural College fund account for the construction of a lift bridge and a punt at Pentall Island. The Council of Agriculture is also empowered to spend £200 in the construction of a punt at the access to the eastern end of the island.
1854. October 26th—The *Benalla Fire Brigade Station Land Act* 1903 alters the frontage of the land vested in the Board.
1855. October 26th—The *Joint Library Committee Act* 1903 defines the tenure of the Parliamentary Library Committee.
1856. October 28th—This Act applies £711,349 out of the consolidated revenue for the service of the year 1903-4.
1857. October 30th—The *Factories and Shops Act* 1903 continues until the end of 1905, and amends, the provisions in force regarding Wages Boards. A Court of Industrial Appeals is constituted for deciding all appeals against determinations of special boards, or for dealing with determinations of special boards referred to the Court by the Minister. The Court is to consist of a Supreme Court Judge. The principles of determinations by special boards are laid down. No determination of a special board is to apply to the children of the employer.
1858. November 12th—The *Municipal Overdrafts (Indemnity) Act* 1903, dating from 29th September, 1903, indemnifies councillors of various municipalities for borrowing moneys by overdrafts on bankers for the purposes of their municipalities if the moneys so borrowed were *bona fide* used for municipal purposes. Power is also given to the municipalities to expend funds in defraying costs incurred in combating the outbreak of swine fever.
1859. November 12th—The *Royal Agricultural Show Day Act* 1903 enacts that Show Day is a holiday in metropolitan and certain country districts, which are specified in the Schedule.
1860. November 23rd—The *Senate Elections (Times and Places) Act* 1903 empowers the Governor-in-Council to fix dates and places in connection with the election of Federal senators for Victoria.
1861. November 23rd—The *Railway Passengers' Actions Act* 1903 facilitates the settling of claims for injuries.
1862. 23rd November—The *Administration and Probate Duties Act* 1903 (No. 2) extends Act No. 1815, previously referred to, until 1st January, 1905. The rates imposed therein are continued, with the exception that estates under £500 are now duty free.

1863. November 23rd—The *Income Tax Act* 1903 (No. 2) declares the rates of income tax for the year ending 31st December, 1904, and continues the Acts in force until that date. The minimum income taxable is £150, and the exemption is £100. Incomes from personal exertion are to pay 3d. for every pound of the taxable amount up to £300; thence up to £800, 4d.; thence to £1,300, 5d.; thence to £1,800, 6d.; and over £1,800, 7d. Incomes from property are double these rates.
1864. November 26th—The *Constitution Act* 1903 has been previously explained, on page 10, *ante*.
1865. December 9th—The *Old Age Pensions Act* 1903 amends the act of 1901, more clearly defining the responsibilities of relatives, and defines the position as to property which may accrue to pensioners, the amount of pension paid being deemed a debt to the Crown, after the death of the pensioner.
1866. December 22nd—The *Health Act* 1903 orders cowkeepers and dairymen to construct proper cowyards, pigsties, etc. It also regulates the use of nightsoil, thoroughly deodorized and disinfected, upon lands or gardens.
1867. December 22nd—The *Kerang Lands Act* 1903 provides for the sale of certain land granted as a site for a racecourse near Kerang, and for the application of the proceeds to the improvement of another site.
1868. December 22nd—The *Ballarat Agricultural and Pastoral Society's Land Act* 1903 provides for the resumption of certain land at Learmonth, for the sale of a certain portion of it, and for the payment of the proceeds to the Ballarat Agricultural and Pastoral Society.
1869. December 22nd—The *Surplus Revenue Act* 1903, dating from 30th June, 1903, applies the surplus revenue of the year ended on that date to the service of the year 1903-4.
1870. December 22nd—The *Municipal Endowment Reduction Act* 1903 provides for the temporary reduction of the municipal endowment to £50,000 for the year 1903-4.
1871. December 22nd—The *Wombat Land Act* 1903 revokes the permanent reservation of certain land at Wombat for the preservation and growth of timber. The land may now be dealt with as unalienated land of the Crown.
1872. December 22nd—The *Electoral Rolls Act* 1903 relates to the preparation of rolls for the two Houses of Parliament, suspending parts of other Acts from operation.
1873. December 22nd—The *Lunacy Act* 1903 amends the law relating to lunacy. Part I. deals with administration. An Inspector-General of the Insane, who must be a legally qualified medical practitioner, is to be appointed, to hold office for five years. The officers of the Lunacy department are removed from the control of the Public Service Board to that of the Inspector-General. A pathologist may be appointed for one year. Part II. deals with the reception of patients, specifying how persons deemed to be insane are to be examined by justices, and the certificates that are to attend their commitment to an asylum. All

such examinations are to be conducted in private. Part III. deals with the detention and maintenance of patients. In addition to proclaiming hospitals for the insane, the Governor-in-Council may proclaim receiving houses or wards in public hospitals, and justices may order persons apprehended under Part II. to be conveyed thither, whence, after observation and examination, they must be discharged or transferred to an asylum. Cottages and other separate accommodation may be relegated to the sole use of paying patients, and regulations made for their management, but these patients are to be subject to the same control and periodical examination as others. The Chief Secretary is empowered to issue licences for private asylums. Hospitals and wards for the criminal insane are to be provided. Restrictions are put upon the employment of mechanical restraint and seclusion. Official visitors are to be appointed to inspect patients and asylums, to make inquiries as to the care and treatment of patients, and to examine books and documents. A Supreme Court judge may direct any patient to be visited, and a report furnished. All patients in asylums are to be examined periodically by the superintendents, and those in licensed houses by the Government medical officer. Patients may be transferred from one asylum to another, or given trial leave outside the asylums, or boarded out. Patients may be taken out of Victoria by order of the Supreme Court. The methods of effecting the discharge of patients are also set out. The various forms of orders, registers, and certificates are given in the Schedules.

1874. December 22nd—The *Hepburn Springs Land Act* 1903 provides for the leasing of certain lands for the purpose of working mineral springs at Hepburn.
1875. December 24th—The *Transfer of Land Act* 1903 amends the Act of 1890, simplifying the procedure in regard to transfer of land.
1876. December 24th—The *Cremation Act* 1903 regulates cremation. Trustees of cemeteries, with four exceptions, may provide for cremation, and trustees of cemeteries for cremation may be appointed. Notice of intention to erect a crematorium must be published. All cremations are to be recorded in a register, and this register, or a copy or extract therefrom, is to be received in the courts as evidence of cremation. Permission to cremate must be obtained from an officer of the trustees on production of a medical certificate as to cause of death and other circumstances.
1877. December 24th—The *Committee of Public Accounts Act* 1903 defines the tenure of the Committee and gives it power to take evidence on oath.
1878. December 24th—The *Savings Bank Act* 1903 empowers the Commissioners to alter the rate of interest payable under the Act of 1896, but so that it shall not exceed 5 per cent., to alter the limit of the total issue of mortgage bonds and debentures from £2,000,000 to £3,000,000, to raise the limit of debentures issuable, and to issue debentures in exchange for mortgage bonds.
1879. December 24th—The *Burrumbeet Park Railway Construction Act* 1903 authorizes the construction of a line of railway from Burrumbeet Station to Burrumbeet Park Reserve.

1880. December 24th—The *Yarrowee Channel Further Loan Act* 1903 provides for a further grant of £1,131, and loan of £3,678 by the State for the Yarrowee Channel Works at Ballarat. The municipalities interested (the City of Ballarat and the Town of Ballarat East) are each liable for one moiety of the amount lent with interest at 3½ per cent., repayable by forty half-yearly instalments.
1881. December 24th—The *Water Supply Loans Application Act* 1903 sanctions the issue and application of certain sums of money available under Loan Acts for water supply in country districts. The total sanctioned is £220,005, of which £132,000 is to be applied towards the construction of the Goulburn National Works, comprising a weir, channels, storage reservoir at Waranga Swamp, and channel thence to the Campaspe.
1882. December 24th—The *Public Works Loan Application Act* 1903 sanctions the issue and application of certain sums of money amounting to £152,381 available under Loan Acts for public works, the principal of which are sanitary works in the metropolitan area, State schools in various places, additional strong room accommodation at the Titles Office, and the Court and Records Offices.
1883. December 24th—The *Libraries Act* 1903 enacts that absence of a trustee of the Melbourne Public Library for four months without leave vacates office, and forbids the appointment of a new trustee when the number would thereby exceed eighteen.
1884. December 24th—The *Railway Loan Application Act* 1903 sanctions the issue and application of certain sums amounting to £305,000, available under Loan Acts for railways, principally additional rolling stock and equipment, the Woomelang to Mildura, and the Burrumbeet Park lines, and additions and improvements to ways and works.
1885. December 24th—The *South Melbourne Loan Act* 1903 authorizes the City of South Melbourne to construct and provide certain permanent works and undertakings (alteration of streets, asphaltting, &c.) in lieu of certain others, the money for the latter not being required.
1886. December 24th—The *Companies Act* 1903 amends prior Acts in regard to filing, registering, and certifying mortgages.
1887. December 24th—The *Legal Practitioners Reciprocity Act* 1903 provides for the admission of legal practitioners from other States of the Commonwealth to practise in Victoria, on terms of reciprocity, and for the establishment of a council of legal education, having power to make and alter rules regulating the admission of legal practitioners.
1888. December 24th—The *Public Service Amendment Act* 1903 permits the substitution of a new life insurance policy of an appointee to the public service, for the original policy deposited with the Public Service Commissioner.
1889. December 24th—The *Fitzroy Loan Act* 1903 enables the Fitzroy council to carry out certain works (improvement of streets and drains) with the surplus moneys in hand from the No. 6 loan.
1890. December 24th—The *Ballarat Old Colonists Association Act* 1903 gives the trustees of the land in Lydiard-street, Ballarat, granted as a site for a hall and offices for the use of the Old Colonists' Association of that city, power to borrow money on security of rents.

1891. December 24th—The *Election Expenses Limitation Act* 1903 (after giving precise definitions of electoral expenses and candidate) limits the expenses which may be incurred by candidates for the State Parliament, to a maximum of £400 and £150 for the Legislative Council and the Legislative Assembly respectively. The matters upon which such expenditure may be incurred are limited and defined by the Act.
1892. December 24th—This Act applies £2,263,942 out of the consolidated revenue to the service of the year 1903-4, and appropriates the supplies now and previously granted, amounting to £4,306,206, to the service of the Government.
1893. December 24th—The *Local Government Act* 1903 consolidates and amends the laws relating to local government. Its chief provisions are summarized under "Local Government," page 40, *post*.
1894. December 24th—The *Unused Roads and Water Frontages Act* 1903 provides for the licensing of unused public roads and water frontages, at the rate of £5 per cent. of the capital value of the licensed land. The proceeds of the licence fees are to form a trust fund, called "The Unused Roads and Water Frontages Fund," and are to be applied towards the construction and maintenance of roads and bridges.
- 1895 and 1896. December 24th—The *Electoral Districts Boundaries Act* 1903, and the *Electoral Provinces Boundaries Act* 1903, determine the boundaries of the Assembly electoral districts and the Council electoral provinces respectively, for the purposes of the reforms enacted by the *Constitution Act* 1903.

## OFFICIAL AND PARLIAMENTARY.

A full list of the Governors of Victoria since 1839, when Mr. Charles Joseph La Trobe was appointed Superintendent of the District of Port Phillip, will be found in Part Blue Book of the Statistical Register for 1901. Sir George Sydenham Clarke, K.C.M.G., assumed office as Governor on 10th December, 1901, and was still in office at the end of 1903, he being then on leave in England, having been appointed as one of a committee of three for the purpose of advising the British Government as to the reform of the War Office. Sir George Clarke left for England on 24th November, 1903, and during his absence on leave Sir John Madden, K.C.M.G., Lieutenant-Governor, acted as Governor. It has since been cabled from England that Sir Reginald Talbot has been appointed as the new Governor of Victoria.

Governors of  
Victoria.

The names of the present Governors of the States and New Zealand and the dependencies, and the dates of their

Governors  
of Austral-  
asian  
States.

assumption of office, according to the latest available official information, are as follow:—

## GOVERNORS OF AUSTRALASIAN STATES.

	Name.	Date of Assumption of Office.
Victoria ... ..	Major-General Hon. Sir Reginald Arthur James Talbot, K.C.B. Sir John Madden, K.C.M.G., LL.D. (Lieutenant-Governor)	29 April, 1899
New South Wales ... ..	Vice-Admiral Sir Harry Holdsworth Rawson, K.C.B. Sir Fred. M. Darley, G.C.M.G. (Lieutenant-Governor)	May, 1902 29 Oct., 1900
Queensland ... ..	Major-General Sir Herbert Charles Chermiside, R.E., G.C.M.G., C.B.	March, 1902
South Australia ... ..	Sir George Ruthven Le Hunte, K.C.M.G. Sir Samuel J. Way, P.C. (Lieutenant-Governor)	1 July, 1903 29 Oct., 1900
Western Australia ... ..	Admiral Sir Frederick George Denham Bedford, K.C.B.	24 March, 1903
Tasmania... ..	Captain Sir Arthur Elibank Havelock, G.C.M.G., G.C.I.E.	8 Nov., 1901
New Zealand ... ..	The Right Honorable the Earl of Ranfurly, K.C.M.G.	10 Aug., 1897
Fiji ... ..	Sir Henry Moore Jackson, K.C.M.G.	1902
New Guinea (British) ... ..	Honorable Christopher Robinson (Acting Administrator)	

Nineteenth  
Parliament.

The Nineteenth Parliament was opened on 14th October, 1902, and the first session lasted until 7th April, 1903. The second opened on 13th May, 1903, and lasted until 1st June, 1903. It was specially convened to deal with the position of affairs brought about by the strike of the engine-drivers and firemen of the Victorian Railways. Repressive legislation of a drastic character was introduced, but the unconditional surrender of the men rendered it unnecessary to proceed further. The third session was opened on 8th September, and was continued until 24th December, 1903, when Parliament was dissolved. The next Parliament will be quite differently constituted to previous Parliaments, the number of members being reduced, separate representation of public servants being introduced, and other amendments of the Constitution having been made as previously described.

Duration of  
Parliaments  
and  
sessions.

The following is a statement of the duration of each Parliament since the establishment of responsible government,

the number of days in session during each Parliament, and the percentage of the latter to the former:—

DURATION OF PARLIAMENTS AND SESSIONS, 1856 TO 1903.

Number of Parliament.	Period.	Duration of Parliament.	Days in Session.	
			Number.	Percentage to Duration.
1st ... ..	1856-8	Days. 991	691	69.7
2nd ... ..	1859-60	637	566	88.8
3rd ... ..	1861-4	1,091	728	66.7
4th ... ..	1864-5	378	366	96.8
5th ... ..	1866-7	686	391	57.0
6th ... ..	1868-70	1,048	734	70.0
7th ... ..	1871-3	1,049	639	60.9
8th ... ..	1874-6	1,072	700	65.3
9th ... ..	1877-9	993	684	68.9
10th ... ..	1880	49	46	93.9
11th ... ..	1880-2	926	802	86.6
12th ... ..	1883-6	1,088	543	49.9
13th ... ..	1886-9	1,091	653	59.9
14th ... ..	1889-92	1,093	636	58.2
15th ... ..	1892-4	845	524	62.0
16th ... ..	1894-7	1,089	684	62.8
17th ... ..	1897-00	1,088	586	53.9
18th ... ..	1900-02	671	358	53.4
19th ... ..	1902-3	436	300	68.8

It will be seen that there was a greater percentage of working days during the last Parliament than any other since 1882. Excluding the last Parliament, the tendency of late years seems to be, according to the above figures, towards shorter sessions than formerly. The longest continuous sessions were—one of 376 days, from July, 1880, to August, 1881; 368 days, during the first session of the first Parliament, in 1856-7; 366 days in 1864-5; 341 days in 1859-60; 322 days in 1877-8; 321 days in 1869; 317 days in 1875-6; and 308 days in 1862-3; whilst at no time since 1880-1 has a session lasted 300 days. The longest sessions since 1881 were—295 days in 1892-3, 284 days in 1882-3 and 1895-6, and 275 in 1886; the longest since 1895-6 being 239 days in 1899-00, 188 days in 1901, 185 days in 1896, 176 days in 1898, and 175 days in 1902-3, during the last Parliament. The session of 376 days in 1880-1 was followed by another of 142 days, with only a recess of one day, thus making an almost continuous sitting extending over 518 days, or almost eighteen months. The longest recess was in 1866-7, when 230 days elapsed between the closing of the second, and the opening of the third, session of the fifth Parliament; the next longest being 220 days in 1883-4, 214 in 1878-9, 205 in 1893-4, 189 in 1897-8 and in 1898-9, 185 in 1888-9, 181 in 1896-7, 173 in 1890-1 and 1886-7, and 169 in 1871-2.

Long sessions and recesses.

The State  
Ministry  
and depart-  
ments.

The following were the names of, and the offices held by, the members of the State Ministry at the end of 1903:—

## STATE MINISTRY.

Name.	Office.
Irvine, William Hill ... ..	Premier and Treasurer.
Davies, John Mark, M.L.C. ... ..	Attorney-General, Solicitor-General.
Shiels, William ... ..	Minister of Railways.
Bent, Thomas ... ..	Commissioner of Public Works, Minister of Health, Vice-President of the Board of Land and Works.
Taverner, John William ... ..	Commissioner of Crown Lands and Survey, Minister of Agriculture, President of the Board of Land and Works.
Cameron, Ewen Hugh ... ..	Minister of Mines and Water Supply.
Murray, John ... ..	Chief Secretary, Minister of Labour.
Sachse, Arthur Otto, M.L.C. ... ..	Minister of Public Instruction, Vice-President of the Board of Land and Works.
Pitt, William, M.L.C. ... ..	Honorary Minister.
McLeod, Donald ... ..	Honorary Minister.

Changes  
in the  
Ministry.

Since 10th June, 1902, the date when the Irvine Ministry first assumed office, there have been several changes of portfolios, the first of which was made on 6th February, 1903, being caused by the retirements of Mr. McKenzie, then Commissioner of Crown Lands and Survey and President of the Board of Land and Works, and of Mr. Robert Reid, M.L.C., then Minister of Public Instruction and of Health, the latter of whom was selected as Senator for the unexpired portion of the term rendered vacant by the death of Sir Frederick Sargood. No new Ministers were appointed from outside the ranks of the Cabinet. Mr. Taverner, then Commissioner of Public Works and Minister of Agriculture, was transferred to the department vacated by Mr. McKenzie; whilst Mr. Davies, M.L.C., then Solicitor-General, was appointed Minister of Public Instruction. Mr. Bent, then Minister of Railways, took over the Departments of Public Health and of Public Works, still retaining his position as Minister of Railways; and Mr. Irvine administered the Department of Solicitor-General in addition to that of Attorney-General. On 8th April, 1903, Mr. J. W. Kirton, an honorary member of the Ministry, resigned that position on his appointment as Chairman of the Ballarat Water Commission. The second reallotment of portfolios was on 21st July, 1903, when Mr. Irvine assumed the position of Treasurer, also retaining the positions of Attorney-General and Solicitor-General; Mr. Shiels, then Treasurer, relieving Mr. Bent of the Railway Department, which he was then administering in addition to the departments of Public Works and of Health. The third and final change was on 7th September, 1903, when Mr. A. O. Sachse, M.L.C., then an honorary member of the Ministry, was appointed Minister of Public Instruction, Mr. Davies, M.L.C., relieving Mr. Irvine of the amalgamated law departments.

The average life of a Ministry in Victoria since 1855 has been 522 days; the Irvine Ministry, which came into office on 10th June, 1902, having lasted 615 days, when Mr. Irvine retired owing to ill-health. The longest-lived Ministry was the first Turner Ministry, which assumed office on 27th September, 1894, and lasted until 5th December, 1899, thus lasting 1,895 days, or more than five years. The nearest approach to this was the McCulloch Ministry of 1863-8, which lasted 1,775 days, and the Gillies-Deakin Ministry of 1886-90, which lasted 1,722 days; the only others lasting over 1,000 days being the second Service Ministry of 1883-6, which lasted 1,078 days, and the second Berry Ministry, of 1877-80, which lasted 1,019 days. The short-lived Ministries were the first O'Shannassy Ministry of 1857, lasting 49 days; then coming the Sladen Ministry of 1868, 66 days; the first Berry Ministry of 1880-1, 74 days; and the second Turner Ministry of 1900-1, 85 days; the latter being caused by the transition of Sir George Turner from State to Federal politics.

Duration of Ministries.

LEGISLATIVE COUNCIL.

Clerk of Parliament and of the Legislative Council: G. H. Jenkins, C.M.G.

Clerk Assistant: J. M. Pitts.

Usher and Accountant: R. W. V. McCall.

MEMBERS ON THE 31ST DECEMBER, 1903.

Name of Province.	Name of Member.	Dates of Retirement.*
Melbourne	Sir Arthur Snowden	1907
	John Mark Davies	1906
	Cornelius Job Ham	1904
	William Cain	1908
North Yarra	Frederick Sheppard Grimwade	1906
	Nathaniel Levi	1904
	William Pitt	1908
South Yarra	George Godfrey	1907
	Edward Miller	1906
	Thomas Luxton	1904
Southern	Thomas Henry Payne	1908
	Sir Rupert Turner Havelock Clarke, Bart.	1906
	Donald Melville	1904
South-Western	Thomas Brunton	1908
	Sidney Austin	1906
	Sir Henry John Wrixon, K.C.M.G., K.C. (President)	1904
	Thomas Charles Harwood	1908
Nelson	Steuart Gladstone Black	1906
	Thomas Dowling	1904
	Hans William Henry Irvine	1908
Western	Walter Synnot Manifold	1906
	Robert Blackwood Ritchie	1904
	Vacant	
North-Western	Joseph Major Pratt	1907
	James Bell	1906
	Thomas Comrie	1904
	Richard Bloomfield Rees	1908

\* These are the years in which each member would have retired but for the *Reform Act*.

Name of Province	Name of Member.	Dates of Retirement.
Northern	{ George Simmie ... ..	1907
	{ Joseph Sternberg ... ..	1906
	{ Joseph Henry Abbott ... ..	1904
	{ William Lawrence Baillieu ... ..	1908
Wellington	{ Edward Morey ... ..	1907
	{ David Ham ... ..	1906
	{ John Young McDonald ... ..	1904
	{ Sir Henry Cuthbert, K.C.M.G., K.C. ... ..	1908
North Central	{ William Blair Gray ... ..	1906
	{ Dr. William Henry Embling ... ..	1904
	{ Nicholas FitzGerald (Chairman of Committees) ... ..	1908
North-Eastern	{ Arthur Otto Sachse ... ..	1906
	{ Willis Little ... ..	1904
	{ William Orr ... ..	1: 08
Gippsland	{ Joseph Hoddinott ... ..	1907
	{ William Pearson ... ..	1906
	{ Edward Jolley Crooke ... ..	1904
	{ Samuel Vary ... ..	1908
South-Eastern	{ James Callender Campbell ... ..	1906
	{ Duncan Elphinstone McBryde ... ..	1904
	{ James Balfour ... ..	1908

## LEGISLATIVE ASSEMBLY.

Clerk of the Assembly: T. G. Watson.

Clerk Assistant and of Private Bills: H. H. Newton.

Clerk of the Papers and Accountant: J. H. Bowman

## MEMBERS OF THE ASSEMBLY AT THE END OF THE YEAR 1903.

Name of Member.	Name of Electoral District.
Andrews, Charles Leonard ... ..	Geelong
Anstey, Frank ... ..	East Bourke Boroughs
Argyle, Reginald Ivon ... ..	Kyneton
Ashworth, Thomas Ramsden ... ..	Ovens
Austin, Austin Albert ... ..	Grenville
Bailes, Alfred Shrapnell ... ..	Sandhurst
Barr, Robert ... ..	Fitzroy
Beazley, William David (Speaker) ... ..	Collingwood
Bennett, George Henry ... ..	Richmond
Bent, Thomas ... ..	Brighton
Billson, John William ... ..	Fitzroy
Bowser, John ... ..	Wangaratta and Rutherglen
Boyd, James Arthur ... ..	Melbourne
Bronley, Frederick Hadkinson ... ..	Carlton
Brown, Joseph Tilley ... ..	Shepparton and Euroa
Cameron, Ewen ... ..	Portland
Cameron, Ewen Hugh ... ..	Evelyn
Cameron, James ... ..	Gippsland East
Carlisle, John Joseph ... ..	Benalla and Yarrawonga
Chirnside, Captain John Percy ... ..	Grant
Craven, Albert William ... ..	Benambra
Cullen, John ... ..	Gunbower
Downward, Alfred ... ..	Mornington
Duffus, James Francis ... ..	Port Fairy
Duffy, John Gavan ... ..	Kilmore, Dalhousie, and Lancefield

Name of Member.	Name of Electoral District.
Duggan, Daniel Joseph	Dunolly
Elmslie, George Alexander	Albert Park
Fairbairn, George	Toorak
Field, Frederick James	Maryborough
Pink, Theodore	Jolimont and West Richmond
Fletcher, John	Bogong
Forrest, Charles Lamond	Polwarth
Gair, Mackay John Scobie	Bourke East
Gillott, Sir Samuel	Melbourne East
Glasgow, John	Villiers and Heytesbury
Graham, George	Numurkah and Nathalia
Graves, James Howlin (Chairman of Committees)	Delatite
Grose, Walter Bolitho	Creswick
Hamilton, Charles	Windermere
Hamilton, Walter Alfred	Sandhurst
Harris, Albert	Gippsland Central
Harris, Joseph	South Yarra
Hennessy, David Valentine	Carlton South
Holden, George Frederick	Warrenheip
Hunt, Thomas	Anglesey
Hutchinson, William	Borong
Irvine, William Hill (Premier)	Lowan
Keast, William Stephen	Dandenong and Berwick
Keogh, Hubert Patrick	Gippsland North
Kerr, David	Grenville
Kirkwood, Hay	Eaglehawk
Kirton, Joseph William	Ballarat West
Lancaster, Samuel	Rodney
Langdon, Thomas	Korong
Lawson, Harry Sutherland Wightman	Castlemaine
Levien, Jonas Felix	Barwon
Livingston, Thomas	Gippsland South
Mackey, John Emanuel	Gippsland West
Mackinnon, Donald	Prahran
Madden, Frank	Eastern Suburbs
Martin, George	Geelong
McBride, Peter	Kara Kara
McCutcheon, Robert George	St. Kilda
McDonald, Alexander	Footscray
McGregor, Robert	Ballarat East
McLeod, Donald	Daylesford
Menzies, Hugh	Stawell
Methven, David	East Bourke Boroughs
Mitchell, George	Talbot and Avoca
Morrissey, John	Rodney
Murray, John	Warrnambool
Oman, David Swan	Ripon and Hampden
Peacock, Sir Alexander James, K.C.M.G.	Clunes and Allandale
Prendergast, George Michael	Melbourne North
Ramsay, Alexander Gordon Culbert	Williamstown
Roberts, George Ernest	Richmond
Robertson, Andrew Robert	Bourke West
Sangster, George	Port Melbourne
Shiels, William	Normanby
Shoppee, Charles Collett	Ballarat West
Smith, Thomas	Emerald Hill
Stanley, Robert	Horsham
Sterry, David Chaplin	Sandhurst South
Swinburne, George	Hawthorn

Name of Member.	Name of Electoral District.
Taverner, John William (succeeded by Meldrum, James)	Donald and Swan Hill
Thomson, John	Dundas
Toutcher, Richard Frederick	Ararat
Tucker, John Benjamin	Melbourne South
Tunnecliffe, Thomas	Melbourne West
Wallace, William	Maldon
Warde, Edward Coughlan	Essendon and Flemington
Watt, William Alexander	Melbourne East
Webb, William Telford	Mandurang
Wilkins, Edgar	Collingwood
Williams, Edward David	Castlemaine

### FOREIGN CONSULS.

Return of Consuls of Foreign Countries for Victoria during the year 1903:—

CONSULS-GENERAL.		Countries Represented.
Name.		
Bonnard, Senor Enrique	...	San Salvador
Boschart, W. L.	...	Netherlands
Lyle, M.	...	Colombia
Were, F. W.	...	Denmark
Bray, John P.	...	United States
M. Beard d' Annet	...	France
Amora, J. H.	...	Costa Rica
Amora, J. H.	...	Nicaragua
Sanders, Lewis	...	Liberia
Pollet, E.	...	Belgium
Moore, Frederick H.	...	Hawaii
Buri, Herr Paul Von	...	Germany
Tillock, Don Diego T.	...	Argentine Republic
Ryan, Dr. Charles	...	Turkey
Smith, William Lamb	...	Paraguay

CONSULS.		
Pinschof, Carl A.	...	Austria-Hungary
Weindorfer, G. (Chancellor)	...	Austria-Hungary
Brahe, William Alexander	...	German Empire
Passek, N.	...	Russia
Bertola, Cav. C.	...	Italy
Martin, Charles	...	Swiss Confederation
Marks, A.	...	Japan
Langdon, Charles P.	...	Hawaii
Pfaff, Alfred	...	Peru
Jack, W. L.	...	Portugal
Bastin, Ch.	...	Belgium (acting)
Webster, A.	...	Chile
Gundersen, H. J.	...	Sweden and Norway
Abourizk, W. (Chancellor, &c.)	...	Turkey
De Possel, H.	...	Bolivia
Curtain, R.	...	Greece
Walters, H. A.	...	Uruguay
Cave, Henry	...	Spain
Oldham, J.	...	Servia
Assche, O. Van	...	Netherlands
Medina, R.	...	Nicaragua

DEPUTY CONSUL-GENERAL.			
Name.	...	...	Countries Represented.
Bill, W. W.	...	...	United States

VICE CONSUL-GENERAL.			
Stanford, J. W.	...	...	United States

VICE-CONSULS.			
Belcher, George Frederick	...	...	Denmark
Holdenson, P. J.	...	...	Denmark
Maistre, M.	...	...	France
Monnét, M. Raphael	...	...	France
Belcher, George Frederick	...	...	Sweden and Norway
Moore, A. E.	...	...	Liberia
Vanderkelen, F.	...	...	Belgium
Drion, Mon.	...	...	Belgium
Sheppard, H. A.	...	...	Brazil, United States of
Behr, W.	...	...	Russia
Pirandello, A.	...	...	Italy
Campbell, C. C.	...	...	United States

PRINCIPAL PUBLIC SERVANTS.

Appended is a list of the principal officers in the Public Service of Victoria, including the judiciary, and other officers not under the provisions of "The Public Service Act." Officers in the Departments of Customs, Posts and Telegraphs, and Defence are not included, these departments having been transferred to the Commonwealth:—

JUDICIARY.

Chief Justice	...	...	Sir John Madden, K.C.M.G., LL.D.
Puisne Judges	...	...	Sir E. D. Holroyd, Kt., K.C. Thomas A'Beckett. H. E. A. Hodges. J. H. Hood.
Associates	...	...	A. Barlow, T. Pennefather, H. Pearson, S. E. Holroyd, E. Wanliss.
County Court Judges	...	...	H. Molesworth. A. W. Chomley. E. B. Hamilton. W. H. Gaunt. W. E. Johnston.
Stipendiary Police Magistrates	...	...	J. A. Panton, Metropolitan. 18 others (1 Melbourne, 1 suburban, and 16 in country districts).

CHIEF SECRETARY'S DEPARTMENT.

Administrative Branch	...	...	Under Secretary, G. C. Morrison. Chief Clerk, W. A. Callaway. Chief Electoral Inspector, H. E. Macdowell. Accountant, J. J. Killen.
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## Sub-Branches—

Audit Office	...	...	Chief Inspecting Officer and Chief Clerk, E. T. Drake.
Executive Council	...	...	Clerk of the Council, T. Brisbane.
Explosives, &c.	...	...	Chief Inspector, C. N. Hake.
Friendly Societies	...	...	Actuary, E. F. Owen.
Government Medical Officer	...	...	J. A. O'Brien.
Government Shorthand Writer	...	...	H. E. Wade.
Government Statist	...	...	W. McLean.
Inspection of Factories	...	...	Chief Inspector, H. Ord.
Inspection of Stores	...	...	Inspector, A. Roche.
Marine Board	...	...	Secretary, J. G. McKie. Engineer, Surveyor, and Examiner of En- gineers, S. Johnson. Inspector, W. F. Deary.
Mercantile Marine	...	...	Superintendent, C. A. Parsons.
Neglected Children and Reform- atory Schools	...	...	Secretary and Inspector, W. Davis.
Observatory	...	...	Government Astronomer, P. Baracchi.
Police	...	...	Accountant, F. Hemmy.
Premier's Office	...	...	Secretary to Premier, R. S. Rogers. Senior Clerk, W. C. Cave-Browne-Cave.
Public Library, Museums, and National Gallery	...	...	Chief Librarian and Secretary, E. La T. Armstrong. Director of National Gallery, L. B. Hall. Instructor in School of Design, F. McCubbin.
Penal and Gaols	...	...	Inspector-General, E. C. Connor. Governor of Pentridge, M. J. Cody. Governor of Melbourne Gaol, T. Meagher.
Hospitals for Insane	...	...	Inspector, Dr. J. V. McCreery. Medical Superintendents—Yarra Bend, Dr. W. L. Watkins; Kew, Senior Medical Officer, Dr. W. L. Mullen; Ararat, Dr. W. H. Barker; Ballarat, Dr. John Steell; Beechworth, Dr. H. A. Samson; Sunbury, Dr. R. W. Lethbridge.

## TREASURY DEPARTMENT.

Under-Treasurer	...	...	H. W. Meakin.
Accountant	...	...	T. W. Gaggin.
Chief Clerk	...	...	C. H. Wheatland.
Receiver and Paymaster, Melbourne	...	...	J. W. Stranger; and 16 others at country offices, and 1 relieving.

## Sub-Branches—

Inspection of Charities	...	...	Inspector, F. T. Short.
Old Age Pensions	...	...	Senior Clerk, A. B. Weire.
Tender Board	...	...	Secretary, M. T. Callan.
Income and Land Tax	...	...	Deputy Commissioner, V. E. Henderson.
Pensions Pay Office	...	...	Paying Officer, J. Hickey.
Government Printer	...	...	R. S. Brain.

## DEPARTMENT OF PUBLIC INSTRUCTION.

Director of Education	...	...	Frank Tate, M.A.
Chief Inspector	...	...	S. J. Swindley.
Assistant Chief Inspector	...	...	W. Hamilton.
Senior Inspectors	...	...	J. Holland, A. C. Curlewis, W. M. Gamble, S. Summons, R. F. Russell.
Training College	...	...	Principal, John Smyth.
Inspector of Drawing	...	...	P. M. Carew Smyth.
Hand and Eye and Manual Training Organizer and Instructor	...	...	John Byatt.
Secretary	...	...	C. W. H. James.
Accountant	...	...	A. C. Witton (acting).

LAW DEPARTMENT.

Parliamentary Draftsman...	...	E. Carlile, K.C.
Secretary ... ..	...	M. Byrne.
Chief Clerk and Accountant	...	Irvin Martin.
Crown Solicitor ... ..	...	E. J. D. Guinness.
Master-in-Equity's Office ...	...	Chief Clerk and Officer for Assessing Duty, J. F. Poole. Registrar of Probates, W McDonald.
Prothonotary ... ..	...	J. W. O'Halloran.
Sheriff... ..	...	A. McFarland.
Registrar of County Court, Clerk of the Peace, and Chief Clerk in Insolvency	...	W. S. A. Ponsford.
Collector of Imposts ... ..	...	J. Davidson.
Senior Examiner of Patents and Deputy Registrar-General	...	J. P. Holmes.
Chief Examiner of Titles ... ..	...	D. C. Rees.
Examiners of Titles ... ..	...	R. W. Chalmers, F. A. Bonner, G. H. Downer.
Registrar-General ... ..	...	T. Byrne.
Titles Office ... ..	...	Surveyor and Chief Draughtsman, G. W. Blandford.

DEPARTMENT OF LANDS AND SURVEY.

Secretary for Lands ... ..	...	J. W. Skene.
Director of Botanic Gardens and Domain, &c.	...	W. R. Guilfoyle.
Surveyor-General ... ..	...	J. M. Reed.

DEPARTMENT OF PUBLIC WORKS.

Inspector-General of Public Works ..	...	W. Davidson.
Secretary for Public Works ... ..	...	D. Martin.
Chief Clerk and Accountant ... ..	...	R. I. Cullen.
Chief Architect ... ..	...	J. H. Marsden.
Engineer Roads, Bridges, and Harbor Works	...	C. Catani.
Engineer Ports and Harbors ... ..	...	C. W. Maclean.

DEPARTMENT OF MINES AND WATER SUPPLY.

Secretary for Mines ... ..	...	W. R. Anderson.
Chief Clerk ... ..	...	P. Cohen.
Accountant ... ..	...	M. A. Minogue.
Chief Draughtsman and Mining Sur- veyor	...	G. Groube.
Chief Engineer of Water Supply ... ..	...	S. Murray, C.E.
Director of Geological Survey ... ..	...	J. W. Gregory, D.Sc.

DEPARTMENT OF PUBLIC HEALTH.

Chairman of the Board of Public Health	...	D. A. Gresswell, M.A., M.D.
Secretary of the Board of Public Health	...	J. W. Colville.
Health Officer, and Superintendent Quarantine	...	Dr. J. C. Johnston.

## DEPARTMENT OF AGRICULTURE.

Director of Agriculture ...	...	S. W. Wallace.
Secretary for Agriculture ...	...	E. G. Duffus (acting).
Chemist ...	...	F. J. Howell.
Entomologist ...	...	C. French, sen.
Inspector of Food for Export ...	...	Dr. A. A. Brown.
Government Botanist ...	...	J. G. Leuhmann.
Chief Inspector of Stock ...	...	J. R. Weir.
Expert and Bacteriologist ...	...	T. Cherry, M.D., M.S.
Dairy Supervisor ...	...	R. T. Archer.
Dairy Expert ...	...	R. Crowe.
Fruit Expert ...	...	J. Knight.
Vegetable Pathologist ...	...	D. McAlpine.
Principal Horticultural School ...	...	C. B. Luffman.
Poultry Expert ...	...	A. Hart.
Tobacco Expert ...	...	T. A. J. Smith.

## OFFICE OF THE PUBLIC SERVICE COMMISSIONER.

Secretary ...	...	J. D. Merson.
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## OFFICERS NOT UNDER THE PUBLIC SERVICE COMMISSIONER.

Public Service Commissioner ...	...	C. A. Topp.
Auditor-General ...	...	F. H. Bruford.
Agent-General, London ...	...	Hon. J. W. Taverner. Secretary, A. W. Arkill (acting).
Master in Equity and Lunacy, and Commissioner of Income Tax	...	T. P. Webb, K.C.
Commissioner of Patents and Chief Clerk, Supreme Court	...	G. H. Neighbour, K.C.
Commissioner of Titles ...	...	E. T. De Verdon, K.C.
Chief Crown Prosecutor ...	...	C. B. Finlayson, K.C.
Coroner ...	...	S. C. Candler.
Analytical Chemist ...	...	W. P. Wilkinson.
Chief Hansard Reporter ...	...	E. B. Loughran.
Parliamentary Librarian ...	...	A. Wadsworth.
Police ...	...	Chief Commissioner, T. O'Callaghan. Inspecting Superintendent, R. Hamilton.
Curator of Estates of Deceased Persons	...	T. F. Bride, LL.D.
Railways ...	...	Commissioners — T. Tait (Chairman), W. Fitzpatrick, C. Hudson. Secretary, R. G. Kent (succeeded by L. J. McClelland). Engineer-in-Chief, M. E. Kernot (acting) Chief Traffic Manager, R. Lochhead. Chief Accountant, Harold Kent. Chief Mechanical Engineer, T. H. Woodroffe. Chief Engineer for Existing Lines, C. E. Norman.
Royal Mint (under Imperial Govern- ment)	...	Telegraph Superintendent, W. A. Holmes. Deputy Master, R. Barton. Superintendent of Bullion Office, E. S. Wardell. First Assayer, F. R. Power. Registrar and Accountant, M. L. Bagge. First Clerk, A. M. Le Souëf.
Commissioners of Land Tax ...	...	J. M. Reed, Surveyor-General. D. Martin, Secretary for Public Works. C. A. Topp, Public Service Commissioner.
Friendly Societies ...	...	Registrar, G. B. Vasey.

The following is a list of Professors, Demonstrators, and Lecturers of the University of Melbourne, statistical information regarding which institution is given in Part Social Condition, post:—

MELBOURNE UNIVERSITY.

Return of the Professors, Lecturers, &c., of the Melbourne University during the year 1903:—

PROFESSORS.		
Office.		Name.
Geology and Mineralogy ...	...	Gregory, J. W., D.Sc.
Physiology and Histology ...	...	Halford, G. B., M.D.
Mathematics ...	...	Nanson, E. J., M.A.
History and Political Economy ...	...	Elkington, J. S., M.A., LL.B.
Anatomy and Pathology ...	...	Allen, H. B., M.D.
Engineering ...	...	Kernot, W. C., M.A., M.C.E.
English, French, and German ...	...	Vacant
Classics and Philology ...	...	Tucker, T. G., M.A., Litt.D.
Chemistry ...	...	Masson, D. O., M.A., D.Sc., F.R.S.
Philosophy and Logic ...	...	Laurie, H., LL.D.
Biology ...	...	Spencer, W. B., M.A., F.R.S.
Natural Philosophy ...	...	Lyle, T. R., M.A.
Law ...	...	Moore, W. H., B.A., LL.B.
Music ...	...	Peterson, Franklin S., Mus.Bac.
Acting Prof. Physiology ...	...	Martin, C. J., M.B., D.Sc., F.R.S.

LECTURERS.

Equity ...	...	...	Mackey, J. E., M.A., LL.B.
Law of Contracts ...	...	...	Duffy, F. G., M.A., LL.B.
Wrongs ...	...	...	Woinarski, C. J. Z., M.A., LL.M.
Law of Property ...	...	...	Guest, W. C., M.A., LL.B.
Classics and Philology ...	...	...	Cornwall, W. E., M.A.
" " ...	...	...	Allen, H. W., M.A.
Mathematics ...	...	...	Michell, J. H., M.A.
French ...	...	...	Carton, Maurice, F.I., M.A.
German ...	...	...	Dichend, W. v.
Surgery ...	...	...	Bird, F. D., M.B., M.S., F.R.C.S.
Theory and Practice of Medicine ...	...	...	Jamieson, J., M.D.
Obstetrics and Diseases of Women ...	...	...	Adam, G. R. W., M.B., C.M.
Forensic Medicine ...	...	...	Neild, J. E., M.D.
Therapeutics, Dietetics, and Hygiene ...	...	...	Springthorpe, J. W., M.A., M.D.
Anatomy ...	...	...	Syme, G. A., M.B., M.S.
Bacteriology ...	...	...	Cherry, T., M.D., M.S.
Mining ...	...	...	Merrin, A. H., M.C.E.
Metallurgy ...	...	...	Mills, A. L.
Architecture ...	...	...	Henderson, A. M., M.C.E.
Hydraulic Engineering ...	...	...	Smith, B. A., M.C.E.

DEMONSTRATORS AND ASSISTANT LECTURERS.

	Office.		Name.
Chemistry	...	...	Green, W. H., B.Sc.
Biology	...	...	Hall, T. S., M.A.
Natural Philosophy	...	...	Love, E. F. J., M.A.
Engineering	...	...	Powler, T. W., M.C.E.

DEMONSTRATORS.

Anatomy	...	...	Rennie, G. C., M.B., M.S.
"	...	...	Owen, A. G., M.B., B.S.
Physiology	...	...	Fielder, W., F.R., M.S.
Pathology	...	...	Ellis, C., M.D., B.S.
Natural Philosophy	...	...	Campbell, F. H., B.A.
"	"	...	Richards, E. S.

OFFICE STAFF.

Registrar	...	...	Cornwall, W. E., M.A.
Librarian	...	...	Bromby, E. H., M.A.

MELBOURNE AND METROPOLITAN BOARD OF WORKS.

Chairman ... .. E. G. FitzGibbon, J.P., C.M.G.

Commissioners—

Hon. Sir S. Gillott, M.L.A., Jas. Baxter, Sir A. Snowden, M.L.C., W. Strong, J.P., W. Cook, D. V. Hennessy, J.P., M.L.A., A. Tait, representing the City of Melbourne.

W. J. Mountain, J.P., J. Baragwanath, J.P., J. S. White, John Sloss, representing the City of South Melbourne.

E. Naylor, John Turner, Hon. T. Luxton, M.L.C., representing the City of Prahran.

J. Gahan, J.P., W. Cody, J.P., representing the City of Collingwood.

M. Gross, J.P., J. G. Yager, J.P. " " Fitzroy.

E. Crawcour, S. J. Willis " " Richmond.

S. Jacoby, G. Connibere, J.P. " " St. Kilda.

F. E. Shillabeer " " Footscray.

W. Cowper, J.P. " " Hawthorn.

T. Wilson, J.P. " " Town of Brighton.

J. W. Fleming, J.P. " " Brunswick.

W. J. C. Riddell " " Caulfield.

W. J. Mountain, jun. " " Essendon.

Alex. Cameron " " Malvern.

Chas. Mitchell " " Northcote.

G. Carter " " North Melbourne.

J. K. B. Plummer " " Port Melbourne.

W. H. Treganowan " " Williamstown.

Jas. Raisbeck, representing the Borough of Flemington and Kensington.

E. E. Atkins " " Kew.

E. Dillon, J.P. " " Shire of Boroondara.

A. Voice, J.P. " " Coburg.

A. Ford, J.P. " " Heidelberg.

C. T. Crispe, J.P. " " Preston.

Secretary ... .. G. A. Gibbs.

Treasurer ... .. R. Richardson.

Engineer-in-Chief ... .. W. Thwaites.

Superintending Engineer of Sewerage ... .. C. E. Oliver.

" " Water Supply ... .. W. Dowden.

Designing Engineer ... .. C. Kussmaul.

MELBOURNE HARBOR TRUST.

Commissioners appointed by—			
Governor-in-Council	...	...	J. S. White; Hon. W. Pitt, M.L.C. (Chairman); J. B. Tucker, M.L.A.; Hon. D. Melville, M.L.C.; W. Methven, M.L.A.
Corporation of Melbourne	...	...	W. Strong, T. J. Davey.
Municipality of South Melbourne	...	...	W. J. Mountain.
"    Port Melbourne	...	...	T. N. Tarver.
"    Williamstown	...	...	W. H. Treganowan.
"    Footscray	...	...	J. Stewart.
Shipowners registered at Mel- bourne	...	...	W. Cowper. H. C. Pigott. W. Siddeley.
Merchants of Melbourne	...	...	C. Duckett. G. Lush. W. M. McPherson.
Secretary	...	...	C. J. Clark.
Treasurer	...	...	R. P. Rudd.
Engineer	...	...	John Halliday.
Harbor Master and Inspector of Dredging	...	...	Thos. Sanderson.

BOARD OF PUBLIC HEALTH.

Chairman and Medical Inspector	...	...	D. A. Gresswell, M.D., M.R.C.S.
Members	...	...	W. Burton, City of Melbourne. J. L. Dangerfield, J.P., North Yarra Group. F. G. Wood, J.P., South Yarra Group. J. H. Gearing, Eastern Country Boroughs. C. C. Shoppee, J.P., M.L.A., Western Country Boroughs. A. H. Smith, J.P., Eastern Shires. H. A. Austin, J.P., Western Shires.
Health Officers	...	...	H. R. Maclean, M.B., Port of Melbourne. H. Howard, M.B., Port of Melbourne. W. B. Docker, M.B., Port of Portland. W. H. Orchard, M.B., Port of Port Fairy. T. J. M. Kennedy, M.B., Port of Geelong. T. J. Fleetwood, M.B., Port of Warrnambool.

MARINE BOARD, MELBOURNE.

President	...	...	Archibald Currie.
Vice-President	...	...	W. D. Garside.
Members	...	...	C. W. Maclean, A. Agnew, R. Dickins, W. Cowper, D. Y. Syme, C. F. Orr, J. McK. Corby, G. W. Lilley, J. G. Little, H. Belfrage.
Examiner in Navigation and Sea- manship	...	...	R. D. Espinasse.
Examiner in Pilotage	...	...	G. Bevis.
Counsel	...	...	E. J. D. Guinness.

COURT OF MARINE ENQUIRY.

President	...	...	Senior Police Magistrate presiding.
Skilled Members	...	...	J. A. Roberts, J. Thompson, A. Dunbar, V. E. E. Gotch, J. Garson, G. Bevis, A. McCowan, D. Elder, J. Tozer, W. H. Panter.

## LOCAL GOVERNMENT.

Municipalities, &amp;c.

Municipal or local government is almost universal throughout Victoria, all but about  $\frac{3}{4}$  per cent. of its whole area being divided into urban or rural municipal districts. The former are called cities, towns, and boroughs, and the latter shires. The laws relating to Local Government have lately been amended and consolidated by the "Local Government Act 1903," passed on 24th December last. The councils of municipalities have power to levy rates, which, together with license fees, subsidies received from the State, market dues, rents, and sanitary charges, form their chief sources of income. Their principal functions are to make, maintain, and control all streets, roads, bridges, ferries, culverts, sewers, drains, water-courses, and jetties within their respective boundaries; also, under proper by-laws, to regulate the markets, pounds, abattoirs, baths, places of recreation, charitable institutions, and the arrangements for sewerage, lighting, water supply, and carrying on of noxious trades, and to act as local Boards of Health.

Cities, towns, boroughs, and shires.

Any portion of Victoria, not exceeding in area nine square miles, and having no point in such area distant more than six miles from any other point therein, which contains at least 500 householders and rateable property capable of yielding £300 upon a rate of one shilling in the pound, may be constituted a borough. Any borough having during the preceding financial year a revenue of £10,000 may be declared a town; or, having a revenue of £20,000, may be declared a city. Any portion of Victoria containing rateable property capable of yielding £1,500 on a rate of one shilling in the pound may be constituted a shire. There are 60 cities, towns, and boroughs in Victoria, and 148 shires. The Governor-in-Council may unite any two or more boroughs which form one contiguous area so as to form one borough, notwithstanding that the area would exceed the limits above specified; may unite any number of municipalities, one of which is a shire, which form one contiguous area, so as to form one shire; and may sever any portion of a municipal district and attach it to another, annex an outlying district, subdivide any municipal district into any number of divisions not exceeding eight, alter the boundaries, or abolish the subdivisions.

Townships.

On petition by twenty-five ratepayers resident in any portion, not exceeding three square miles in extent, of any shire, and distant more than ten miles from the City of Melbourne, the Governor-in-Council may proclaim such portion a township.

Each municipality existing at the commencement of the original Act—now incorporated in the Act of 1903—is allowed the number of councillors then assigned to it; but in other cases the number must be some multiple of three, not less than six nor more than twenty-four. The number is usually nine. If the district is subdivided, the number of councillors is three for each subdivision. If at any time in any municipality there is no council or not enough councillors to form a quorum, a commissioner may be appointed by the Governor-in-Council to exercise the powers of the council. Male persons liable to be rated in respect of property in the municipal district of the rateable annual value of £20 at least, whether consisting of one or more tenements, are qualified to hold the office of councillor; but uncertificated and undischarged bankrupts or insolvents, persons attainted of treason or convicted of felony or perjury or any infamous crime, or being of unsound mind, or holding any office under the council, or concerned in any way with any contract with, or work done under, the council, are disqualified from a position in the council; but certain exceptions are made from the latter provision. The election of councillors takes place annually. One-third of the councillors retire each year by rotation, but retiring councillors may be re-elected. The councillors elect their own chairman, who, in the case of cities, towns, and boroughs, is called the mayor; in the case of shires, the president.

Municipal  
councillors.

Every person (male or female) 21 years of age or upwards, liable to be rated in respect of property within a municipal district, in respect of which all rates, made before 10th March of the year, have been paid, shall be entitled to be enrolled as a voter. Plurality of votes is allowed upon the following scale:—

Municipal  
electors.

IN CITIES, TOWNS, AND BOROUGHS.

Properties rated at an annual value of under £50 ...	...	...	One vote.
" " " " " £50 to £100 ...	...	...	Two votes.
" " " " " £100 and upwards ...	...	...	Three votes.

IN SHIRES.

Properties rated at an annual value of under £25 ...	...	...	One vote.
" " " " " £25 to £75 ...	...	...	Two votes.
" " " " " £75 and upwards ...	...	...	Three votes.

No person may be enrolled in respect of property rated under £5 a year, unless there is a house on the property, and he resides there. The occupier and the owner are not to be both enrolled in respect of the one property, the former having the prior right to enrolment. Corporations liable to be rated may nominate not more than three persons to be enrolled in their stead, and joint-occupiers and owners, not exceeding three, are each entitled to be enrolled. If there be more than

three, then the three standing first on the last rate valuation or return are so entitled. The "Voting by Post Act 1900" may be made applicable to the elections for any municipality on the petition of the councillors.

Rateable  
property.

All land situated in a municipal district is rateable property except the following:—Crown lands; land used exclusively for commons, mines, public worship, mechanics' institutes, public libraries, cemeteries, primary free schools, and charitable purposes; land vested in or held by or in trust for any municipality, local governing body, or commissioners under the Water Acts; land vested in fee in the Railway Commissioners, Minister of Public Instruction, Board of Land and Works, Harbor Trust Commissioners, and Melbourne and Metropolitan Board of Works. The expression land includes, of course, all buildings and improvements thereon.

Rates—  
general,  
separate,  
&c.

Rates levied in municipal districts are of three kinds, viz.:—General, extra, and separate rates. General rates are levied at least once in every year by the council of every municipality, and shall not exceed in any one year 2s. 6d. in the pound of the net annual value, or be less than 6d. in the pound of such value. Every general rate is made and levied on the occupier of the property rated, or if there be no occupier, or the occupier be the Crown or public or local body, then upon the owner of the property. Extra rates may be levied in any one or more subdivisions of a district, on requisition by not less than two-thirds of the councillors for the subdivision, provided that both rates together in any subdivision do not exceed 2s. 6d. in the pound. Extra rates are levied on all properties alike in the subdivision; but where any works or undertakings are for the special benefit of any particular portion of the municipal district, "a separate rate" may be levied, with the consent of a majority of the occupiers, and of one-third at least of the owners of the properties affected. The rates to be levied may be differential according to the benefits to be received by different properties, and the amount of the rate must be such as will, in the opinion of the council, suffice to provide for the payment of interest, and periodical repayments of, or sinking fund for, the loan raised on the security of such rate.

Improve-  
ment  
charge.

Where under any Act a council is empowered to execute any work at the cost of the owners, or to require such owners to do so, a special improvement charge may be made on the properties affected, on the security of which money may be borrowed for the carrying out of such work.

Incorporation  
of  
Melbourne  
and  
Geelong.

Melbourne and Geelong, the latter of which was for many years of second importance in the colony, having been incorporated under special statutes prior to the establishment

of municipal government on a large scale throughout the colony, are not subject to the Local Government Acts, except in a few comparatively unimportant particulars. Melbourne was incorporated as a town in 1842, and was ordained a city in 1847. Geelong was incorporated as a town in 1849.

Other functions of a special character have been delegated to boards or trusts, of which the following are the more important:—Melbourne Harbor Trust, constituted to provide for the maintenance and improvement of the Port of Melbourne; Melbourne and Metropolitan Board of Works, for the water supply and sewerage of the metropolis; Melbourne Tramways Trust, for the construction, on behalf of the municipalities, of cable and other tramways in Melbourne and suburbs, which have been leased to a company for a term of years; two fire brigade boards; and Irrigation and Water Supply Trusts, for the conservation, distribution, and supply of water in country districts.

### THE COMMONWEALTH.

A full account of the movement leading up to the Federation of the Australian Colonies was given in the issues of this work for 1895-8 and for 1902.

#### COMMONWEALTH CONSTITUTION.—LEADING FEATURES.

The following are the leading features of the "Commonwealth of Australia Constitution Act," passed by the Imperial Parliament:—

Leading features of the Commonwealth Constitution.

Constitution indissoluble, and to come in force by Imperial Proclamation.

The Parliament is to consist of the Queen, a Senate, and a House of Representatives. Governor-General appointed to act for the Queen.

Parliament.

Senate to consist of six members from each State; number may be increased or diminished, but so that equal representation of the States be maintained. Qualification of electors of Senate and of Senators to be same as that of House of Representatives. Each elector shall vote only once.

Senate.

House of Representatives shall have twice the number of members of the Senate; and the number of members for each State shall be in proportion to population, but not less than five for any State. Qualification of electors to be that of the more numerous House in each State. Each elector to vote only once. Qualifications of a member—(a) 21 years of age, (b) to be an elector or entitled so to be, (c) resident three years, (d) natural born or naturalized five years.

House of Representatives.

The general powers of the Parliament are 39 in number, the principal of which are to make laws for trade, taxation, bounties, borrowing, postal services, naval and military, statistics, currency, banking, insolvency, corporations, divorce, marriage, old age pensions, immigration and emigration, railways, &c. Exclusive powers in regard to the seat of Government, State departments transferred, other matters declared by the Constitution to be within the exclusive power of the Parliament.

Powers of Parliament.

Money Bills not to originate in, nor to be amended by the Senate, which House may, however, return the Bill requesting any omission or amendment. Equal power in all other matters. Tacking Bills prohibited.

Money Bills.

- Dead-locks.** Provision for dead-locks.—Joint dissolution, and if again passed in lower House and rejected in Senate a joint sitting to be held, and if passed by an absolute majority of the total members of both Houses, disputed Bill to become law.
- A Bill having passed both Houses the Governor-General shall either assent, withhold assent, reserve the Bill or return it, and recommend amendments.
- Executive.** Executive power vested in Queen and exercisable by Governor-General in Council who may appoint Ministers of State.
- Departments transferred.** State departments of Customs and Excise transferred to Commonwealth on its establishment. Departments of posts, naval and military, defence, light-houses, &c., and quarantine, on a date or dates to be proclaimed.
- Judicature.** High Court of Australia established; appellate and original jurisdiction.
- Finance and Trade.** Collection of Customs to pass. Custom and Excise duties to be uniform, and intercolonial free-trade established within two years after the establishment of the Commonwealth, after which the Federal Government shall have exclusive power to levy such duties as well as bounties in the production or export of goods.
- Of the net revenue from Customs and Excise not more than one-fourth to be applied by Commonwealth towards its expenditure. This provision is liable to variation or repeal after 10 years from the establishment of the Commonwealth.
- Water rights.** Right of States to reasonable use of river waters for conservation or irrigation reserved.
- Interstate Commission.** Interstate Commission appointed to regulate trade and commerce, and prevent discriminations being made by any State which may be deemed unreasonable or unjust to any other State.
- State Debts.** Constitutions, powers, and laws of States protected. State Debts may be taken over.
- Protection to States.** Admission of new States provided for. Commonwealth to protect States against invasion or domestic violence.
- Federal Capital.** Seat of Government to be fixed by the Parliament at some place in New South Wales, but at least 100 miles from Sydney, and to be federal territory.
- Alteration of Constitution.** Constitution may be altered by an absolute majority of both Houses, or of one House if passed twice successively with three months interval; subject to the approval of a majority of the electors voting in a majority of the States, and in the whole Commonwealth.

**Governor-General and Proclamation of Commonwealth.**

The Right Hon. the Earl of Hopetoun, P.C., K.T., G.C.M.G., G.C.V.S., was on the 29th October, 1900, appointed Governor-General and Commander-in-Chief of the Commonwealth, and arrived at Sydney on the 16th December. The Proclamation of the Commonwealth and the swearing-in of the Governor-General took place at Sydney on the 1st day of January, 1901, in the presence of representatives of most of the principal countries of the world, and of a vast assemblage from all parts of the Commonwealth and elsewhere. The Governor-General continued in office until the 9th May, 1902, when he was, at his own request, recalled. On 17th July, 1902, the Right Hon. Hallam, Baron Tennyson, K.C.M.G., was appointed Acting Governor-General; and on 16th January, 1903, he was appointed as Lord Hopetoun's

successor. Lord Tennyson retired on 21st January, 1904, and was succeeded by the Right Hon. Henry Stafford, Baron Northcote, C.B.

THE COMMONWEALTH MINISTRY.

At the Proclamation ceremony the members of the first Commonwealth Ministry were sworn in. The following were their names and the respective offices filled by them:—

First Commonwealth Ministry.

Prime Minister and Minister for External Affairs: The Right Hon. Edmund Barton, P.C.

Attorney-General: The Hon. Alfred Deakin.

Treasurer: The Right Hon. Sir George Turner, P.C., K.C.M.G.

Minister for Home Affairs: The Hon. Sir William John Lyne, K.C.M.G.

Minister for Trade and Customs: The Right Hon. Charles Cameron Kingston, P.C., Q.C.

Minister for Defence: The Hon. Sir James Robert Dickson, K.C.M.G. Died January, 1901, succeeded by Sir John Forrest.

Postmaster-General: The Right Hon. Sir John Forrest, P.C., G.C.M.G. Succeeded in January, 1901, by Hon. J. G. Drake (re-arrangement of portfolios).

Honorary Ministers: Richard Edward O'Connor, Esq., Q.C.; The Honorable Neil Elliott Lewis, succeeded by the Hon. Sir Philip Fysh, K.C.M.G.

Consequent upon the resignation of the Right Hon. C. C. Kingston from the Ministry, and the subsequent appointment of the Right Hon. Sir Edmund Barton, P.C., and Mr. R. E. O'Connor, K.C., to the bench of the newly-constituted High Court of Australia, several changes have been made in the Ministry. The following were the members of the Ministry at the beginning of the first session of the second Commonwealth Parliament, in 1904:—

Changes in the Ministry.

Minister of External Affairs: The Hon. Alfred Deakin.

Minister of Trade and Customs: The Hon. Sir William John Lyne, K.C.M.G.

Treasurer: The Right Hon. Sir George Turner, P.C., K.C.M.G.

Minister of Home Affairs: The Right Hon. Sir John Forrest, P.C., G.C.M.G.

Attorney-General: The Hon. James George Drake.

Postmaster-General: The Hon. Sir Philip Oakley Fysh, K.C.M.G.

Minister of Defence: The Hon. Austin Chapman.

Vice-President of the Executive Council: The Hon. Thomas Playford.

The first elections to the Commonwealth Parliament were held in March, 1901. For the House of Representatives 4 of the 23 Victorian electorates were uncontested. The proportion of the electors entitled to vote who availed themselves of the franchise was 56 per cent., against 63·5 at the State

First Commonwealth Elections

general elections held in November, 1900. The following table gives particulars of the elections in each State:—

FIRST COMMONWEALTH ELECTIONS, MARCH, 1901.

State.	Number of Members.		Number of Electors.		Electors who Voted.		Percentage of Electors who Voted.	
	Senate.	House of Representatives.	Total.	In contested Districts for House of Representatives.	Senate*	House of Representatives. †	Senate.	House of Representatives.
Victoria .. .. .	6	23	280,661	233,051	149,012	130,610	53.09	56.04
New South Wales ..	6	26	331,765	317,902	218,456	211,035	65.81	66.38
Queensland .. .. .	6	9	103,806	103,806	51,336	62,656	49.45	60.35
South Australia .. .	6	7	154,281	154,281	62,952	62,892	40.80	40.76
Western Australia ..	6	5	87,920	70,230	28,733	25,945	32.68	36.95
Tasmania .. .. .	6	5	39,528	39,528	18,822	18,572	47.62	46.99
Commonwealth	36	75	997,961	918,798	529,311	511,710	53.04	55.69

Opening of  
the first  
Common-  
wealth  
Parliament

The first Parliament of the Commonwealth was opened in Melbourne on the 9th May, 1901, by His Royal Highness the Duke of Cornwall and York, K.G., K.T., K.P., G.C.V.S., who was authorized as His Majesty's High Commissioner by letters patent. Besides the Duke and Duchess and suite, the Governor-General, and Members of Parliament, there were present at this memorable function an assemblage of 12,000 people—embracing official representatives from other British Colonies, the Foreign Consuls, Admirals and Captains of visiting war ships (British and Foreign), Commonwealth and State Government officials, representatives of Provincial Bodies, Societies, and Institutions, as well as leading Australian citizens and visitors.

COMMONWEALTH ELECTIONS, 1903.

The Commonwealth Elections, held on 16th December, 1903, are notable by reason of the fact that female franchise was, on that occasion, universal throughout the Commonwealth.

Franchise

All persons 21 years of age, male or female, who have lived in Australia for six months continuously, are natural-born or naturalized subjects, and whose names are on the roll for any division, are entitled to vote at the election of members of the Senate and the House of Representatives. No person of unsound mind, or attainted of treason, or convicted and under sentence or subject to be under sentence for any offence punishable by imprisonment for one year or longer, shall be entitled to vote. No aboriginal native of Australia, Asia, Africa, or the Islands of the Pacific, except New Zealand, shall be enrolled, unless he is entitled to vote

\* Including informal voters as follow :—8,769 in Victoria, 38,674 in New South Wales, 3,371 in Queensland, 1,478 in South Australia, 5,793 in Western Australia, and 419 in Tasmania.

† Including informal voters as follow :—1,051 in Victoria, 4,070 in New South Wales, 1,575 in Queensland, 935 in South Australia, 525 in Western Australia, and 533 in Tasmania.

for the more numerous House of the Parliament of a State. No person is allowed to vote more than once at the same election. The following is a statement of the number of electors, votes polled, and percentage of the latter to the former, for the Senate and the House of Representatives:—

ELECTORS ENROLLED AND VOTES POLLED.

State.	Number of Electors.		Electors who Voted.		Percentage of Electors who voted.	
	Total.	In contested districts for House of Representatives.	Senate.	House of Representatives.	Senate.	House of Representatives.
Victoria ...	612,472	488,223	313,487	262,789	51·18	53·83
New South Wales...	687,049	578,017	324,364	282,514	47·21	48·88
Queensland ...	227,080	202,925	124,507	115,731	54·83	57·03
South Australia ...	167,775	49,645	54,785	20,122	32·65	40·53
Western Australia...	116,942	69,824	33,148	21,233	28·35	30·41
Tasmania ...	82,268	82,268	37,021	37,013	45·00	44·99
Commonwealth	1,893,586	1,470,902	887,312	739,402	46·86	50·26

It will be seen that the greatest activity was displayed by voters in Queensland and Victoria, which were the only two States in which more than half the votes were polled; but in Western Australia the polling was abnormally low, less than one-third of the votes being polled. At the first Commonwealth elections, held in March, 1901, the polling was higher in every State, the percentage of electors who voted in contested districts for the House of Representatives being 66·38 in New South Wales, 60·35 in Queensland, 56·04 in Victoria, 46·99 in Tasmania, 40·76 in South Australia, and 36·95 in Western Australia.

The following is a statement of the male and female electors enrolled, votes recorded, and percentage of votes to electors at the Senate elections of December, 1903:—

Males and females—votes recorded.

SENATE ELECTIONS, 1903.—MALE AND FEMALE ELECTORS, AND VOTES RECORDED.

State.	Electors Enrolled.		Votes Recorded.		Percentage of Votes to Electors.	
	Males.	Females.	Males.	Females.	Males.	Females.
Victoria ...	302,069	310,403	171,839	141,648	56·89	45·63
New South Wales	360,285	326,764	189,877	134,487	52·70	41·16
Queensland ...	127,914	99,166	79,938	44,569	62·49	44·94
South Australia ...	85,947	81,828	35,736	19,049	41·58	23·28
Western Australia	74,754	42,188	26,878	6,270	35·96	14·86
Tasmania ...	43,515	38,753	23,729	13,292	54·53	34·30
Commonwealth	994,484	899,102	527,997	359,315	53·08	39·96

It will be seen, by comparing the percentage of males who voted with the percentage who voted in State elections previously given, that a greater amount of interest is aroused in State elections than in elections for the Commonwealth, the percentage of votes recorded in the former fluctuating from 60 to 70 per cent. at various times. The above figures show that the female vote was exercised to a greater extent in Victoria and Queensland than in the other States, New South Wales being next in this respect; but only about one female in every seven entitled to vote in Western Australia, took the trouble to do so.

Female franchise is in force in New Zealand, and in all the Australian States except Victoria and Queensland for the State as well as the Commonwealth elections. At the last general elections in New Zealand, held in 1902, 74.52 per cent. of the females enrolled exercised the franchise; and at the last State elections of South Australia, held in 1902, 50.72 per cent. of the females entitled to vote availed themselves of the privilege. At the last State elections of Western Australia, held in 1901, 56 per cent. of the females enrolled voted, whereas at the Commonwealth elections in the same State less than 15 per cent. of the females voted. Comparing these figures with those in the preceding table, it is seen that in New Zealand the females exercise the franchise to a far greater extent than in Australia, and that in those two States in Australia where female franchise has been exercised for both Commonwealth and State elections, the right is exercised to a much greater extent in respect of the latter.

Informal votes are included in the votes recorded set out in the two preceding tables. The following were the number and percentage of votes which were informal for both Houses of the Commonwealth Parliament:—

INFORMAL VOTES, COMMONWEALTH ELECTIONS, 1903.

State.	Senate.		House of Representatives.	
	Number.	Percentage of Votes Recorded.	Number.	Percentage of Votes Recorded.
Victoria ... ..	7,003	2.23	4,818	1.83
New South Wales ... ..	15,796	4.87	7,834	2.77
Queensland ... ..	4,612	3.70	3,057	2.64
South Australia ... ..	1,208	2.20	542	2.69
Western Australia ... ..	2,001	6.03	1,251	5.89
Tasmania ... ..	1,441	3.89	1,164	3.15
Commonwealth ... ..	32,061	3.61	18,666	2.52

MEMBERS OF THE SECOND COMMONWEALTH PARLIAMENT, 1904.

THE SENATE.

The Senate.

President: The Hon. Sir Richard Chaffey Baker, K.C.M.G., K.C.

Victoria—

Best, Hon. Robert Wallace  
Findley, Edward  
Fraser, Hon. Simon  
Styles, James  
Trenwith, Hon. William Arthur  
Zeal, Hon. Sir William Austin,  
K.C.M.G.

New South Wales—

Gould, Lt.-Col. Hon. Albert John  
Gray, John Proctor  
Millen, Edward Davis  
Nield, Lt.-Col. John Cash  
Pulsford, Edward  
Walker, James Thomas

Queensland—

Dawson, Anderson  
Drake, Hon. James George  
Givens, Thomas  
Higgs, William Guy  
Stewart, James Charles  
Turley, Henry

South Australia—

Baker, Hon. Sir Richard Chaffey,  
K.C.M.G., K.C.  
Guthrie, Robert Storrie  
McGregor, Gregor  
Playford, Hon. Thomas  
Story, William Harrison  
Symon, Sir Josiah Henry, K.C.M.G.,  
K.C.

Western Australia—

Croft, John William  
de Largie, Hugh  
Henderson, George  
Matheson, Alexander Perceval  
Pearce, George Foster  
Smith, Miles Staniforth Cater

Tasmania—

Clemons, John Singleton  
Dobson, Hon. Henry  
Keating, John Henry  
Macfarlane, James  
Mulcaby, Hon. Edward  
O'Keefe, David John

THE HOUSE OF REPRESENTATIVES.

Speaker: The Hon. Sir Frederick William Holder, K.C.M.G.

The House  
of Repre-  
sentatives

Victoria.

Member.	District.	Member.	District.
Cook, J. N. H.	Bourke	Maloney, Wm.	Melbourne
Crouch, R. A.	Corio	McLean, Hon. A.	Gippsland
Deakin, Hon. A.	Ballarat	Phillips, Hon. P.	Wimmera
Gibb, James	Flinders	Quick, Sir J.	Bendigo
Harper, R.	Mernda	Robinson, A.	Wannon
Higgins, H. B., K.C.	Northern Melb.	Ronald, Rev. J. B.	Southern Melb.
Isaacs, Hon. I. A., K.C.	Indi	Salmon, Hon. C. C.	Laanecoorie
Kennedy, Thos.	Moira	Skene, Thos.	Grampians
Knox, Wm.	Kooyong	Tudor, F. G.	Yarra
Mauger, S.	Melb. Ports	Turner, Rt. Hon. Sir G., P.C., K.C.M.G.	Balaclava
McCay, Hon. J. W.	Corinella	Wilson, J. G.	Corangamite
McCull, Hon. J. H.	Echuca		

New South Wales.

Vacant	... Riverina	Lyne, Hon. Sir W. J., K.C.M.G.	Hume
Brown, Thomas	... Canobolas	Reid, Rt. Hon. G. H., P.C., K.C.	East Sydney
Chapman, Hon. A.	... Eden-Monaro	Smith, Bruce, K.C.	... Parkes
Conroy, A. H. ...	... Werriwa	Smith, Hon. S....	... Macquarie
Cook, Joseph ...	... Parramatta	Spence, W. G. ...	... Darling
Edwards, G. B.	... South Sydney	Thomas, J. ...	... Barrier
Ewing, T. T. ...	... Richmond	Thomson, Dugald	... North Sydney
Fuller, G. W. ...	... Illawarra	Watkins, D. ...	... Newcastle
Hughes, W. M.	... West Sydney	Watson, J. C. ...	... Bland
Johnson, W. E.	... Lang	Webster, W. ...	... Gwydir
Kelly, W. H. ...	... Wentworth	Wilks, W. H. ...	... Dalley
Lee, H. W. ...	... Cowper	Willis, H. ...	... Robertson
Liddell, F. ...	... Hunter		
Lonsdale, E. ...	... New England		

## Queensland.

Bamford, F. W. ...	Herbert	McDonald, C. ...	Kennedy
Culpin, M. ...	Brisbane	Page, James ...	Maranoa
Edwards, R. ...	Oxley	Thomson, D. A. ...	Capricornia
Fisher, A. ...	Wide Bay	Wilkinson, J. ...	Moreton
Groom, L. E. ...	Darling Downs		

## South Australia.

Batchelor, E. L. ...	Boothby	Hutchison, J. ...	Hindmarsh
Bonython, Sir J. L. ...	Barker	Kingston, Rt. Hon. C. C.,	
Glyn, P. McM. ...	Angas	P.C., K.C. ...	Adelaide
Holder, Hon. Sir F. W.,	Wakefield	Poynton, A. ...	Grey
K.C.M.G.			

## Western Australia.

Carpenter, W. H. ...	Fremantle	Fowler, J. M. ...	Perth
Forrest, Rt. Hon. Sir John,	Swan	Frazer, C. E. ...	Kalgoorlie
P.C., G.C.M.G.		Mahon, H. ...	Coolgardie

## Tasmania.

D. N. Cameron	Wilnot	McWilliams, W. J. ...	Franklin
Fysh, Hon. Sir P. O.,	Denison	O'Malley, King	Darwin
K.C.M.G.		Storrer, D. ...	Bass

## Parliamentary Officers.

Senate.—E. G. Blackmore, G.M.G., Clerk of the Parliaments; C. B. Boydell, Clerk Assistant; G. E. Upward, Usher of the Black Rod.  
 House of Representatives.—C. G. Duffy, Clerk; W. A. Gale, Clerk Assistant; T. Woollard, Sergeant-at-Arms.  
 Reporting Staff.—B. H. Friend, Principal Parliamentary Reporter; D. F. Lumsden, Second Reporter.

## COMMONWEALTH ACTS PASSED, 1901.

- No. 1. 25th June.—This Act grants and applies out of the consolidated revenue fund the sum of £491,882 to the service of the period ending 30th June, 1901.
- No. 2. 12th July.—The *Acts Interpretation Act* 1901 details the methods of interpreting Acts of Parliament, and of shortening their language.
- No. 3. 12th July.—This Act grants and applies out of the consolidated revenue the sum of £1,010,732 for the service of the year ending 30th June, 1902.
- No. 4. 7th August.—The *Audit Act* 1901 makes provision for the collection and payment of the public moneys, the audit of the public accounts, and the protection and recovery of public property.
- No. 5. 5th September.—The *State Laws and Records Recognition Act* 1901 provides for the recognition throughout the Commonwealth of the laws, the public acts and records, and the judicial proceedings of the States.
- No. 6. 3rd October.—The *Customs Act* 1901 regulates the customs, and deals with the importation, exportation, and warehousing of goods, the administration and control of the customs, duties and drawbacks, ships' stores, the coasting trade, agents and officers, forfeitures and penalties, prosecutions and settlement of cases by the Minister. This is a machinery Act, and does not impose any duties.

- No. 7. 5th October.—The *Beer Excise Act* 1901 regulates the excise on beer, the licensing of brewers and regulation of breweries, excise supervision, duty stamps, computation and payment of duty and refunds, removal of beer from breweries, powers of officers, and prohibition and penalties. The Act does not impose the rate of duty.
- No. 8. 5th October.—The *Distillation Act* 1901 regulates distillation, stills, licences, vigneron, excise supervision, removal of spirits, computation and payment of duty, powers of officers, and prohibitions and penalties.
- No. 9. 5th October.—The *Excise Act* 1901 regulates excise generally, and deals with administration, producers, and dealers, licensing of manufacturers and regulation and supervision of factories, payment of duty and excise control, drawbacks, officers, disputes, prohibitions and penalties.
- No. 10. 12th October.—This Act grants and applies £928,322 out of the consolidated revenue to the service of the year 1901-2.
- No. 11. 16th October.—The *Service and Execution of Process Act* 1901 provides for the service and execution throughout the Commonwealth of the civil and criminal process, and the judgments of the courts of the States and of other parts of the Commonwealth, and matters connected therewith.
- No. 12. 16th November.—The *Post and Telegraph Act* 1901 relates to the postal and telegraphic services of the Commonwealth, which were transferred from the States on 1st March, 1901, and deals with the appointment, powers, and privileges of officers, arrangements and contracts for the carriage of mails, newspapers, and packets, arrangements for money orders and postal notes, the control of telegraphs and protection of telegraph lines, prohibitions and penalties, legal proceedings, and notice of limitation of actions.
- No. 13. 12th December.—The *Property for Public Purposes Acquisition Act* 1901 provides for the acquisition of property for public purposes, for dealing with property so acquired, and for other matters connected therewith.
- No. 14. 17th December.—The *Punishment of Offences Act* 1901 makes provision for the punishment of offences against the laws of the Commonwealth, by enacting that the laws of each State respecting the arrest and custody of offenders, and the procedure for their summary conviction, or for their examination and commitment for trial on indictment or information, and for holding accused persons to bail, shall apply generally to persons charged with offences committed within that State against the Commonwealth laws.
- No. 15. 17th December.—This Act grants and applies £410,767 out of the consolidated revenue to the service of the year 1901-2.
- No. 16. 17th December.—The *Pacific Island Labourers Act* 1901 provides for the regulation, restriction, and prohibition of the introduction into the Commonwealth of labourers from the Pacific Islands. No Pacific Islander is to enter Australia after 31st March, 1904, nor, except under a licence, before that date.

- No. 3. 30th July.—*Sugar Rebate Abolition Act* 1903 abolishes, as from the date of this Act, the rebate of excise on sugar, provided for in the Schedule to the *Excise Tariff Act* 1902.
- No. 4. 30th July.—*Sugar Bounty Act* 1903 provides for a bounty to every grower of sugar-cane or beet in the production of which white labour only has been employed, at the rate of 4s. per ton on cane giving 10 per cent. of sugar, or in the case of beet, at the rate of 40s. per ton on the sugar-giving contents of the beet. Ancillary provisions are included, and regulations may be made by the Governor-in-Council.
- No. 5. 30th July.—*Supply Act* (No. 2) 1903-4 applies £595,659 for the services of the year 1903-4.
- No. 6. 26th August.—*Judiciary Act* 1903 provides for the establishment of the High Court of Australia, to consist of a Chief Justice and two other justices, to be appointed by commission. The seat of Government shall be the principal seat of the Court, but district registries may be established in each State, where the Court shall sit when required. Chamber business, interlocutory proceedings, &c., may be dealt with by a Judge of the High Court, and (except in matters within the exclusive jurisdiction of the High Court) by a Judge of the Supreme Court of a State. Provision is made for a Full Court to hear appeals, and to grant appeals to the Privy Council. The jurisdiction, original and appellate, is fully defined and regulated. Provision is made for officers of the Court, and in regard to barristers and solicitors, those of any State being entitled to practise in any Federal Court. Suits by and against the Commonwealth and the States are regulated; and the criminal jurisdiction in regard to offences against the laws of the Commonwealth is fully regulated.
- No. 7. 28th August.—*High Court Procedure Act* 1903 relates to the procedure of the High Court, and formulates rules.
- No. 8. 28th August.—*Naval Agreement Act* 1903 ratifies an agreement entered into between the British Admiralty and the Governments of the Commonwealth and New Zealand relating to the naval force on the Australian station. The Commonwealth is to pay the Imperial Government five-twelfths and New Zealand is to pay one-twelfth of the total annual cost of maintaining the naval force on the Australian station, not to exceed £200,000 and £40,000 respectively in any year.
- No. 9. 11th September.—*Electoral Divisions Act* 1903 retains the electoral divisions determined under the State laws for the first elections.
- No. 10. 29th September.—*Supply Act* (No. 3) 1903-4 applies £658,500 to the services of the year 1903-4.
- No. 11. 13th October.—*Naturalization Act* 1903. Any resident of the Commonwealth, not being a British subject, and not being an aboriginal native of Asia, Africa, or the Islands of the Pacific, who intends to settle in the Commonwealth, has resided there continuously for the preceding two years, or has been naturalized in the United Kingdom, may, at the discretion of the Governor-in-Council, be naturalized. Provision is also made as to the naturalization of women by marriage, and of children of naturalized persons; and for the recognition of persons previously naturalized under State laws; and as to the exclusive power of the Commonwealth in regard to naturalization.

- No. 11. 26th July.—The *Excise Tariff* 1902 declares the time of the imposition of uniform duties of excise, and validates the collections made under tariff proposals, and imposes the rates of excise duty on beer, spirits, starch, sugar, and tobacco.
- No. 12. 8th September.—The *Royal Commissions Act* 1902 empowers Commissions issued by the Governor-General under the Great Seal of the Commonwealth to summon any person to attend for examination on oath, and to send for books and documents.
- No. 13. 9th September.—The *Post and Telegraph Rates Act* 1902 enacts that government telegrams and letters are to be subject to the rates in force, and declares the rates for newspapers and telegrams.
- No. 14. 16th September.—The *Customs Tariff* 1902 declares the time of the imposition of uniform duties of customs, and validates the collections made under tariff proposals, and declares the rates of duties on imports.
- No. 15. 29th September.—This Act grants and applies £1,365,597 out of the consolidated revenue to the service of the year 1902-3.
- No. 16. 10th October.—This Act grants and applies £52,497 out of the consolidated revenue to the service of the year 1901-2, and appropriates the supplies granted for the year in that session of Parliament, amounting to £4,211,348.
- No. 17. 10th October.—The *Appropriation Act* 1902-3 grants and applies £2,621,197 out of the consolidated revenue to the service of the year 1902-3, and appropriates the supplies granted for the year in that session of Parliament amounting to £3,986,794.
- No. 18. 10th October.—The *Appropriation (Works and Buildings) Act* 1902-3 grants and applies £406,092 out of the consolidated revenue to the service of the year 1902-3 for the purposes of additions, new works, and buildings.
- No. 19. 10th October.—The *Commonwealth Electoral Act* 1902 regulates Parliamentary elections, dealing with the appointment and duties of electoral officers, the partition of each of the States into electoral divisions, the fixing of polling places, the preparation of electoral rolls, the constitution and jurisdiction of special courts of revision, the issue and return of the writs, nomination of candidates, voting by post, elections, scrutiny, limitation of electoral expenses, offences and punishments, and disputed returns.
- No. 20. 10th October.—The *Parliamentary Allowances Act* 1902 fixes the dates from which the allowances of Members of Parliament are to commence.
- No. 21. 10th October.—The *Claims Against the Commonwealth Act* 1902 makes temporary provision for enforcing claims against the Commonwealth.

### COMMONWEALTH ACTS PASSED DURING 1903.

- No. 1. 4th July.—*Supply Act* (No. 1) 1903-1904 provides for an advance to the Treasurer of £75,000.
- No. 2. 15th July.—*Senate Elections Act* 1903 provides that the election of Senators to fill periodical and casual vacancies shall be conducted as one election, and for a casting vote by the Commonwealth electoral officer of the State in the case of an equal number of votes. The powers of the Court of Disputed Returns are added to, and other formal matters dealt with.

- No. 3. 30th July.—*Sugar Rebate Abolition Act* 1903 abolishes, as from the date of this Act, the rebate of excise on sugar, provided for in the Schedule to the *Excise Tariff Act* 1902.
- No. 4. 30th July.—*Sugar Bounty Act* 1903 provides for a bounty to every grower of sugar-cane or beet in the production of which white labour only has been employed, at the rate of 4s. per ton on cane giving 10 per cent. of sugar, or in the case of beet, at the rate of 40s. per ton on the sugar-giving contents of the beet. Ancillary provisions are included, and regulations may be made by the Governor-in-Council.
- No. 5. 30th July.—*Supply Act* (No. 2) 1903-4 applies £595,659 for the services of the year 1903-4.
- No. 6. 26th August.—*Judiciary Act* 1903 provides for the establishment of the High Court of Australia, to consist of a Chief Justice and two other justices, to be appointed by commission. The seat of Government shall be the principal seat of the Court, but district registries may be established in each State, where the Court shall sit when required. Chamber business, interlocutory proceedings, &c., may be dealt with by a Judge of the High Court, and (except in matters within the exclusive jurisdiction of the High Court) by a Judge of the Supreme Court of a State. Provision is made for a Full Court to hear appeals, and to grant appeals to the Privy Council. The jurisdiction, original and appellate, is fully defined and regulated. Provision is made for officers of the Court, and in regard to barristers and solicitors, those of any State being entitled to practise in any Federal Court. Suits by and against the Commonwealth and the States are regulated; and the criminal jurisdiction in regard to offences against the laws of the Commonwealth is fully regulated.
- No. 7. 28th August.—*High Court Procedure Act* 1903 relates to the procedure of the High Court, and formulates rules.
- No. 8. 28th August.—*Naval Agreement Act* 1903 ratifies an agreement entered into between the British Admiralty and the Governments of the Commonwealth and New Zealand relating to the naval force on the Australian station. The Commonwealth is to pay the Imperial Government five-twelfths and New Zealand is to pay one-twelfth of the total annual cost of maintaining the naval force on the Australian station, not to exceed £200,000 and £40,000 respectively in any year.
- No. 9. 11th September.—*Electoral Divisions Act* 1903 retains the electoral divisions determined under the State laws for the first elections.
- No. 10. 29th September.—*Supply Act* (No. 3) 1903-4 applies £658,500 to the services of the year 1903-4.
- No. 11. 13th October.—*Naturalization Act* 1903. Any resident of the Commonwealth, not being a British subject, and not being an aboriginal native of Asia, Africa, or the Islands of the Pacific, who intends to settle in the Commonwealth, has resided there continuously for the preceding two years, or has been naturalized in the United Kingdom, may, at the discretion of the Governor-in-Council, be naturalized. Provision is also made as to the naturalization of women by marriage, and of children of naturalized persons; and for the recognition of persons previously naturalized under State laws; and as to the exclusive power of the Commonwealth in regard to naturalization.

- No. 12. 21st October.—*Extradition Act* 1903 relates to the extradition of criminals from the Commonwealth and from Foreign States.
- No. 13. 21st October.—*High Court Procedure Amendment Act* 1903 relates to the transfer of applications to a registry where the court is sitting.
- No. 14. 22nd October.—*Appropriation Act* 1903-4 issues and applies towards supply £2,648,437. This and other previous supplies granted are appropriated to the expenditure of the year 1903-4.
- No. 15. 22nd October.—*Supplementary Appropriation Act* 1901-2 and 1902-3 authorizes and applies for services previously rendered £6,968 for 1901-2, and £107,997 for 1902-3.
- No. 16. 22nd October.—*Appropriation (Works and Buildings) Act* 1903-4 applies and appropriates £422,283 for additions, new works, and buildings for 1903-4.
- No. 17. 22nd October.—*Supplementary Appropriation (Works and Buildings) Act* 1901-2 and 1902-3 applies and appropriates £1,004 and £2,635 respectively for these two years.
- No. 18. 22nd October.—*Rules Publication Act* 1903. This Act regulates the manner in which any rules authorized to be made under any Statute, shall be made and published.
- No. 19. 22nd October.—*Commonwealth Public Service Amendment Act* 1903 extends the time within which persons who have passed the entrance examination may be appointed to fill subsequent vacancies arising from nine to eighteen months.
- No. 20. 22nd October.—*Defence Act* 1903. For the purposes of administration the Governor-General in Council may appoint a General Officer Commanding the Military Forces of the Commonwealth, a similar Naval Officer, and Commanding Officers of Districts, apportion the forces amongst the districts and sub-districts, and generally appoint and promote officers, and issue commissions. The powers, duties, and tenure of certain officers is provided for; and also seniority, promotion, and reserves. A Naval and Military College may be established to impart education in the various branches of naval and military science. The defence force is to consist of the permanent and citizen forces, the latter of which is divided into Militia Volunteer Forces and Reserve Forces, and provision is made for the raising of the force. The permanent forces are at all times liable to be employed on active service, and the citizen forces may be called out in time of war by proclamation. The military forces are not liable to serve beyond the Commonwealth, but the naval forces are. Where the Governor of a State proclaims that domestic violence exists therein, the permanent forces may be called out. All male inhabitants (except persons specially exempt from service), aged 18 to 60 years, who are British subjects and resident six months, shall, in time of war, be liable to serve in the Militia forces. Other general provisions of a comprehensive character are also included.
- No. 21. 22nd October.—*Patents Act* 1903 provides for the transfer of the administration of the State Patent Acts and for the establishment of a new system, with the saving of rights accrued under State Acts. State patents in existence may be extended to the Commonwealth. A Commissioner of Patents is to be appointed, and a Patent Office established, and the mode of registration and procedure is fully dealt with.

## SOCIAL CONDITION.

## MELBOURNE UNIVERSITY.

The Univer-  
sity of  
Melbourne.

The University of Melbourne was incorporated and endowed by an Act of the Governor and Legislative Council of Victoria, to which the Royal assent was given on 22nd January, 1853. The University buildings, together with those of the affiliated colleges, are situated in 106 acres of ground, in the southern part of Carlton. The University consists of a Council and Senate, and is incorporated and made a body politic with perpetual succession. It has power to grant degrees, diplomas, certificates, and licences in all faculties except divinity. The Council consists of 20 members elected by the Senate. It elects two of its members to be Chancellor and Vice-Chancellor respectively. The ordinary tenure of office of Councillors is five years, but those members who were in office on 7th June, 1881, have a life tenure. The Senate consists of all male persons who have graduated doctor or master in the University. It elects a Warden annually from its members. Control and management are in the hands of the Council. Council and Senate conjointly make statutes and regulations. There is no religious test for admission. The Governor of Victoria for the time being is the Visitor, and has authority to do all things which appertain to Visitors. By Royal letters patent of 14th March, 1859, it is declared that the degrees of the University of Melbourne shall be as fully recognized as those of any University in the United Kingdom. Scholarships, exhibitions, and prizes are provided in all the principal subjects, the cost being defrayed partly out of University funds and partly by private bequests. In the matter of endowment by private persons, the Melbourne University does not, however, compare favourably with others. The Act provides for an endowment of £9,000 annually for maintenance and management. Additional grants are voted annually by Parliament for maintenance, and from time to time for building purposes. Since 1853 the total amount received from the Government was £718,262—£154,012 for building and apparatus, £459,000 endowment under "Special Appropriation Act," 16 Vict. 34, and £105,250 additional endowment by annual votes of the Legislature. In addition, the Council derives income from the fees

paid by students for lectures, examinations, certificates, and diplomas. These are charged as follow:—

- For the degree of Bachelor of Arts, £12 12s. per annum.  
 For the degree of Bachelor of Science, £21 per annum.  
 For the degree of Bachelor of Laws, £12 12s. for each of the 1st and 2nd years; £25 4s. for each of the 3rd and 4th years.  
 For the degree of Bachelor of Medicine and Surgery, £21 per annum.  
 For the degree of Bachelor of Civil Engineering, Bachelor of Electrical Engineering, Bachelor of Mining Engineering, £18 18s. for the 1st year; £21 for the 2nd year; £25 4s. for each of the 3rd and 4th years.  
 For the degree of Bachelor of Music and Diploma in Music, £12 12s. per annum.  
 For the course for Diploma of Education, £6 6s. per annum.  
 For single subjects, special fees are charged, ranging from £3 3s. each annually for Art subjects to £21 for Science subjects, in which laboratory work plays a great part.  
 For admission to degrees, £5 5s. is payable by bachelors, £10 10s. by masters, £5 5s. for any *ad eundem* degree.  
 For any diploma, £3 3s. is the fee.  
 For certificates of matriculation, attendance upon lectures, etc., special small fees are charged.

The number of students who presented themselves for the matriculation examination, the number that passed, as well as those matriculated, who entered the Melbourne University as undergraduates, and the number attending lectures, in each of the five years 1899 to 1903, were:—

Matriculation and attendance at lectures.

#### MATRICULATION AND ATTENDANCE AT LECTURES, 1899 TO 1903.

Year.	Number Presented for—		Students who Passed the Matriculation Examination.		Number Matriculated and Admitted as Under-graduates.	Number Attending Lectures.
	Matriculation Examination.	Less than Required Number of Subjects.	Number.	Percentage.		
1899	1,496	261	559	45·3	108	727
1900	1,479	320	443	38·2	101	647
1901	1,438	302	511	45·0	137	584
1902	1,415	368	490	46·8	124	621
1903	1,566	367	478	39·9	111	628

The number of candidates in 1903 was greater than in any year since 1892. Of the 628 students who attended lectures in 1903, 123 attended in Arts, 51 in Laws, 64 in Engineering, 251 in Medicine, 13 in Science, 102 in Music, and 24 in Education.

The number of degrees taken in 1903 was 140, 135 of which were direct and 5 *ad eundem*, as against a total of 755 for the five preceding years, or an average of 151 per year. The direct graduates numbered 724, and the *ad eundem* degrees 31 in the five preceding years. Of the total number of 3,499 degrees conferred, 245 were conferred on women, 243

Degrees.

of which were direct and 2 ad eundem; and 125 of which were the degree of Bachelor of Arts, 55 Master of Arts, 26 Bachelor of Medicine, 1 Doctor of Medicine, 24 Bachelor of Surgery, 1 Bachelor of Laws, 7 Bachelor of Science, 5 Master of Science, and 1 Bachelor of Music. The following table shows the number of degrees conferred at the University between the date of its first opening and the end of 1903—the years 1902 and 1903 being shown separately:—

## DEGREES CONFERRED.

Degrees.	Prior to 1902.			During 1902			During 1903			Total.		
	Direct.	Ad Eundem.	Total.	Direct.	Ad Eundem.	Total.	Direct.	Ad Eundem.	Total.	Direct.	Ad Eundem.	Total.
Bachelor of Arts ...	759	107	866	16	...	16	22	...	22	797	107	904
Master of Arts ...	406	155	561	19	...	19	19	2	21	444	157	601
Bachelor of Medicine ...	542	13	555	27	...	27	28	1	29	597	14	611
Doctor of Medicine ...	68	98	166	9	...	9	12	1	13	89	99	188
Bachelor of Surgery ...	455	3	458	28	...	28	30	...	30	513	3	516
Master of Surgery ...	7	...	7	2	...	2	2	...	2	11	...	11
Bachelor of Laws ...	294	9	303	8	...	8	9	...	9	311	9	320
Master of Laws ...	56	3	59	3	...	3	1	...	1	60	3	63
Doctor of Laws ...	15	20	35	...	...	...	...	...	...	15	20	35
Bachelor of Engineering ...	110	2	112	6	...	6	5	...	5	121	2	123
Master of Engineering ...	63	...	63	1	...	1	1	...	1	65	...	65
Bachelor of Science ...	28	3	31	1	...	1	2	...	2	31	3	34
Master of Science ...	11	...	11	1	...	1	4	1	5	16	1	17
Doctor of Science ...	...	3	3	1	...	1	...	...	...	1	3	4
Bachelor of Music ...	3	2	5	...	...	...	...	...	...	3	2	5
Doctor of Music ...	...	2	2	...	...	...	...	...	...	...	2	2
Total ...	2,817	420	3,237	122	...	122	135	5	140	3,074	425	3,499

## AFFILIATED COLLEGES.

The affiliated colleges.

The permission accorded by the "University Act of Incorporation" for the establishment of affiliated colleges has been taken advantage of by the clergy and people of the Church of England, and of the Presbyterian and Methodist Churches of Victoria. Substantial colleges have been built upon the sites reserved for this purpose, which are situated in the northern portion of the University grounds, fronting Sydney Road and College Crescent, Carlton. These colleges, which admit students without regard to their religious beliefs, are also training seminaries for the ministers of the respective denominations. There are efficient staffs of lecturers assisting the masters in teaching the principal subjects in each of the University courses. The Roman Catholic body has not yet erected a college upon its site in Madeline Street.

The Anglican Church was the first to avail itself of the right. In 1869, Bishop Perry (then Lord Bishop of Melbourne), assisted by Professor Wilson and others, undertook to raise the funds required for the college buildings. Their efforts were crowned with success, and the building of Trinity was commenced in the following year. Its progress was remarkably rapid, and in 1877 it was found necessary to increase the accommodation for students. In 1883 the Clarke buildings were erected by Sir W. J. and Mr. Joseph Clarke, and additions have been repeatedly made since that time. In 1886, Trinity College Hostel, a house of residence for women students of the college, was established by the present Warden, and was carried on until 1890 in houses rented by him. In 1890, mainly through the munificence of Janet Lady Clarke, the hostel was supplied with a permanent building, erected within the college precincts, and named "The Janet Clarke Buildings." The hostel forms an integral part of Trinity College, and the women students of the college consequently enjoy all its educational advantages on equal terms with the men students. The hostel is open to students of all religious denominations. The college buildings consist of a chapel, dining hall, chemical and biological laboratories, lecture rooms, libraries, and students' common room, in addition to apartments for the warden, tutors, and students. The master is Dr. A. Leeper, M.A., LL.D., Warden of the college.

Trinity  
College.

In 1877, the General Assembly of the Presbyterian Church in Victoria appointed a Committee to take charge of the site in its interests. Shortly afterwards it was resolved to raise subscriptions to obtain the Crown grant for the land, and to proceed with the erection of a college. When £6,000 was subscribed for the purpose, Mr. Francis Ormond offered £10,000, provided that the Church obtained £10,000 from other sources, and in less than a year the Council were in a position to receive Mr. Ormond's subscription. The buildings were at once commenced, and the college opened in March, 1881. It was then announced that Mr. Ormond would bear the whole expense of the structural part of the building, so that the remaining subscriptions could be entirely devoted to payments for fittings, improvements, repairs, etc. In 1883 the buildings were enlarged. In 1887 Mr. Ormond erected the Victoria wing, in honour of the late Queen's Jubilee. The buildings comprise lecture and reading rooms, common room, and masters', tutors', and students' quarters. Mr. Ormond's benefactions, amounting to £41,780 during his lifetime, were increased under his bequest to a sum which will ultimately amount to £67,000. The college bears the name of this generous donor. The master is Mr. J. H. McFarland, M.A.

Ormond  
College.

Queen's  
College.

The Conference of the Wesleyan Church in Victoria, in 1878, appointed a Committee to arrange for the building of a college. A request for donations met with a generous response, the first donor being Sir William McArthur, who made a gift of £1,000. The work of erecting the college was not, however, commenced until 1887. It was formally opened in March, 1888. The strenuous efforts of the Rev. W. A. Quick, in the establishment of the college, entitle him to the honour of being practically its founder. In 1889 large additions were made to the buildings, which now comprise fully equipped lecture rooms, laboratories, library, reading rooms, and apartments for the master, tutors, and students. The master is the Rev. E. H. Sugden, M.A., B.Sc.

## UNIVERSITY EXTENSION.

University  
Extension

The system of local lectures and classes, known as University Extension, which has been in vogue in England for nearly 40 years, and has more lately been introduced into the countries of Europe and the United States, was organized in Victoria in 1891, under a Board appointed by the Melbourne University. The system aims at bringing teaching of the scope and standard of that given at the University itself within the reach of the numerous and constantly growing class of people whose position in life prevents them from attending lectures there, but who wish to devote their leisure to systematic reading and study. To these, material assistance is given by formal lectures, illustrated, where the subject requires it, by demonstrations and experiments, informal classes and discussions, checking written essays, and examinations, by men of special training. By thus systematising the knowledge of the extension students, guiding their reading, and suggesting new methods and new directions of inquiry, the higher education is imparted to them. The lectures are not of the ordinary popular kind. Their primary object is education, they seek to instruct and stimulate rather than to entertain; at the same time, they endeavour to avoid pedantry and dullness. The lectures are delivered in courses, and thus fairly wide subjects are able to be treated with some approach to thoroughness. The work is carried on by local committees, both in Melbourne and suburbs, and in urban centres, acting in conjunction with the Central Board. This body supplies a list of suitable courses of lectures by competent and approved lecturers, and the local committee chooses the lecturer and subject. Since 1891, 161 courses of lectures have been delivered, and 19,175 students enrolled. In 1903 there were 5 centres, 5 courses of lectures, and 930 students enrolled.

## THE STATE EDUCATION SYSTEM.

The present system of "free, compulsory, and secular" education came into operation on the 1st January, 1873, the Act having been passed the previous year, and being now, with two Amending Acts passed in 1876 and 1889, consolidated in the "Education Act 1890," which in turn has been amended by Act No. 1777, passed in December, 1901. Before the inception of the present system, several different systems were tried. Prior to 1848 education was left to private enterprise; but in that year a denominational system was introduced and administered by a Board, subsidy being granted by the State. Under that system, religious as well as secular instruction was imparted by the teachers—the former being given according to the principles of the denomination to which the school was attached, the clergy of which also exercised control over the instruction imparted. On the separation of Port Phillip district from New South Wales in 1851, a Board of National Education was established in the new Colony of Victoria "for the formation and management of schools to be conducted under Lord Stanley's National System of Education, and for administering the funds in connexion therewith." There were thus two systems of education under separate Boards in operation at the same time, which duplicate system continued in force until 1862, when it was abolished as being cumbrous and costly. The "Common Schools Act 1862" transferred the powers of both Boards to a single Board of Education, provided a limit to the distance between which schools might be established, and fixed a minimum of scholars a school must have in order to entitle it to State aid; it prescribed, moreover, that four hours each day would be set apart for secular instruction, and that no child should be refused admission to any school on account of its religious persuasion. Although this Act caused some improvement, it was not designed to abolish denominationalism, nor did it reduce the number of small schools to any appreciable extent. It continued in force, however, for ten years, when it was repealed by the present Act in 1872. Under these systems, a fee ranging from 6d. to 2s. 6d. weekly was charged to all children except those whose parents were in destitute circumstances. Under the Act of 1872, education was made free to all willing to accept it; compulsory, in the sense that, whether accepted or not, evidence must be produced that all children are educated up to a certain standard; and secular, no teacher being allowed to give other than secular instruction in any State school building. Every facility is, however, afforded to the clergy of any denomination to assemble any of the children of the parents who desire it in a school room and impart religious instruction.

The education system of Victoria.

Main details  
of the  
system.

In each school four hours at least are set apart during each school day for secular instruction, two hours of which are to be before, and two hours after, noon. Secular instruction, in the case of children over nine years of age, includes the teaching of some recognised lesson books on the laws of health and lessons from some recognised temperance lesson books.

Compulsory  
clauses.

Parents and custodians of children not less than 6 nor more than 13 years of age, are required to procure such children to attend a State school at least two hours before or after noon for at least 75 per cent. of the days on which school is open. Non-attendance may be excused for either of the four following causes:—(1) If the child is receiving efficient instruction in some other manner; or (2) has been prevented from attending by sickness, fear of infection, temporary or permanent infirmity, or any unavoidable cause; or (3) is 12 years of age and has been educated up to the standard, or has been excused by a general or particular order of the Minister; or (4) that there is no State school within 1, 2,  $2\frac{1}{2}$ , or 3 miles in the case of children under 7, between 7 and 9, between 9 and 12, and over 12 years of age respectively. In regard to the latter cause, however, in cases where schools are closed through low average attendance, or where the number of children would warrant the department in establishing a school, allowances are made by the department for the conveyance of children to the nearest school. The amount of the allowance is 3d. per day for children over 6 and under 12 who reside between  $2\frac{1}{2}$  and 3 miles from the nearest school, or 4d. per day for all children over 6 and under 15 who reside 3 miles or over from the nearest school. Parents and custodians who fail to make a child attend as provided may be summoned and fined 5s. for the first, and between 5s. and £1 for each subsequent offence, or in default 7 days' imprisonment; and truant officers are appointed to see that the compulsory provisions are carried out.

Boards of  
Advice.

There are at present 374 school districts, in each of which a Board of Advice is elected every three years by the ratepayers in the district, the members of such Boards being 7 or 5 according to the size or importance of the district. The main functions of a Board of Advice are:—To report on the condition of schools and premises, whether new ones are required, and as to books, furniture, gymnastic appliances or other requirements; to suspend teachers for misconduct, and report cause to the Minister; to visit schools, record the number present, and its opinion as to the general condition and the management of the schools in the district; and to endeavour to induce parents to send their children

regularly to school, to compare the attendance with the roll, and report names of parents who fail to comply with the compulsory clauses.

The following are the subjects instruction in which is absolutely free:—Reading, writing, arithmetic, grammar, geography, history, drill, singing, drawing, elementary science, manual training, gymnastics, and swimming where practicable; lessons on the laws of health and on temperance previously mentioned; and sewing, needlework, cookery, and domestic economy for girls. For instruction in other branches, fees are charged to the parents, and the teacher is entitled to such fees if the inspector is satisfied with the instruction imparted.

Free subjects.

In the latter half of 1902, a revised programme of free instruction was issued, the provisions of which are such as to secure a more realistic treatment than formerly of the essential subjects of school education, and a larger share of attention to the training of the hand and eye through manual instruction in various forms. The requirements from infant teachers were also made such as to secure methods of teaching in accord with the principles enunciated by Froebel, the founder of the kindergarten system. Great activity has been displayed in the training of teachers for the new work. In January of each year (during the past four years), hundreds of country teachers have been instructed, at the University and Training College, in such subjects as drawing, brush work, paper work, cardboard modelling, kindergarten, experimental science, and nature study; while, at centres throughout the State, during the past two years, Saturday classes have been held in several of these subjects.

New free subjects.

There were, on the 30th June, 1903, 18 Sloyd centres in operation, attended by 3,740 boys; and 11 cookery centres, attended by 1,430 girls. Military drill receives a large share of attention, and the bigger boys of the larger schools are enrolled in corps and provided with light rifles. The teaching of swimming is organized when practicable, the children being formed into swimming clubs, which hold annual competitions at Melbourne and Geelong. The cultivation of school gardens and the study of the elements of agriculture are warmly encouraged by the Department's officers; and every facility is made for the holding of arbour days.

Drill, swimming school gardens, &c.

The following are the extra subjects and the fees chargeable:—Latin, French, German, and painting, for which the fee must not exceed one shilling weekly; natural science, euclid, algebra, trigonometry, fancy work, elocution, and shorthand, fee not exceeding sixpence weekly; and book-keeping and calisthenics, fee not exceeding threepence weekly;

Extra subjects.

and such other subjects as may be approved by the Director. The instruction in extra subjects must not be given so as to interfere with the ordinary free instruction.

Standard of  
education.

Yearly examinations are held to determine the quality of the work done by teachers, and to award merit certificates, and to grant certificates of exemption from compulsory attendance to children who present themselves. The subjects of examination for the latter certificates are:—Reading, writing, spelling, composition, and arithmetic; and any child under 13 years of age who wishes exemption from further compulsory attendance may be so exempt on passing this test. Half-yearly examinations are also held for the examination of children not attending State schools who desire to prove that they are educated up to the standard.

Teachers'  
remunera-  
tion and  
classifica-  
tion.

Male teachers are divided into eight classes and female teachers into seven classes, there being no female teachers in the first class. The salaries for males, excluding pupil teachers, range from £70 to £288, and those for females, excluding pupil teachers and sewing mistresses, £56 to £138. In addition to these fixed salaries, a sum equal to one-half the amount of each salary is obtainable by way of results; the efficiency of the instruction imparted by the teacher being gauged by an inspector's examination of every scholar who has attended the school during any part of the two weeks preceding the visit, the examination being restricted to the free subjects. It was intended to abolish the system of payments by way of results by Act No. 1777, which provided for the repeal as from 31st August, 1902, of the provision contained in Sec. 23 of the principal Act, empowering the Governor-in-Council to make regulations for these payments. A substitute was provided by a subsequent Act, which, however, was afterwards withdrawn. The repeal of the power to make regulations for these payments did not affect the validity of the regulations then in force, and these payments are being continued for the present. In addition to the head and assistant teachers, there are four classes of male and female pupil teachers, with salaries ranging from £30 to £60 and £24 to £48 respectively, and monitors are appointed, males receiving £12 and females £10 per annum. Sewing mistresses receive £30 yearly.

State  
schools,  
teachers,  
and schol-  
ars, 1872  
to 1903.

The following statement shows the progress as regards State schools, teachers, and scholars since 1872. The figures relating to the number of schools and teachers refer to 30th June, and those relating to the number of scholars to the financial year ended 30th June, for the last two years, and to the 31st December for all previous years:—

STATE SCHOOLS, ENROLLMENT AND ATTENDANCE, 1872 TO 1902-3.

Year.	Number of Schools.	Number of Instructors.	Number of Scholars.		
			Enrolled during the year.	In Average Attendance.	Distinct Children (estimated).
1872 ...	1,049	2,416	136,055	68,456	113,197
1880 ...	1,810	4,215	229,723	119,520	195,736
1890 ...	2,170	4,708	250,097	133,768	213,886
1898 ...	1,877	4,618	238,357	134,976	212,164
1899 ...	1,892	4,808	239,732	143,844	214,522
1900 ...	1,948	4,977	243,667	147,020	218,240
1901-2 ...	2,041	5,066	257,355	150,939	228,241
1902-3 ...	1,988	5,037	251,655	150,268	224,178

The falling off in the number of schools in 1898, as compared with 1890, was due to the closing of a number of small schools and the amalgamation of others. The decrease in the scholars enrolled during the same period was entirely due to the non-enrollment since 1892 of children under 4½ years of age, and to payments for conveyance being restricted to those between the ages of 5 and 13. From 1898 to 1902 there was an annual increase in the number of schools, and a very satisfactory annual increase in the number of scholars. During the year 1902-3, however, the reduction of 53 in the number of schools, as compared with the previous year, is due to the closing of some, and to the making of others into half-time schools, two of the latter being counted as one school. The reduction in the scholars enrolled, and in the attendance during the year 1902-3, instead of an increase, as in the preceding four years, is mainly due to the severity of the drought in that year, which caused the removal of families from drought-stricken areas, and a consequent decrease in the attendance.

Increase of schools and scholars.

The following are particulars of the number and percentage of distinct children attending State schools, below, at, and above the school age (6 and under 13) during the year 1902-3:—

Ages of State school scholars.

AGES OF DISTINCT CHILDREN.

Ages.	Distinct Children Attending—					
	Day Schools.		Night Schools.		Total.	
	Number.	Per-centage.	Number.	Per-centage.	Number.	Per-centage.
Under 6 years ...	12,389	5.56	...	...	12,389	5.53
6 to 13 ...	168,430	75.57	...	...	168,430	75.13
13 years and upwards ...	42,050	18.87	1,309	100.0	43,359	19.34
Total ...	222,869	100.00	1,309	100.0	224,178	100.00

Private schools, 1872 to 1902-3.

The number of private schools, instructors in same, and individual scholars in attendance in 1872, the year before the adoption of the present secular system, for a number of subsequent years, and for the latest year available, was:—

PRIVATE SCHOOLS AND ATTENDANCE, 1872 TO 1902-3.

Year (4th Quarter).	Number of Schools.	Number of Instructors.	Number of Individual Scholars.
1872	888	1,841	24,781
1880	643	1,516	28,134
1890	791	2,037	40,181
1898	945	2,440	43,926
1899	901	2,417	48,854
1900	884	2,348	48,483
1901-2	872	2,379	43,182
1902-3	798	2,369	42,695

Scholars attending State and private schools.

On comparing the number of scholars with the number attending State schools, as shown in the preceding paragraph, it is seen that 16 per cent. of the scholars attending school during 1902-3 attended private schools, and the balance, 84 per cent., attended State schools.

Ages of scholars at private schools.

Of the 42,695 scholars attending private schools during 1902-3, 28,924, or 68 per cent., were at the compulsory school age (6 and under 13); 4,431, or about 10 per cent., under 6; and 9,340, or 22 per cent., were 13 and upwards. As compared with the ages of State school scholars shown in the preceding table, it will be seen that there is a larger percentage under and above the compulsory age, but a smaller percentage at that age.

TRAINING COLLEGE.

College for training teachers.

There is a college for the training of teachers, studentships entitling classified teachers and first-class pupil teachers to free instruction on competitive examination. The course of instruction in the Training College extends over two years, and includes history, theory and practice of teaching, English language and literature, history of the British Empire, mathematics, Latin, science, music, drawing, and manual training. Holders of studentships are allowed to reside at the Training College upon the payment of £12 per annum towards the expense of their board and residence. Holders of studentships who may reside at home are entitled to an allowance of £18 per annum towards board and residence. Holders of State school exhibitions may be granted a studentship for any two years during the currency of their exhibition, but without allowance for board and residence (other than that payable to

them as exhibitioners.) Studentships, not exceeding five in number in any one year, may be granted to persons who have passed the matriculation examination of the Melbourne University, or an approved equivalent, who are at least eighteen years of age, and who have been classed as meritorious in the competitive examination above mentioned. Such students will be entitled to tuition in the course of instruction at the College free of expense, but without any allowance for board and residence. Every student will be required to enter into an agreement, by himself and an approved surety, not to relinquish his course of training without the permission of the Minister, and for four years after the termination of his studentship to teach in any school to which he may be appointed. Persons other than students may, on payment of a fee of £10 10s. per annum, be admitted to the course of instruction at the Training College, or, on payment of a fee of £4 4s. per annum, to the course of instruction in Theory and Practice of Teaching only.

#### SCHOLARSHIPS AND EXHIBITIONS.

Any person may collect, raise, or give a sum of money towards founding a scholarship or exhibition in connection with any particular State school; and money or land, or both, may be bequeathed for that purpose. There are 40 departmental scholarships, each of the annual value of £10, tenable for three years, open to 6th class scholars under 14 years, upon competitive examination. The conditions are that after the award of scholarship the scholar shall at the next ensuing session become a student in one of the approved secondary schools or colleges; shall continue to attend, and shall obtain at the end of each year a favourable report from the authorities of the same. Where a scholar does not reside within 3 miles of an approved secondary school or college, the Minister may, at his discretion, allow him such sum (not exceeding £5 per annum) as will cover the cost of transit to and fro, if the school or college is easily accessible by rail or coach; or may increase the Scholarship to one of £20 per annum. Examinations of State school pupils for Scholarships offered by secondary schools or colleges may be held annually, under the supervision of the Department, provided that the conditions under which such Scholarships are to be offered have been previously approved by the Minister of Public Instruction. Holders of these Scholarships will be eligible to compete for Exhibitions subject to the conditions of the Regulation relating thereto. The Council of Agricultural Education offers five Scholarships triennially entitling the holders to be admitted free of charge to the Agricultural College for a course of training. The next examination will be held in December, 1906. The holders of scholarships under 17 years

Scholarships  
and exhibi-  
tions.

of age, who have attended regularly at an approved secondary school or college for the preceding two years, from the authorities of which good reports have been obtained, and who have passed the matriculation examination at the University, are eligible to compete for twenty exhibitions annually awarded by the department. The exhibitions are allotted on competitive examination in English, algebra, and geometry, and any two of the four following languages:—Latin, Greek, French, or German; the examination being on the basis prescribed for the preceding matriculation. Each exhibition is of the annual value of £40, tenable for three years at technical schools, or for four years at the Melbourne University.

## CENSUS RETURNS.

Education of  
the people,  
census  
1901.

The following statement, taken from the returns of the census of 1901, shows the number and percentage of persons (excluding Chinese and Aborigines) in the State at different ages who could read and write, who could read only, or who were unable to read:—

## EDUCATION OF THE PEOPLE, 1901.

Ages.	Numbers living in 1901.				Number in every 100 living at each age in 1901.		
	Able to read and write.	Able to read only.	Unable to read.	Total.	Able to read and write.	Able to read only.	Unable to read.
Under 6 years ...	4,811	5,237	146,796	156,844	3·07	3·34	93·59
6 to 13 years ...	175,797	8,046	11,251	195,094	90·12	4·12	5·76
13 " 15 " ...	50,547	65	220	50,832	99·44	·13	·43
15 " 25 " ...	222,076	239	1,245	223,560	99·34	·10	·56
25 " 35 " ...	187,879	288	1,512	189,679	99·05	·15	·80
35 " 45 " ...	155,206	650	1,994	157,850	98·32	·41	1·27
45 " 55 " ...	76,480	1,120	2,350	79,950	95·66	1·40	2·94
55 " 65 " ...	52,808	1,986	2,994	57,788	91·38	3·44	5·18
65 years and upwards	54,809	3,776	4,865	63,450	86·38	5·95	7·67
Unspecified adults...	1,647	27	45	1,719	95·81	1·57	2·62
All ages ...	982,060	21,434	173,272	1,176,766	83·46	1·82	14·72
15 years and upwards	750,905	8,086	15,005	773,996	97·02	1·04	1·94
21 " " "	613,018	7,936	14,335	635,289	96·49	1·25	2·26

The number of children from 6 to 13 years of age includes those children whose ages were not specified, the total figures exclude those whose educational attainments were not returned, and in the ages 15 years and upwards are included the adults whose ages were unspecified.

The numbers of persons in every 10,000 of the population who could read and write, and who were unable to read, at the last two enumerations, were as follow:—

	In 1891.	In 1901.	
At all ages ... ..	8,318	8,528	could read
"          "          "	8,029	8,346	could write
"          "          "	1,682	1,472	could not read
Between 6 and 13 (school age) ...	9,389	9,424	could read
"          "          "	8,769	9,012	could write
"          "          "	611	576	could not read
At 15 and upwards ... ..	9,771	9,806	could read
"          "          "	9,573	9,702	could write
"          "          "	229	194	could not read
At 21 and upwards ... ..	9,728	9,774	could read
"          "          "	9,491	9,619	could write
"          "          "	272	226	could not read

Education  
1891 and  
1901.

A marked improvement is noticeable at all ages, and in regard to children at school age the proportion entirely illiterate was only 576 per 10,000.

A comparison of the results of the censuses of 1891 and 1901 in every 10,000 children of school age, i.e., between 6 and 13 years of age, indicates that the educational attainments of both boys and girls had materially improved, as there were proportionately more children able to read in 1901 than there were in 1891. This will be readily seen by an examination of the following figures:—

Education  
of boys and  
girls 1891  
and 1901.

1891.		1901.	
Boys.	Girls.	Boys.	Girls.
9,357	9,421	9,398	9,454 could read.
8,686	8,852	8,971	9,056 could write.
643	579	602	546 could not read.

It is always a noticeable fact that in Victoria girls are much more forward in regard to the rudiments of education than are boys. Whether it is owing to the fact of a closer application to lessons, of less distractions caused by sports and games, or of quicker natural abilities, it is hard to determine. This relative backwardness of boys is not a condition peculiar to Victoria, but is just as noticeable in the other States.

The degree of education of children differs somewhat according to religious denomination, as will be seen by the following figures taken at the census of 1901:—

Education  
of children  
of different  
sects.

## EDUCATION OF CHILDREN OF DIFFERENT DENOMINATIONS, 1901.

Religious Denominations.	Number aged 5 to 15 years.			Proportion per cent.		
	Able to read and write.	Able to read only.	Unable to read.	Able to read and write.	Able to read only.	Unable to read.
Church of England ...	84,406	4,797	9,914	85·16	4·84	10·00
Presbyterian ...	36,808	2,032	4,232	85·46	4·72	9·82
Methodist ...	40,769	2,036	4,102	86·92	4·34	8·74
Other Protestants ...	18,022	858	2,028	86·20	4·10	9·70
Total Protestants ...	180,005	9,723	20,276	85·72	4·63	9·65
Roman Catholics ...	46,468	2,849	6,253	83·62	5·13	11·25
Jews ...	1,026	56	79	88·37	4·82	6·81
Residue ...	3,657	198	497	84·03	4·55	11·42
Total ...	231,156	12,826	27,105	85·27	4·73	10·00

In addition to these, there were 5,770 children between the ages of 5 and 15 whose education was unstated.

Education of children at census, 1901.

At the census of 1901 the number of children at school age (over 6 and under 13 years) resident in Victoria was 197,704, and of these 184,200 were receiving instruction, whilst the balance, 13,504, were not under instruction nor receiving any education whatsoever. There were also 43,353 children either above or below the school age, making a total of 241,057 children under instruction. Of every 1,000 of these, 783 were educated at State schools, 33 at colleges and grammar schools, 72 at denominational schools, 63 at private schools, and 10 at unspecified schools, whilst the balance of 39 were educated at home. Of the 13,504 at school age who were returned as not receiving any instruction at all, 4,608 were in Melbourne and suburbs, 2,209 in country cities, towns, and boroughs, and 6,687 in rural districts. Of the children at school age resident in Melbourne and suburbs, 6·13 per cent., of those in country towns, &c., 7·03 per cent., and of those in rural districts 7·34 per cent. were not receiving instruction.

Education of children. Progress and comparison with other States.

As a measure of the progress of education under the free, compulsory, and secular system, it may be mentioned that 90·12 per cent. of children of school age (6 to 13 years) at the census of 1901 were able to read and write, as against 87·69 at that of 1891, 81·70 in 1881, and 65·60 in 1871, just before the introduction of the system. The percentage just mentioned as being able to read and write at the census of 1901 (viz., 90·12) is considerably higher than that in any other State in the Commonwealth, the percentage being, at the 1901

census, 84·42 in Queensland (Australian born children only), 82·05 in Western Australia, 82·00 in South Australia, 80·35 in New South Wales, and 78·77 in Tasmania.

STANDARD OF EDUCATION.

The proportion of either sex who showed their want of elementary education, by signing the marriage register with a mark instead of in writing, is given in the following table for each fifth year from 1875, and for the years 1898 to 1903:—

Signing with marks.

SIGNING THE MARRIAGE REGISTER WITH MARKS, 1875 TO 1903.

Year.	Men.	Women.	Mean.
	Per cent.	Per cent.	Per cent.
1875 ...	5·48	9·43	7·46
1880 ...	4·18	4·09	4·13
1885 ...	2·56	2·62	2·59
1890 ...	1·50	1·53	1·52
1895 ...	·89	·67	·78
1898 ...	·73	·62	·67
1899 ...	·85	·68	·76
1900 ...	·66	·85	·76
1901 ...	·56	·50	·53
1902 ...	·67	·54	·60
1903 ...	·69	·50	·59

It will be observed that in proportion to the total numbers married, a very satisfactory increase has taken place during the 20 years ended with 1895 in the numbers of both sexes signing the marriage register in writing, in that nearly every year, as compared with its predecessor, a smaller proportion of persons signed with their marks. Since 1895, this proportion remained at a somewhat uniform level, until the last three years, when it was the lowest. It is probable, however, that the irreducible minimum has almost now been reached, for a certain residuum of the population will remain illiterate even under the compulsory system of education which prevails in Victoria. This is confirmed by the results of the census of 1901, which show that the percentage of males aged 21 years and upwards (exclusive of Chinese and Aborigines) who could not write was 3·18, and that of females aged 15 years and upwards, 3·23; whereas at the age groups 15 to 20, immediately following the school period, the percentage was ·81 for males and ·45 for females, so that the persons at all ages now marrying in Victoria are not only far better instructed than the general population, but are quite as well educated as those who have just completed their school life.

Increased numbers signing in writing.

Compared with England and Wales, Scotland, and Ireland, where the proportions signing with marks were 2·70, 2·37, and 8·45 respectively, the elementary educational standard is very high in this State, which in this respect occupies the highest position in Australasia.

## TECHNICAL SCHOOLS.

Technical  
schools.

All the technical schools, under which name are included the Schools of Mines, Working Men's College, and Schools of Art and Design, are managed by local councils elected by subscribers. The Education Department, however, retains the general direction of technical education, and decides when schools are to be opened. Regulations are issued defining the powers of the councils, allotting the Government grants, and providing for the instruction and examination of the students. In the schools of art and design, the subjects taught comprise practical geometry, mechanical and architectural drawing, perspective, model, and freehand drawing. The schools of mines, which have been established at the principal mining centres, provide both theoretical and practical instruction, not only in all the subjects in any way connected with mining pursuits, but also in the arts and sciences generally; whilst a wide range of subjects is taught at the working men's and other colleges. In 1902-3, there were altogether 18 technical schools in the State. Five of these afforded instruction in science, art, and trade subjects; 5 in art and science; 2 in art and trade; while 5 schools confined their teaching to art; and 1 to science subjects only. Five schools, viz., the Working Men's College, Melbourne, and the Schools of Mines at Ballarat, Bendigo, Bairnsdale, and Stawell, are classed as certified science schools, and are eligible to receive State school exhibitioners. The schools, as a whole, had, during 1902-3, an average enrollment of 3,173 pupils for each term; whilst the fees per quarter ranged in the different schools from 3s. to £8 15s. The Government expenditure on all the institutions in 1902-3 amounted to £16,430. Of this, £13,600 was the ordinary Government grant for maintenance, which was supplemented by £944 for miscellaneous maintenance expenditure; £1,601 was for buildings, furniture, &c., and £285 was loan expenditure on buildings and equipment. Of the total amount, the Working Men's College (Melbourne) received £4,714; the Ballarat School of Mines, £3,508; the Bendigo School of Mines, £1,501; the Stawell School of Mines, £605; and the Bairnsdale School of Mines, £726. These amounts are exclusive of £1,008 miscellaneous expenditure on all the technical schools.

Technical  
education,  
Royal Com-  
mission on.

In June, 1899, a Royal Commission was appointed to inquire into the mining, agricultural, trades, and art schools of the State, and to report as to the best method of carrying on technical instruction in such schools; to consider the advisability of the affiliation of the mining schools with the University; to report as to the adoption in the State schools of elementary instruction in sciences pertaining to mining.

agricultural, dairying, and manufacturing pursuits; and generally to recommend what means should be adopted for the better provision of a systematic course of technical instruction. The Commission was under the presidency of Mr. Theodore Fink, M.L.A. Many sittings were held, and, after the issue of five progress reports, the final report was presented in August, 1901. This report deals fully with the strides made in technical education in Germany and the principal European countries, and contains a survey of the systems in force in those countries, in the United Kingdom, the United States, Canada, Japan, the Australian States, and New Zealand. A synopsis, historical and general, is also given of the system in vogue in Victoria. Some of the principal recommendations made by the Commission are:—The establishment of State continuation schools, in view of the need for some form of preparatory education bridging the gap between the State and technical schools; the abolition of the existing local councils of technical schools, and the substitution of committees representative of the best educational thought of the localities—such committees to be represented on a General Council of Education; the establishment in the suburbs of Melbourne of classes to afford working tradesmen a knowledge of drawing, geometry, and other subjects applied to their trades; a liberal provision for scholarships; the introduction of legislation for fixing the period of apprenticeship in different trades, and for affording facilities for attending technical classes during the earlier years of apprenticeship; the appointment of skilled tradesmen to supervise and report upon the instruction afforded in trade subjects; the establishment of a Central Technical Art School to afford instruction having the widest application to the various industries of the country, and of a Technical Art Museum in connection therewith; the establishment of systematic courses in commercial education, and of a School of Domestic Economy at the Working Men's College, and the encouragement of science teaching by the secondary schools.

#### THE WORKING MEN'S COLLEGE.

The Working Men's College is a technical institution and school of mines, founded in 1887. It is open to all classes and both sexes, and supplies high-class instruction. Its revenue is obtained from students' fees, supplemented by a Government grant.

Working  
Men's  
College.

All fees are payable in advance; and no refund is allowed. Students under 18 years of age, and those under 21 in receipt of less wages than 25s. per week, and indentured apprentices, are admitted at reduced fees to many of the classes. Examinations are held in July and December, and entrance

Fees.

to these examinations is free to students of the college attending the classes in which they present themselves for examination, provided they have made the necessary attendances.

#### FEEES PAYABLE.

Subject.	Fee.
Mechanical, Electrical, and Marine Engineering—	
First year ... ..	£5 per term.
Second year ... ..	£6 „
Third year ... ..	£8 „
Mining Engineering—	
First year ... ..	£5 „
Second year ... ..	£6 „
Third year ... ..	£8 „
Metallurgy—	
First year ... ..	£5 „
Second year ... ..	£6 „
Third year ... ..	£8 „
Arithmetic ... ..	} Various amounts ranging from 3s. upwards per term.
Practical Geometry ... ..	
Workshop Drawing ... ..	
Freehand Sketching ... ..	
Wood Working ... ..	
Algebra ... ..	
Mensuration ... ..	
Geometrical Development ... ..	
Metal Plate Working ... ..	
Mechanical Drawing ... ..	
English Literature, Science, Trade, Commercial, and Other Subjects ... ..	

Prizes.

Special prizes are awarded to students annually. The Magee prize is of the annual value of £3, and is awarded to the student who obtains highest marks at examination in the work of the senior mechanical drawing class. The Sir George Verdon prize is of an annual value equal to the interest on the amount of the donor's endowment of £210, and is awarded for excellence of design and workmanship in any technical or trade subject. The Turri prizes, awarded for original inventions of students, consist of one prize of £10 10s., two prizes of £5 5s., and five prizes of £1 1s. each.

By F. A. CAMPBELL, Esq., DIRECTOR.

Over one hundred classes are held in the following departments:—Commercial, elocution and music, mathematics, engineering, architecture, chemistry, mining and metallurgy, photography, art and applied art, rural industries, household economy, and trade courses. The work is divided into—(1) day courses, and (2) evening courses and classes. In the day courses, the lower technical school prepares for the higher technical school, and also gives boys after they have left school a course of practical training, fitting them to enter intelligently on any line of industrial work. The higher technical school prepares students for the higher positions of industrial life, and has the following complete courses:—(1) Mechanical engineering,

(2) electrical engineering, (3) marine engineering, (4) mining engineering, (5) sanitary engineering, (6) municipal engineering, (7) metallurgy, and (8) applied chemistry. To students who complete any of the above courses, pass the necessary examinations, and produce evidence of having obtained twelve months' approved practical experience, the Diploma of "Associateship" of the College is issued.

In the evening school, the following courses are in operation for Experts' Certificates:—(A) carpenters, (B) fitters and machinists, (Ba) marine engineers, (C) cabinet makers, (D) plumbers, (E) house decorators, (F) modellers and terra cotta workers, (G) lithographic artists and draftsmen, (H) photographers, (I) electricians, (J) assayers, (K) geologists, (L) metallurgists, (M) municipal engineers, (N) commercial, (O) wool. The following figures indicate the comparative amount of work done at the college during the years 1899 to 1903:—

STUDENTS AT WORKING MEN'S COLLEGE, 1899 TO 1903.

	1899.	1900.	1901.	1902.	1903.
Students enrolled—					
Average per term ... ..	1,943	2,100	2,162	2,364	2,182
Males over 21 ... ..	459	482	564	455	437
„ under 21—Apprentices	112	127	146	147	145
„ „ Others ... ..	887	949	979	1,164	1,135
Females ... ..	485	542	473	598	465
Fees received during the year £	4,113	5,396	6,236	7,485	7,050
Average fee per student ...	43s. 6d.	51s. 3d.	57s. 8d.	63s. 8d.	65s. 7d.
Number of classes ... ..	128	134	156	161	163
„ instructors ... ..	46	49	51	53	55
Salaries paid instructors £	4,157	5,408	6,106	7,479	6,392

## MELBOURNE PUBLIC LIBRARY.

The buildings of the Melbourne Public Library, Museums, and National Gallery cost £215,202. These funds were provided by the Government, as also were further moneys expended on maintenance, amounting, with the sum just named, to a total of £988,935. At the end of 1903 the library contained 149,500 volumes. It is open to the public, without payment, on week days between the hours of 10 a.m. and 10 p.m., and was visited during the year by 354,376 persons. The library consists of three distinct sections, viz:—the Public Library, the Lending Library, and the Country Lending Library. The librarian reports that 4,293 volumes were purchased, 1,412 volumes presented, 206 volumes obtained under the "Copyright Act," and 40,089 newspapers were added to the Reference Library during the year. The Lending Branch, which is also free to the public, issued 178,775

Melbourne  
Public  
Library.

volumes during 1903, and the number of persons to whom the books were lent was 8,443. Of these volumes, 61·7 per cent. related to fiction, 13 to history, 6·8 to general literature, 9·3 to religion, philosophy, natural science and art, 5·7 to arts and trades, and 2·7 per cent. to social science. The number of volumes in the Lending Library at the end of 1903 was 20,517, of which 1,034 were added during the year.

Following on the establishment of the Melbourne Public Library, libraries were founded in many of the larger urban towns. The attention of the original trustees of the Melbourne Library was directed to these institutions, and to the vast number of people whom the distance prevented from reaching the building. They, therefore, established a scheme by which the larger country centres should have the benefit of the collection, and forwarded cases of books on loan for fixed periods. To the country towns of less importance cases were also sent, and in many instances the nucleus of a local library was thus formed. This travelling library system, as it is called, thus greatly stimulated the library movement in those places where it had been begun, and inaugurated it in many places to which as yet it had not spread. At the present time loans are made up to 300 volumes at a time to the committees of free libraries and mechanics' institutes, and to the councils of municipalities, for a period of one year, with a further extension of time if required. The books are selected with a view to meeting the special requirements of the district to which they are to be forwarded, publications on mining being sent to mining centres, and those relating to agricultural and pastoral pursuits to those districts where these industries are carried on. Although this scheme is now in operation in many countries, research among library records does not reveal the existence of anything similar prior to its establishment in Melbourne, so that the credit of starting it seems to belong undoubtedly to the original trustees of our library. Many of the local libraries are now in a position to supply all the wants of their patrons without having recourse to these loans.

**National  
Gallery.**

The National Gallery at the end of 1903 contained 17,327 works of art, viz., 450 oil paintings, 3,470 objects of statuary, &c., and 13,407 water colour drawings, engravings, photographs, &c. It is opened at 10 a.m. and closed at 5 p.m. daily on week days (Christmas Day and Good Friday excepted). The school of painting in connexion with this institution was attended in the year by 6 male and 18 female students, and the school of design by 25 male and 65 female students. The students are encouraged to paint original works, by which means it is hoped the foundation may be laid of a school of art of purely Australian subjects.

The Industrial and Technological Museum adjoins the National Gallery, and was opened on the 7th September, 1870. At the end of 1903 it contained 55,208 specimens. It is opened at 10 a.m. and closed at 5 p.m. daily on week days (Christmas Day and Good Friday excepted). Industrial Museum.

The collection in the National Museum, formerly kept in a building situated on the grounds of the Melbourne University, is now located in the Public Library Buildings. It comprises natural history, geology, and ethnology. The National Museum is open to the public free of charge on all week days throughout the year, except Thursdays, Christmas Day, and Good Friday, between the hours of 10 a.m. and 5 p.m. In 1903 the expenditure for specimens, furniture, material, &c., was £660. The payments for salaries and wages during the year amounted to £2,230. National Museum.

#### FREE LIBRARIES,

Most of the suburban and country libraries have been in the habit of receiving Government aid. Of these, twenty-five are situated within ten miles of Melbourne, and received £156 during the year 1902-3; of the remainder, three hundred and fifteen are to be found in the most important country towns throughout the State. These received for the same year £2,344. Free Libraries.

Any of these institutions claiming to participate in the grant must be a free library solely, or a free library combined with a mechanics' institute, athenæum, or country museum, as the case may be, or a country museum solely; but strict compliance is required with the following regulation:—"That where the free library is part of or connected with a mechanics' or other institution all the books of such institution or all the articles in the museum, as the case may be, are to be available to the public in the free library or museum on all occasions when they are available to subscribers."

Grants are allotted for four purposes:—(1) Reduction of debt, (2) building, (3) books, and (4) maintenance.

(1) "Reduction of debt" will be the reduction of the existing debt of any institution.

(2) "Building" will comprise the erection of or repairs to and painting of buildings, fencing-in of the land, and providing furniture.

(3) "Books" will comprise the purchase of books, periodicals, and newspapers, and the binding of the same.

(4) "Maintenance" will comprise salaries, fuel, light, water, cleaning, and incidental expenses, but not more than thirty-three per centum of the total revenue (including the grant in aid) of any institution shall be expended under this head without the special permission of the Chief Secretary.

No institution shall receive from the grant more than the sum of £20 a year.

During the year 1903-4 no provision has been made by the Government for the purpose of aiding the funds of these institutions.

The number of public libraries and mechanics' institutes in the State who furnished returns in 1903 was 414; the cost of their erection was £719,321; the total of their receipts is as follows:—From Government, £22,012; from municipal councils, £3,119; from private contributions, £9,797; from all other sources, £23,430; a total of £58,358. The number of volumes (excluding duplicates, pamphlets, &c., in the Melbourne Public Library) is 847,579. The visits to institutions where records were kept numbered 3,239,648.

City of Ballarat Free Library.

This library was established in 1878, on a site situated at the corner of Sturt and Camp Streets, which was at the time occupied by the Mining Board, the District Mining Surveyor, and Registrar of Births and Deaths. These officials were, however, compensated by the founders of the library to the extent of £600. With the aid of donations from some of the citizens, gifts of books from others, and loans of books from the Melbourne Public Library, the Committee were enabled in course of time to thoroughly establish the institution. In 1901-2, a sum of £3,000 was expended on a new library and reading rooms. It now contains 9,000 volumes on science, history, travels, and other subjects, besides a supply of reviews, magazines, and newspapers of Great Britain and the Commonwealth. The number of visitors during the last twelve months was 243,144. Further important additions and improvements are now in contemplation whereby the general usefulness of the institute will be greatly enhanced.

Ballarat Public Library.

This institution was established in 1863 by a number of the prominent citizens of Ballarat, and since that time its progress has been most satisfactory. It is governed by a president and fifteen members of council. With assistance from the Government, town council, and local residents, very fine premises have been erected for the use of the general public. The library, which is open from 9 a.m. to 9 p.m. daily, except Sundays, contains 16,736 volumes, and adds to its

stock about 300 new works each year. It is also liberally supplied with the most important newspapers and periodical literature. A technical and art school is connected with this institution, and receives from the Government a grant of £450 per annum. It possesses a staff of capable and expert teachers who are carrying out good and successful work, with an average of 250 students, distributed over several classes.

This institute was established in 1854. It consists of two sections—the public and lending libraries—which are open to the public daily from 10 a.m. to 10 p.m. There is connected with it a reading room for members of either sex, also a special reading room for ladies. The library contains about 14,000 volumes, and a liberal supply of periodical literature is kept up to date. The institute is maintained by members' subscriptions, grants by the City Council, rents, and a subsidy from the Government, but its present financial condition is far from satisfactory, owing to want of public support and decreased grants from the Government during late years. An amalgamation with the Bendigo School of Mines is contemplated.

Sandhurst  
Mechanics'  
Institute.

The Geelong Free Library and Museum is located in a handsome building, originally built by the Chamber of Commerce at a cost of £11,000. It was purchased in 1876 from that body for £3,200 for the purposes of the library and museum, which, as an institution, had been in existence since 1854. It has been mainly supported by residents of the town, and amply supplies all requirements. The average daily attendance is about 460. The library contains over 5,500 books, comprising works of fiction, poetry and the drama, educational, scientific, geological, religious, biographical, classical, and other works, together with daily, weekly, and monthly publications. The museum contains an interesting collection of geological and mineralogical specimens, native weapons, and objects of national history. In the art gallery are several excellent oil paintings, which add largely to the attraction of the institution. In 1903 the receipts were £176, and the expenditure £186.

Geelong  
Free  
Library and  
Museum.

This institute was established on a very small scale in 1855, but from that time onward it has continued to make steady and satisfactory progress. Up to the end of 1903 the buildings erected cost £4,998. For the erection of a large hall, which is used for general entertainments and meetings, accommodating 600 persons, a sum of £1,100 has been borrowed. There are at the present time 250 subscribers to the institution, which contains suitable and commodious reading and other rooms for the use of the general public, well equipped with books on various subjects, numbering at

Castlemaine  
Library and  
Mechanics'  
Institute.

the end of the year 9,684 volumes, also magazines, newspapers, and illustrated papers. The income for the year from all sources was £464, the expenditure £418.

Warrnam-  
bool  
Mechanics'  
Institute  
and Free  
Library

In October, 1853, a public meeting was held at Warrnambool for the purpose of petitioning the Government to reserve a block of land for the purposes of a mechanics' institute building site. The site then obtained was given up some years later, and that upon which the building now stands was obtained in its stead. It was not, however, until after the lapse of some years, in August, 1871, that the Committee were in a position to erect buildings thereon. In this year a reading room was erected, at a cost of £340, and in the September of the following year four additional rooms were added. In 1885, a large art gallery and museum was added, and opened free of all encumbrance. Valuable works of art, curiosities, and historical relics, were gradually collected by the curator. In 1889, the museum was transferred to the town council, which body removed the collection to the old court-house building, thus leaving the hall free for works of art, many of which were purchased at the Melbourne Exhibition of 1888. In the same year as the art gallery and museum were founded, a school of design was opened, and later on a class room was added to the building. This school has been successfully carried on up to the present time. Though not quite free from debt, the position of the institution is fairly satisfactory. It comprises a large reading room, furnished with the leading newspapers and magazines; a library, containing over 6,000 volumes; an art gallery, and school of art.

Stawell Free  
Library and  
Mechanics'  
Institute.

This library dates its origin as far back as 1858, when the inhabitants of the Reef, Pleasant Creek, opened a building for the purpose of a mechanics' institute, circulating library, and reading room. This building served the needs of the people until 1866, when it was destroyed by a fire. It was replaced by a two-story structure, which, in addition, provided space for lodge and lecture rooms. This building was burnt in 1875, and replaced by the structure now known as the Stawell Free Library and Mechanics' Institute, the cost of which was about £4,000, and at the present time there is upon it an outstanding debt of £500. The library contains 6,500 volumes of various classes of literature, and is well supplied with newspapers, magazines, journals, and illustrated papers. The institute is managed by a committee of 16, 6 members being elected each year by the public, and 6 by the subscribers for the same term; 3 being trustees or permanent members of the committee, and the Mayor of Stawell is, *ex officio*, its president. The receipts during 1903 were £445.

## SPECIAL LIBRARIES.

There is a free library attached to the Patent Office, Melbourne. This contains about 7,500 volumes, consisting of the patent records of Great Britain, Victoria, New South Wales, South Australia, Queensland, New Zealand, Canada, the United States, France, Italy, Germany, &c., and other works relating to Science, Patents, and Trade Marks. About 200 models of patented inventions may also be seen on application to the officer in charge. The approximate value of the books and models is £3,500. The library is open to the public on each week day, except Saturday, between the hours of 9 a.m. and 5 p.m., and on Saturday from 9 a.m. until noon.

Patent Office  
Library

The Supreme Court Library at Melbourne has eighteen branches in the assize towns. It is free to members of the legal profession between the hours of 9 a.m. and 4 p.m., except on Saturdays, when it closes at noon. It is supported by fees paid under Acts of Parliament and rules of court for the admission of barristers and attorneys.

Supreme  
Court  
Library.

## EXHIBITION BUILDINGS.

The Exhibition Buildings, which are situated in the Carlton Gardens, Melbourne, when first opened, in October, 1880, occupied a total space of 907,400 square feet. The original cost of the permanent structure was £132,951, of the temporary annexes, £83,111; gardens, £18,481; machinery, £5,715; organ, £5,560; and miscellaneous expenditure, £547—making a total of £246,365. After the close of the exhibition, on the 30th April, 1881, the annexes were removed, and the permanent building was vested in trustees. Another exhibition was opened in the building on the 1st August, 1888, to commemorate the hundredth anniversary of the foundation of the first Australian Colony. On this occasion, a further sum of £125,178 was expended upon the re-erection of the annexes; £30,986 upon additions, alterations, and decorations to the permanent building; £4,854 upon the gardens; £16,471 upon machinery; £77,128 upon electric lighting; and £8,337 upon gas and gas fittings—making a total of £262,954. At the close of the exhibition, there was realized from the sale of various materials, including temporary annexes, a sum of £56,904. The property again reverted to the trustees, who report, for the year 1903, that all the buildings are in a good and substantial condition, the gardens well maintained, the oval improved, the aquarium and insectarium museums extremely useful, both from educational and scientific points of view. The receipts for the year amounted to £5,910, consisting of an advance from the Treasury of £300; rents, £3,758; and aquarium and other receipts, £1,852. The expenditure totalled

Exhibition  
Buildings,  
Aquarium,  
and  
Museum.

£5,228, viz., £1,849 for wages, advertisements, feed, live stock, and miscellaneous items; £3,379 for maintenance and improvement of the building and gardens, insurance and sundry expenses.

#### THE MELBOURNE BOTANIC GARDEN.

BY W. R. GUILFOYLE, ESQ., DIRECTOR.

Botanic  
Garden.

The Melbourne Botanic Garden is situated on the south side of the River Yarra, and is at a distance of about a mile and a half from the city. The area of the garden proper, including lawns, groups, &c., is 88 acres, whilst that of the lake, including the added elbow, or bend of the River Yarra, amounts to 12 acres in addition. This now historic garden, together with the Government House grounds (62 acres), and the Domain (150 acres), comprises a total of 312 acres. The facts as to the commencement and progress of the establishment, having been compiled from the most reliable sources, are to be found in the new illustrated "Guide Book," as published by the Government printer in 1901-2, from which the accompanying quotation has been taken:—

"The first site chosen for a Botanic Garden was an area of 50 acres, near to where the Spencer-street railway station is situated, and was selected by Mr. Hoddle, Surveyor-General, in 1842. Afterwards various other localities were proposed, but finally, owing mainly to the discrimination and taste of the Hon. Charles Joseph La Trobe, first Government Superintendent (afterwards Lieutenant-Governor) of the Province of Port Phillip, a portion of the present site was decided upon for the purpose. In September, 1845, Dr. Nicholson presented a petition, signed by three or four hundred of the citizens, headed by the Mayor, praying for the immediate establishment of the Botanic Garden, and the sum of £750 was thereupon voted—1845-6—for its maintenance. The first superintendent, or curator (Mr. John Arthur), was appointed 1st March, 1846, and he at once fenced in a 5-acre paddock, that portion of the gardens at present known as the Anderson-street Lawn, sloping towards the tea-house on the edge of Lake, in which he made good progress both as to cultivation and planting. Mr. Arthur, however, whose labours were much appreciated at the time, died in January, 1849. Mr. John Dallachy succeeded Mr. Arthur as curator, and insured such good results that, at the end of 1851, a progress report submitted to the Legislature showed that, in addition to an extension of cultivated ground, many kinds of exotic plants had been added to the collection, and also that the native vegetation had received attention. The various shows of the Horticultural Society were at that time held in the gardens. For several years prior to the retirement of Mr. Dallachy, a scientific arrangement of plants in a part of the gardens was undertaken by the then Government Botanist, Dr. Ferdinand Mueller (subsequently Baron Sir F. von Mueller), who had accompanied the Gregory Expedition in search of Leichhardt, the explorer. After the Baron had received the appointment as Director (1857), Mr. Dallachy was re-employed for several years as a collector of seeds and herbarium specimens for the gardens, and discovered many new and beautiful species in Queensland. The Baron held office as Director until 1873, when, with the view of enabling him to give undivided attention to his scientific labours as Government Botanist, he was relieved of control of the Botanic Gardens, and Mr. W. R. Guilfoyle was appointed to the position. Since 1873 the gardens have been entirely remodelled by him, and their area extended by more than 30 acres."

When I took charge of the grounds, I found about 3,000 species of plants growing there, and these, having been added

to by me during the past 30 years, now represent no less than 14,000 species. Many of them are large and well-grown palms in great variety, also arborescent as well as other ferns—as for instance, several hundreds in the rather extensive “Gully.” There are, besides, other ornamental and utilitarian plants, together with a good-sized collection in the medicinal or herb garden.

A large “System Pavilion of Plants” was also formed, classified in their natural orders, which, like the whole of the various collections in the outer grounds, conservatory, &c., have their labels attached—giving both their scientific and common names, and also their orders, native countries, &c.

The “Museum of Plant Products” was formed some time ago, which contains many thousands of fully-named herbarium specimens; seeds in their seed vessels (or pods), fibres, and woods, representatives of plants yielding either food or articles for manufacture. Both the system pavilion and museum are largely visited by students connected with botanical classes, in colleges and schools.

The grounds are almost encircled by a much-used carriage way, which, having been inter-connected, comprises the Alexandra Avenue, and the South Yarra Drive, and now make one wide promenade of  $2\frac{3}{4}$  miles in length. Adjacent to the two entrances from the Alexandra Avenue, and on one of the highest points, close to Government House, I have erected, from my own design, a large domed structure with ten massive columns, which is known as the Temple of the Winds, and has been dedicated by the Director to the memory of the Hon. Charles Joseph La Trobe, the first Governor of Victoria, who selected the site for the Botanic Gardens in 1845-6. The Temple is a very attractive spot for visitors, as from it very fine views of the Gardens, Yarra Improvements, City, Eastern Suburbs, and the Dandenong and Healesville Ranges are to be obtained.

It will be seen by the facts quoted that the Melbourne Botanic Garden has now had an existence of 58 years, and as a favourite resort, has become increasingly popular, being attended by many thousands of people on Sundays and holidays, whilst being on week days much used by citizens and others, including visitors from other States, colonies, &c., Great Britain, and other countries.

The gardens of the Zoological and Acclimatisation Society of Victoria are situated in the centre of the Royal Park, on the northern side of the city, and distant nearly two miles from

Zoological  
and Acclimatisation  
Gardens.

the Post Office, and can be reached by the tramcars starting every few minutes, or by rail. The ground enclosed contains 50 acres, rather more than half of which is laid out as a zoological garden and the rest in deer paddocks, and are admittedly the finest zoological gardens in Australia. The present director of the society is Mr. D. Le Souëf.

#### MELBOURNE HORTICULTURAL SOCIETY.

BY C. BOGUE LUFFMAN, ESQ., PRINCIPAL.

Melbourne  
Horti-  
cultural  
Society.

The estate of the Melbourne Horticultural Society is situated at Richmond Park. It covers about 40 acres, and was originally a part of the old "police paddock," used for depasturing horses of the New South Wales troopers. About the year 1850 it was granted in trust to the Horticultural Society of Victoria, and for many years, under the name of the Horticultural Society's gardens, served as a propagating and distributing centre for such plants as had not previously gained a footing in the colony. By the year 1890 the Society's efforts as an educational body had practically ceased, and no funds were available whereby the two or three thousand trees and odd pieces of cultivated land might be maintained. The Government thereupon resumed control of the land, paid the Society's debts (some £1,500 odd), and decided to start an institution for the training of orchardists and small settlers. Up to this time the grounds had never been laid out to secure direct and efficient teaching; and as only casual and itinerant instructors were forthcoming, the school, during its early years, secured no special training to its students; and in 1897 almost ceased to exist. At this time the curator—an old servant of the Society—retired, and the present principal was appointed.

During the past seven years the estate has been almost entirely transformed in order that direct means might be provided for teaching the regular and casual students, and those visitors calling in search of special information. Previous to this, it was a jumble of useless old trees and poverty-stricken soil, the former of which have now been cleared away and the latter capped with new material. Effective roads and culverts have been laid, model orchard blocks, gardens, and a students' training ground have been prepared, and a large variety of instructive implementa got together for use in the class and field work.

Class room instruction is given in horticultural science, vegetable pathology, botany, chemistry of soils and plants, physical and commercial geography, entomology, measuring, levelling, designing, and plotting of homesteads, orchards, and

garden areas, and the most approved methods of raising and managing fruit trees and plants. Practical work includes the propagation and management of orchard trees, citrus, table grapes, bush fruits, harvesting, storing, packing, marketing, drying and canning fruit, vegetable culture, clearing, grading, and trenching of land, management of soils, manures, drainage, and villa gardening.

The principal and his assistant carry out this programme by affording lessons daily in the class room and field. Much of the landed estate is still in the rough, since the material employed in its improvement (city refuse) cannot be finally arranged till time has mellowed and settled it into firm, sweet loam. This secured, the school will possess greater advantages than any similar institution on the Australian continent.

In 1899, women students were first admitted, and up to the present year about 150 have passed through the institution. They have for the most part devoted their studies to the designing and making of villa gardens, vegetable and herb culture, and the special cultivation of table grapes and lemons—branches of commercial horticulture most suited to women.

Previous to 1903, instruction was free, but a fee of £5 per annum is now charged for admission of each student. There is a steady advance in the number of students, and every indication of the school doing generally helpful work in the service of the State. The flower gardens surrounding the principal's residence are noted for their beauty, and the instructional character of the work ever in progress makes the place well worth a visit at any season. The school year extends from February to December. Application for admission should be made to the Secretary for Agriculture, Public Offices, Melbourne.

There are 26 other horticultural societies in the State, situated at Ballarat, Bendigo, Castlemaine, Kyneton, Mildura, Terang, Traralgon, Warrnambool, and other centres. The Government provided £300 in aid of these associations during the year ended 30th June, 1903.

Other societies.

#### METROPOLITAN PUBLIC RESERVES.

Greater Melbourne is amply supplied with public reserves and parks, the total area devoted to such purposes being 5,322½ acres in 1903, as against 5,226 in 1899. The following list of these reserves, together with a statement of their respective areas, has been supplied by the Lands Department:—

Public reserves in Greater Melbourne.

## AREA OF PARKS AND GARDENS IN MELBOURNE AND SUBURBS, 1903.

Municipality.	Name of Reserve.	1903. Area. Acres.
Melbourne City	Royal Park...	425
"	Yarra ...	155
"	Prince's ...	97
"	Fawkner ...	102
"	Flinders ...	17
"	Park (Model Farm) ...	81
"	Botanic Garden and Domain ...	178
"	Zoological " ...	55
"	Carlton " ...	63
"	Fitzroy " ...	64
"	Spring " ...	21
"	Flagstaff " ...	18
"	Argyle Square ...	3 $\frac{1}{4}$
"	Curtain " ...	3 $\frac{1}{2}$
"	Darling " ...	2
"	Lincoln " ...	3 $\frac{1}{4}$
"	Macarthur " ...	1
"	Murchison " ...	1
"	University " ...	3 $\frac{1}{2}$
"	University Grounds ...	106
"	Friendly Societies' Grounds ...	25
"	Industrial Schools & Board of Health Depôt ...	47
"	Melbourne Cricket Ground ...	9 $\frac{1}{2}$
"	East Melbourne " ...	7
"	Scotch College " ...	7
"	Richmond " ...	6
"	Carlton " ...	5
"	Parliament Reserve ...	10
"	Ornamental Plantations ...	5
"	General Cemetery ...	101
"	Old Cemetery ...	8 $\frac{1}{2}$
"	Military Parade Ground ...	5
"	Recreation (Brown's Hill) ...	7 $\frac{1}{2}$
North Melbourne Town	Recreation ...	9 $\frac{1}{2}$
Fitzroy City	Edinburgh Park ...	34
"	Recreation ...	7
Collingwood City	Mayor's Park ...	6
"	Recreation ...	7
"	Darling Gardens ...	16
"	Victoria Park ...	10
Richmond City...	Richmond Park ...	156
"	Horticultural Gardens ...	33
"	Barkly Square ...	7
"	Municipal Reserve ...	7 $\frac{1}{2}$
Northcote Town	Jika Park ...	14 $\frac{1}{2}$
South Melbourne City	Albert Park (part of) ...	464
"	St. Vincent Gardens ...	7 $\frac{1}{2}$
"	Ornamental Plantations ...	2 $\frac{1}{4}$
"	Cricket and Recreation (Warehousemen's) ...	8
Port Melbourne Town	Cricket Ground ...	7 $\frac{1}{4}$
"	Park and Garden ...	58
"	" " ...	2
"	Ornamental Plantations ...	17
Prahran City	Toorak Park ...	7
"	Victoria Gardens ...	4
"	Gardens (Grattan-street) ...	2
St. Kilda City	St. Kilda Gardens ...	16
"	Albert Park (part of) ...	106

AREA OF PARKS AND GARDENS IN MELBOURNE AND SUBURBS, 1903—  
continued.

Municipality.	Name of Reserve.	1903. Acres.
St. Kilda City ... ..	Recreation ... ..	54
" ... ..	" ... ..	4 $\frac{3}{4}$
" ... ..	" ... ..	11
" ... ..	" ... ..	15 $\frac{3}{4}$
" ... ..	" (Dandenong Road)... ..	22 $\frac{1}{2}$
" ... ..	Cemetery ... ..	20
Brighton Town ... ..	Elsternwick Park ... ..	85
" ... ..	Recreation (Elsternwick) ... ..	14 $\frac{1}{2}$
" ... ..	Beach Park ... ..	67
Essendon Town... ..	Recreation ... ..	10 $\frac{1}{2}$
" ... ..	" ... ..	5 $\frac{1}{4}$
" ... ..	Agricultural Society's Yards ... ..	30
" ... ..	Queen's Park ... ..	18
" ... ..	Water Reserve ... ..	11 $\frac{1}{2}$
Flemington and Kensing- ton Borough	Racecourse ... ..	301
" ... ..	Recreation ... ..	5 $\frac{3}{4}$
Hawthorn City ... ..	" ... ..	15
Kew Borough ... ..	Studley Park ... ..	203
" ... ..	Lunatic Asylum ... ..	384
" ... ..	Cemetery ... ..	31
" ... ..	Recreation ... ..	16
Footscray City ... ..	Public Gardens and Recreation ... ..	10 $\frac{1}{2}$
" ... ..	" ... ..	2 $\frac{1}{4}$
" ... ..	Cricket Ground, &c. ... ..	5 $\frac{3}{4}$
" ... ..	Recreation (Yarraville) ... ..	5
" ... ..	" (Footscray West) ... ..	15
Williamstown Town ... ..	Park ... ..	36
" ... ..	" ... ..	20
" ... ..	Recreation ... ..	9 $\frac{3}{4}$
" ... ..	Beach Park ... ..	20
" ... ..	Cemetery ... ..	15
" ... ..	Rifle Range ... ..	332
" ... ..	Cricket Ground ... ..	6 $\frac{3}{4}$
" ... ..	Public Garden ... ..	3 $\frac{1}{2}$
" ... ..	Recreation (Newport) ... ..	13
Malvern Town ... ..	Park and Garden ... ..	8
" ... ..	Recreation ... ..	4 $\frac{1}{2}$
" ... ..	Park and Garden (Waverley) ... ..	16
Caulfield Town... ..	Racecourse ... ..	144
" ... ..	Park ... ..	62
" ... ..	Park (East Caulfield) ... ..	17
" ... ..	Recreation ... ..	13
Oakleigh Borough ... ..	Recreation ... ..	8
" ... ..	Park and Garden ... ..	21
" ... ..	Cemetery ... ..	10
Outside urban munic- ipalities	Yarra Bend Asylum ... ..	350
	Camberwell Gardens ... ..	7
	Williamstown Racecourse ... ..	190
	Total ... ..	5,322 $\frac{1}{2}$

FRIENDLY SOCIETIES.

Friendly Societies are regulated under the "Friendly Societies Act 1890," and amendments thereof in the Acts of 1891, 1896, and 1900, which, amongst other provisions, pre-  
scribe that each society shall furnish returns annually to the  
Valuations of Friendly Societies.

Government Actuary for Friendly Societies, and once in every five years shall cause its assets and liabilities to be valued to the satisfaction of that officer. The fees for valuation have purposely been fixed low, and average no more than three-pence per member, the result being that, although it is competent for the societies to employ outside valuers if they desire it, as a matter of fact they very rarely do so, and all the valuations are now made by the Government Actuary for Friendly Societies, Mr. Evan F. Owen, A.I.A.

Friendly  
Societies.

The following is an epitome of the particulars furnished respecting Friendly Societies for the five years, 1898 to 1902:—

FRIENDLY SOCIETIES, 1898 TO 1902.

	1898.	1899.	1900.	1901.	1902.
Number of societies ...	31	29	29	29	28
„ branches ...	1,088	1,105	1,111	1,132	1,146
Average number of members	86,369	91,213	95,819	99,360	101,574
Number of members sick	18,693	21,083	18,007	20,832	20,708
Weeks for which alim- ment was allowed	160,611	165,616	157,235	169,289	168,830
Deaths of members ...	931	993	976	1,036	1,023
„ registered wives	481	442	424	393	427
	£	£	£	£	£
Income of sick and funeral fund	173,443	186,547	203,569	202,394	202,044
Income of incidental fund	150,111	159,879	164,849	169,406	181,719
Total income ...	323,554	346,426	368,418	371,800	383,763
Expenditure of sick and funeral fund	146,505	153,519	151,226	153,478	156,024
Expenditure of inci- dental fund	146,722	155,057	161,934	167,579	181,260
Total expenditure	293,227	308,576	313,160	321,057	337,284
Amount to credit of sick and funeral fund	1,133,156	1,166,184	1,218,527	1,267,443	1,313,463
Amount to credit of incidental fund	40,804	45,626	48,541	50,368	50,827
Amount invested—sick and funeral fund	1,059,374	1,103,433	1,141,678	1,205,151	1,249,809
Amount invested—inci- dental fund	31,459	36,026	36,784	39,522	41,793
Total invested ...	1,090,833	1,139,459	1,178,462	1,244,673	1,291,602

Growth of  
Friendly  
Societies.

During the quinquennium ended with 1902, the number of members in Friendly Societies increased by 15,205, or by about 18 per cent., the amount to the credit of the sick and funeral fund by £180,307, or 16 per cent., and the total amount invested by £200,769, or 18 per cent.

Sickness  
and death  
rates.

In proportion to the number of effective members of Friendly Societies, the amount of sickness experienced in 1902 was somewhat below the average of recent years. The days per effective member for which alimment was allowed were equal

to an average of 11.6 in that year, 12.0 in 1901, 11.3 in 1900, 13.0 in 1899, and 13.0 in 1898, but the average was only 10.6 during the fifteen years ended 1897. The death rate in 1902 was slightly below the average—the death rate per 1,000 members being 10.09 in 1902, 10.45 in 1901, 10.21 in 1900, 10.92 in 1899, 10.82 in 1898, and 10.63 for the 25 years ended 1902.

## OCCUPATIONS.—CENSUS RETURNS.

The occupations of the people in 1901 were ascertained at the census. The various divisions of employment, under 2S heads, were:—

## OCCUPATIONS OF THE PEOPLE, 1901.

	Males.	Females.	Total.
Ministering to—			
Government, Defence, etc. ... ..	6,719	165	6,884
Religion, Charity, Science, Education, etc. ...	13,664	14,676	28,340
Board, Lodging, and Attendance ... ..	13,129	53,686	66,815
Dealing in—			
Money and Real Property ... ..	10,039	2,760	12,799
Art and Mechanic Productions ... ..	3,720	934	4,654
Textile Fabrics, Dress and Fibrous Materials	6,374	2,452	8,826
Foods, Drinks, Narcotics and Stimulants ...	18,217	3,428	21,645
Animals, and Animal and Vegetable Sub- stances	3,977	198	4,175
Metal or Minerals (other than those used for Fuel and Light)	2,044	162	2,206
Minerals, etc., mainly used for Fuel and Light	2,794	34	2,828
Engaged in—			
General Dealing and Mercantile Pursuits ...	16,091	4,446	20,537
Speculating on Chance Events ... ..	284	1	285
Storage ... ..	1,093	...	1,093
Transport and Communication ... ..	30,318	1,198	31,516
Manufacturers of—			
Art and Mechanic Productions ... ..	20,676	1,748	22,424
Textile Fabrics, Dress and Fibrous Materials	10,664	28,450	39,114
Foods, Drinks, Narcotics, and Stimulants ...	10,251	1,402	11,653
Animal and Vegetable Substances ... ..	5,281	85	5,366
Metals and Minerals (other than those used for Fuel and Light)	14,315	88	14,403
Materials used for Heat, Light, or Energy	1,035	37	1,072
Constructors of Buildings, Roads, Railways, Earthworks, etc.	27,392	17	27,409
Engaged in Disposing of the Dead or Refuse ...	1,260	24	1,284
Ill-defined Industrial Workers (chiefly labourers)	22,653	855	23,508
Engaged on Land or with Animals, and in Obtaining Raw Products from Natural Sources	140,149	24,998	165,147
Persons—			
Of Independent Means ... ..	7,242	2,824	10,066
Dependent upon Natural Guardians ... ..	203,279	444,931	648,210
Dependent upon the State or upon Public or Private Support	7,701	6,444	14,145
Occupation not stated (chiefly Breadwinners) ...	3,522	1,415	4,937
Total ... ..	603,853	597,458	1,201,341

Occupations, 1901.

The number of breadwinners and dependents were:—

BREADWINNERS AND DEPENDENTS, 1901.

	Males.	Females.	Total.	Percentage.		
				Males.	Females.	Total.
Breadwinners ...	389,381	144,668	534,049	65	24	45
Dependents ...	210,980	451,375	662,355	35	76	55
Total ...	600,361	596,043	1,196,404	100	100	100

Proportion of breadwinners and dependents.

The proportion of breadwinners was 100 to every 124 dependents, which was almost the same as at the previous census, when 100 breadwinners supported 125 dependents. It will be seen, too, that nearly one-fourth of the females in Victoria were returned as earning their own living.

Unemployed, 31st March, 1901.

Provision was made in the census schedules for ascertaining the number of persons unemployed for more than a week prior to the enumeration. The information then collected shows that 13,795 male and 2,647 female wage-earners were returned as idle at that time.

FACTORIES AND SHOPS.

Factory legislation.

There are now eight Factories and Shops Acts in force in this State, viz.:—The “Factories and Shops Act 1890,” and seven amending Acts. The amending Acts have been passed for limited periods, and, on 10th September, 1902, lapsed altogether owing to the sudden ending of the session of Parliament without any Act being carried to continue the Acts in force. The Acts and Regulations, and the determinations of the great majority of the Boards were, however, revived, and continued in force, by the “Factories and Shops Continuance Act 1902,” until the 31st October, 1903. On the 30th October, 1903, the “Factories and Shops Act 1903” was passed, and continued all the amending Acts in force until the 31st December, 1905. A factory is defined to mean any place in which four or more persons other than a Chinese, or in which one or more Chinese are employed in any handicraft, or in preparing articles for trade or sale; or any place in which one or more are employed, if motive power be used in the preparation of such articles, or where furniture is made, or where bread or pastry is made or baked for sale. The expression handicraft includes any work done in a laundry or dyeworks. Provision is made for the registration of factories; and inspectors are appointed to inspect and examine them in order to see that the health requirements and other provisions of the Acts are complied with

A record is to be kept in every factory of the names, work, and wages of all employés, and the ages of those under 16. The employment of persons under 13 is debarred, and a strict limitation is placed on the hours of employment for other young persons; and there are special provisions to guard against accidents, for the inspection of boilers, and against the employment of uncertificated persons to control them. All shops, except chemists, news agents, eating houses, &c., must close at seven p.m. on week days and at ten p.m. on Saturdays; but municipal councils are empowered to make by-laws permitting all shops of a particular class to remain open later, or providing that such shops be closed for one afternoon in each week, on petition by a majority of the shop-keepers of the same class; but the Act provides that all shop assistants shall have a half-holiday in each week. The working hours of Chinese are specially restricted, in order to try to prevent or lessen unfair competition.

The most important provision contained in the Act of 1896, and extended by subsequent Acts, is in regard to the formation of Boards to fix the rates of wages and piecework in various trades, for which purpose it is provided that, to determine the lowest prices or rates to be paid, the Governor-in-Council may appoint special Boards, if a resolution in favour of creating a Board for any process, trade, or business has been carried in both Houses of Parliament, consisting of from four to ten members (half elected by employers and half by employés), who are to nominate some outside person as chairman; or if no agreement can be arrived at as to such nomination, then the Governor-in-Council shall appoint the chairman. The Board so appointed shall agree upon the rates or prices to be charged, and shall also determine the number of improvers under 21 years of age who may be employed, and the lowest price or rate of pay; but no one shall receive less than 2s. 6d. per week in any case.

Wages  
Boards.

The Chief Inspector of Factories reports that determinations, made by twenty-nine Boards elected under the Act, were in full operation during 1902, and furnishes figures showing the increase in average earnings consequent thereon. For instance, the average weekly wage for all employés (including boys) in the bread-making trade was £1 12s. 6d. in 1896, prior to the Wages Board being in operation, and £2 2s. 10d. in 1902, when its determination was in full force. Likewise, the average wage of persons employed in the clothing trade increased from £1 in 1896 to £1 2s. 5d. in 1902; the average wage in the boot trade from £1 3s. 2d. to £1 8s. 3d.; and in the furniture trade from £1 9s. 1d. to £1 19s. 6d. In 1900, the average wage of persons engaged in the engraving trade was 36s. 11d., and in 1902, when the determination was in force, it was

Effect—  
rise in  
earnings

49s. 10d., or an increase of 12s. 11d. In the pottery trade the average wage was £1 8s. 1d. in 1900, before the Wages Board fixed the rates, and in 1902, when the determination was in operation it had risen to £1 16s. 4d., or an average increase of 8s. 3d. for each employé engaged in the trade.

## HOSPITAL SATURDAY AND SUNDAY.

Hospital  
Saturday  
and  
Sunday.

In Melbourne and suburbs, the last Saturday and Sunday of October in each year are set apart for making collections in aid of the charitable institutions. The clergy of the various denominations take an active part in the movement, preaching sermons appropriate to the occasion, and otherwise helping it forward. The church collections on this Sunday are entirely devoted in aid of the fund. Sunday school superintendents, business firms, their employés, and others lend valuable assistance in making collections. The following are the amounts collected since the movement was inaugurated:—

## COLLECTIONS, 1873 TO 1902.

1873 to 1898	...	£190,104	1901	...	£6,034
1899	...	5,853	1902	...	6,669
1900	...	5,901	Total	...	£214,561

The returns for 1903 are not yet available.

Distribution  
of moneys  
collected  
on Hospital  
Saturday  
and  
Sunday.

The amounts distributed to the various charitable institutions, as well as the total sums collected, from the inception of the fund, and for the year 1902, were as under:—

## DISTRIBUTION, 1873 TO 1902.

Institution.	Amount Distributed.		
	1873 to 1901.	1902.	Total.
	£	£	£
Melbourne Hospital	61,802	1,654	63,456
Alfred Hospital	26,903	598	27,501
Benevolent Asylum	18,614	411	19,025
Women's Hospital	18,558	569	19,127
Children's Hospital	23,125	879	24,004
Eye and Ear Hospital	10,100	290	10,390
Homœopathic Hospital	10,064	261	10,325
Victorian Home for Aged and Infirm	6,842	149	6,991
Richmond Dispensary	1,330	35	1,365
Collingwood Dispensary	1,900	...	1,900
Austin Hospital for Incurables	10,122	581	10,703
Convalescent Home for Women	1,790	125	1,915
Convalescent Home for Men	1,275	125	1,400
Melbourne District Nursing Society	576	77	653
St. Vincent's Hospital	2,505	245	2,750
Sanatorium for Consumptives, Echuca and Macedon	790	223	1,013
Queen Victoria Hospital for Women and Children	308	106	414
Melbourne Dental Hospital	20	20	40
Total Distributed	196,624	6,348	202,972
Total Collected	207,892	6,669	214,561

## CHARITABLE INSTITUTIONS.

Particulars relating to the most important of the various classes of charitable institutions in the State are as follow. The information relates to the year ended the 30th June, 1903, except for the Hospitals for the Insane, the Idiot Asylum, and the Neglected Children and Reformatory Schools, in which cases it relates to the calendar year 1903. Of the general hospitals, six are in Melbourne, the remainder in country towns, nine of the latter being also benevolent asylums. The accommodation available for indoor patients was as follows:—

Charitable institutions  
—accommodation.

## AMOUNT OF ACCOMMODATION, 1902-3.

Description of Institution.	Number of Institutions.	Dormitories.		Number of Beds for Inmates.	Number of Cubic Feet to each Bed.
		Number.	Capacity in Cubic Feet.		
General Hospitals ...	45	393	4,070,321	2,956	1,376.9
Women's Hospital...	1	24	142,486	93	1,532.1
Children's Hospital ...	1	17	125,076	113	1,106.9
Eye and Ear Hospital ...	1	8	54,680	60	911.3
Queen Victoria Hospital for Women and Children	1	3	23,894	18	1,327.4
Consumptive Sanatorium ...	1	15	56,000	95	589.5
Hospitals for the Insane ...	6	1,193	2,870,227	4,066	705.9
Idiot Asylum ...	1	20	114,288	286	399.6
Benevolent Asylums ...	6	179	1,663,766	2,434	683.6
Convalescent Homes ...	2	29	69,000	61	1,131.1
Blind Asylum ...	1	5	91,318	112	815.3
Deaf and Dumb Asylum ...	1	4	75,872	74	1,025.2
Orphan Asylums ...	7	55	605,979	1,083	559.5
Neglected Children and Reformatory Schools	15	...	...	...	...
Infant Asylum ...	1	8	38,821	54	718.9
Female Refugees ...	9	129	393,039	539	729.2
Salvation Army Rescue Homes	6	39	101,317	228	444.4
Total ...	105	2,121	10,496,084	12,272	855.3

The regulations of the Board of Public Health require an allowance of 1,200 cubic feet for each inmate in hospitals, and the above statement shows that, with two exceptions, this requirement has been complied with.

The following statement shows the number of inmates and of deaths in these institutions:—

Charitable institutions  
—inmates and deaths.

## INMATES AND DEATHS, 1902-3.

Description of Institution.	Number of Inmates.		Number of Deaths.	Proportion of Deaths to Total Number of Inmates.
	Total during the Year.	Daily Average.		
General Hospitals ...	21,509	2,023	2,320	Per Cent. 10·78
Women's Hospital ...	1,929	66	41	2·13
Children's Hospital ...	1,302	87	113	8·68
Eye and Ear Hospital ...	813	49	6	·74
Queen Victoria Hospital for Women and Children	236	17	11	4·66
Consumptive Sanatorium	155	39	..	...
Hospitals for the Insane	5,200	4,262	342	6·58
Idiot Asylum ...	331	296	20	6·04
Benevolent Asylums ...	3,889	2,415	470	12·09
Convalescent Homes ...	1,160	39	1	·09
Blind Asylum ...	108	93	4	3·70
Deaf and Dumb Asylum	75	69	8	10·67
Orphan Asylums ...	1,482	1,138	7	·47
Neglected Children and Reformatory Schools	6,299	5,503	53	·84
Infant Asylum ...	114	61	7	6·14
Female Refuges ...	835	479	17	2·04
Salvation Army Rescue Homes	573	145	...	...
Total ...	46,010	16,781	3,420	7·43

By comparing the above table with that preceding it, overcrowding seems to exist in the Hospitals for the Insane, the Idiot Asylum, the Infant Asylum, and the Orphan Asylums, as the daily average number of inmates in those institutions is greater than the number of beds provided.

In addition to the inmates shown above, there were 59 mothers of infants in the Infant Asylum, 111 infants in the Female Refuges, and 135 infants in Salvation Army Homes during the year.

The total receipts of all charitable institutions in the year 1902-3 amounted to £441,446, of which more than three-fifths were contributed by Government, and the expenditure amounted to £459,812. Of the Government contribution, £187,934 was expended on the Hospitals for the Insane, the Idiot Asylum, and the Neglected Children and Reformatory Schools, which are Government institutions.

Charitable  
institutions  
—receipts  
and ex-  
penditure.

## RECEIPTS AND EXPENDITURE, 1902-3.

Description of Institution.	Receipts.			Expenditure.
	From Government.	From Other Sources.	Total.	
General Hospitals ... ..	£ 49,078	£ 74,484	£ 123,562	£ 130,268
Women's Hospital ... ..	2,568	5,352	7,920	7,154
Children's Hospital ... ..	642	6,835	7,477	18,592
Eye and Ear Hospital ... ..	800	3,469	4,269	4,443
Queen Victoria Hospital for Women and Children	160	1,140	1,300	1,737
Consumptive Sanatorium ... ..	165	2,595	2,760	2,931
Hospitals for the Insane ... ..	121,823	19,741	141,564	141,564
Idiot Asylum ... ..				
Benevolent Asylums ... ..	21,220	14,636	35,856	34,667
Convalescent Homes ... ..	385	1,068	1,453	1,418
Blind Asylum ... ..	1,640	2,818	4,458	4,248
Deaf and Dumb Asylum ... ..	820	2,675	3,495	3,236
Orphan Asylums ... ..	5,560	14,354	19,914	19,564
Neglected Children and Reformatory Schools	66,111	1,280	67,391	67,391
Infant Asylum ... ..	585	667	1,252	1,273
Female Refuges ... ..	2,084	12,381	14,465	16,589
Salvation Army Rescue Homes ... ..	566	3,744	4,310	4,737
Total ... ..	274,207	167,239	441,446	459,812

The following statement shows the average number of inmates of the respective institutions, the total cost of their maintenance, and the average cost per annum of each inmate:—

Charitable institutions—average cost per inmate.

## COST OF MAINTENANCE, 1902-3.

Description of Institution.	Daily Average Number of Inmates.	Total Cost of Maintenance.	Average Cost of Each Inmate Per Annum.
General Hospitals ... ..	2,023	£ 118,145	£ s. d. 58 8 0
Women's Hospital ... ..	66	7,102	107 12 1
Children's Hospital ... ..	87	8,462	97 5 3
Eye and Ear Hospital ... ..	49	3,619	73 17 2
Queen Victoria Hospital for Women and Children	17	1,408	82 16 6
Consumptive Sanatorium ... ..	39	2,918	74 16 5
Hospitals for the Insane ... ..	4,262	141,564	31 1 2
Idiot Asylum ... ..	296		
Benevolent Asylums ... ..	2,415	33,936	14 1 0
Convalescent Homes ... ..	39	1,364	34 19 6
Blind Asylum ... ..	93	3,612	38 16 9
Deaf and Dumb Asylum ... ..	69	3,188	46 4 1
Orphan Asylums ... ..	1,138	16,878	14 16 7
Neglected Children and Reformatory Schools	5,503	67,391	12 4 11
Infant Asylum ... ..	61	1,262	20 13 9
Female Refuges ... ..	479	13,230	27 12 5
Salvation Army Rescue Homes ... ..	145	4,526	31 4 3
Total ... ..	16,781	428,605	25 10 10

The institutions showing the lowest average cost per inmate are the Neglected Children and Reformatory Schools, the Orphan Asylums, and the Benevolent Asylums. As many of the children of the Industrial and Reformatory Schools cost the State nothing—maintaining themselves at service or being supported by relatives—the cost of maintenance per head shown above is somewhat misleading, the true cost per head of those supported by the State being about £16 16s. The average cost per inmate of the Infant Asylum, Female Refuges, and Salvation Army Homes would be reduced if allowance were made for mothers of infants in the first-named institution, and for infants in the two latter groups of institutions.

Melbourne  
Hospital.

The origin of this institution belongs to the very earliest days of Melbourne. Five years from the foundation of the city, the great desirability, and even necessity, of providing some establishment for the receipt, nursing, and treatment of the sick poor, and for the relief of victims of accidents, was apparent. A public meeting, presided over by the Superintendent of the Province, Mr. Latrobe, and attended by the leading people of the settlement, was held on 1st March, 1841, and resolutions were unanimously and enthusiastically agreed to in favour of the foundation of a hospital where the best medical advice and the most skilful surgical treatment available should be at the service of those who were in indigent circumstances, as well as those who should be admitted as paying patients. The severity of the struggle for existence in these early days, and the poverty of the people of the settlement, retarded for a time the collection of subscriptions. In a year, only £300 had been received; but urgent requirements were met by the establishment of a dispensary in a small brick cottage in Little Collins Street rented for the purpose. The grant in aid, which had been fully expected, was refused by the Government in Sydney. But the charitable work was not thereby doomed, and private donations enabled larger premises, in Bourke Street West, to be engaged for hospital purposes. It was intimated that no more than £500 could in any event be expected from Sydney, and the indignation and disappointment in Melbourne culminated in a meeting of prominent colonists at the house of Dr. Palmer, afterwards President of the Legislative Council under responsible Government. Strong representations were made to the Governor, Sir George Gipps, who promised the memorialists a site for the hospital, and a money grant by way of building fund and endowment. In February, 1845, the two sites offered, namely, the hay and corn market reserve, between Flinders Lane and Flinders Street, on the east side of Collins Street, and a block, in a then sequestered corner

of the town, bounded by Lonsdale, Little Lonsdale, Swanston, and Russell Streets. The latter site was ultimately chosen, and upon it the building of the hospital was commenced.

As an intimation had been received from Sydney that the Government was prepared to advance £1,000 if a like amount was subscribed in Melbourne, immediate steps were taken to fulfil the condition. £265 was raised at the meeting, where also a governing body was appointed. The first entertainment raised nearly £60, and was given by some gentlemen amateurs who had formed themselves into a philharmonic society. In January, 1846, tenders were called for. The foundation stone was laid on the same day as that of the original Prince's Bridge. Early in 1848, the building was ready for occupation, a staff was appointed, and, in March of that year, two patients were admitted, and four out-patients treated. By July, 1848, all the beds, 21 in number, were occupied, and even at that early date applications for admission exceeded the available accommodation. Additions had therefore to be made. The original building now forms the east wing of the main building. During the first five years, 1,151 in-patients and 684 out-patients were treated in the institution. From 1853 the numbers steadily increased, generally in about the same ratio as the population of the colony. The grand total, as exhibited in the annual report for 1902-3, being 176,057 in-patients and 777,253 out-patients. During the year ended 30th June, 1903, the numbers treated were 4,328 in-patients and 18,597 out-patients. The institution contains 34 wards and 318 beds, and the expenditure during 1902-3 was £26,568.

For many years before the establishment of this institution, the necessity for a second general hospital in Melbourne was recognized. It was not, however, until 1868, when it was finally resolved that a charitable institution should be erected as a memorial of the providential escape of H.R.H. Alfred, Duke of Edinburgh, from assassination during his visit to Sydney. A site of 13 acres within the municipality of Prahran was secured, and the foundation stone was laid in March, 1869, by His Royal Highness, after whom the hospital was named. In May, 1871, the establishment was opened, and additions were made in 1885. In 1888, a fire occurred, which entirely destroyed a portion of the original buildings. During the year 1901-2, further additions were made. This hospital is recognized by the Melbourne University as a clinical school for medical students, and, in addition, a training school for nurses, was established in 1880, the term of instruction decided upon being one year, but this was subsequently increased to three years. The pupils are of two grades—the first pay an entrance fee and a fixed sum

Alfred  
Hospital.

monthly for maintenance, &c.; whilst the second receive a small and progressive salary after six months. Since the opening in 1871, 42,960 in-patients were treated, and of these 4,722 died in the establishment. The out-patients numbered 82,270, and the casualty cases 48,003. For the year ended 30th June, 1903, the daily average number of in-patients was 165. The total revenue from all sources was £10,400, and the total expenditure £10,700. The cost per occupied bed was £55 12s. 1d., this sum being £3 5s. 1d. above the mean expenditure of all hospitals, but considerably below that of those situated in the metropolitan area.

Homoeo-  
pathic  
Hospital

This institution was first established in 1869 as a dispensary, in Spring Street, Melbourne. In 1876, the buildings were enlarged, and founded as a hospital for the treatment of both in and out patients. In 1881, owing to annually increasing demands for the treatment of in-patients, it was decided to remove the institution to its present site on St. Kilda Road, and the northern wing and administration quarters were then erected. In 1890, the southern wing, which is reserved for accidents and surgical cases, was added, the cost being met by a gift of £9,000 made by Mr. James S. Hosie, of Melbourne. Since the institution was first opened, up to 30th June, 1903, 117,393 patients have received treatment. During the year ended on that date, 8,302 patients were treated. The visits of out-patients during the same period were 18,933. The average stay of in-patients was 18 days. 800 operations were performed by the visiting honorary surgeons, and 1,670 casualty cases were attended to. The establishment has attached to it a school for training nurses, who have to serve a period of 3 years, and pass prescribed examinations. Visitors are admitted on Sundays and Wednesdays, between the hours of 2 and 4 p.m. The income for the year was £4,358, and the expenditure £3,878.

Austin  
Hospital  
for In-  
curables

This hospital for incurables, the only one of its kind in Victoria, is situated on a block of 17 acres at Heidelberg. Its origin belongs to the year 1880, when Mrs. Thomas Austin, of Barwon Park, Winchelsea, offered £6,000 for the purposes of the institution. Other donations quickly followed, and the Government of the day granted the present site. The hospital was opened in August, 1882, and provided accommodation for 66 patients. In 1884, a wing, containing 16 beds for the reception of cancer patients, was opened, and in 1900 another wing was added for consumptives, containing 41 beds. Alterations in 1897 increased by 8 the accommodation for cancer patients. The Nurses' Home, with accommodation for 30 nurses and women servants, was erected and furnished in 1897. In 1901, the children's wing was erected, and a laundry has since

been added. Up to 30th June, 1903, 1,861 patients were admitted; of this number 1,267 died in the institution, 454 were discharged, and 140 were occupying beds in the various wards. The patients treated have been all of the one class, i.e., chronic or incurable, many of them reaching the hospital in a dying condition. Amongst the number set out as having been discharged, a fair percentage, say, 45 per cent., have benefited very considerably from the treatment received in the institution, the remaining 55 per cent. having left of their own accord, many of them preferring to die amongst their friends and relatives. Practically no cures have been effected at the establishment. The patients received during the year 1902-3 numbered 247, and the daily average was 136. The institution is well supported by the public. Out of the total expenditure, only about 3s. in the £1 is obtained from the Government and municipal bodies. The receipts were £6,592, and the expenditure £7,620.

This hospital was founded in 1893, and is conducted by the Sisters of Charity; but, though associated with the Roman Catholic Church, the work of the institution is carried on upon entirely unsectarian lines. The site is in Victoria Parade, Fitzroy. The utility of the hospital causes applications for admission from patients urgently needing treatment to be greatly in excess of the means of complying with them, and the construction of a new building is being carried on. During the year ended 30th June, 1903, 439 patients were admitted, which, with 25 remaining from the previous year, makes 464 treated. The number of out-patients who received treatment was 7,440. The receipts were £3,081, and the expenditure £2,922.

St. Vincent's  
Hospital.

The foundation stone of this hospital was laid on the 25th December, 1855, and on the 1st January following a memorial stone was laid to commemorate the completion of the main building. On the Queen's Birthday, 1869, the foundation stone of the Prince Alfred Memorial Ward was laid. This building provides accommodation for 75 beds. On 23rd March, 1897, a public meeting of the ladies of the district was held, when it was decided to collect funds for the purpose of building wards to accommodate 50 female patients, and on 21st June, 1897, was laid the foundation stone of the Queen Victoria Women's Ward, in commemoration of the Jubilee of Her Majesty, the late Queen Victoria, and this building was completed and opened on 26th October, 1900. The establishment is now fully equipped for the accommodation of 170 patients, and its work and usefulness are of a high character.

Ballarat  
District  
Hospital.

Bendigo  
Hospital.

This establishment was founded in 1853, upon a site of 10 acres, which was permanently reserved in 1856, when the main portion of the present building was erected to provide accommodation for 60 patients, the Bowen wing having been subsequently added. This hospital, through the munificence of Mr. George Lansell, has the right to 6 beds for patients from the district in the Austin Hospital for Incurables, at Heidelberg. The hospital now contains a detention ward of 5 rooms for male and female insane patients, where they are kept under observation for limited periods prior to discharge or transfer to a public asylum. There is also a special cottage set apart for contagious diseases, which, however, is not adequate to meet the wants of the district, and local effort is now being made to raise the necessary funds whereby this cottage may be enlarged. The buildings provide accommodation for 172 patients, but during the last ten years the daily average has only been 118. The number of patients received during the year was 1,519, which, with 101 remaining at the close of the previous year, yields a total of 1,620 treated. The out-patients numbered 2,405, and their attendances 6,018. The receipts were £7,981, and the expenditure £8,655. The institution is endowed to the extent of nearly £11,500 (£2,500 of which is in real estate); but, from the report of the past year, it would appear that this fund is in a stationary condition, the balance remaining much the same as at 30th June, 1902.

Geelong  
Infirmiry  
and  
Benevolent  
Asylum.

This institution was opened on the 23rd April, 1852, and during the remainder of the year 150 patients were treated in the Infirmiry and 7 inmates were admitted to the Benevolent Asylum. The institution is managed by a President, assisted by a Committee of 22 persons, who meet once a month for the transaction of business. The staff consists of a resident surgeon and assistants, a matron, wardsman, and women nurses and probationers. A nurses training school is a special feature of this establishment, twelve nurses being constantly under tuition, the course of instruction extending over a term of three years. The buildings being now over 50 years old are showing signs of age, but everything is done to keep the wards in an up-to-date condition. There is a handsome new out-patients' department, which is kept quite apart from the general hospital. The number of beds is 223, the average number occupied 153. During 1903, no less than 2,037 cases—865 indoor and 1,172 outdoor—received relief, and there were 131 under care in the asylum at the close of the year. The total income from all sources for the twelve months ended 30th June, 1903, was £6,544 (including the grant in aid received from the Government, £2,540), and the total expenditure was £5,430.

There are no official records in existence dealing with the formation and early history of this hospital. Many attempts have been made by members of various committees in the past to obtain reliable data and original documents to enable them to do so, but unfortunately, without success. During the past year, however, some important private documents have been discovered which throw some light upon the subject. From these it appears that a public meeting was convened at Castlemaine on the 17th February, 1853, when it was resolved that a hospital should be established for (1) the reception of sick persons who are totally destitute; (2) for accidents; and (3) for those who are able to pay to be attended by their own medical men if desired. On the 24th May, 1853, the hospital appears to have been opened in a good building, 30 feet long by 20 feet wide, with a detached surgery, kitchen, and men's room. The first resident surgeon was appointed to the institution about the middle of 1853. Cases of leprosy were treated early in the sixties, in a tent specially set apart for the purpose, but, in 1870, the patients were all removed to Melbourne, and there strictly isolated. In 1902-3, 407 patients were admitted, 306 were discharged cured or relieved, 42 died, and 59 remained at the close of the year.

Castlemaine  
Hospital.

This institution was incorporated in 1872. During the year ended 30th June, 1903, 345 cases were treated in the institution, viz., 277 in the hospital and 68 in the benevolent asylum. The daily average of hospital patients was 23, of benevolent inmates 35. The total attendances of out-patients was 484. An isolated building in the hospital grounds has been set apart for the reception and treatment of contagious cases. The receipts for the year were £2,702, and the expenditure £1,982.

Warrnam-  
bool Hos-  
pital and  
Benevolent  
Asylum.

The Pleasant Creek Hospital was established in 1858, and its inauguration was brought about through the desire of the benevolent people of the district to establish a charity where the accidents and sicknesses incidental to the mining industry, which the discovery of gold had developed, might be successfully treated. The bark huts and small calico tents in which the bulk of the community then resided were altogether unfit to accommodate the victims of accidents, or the sufferers from the prevalent dysentery and enteric, and the nearest hospital was 80 miles away, at Ballarat. A number of the residents, therefore, decided to arouse public sympathy and assistance in the establishment of a district hospital, and after much display of energy and many meetings, the institution was formally organized on 7th August, 1858, under the style of the Pleasant Creek Hospital. The committee decided, in the urgent interests of the suffering, to erect a

Stawell  
Hospital  
and  
Benevolent  
Asylum.

temporary hospital, and a building of wood, canvas, and iron, capable of accommodating 20 patients, was constructed. In February, 1859, this temporary hospital was opened, and before the end of the year 67 patients had been admitted. It was at once perceived that the hospital was of immense value, meeting, as it did, the requirements not only of the gold-fields population, but receiving and treating the sick and wounded of the whole of that part of the western portion of the State, the large pastoral districts extending northwards to the Mallee and westwards to the South Australian border. In 1861, the permanent building was opened, on the admirable site of 19 acres, which the Government had granted. Numerous additional wards have from time to time been constructed, and in 1883 the scope of the operations of the charity was widened by the incorporation with the hospital of a benevolent asylum; its name also was altered to the Stawell Hospital and Benevolent Asylum. The buildings are now capable of accommodating 47 patients in the hospital and 16 inmates in the benevolent asylum. A special ward with 6 beds has lately been set apart for consumptive patients from any part of the State. A new building is now being constructed for the purpose of an Infectious Diseases Hospital, and will provide for 12 patients. It will be designated the W. H. Syme ward, its whole structure, furnishing, and equipment being generously provided as a free gift by the widow of the late Dr. W. H. Syme, who for many years was an honorary surgeon of the institution. The relief afforded during the year ended 30th June, 1903, was as follows:—In-patients, 349; out-patients (new cases), 363; number of attendances of out-patients, 1,757; daily average of in-patients, 42. The revenue for the year was £2,357, and the expenditure £2,202.

Mary-  
borough  
Hospital.

The Maryborough Hospital was established in 1854, and incorporated in 1864. The number of patients admitted since the foundation of the institution has steadily increased year by year, till, in 1902-3, it had amounted to 420, with a daily average of 42. The number of out-door patients was 778, who attended on 2,603 separate occasions, this being the largest on record during any one year. The receipts for the year 1902-3 were £2,121, and the expenditure £1,996.

Women's  
Hospital.

The necessity for establishing an institution of this kind forced itself upon the attention of the benevolent ladies of Melbourne nearly 50 years ago. In 1856 it was definitely founded, its original title being the Melbourne Lying-in Hospital and Infirmary for diseases of women and children. The work of the institution was first carried on in Collins Street, Eastern Hill, but a permanent site was eventually found in Madeline Street, Carlton, where the hospital was opened in 1858, its title being altered in 1868 to Women's

Hospital, the name it now bears. The institution, early in its career, attained a high reputation for the efficient help it afforded, and the accommodation had to be augmented from time to time to meet increasing demands. The institution is a training school for medical men and nurses, and the excellent work carried on is fully recognized. Up to 30th June, 1903, the number of patients admitted was 10,804, and the attendances of out-patients 175,194. During the year ended on that date, 411 patients were admitted, which, together with 29 remaining in at close of previous year, gives a total of 440 treated. There were also in the same period 4,726 attendances of 1,036 out-patients. The receipts for the year were £7,920, the expenditure £7,154.

The Children's Hospital, Melbourne, was established for the purpose of treating the general and peculiar ailments of children. The patients treated come in from almost every part of the State, over 100 districts being tabulated as those whence the in-patients come, including places so widely apart as Swan Hill and Yarram, Camperdown and Rochester. Every infantile ailment is treated—febrile, constitutional, and developmental troubles being dealt with in large numbers. Numerous cases of accidents and casualties are also admitted. Many of the cots have been endowed by the generosity of private donors or of public bodies. On 8th May, 1903, the Princess May Pavilion—a wing of the building containing 40 beds—was opened, thus affording accommodation for over 500 children during the year. Babies' wards have also been instituted. The hospital had 84 in-door patients at the commencement of the financial year. During the twelve months ended 30th June, 1903, there were 1,218 additional in-door patients admitted, of whom 1,100 were discharged relieved, 113 died, and 89 remained at the close of the year. The attendances of out-door patients for the year were 77,895. The total attendances of out-door patients since the foundation were 932,350, and of in-door patients treated 18,969. The hospital is situated in Rathdown, Pelham, and Drummond Streets, Carlton, and connected with the institution is a convalescent home at Brighton Beach, containing 21 cots. The number of convalescent children passing through this establishment during the year 1902-3 was 297.

Children's  
Hospital,  
Melbourne.

The Victorian Eye and Ear Hospital deals not only with the diseases which, as the name of the institution implies, fall to be treated there, but also with diseases in parts adjacent to the eye and ear, viz., the nose, pharynx, naso-pharynx, and larynx. Thus classes of ailments are treated in this institution which not only are the cause of extreme suffering in themselves, but also, when unchecked, the means of producing

Eye and Ear  
Hospital.

much helplessness and poverty, arising from deafness, blindness, &c., and entailing a heavy burden on the community. It places within the reach of all persons, without distinction of creed or country, every attainable means for the relief or cure of diseases of the eye and ear. The patients treated are distributed throughout the whole State—Bairnsdale and Omeo in the east, Casterton and Coleraine in the west, and Echuca and Mildura on the Murray, as well as almost every other centre of importance, contributing to the cases treated. The in-patients received during 1903 numbered 759, making, with 54 in the institution at the commencement of the year, a total of 813 treated. The patients discharged numbered 775, of whom 719 were stated to be cured or relieved, and 56 to be incurable. Besides these, there were 5,623 out-patients treated, 129 of this number being from the other States and New Zealand. The hospital buildings are situated on a fine site in Victoria Parade, East Melbourne.

Lunatic  
asylums,  
1903.

The number of cases admitted to lunatic asylums during the year 1903 was 766, the number discharged recovered was 324, and relieved 48. The number of patients remaining in the asylums on the 31st December, 1903, was 4,570, or a proportion of 1 in every 264 of the population, as compared with 4,547, or 1 in every 265 of the population, in the preceding year. Of those discharged recovered in 1903, as many as 75 per cent. had been in the asylums for less than 12 months, 15 per cent. from 1 to 2 years, and 7 per cent. from 2 to 5 years. After this length of time in the asylums recoveries are not at all likely to take place. Of those who died, 32 per cent. had not been resident 12 months, 30 per cent. from 1 to 5 years, 13 per cent. from 5 to 10 years, 8 per cent. from 10 to 15 years, 5 per cent. from 15 to 20 years, 6 per cent. from 20 to 25 years, and about 6 per cent. were in longer than 25 years. These facts tend to show that mortality is heavy during the early stages of treatment, and that the death rate amongst those inmates who have a lengthened asylum residence is very light, and no doubt this result generally aids in making the large asylum population to which attention has been repeatedly directed.

Admission,  
discharge,  
&c., lunatic  
asylums,  
1848 to 1903.

Since the opening of the first asylum in 1848 up to the end of 1903, 32,691 persons have been admitted, viz., 18,765 males, and 13,926 females. The proportion who recovered was 29 per cent. of males, and 33 per cent. of females, whilst 4 and 6 per cent. respectively were relieved, 21 per cent. and 22 per cent. (including transfers) were not improved, 33 and 23 per cent. died, and 13 and 16 per cent. respectively still remain under care in the institutions.

The number of lunatics in the different Australian States and New Zealand, and their proportion to the total population of each State on 31st December, 1902, were:—

Lunatics in Australia and New Zealand.

NUMBER OF LUNATICS IN STATES.

State or Colony.	Number of Lunatics on 31st December, 1902.	
	Total.	Per 100,000 of Population.
Victoria ... ..	4,547	375
Queensland ... ..	1,813	355
New Zealand ... ..	2,848	353
New South Wales ... ..	4,673	332
South Australia ... ..	991	271
Tasmania ... ..	441	249
Western Australia (1901) ... ..	340	175

The recoveries of patients in the Victorian lunatic asylums in 1902 were above the average of the 21 years ended with 1902, the proportion in that year being 4,497 per 10,000 admitted, as compared with 4,051 in the period stated. The proportion of recoveries in 1902 was higher than in any other Australian State, with the exception of Tasmania.

Recoveries of Lunatics in Australia, 1902.

RECOVERIES.

Recoveries per 10,000 Admissions.		Recoveries per 10,000 Admissions.	
Tasmania ... ..	4,625	New South Wales ... ..	3,991
Victoria ... ..	4,497	Queensland ... ..	3,864
South Australia ... ..	4,476	Western Australia (1901) ... ..	3,830

The mortality of lunatic asylum patients was higher in Victoria in 1902 than in any of the other States with the exception of South Australia. This will be seen by the following figures:—

Deaths of Lunatics in Australia and New Zealand.

DEATHS.

Deaths per 10,000 Resident Patients.		Deaths per 10,000 Resident Patients.	
South Australia ... ..	1,076	Tasmania ... ..	641
Victoria ... ..	763	New Zealand ... ..	623
New South Wales ... ..	718	Queensland ... ..	505
Western Australia (1901) ... ..	681		

There are seven of these institutions in the State; situated, one at Ballarat, Bendigo, Beechworth, and Castlemaine, the remaining three being in Melbourne. The number of inmates on the 1st July, 1902, was 2,437; the number admitted during the year 1,452; the total discharged, cured, relieved, or otherwise, and died, was 1,448; leaving under care on 30th June, 1903, in all the institutions, 2,441. The Government grant-in-aid for the year 1902-3 was £21,220; from municipalities a sum of £1,120 was received; private contributions amounted to £3,165; proceeds of entertainments, £1,142; legacies, bequests, and special donations, £2,663; Hospital Sunday collections, £1,037; payments by patients, £1,875; interest on moneys invested, £2,462; from all other sources, £1,172 was received,

Benevolent asylums.

making a total income of £35,856. The expenditure was £34,667. At the close of the year the assets of the institutions amounted to £1,159; the liabilities to £4,154; and the endowment funds to £62,302. There are nine other benevolent institutions carried on in connection with general hospitals situate at Ararat, Daylesford, Geelong, Hamilton, Maldon, Port Fairy, Portland, Stawell, and Warrnambool.

Benevolent societies.

Seventy-seven benevolent or philanthropic societies furnished returns for the year ended 30th June, 1903. These associations are for the relief of distressed or indigent persons, and are generally managed by ladies. The names of two of the societies indicate their connection with the Jewish body, but no distinctive denomination is perceptible in the titles of any of the others, with the exception of the Central Methodist Mission, and Church of England Seamen's Mission. The distinct adult individuals relieved during the year numbered about 15,573; the receipts amounted to £16,483, of which £5,960 was from Government and £10,523 from private sources; and the expenditure to £20,140.

Convalescent homes.

In addition to the hospitals, there were two Convalescent Homes—one for men, situated at Cheltenham, and the other for women at Clayton—with accommodation for 61 inmates. The number of inmates at the beginning of the year 1902-3 was 34; 1,126 were admitted, and 1,117 were discharged during the year, and 43 remained under care on the 30th June, 1903.

Free dispensaries.

Two free dispensaries furnished returns for 1903—the Collingwood and Fitzroy Free Medical Dispensary, and the Richmond General Dispensary. The individuals treated during the year ended 30th June, 1903, numbered 5,265. The visits to or by these persons numbered 19,512. The total receipts amounted to £602, of which £180 was from Government and £422 from other sources. The total expenditure was £703.

Orphan asylum.

There are seven of these establishments in the State receiving aid from the Government—situated at Ballarat, Geelong, and Melbourne. The number of children under care on the 1st July, 1902, was 1,123; the number admitted during the 12 months was 359; the total discharged and died, 309; leaving under care on 30th June, 1903, 1,173. This shows overcrowding to a very slight extent, as the accommodation for beds is only 1,083. The total receipts of these establishments was £19,914, and the expenditure was £19,564. At the close of the year, the managing bodies of the various institutions report the assets to be £555; liabilities, £2,933; and the endowment or other special funds, £46,586.

Broadmeadows Foundling Hospital.

This hospital was established on the 1st April, 1901. The original cost of the buildings was £2,200, and £557 has been expended since that time in additions and improvements. The

institution is supported chiefly by donations and collections. It is managed by the Sisters of St. Joseph, whose aim is to protect infant life, procure suitable homes for the children, and afford shelter to destitute mothers. The present condition of the establishment is satisfactory.

There were at the end of 1903 three industrial and ten reformatory schools in the State, one of the former being a servants' training school. The State industrial schools are used merely as receiving depôts, the children being sent as soon as possible after commitment to the schools either to foster homes, or to private farm reformatories partly supported by the State. Many of the inmates of the State reformatories are either placed with friends or licensed out. The wards of the State on 31st December, 1903, numbered 5,361, and in addition, there were 41 others free from legal control, who, being incapacitated, were maintained by the State. Of the total number under control, only 316 are described as reformatory children; 192 of these were in reformatory schools, 64 were maintaining themselves at service, 54 were placed with relatives without cost to the State, 3 were in hospitals, and 3 were inmates of gaols. The balance, 5,045, are described as neglected children, of whom 3,363 were boarded out in foster homes, 767 were maintaining themselves at service, 771 were living with relatives without cost to the State, 134 were inmates of institutions for neglected children, 9 were in hospitals, and 1 in gaol.

Industrial  
and re-  
formatory  
schools.

The welfare of the children boarded out is cared for by honorary committees, who send reports to the department as to their general condition. The rate paid by the Government to persons accepting charge of these children is five shillings per week for each child. Children from either industrial or reformatory schools may be placed with friends on probation, without wages, or at service. The number of children boarded out at the end of 1903 was 3,363, as against 3,753 in 1902, 3,701 in 1901, 3,331 in 1900, and 3,113 in 1899; the number placed with friends on probation was 825 in 1903, as against 825 in 1902, 780 in 1901, 719 in 1900, and 689 in 1899; and the number at service or apprenticed, 831 in 1903, as against 815 in 1902, 851 in 1901, 842 in 1900, and 820 in 1899.

Children  
boarded  
out, &c.

The circumstances leading to the commitment of these children are as follow, the particulars having been obtained from the orders:—The total number of children placed under control in the schools in 1903 was 480, and in only 208, or 43 per cent. of the whole, were the parents held to be blameable—the father in 150, the mother in 34, and both parents in 24 cases. There were 272 cases in which the parents were held to be blameless; in 108 the father was dead and the mother poor, but of good character; in 20 both parents were dead;

in 55 the parents were alive, but, though held to be of good character, were too poor to support their children; in 27 the father was poor and the mother dead; in 33 both parents were the victims of misfortune; in 7 the parents were unknown; in 10 the father was unknown and the mother dead; and in 12 the father was unknown and the mother unable, through sickness or poverty, to maintain her offspring.

Cost of maintenance of neglected and reformatory children.

The Government expenditure for the maintenance of neglected children amounted in 1903 to £56,839, and for reformatory school children to £6,380; the expenses of administration amounted to £4,172, making a total gross expenditure of £67,391. A sum of £1,226 was received from parents for maintenance, and £54 from other sources, making the net expenditure £66,111. The average number of neglected children under supervision during the year was 5,250, of this total, 3,547 were maintained in foster homes at an average annual cost per head to the State of £14 9s. 10d., 79 were in Government receiving depôts at £35 11s. 7d. per head, and 90 were in private industrial schools costing £14 9s. 7d. per head; 765 were at service earning their own living, and 769 were with relatives and others at no cost to the State. The average number of reformatory wards under supervision during the year was 330. Of this number, 212 were maintained in private schools at an average annual cost per head of £30 1s. 11d., 64 were at service earning their own living, and 54 were with relatives at no cost to the State. The average net cost per head of neglected and reformatory school children who were maintained by the State during the year was £16 16s. 7d.

Victorian Infant Asylum.

The objects of the Victorian Infant Asylum and Foundling Hospital are the prevention of infanticide, the saving of infant life from the many evils arising from baby-farming, and the rescuing of mothers of illegitimate children from further degradation. Every child admitted must be brought by the mother or some authorized person, who must enter the child's name and the date of birth in a register kept for the purpose, and must undertake to contribute something towards its support. During the year ended 30th June, 1903, the number of infants admitted was 57, besides which 58 were under the care of the institution at the commencement of the year. The number who died during the year was 7; 34 were discharged or adopted; and 10 were boarded out; thus the number remaining under the control of the institution at the end of the year was 64, of whom 39 were boarded out. Besides the infants, there were 59 mothers under the care of the institution during the year, of whom 44 were discharged, and 15 remained at the close of the year. The receipts during the year amounted to £1,252, of which £585 was from Government, and £667 from private sources; and the expenditure was £1,273. During the year, 81 applications for the admission of infants had to be

refused for want of accommodation. Plans for a new building have been approved of, and the committee hope that before long a new wing will be added, which will give accommodation to a larger number.

The general objects of these institutions are—(1) To provide a refuge for women who have fallen into vice and who are desirous of return to the paths of virtue; (2) to reclaim such women from evil courses and fit them to become useful members of society; (3) to assist in procuring situations or in other ways providing for them on leaving the institutions. At the present time these refuges are nine in number, and are all situated in or near large centres of population. A Commission, which made an investigation of these charities in 1891, expressed opinion that there was waste of energy and funds in their management and maintenance, and that they might be advantageously worked together with economy and efficiency. The Commission advocated the removal of all the inmates to one central establishment in the country where the general surroundings would be more home like, and thereby tend to further the reformation of the women. Nothing has, however, been done in this direction up to the present time. During the year ended 30th June, 1903, the Government subsidised these establishments to the extent of £2,084; in addition, they received £62 aid from the municipalities; £903 from private contributions; £32 from Hospital Sunday and church collections; £571 from legacies, bequests, and special donations; £10,404 from the labour of the inmates; £107 contributions on behalf of patients; and £302 from all other sources; making a total of £14,465. The total expenditure was £16,589, made up of £3,227 buildings and extraordinary repairs, £476 ordinary repairs, and £12,886 maintenance of inmates and miscellaneous expenditure.

Refuges for  
fallen  
women.

There were 835 female inmates in these institutions during the year ended 30th June, 1903; 26 were in the Ballarat Home, 18 in the Bendigo Rescue Home, 84 in the Elizabeth Fry Retreat, South Yarra, 16 in the Geelong Female Refuge, 458 in the Magdalen Asylum at Abbotsford, 52 in the Carlton Refuge, 75 in the South Yarra Home, 84 in the Temporary Home for Fallen and Friendless Women, at Collingwood, and 22 in the House of Mercy, at Cheltenham. In addition, there were 91 children in the institutions with their mothers; 8 at Ballarat, 9 at Bendigo, 7 at Geelong, 39 at Carlton, 1 at South Yarra Home, and 27 at Collingwood. During the year, 14 children were born in the Ballarat Home and 6 at Geelong. The total number under care in all the institutions on 30th June, 1903, was 492 women and 49 children. 161 women and 16 children were either placed in service or restored to friends; 3 women were married; 106 women (one accompanied by a child) left voluntarily; 17 were expelled for misconduct; 19 women and

3 children were sent to other institutions; homes were found for 9 children; 20 women and 15 children left otherwise; and 17 women and 18 children died during the year. The total discharges numbered 343 women and 62 children.

The women while under care in these institutions are expected to work to the best of their ability, a suitable share of labour being allotted to each. Laundry work is the chief means of providing employment, whilst sewing, art needle-work, embroidery, &c., also provide occupation to a limited extent.

Night  
shelters.

At Dr. Singleton's Night Shelters, Collingwood, 15,422 cases were accommodated during the year 1902-3, viz., 8,797 men, 6,324 women, and 301 children. The expenses were £88, which were defrayed out of the "General Charity Fund," but there were also numerous contributions in the shape of food. This charity is truly a boon, affording as it does a clean quiet haven of rest for the homeless, after the weariness of a day out of doors.

Society for  
the Pro-  
tection of  
Animals.

The Victorian Society for the Protection of Animals has been established for about 30 years. By the enforcement of the existing laws, and the procuring of such further legislation as may be deemed expedient, it seeks to prevent wanton and unnecessary cruelty. The creation of a wholesome and enlightened public opinion is also aimed at, since it is recognized that to excite and sustain such opinion regarding man's duty to the lower animals is even of greater force than the law, particularly in those classes of cases where pain and suffering may actually be caused in ignorance, and where consequently a little more knowledge of animals would result in the diminution of the unconscious practice of cruelty. To this end, papers and leaflets dealing with the proper, humane, and considerate treatment of animals are widely distributed. Honorary agents of the society are appointed in the principal centres, and these, by disinterested service in the cause of mercy, under the supervision and in co-operation with the secretary and inspector in Melbourne, forward the work of the institution in every portion of the State. During the year ended 30th June, 1903, 774 cases were dealt with by the society, of which 541 were connected with cruelty to horses. There were 117 prosecutions in cases of deliberate cruelty, in nearly all of which the law was vindicated by the punishment of the offenders. The receipts for the year amounted to £428, and the expenditure to £436.

Victorian  
Discharged  
Prisoners'  
Aid  
Society.

Since 1872 a society has been in existence for the purpose of affording assistance to discharged prisoners, and offering them inducements to return to the paths of honesty and industry. Relief is afforded by gifts of money, clothes, blankets,

and other necessaries, railway passes, and various kinds of tools of trade; and those who desire it are supplied for a time with board and lodging in Melbourne, or are provided with means to go into the interior, or to leave the State. The society also takes charge of and distributes the sums earned by the prisoners whilst under detention. The work is aided by honorary correspondents in country centres. Very valuable aid is given in connection with the moral reformation of the young offender. The improvement of the hardened criminal is a matter of great difficulty, but the society is valuable help to those who have not become confirmed in careers of crime and wrong doing, and minimises the tendencies of drifting into the criminal class of those who have formed vicious and evil habits. The number of individuals relieved in 1902-3 was 580. The receipts were £831, including grants from the Government, the Penal Department, and private sources; and the expenditure was £749.

This association was established in Victoria in 1883. Its objects are to instruct all classes in the preliminary treatment of the sick and injured. Since the inception of the association, its influence has been steadily increasing, and the number of people instructed is growing larger every day. The total number who have been instructed to date is 13,678; the number of persons who are fully qualified is 656; 2,047 railway employes and 553 members of the police force have been specially educated in the work; and 7,943 certificates and medallions have been issued. An ambulance waggon is stationed at the back of the Grand Hotel, Spring Street, which may be summoned when required. Ashford litters are also provided for the use of the public in cases of accident in the city and suburbs, and first aid is generally rendered by trained firemen.

St. John's  
Ambulance  
Association

#### OLD AGE PENSIONS.

An Act to provide for the payment of old age pensions was passed in 1900. The minimum age of a pensioner is 65 years, but pensions may be granted to persons under that age if they have been permanently disabled through having been engaged in mining or any unhealthy or hazardous occupation. The period of residence in the State required to entitle a person to a pension is 20 years, five of which must be continuous and immediately preceding the application. A person who has deserted, without just cause, wife, husband, or children, for a period of 12 months in the preceding five years, is debarred from pension rights. The absence of serious criminal taint, to the extent of not having been imprisoned for periods amounting to five years during the whole qualifying period of residence, or to six months or upwards in the preceding five years, is insisted upon. Three convictions for

Old age  
pensions

drunkenness during the preceding two years is a disqualification. An applicant must be a British subject by birth, or a naturalized subject of not less than six months' standing, but Chinese and Asiatics, whether naturalized or not, and Aborigines are excluded. Relatives may be summoned to show cause why they do not support applicants for pensions, and may be ordered to do so. Originally the maximum pension was 10s. per week, but in the Amending Act of 1901 it was reduced to 8s. per week. 12,417 persons were entitled to receive pensions on 30th June, 1903. Between 1st July and 31st December, 1903, 515 pensions were granted to new applicants and 8 pensions were restored; 343 pensions were cancelled and 557 pensioners died, leaving 12,040 pensioners on 31st December, 1903, of whom 5,147 were resident in Melbourne and suburbs; 827 in Ballarat and district; 600 in Bendigo and district; 367 in Geelong; 151 in Maryborough; 148 in Daylesford; 141 in Warrnambool; and the remainder are scattered throughout the other districts of the State. The following are the amounts paid since the inception of the system on 1st January, 1901, viz.:—

In 1900-01	...	...	...	...	£129,338
1901-02	...	...	...	...	292,432
1902-03	...	...	...	...	215,973
From 1st July, 1903, to 31st December, 1903	...	...	...	...	104,271
Total	...	...	...	...	£742,014

The following statement shows the proportion of persons, aged 65 years and upwards, to the population in the three States paying old age pensions, also the proportion drawing old age pensions, and the percentage of the latter to the former:—

#### PROPORTION RECEIVING OLD AGE PENSIONS.

State or Colony.	Number in Every 10,000 Persons.		Proportion of those Eligible on an Age Basis receiving Pensions.
	65 and Upwards.	Receiving Old Age Pensions.	
	1901.	1902.	Per Cent.
Victoria	552	117	21
New South Wales	344	166	48
New Zealand (including Maoris)	414	157	38

It thus appears that New South Wales is paying pensions to almost half of those eligible to receive them under the age qualification, New Zealand to nearly two-fifths, but in Victoria only about a fifth of those so qualified are the recipients of this character of State aid.

#### CHARITY ORGANISATION SOCIETY.

This society has been well to the fore in regard to the establishment of labour colonies. That at Leongatha was founded by the advice and with the assistance of the society

Proportion of population 65 and upwards receiving old age pensions in two Australian States and New Zealand.

Pensions paid in states compared.

Charity Organisation Society.

ten years ago. Such institutions are regarded as a valuable resource for effectively assisting certain classes of the unemployed in adverse times and seasons. Although the Leongatha colony has not been altogether a success, it is hoped that future efforts will be benefited by the knowledge of the errors that attended its experimental establishment, and the Charity Organisation Society has been instrumental in securing the continuation of the colony until another has been founded and equipped. The lack of suitable employment for the poor is met by the employment office of the society, through which a large number of persons have been given work, permanent in some cases and temporary in others, which otherwise would not have reached them.

BY T. C. MACKLEY, Esq., SECRETARY.

A Charity Organisation Society has been established in Melbourne since 1887, its objects being:—(1) Promotion of co-operation in charitable work; (2) adequate inquiry into all applications for assistance; (3) distribution of immediate relief in kind pending inquiry or arrangements with existing charities; (4) compilation of records of all cases for facility of reference; (5) administration of a loan fund; (6) maintenance of a wood-yard or other labour test, so that the means of earning food and shelter shall be opened to all applicants able to work; (7) to encourage charitable work where and in so far as no suitable society exists; (8) discouragement of indiscriminate alms-giving, imposture, and professional mendicity; (9) encouragement of charitable work in localities where no suitable societies are in existence. The society is managed by an executive committee elected by a council empowered to make rules and regulations for the conduct of its business. This council consists of a representative of each of the charities, and of twenty members elected at an annual meeting of subscribers of the society. The income of the year ended 30th June, 1903, was:—General account (for administration expenses)—Receipts, £615; expenditure, £777. Trust Account (being donations for special applicants and objects)—Receipts, £586; expenditure, £546. Emergency Relief Account—Receipts, £131; expenditure, £85. Woodyard—Receipts, £420; expenditure, £420. The number of cases dealt with during the year was 1,294, of which the new cases investigated were 745, the result of the inquiry being that 616 were set down as being satisfactory and 129 as unsatisfactory. The society claims to have prevented a large amount of imposture, to have relieved subscribers of the annoying feeling that their benevolence was often wasted on unworthy objects, and to have stimulated and directed the flow of charity. Especially good work has been done in cases where employment has been found for those who, without the society's aid, might have degenerated into permanent burdens on public or private

charity, and in the large number of cases in which relatives of indigent persons have been induced to recognise natural claims in a community where no legal obligation is entailed by relationship other than that of husband to wife and of parent to infant. The woodyard is a very practical part of the society's work. It affords a test of the sincerity of men who ask help on the ground that they cannot get work; and it gives temporary work to those who really need it.

#### AUSTRALIAN HEALTH SOCIETY.

By J. G. BURROWS, Esq., SECRETARY.

Health  
Society.

An Australian Health Society was established in Melbourne in 1875. It consists of about 300 members, and is managed by a president, two vice-presidents, a treasurer, two secretaries (one being a lady), and fifteen members of council. Its objects are:—(1) To create and educate public opinion with regard to sanitary matters in general, by the aid of the platform, the press, and other suitable means; (2) to induce and assist people, by personal influence, example, and encouragement, to live in accordance with the recognized laws whereby health is maintained and disease is prevented; (3) to seek removal of all noxious influences deleterious to public health, and to influence and facilitate legislation in that direction. To effect these objects, the society distributes pamphlets, tracts, and wall sheets, bearing upon the preservation of health; maintains a lending library of specially selected works for the use of members; and arranges for the delivery of public lectures annually in Melbourne and suburbs. In pursuance of the plan of testing the work done in the inculcation of health and temperance lessons in the State schools, an examination was arranged to be held, with the concurrence of the Minister of Public Instruction, on 16th September, 1903, of pupils (over 11 years of age) attending the schools in the metropolitan district. Of those pupils who presented themselves for examination, 75 received the Health Society's certificate. These examinations are conducted annually by the council of the society, alternately in the metropolitan and country schools. At the previous examination, in the metropolitan district, 658 pupils competed, of whom 37 per cent. passed. No pecuniary aid is received from the Government, the work of the society being carried on by subscriptions ranging from 5s. per annum upwards.

#### VICTORIAN DEAF AND DUMB INSTITUTE.

By JOHN ADCOCK, Esq., SUPERINTENDENT.

Deaf and  
Dumb  
Institution

The Victorian Deaf and Dumb Institution occupies a site on the St. Kilda Road. At the beginning of the year there were 70 pupils on the roll. During the year 5 new pupils were admitted and 8 were discharged, thus leaving the number

of pupils on the 30th June, 1903, 67 (32 boys and 35 girls). Since the year 1862, when the institution was fairly launched, there have been received into it over 422 children, 355 of whom have been discharged, most of them being capable of maintaining themselves. The combined oral and manual system of teaching, which is used in the majority of similar institutions throughout the world, is also used here, with most satisfactory results. In addition to the ordinary school work, many of the boys are taught gardening and bootmaking, and the girls domestic duties. The total receipts for the year were £3,095 (the sum allotted out of the charitable vote being £820). Bequests amounting to £500 were received, £400 of which was added to the endowment account; the total to the credit of which fund is now £12,029, most of which is invested in Government stock, the interest only being used for maintenance purposes.

ROYAL VICTORIAN INSTITUTE FOR THE BLIND.

By J. THURSTON HOGARTH, ESQ., SUPERINTENDENT AND SECRETARY.

The Royal Victorian Institute for the Blind occupies a site on the St. Kilda-road, Melbourne. The institution is strictly undenominational in its character, and its objects are to give a suitable scholastic and religious education to the young blind of the State, and to teach them trades or professions by means of which they may earn an independent livelihood. It is further intended, as far as the exigencies of trade will permit, to give employment in its industrial department to blind people, who, having completed their term of training, may be unable to get work elsewhere. This, however, is restricted to the demand for the goods made. The institute is not in any sense a benevolent asylum for the indigent blind, who can not only be maintained cheaper, but can be better cared for in the ordinary institutions for the care of the destitute. The scholastic education is similar to that in the State schools, varied only in the apparatus and means employed; and examinations are held annually by the Education department, the percentage gained at the last being 100. Music is an important part of the education of the blind, and those who display exceptional talent are trained for the musical profession, and the skill of the pupils is utilised as means of raising revenue for the institution by means of concerts and band performances in various parts of the State. In the industrial branch, pupils are trained in the trades of brush, basket, mat, and matting making, the period of training varying from two to five years; and employment is then given to non-resident ex-pupils, who are paid wages at piece-work rates ruling in the various trades. Some less proficient workers have their wages supplemented by a bonus. Its outside workers are assisted in times of sickness by "The Institute for Blind."

Blind Workers' Sick Benefit Society." Its funds are maintained by weekly contributions by its members, and it is subsidised by a grant from the board of management equal to the amount of the members' contributions. This society is managed by a committee of its members, assisted by the principal of the institution, and the accountant, who acts as honorary treasurer. There is now no debt on the institution. The total number of pupils and workers on the roll is 96; classified as follows:—Resident pupils, 54; day pupils, 2; journeymen and non-resident workers, 40.

ROYAL HUMANE SOCIETY OF AUSTRALASIA.

BY WILLIAM HAMILTON, ESQ., SECRETARY.

Humane  
Society.

The Royal Humane Society of Australasia was established in 1874 under the name of "The Victorian Humane Society." Its objects are as follow:—(1) To bestow rewards on all who promptly risk their own lives to save those of their fellow-creatures. (2) To provide assistance, as far as it is in the power of the society, in all cases of apparent death occurring in any part of Australasia. (3) To restore the apparently drowned or dead, and to distinguish by rewards all who, through skill and perseverance, are, under Providence, successful. (4) To collect and circulate information regarding the most approved methods and the best apparatus to be used for such purposes. During the year ended 30th June, 1903, 65 applications for awards were investigated, with the result that 21 certificates and 9 bronze medals were granted. The receipts during the year amounted to £540, and the expenditure to £478. The institution has placed and maintains 430 life-buoys at various places on the coast, rivers, lakes, and reservoirs throughout all the Australian States and Fiji. Of the honorary awards distributed in 1902-3, 17 were for deeds of bravery performed in Victoria, 5 for similar acts in New South Wales, 3 in Queensland, 3 in New Zealand, and 1 in Western Australia. The society has 146 honorary correspondents, residing as follow, viz.:—45 in Victoria, 34 in New South Wales, 26 in New Zealand, 25 in Queensland, 8 in Tasmania, 3 in South Australia, and 5 in Western Australia. Owing to the appointment of these gentlemen and to the awards made by the society appearing to give complete satisfaction throughout the States, there is no urgency for forming local branches of the society in the other States.

Swimming competitions have been inaugurated in the schools of the Commonwealth, and awards of medals and certificates are made to those pupils who attain proficiency in exercises which have special reference to saving life from drowning.

## POPULATION.

At the date of the census, 31st March, 1901, the population of Victoria was 1,201,070 (excluding 271 full-blooded aborigines); on 31st December, 1901, it had increased to 1,210,882; on 31st December, 1902, to 1,211,450; and on 31st December, 1903, owing to excess of emigration over immigration and natural increase, it had declined to 1,208,854.

Population,  
1901 and  
1903.

On the suggestion of Sir John See, Premier of New South Wales, a conference of the statisticians of the various States met at Melbourne on 22nd September, 1903, and the three following days, to decide upon a uniform basis of estimating the populations of the various States. As a result of their deliberations, it was decided that the census of 1901 was to be taken as the starting point, and future estimates of population published as from that basis; that the Registrar-General's returns of births and deaths and the Customs and Railways Departments' certificates of arrivals and departures be accepted for the compilations; that ten per cent. be added to the railway returns of arrivals and departures by land for New South Wales, Victoria, Queensland, and South Australia, to allow for unrecorded traffic by rail and road; that to the recorded departures by sea an allowance of nine per cent. be added in the case of Victoria and New South Wales, and varying percentages in the other States, to make up for the unrecorded departures, these estimates being framed on the basis of the errors made during the preceding ten years; that where the distribution of the sexes arriving and departing is unknown, the proportion of males and females be fixed on the basis of the recorded movement by sea for the corresponding period; that full-blooded aborigines be excluded from the population, but shown on a separate line in the estimates of the population; and that seamen having permanently left their ships, and all seamen signing on, be taken into account as arrivals and departures respectively. The particulars of the movement of the population since the census of 1901 are fully detailed in the following statement:—

POPULATION OF VICTORIA, 31ST MARCH, 1901, TO  
31ST DECEMBER, 1903.

	Males.	Females.	Males.	Females.	Total.
<i>Enumerated Population, 31st March, 1901</i> (exclusive of full-blooded aborigines) ... ..			608,720	597,350	1,201,070
Births, 1/4/01 to 31/12/01 ... ..	11,902	11,364			
Deaths " " " " ... ..	6,708	5,067			
Natural increase ... ..	...	...	+ 5,194	+ 6,297	+ 11,491
Migration by Sea, 1/4/01 to 31/12/01—					
Arrivals (as recorded) ... ..	42,909	21,689			
Departures " " " " ... ..	41,202	22,877			
Allowance for unrecorded Departures (9 per cent.) ... ..	3,708	2,059			
Loss Seawards ... ..	...	...	- 2,001	- 3,247	- 5,248
Migration by Land, 1/4/01 to 31/12/01 (plus 10 per cent.)—					
Arrivals ... ..	10,520	5,318			
Departures ... ..	7,889	4,380			
Gain Overland ... ..	...	...	+ 2,631	+ 938	+ 3,569
<i>Estimated Population, 31st December, 1901</i> ... ..			609,544	601,338	1,210,882
Births, 1902 ... ..	15,583	14,878			
Deaths " " " " ... ..	9,152	7,025			
Natural increase ... ..	...	...	+ 6,431	+ 7,853	+ 14,284
Migration by Sea, 1902—					
Arrivals (as recorded) ... ..	56,984	30,573			
Departures " " " " ... ..	62,963	34,970			
Allowance (9 per cent.) ... ..	5,667	3,147			
Loss Seawards ... ..	...	...	- 11,646	- 7,544	- 19,190
Migration by Land, 1902 (plus 10 per cent.)—					
Arrivals ... ..	15,533	8,334			
Departures ... ..	11,825	6,568			
Gain Overland ... ..	...	...	+ 3,708	+ 1,766	+ 5,474
<i>Estimated Population, 31st December, 1902</i> ... ..			608,037	603,413	1,211,450
Births, 1903 ... ..	15,115	14,454			
Deaths " " " " ... ..	8,626	6,969			
Natural increase ... ..	...	...	+ 6,489	+ 7,485	+ 13,974
Migration by Sea, 1903—					
Arrivals (as recorded) ... ..	33,275	19,481			
Departures " " " " ... ..	40,803	25,356			
Allowance (9 per cent.) ... ..	3,672	2,282			
Loss Seawards ... ..	...	...	- 11,200	- 8,157	- 19,357

POPULATION OF VICTORIA, 31ST MARCH, 1901, TO  
31ST DECEMBER, 1903—continued..

	Males.	Females.	Males.	Females.	Total.
<i>Estimated Population, 31st December, 1902—continued.</i>					
Migration by Land, 1903 (plus 10 per cent.)—					
Arrivals ... ..	12,609	7,309			
Departures ... ..	10,574	6,557			
Gain Overland ... ..			+ 2,085	+ 752	+ 2,787
<i>Estimated Population, 31st December, 1903</i> ... ..					
Increase from Census, 31st March, 1901, to 31st December, 1903...			605,361	603,493	1,208,854
			+ 1,641	+ 6,143	+ 7,814
Full-blooded Aborigines at the date of the Census not included in the estimate ... ..			163	108	271

The enumerated population at the five census years, the estimated population in 1903, and the increases, numerical and centesimal, are as under:—

Increase of population at five decades, and in 1903

POPULATION OF VICTORIA (INCLUDING ABORIGINES) AT FIVE CENSUS PERIODS, AND IN 1903.

Year of Census or Estimate.	Both Sexes.			Males.			Females.		
	Popu- lation.	Increase since last Census.		Popu- lation.	Increase since last Census.		Popu- lation.	Increase since last Census.	
		Numeri- cal.	Centesi- mal.		Numeri- cal.	Centesi- mal.		Numeri- cal.	Centesi- mal.
1861 ...	540,322	129,556	31·54	328,651	64,317	24·33	211,671	65,239	44·55
1871 ...	731,528	191,206	35·39	401,050	72,399	22·03	330,478	118,807	56·13
1881 ...	862,346	130,818	17·88	452,083	51,033	12·72	410,263	79,785	24·14
1891 ...	1,140,405	278,059	32·24	598,414	146,331	32·37	541,991	131,728	32·11
1901 ...	1,201,341	60,936	5·34	603,883	5,469	·91	597,458	55,467	10·23
1903 ...	1,209,125	7,784	·65	605,524	1,641	·27	6 3,601	6,143	1·03

The increase between 1891 and 1901 was the smallest since 1861, being only 60,936 persons, as against 278,059 between 1881 and 1891, and 130,818 and 191,206 respectively in the two decennial periods prior to 1881. Small as was the increment to the population in the ten years, 1891 to 1901, it was larger on the average than in the two and three-quarter years from 1st April, 1901, to 31st December, 1903, when it amounted to only 7,784 persons.

Population, 1861-1903.

Small  
increase of  
males,  
1891-1901.

The increase in the number of males between 1891 and 1901 has been very small, only 5,469, or less than 1 per cent., as compared with 146,000, or 32 per cent., in the previous decade.

Proportion  
of sexes.

The proportion of sexes at the five census enumerations and in 1903 was:—

Year.				Females to 100 Males.
1861	...	...	...	64·41
1871	...	...	...	82·40
1881	...	...	...	90·75
1891	...	...	...	90·57
1901	...	...	...	98·94
1903	...	...	...	99·68

Uniformity  
of sexes.

The number of females has thus gradually approximated to that of males, until in 1903 the sexes were almost equal in number. The emigration of males has been the principal factor in contributing to the large proportionate increase of females during the last intercensal period, when the excess of departures over arrivals was for men 73,674, and for women only 37,983.

Density of  
population,  
houses, etc.

In the following return, the persons and dwellings to the square mile, persons and rooms to a dwelling, and persons to a room, are shown for the five census years 1861-1901:—

DENSITY OF POPULATION. --RETURN FOR FIVE CENSUS YEARS.

Year of Census.	Persons to the Square Mile (exclusive of Persons in Ships).	Inhabited Dwellings to the Square Mile.	Persons to the Inhabited Dwelling (exclusive of Persons in Ships.)	Rooms to a Dwelling (Inhabited and Uninhabited).	Persons to a Room.
1861 ... ..	6·126	1·470	4·16	2·96	1·35
1871 ... ..	8·298	1·714	4·84	3·89	1·18
1881 ... ..	9·791	1·935	5·06	4·44	1·08
1891 ... ..	12·948	2·549	5·08	5·10	·92
1901 ... ..	13·643	2·747	4·97	5·25	·90

The population returned at the census of 1901 furnishes a proportion of 13·6 persons to the square mile. In 1891 the proportion was 12·9; in 1881, 9·8; in 1871, 8·3; and in 1861, 6·1. There were 497 persons to every 100 inhabited dwellings in 1901, a smaller number than in 1891 and 1881, when the numbers were 508 and 506 respectively, but greater than in 1871 and 1861, when the numbers were 484 and 416.

Population  
of Australia  
and New  
Zealand,  
1903.

The estimated population of each Australian State and New Zealand at the end of 1903, prepared on the same basis as in Victoria, the increase of population since the census, and the number of persons to the square mile are as follow:—

POPULATION OF AUSTRALIA AND NEW ZEALAND,  
31ST DECEMBER, 1903.

State.	Estimated Population 31st December, 1903.			Increase Since Census, 1901.			Persons to the Square Mile.
	Males.	Females.	Total.	Males.	Females.	Total.	
Victoria ... ..	605,361	603,493	1,208,854	1,641	6,143	7,784	13·75
New South Wales ... ..	752,202	675,175	1,427,377	42,197	30,334	72,531	4·59
Queensland ... ..	285,297	230,233	515,530	8,294	9,107	17,401	·77
South Australia Proper	183,584	181,107	364,691	...	...	6,345	·96
"  "  Northern Territory ... ..	3,569	563	4,132	...	...	-679	·01
Western Australia ... ..	135,961	90,993	226,954	23,086	19,744	42,830	·23
Tasmania ... ..	93,077	86,410	179,487	3,453	3,559	7,012	6·85
Australia ... ..	2,059,051	1,867,974	3,927,025	...	...	153,224	1·32
New Zealand ... ..	439,673	392,831	832,504	33,681	26,104	59,785	7·97

During the two years and nine months from the date of the last census to the end of 1903, the population of the Commonwealth of Australia increased by about 153,000, New South Wales contributing very nearly one-half, and Western Australia about 28 per cent. of that number. The increase in Victoria, which was the smallest in any of the States except South Australia and Tasmania, was only 7,784 persons. On the other hand, New Zealand has made good progress, the addition of 59,785 to her population being second only to that of New South Wales.

Increase in  
different  
States,  
1901-1903.

The increase of population per cent. from the 31st March, 1901, to 31st December, 1903, was as follows in the different States:—Western Australia, 23·26; New Zealand, 7·74; New South Wales, 5·35; Tasmania, 4·07; Queensland, 3·49; South Australia Proper, 1·77; and Victoria, ·65. In the Northern Territory there was a decrease of 14·11 per cent.

Proportionate in-  
crease from  
census,  
1901, to  
31st Dec.,  
1903.

The population of the State on 31st March, 1891, when the census of that year was taken, was 1,140,405. Although it had increased to 1,201,341 when the next census was taken, viz., on 31st March, 1901, yet the State lost by emigration during the ten years 111,577 persons. The total increase—60,936—which took place, being the excess of births over deaths after deducting the net loss by emigration. During the remainder of 1901, the natural increase was 11,491, the loss by emigration 1,679, and the addition to the population 9,812. In 1902, the natural increase was 14,284, the loss by emigration 13,716, and the addition to the population 568. In 1903, the natural increase was 13,974, the emigration 16,570, and there was thus a loss to the population of 2,596.

Population,  
1891-1903.

TABLE SHOWING THE MOVEMENT OF POPULATION SINCE THE CENSUS OF 1891.

Period.	Increase or Decrease.	Total.
Population, 5th April, 1891 ... ..	...	1,140,405
Natural Increase, 1891 to 1901 ... ..	172,513	
Loss by Emigration... ..	111,577	
		+ 60,936
1901—Natural Increase, April to December ... ..	11,491	
Loss by Emigration " " ... ..	1,679	
		+ 9,812
1902—Natural Increase ... ..	14,284	
Loss by Emigration... ..	13,716	
		+ 568
1903—Natural Increase ... ..	13,974	
Loss by Emigration... ..	16,570	
		- 2,596
Total ... ..	...	1,209,125
Less full-blooded Aborigines ... ..	...	271
Population, 31st December, 1903 ... ..	...	1,208,854

It is thus seen that emigration from the State has been continuous since 1891. The total loss from that time, mostly adult men and women, was 143,542, who were replaced by infants, 212,262 being the excess of births over deaths. The total increase since the 1891 census was thus 68,720.

The following table shows the population of each Australian State and New Zealand at each census from 1851 to 1901, and an estimate for 1903:—

POPULATION OF THE SIX STATES OF AUSTRALIA AND NEW ZEALAND, 1851-1903.

State.	1851.	1861.	1871.	1881.	1891.	1901.	1903. (Estimated.)
Victoria ...	77,345	540,322	731,528	862,346	1,140,405	1,201,070	1,208,854
New South Wales	191,099	350,860	503,981	751,468	1,132,234	1,354,846	1,427,377
Queensland ...	...	30,059	117,960	213,525	393,718	498,129	515,530
South Australia	63,700	126,830	185,626	279,865	320,431	363,157	368,823
West Australia	5,886	15,100	25,270	29,708	49,782	184,124	226,954
Tasmania ...	70,130	89,977	101,020	115,705	146,667	172,475	179,487
Australia ...	408,160	1,153,148	1,665,385	2,252,617	3,183,237	3,773,801	3,927,025
New Zealand ...	22,108	84,536	257,810	489,933	626,658	772,719	832,504

Immigration from outside Australia to the Australian States ceased about the year 1891, and since that time we have had to depend solely upon the excess of births over deaths for any increase that has taken place in the population.

In Victoria, since 1891, the loss by emigration has been continuous; in New South Wales, however, not only has the

Population of Australia and New Zealand, 1851-1903

Interstate movements of population.

population been maintained, but a small addition of about 15,000 has taken place; in Queensland a gain of about 13,000 has been made; but in South Australia and Tasmania, like Victoria, the loss has been constant year after year. In Western Australia there has been an addition of no less than 151,551 by immigration in the 12 $\frac{3}{4}$  years from 1891. Part I. of the following table contains all necessary particulars as to movement of population by immigration and emigration since 1851:—

TABLE SHOWING INCREASE OF POPULATION IN AUSTRALIAN STATES SINCE 1851.

Period.	Increase by Excess of Immigration over Emigration.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
<b>PART I.</b>							
1851-61 (Census period)	400,045	126,314	...	35,750	6,510	7,709	576,328
1861-71 " "	41,789	48,247	68,581	17,060	6,386	-5,183	176,880
1871-81 " "	-15,322	107,536	58,904	45,032	-135	-770	195,245
1881-91 " "	116,950	164,424	114,835	-28,275	12,973	5,993	386,900
1891-01 " "	-111,577	223	16,693	-16,121	118,441	-2,179	5,480
1901 (from 1st April)...	-1,679	4,058	1,278	-1,299	7,585	-451	9,492
1902 ... ..	-13,716	6,903	-3,103	-3,706	15,809	-93	2,094
1903 ... ..	-16,570	4,543	-1,598	-1,841	9,716	-942	-6,692
Total ... ..	399,920	462,248	255,590	46,600	177,285	4,084	1,345,727
<b>PART II.</b>							
Natural Increase (i.e., Excess of Births over Deaths).							
1851-61 (Census period)	62,932	63,506	...	27,380	2,704	12,138	168,660
1861-71 " "	149,417	104,874	19,320	41,736	3,784	16,226	335,357
1871-81 " "	146,140	139,951	36,661	49,207	4,573	15,455	391,987
1881-91 " "	161,109	209,705	65,358	68,841	7,101	24,969	537,083
1891-01 " "	172,513	226,676	87,718	58,294	15,901	27,987	589,089
1901 (from 1st April)...	11,491	16,338	6,537	3,875	2,400	2,353	42,994
1902 ... ..	14,284	21,189	8,012	4,633	3,409	3,181	54,708
1903 ... ..	13,974	19,500	6,275	4,557	3,911	2,964	51,181
Total ... ..	731,860	801,739	229,881	258,523	43,783	105,273	2,171,059
<b>PART III.</b>							
Total Increase.							
1851-61 (Census period)	462,977	189,820	...	63,130	9,214	19,847	744,988
1861-71 " "	191,206	153,121	87,901	58,796	10,170	11,043	512,237
1871-81 " "	130,818	247,487	95,565	94,239	4,438	14,685	587,232
1881-91 " "	278,059	374,129	180,193	40,566	20,074	30,962	923,983
1891-01 " "	60,936	226,899	104,411	42,173	134,342	25,808	594,569
1901 (from 1st April)...	9,812	20,396	7,815	2,576	9,985	1,902	52,486
1902 ... ..	568	28,092	4,909	927	19,218	3,088	56,802
1903 ... ..	-2,596	24,043	4,677	2,716	13,627	2,022	44,489
Total ... ..	1,131,780	1,263,987	485,471	305,123	221,068	109,357	3,516,786

State  
assisted  
immigra-  
tion.

The practice of assisting immigrants is at the present time in force only in Queensland and Western Australia, although the plan had been in operation in all the States in the early days. In Victoria, from 1852 to 1854, the greatest number of assisted immigrants was received—the annual average of these years being 15,500 persons. From 1873 to 1882, only 379 persons were received, and in the latter year was admitted the last assisted immigrant to Victoria. In New South Wales the practice was discontinued in 1887, but from 1888 to 1899 husbands and wives resident in that State nominated no less than 1,994 persons whose passages were partly paid by the Government. The last assisted immigrant arrived in South Australia in 1885, and in Tasmania in 1890. In New Zealand, although the practice of nominating immigrants has been discontinued since the 16th December, 1890, yet it is customary for the Agent-General to make arrangements with the shipping companies whereby men with moderate means who purpose settling in that colony may be allowed to take out passages at reduced rates. In the following table appears the number of assisted immigrants to Australia and New Zealand during the 53 years ended on the 31st December, 1903:—

STATE ASSISTED IMMIGRATION TO AUSTRALIA AND NEW ZEALAND,  
1851 TO 1903.

	Number of Persons.
Victoria ... ..	140,104
New South Wales ... ..	149,011
Queensland ... ..	163,369
South Australia ... ..	95,345
Western Australia ... ..	7,453
Tasmania ... ..	21,699
Australia ... ..	576,981
New Zealand ... ..	115,578

Prior to the period embraced in the table, viz., from 1832 to 1850, 62,961 assisted immigrants arrived in New South Wales. The figures for New Zealand are exclusive of the arrivals prior to 1870, of which no record is available.

The recorded Victorian immigration and emigration by sea from 1899 to 1903 was:—

RECORDED IMMIGRATION AND EMIGRATION BY SEA, 1899 TO 1903.

Year.	Immigrants.	Emigrants.	Excess of Emigrants.
1899 ... ..	85,384	86,947	1,563
1900 ... ..	82,157	83,684	1,527
1901 ... ..	93,107	90,126	-2,981
1902 ... ..	87,557	97,933	10,376
1903 ... ..	52,756	66,159	13,403

Immigra-  
tion and  
emigra-  
tion,  
1899-1903.

The small number of migrants in 1903, as compared with previous years, is accounted for by the fact that passengers calling at the ports of the State on their way to other places have been excluded from the records since the beginning of that year, but were included in all previous years.

The departures exceeded the arrivals in each of the years stated with the exception of 1901, when there was an excess of immigrants numbering 2,981. In only one other year since the first settlement of the State, viz., in 1896, did the excess of emigrants exceed that recorded in 1903.

Excess of departures, 1899-1903.

As the interstate railway passenger traffic is now taken into account in framing estimates of population at the end of each year, the movement of this traffic since the date of the census is shown in the following return:—

Arrivals and departures by rail, 1st April, 1901, to 31st Dec. 1903.

MIGRATION BY RAIL, 1901 TO 1903 (AS RECORDED).

Year.	Arrivals.			Departures.			Excess of Arrivals.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1901 (From 1st April)	9,564	4,834	14,398	7,172	3,982	11,154	2,392	852	3,244
1902	14,121	7,576	21,697	10,750	5,971	16,721	3,371	1,605	4,976
1903	11,463	6,645	18,108	9,611	5,959	15,570	1,852	686	2,538

The net result of the recorded immigration and emigration by sea between Victoria and the neighbouring States, the United Kingdom, and Foreign Countries during each of the five years ended 1903 is shown in the following table. Where a minus sign (-) appears, it indicates that the immigrants exceeded the emigrants by the number against which it is placed:—

Loss by emigration to various countries, and vice versa.

NET EMIGRATION FROM VICTORIA BY SEA, 1899 TO 1903.

Year.	Excess of Emigration over Immigration between Victoria and—									Net Emigration.
	New South Wales and Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand and South Seas.	South Africa.	United Kingdom.	Other British Dominions.	Foreign Ports.	
1899	1,032	213	-104	-402	1,522	198	278	-153	-1,021	1,563
1900	-1,218	-709	2,938	-1,592	1,064	1,767	558	-625	-656	1,527
1901	1,851	-1,136	5,333	-2,847	564	-1,070	-3,083	-1,101	-1,442	-2,981
1902	939	-888	8,058	-407	2,595	1,245	253	-125	-1,294	10,376
1903	3,205	411	4,868	-663	2,830	2,717	178	187	-330	13,403
Total	5,809	-2,159	21,093	-5,911	8,575	4,857	-1,816	-1,817	-4,743	23,888

Immigration and emigration to various places, 1899 to 1903.

During the five years mentioned, the emigration from exceeded the immigration to Victoria as follows:—To Western Australia by 21,093 persons; to New Zealand and South Seas by 8,575; to New South Wales and Queensland by 5,809; and to South Africa by 4,857. There was a balance in favour of this State of 4,743 from Foreign ports; 5,911 from Tasmania; 2,159 from South Australia; 1,817 from British dominions otherwise unspecified; and 1,816 from the United Kingdom. The net loss to Victoria amounted to 23,888 in the quinquennium.

Effective strength of population in Australasia.

The subjoined tabulation shows, according to the census of 1901, the number of persons at the supporting and dependent ages, in each of the Australian States and in New Zealand, in every 10,000 of the population:—

STRENGTH OF AUSTRALASIAN POPULATION, 1901.

State or Colony.	Numbers in every 10,000 Persons living—		
	At Supporting Ages (15 to 65 Years).	At Dependent Ages.	
		Under 15 Years.	65 Years and upwards.
1. Western Australia ... ..	6,920	2,899	181
2. New Zealand ... ..	6,255	3,339	406
3. New South Wales ... ..	6,055	3,601	344
4. Queensland ... ..	6,048	3,693	259
5. Victoria ... ..	6,030	3,418	552
6. South Australia ... ..	6,024	3,564	412
7. Tasmania ... ..	5,877	3,716	407

Relative strength of population of Australasia.

Western Australia stands, as might be expected, far ahead of all the States in the relative strength of its population, and this is undoubtedly due to the development of gold mining there and the consequent large immigration of adult males from all the adjoining States. New Zealand occupies second position, and Victoria, which ten years before was second only to Western Australia in this respect, has fallen to fifth place on the list. Tasmania has relatively the weakest population of any of the States, i.e., a larger proportion of persons at the dependent ages under 15 years.

Old persons in Australasia.

Victoria has the largest proportion of old people in its population, viz., 552 per 10,000, and is followed in this respect by South Australia with 412, Tasmania with 407, and New Zealand with 406. In New South Wales, Queensland, and Western Australia the proportion is much lower.

The number of women at ages between 15 and 45 years, and the proportion they bore to the total female population of each State at the census of 1901, were:—

Women at reproductive ages in Australasia.

NUMBER OF FEMALES 15 TO 45 YEARS OF AGE IN AUSTRALASIA, 1901.

State or Colony.	Women between the Ages of 15 and 45 Years.	Number in 10,000 Females Living.
1. Western Australia ... ..	37,816	5,307
2. New Zealand ... ..	183,387	5,001
3. Victoria ... ..	295,278	4,942
4. New South Wales ... ..	313,824	4,853
5. South Australia ... ..	85,132	4,778
6. Tasmania ... ..	39,033	4,711
7. Queensland ... ..	104,217	4,670

Western Australia and New Zealand had the greatest proportion of women at ages ranging from 15 to 45 years, and the progress of New Zealand in this respect since the 1891 census has been most marked. Tasmania was the only Australian State with a lower proportion than New Zealand on that date.

States with greatest proportion of women at reproductive ages.

The population of Victoria, distinguishing Chinese and Aborigines, was at the five census enumerations:—

Chinese and Aborigines in Victoria.

POPULATION OF VICTORIA DISTINGUISHING CHINESE AND ABORIGINES AT FIVE CENSUS PERIODS.

Year of Census	Total Population—including Chinese and Aborigines.			Chinese.			Aborigines.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
1861	540,322	328,651	211,671	24,732	24,724	8	1,694	1,046	648
1871	731,528	401,050	330,478	17,935	17,899	36	1,330	784	546
1881	862,346	452,083	410,263	12,128	11,869	259	780	460	320
1891	1,140,405	598,414	541,991	9,377	8,772	605	565	325	240
1901	1,201,341	603,883	597,458	7,349	6,740	609	652	367	285

Since 1861 there has been a gradual decrease of Chinese. In that year they numbered 24,732; in 1901 they totalled only 7,349—a falling off which is due mainly to Acts of the Legislature imposing severe restrictions on Chinese immigration. At the 1901 census there were enumerated 652 Aborigines, consisting of 271 of pure blood and 381 half-castes. These figures indicate that the race is gradually but surely dying out, for, although the half-castes have increased by 133 since 1891, the pure race shows a decrease of 46 in the ten

Decrease of both races.

years. From the report of the Aborigines Board, dated 8th October, 1903, it would appear that the majority of the pure race and half-castes are under the care of that body, in the following mission stations:—

NUMBER OF ABORIGINES UNDER CARE AT MISSION STATIONS IN  
VICTORIA, 1903.

Station.	Area of Reserves.	Total Number under care.
	Acres	
Coranderrk ... ..	2,400	76
Condah ... ..	2,000	48
Ramahyuck ... ..	750	46
Lake Tyers ... ..	4,000	62
Ebenezer ... ..	1,600	16
Framlingham ... ..	548	26
Colac and Lake Moodemere ... ..	48	...
Industrial Schools and Orphanage ... ..	...	13
Depôts ... ..	...	95
Total ... ..	11,346	382

Of the balance, numbering 270, some are residing elsewhere than at the mission stations, but they receive supplies of food and clothing when they call; some prefer to lead a wandering life about the country, and but rarely come under the notice of the Board.

Chinese and  
Aborigines  
in Austral-  
asia

The following is a statement of the number of Chinese and Aborigines in each Australian State and New Zealand at the census of 1901:—

CHINESE AND ABORIGINES IN AUSTRALIA AND NEW ZEALAND, 1901.

State.	Chinese.		Aborigines.			
	Males.	Females.	Full Blood.		Half-caste.	
			Males.	Females.	Males.	Females.
Victoria ... ..	6,740	609	163	108	204	177
New South Wales ... ..	10,590	678	2,451	1,836	2,108	1,885
Queensland ... ..	8,783	530	13,000	12,137	773	760
South Australia ... ..	3,280	175	14,076	12,357	349	341
Western Australia ... ..	1,526	43	2,933	2,328	492	459
Tasmania ... ..	536	72	...	...	79	78
Australia ... ..	31,455	2,102	32,623	28,766	4,005	3,700
New Zealand ... ..	2,825	32	21,418	18,592	1,694	1,439

There are more Chinese in New South Wales and Queensland than in the other States, but they appear to be steadily diminishing in Australia as a whole. With the exception of Queensland and Western Australia, the number enumerated in 1901 was smaller than in 1891—the total decrease in Australasia in the decade amounting to about 6,100 persons. In Western Australia they increased from 917 to 1,569, and in Queensland from 8,574 to 9,313 in the same period.

Decrease of Chinese in Australia.

The enumeration of Aborigines, owing to their nomadic habits, was incomplete. In Victoria the number returned is believed to be correct, but in some of the other States, for example—Queensland—the figures given are only a rough approximation. The aboriginal race is extinct in Tasmania—the last male having died in 1869, and the last female in 1876. The Maoris enumerated in New Zealand show an increase of 3,289 over those returned in 1896, but this increase is believed to be more apparent than real, as, although some slight increase has probably taken place in the quinquennium—averaging the results of the different enumerations since 1878, the authorities in New Zealand state that they convey the idea of a stationary population.

Aborigines in Australia.

The number of coloured persons in Victoria was ascertained at the census of 1901, and the information then collected gives a total of 7,349 Chinese and 1,273 other coloured persons at that time. It is believed that these numbers have not materially altered up to the end of 1903, the Chinese being then estimated at 7,383, and other coloured persons at 1,185.

Coloured persons in Victoria, 1901 and 1903.

NUMBER OF PERSONS OF COLOURED RACES (EXCLUSIVE OF ABORIGINES) IN VICTORIA AT THE CENSUS OF 1901.

Birthplace.	Persons.	Birthplace.	Persons.
Chinese—		Other Asiatic countries—	
Born in China ...	6,160	British India ...	772
" Hong Kong ...	49	Syria ...	344
" Singapore ...	8	Japan ...	55
" Victoria ...	1,091	Others ...	81
" other British colonies	39	Total Other Asiatic countries	1,252
" at Sea ...	1		
Unspecified ...	1	Polynesia ...	2
Total Chinese ...	7,349	Africa ...	19
		Grand Total Coloured Persons	8,622

Arrivals and  
departures  
of Chinese.

In each year since 1898, except in the year 1903, a greater number of Chinese entered than left Victoria, the net excess in the six years being 1,251. The figures for each year are:—

CHINESE IMMIGRATION AND EMIGRATION, 1898 TO 1903.

Year.	Immigrants.	Emigrants.	Excess of— Arrivals (+). Departures (-).
1898 ... ..	711	341	+ 370
1899 ... ..	636	417	+ 219
1900 ... ..	569	385	+ 184
1901 ... ..	864	471	+ 393
1902 ... ..	614	434	+ 180
1903 ... ..	408	503	- 95
Total ... ..	3,802	2,551	+ 1,251

Immigration and emi-  
gration of  
coloured  
persons,  
1901 to 1903.

The numbers of coloured persons who entered or left the State since the date of the census are contained in the following table:—

IMMIGRATION AND EMIGRATION OF COLOURED PERSONS (OTHER THAN CHINESE) FROM THE 1ST APRIL, 1901, TO 31ST DECEMBER, 1903.

Year.	Immigrants.	Emigrants.	Excess of— Arrivals (+). Departures (-).
From 1st April, 1901, to 31st Dec., 1901	609	483	+ 126
1902 ... ..	307	525	- 218
1903 ... ..	96	92	+ 4
Total ... ..	1,012	1,100	- 88

Naturaliza-  
tion.

Aliens who desire to obtain the rights and privileges of citizens must take out letters of naturalization. The native countries of those who did so during the years 1899-1903 were:—

NATURALIZATION, 1899 TO 1903.

Native Places.	Numbers Naturalized in each Year.				
	1899.	1900.	1901.	1902.	1903.
France ... ..	10	11	19	17	11
Belgium ... ..	5	4	7	2	...
Austria ... ..	13	10	13	10	11
Germany ... ..	119	154	233	194	149
Russia ... ..	21	18	24	19	25
Norway and Sweden ... ..	42	73	108	75	57
Other European Countries ... ..	98	102	141	146	121
United States ... ..	6	8	11	16	14
Other Countries ... ..	18	12	18	21	9
Total ... ..	332	392	574	500	397

No less than 601 Chinese in 1884, and 1,178 in 1885, took out letters of naturalization, but after the latter year the Government, in view of the increasing number of Chinese applying for such papers, determined to issue no more "unless a sufficient reason was assigned," with the result that only 173 were issued in 1886, and 16 in 1887, since which year none have been issued.

Naturaliza-  
tion of  
Chinese.

The following table shows for Greater Melbourne its estimated area in acres, its estimated population, the number of persons to the acre at the end of 1903, also the estimated mean population during that year in the various municipalities:—

Population of Greater  
Melbourne,  
1903.

## POPULATION OF GREATER MELBOURNE, 1903.

Sub-district.	Estimated Area in Acres.	At End of 1903.		Mean Population, 1903.
		Estimated Population.	Persons to the Acre.	
Melbourne City ... ..	6,005	68,360	11·4	68,510
North Melbourne Town ... ..	565	17,680	31·3	17,730
Fitzroy City ... ..	923	32,000	34·7	32,090
Collingwood City ... ..	1,139	34,050	29·9	34,280
Richmond City ... ..	1,430	38,000	26·6	38,090
Brunswick Town ... ..	2,722	23,650	8·7	23,850
Northeast Town ... ..	2,850	10,250	3·6	10,010
Prahran City ... ..	2,320	41,000	17·7	41,110
South Melbourne City ... ..	2,311	40,000	17·3	40,230
Port Melbourne Town ... ..	2,366	12,260	5·2	12,230
St. Kilda City ... ..	2,046	20,550	10·0	20,640
Brighton Town ... ..	3,288	10,160	3·1	10,160
Essendon Town ... ..	4,000	18,200	4·6	18,000
Flemington and Kensington Borough ...	1,088	11,000	10·1	11,000
Hawthorn City ... ..	2,400	22,080	9·2	22,260
Kew Borough ... ..	3,553	9,550	2·7	9,530
Footscray City ... ..	2,577	17,300	6·7	17,800
Williamstown Town ... ..	2,775	13,750	5·0	13,900
Oakleigh Borough ... ..	1,858	1,300	·7	1,300
Caulfield Town ... ..	6,080	10,100	1·7	9,980
Malvern Town ... ..	3,989	11,930	3·0	11,420
Camberwell and Boroondara Shire ...	8,320	9,180	1·1	8,970
Preston Shire ... ..	8,800	3,800	·4	3,900
Coburg Shire ... ..	4,800	7,500	1·6	7,400
Remainder of District ... ..	85,275	16,080	·2	15,940
Shipping in Hobson's Bay and River ...	...	1,730	...	1,730
<b>Total, including Shipping ...</b>	<b>163,480</b>	<b>501,460</b>	<b>3·1</b>	<b>502,060</b>

Fitzroy is the most thickly populated municipality, with about 35 persons to the acre; North Melbourne is next, with 31; Collingwood has 30; Richmond 27; Prahran 18; South Melbourne 17; and Melbourne City about 11. There are large

Density of metropolitan population.

areas devoted to parks, gardens, and other reserves in many of the municipalities, so that the population is really living closer together than these figures indicate. Melbourne City contains 1,643 acres of such reserves, Kew 634, South Melbourne 482, Williamstown 456, Flemington and Kensington 307, St. Kilda 250, Caulfield 236, Richmond 204, and Brighton 167 acres. There are smaller areas in other districts, but they do not appreciably affect the question of density of population. The total area of all the reserves is 5,323 acres, and if these be excluded, the number of persons to the acre in the places named would be as follows:—Richmond 31, South Melbourne 22, Melbourne City 16, Flemington and Kensington 14, St. Kilda 11, Williamstown 6, Kew 3, and Brighton 3; but in Caulfield the proportion would remain about the same.

Urban and  
rural popu-  
lation, 1903.

In the following return, Victoria is divided into three districts, the first being the metropolitan (Greater Melbourne), extending in all directions for a distance of 10 miles from the centre of the city; the second, the other urban districts, including the total space embraced in cities, towns, and boroughs (present or former) outside the limits of Greater Melbourne; and the third, rural districts, including the remaining portions of the State. The population at the end of the year 1903, the average population during the year, the ratio of the population of each district to that of the whole State, and the number of persons to the square mile were as follow:—

#### URBAN AND RURAL POPULATION, 1903.

District.	Estimated Area in Square Miles.	Estimated Population at end of 1903.			Mean Population, 1903.
		Total.	Proportion per cent.	Persons to the Square Mile.	
Metropolitan ...	255	501,460	41·48	1,967	502,060
Other Urban ...	376	207,170	17·14	551	207,010
Total Urban ...	631	708,630	58·62	1,123	709,070
Rural ...	87,253	500,224	41·38	5·7	499,810
Total State ...	87,884	1,208,854	100·00	13·8	1,208,880

Proportion  
of metro-  
politan  
population.

The urban is greater than the rural population, and the population of the metropolis alone is equal to 41½ per cent. of the whole State.

PROPORTION OF POPULATION OF GREATER MELBOURNE TO THE WHOLE OF VICTORIA.

Year.	Per cent.
1899 ... ..	41.2
1900 ... ..	41.3
1901 ... ..	41.5
1902 ... ..	41.7
1903 ... ..	41.5

Outside Melbourne and suburbs, the most important towns in Victoria are Ballarat, comprising three municipalities; Bendigo, two; Geelong, three; Castlemaine, two; Warrnambool, Maryborough, and Stawell, one each. The enumerated populations of these, with their immediate suburbs, according to the census of 1901, and an estimate brought to about September, 1903, were as follow:—

POPULATION OF CHIEF TOWNS IN VICTORIA, 1901 AND 1903.

Name of Town.	1901 (Census).	1903 (Estimated).
Ballarat ... ..	49,414	51,320
Bendigo ... ..	42,701	42,540
Geelong ... ..	25,017	25,801
Castlemaine... ..	7,912	8,003
Warrnambool ... ..	6,404	6,600
Maryborough ... ..	5,622	5,750
Stawell ... ..	5,318	5,200

Population of chief extra metropolitan towns.

Persons of Victorian birth living in other Australian States and New Zealand numbered 136,638 at the census of 1901, as compared with 69,021 at the previous census in 1891, thus showing an increase of 67,617. The exodus to Western Australia was the principal factor contributing to this result, for whereas in 1891 there were only 1,036 Victorians resident there, in 1901 the number had increased to 39,491, as shown hereunder:—

Victorians in each Australian State and New Zealand.

VICTORIANS LIVING IN EACH AUSTRALIAN STATE AND NEW ZEALAND, 1901.

State in which Living--	Numbers Born in Victoria.		
	Males.	Females.	Total.
Victoria ... ..	428,823	447,180	876,003
New South Wales ... ..	30,358	25,661	56,019
Queensland ... ..	6,721	3,551	10,272
South Australia ... ..	5,134	5,190	10,324
Western Australia ... ..	24,342	15,149	39,491
Tasmania ... ..	4,502	3,447	7,949
Australia ... ..	499,880	500,178	1,000,058
New Zealand ... ..	6,530	6,053	12,583
Total ... ..	506,410	506,231	1,012,641

It thus appears that out of the 1,012,641 Victorian-born persons resident in Australia and New Zealand, 876,003, or 86·6 per cent., were living in Victoria; 56,019, or 5·5 per cent., in New South Wales; 10,272, or 1 per cent., in Queensland; 10,324, or 1 per cent., in South Australia; 39,491, or 3·9 per cent., in Western Australia; 7,949, or ·8 per cent., in Tasmania; and 12,583, or 1·2 per cent., in New Zealand.

From the census returns of 1901 it is shown that there were resident in Victoria 22,417 natives of New South Wales, 3,032 of Queensland, 21,929 of South Australia, 1,468 of Western Australia, 15,363 of Tasmania, 9,020 of New Zealand, and 885 born in Australia, the particular State being unspecified. This makes a total of 74,114 natives of other States who were resident in Victoria; and as there were 136,638 native Victorians residing in other States, there was thus 62,524 persons of Victorian birth resident in other States over and above the number of natives of other States who were resident in Victoria.

Immigration  
from and  
emigration  
to Western  
Australia,  
1891 to  
1903.

The following figures show the number of immigrants who arrived in Victoria from Western Australia and the number of emigrants who departed thereto during each of the years from 1891 to 1903:—

MIGRATION TO AND FROM WESTERN AUSTRALIA, 1891 TO 1903.

Year.	Arrivals from.	Departures to.	Excess of Departures.
1891 ... ..	344	2,304	1,960
1892 ... ..	632	2,346	1,714
1893 ... ..	1,922	4,177	2,255
1894 ... ..	6,545	16,690	10,145
1895 ... ..	6,344	17,471	11,127
1896 ... ..	12,951	37,448	24,497
1897 ... ..	20,580	31,775	11,195
1898 ... ..	21,687	22,504	817
1899 ... ..	12,403	12,299	- 104
1900 ... ..	10,638	13,576	2,938
1901 ... ..	11,371	16,704	5,333
1902 ... ..	10,550	18,608	8,058
1903 ... ..	7,986	12,854	4,868
Totals ... ..	123,953	208,756	84,803

Victorians  
in Western  
Australia.

The arrivals and departures cannot all be taken to represent Victorians, as passengers from the other Eastern States calling at Victorian ports on their way to the Western State were, up to the 31st December, 1902, included. A very large proportion of Victorians must, however, have emigrated to Western Australia, as the census returns of that State on the 31st March, 1901, disclosed the fact that there were no less than 39,491 natives of Victoria resident there.

The first year in which a separate record of passenger traffic from Victoria to South Africa was kept was 1895, since which date it has been as follows:—

Arrivals from and departures to South Africa, 1895 to 1903.

MIGRATION TO AND FROM SOUTH AFRICA, 1895 TO 1903.

Year.	Arrivals from.	Departures to.	Excess of Departures.
1895 ... ..	136	1,524	1,388
1896 ... ..	333	3,214	2,881
1897 ... ..	824	1,570	746
1898 ... ..	740	870	130
1899 ... ..	994	1,192	198
1900 ... ..	1,878	3,645	1,767
1901 ... ..	4,785	3,715	-1,070
1902 ... ..	4,215	5,460	1,245
1903 ... ..	794	3,511	2,717
Total ... ..	14,699	24,701	10,002

It is here shown that for some time past there has been a growing tendency on the part of young Victorians to leave for South Africa. This tendency was, however, somewhat checked during 1898 and 1899, the years immediately preceding the war, but again asserted itself in 1902 and 1903.

Migration to South Africa.

The enumerated population of Australian capital cities during the past 42 years is shown in the following table. Melbourne during that time has made good progress, more especially in the decennial period, 1881-91, when the increase was 73 per cent. Since the latter year, however, the population has remained almost stationary—the increase to the end of 1903 only amounting to about 2 per cent. Sydney, which since 1902 has been the most populous city in Australasia, now has 511,000 inhabitants. These two cities contain about 26 per cent. of the population of the Commonwealth. Perth has made a remarkable advance since 1891, when the enumerated population was about 8,500, which had increased to more than 46,000 in 1903.

Population of Australasian Capital Cities, 1861-1903.

POPULATION OF AUSTRALASIAN CAPITAL CITIES, 1861 TO 1903.

Capital City (with Suburbs).	Enumerated Population at the Census of—					Estimated Population on 31st Dec., 1903.
	1861.	1871.	1881.	1891.	1901.	
Melbourne ... ..	139,916	206,780	282,947	490,896	496,079	501,460
Sydney ... ..	95,789	137,776	224,939	333,283	481,830	511,030
Brisbane ... ..	6,051	15,029	31,109	101,554	119,428	124,463
Adelaide ... ..	18,303	42,744	103,864	133,252	162,094	168,066
Perth ... ..	3,507	5,445	5,822	8,447	36,274	46,400
Hobart ... ..	24,773	26,004	27,248	33,450	34,604	34,917
Wellington ... ..	4,176	7,908	20,563	34,190	49,344	53,573

Population  
of Principal  
Towns in  
Australia  
and New  
Zealand.

The population of the principal towns in Australia and New Zealand are given in the following statement. In most cases the immediate suburbs are included. The figures for Victoria and Western Australia relate to the year 1903; for New South Wales, South Australia, and Tasmania to 1902; and for Queensland and New Zealand to 1901.

POPULATION OF PRINCIPAL TOWNS IN AUSTRALIA AND  
NEW ZEALAND

VICTORIA.		SOUTH AUSTRALIA.	
	Population.		Population.
Melbourne	501,460	Adelaide	165,723
Ballarat	51,320	Port Pirie	8,481
Bendigo	42,540	Mount Gambier	3,225
Geelong	25,801	Walleroo	3,074
Castlemaine	8,003		
Warrnambool	6,600		
Maryborough	5,750		
Stawell	5,200		
NEW SOUTH WALES.		WESTERN AUSTRALIA.	
Sydney	508,510	Perth	46,400
Newcastle	58,010	Fremantle	23,008
Broken Hill	26,970		
Parramatta	12,560		
Goulburn	10,500		
Maitland	10,100		
Bathurst	9,340		
Orange	6,510		
Albury	6,310		
Tamworth	5,980		
Lithgow	5,720		
Grafton	5,340		
Wagga Wagga...	4,890		
QUEENSLAND.		TASMANIA.	
Brisbane	119,428	Hobart	34,809
Charters Towers	20,976	Launceston	21,466
Rockhampton	19,691	Queenstown	5,203
Townsville	15,506	Zeehan	5,162
Ipswich	15,246	Devonport	2,774
Gympie	14,431	Beaconsfield	2,658
Toowoomba	14,087		
Maryborough	12,900		
Bundaberg	9,666		
Mount Morgan	8,486		
		NEW ZEALAND.	
		Auckland	67,226
		Christchurch	57,041
		Dunedin	52,390
		Wellington	49,344
		Invercargill	10,637
		Napier	9,015
		Wanganui	7,334
		Nelson	7,167
		Palmerston North	6,534
		Timaru	6,486

GENERAL FINANCE.

STATE REVENUE AND EXPENDITURE.

The following table shows the receipts and expenditure from general revenue during the year ended 30th June, 1903. On 1st July, 1902, the total revenue deficiency was £2,356,119 12s. 5d.; and in the course of the year this amount was reduced by £194,659 9s. 0d., leaving the accumulated revenue deficiency at the end of the financial year, 1902-3, £2,161,460 3s. 5d., the whole of this amount, as in previous years, being covered by advances from the trust funds, with the exception of £100,000, which has been raised by the issue of Treasury bonds.

Revenue and expenditure, 1902-3.

REVENUE AND EXPENDITURE, 1902-3.

Revenue.		Amount.		Expenditure.		Amount.	
		£	s. d.			£	s. d.
From—				On—			
Excise and Inland	...	703,601	9 3	Revenue deficiency, 30/6/02:	2,356,119	12 5	
Territorial	...	348,089	16 8	Consolidated deficit			
Public Works	...	3,078,665	6 1	Special Appropriations	2,801,582	14 4	
Ports and Harbors	...	70,324	19 5	Chief Secretary	683,040	1 8	
Fees	...	272,113	4 3	Minister of Public Instruction	631,968	7 4	
Fines	...	8,505	19 4	Attorney-General	73,319	17 7	
Miscellaneous	...	382,214	1 3	Solicitor-General	60,190	3 8	
Commonwealth balances returned	...	2,105,449	15 3	Treasurer	222,338	1 4	
Revenue deficiency, 30/6/03:	2,161,460	3 5		Commissioner of Crown Lands and Survey	116,518	8 7	
Consolidated deficit				Commissioner of Public Works	167,202	8 8	
				Minister of Mines and Water Supply	70,300	18 8	
				Minister of Agriculture	68,858	14 7	
				Minister of Health	18,492	12 5	
				Minister of Railways	1,860,492	13 8	
Total	...	9,130,424	14 11	Total	...	9,130,424	14 11

The following are the amounts to the credit of the principal trust funds, and the manner of their investment, at the end of each of the last five financial years:—

Trust funds, 1899 to 1903.

## TRUST FUNDS: RETURN FOR FIVE YEARS.

Accounts.	Credit Balance on 30th June.				
	1899.	1900.	1901.	1902.	1903.
	£	£	£	£	£
Deposits in Savings Banks	3,595,418	3,675,418	3,675,418	3,603,187	3,595,418
Deposits in Savings Banks Security Account	1,727,988	2,116,141	2,453,452	2,500,327	1,543,952
Municipal Investments Account	...	614,480	1,116,380	1,115,380	1,113,799
Municipal Sinking Funds	660,711	610,895	626,368	652,951	634,141
Assurance Fund ...	153,680	161,025	169,076	176,683	181,685
Intestate Estates ...	87,590	93,575	89,482	89,288	88,698
Country Tramways ...	137,872	137,872	137,872	137,872	137,872
Trustee and Assurance Companies	89,845	99,795	104,795	104,795	104,795
Police Superannuation Fund	55,803	37,422	15,327	1,665	3,253
Other Funds ...	650,380	858,751	945,731	1,437,001	1,018,959
Total ...	7,159,287	8,405,374	9,333,901	9,819,149	8,422,572
How Invested:—					
Invested in Debentures, &c.	1,494,277	2,136,814	2,673,002	2,689,430	2,709,343
Deposited in Banks	198,851	306,138	132,096	504,228	42,624
Held otherwise ...	5,466,159	5,962,422	6,528,803	6,625,491	5,670,605

The revenue deficiency on 30th June, 1903, £2,161,460 3s. 5d., is, with the exception of £100,000 met out of Treasury bonds, made a charge against the item "Held Otherwise," £5,670,605.

In 1898 an Act was passed to relieve any municipality, which desired relief, from further contributions to its loan sinking fund. The amount already to the credit of the sinking fund of any municipality, which took advantage of the Act, is allowed to accumulate with interest, and at the maturity of the loan, the Government will, by the sale of inscribed stock, pay the difference between the amount at credit of the fund and the amount of the loan to be redeemed, the municipality repaying to the Government the amount so paid.

The following is a return of the revenue and expenditure of Victoria for the five years 1899-1903—special receipts and expenditure being excluded. The Mallee land receipts (£9,372 in 1902-3), which are set apart for the redemption of loans, are included as revenue, an equivalent amount being entered as expenditure, and afterwards transferred to the Mallee Land Account:—

Municipal Investment Account.

Revenue and expenditure, 1898-9 to 1902-3.

REVENUE AND EXPENDITURE: RETURN FOR FIVE YEARS.

Year ended 30th June.	Revenue.	Expenditure.	Surplus.	Deficit.
	£	£	£	£
1899	7,389,444	7,107,206	282,238	...
1900	7,453,355	7,285,636	167,719	...
1901	7,712,099	7,672,780	39,319	...
1902	6,997,792	7,398,832	...	401,040
1903	6,954,619	6,759,960	194,659	...

Early in 1901, the Customs, Post and Telegraph, and Defence Departments were transferred to the Commonwealth Government. If the full Federal returns were included, the revenue for 1903 would be increased to £7,976,290, the expenditure to £7,778,790, and the figures for the five years would show that an annual increase in both revenue and expenditure had been maintained; but that, while the increase in revenue between 1899 and 1903 would have been £586,846, the increase in expenditure would have been £671,584. The latter is mainly due to the introduction of old age pensions, and to increased expenditure on education and on the railway working expenses. In the period shown, the excess of revenue over expenditure is £282,895.

The sources of revenue may be grouped under three headings—(1) taxation, (2) public works, and (3) other services. Customs and Excise (under taxation), and Posts and Telegraphs (under public works) were transferred to the Federal Government in 1900-1, and an additional heading, "Federal Government," which comprises these sources, is therefore added. Land revenue, which averaged £373,000 yearly, is included under "other sources." The amounts received during the last five financial years were as follow:—

Heads of  
revenue,  
1898-9 to  
1902-3.

HEADS OF REVENUE: RETURN FOR FIVE YEARS.

Head of Revenue.	1898-9.	1899-1900.	1900-1.	1901-2.	1902-3.
	£	£	£	£	£
Federal Government ...	...	...	1,177,740	1,920,974	2,105,450
State Taxation—					
Customs and Excise	2,234,442	2,267,131	1,202,191	...	...
Other ...	851,363	717,461	762,438	818,274	950,183
Public Works and Services—					
Railways ...	2,849,370	3,008,521	3,302,202	3,362,030	3,033,596
Posts and Telegraphs	553,672	586,061	410,435	...	...
Others ...	191,371	175,445	195,743	202,502	180,379
Other Sources	709,226	698,736	661,350	694,012	685,011
Total ...	7,389,444	7,453,355	7,712,099	6,997,792	6,954,619
Per Head of Population	£ s. d. 6 4 11	£ s. d. 6 5 4	£ s. d. 6 8 10	£ s. d. 5 15 9	£ s. d. 5 15 5

In this table the figures for 1900-1 for Customs and Excise include only the amounts collected for the half-year ended 31st December, 1900, and for Posts and Telegraphs for the eight months ended 28th February, 1901. There is no State revenue under these headings for 1901-2 and 1902-3. The amount returned to the State by the Federal Government—£1,177,740 for 1900-1, £1,920,974 for 1901-2, and £2,105,450 for 1902-3—is that collected from the transferred departments, less the amount deducted by the Federal Government under Section 89 of the "Commonwealth of Australia Constitution Act." For 1902-3, the Federal Government received £2,499,014 from Customs and Excise; £622,700 from Posts and Telegraphs; and £5,407 from other sources; and returned to the State Government £2,105,450. Had the old arrangement remained in existence, the amount per head of the population would have been £6 12s. 4d. instead of £5 15s. 5d. under the new arrangement.

Railway  
revenue.

The railway revenue during 1902-3 was the lowest of the last three years, the falling off in that year amounting to £328,434, which is entirely due to severe drought, the almost total harvest failure, and the consequent small carriage of grain resulting therefrom.

Income tax.

An income tax was first imposed in Victoria in 1895, and was to have expired by effluxion of time in 1898, but it has been from time to time extended ever since. The Act is administered by a Commissioner, who, together with his officers, are bound by oath to secrecy. Incomes assessed for tax in any year are those earned, derived, or received in Victoria in the preceding calendar year; and are divided into two classes, viz.:—Incomes, (1) from personal exertion, and (2) from property. The former consists of earnings, salaries, wages, allowances, pensions, &c., or stipends earned in or derived from Victoria, and all income arising or accruing from any profession, business, or occupation carried on in Victoria, and the latter, of all other income. This is the gross income, and the net income is ascertained by making certain deductions, the principal of which are losses and outgoings incurred in the production of the income, all other

taxes under any Victorian Act, life assurance premiums not exceeding £50, and calls or contributions actually paid into any reconstructed company whose shares are of no value. Incomes of certain public, local, religious, provident, &c., bodies or societies are exempt from taxation, also the official salaries of the Governor and of Ministers of the Crown, and the incomes of mutual life offices with head offices in Australia, fire, fidelity, &c. insurance companies taking out licences under the "Stamps Act," limited to income from that class of business; and income from stock debentures or bonds of the Victorian Government or of any public or municipal trust or body. Prior to 1903 an exemption to the extent of £200 was allowed, except in the case of absentees. The rate of tax was 4d. in the £ on the first £1,200 of the taxable amount (allowing for £200 exemption), 6d. on the next £1,000, and 8d. on all over £2,200 on income from personal exertion, and double these rates on income from property. The rate of tax for 1903, based on the incomes of the previous year, was fixed by Act No. 1819, as follows:—(a) Personal exertion—Net incomes up to £125 exempt; from £125 to £500, 4d. (with £100 exemption); over £500, 4d. on first £500 (no exemption), 1d. extra on every £500 or portion thereof up to £2,000; and 8d. on all over £2,000. (b) Property—Double these rates. This Amending Act also makes companies taxable as persons, except mining companies, the shareholders of which still pay on the dividends received. Special provision is also made for the assessment and taxation of life, fire, fidelity, and guarantee assurance and insurance companies. The rates for the year 1904, based on the incomes of 1903, were altered by Act No. 1863, which did not alter the exemption, but raised the minimum taxable from £125 to £150, and altered the rates as follow:—Incomes from personal exertion—3d. for every £ of the taxable amount up to £300; thence up to £800, 4d.; thence to £1,300, 5d.; thence to £1,800, 6d.; and over £1,800, 7d. Incomes from property—double these rates. The following is a statement of the assessments, taxpayers, taxable income, and tax payable from personal exertion and property during the last five years:—

## INCOME TAX: RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
Number of Assessments:					
Personal exertion ...	17,954	20,322	21,511	22,901	58,690
Property ...	16,766	15,322	17,589	17,577	12,015
Total ...	34,720	35,644	39,100	40,478	70,705
Distinct taxpayers ...	33,577	34,377	37,803	39,215	64,548
Taxable Income—	£	£	£	£	£
Personal exertion ...	4,570,300	6,027,200	6,150,300	6,261,800	9,740,143
Property ...	2,126,400	2,316,500	2,348,000	2,325,000	3,802,973
Total ...	6,696,700	8,343,700	8,498,300	8,586,800	13,543,116
Tax Payable—	£	£	£	£	£
Personal exertion ...	89,444	123,457	125,824	123,609	206,227
Property ...	83,976	93,787	95,091	91,494	188,535
Total ...	173,420	217,244	220,915	215,103	394,762
Per Taxpayer ...	£ s. d. 5 3 4	£ s. d. 6 6 5	£ s. d. 5 16 11	£ s. d. 5 9 8	£ s. d. 6 2 4
Average Tax payable in the £ on Taxable In- comes derived from—	d.	d.	d.	d.	d.
Personal exertion ...	4.70	4.91	4.91	4.74	5.08
Property ...	9.48	9.72	9.72	9.45	11.90

The effect of the Act of 1903 was that during the five years under review, the number of assessments increased from 34,720 in 1899 to 70,705 in 1903, the latter figures including 896 assessments of companies. Of the total increase, 40,736 were from personal exertion; but there was a decrease of 4,751 from property. The taxpayers increased by 30,971; the number in 1903 being 64,548, of which 570 were companies. The taxable income from personal exertion increased from £4,570,300 in 1899 to £9,740,143 in 1903; and that from property, in the years given, from £2,126,400 to £3,802,973. The total increase in the taxable income was £6,846,416. The income exempt from taxation in 1899 was £5,359,200, and in 1903 it was £6,387,900. The amount of tax payable increased from £89,444 in 1899, to £206,227 in 1903, from personal exertion; and from £83,976 to £188,535 from property—a total increase of £221,342.

Notwithstanding the fact that by the reduction of the minimum amount taxable a large number of smaller taxpayers were included in the figures for 1903, yet by the alteration of rates and exemptions and by the taxation of companies as individuals, the average amount per taxpayer shows a considerable increase over the two previous years,

though not equal to that of 1900. The average tax payable in the pound has also been raised in 1903, both on taxable incomes derived from personal exertion (to 5d.) and from property (to nearly 1s.). The highest previous rates were—under 5d. and 9½d. respectively. The following return shows particulars of rates of taxation, assessments, taxable incomes, and taxes payable, in the respective groups for which different rates of taxation are charged:—

INCOME TAX ASSESSMENTS, 1903—BASED ON INCOMES OF 1902.

Taxable Income.	Rate of Tax in £ on Incomes derived from		Number of Assessments.		Taxable Income from		Tax Payable on	
	Personal Exertion.	Property.	Personal Exertion	Property	Personal Exertion.	Property.	Personal Exertion.	Property.
Up to £500 ...	4	8	54,947	10,136	5,648,280	1,270,170	94,138	42,339
£500 to £1,000	5	10	2,534	1,115	1,473,456	647,184	30,697	26,966
£1,000 to £1,500	6	12	574	300	558,080	295,100	13,952	14,755
£1,500 to £2,000	7	14	229	145	297,017	187,149	8,663	10,917
Over £2,000 ...	8	16	406	319	1,763,310	1,403,370	58,777	93,558
Total ...	...	...	58,690	12,015	9,740,143	3,802,973	206,227	188,535

It is here shown that the taxable income from personal exertion amounts to £9,740,143, and that from property to £3,802,973, after allowing for exemptions of about £5,427,200 in the former, and of £960,700 in the latter. The total net incomes of those who paid income tax, during 1902-3, amounted to nearly twenty millions sterling, or an average of £308 for 64,548 taxpayers.

A Land Tax was first imposed in Victoria in 1877, and has continued in force ever since without any amendment. All estates over 640 acres in extent, valued at upwards of £2,500, whether consisting of one block or several blocks of land not more than five miles apart, are taxed at the rate of one and a quarter per cent. upon their capital value after deducting an exemption of £2,500. If a proprietor hold more than one estate, only one exemption is allowed. The lands are valued on a purely pastoral basis, according to their sheep-carrying capacity, irrespective of whatever value may attach to such lands for dairying or agricultural purposes. The estates in question are divided into four classes, the value being estimated according to the number of sheep they are able to carry, as follows:—

	Value per Acre.
	£
Class I.—carrying 2 sheep or more per acre ...	4
Class II. „ 1½ sheep per acre ...	3
Class III. „ 1 sheep per acre ...	2
Class IV. „ under 1 sheep per acre ...	1

The following are particulars regarding the land tax for the half-year ended February, 1904:—

LAND TAX: RETURN FOR THE HALF-YEAR ENDED  
27TH FEBRUARY, 1904.

Class.	Number of Proprietors.	Estates Assessed.			Value of Exemptions.	Net Taxable Value.	Half-year's Tax Payable.
		Number.	Area.	Capital Value.			
			Acres.	£	£	£	£
I	80	90	232,383	925,632	200,000	725,632	3,535
II	158	169	503,225	1,504,613	395,000	1,109,613	6,935
III	274	319	1,480,675	2,961,350	685,000	2,276,350	14,227
IV	360	470	4,580,745	4,580,745	900,000	3,680,745	23,005
Total ...	872	1,048	6,797,028	9,972,340	2,180,000	7,792,340	47,702

There are thus 872 proprietors in the State who hold land to the extent of 6,797,028 acres, valued at £9,972,340, or an average of 7,800 acres to each proprietor; from which a tax of £47,702 has been levied for the half-year ended 27th February, 1904. The collections in 1898-9 amounted to £108,745; in 1899-1900, to £108,222; in 1900-1, £97,948; in 1901-2, £97,862; and in 1902-3, to £92,867. In the following return a comparison is made of the number and size of the estates assessed for land tax in 1899 and in 1903:—

LAND TAX: RETURN FOR 1899 AND 1903.

Year.	Number of Proprietors.	Estates.			Net Taxable Value.	Average Area to each Proprietor.
		Assessed.	Area.	Capital Value.		
			Acres.	£	£	Acres.
1899	887	1,145	7,280,223	11,830,190	9,612,690	8,208
1903	872	1,048	6,797,028	9,972,340	7,792,340	7,795

The total area of the State being 56,245,760 acres, there is thus slightly less than an eighth of the whole subjected to taxation. The quantity of land alienated and in process of alienation is 24,058,181 acres; of which the taxable land is only two-sevenths.

COMMONWEALTH REVENUE AND EXPENDITURE.

Revenue  
and expen-  
diture.

The amount of revenue collected in this State by the Federal Government since its inauguration is £7,640,431. Of this amount £2,407,626 was used to meet the Victorian portion of Commonwealth expenditure, and £5,204,164 was returned to the State Government. A balance of £28,641 is still due to the State, but of this amount £28,000 is retained as "till-money," principally in the offices of the post and telegraph department in the State.

A statement of the Commonwealth revenue and expenditure for Victoria given separately is as follows:—

Commonwealth revenue and expenditure for Victoria.

COMMONWEALTH REVENUE AND EXPENDITURE CREDITED OR DEBITED TO THE STATE OF VICTORIA: RETURN FOR 2½ YEARS.

Revenue from—	1901, to 30th June.	1901-2.	1902-3.
	£	£	£
Customs Duties ... ..	1,123,106	1,976,245	2,096,318
Excise Duties ... ..	232,993	400,280	402,696
Posts and Telegraphs ... ..	177,931	591,470	622,700
Miscellaneous ... ..	2,780	8,505	5,407
<b>Total ... ..</b>	<b>1,536,810</b>	<b>2,976,500</b>	<b>3,127,121</b>

  

Expenditure on—	1900-1.	1901-2.	1902-3.
	£	£	£
Customs and Excise ... ..	32,645	63,812	64,770
Posts and Telegraphs ... ..	181,177	588,888	597,008
Defences ... ..	77,148	316,876	258,852
New Expenditure ... ..	41,056	87,194	98,200
Paid over to the State ... ..	1,177,740	1,920,974	2,105,450
<b>Total ... ..</b>	<b>1,509,766</b>	<b>2,977,744</b>	<b>3,124,280</b>

COMMONWEALTH AND STATE REVENUE AND EXPENDITURE.

The total revenue and expenditure of the State of Victoria is shown by combining State and Commonwealth receipts and expenditure. The following are the main heads:—

Revenue and expenditure, Commonwealth and State combined.

REVENUE AND EXPENDITURE OF COMMONWEALTH AND STATE COMBINED: RETURN FOR THREE YEARS.

H heads of Revenue and Expenditure.	1900-1.	1901-2.	1902-3.
	REVENUE.		
	£	£	£
Customs and Excise ... ..	2,558,290	2,376,525	2,499,014
Posts and Telegraphs ... ..	588,366	591,470	622,700
Railways ... ..	3,302,202	3,362,030	3,033,596
State Taxation ... ..	762,438	818,274	950,183
Other sources ... ..	859,873	905,019	870,797
<b>Total Revenue ... ..</b>	<b>8,071,169</b>	<b>8,053,318</b>	<b>7,976,290</b>
	EXPENDITURE.		
Customs and Excise ... ..	67,255	63,812	64,770
Posts and Telegraphs ... ..	510,449	588,888	597,008
Railways ... ..	1,982,421	2,052,264	1,849,989
Public Instruction ... ..	655,456	690,737	661,024
Public Debt—			
Interest and Expenses ... ..	1,900,139	1,941,449	1,907,656
Redemption ... ..	47,702	94,414	68,155
Other Expenditure ... ..	2,841,384	3,024,038	2,630,188
<b>Total Expenditure ... ..</b>	<b>8,004,806</b>	<b>8,455,602</b>	<b>7,778,790</b>

In 1901-2 the Customs and Excise revenue was less by £181,765 than during the preceding year, when the State tariff was in force, but exceeded that for the year 1899-00 by £109,394. In 1902-3 this source of revenue showed an increase of £122,489 over that of 1901-2. It is satisfactory to note that since the transfer of that department to the Commonwealth the expenditure on Customs and Excise was reduced to £64,770 in 1902-3, as against £68,107 in 1899-00 under State control. On the other hand, under the Commonwealth in 1902-3 Posts and Telegraphs showed a surplus of £25,692, whereas under State control in 1899-1900 there was a surplus of £64,143, the loss of which has not been caused by a diminution of revenue, but by an increase in expenditure under Commonwealth control.

## COMMONWEALTH, STATE, AND MUNICIPAL TAXATION.

Common-  
wealth,  
State, and  
Municipal  
taxation.

In the following table will be found a statement showing for the years 1898-9 to 1902-3, the amount of revenue collected under the various heads of taxation by the Commonwealth, the State, and the Municipal bodies:—

COMMONWEALTH, STATE, AND MUNICIPAL TAXATION :  
RETURN FOR FIVE YEARS.

Heads of Taxation.	Amount Received.				
	1898-9.	1899-00.	1900-1.	1901-2.	1902-3.
	£	£	£	£	£
<b>Federal—</b>					
Customs Duties ... ..	...	...	1,123,106	1,976,245	2,096,318
Excise Duties ... ..	...	..	232,993	400,280	402,696
<b>Total Federal Taxation</b>	...	...	1,356,099	2,376,525	2,499,014
<b>State—</b>					
Customs Duties ... ..	1,918,721	1,937,754	1,027,805	...	...
Excise Duties ... ..	315,721	329,377	174,386	...	...
Wharfage Rates ... ..	33,732	34,462	37,592	41,760	43,976
Ports and Harbors ... ..	21,674	24,763	29,248	28,298	27,616
Business Licenses ... ..	19,061	19,205	18,377	16,914	16,969
Probate & Succession Duties	305,762	126,478	155,902	217,796	161,636
Duties on Bank Notes ... ..	17,735	18,660	19,057	19,041	18,434
Land Tax ... ..	108,745	108,222	97,948	97,862	92,867
Income Tax ... ..	182,154	215,071	220,314	220,629	415,048
Stamp Duty ... ..	162,500	170,600	184,000	175,974	173,637
<b>Total State Taxation</b>	3,085,805	2,984,592	1,964,629	818,274	950,183.
<b>Municipal Taxation ... ..</b>	853,694	857,322	897,062	964,240	940,351
<b>Melbourne Harbor Trust Taxation</b>	110,393	127,785	136,178	140,258	164,611
<b>Total Taxation ...</b>	4,049,892	3,969,699	4,353,968	4,299,297	4,554,159

STATE EXPENDITURE.

The following table shows for the years 1898-9 to 1902-3, the principal heads of State expenditure:—

Heads of expenditure, 1898-9 to 1902-3.

PRINCIPAL HEADS OF STATE EXPENDITURE: RETURN FOR FIVE YEARS.

Heads of Expenditure.	1898-9.	1899-1900.	1900-1.	1901-2.	1902-3.
	£	£	£	£	£
General Administration ...	220,199	231,189	246,238	248,543	226,374
Retiring Allowances, Gratuities, &c. ...	313,005	320,118	310,301	319,280	337,226
Defences ...	197,585	201,611	161,342	...	...
Law, Order, and Protection ...	470,374	484,597	501,767	502,645	482,239
Education :—					
State ...	543,987	585,062	621,774	656,761	631,129
Secondary and Technical ...	29,250	31,100	33,682	33,976	29,895
Science, Medical, &c. ...	46,319	60,371	61,083	63,084	52,398
Charitable Institutions ...	305,196	281,656	293,154	313,735	300,821
Agriculture ...	78,503	133,961	150,222	169,351	110,867
Mining ...	59,021	64,889	67,953	59,502	53,961
Crown Lands ...	67,186	68,879	78,978	83,096	79,014
Public Works and Services :—					
Railways ...	1,710,696	1,801,954	1,982,421	2,052,264	1,849,989
Posts and Telegraphs ...	514,500	521,918	329,272	...	...
Others ...	368,349	280,156	322,370	330,555	209,146
Public Debt :—					
Interest and expenses	1,881,198	1,852,970	1,900,139	1,941,449	1,907,656
Redemption ...	30,543	37,947	47,702	94,414	68,155
Old Age Pensions ...	...	...	129,338	292,432	215,973
Other Expenditure ...	271,295	327,258	435,044	237,745	205,117
Special Appropriations	2,758,073	2,672,851	2,878,550	2,996,333	2,810,955
Total Votes ...	4,349,133	4,612,785	4,794,230	4,402,499	3,949,005
Grand Total ...	7,107,206	7,285,636	7,672,780	7,398,832	6,759,960
Per Head of Population ...	£ s. d. 6 0 3	£ s. d. 6 2 7	£ s. d. 6 8 2	£ s. d. 6 2 5	£ s. d. 5 12 2

The figures for 1902-3 show a reduction of expenditure to the amount of £185,378 under special appropriations, and of £453,494 under annual votes. The principal reductions were under the following heads, viz.:—Railways, £202,275; Old Age Pensions, £76,459; Agriculture, £58,484; Interest on Public Debt, £33,793; Expenditure on Education, £29,713; and Expenditure on Charitable Institutions, £12,914. The only item which shows an increase over the previous year is Retiring Allowances and Gratuities, which has increased to the extent of £17,946.

The causes of the reduction under Old Age Pension payments were that under Act No. 1751 the maximum payments were reduced from 10s. to 8s. per week, and provision was made for enforcing contributions from relatives. The total expenditure has decreased from £7,398,832 in 1901-2 to £6,759,960 in 1902-3, and the amount per head of the population from £6 2s. 5d. to £5 12s. 2d. per annum.

## PENSIONS AND GRATUITIES

Pensions,  
etc.

During the year 1902-3, 2,661 pensions were paid under special appropriations, amounting to £264,150; from annual votes, 202, amounting to £9,945. The total number of pensions was 2,863, and the amount £274,095. 109 compensations and gratuities were also paid, the amount being £16,131; and £47,000 was paid as a subsidy to the Police Superannuation Fund. The following statement contains full particulars, showing various Acts under which these payments have been made:—

PENSIONS, SUPERANNUATION ALLOWANCES, AND GRATUITIES, &c.,  
PAID, 1902-3.

	Special Appropriations.		Annual Votes.		Total.	
	Number.	Amount.	Number.	Amount.	Number.	Amount.
General Public Service—		£		£		£
Under Civil Service Act	504	85,282	} 17	1,116	709	110,472
„ Public Service Act	176	18,821				
„ Other Acts ...	12	5,253				
„ Discipline Act ...	22	1,530				
„ Lunacy Act ...	56	3,660	...	...	22	1,530
Education Department ...	822	74,121	35	2,277	56	3,660
Railways ...	1,063	71,186	143	6,333	857	76,398
Miscellaneous—					1,206	77,519
Under Constitution Act	1	610	} 7	219	13	4,516
„ County Courts Act	5	3,687				
Total Pensions and Superannuation Allowances	2,661	264,150	202	9,945	2,863	274,095
Compensation and Gratuities	66	9,058	43	7,073	109	16,131
Subsidy to Police Superannuation Fund	...	2,000	...	45,000	...	47,000
Total Amount Paid...	...	275,208	...	62,018	...	337,226

Other funds.

In 1902-3 the payments out of the Police Superannuation Fund were as follow:—364 pensions, amounting to £43,253,

and 23 gratuities, amounting to £12,395. The Police Superannuation Fund is maintained by the annual income arising from the balance of an investment in Government stock; by an annual subsidy of £2,000 from the consolidated revenue; by a moiety of the fines inflicted by the Courts of Petty Sessions; and, if necessary, by a deduction, not exceeding  $2\frac{1}{2}$  per cent., from the pay of the members of the force, and a further grant in aid from the consolidated revenue. In the year 1902-3, 25 pensions, amounting to £1,125, and £205 sick allowances were paid out of the Port Phillip Pilot Sick and Superannuation Fund, towards which, however, the Government does not contribute.

RAILWAY REVENUE.

After deducting the net earnings of the Department of Railways from the amount of interest and expense of loans, a correct idea of its financial condition is obtained. This has been done in the table which follows, and from the figures supplied by the Railway Department the actual annual loss to the State in the last five years is shown; the loss in 1902-3 being much greater than in any of the years under review, and due, as has been before pointed out, to the extreme severity of the last season, when the yield of wheat alone was only 2,569,364 bushels, the lowest returned since 1864-5. No account is taken of the value of the work performed free of cost for other Government departments, which is estimated at £20,000 in each of the first 2 years, £31,000 in 1900-1, £34,000 in 1901-2, and £61,161 in 1902-3.

Loss on working of railways, 1898-9 to 1902-3.

RAILWAY DEFICIT: RETURN FOR FIVE YEARS.

	1898-9.	1899-1900.	1900-1.	1901-2.	1902-3.
	£	£	£	£	£
Gross Receipts ...	2,873,729	3,025,162	3,337,797	3,367,843	3,046,858
Working Expenses ...	1,716,441	1,807,301	1,984,796	2,072,374	1,938,580
Pensions, Gratuities, &c.	81,284	95,239	90,443	93,744	93,507
Net Receipts ...	1,076,004	1,122,622	1,262,558	1,201,725	1,014,771
Interest on Cost of Construction	1,472,090	1,430,448	1,464,809	1,492,695	1,473,532
Deficit ...	396,086	307,826	202,251	290,970	458,761

As compared with the two preceding years, this table shows a decrease both in receipts and in working expenses. There is only a slight variation—a decrease of £19,163—in the last year, under the heading Interest on Construction. The

amount paid in pensions is about the same as in the preceding year. During the years under review an increase is shown in the revenue amounting to £173,129, and in the expenditure to £234,362 for working expenses and pensions, and to £1,442 for interest, the deficit in 1902-3 being £62,675 greater than that of 1898-9.

## EXPENDITURE ON EDUCATION.

Expenditure  
on public  
instruction.

The expenditure during 1902-3 on State education amounted to £738,997, portion of which, however (£21,030) was for the Melbourne University and for technical schools. Pensions, gratuities, etc., are also included, but this expenditure may be considered as more appropriately belonging to the education of a past generation rather than as a portion of the cost of instruction of the children of the present day. The expenditure in detail for the five years 1898-9 to 1902-3, extracted from the report of the Education Department, is as follows:—

## EXPENDITURE ON EDUCATION: RETURN FOR FIVE YEARS.

Expenditure on—	1898-9.	1899-1900.	1900-1.	1901-2.	1902-3.
	£	£	£	£	£
Instruction ... ..	487,592	517,714	546,009	565,931	552,838
Training ... ..	...	2,242	4,516	4,701	4,555
Administration ... ..	31,024	34,218	39,865	41,977	39,148
Technical Schools ... ..	20,930	24,740	26,225	22,958	16,430
Melbourne University ... ..	5,250	5,250	5,750	6,000	4,600
Pensions, Compensation, and Gratuities	77,993	75,785	75,166	76,352	77,341
Miscellaneous ... ..	120	144	22	338	4,716
<b>Total (exclusive of Buildings)</b>	<b>622,909</b>	<b>660,093</b>	<b>697,553</b>	<b>718,257</b>	<b>699,628</b>
<b>Buildings—</b>					
<b>Expended by the Public Works</b>					
<b>Department:—</b>					
From Loans ... ..	1,089	13,940	4,758	35,197	10,734
„ Annual Votes ... ..	20,919	25,756	24,144	39,231	20,886
By Boards of Advice ... ..	2,202	2,077	3,293	3,398	3,901
Rents ... ..	2,186	2,912	3,845	4,119	3,848
<b>Total ... ..</b>	<b>649,305</b>	<b>704,778</b>	<b>733,593</b>	<b>800,202</b>	<b>738,997</b>

A considerable annual increase in the expenditure will be noticed during each of the four years, 1898-9 to 1901-2, but a decrease to the extent of £61,205 for 1902-3. The decreases are under—Instruction, £13,093; Training, £146; Administration, £2,829; Technical Schools, £6,528; Melbourne University, £1,400; and Buildings, £42,576. The increases were in Pensions, etc., £989; and Miscellaneous, £4,378. Since the inception of the system of free, compulsory, and secular education in 1872, up to the 30th June, 1903, the expenditure on public

instruction has amounted to £20,431,577, of which £15,157,102 has been spent on instruction, £1,138,683 on administration, £150,237 on training teachers, £1,574,167 on miscellaneous items, principally pensions, technical schools, and the Melbourne University (excluding the annual fixed grant of £9,000 to that institution), £2,411,388 on buildings, of which £1,129,226 was paid out of loans, and £1,282,162 from revenue. For particulars of the progress of State instruction since its inception, see Part Social Condition, ante.

The foregoing statement deals with public instruction generally, and includes some items of expenditure on secondary and technical education; but in the following statement particulars are given of primary State school education only,—that is, the cost to the State of the “free, compulsory, and secular” system, the subjects of which are set out in the Schedule of Act No. 1777, as follow:—Reading, writing, arithmetic, grammar, geography, history, drill, singing, drawing, elementary science, manual training, and, where practicable, gymnastics and swimming; also, for children over nine years of age, lessons in health and temperance from standard works; and, for girls, sewing, needlework, cookery, and domestic economy:—

Expenditure on primary education.

EXPENDITURE ON PRIMARY EDUCATION: RETURN FOR FIVE YEARS.

Items.	1898-9.	1899-00.	1900-01.	1901-02.	1902-3.
<b>Instruction:—</b>	£	£	£	£	£
Teachers' Salaries ... ..	446,340	472,704	496,336	511,846	499,559
Singing, Drawing, Drill, Gymnastics, Kindergarten, Cookery, and Manual Training	...	1,211	2,497	4,681	5,955
Teachers' Travelling Expenses ...	1,789	1,438	1,803	2,060	2,540
Conveyance of Children to Schools	1,978	2,372	2,063	2,386	2,536
Books, Stores, Cadets, Kindergarten, Manual Training, and Cookery Expenses	5,630	7,350	9,479	9,140	10,034
Cleaning, Stationery, Fuel, &c. ...	30,178	30,863	31,039	31,459	31,532
Teaching Night Schools ... ..	232	306	615	804	682
Training ... ..	...	2,242	4,516	4,701	4,555
<b>Total Instruction</b> ... ..	<b>486,147</b>	<b>518,486</b>	<b>548,348</b>	<b>567,077</b>	<b>557,393</b>
<b>Administration:—</b>					
Office and Inspectors ... ..	26,814	29,380	31,257	31,235	29,156
Truant Officers ... ..	3,342	3,655	6,793	7,569	6,046
Stores, Cleaning, &c. ... ..	868	1,183	1,814	3,173	*3,946
Buildings ... ..	26,396	44,685	36,040	81,946	39,369
Retiring Allowances, Compensation, and Gratuities	77,993	75,785	75,166	76,352	77,535
<b>Total Expenditure</b> ... ..	<b>621,560</b>	<b>673,174</b>	<b>699,418</b>	<b>767,352</b>	<b>713,445</b>

\* Including Postage and Telegrams, £2,136.

Out of the total decrease (£61,205) which has taken place in the expenditure on Education during the past year, £53,907 has been effected on items comprising primary instruction. This has occurred in the items Teachers' Salaries and Buildings. Slight increases are shown in the expenditure on Singing, etc., Teachers' Travelling Allowances, Conveyance of Children to Schools, Books, Stores, etc., Cleaning, Stationery, Fuel, and Pensions.

The following return shows the cost per head of primary instruction, including salaries and allowances paid to teachers, travelling expenses, stores, maintenance of schools, stationery, fuel, books and school requisites, office administration, inspection, buildings, and retiring allowances, computed on the number of children in daily average attendance throughout the year:—

COST OF PRIMARY INSTRUCTION IN VICTORIA: RETURN FOR  
FIVE YEARS.

Year.	Cost to the State.		Scholars in Average Attendance.	Per Head of Scholars in Average Attendance.	
	Including Buildings.	Excluding Buildings.		Including Buildings.	Excluding Buildings.
	£	£		£ s. d.	£ s. d.
1898-9 ... ..	621,560	595,164	141,740	4 7 8	4 4 0
1899-00 ... ..	673,174	628,489	145,868	4 12 4	4 6 2
1900-01 ... ..	699,418	663,378	147,818	4 14 8	4 9 9
1901-2 ... ..	767,352	685,406	150,939	5 1 8	4 10 10
1902-3 ... ..	713,445	674,076	150,268	4 14 11	4 9 8

On the whole the cost for 1902-3 is well below that of the preceding year, the column which includes buildings showing a decrease of 6s. 9d. per head. It is somewhat difficult to institute a fair comparison of the cost of primary instruction with other States, inasmuch as there are different elements which go to make up the item primary instruction; for instance, in Victoria, contributions by parents are in every instance paid to the teachers, principally for imparting instruction in extra subjects, whereas in New South Wales these fees are paid for instruction in primary subjects, and placed to the credit of the general revenue. Again, in some States the buildings are under the control of the Public Works Department, and in others, under the control of the Education Department. So far, however, as it has been possible to collect figures making a fair comparison, the information is included in the following table, the Victorian figures being for 1902-3, those for the other States a year earlier:—

COST PER SCHOLAR OF PRIMARY INSTRUCTION EXCLUDING BUILDINGS

	£	s.	d.		£	s.	d.
Victoria	4	9	8	Western Australia	5	18	1
New South Wales	4	16	1	Tasmania	4	2	10
Queensland	3	11	9	New Zealand	3	9	4
South Australia	3	8	10				

SUBSIDIES, GRANTS, AND ENDOWMENTS.

The following is a statement of all grants and endowments, and expenditure in aid of various services, institutions, and societies, from 1898-9 to 1902-3:—

Subsidies, grants, endowments, etc

	1898-9.	1899-1900.	1900-1.	1901-2.	1902-3.
	£	£	£	£	£
Grants to Agriculture, &c.	56,403	106,478	123,358	142,418	82,978
„ Mining	20,917	23,399	24,900	15,992	11,866
Subsidy to Municipalities	100,000	100,000	100,000	100,000	50,000
<i>Educational Grants, &amp;c.—</i>					
Melbourne University—Endowment under Act	9,000	9,000	9,000	9,000	9,000
Melbourne University—Additional Endowment voted	3,250	3,250	6,250	6,000	4,500
College of Pharmacy	500	500	500	500	250
Technological Schools—Maintenance, &c.	14,500	16,350	17,932	18,476	16,145
Working Men's College—Workshops	6,000	...	...	...	...
Public Libraries, &c. (including Melbourne Public Library)	19,870	24,767	26,660	27,065	20,828
Royal Society	100	100	100	100	50
Royal Geographical Society	...	...	...	75	...
Victorian Artists' Society	100	100	150	100	...
Fine Art Galleries—Ballarat, Bendigo, &c.	500	500	500	500	250
Zoological and Acclimatisation Society, &c.	3,100	3,600	3,500	3,500	3,000
Parks and Gardens (including Melbourne Botanical Gardens)	13,963	14,383	14,867	15,175	12,295
Charitable Institutions	136,483	116,026	115,979	114,459	98,384
Instructor of the Blind	170	170	170	170	164
Animals Protection Society	50	50	50	50	50
<i>Miscellaneous Grants and Subsidies—</i>					
Exhibitions	9,296	4,302	500	1,000	...
Exhibition Trustees, Expenses of	2,249	2,749	1,250	1,250	300
Fire Brigades	14,423	14,766	15,941	16,215	16,262
Mint Subsidy	20,000	20,000	20,000	20,000	20,000
Village Settlements and Labor Colonies	5,898	4,000	3,987	2,993	3,519
Carriage of Water—to reimburse Railway Department for	102	...	5,036	11,026	2,919
Relief on account of Bush Fires, Cyclones, Drought, &c.	221	...	1,250	3,295	495
Relief of the Unemployed	700	1,082	906	1,161	907
Savings Banks Commissioners—Extra Working Expenses	13,736	10,841	11,178	12,685	13,663
<b>Total</b>	<b>451,531</b>	<b>476,413</b>	<b>503,964</b>	<b>523,205</b>	<b>367,825</b>

In 1901-2, the amount expended was £523,205; in 1902-3, it was £367,825, a reduction of £155,380. Large reductions appear under all the items, with the exception of University Endowment, Animals Protection Society, and Mint Subsidy, which are the same as in the previous year, and the items Village Settlements, Fire Brigades, and Savings Banks Commissioners, where increases are shown. The most noticeable reductions are:—Grants to Agriculture, by nearly £60,000; Subsidies to Municipalities, £50,000; Charities, over £16,000; Public Libraries, over £6,000; and Parks and Gardens, nearly £3,000. The amounts under some of the minor heads have altogether disappeared.

## LOANS FLOATED IN LONDON.

The total amount of loans raised in London at varying rates of interest was £62,075,200, after conversion operations. The amount paid off by means of new loans was £16,416,629, and by means of payment derived from revenue, £566,100; leaving a balance due on 30th June, 1903, £45,092,471, consisting of debentures amounting to £6,584,000, and inscribed stock £38,508,471. The following statement gives particulars respecting the various loans now forming part of the public debt, which were raised in London since 1859, together with the average prices obtained after deducting flotation expenses as well as accrued interest, and the rates of interest to which such prices are equivalent:—

## LOANS FLOATED IN LONDON, 1859 TO 1903.

When Raised.	Debentures or Stock.				Average Price Obtained per £100 Debenture or Bond.				Actual Rate of Interest per £100 Net.
	Currency.		Amount Sold.	Rate of Interest.	Ex Accrued Interest.	Ex Interest and Expenses. (Net Proceeds.)			
	When Due.	No. of Years.					£	s. d.	
1859	1883	24	1,000,000	6	105 1 11½	103 18 11½	£	s. d.	5 14 0
"	"	"	750,000	6	107 17 7½	106 14 7½	£	s. d.	5 9 10
1860	"	23	1,837,500	6	104 17 10½	103 14 10½	£	s. d.	5 14 1
"	1884	"	812,500						
1861	1885	24	1,000,000	6	103 1 6½	101 18 6½	£	s. d.	5 17 0
1862	"	23	1,600,000	6	102 19 7	101 16 7	£	s. d.	5 17 2
1866	1891	25	850,000	6	100 8 11½	99 5 11½	£	s. d.	6 1 1
1869	1894	"	588,600	5	98 4 2½	97 1 2½	£	s. d.	5 4 3
1870	"	24	1,518,400	5	100 17 6½	99 14 6½	£	s. d.	5 0 5
1874	1899	25	1,500,000	4	90 2 7	88 19 7	£	s. d.	4 15 5
1876	1901	"	{ 500,000 } { 2,500,000 }	4	94 16 10½	93 18 11½	£	s. d.	4 8 1
1878	1904	26	457,000	4	...	...	£	s. d.	...
1879	"	25	3,000,000	4½	97 17 5½	96 19 2½	£	s. d.	4 14 0
1880	"	24	2,000,000	4½	103 3 8½	102 5 11	£	s. d.	4 6 11

LOANS FLOATED IN LONDON, 1859 TO 1903—Continued.

When Raised.	Debentures or Stock.				Average Price Obtained per £100 Debentures on Bond.		Actual Rate of Interest per £100 Net.
	Currency.		Amount Sold.	Rate of Interest.	Ex Accrued Interest.	Ex Interest and Expenses. (Net Proceeds.)	
	When Due.	No. of Years.					
			£	Per cent.	£ s. d.	£ s. d.	£ s. d.
1883	1907	"	4,000,000	4	98 16 8½	97 13 7½	4 3 0
"	1908	"	2,000,000	4	97 14 1½	96 10 11½	4 4 6
1884	1913	29	{ 2,636,600 1,363,400 }	4	98 5 7	97 2 8¼	4 3 3
1885	1919	34	{ 3,180,620 819,380 }	4	98 18 6½	97 15 9½	4 2 5
1886	1920	"	1,500,000	4	105 12 3¼	104 9 0	3 15 5
1887	"	33	3,000,000	4	102 5 6¾	101 2 9	3 18 9
1888	"	32	1,500,000	4	108 1 1¼	106 18 0¾	3 12 9
1889	1923	34	3,000,000	3½	102 14 10	101 11 11½	3 8 5
1890	"	33	4,000,000	3½	100 2 4	98 19 6	3 11 1
1891	1921-6	30-5	{ 850,000 2,150,000 }	3½	96 3 7	95 0 10	3 15 6
1892	"	29-34	2,000,000	3½	91 13 7	90 10 8	4 1 5
1893	1911-26	17-32	2,107,000	4	94 7 5	93 4 8	4 11 7
1899	1929-49	30-50	1,600,000	3	94 7 1	93 4 2	3 7 3
1901	1929-49	28-48	3,000,000	3	92 2 1	89 14 5	3 11 10
1902	1929-49	27-47	1,000,000	3	95 16 6½	93 8 3¾	3 7 6
			<i>Treasury Bonds.</i>				
1892	1893	1	1,000,000	4½	99 3 11	99 1 5	5 0 0
1898	1901	1-3	500,000	3¾	100 0 0	100 0 0	3 15 0
Total	...	...	61,121,000				
Paid off	...	...	16,028,529				
Outstanding	...	...	45,092,471				

The figures in the last column represent the rate of interest payable by the State for the actual amount of money which was realized after the deduction of all expenses which had been incurred in connection with the flotation. The column, Amount Sold, includes £957,000 for conversion loans.

The nominal rate of interest has varied from 6 per cent. for earlier loans to 3 per cent. for those of later date, and the actual rate obtained by investors varied from 6 per cent. in 1866 to 3¾ per cent. in 1899 and 1902. The first six loans raised were obtained at about 5¾ per cent., but the credit of the State would appear to have gradually improved after 1866, and money was obtained four years later at 5 per cent. In 1883 it was obtained at 4 1.5 per cent., in 1885 at 4½, in 1888 at

3 $\frac{3}{8}$ , and in 1889 at less than 3 $\frac{1}{2}$  per cent. In 1891 there was a reaction, when the money obtained cost 3 $\frac{3}{4}$  per cent., and the rate was still increased to over 4 $\frac{1}{2}$  in 1893, while 5 per cent. was paid on short-dated Treasury bonds obtained in 1892. Later loans show a marked improvement, as in 1899 the actual rate of interest was less than 3 $\frac{3}{8}$  per cent., this being the lowest rate of those loans which were raised in London, while for the two later loans, one of which was floated in 1901, the money was obtained at slightly over 3 $\frac{1}{2}$  per cent., and the other in 1902, at 3 $\frac{3}{8}$  per cent.

#### LOANS FLOATED IN MELBOURNE.

Melbourne  
loans.

The total amount of loans floated in Melbourne after conversion operations was £9,190,465. Of this amount, £1,841,159 was redeemed by loans, and £1,343,877 by revenue, leaving due a balance of £6,004,429 on 30th June, 1903, consisting of debentures, £2,107,495; inscribed stock, £3,196,934; and Treasury bonds, £700,000. In addition, there is a sum of £1,000 overdue for debentures of the late Melbourne and Hobson's Bay Railway Company not yet presented for payment. The outstanding balance of loans floated in Melbourne amounted to £3,451,088 on 30th June, 1898, but during the last five years the local debt has been increased by over 2 $\frac{1}{2}$  millions sterling. The following is a statement of these loans, exclusive of Melbourne and Hobson's Bay Railway debentures, showing the amounts originally raised, the amounts converted or paid off, and the amounts outstanding on 30th June, 1903:—

#### LOANS RAISED IN MELBOURNE.

Authorization.		Loans as originally raised.			Amounts.		Loans Outstanding on 30th June, 1903.
Act No.	Year.	Rate of Interest.	When due.	Amount.	Converted into Stock or Debentures.	Paid off.	
		Per cent.		£	£	£	£
<i>Debentures.</i>							
13 & 23	1854	...	1855-75	735,000	...	735,000	...
40	1855	6	1857-72	299,100	...	299,100	...
15	1856	6	1872-4	2,900	...	2,900	...
36	1857	6	1883-5-8	1,000,000	52,780	947,220	...
150	1862	6	1889	300,000	23,900	276,100	...
332	1868	5	1894	610,000	297,100	312,900	...
371	1870	5		100,000	100,000	...	...
1296	1893	4	1913-23	746,795	...	...	746,795
1440	1896	3	1912	63,000	...	...	63,000
1659	1900	3	1921-30	1,000,000	...	...	1,000,000
1753	1901	3	1923-32	297,700	...	...	297,700

LOANS RAISED IN MELBOURNE—Continued.

Authorization.		Loans as originally raised.			Amounts.		Loans Outstanding on 30th June, 1903.			
Act No.	Year.	Rate of Interest.	When due.	Amount.	Converted into Stock or Debentures.	Paid off.				
		Per cent.		£	£	£				
<i>Inscribed Stock.</i>										
428	1872	4	1897	1,113,000	} 2,659,613	...	...			
439	1872	4	"	{ 86,780						
741	1882	4	"	{ 13,102						
963	1887	4	"	167,600						
1015	1889	4	"	130,000						
1341	1893	4	"	750,000						
1369	1895	4	"	150,000						
1468	1896	4	"	249,131						
1468	1896	3	1917	2,290,482				...	...	2,290,482
1552	1898	3	"	2,809				...	...	2,809
1564	1898	3	"	500,000	...	42,894	457,106			
1602 )	1898	3	"	206,285	...	6,922	199,363			
1749 )										
1623	1899	3	"	247,174	...	...	247,174			
<i>Treasury Bonds.</i>										
1574	1898	3½	1901	500,000	...	500,000	...			
1800	1902	3½	1907	700,000	...	...	700,000			
Total		...	...	12,260,858	3,133,393	3,123,036	6,004,429			

NOTE.—Exclusive of £62,000, Melbourne and Hobson's Bay Railway debentures redeemed in Melbourne.

Of the total loans raised in Victoria, £2,337,000, i.e., the total of those loans which were floated prior to 1863, was obtained at 6 per cent.; £710,000, or those floated from 1868 to 1870, at 5 per cent.; £3,406,408, or those floated from 1872 to 1895, at 4 per cent.; and £4,607,450, floated since 1895, at 3 per cent. During 1898 and 1902 short-dated Treasury bonds, for £500,000 and £700,000 respectively were issued at 3½ per cent. Of the total Melbourne loans outstanding on 30th June, 1903, £746,795 is bearing interest at 4 per cent., £700,000 at 3½ per cent., and the balance, £4,557,634, at 3 per cent.

REPAYMENT OF LOANS.

The total debt on 30th June, 1903, exclusive of debentures for £1,000 overdue since 1897, was £51,096,900, and of this sum £8,691,495 was in the form of debentures; £38,508,471 of inscribed stock (London Register); £3,196,934 of funded stock (Melbourne Register); and £700,000 in the form of Treasury bonds. The following are the dates on which these loans are

Repayment of debt.

repayable, those repayable in Melbourne and London being also indicated:—

TOTAL DEBT, INTEREST, AND DATE OF REPAYMENT.

Under Act No.	When Repayable.	Rate of Interest per cent.	Amount Repayable.		
			In Melbourne.	In London.	Total.
			£	£	£
	<i>Debentures.</i>				
608	1st Jan., 1904 ...	4½	...	5,000,000	5,000,000
611	" " " " ...	4	...	457,000	457,000
1296	1st April, 1913-23 ...	4	746,795	...	746,795
1440	" " 1912-22 ...	3	63,000	...	63,000
1659	1st Jan., 1921 ...	3	1,000,000	...	1,000,000
1753	" " 1923-32 ...	3	297,700	...	297,700
	<i>Inscribed Stock (London).</i>				
717	1st July, 1907 ...	4	...	4,000,000	4,000,000*
739	1st April, 1908 ...	4	...	2,000,000	2,000,000*
760	1st Oct., 1913 ...	4	...	4,000,000	4,000,000*
805	" " 1919 ...	4	...	4,000,000	4,000,000
845	" " 1920 ...	4	...	6,000,000	6,000,000
989	" " 1923 ...	3½	...	7,000,000	7,000,000
1032	" " 1923 ...	3½	...	7,000,000	7,000,000
1196	1st Jan., 1921 to 1926 ...	3½	...	5,000,000	5,000,000
1217					
1287	" " 1911-1926 ...	4	...	2,107,000	2,107,000
1560	" " 1929-1949 ...	3	...	4,528,471	4,528,471
1562	" " 1929-1949 ...	3	...	1,000,000	1,000,000
	<i>Funded Stock (Melbourne).</i>				
1468	} 29th Sept., 1917 ...	3	2,290,482	...	2,290,482
1552			2,809	...	2,809
1564			457,106	...	457,106
1602			199,363	...	199,363
1623			247,174	...	247,174
	<i>Treasury Bonds.</i>				
1800	... ..	3½	700,000	...	700,000
	Total ... ..	...	6,004,429	45,092,471	51,096,900

The last of the 6 per cent. loans was paid off on the 1st January, 1891, and the last of the 5 per cents. on the 1st January, 1897. The only loan bearing a higher rate of interest than 4 per cent. is one of 5 millions at 4½ per cent., and this became due and was redeemed on 1st January, 1904. The loans at the higher rates of interest which have already been redeemed, were replaced by others obtained at lower rates, and by this means a considerable saving in interest

\* Debentures convertible into inscribed stock at option of holders. The amount so converted to 30th June, 1903, was £8,873,000.

has been effected. The last two loans which fell due were one for 1½ millions in 1899, and the other for 3 millions in 1901. Both were 4 per cent. debentures, and they were redeemed by the proceeds of £4,600,000 stock raised in London at 3 per cent., the transaction effecting an annual saving of £42,000 in the amount of interest payable.

## PURPOSES FOR WHICH LOANS WERE RAISED.

The aggregate amount of the loans raised to 30th June, 1903, exclusive of temporary Treasury bonds in aid of revenue, was £71,265,665; but a total of £20,167,765 (exclusive of £2,089,613 conversion loans) having been repaid, viz., £1,909,977 out of the general revenue, and £18,257,788 out of the proceeds of redemption loans, the balance on 30th June, 1903, was reduced to £51,097,900. The purpose for which the amount outstanding was borrowed and the annual interest payable thereon, are as follow:—

Purposes  
for which  
loans were  
incurred.

## PURPOSES FOR WHICH LOANS WERE RAISED.

Public Borrowings Contracted for—	Amount of Loans Outstanding on 30th June, 1903.	Annual Interest Payable.
	£	£
<b>REVENUE-YIELDING WORKS.</b>		
Railways ... ..	38,903,114	1,468,109
Tramways, Country... ..	200,000	7,750
Water Supply and Irrigation—Melbourne	2,082,337	77,741
Country ... ..	5,736,478	204,496
Harbors and Docks ... ..	275,554	11,022
Graving Dock ... ..	354,820	13,155
Agriculture—Advances to Beet Sugar Company	63,000	1,890
Agriculture—Wineries, &c. ... ..	58,216	1,760
Purchase of Land for Closer Settlement	199,363	5,981
Development of Mining ... ..	126,022	3,894
<b>Total Revenue Yielding Works ...</b>	<b>47,998,904</b>	<b>1,795,798</b>
<b>OTHER WORKS OF A PERMANENT CHARACTER.</b>		
Parliament Houses ... ..	246,453	10,305
Law Courts ... ..	364,715	13,516
Public Offices ... ..	165,583	6,098
Defence Works ... ..	151,467	5,044
State School Buildings ... ..	1,226,732	42,897
Other ... ..	944,046	30,856
<b>Total other Permanent Works ...</b>	<b>3,098,996</b>	<b>108,716</b>
<b>Net Borrowings ... ..</b>	<b>51,097,900</b>	<b>1,904,514</b>

The loans outstanding on the 30th June, 1903, include sums not yet expended, amounting in the aggregate to £263,331, of which £206,751 has been borrowed for railways, £18,402 for country water supply, and the balance (£38,178) for different other services. Of the total sum borrowed, 94 per cent. has been devoted to revenue-yielding works, namely, railways, water supply, and country trams, etc.

Including money borrowed for temporary purposes (£350,000) in aid of revenue, the total debt on the 30th June, 1903, is £51,447,900, upon which the amount of interest and expenses (paid in 1902-3) was £1,907,656, or an average of 3·71 per cent. on the total debt. The amount of interest and expenses paid was fully earned by £33,873,683, the amount of such interest and expenses being £1,256,015. This leaves £17,574,217, all the interest and expenses upon which, £651,641, has to be met by charge upon the general revenue. In addition, a sum of £2,391,663 has been advanced from the trust funds, upon which the interest is £50,225, or 2·10 per cent. The total interest which has to be met from general revenue is thus £701,866, equal to 3·51 per cent., or 11s. 7d. per head of population on a debt of £19,965,880, and this amount represents the real burden on 30th June, 1903. It is, however, worthy of notice that £3,098,996 of the indebtedness has been expended in the erection of Parliament House, public offices, and school buildings throughout the State, defence, and other works of a necessary and permanent character, and if these are not directly reproductive in character, yet they save the State in rent charges and otherwise. A sum of £2,741,663 has been expended on works in anticipation of revenue and to meet revenue, deficiencies, etc., and the balance of the real debt, £14,125,221, has been expended on railways, water conservation, country trams, development of the agricultural and mining resources of the State, the graving dock, and on other revenue-producing works, which do not at the present time earn sufficient to cover working expenses and interest on the money expended in their construction, and will not do so until the population of the State has materially increased.

In addition to the ordinary expenditure from revenue, certain sums are annually disbursed for various purposes from amounts raised by means of loans. The following table

shows the details of such expenditure in each of the last five years:—

Expenditure from loans.

LOAN EXPENDITURE: RETURN FOR FIVE YEARS.

Works.	1898-9.	1899-1900.	1900-1.	1901-2.	1902-3.
	£	£	£	£	£
Railways ...	451,087	595,543	490,857	467,937	354,916
Water Supply ...	100,077	144,149	138,233	88,902	115,405
Defences ...	34,827	229	4,080	11,889	...
Schools—					
Primary ...	1,088	13,745	4,618	34,332	12,039
Technical ...	4,832	6,892	99	...	...
Beet Sugar Company	22,000	...	...	...	...
Wineries ...	5,094	12,063	15,480	17,895	6,352
Closer Settlement, Purchase of Estates	...	63,985	85,040	55,462	1,189
Bush Fires—Advances to Farmers	17,302	...	2,366	332	...
Mining Development...	...	41,294	25,932	32,443	23,895
Pilots—Advance for Steam Service	...	23,000	...	...	...
Sundry Public Works	75,786	104,989	165,560	175,083	215,607
Total ...	712,093	1,005,889	932,265	884,275	729,403
Per Head of Population	s. d. 12 0	s. d. 16 11	s. d. 15 7	s. d. 14 8	s. d. 12 1

It will be seen that during the last five years the loan expenditure averaged £852,785 yearly, whereas during the preceding six years the average was £362,921, and during the ten years ended 30th June, 1892, it was £2,300,000 yearly. During the last five years the loan expenditure of Victoria and New South Wales was as follows:—

	Total Last Five Years.	Annual Average.
Victoria ...	£4,263,925	£852,785
New South Wales ...	16,426,085	3,285,217

During each of the last two years the loan expenditure in New South Wales was nearly five millions.

LOANS AUTHORIZED BUT NOT RAISED.

The permanent loans authorized, but not raised, on the 30th June, 1903, amounted to £2,199,640, which sum now represents the unfloated balance of loans authorized in 1896, 1898, 1899, 1901, 1902, and 1903. The following is a return of the amounts authorized, showing the purposes for which the original loans were intended, and the amounts raised up to June, 1903:—

Loans authorized but not raised.

## LOANS AUTHORIZED BUT NOT RAISED, 30TH JUNE, 1903.

Purposes.	Under Loan Act—						
	59 Vict., No. 1440.	62 Vict., No. 1552.	62 Vict., No. 1602, & 1 Ed. VII., No. 1749.	63 Vict., No. 1623.	1 Ed. VII., No. 1753.	1 Ed. VII., No. 1800.	1 Ed. VII., No. 1816.
	£	£	£	£	£	£	£
Railways ...	...	...	...	206,357	350,609	541,958	} 100,000
Irrigation Works, &c.	...	...	...	100,000	100,000	257,989	
Beet Sugar Industry ...	100,000	...	...	...	...	...	
Closer Settlement ...	...	...	400,000	...	...	...	
Redemption of Municipal Debentures	...	1,116,608	...	...	...	...	
Miscellaneous ...	...	...	...	193,643	49,391	200,053	
Total ...	100,000	1,116,608	400,000	500,000	500,000	1,000,000	100,000
Amount raised to 30th June, 1903	63,000	2,809	206,285	247,174	297,700	700,000	...
Balance not Floated ...	37,000	1,113,799	193,715	252,826	202,300	300,000	100,000

In addition to the £51,097,900, the total amount of the outstanding funded loans of the State on the 30th June, 1903, these figures show that authority had been obtained from Parliament for a further borrowing to the extent of £2,199,640, and of this sum £134,973 is not apportioned to any service; £378,292 is for railway purposes, £305,801 for water supply, £193,715 for closer land settlement, £1,113,799 for the redemption of municipal debentures, and £73,060 for other works. The rate of interest on the amount to be raised is 3 per cent. on £1,799,640, and 3½ per cent. on £400,000.

## SINKING FUNDS.

On 30th June, 1903, the sinking funds were as follow:—

## SINKING FUNDS IN AUSTRALIAN STATES, 30TH JUNE, 1903.

Sinking funds.

State.	Sinking Funds in Connection with—	
	State Funded Debts.	Municipal and Other Debts.*
	£	£
Victoria ...	313,295	698,194
New South Wales ...	775,208	295,415
Queensland ...	...	...
South Australia ...	117,338	...
Western Australia ...	655,069	59,953
Tasmania ...	242,127	89,410
Australia ...	2,103,037	1,142,972

\* Figures for 1902.

The following table shows for Victoria the various funds having balances to their credit on 30th June, 1903:—

	Balance at Credit.
Mallee Land Account ... ..	£56,667
Farms Settlement Fund ... ..	5,317
Victorian Loans Redemption Fund ... ..	109,267
Victorian Government Consolidated Inscribed Stock Redemption Fund ... ..	130,452
Municipalities Contribution—Prince's Bridge ... ..	11,592
Total ... ..	£313,295

STATE DEBTS.

The following is a statement of the total indebtedness of the Australian States on 30th June, 1903:—

FUNDED AND UNFUNDED DEBT OF AUSTRALIAN STATES,  
30TH JUNE, 1903.

State.	State Debts.		Municipal and Corporation Debts (exclusive of Loans from Government).	Grand Total.	
	Funded.	Unfunded.		Amount.	Per Head of Population.
	£	£	£	£	£ s. d.
Victoria. ... ..	51,097,900	2,741,663	11,783,699	65,623,262	54 6 5
New South Wales ... ..	75,465,361	5,556,604	2,882,140	83,904,105	59 5 3
Queensland ... ..	38,318,627	2,712,620	685,967	41,717,214	81 7 2
South Australia ... ..	26,754,420	1,088,950	106,310	27,949,680	76 11 5
Western Australia ... ..	15,627,298	...	413,050	16,040,348	72 5 2
Tasmania ... ..	9,228,963	212,856	537,086	9,978,905	56 7 10
Total ... ..	216,492,569	12,312,693	16,408,252	245,213,514	62 17 4

The figures, £245,213,514, include loans raised by the Australian Governments, municipal bodies, corporations, and trusts, but exclude moneys advanced by the Governments to these bodies. The figures for Victoria also exclude the amount of the tramways trust loan, viz., £1,650,000, which is treated as a loan to a private company, for although the money has been borrowed by the trust, which is composed of representatives of municipalities, on the security of municipal property, yet the interest is paid and a sinking fund provided by the tramway company, which renders the liability of the trust merely nominal; further, the property must be purchased by the municipalities when the trust's lease has expired.

The figures in the table show the full public indebtedness of the Commonwealth, including States, municipalities, and corporation debts, to the latest date at which comparison can be made. Victoria has the smallest amount per head, Tasmania the next, and Queensland the largest. There are of

course private debts to a considerable extent and private investments by British capitalists; but there is no reliable information as to the amount of this class of indebtedness.

The State debts are those at the end of 1903, the municipal and corporation debts are for the year ended 1902, figures for 1903 for other States than Victoria not being available. The complete figures for Victoria on the 30th June, 1903, appear in the following statement:—

STATE AND LOCAL DEBTS, 30TH JUNE, 1903.

	£	£
State Debts (Funded)—		
London Register	45,092,471	
Melbourne Register	6,004,429	
State Debts (Unfunded)	2,741,663	
Overdue Debenture, late Melbourne and Hobson's Bay		
Railway—unpresented	1,000	
<b>Total State Debts</b>		<b>53,839,563</b>
Municipal Debts	3,936,077	
Harbor Trust Debts	2,000,000	
Fire Brigades Board	130,000	
Melbourne and Metropolitan Board of Works	6,090,000	
<b>Total Debts of Municipalities and Corporations</b>		<b>12,156,077</b>
<b>Total Debts</b>		<b>65,995,640</b>

This sum (£65,995,640) is equal to a debt of £54 12s. 7d. per head of the population on 30th June, 1903.

Funded  
debts of  
Australian  
States and  
New  
Zealand,  
1903.

The following is a summary of the funded debts of the Australian States and New Zealand on the 30th June, 1903, their proportion to population, and the total and average interest payable. The amounts are exclusive of Treasury bonds or bills issued for revenue purposes:—

FUNDED DEBT OF AUSTRALIAN STATES AND NEW ZEALAND,  
30TH JUNE, 1903.

State.	Funded Debt.		Interest Payable.	
	Amount.	Per Head of Population.	Amount.	Average Rate Per Cent.
	£	£ s. d.	£	
Victoria	51,097,900	42 5 11	1,904,514	3·73
New South Wales	75,465,361	53 6 1	2,679,622	3·55
Queensland	38,318,627	74 14 7	1,421,080	3·71
South Australia	26,754,420	73 5 11	1,004,177	3·75
Western Australia	15,627,298	70 7 11	528,608	3·38
Tasmania	9,228,963	52 3 1	338,230	3·66
<b>Total Australia</b>	<b>216,492,569</b>	<b>55 10 1</b>	<b>7,876,231</b>	<b>3·64</b>
New Zealand	55,899,019	68 5 4	2,075,063	3·71

South Australia and Victoria pay the highest average rate of interest on their loans, the reason being, not that their securities are considered of less value, but that a larger proportion of their loans was raised when the rates of interest were high.

#### VALUATION OF STATES' DEBTS.

In view of the possible transference of the States' debts to the Federal Government, it will be of interest to ascertain the present value of each State's indebtedness so far as funded stock is concerned. A mere statement of the various loans is not necessarily an indication of their actual value. Although a loan may be raised at above the market rate of interest and realize a premium, which when considered in conjunction with the term of the loan reduces the nominal rate to something approaching the current rate at par, the value of the loan at any time of its currency has a greater value than the nominal amount. To illustrate this: Suppose a loan of a million has a term of 20 years to run, upon which interest at the rate 4 per cent per annum is paid, and assuming, as is probably the case, the market rate of interest is  $3\frac{1}{2}$  per cent. What is the value of the loan? Clearly, the present value of the principal (£1,000,000) due 20 years hence, together with the present value of an annuity of the amount of the interest (£40,000) for 20 years. The value of the former is £502,566, and that of the latter £568,496, and the total value of the loan £1,071,062. If the loan carry only 3 per cent. interest with the same currency, the value is £928,938.

Valuation of  
States'  
debts on  
 $3\frac{1}{2}$  per cent.  
basis.

Each debt of each State of the Commonwealth has thus been separately valued upon a  $3\frac{1}{2}$  per cent. basis, and as from the 1st January, 1905—the presumption being that all debts due up to and inclusive of that date will be paid by the States indebted. To this extent the amounts shown in the next table are deficient as compared with those shown in preceding tables, but it affords an idea of the comparative values of the nominal debt and its present worth on a  $3\frac{1}{2}$  per cent. basis. Full particulars are not available to effect the complete valuation. The results are set forth in the following table:—

## VALUATION OF STATE FUNDED DEBTS.

State.	Funded Debt. Nominal Amount.	Value of—		Total.
		Principal.	Interest.	
	£	£	£	£
Victoria ... ..	51,036,378	29,283,964	21,587,140	50,871,104
New South Wales ... ..	68,992,960	38,834,208	30,003,602	68,837,810
Queensland ... ..	38,318,627	19,720,491	19,105,742	38,826,233
South Australia ... ..	25,831,980	14,229,962	11,799,340	26,029,302
Western Australia ... ..	14,910,810	7,125,862	7,310,679	14,436,541
Tasmania ... ..	9,036,129	4,725,981	4,463,771	9,189,752
Commonwealth ... ..	208,126,884	113,920,468	94,270,274	208,190,742

It will be seen that the actual value of the whole of the States' debts differs but slightly from the nominal amount. This is due to the fact that the mean rate of interest is nearly  $3\frac{1}{2}$  per cent. It is also noticeable that the actual values of the Victorian, New South Wales, and Western Australian loans are less than the nominal values, whilst the actual values of the Queensland, South Australian, and Tasmanian loans are greater. In each of the first series of States the mean rate of interest payable upon the loans—after attaching due weight to the currencies of the loans—is less than  $3\frac{1}{2}$  per cent., whilst in the latter it must be more. It is necessary to mention, however, that the above valuations have been made upon the assumption that interest is payable annually—not as is the case every six months.

Cost of  
periodic  
conver-  
sions.

The whole of this debt is practically in terminable stock—the average currency of these loans being probably about 35 years. The average rate of expenses in floating or converting the Victorian loans is about  $1\frac{1}{4}$  per cent., which it is presumed does not differ essentially from those of the other States. As these debts necessitate renewal during this period of 35 years, it is obvious that at the end of the period the expenses involved in the conversions of the debts of the Commonwealth would be approximately £2,600,000. Assuming an equal distribution throughout the period, the annual expense is £74,000—a rather large amount for the comparatively small population of Australia. In any scheme for the transference and consolidation of the present State debts, it might be advisable to take into consideration the conversion of the present into interminable stock in order to avoid the expenses in connection with the present system of periodic conversions.

FEDERAL, STATE, AND LOCAL REVENUE AND EXPENDITURE.

A statement of the ordinary revenue and expenditure and also of the loan expenditure of the Federal and the State Governments and of municipal and local bodies during the last five years will be found in the following table. From the totals of revenue and expenditure, the amounts granted by one body to another have been deducted:—

Federal, State, and local revenue and expenditure.

FEDERAL, STATE, AND LOCAL REVENUE AND EXPENDITURE :  
RETURN FOR FIVE YEARS.

—	1899.	1900.	1901.	1902.	1903.
<i>Revenue.</i>	£	£	£	£	£
Government—Federal	...	...	1,536,810	2,976,500	3,127,121
"    State...	7,277,395	7,344,495	6,425,269	4,987,757	4,767,168
Municipalities	1,027,926	1,036,497	1,105,262	1,201,230	1,180,453
Melbourne Harbour Trust	126,946	143,362	151,383	155,513	177,233
Melbourne and Metropolitan Board of Works	236,100	269,213	292,793	315,054	362,450
Fire Brigades Boards	16,818	18,516	19,529	20,278	21,639
Total ...	8,685,185	8,812,083	9,531,046	9,656,332	9,636,064
<i>Ordinary Expenditure.</i>					
Government—Federal	...	...	1,509,766	2,977,744	3,124,280
"    State...	6,995,157	7,176,776	6,385,950	5,388,797	4,572,509
Municipalities	976,679	1,067,038	1,151,282	1,196,422	1,099,620
Melbourne Harbour Trust	135,607	148,612	158,007	162,603	150,174
Melbourne and Metropolitan Board of Works	306,002	337,079	366,936	373,571	398,879
Fire Brigades Boards	18,253	20,124	19,429	17,887	20,455
Total ...	8,431,698	8,749,629	9,591,370	10,117,024	9,365,917
<i>Loan Expenditure.</i>					
Government	712,093	1,005,889	932,265	884,275	729,403
Municipal	58,289	61,600	254,098	135,251	132,044
Melbourne and Metropolitan Board of Works	453,356	308,785	616,676	346,884	358,387
Fire Brigades Boards	1,533	1,609	...	...	...
Total ...	1,225,271	1,377,883	1,803,039	1,366,410	1,219,834
<i>Expenditure—Grand Total.</i>	9,656,969	10,127,512	11,394,409	11,483,434	10,585,751
<i>Per Head of Population—</i>					
Revenue	£ s. d. 7 6 10	£ s. d. 7 8 2	£ s. d. 7 19 3	£ s. d. 7 19 9	£ s. d. 7 19 10
Ordinary Expenditure	7 2 6	7 7 1	8 0 3	8 7 5	7 15 5
Loan Expenditure	1 0 9	1 3 2	1 10 1	1 2 7	1 0 3

The total revenue of the Federal and State Governments, the Municipalities and Corporations, remains practically the same as in the previous year—a little over nine and a half millions. The ordinary expenditure, however, shows that a considerable reduction has been made in the twelve months, the amount being reduced by £751,107, and this has occurred entirely in the State expenditure. The loan expenditure decreased by £146,576. The revenue per head in 1902 was £7 19s. 9d., and in 1903, £7 19s. 10d. The ordinary expenditure was £8 7s. 5d. and £7 15s. 5d. in those years; and the loan expenditure was £1 2s. 7d. and £1 0s. 3d. respectively.

## MUNICIPAL STATISTICS.

## LOCAL FINANCE.

Municipal  
ties

The following is a summary of the population, number of ratepayers, estimated number of dwellings (inhabited and uninhabited), total and annual value of rateable property, and annual revenue of cities, towns, boroughs, and shires in each of five years ended 1902-3:—

## MUNICIPALITIES: RETURN FOR FIVE YEARS.

Year.	Estimated Population.	Number of Rate-payers.	Estimated Number of Dwellings.		Estimated Value of Rateable Property.		Total Revenue.
			Inhabited.	Un-inhabited.	Total.	Annual.	
<b>Cities, Towns, and Boroughs—</b>							
1898-9 .. ..	595,485	157,363	132,696	5,990	£ 66,983,137	£ 4,605,199	£ 654,858
1899-00 .. ..	605,944	153,285	133,325	4,543	67,113,600	4,670,200	657,775
1900-01 .. ..	647,397	153,783	130,215	4,250	67,302,423	4,765,632	736,240
1901-2 .. ..		157,320			77,289,493	5,223,232	809,325
1902-3 .. ..	652,607	155,262	136,907	3,341	92,099,451	5,303,546	779,950
<b>Shires—</b>							
1898-9 .. ..	567,615	159,487	117,212	4,406	101,473,386	5,528,909	533,905
1899-00 .. ..	577,600	154,662	118,588	4,840	102,798,300	5,613,300	531,102
1900-01 .. ..	551,523	159,128	111,162	7,376	106,839,331	5,771,865	544,994
1901-2 .. ..		147,671			107,812,500	5,661,805	491,209
1902-3 .. ..	557,285	150,724	115,429	3,567	111,803,468	5,880,386	499,112
<b>Total—</b>							
1898-9 .. ..	1,163,100	316,350	249,908	10,396	168,456,523	10,134,108	1,193,763
1899-00 .. ..	1,183,544	307,947	252,413	9,383	169,911,900	10,283,500	1,188,877
1900-01 .. ..	1,198,920	312,911	241,377	11,626	174,141,754	10,537,497	1,281,234
1901-2 .. ..		305,491			185,101,993	10,835,087	1,300,534
1902-3 .. ..	1,209,892	305,986	252,336	6,908	203,902,919	11,184,932	1,279,062

Population  
and dwell-  
ings in  
municipali-  
ties, 1901.

The population of the municipalities on the 31st March, 1901, was 1,198,920, and as the total population of the State was 1,201,341, there were only 2,421 persons outside municipal jurisdiction when the census was taken. Of these 2,281 were living on board of ships and vessels, and there were only 140 persons in the State who were not accounted for in any municipality on that night. The number of houses was 253,003, of which 11,626 were uninhabited.

The number of ratepayers returned for 1902-3 is 305,986, and the total capital value of rateable property £203,902,919, which is equivalent to about 18 years' purchase on the annual value, £11,188,932.

Ratepayers and rateable property in municipalities.

The ordinary revenue and expenditure and the revenue and expenditure from loans of municipalities for the financial years ended 30th September, 1902 and 1903, were as follow:—

Municipal revenue and expenditure

REVENUE AND EXPENDITURE OF MUNICIPALITIES, 1902 & 1903

Sources of Revenue.	1902.	1903.
<b>Taxation—</b>	<b>£</b>	<b>£</b>
Rates ... ..	784,810	765,910
Licences ... ..	121,317	106,948
Market and Weighbridge Dues ... ..	58,113	52,522
Government Endowment and Grants ... ..	99,304	98,609
Contributions for Streets, Footpaths, &c. ... ..	21,901	21,577
Sanitary Charges ... ..	48,332	44,718
Rents ... ..	56,494	58,081
Other Sources ... ..	110,263	130,697
<b>Total ... ..</b>	<b>1,300,534</b>	<b>1,279,062</b>
<b>Heads of Expenditure.</b>		
	<b>£</b>	<b>£</b>
Salaries, &c. ... ..	139,174	135,730
Sanitary Work, Street Cleansing, &c. ... ..	131,847	125,535
Lighting ... ..	97,414	68,665
Fire Brigades' Contributions ... ..	15,884	16,530
Public Works—		
Construction ... ..	195,487	131,508
Maintenance ... ..	340,791	330,897
Formation of Private Streets, &c. ... ..	22,197	19,307
Redemption of Loans ... ..	32,015	50,146
Interest on Loans ... ..	195,186	193,638
Charities ... ..	13,277	12,431
Other Expenditure ... ..	112,454	113,842
<b>Total ... ..</b>	<b>1,295,726</b>	<b>1,198,229</b>

As compared with 1902, the revenue of 1903 has diminished by £21,472. The items reduced are:—Rates, about £19,000; licences, £14,000; market and weighbridge dues, £6,000; Government endowments and grants, nearly £1,000; sanitary charges, £4,000. Rents have increased by about £2,000; and revenue from all other sources by nearly £20,000. The expenditure shows a reduction of £97,497. The items reduced are—Salaries, about £3,000; sanitary work and street cleaning, £6,000; lighting, £29,000; public works, construction, £64,000; maintenance, £10,000; formation of private streets, £3,000; interest on loans, £2,000; charities, £1,000. The increases in expenditure are—Contributions to fire brigades, about £1,000; redemption of loans, £18,000; and all other expenditure, about £1,000.

Proportion of municipal revenue raised from different sources

Sixty per cent. of municipal revenue was derived from rates, 8 per cent. from licenses of all kinds, 4 per cent. from market and weighbridge dues, 8 per cent. from Government endowments and grants, 2 per cent. from contributions for streets, footpaths, &c., 3 per cent. from sanitary charges, 5 per cent. from rents, and 10 per cent. from all other sources.

Salaries.

In 1903 the salaries of the municipal officers amounted to £135,730, or 10 3-5ths per cent. of the entire revenue.

Local charities.

A sum of £12,431, equivalent to about 1 per cent. of the revenue, was devoted to local charities—the greater part of this disbursement was in aid of hospitals, benevolent asylums and associations, and orphan asylums.

Assets and liabilities of municipalities.

The assets of the municipalities are shown under three heads—(1) Municipal Fund, (2) Loan Fund, (3) Property; the liabilities under two heads—(1) Municipal Fund, (2) Loan Fund.

#### MUNICIPAL ASSETS AND LIABILITIES, 1902 AND 1903.

Assets.	1902.	1903.
Municipal Fund—	£	£
Uncollected Rates ... ..	141,482	130,203
Other Assets ... ..	153,490	166,753
Loan Funds—		
Sinking Funds—		
Amount at Credit ... ..	697,019	654,281
Arrears due... ..	1,175	2,033
Unexpended Balances ... ..	282,229	223,624
Due by other Municipalities ... ..	18,835	18,366
Property—		
Halls, Buildings, Markets, &c. ... ..	2,470,460	2,449,762
Waterworks ... ..	210,367	226,220
Gasworks ... ..	61,592	60,820
Total Assets ... ..	4,036,649	3,932,062
Liabilities.		
Municipal Fund—		
Arrears due to Sinking Funds ... ..	1,175	2,033
Overdue Interest ... ..	13,044	17,616
Bank Overdrafts ... ..	148,236	107,090
Temporary Government Advances ... ..	17,604	13,310
Other Liabilities... ..	147,888	126,671
Loan Funds—		
Loans Outstanding... ..	4,254,061	4,212,051
Due on Loan Contracts ... ..	33,455	30,092
Due to other Municipalities ... ..	18,835	18,366
Total Liabilities ... ..	4,634,298	4,527,229

The total assets of municipalities in 1903 amounted to £3,932,062, and the liabilities to £4,527,229, showing a deficiency of £595,167. The aggregate of the current liabilities (Municipal Fund) was £266,720, against which there were assets amounting to £296,956. The gross liability on account of loan expenditure for works completed and in progress was £4,260,509, which, after deducting sinking funds and unexpended balances, was reduced to £3,362,205. If credit were taken for the value of municipal properties (£2,736,802) in markets, halls, buildings, gasworks, waterworks, &c., the net burden on account of loan moneys would be £625,403. As compared with 1902, there has been a reduction in the value of the assets of £104,587; and of the liabilities of £107,069. The item, £697,019, amount to credit of sinking funds in 1902, has been somewhat inflated by the improper inclusion of certain payments made for redemption of Government loans. The amount for 1903 is, however, guaranteed to be accurate by the auditors of municipal accounts.

Municipal assets and liabilities compared.

Under the "Local Government Act 1891," £450,000 was provided as an annual endowment for the municipalities. This was the first statutory provision made since 1879, when an endowment of £310,000, authorised under the "Local Government Act 1874," ceased to be payable. A subsidy, however, in lieu thereof, amounting to £310,000, was voted by Parliament annually, but this vote was gradually increased until £450,000 was reached in 1889-90 and 1890-91. This amount was reduced to £405,000 per annum from the 1st January, 1893; to £310,000 from 1st July, 1893; to £100,000 from 1st July, 1894, and to £50,000 from 1st July, 1902. The endowment is payable in equal moieties in March and September in each year. The following table shows the method of distribution for the year 1902-3:—

Endowment of municipalities.

ENDOWMENTS TO MUNICIPALITIES, 1902-3.

Municipality.	Endowment.		
	£	s.	d.
Cities (11) ... ..	...	...	...
Towns (12) ... ..	...	...	...
Boroughs (37) ... ..	899	1	9
Shires (148)—			
1st Class ... ..	...	...	...
2nd „ ... ..	18,502	5	4
3rd „ ... ..	17,704	7	0
4th „ ... ..	1,483	12	0
5th „ ... ..	7,166	14	0
6th „ ... ..	2,871	19	11
Transferred to Trust Fund for Salaries, &c., of Inspectors of Municipal Accounts ... ..	1,372	0	0
Total ... ..	£50,000	0	0

The amount of endowment paid is calculated on the amount of rates received during 1901, the following being the rates in the £1 received:—

			s.	d.
Boroughs	...	...	1	9 58
Shires—				
2nd Class	...	...	2	10 53
3rd „	...	...	3	4 29
4th „	...	...	4	9 55
5th „	...	...	5	8 35
6th „	...	...	6	7 14

Licence fees.

In addition, the municipalities received from the Government a sum of £92,245 8s. 1d., under Act No. 1111, Section 201, the equivalent for (1) fees for licences, not including new licences other than new licences issued in the place of licences which had lapsed since 1876; (2) fees for the registration of brewers and spirit merchants; (3) fines, penalties, and forfeitures incurred under "The Licensing Act 1876." The particulars of this payment are in the following return:—

## LICENCE PAYMENTS, 1902-3.

			£	s.	d.
Paid to Cities (11) ...	...	...	36,894	5	5
„ Towns (12) ...	...	...	11,668	6	9
„ Boroughs (37) ...	...	...	14,738	8	0
„ Shires (148)—					
1st Class ...	...	...		555	0 0
2nd Class ...	...	...	15,476	15	10
3rd Class ...	...	...	9,498	18	9
4th Class ...	...	...		831	15 0
5th Class ...	...	...	1,839	18	10
6th Class ...	...	...	741	19	6
Total ...	...	...	92,245	8	1
By adding the Accounts Paid on Account of 1902	£1,214	0	6		
By deducting the Unpaid Accounts of 1903	354	5	0		
			859	15	6
Equivalent to Municipalities...			93,105	3	7

Licensing Act Fund.

The following is a statement of the payments and receipts of the Licensing Act Fund for the year ended 30th June, 1903:—

LICENSING ACT FUND.						
Payments.			Receipts.			
	£	s.	d.	£	s.	d.
Expenses of Officers under Licensing Act	7,675	8	1	Balance, 30th June, 1902	19,084	16 3
Cost of taking Poll of Electors	114	15	1	Licences, less Refunds	99,786	11 7
Equivalent to Municipalities (see previous table)	93,105	3	7	Fines, less Refunds	2,189	17 0
Compensation	5,653	7	6	Sale of Confiscated Liquor	26	1 3
Balance, 30th June, 1903	14,538	11	10			
Total	121,087	6	1	Total	121,087	6 1

The item, Compensation, £5,653 7s. 6d., represents the amount of money paid to the owners of licensed houses which were closed during the year under the provisions of the Licensing Act, as the result of a local option poll.

The number of properties rated and the annual assessments thereon in cities, towns and boroughs, and shires, in 1901-2, were as follow:—

Classification of properties rated, 1901-2.

NUMBER AND ASSESSMENT OF PROPERTIES RATED. 1901-2.

Rateable Values.	Number of Properties Rated.			Assessment of Properties.		
	In Cities, Towns, and Boroughs.	In Shires.	Total.	In Cities, Towns, and Boroughs.	In Shires.	Total.
				£	£	£
Under £25 ...	138,191	119,146	257,337	} 2,713,023	} 2,426,477	} 5,139,500
£25 to £50 ...	34,848	44,225	79,073			
£50 to £75 ...	8,002	10,681	18,683	} 693,482	} 1,096,013	} 1,789,495
£75 to £100 ...	3,094	6,612	9,706			
£100 to £200	3,823	5,813	9,636	} 517,663	} 762,504	} 1,280,167
£200 to £300	1,013	1,112	2,125			
£300 to £400	435	406	841	} 1,299,114	} 1,376,811	} 2,675,925
£400 to £500	257	226	483			
£500 and upwards	627	707	1,334			
Total ...	190,290	188,928	379,218	5,223,282	5,661,805	10,885,087

Of these properties, 89 per cent. were of an annual value of under £50, 68 per cent. being less than £25. The annual assessment on properties under £50 amounted to over five millions, or 47 per cent. of the total. Although there are a greater number of properties rated in cities, towns, and boroughs, than in shires, the latter are the more valuable, as evidenced by the fact that the assessment on rural properties amounted to £5,660,000, as against £5,220,000 in urban municipalities.

Value of properties compared.

Of the 60 cities, towns, and boroughs, 12 levied rates of 1s. in the £, 5 of 1s. 3d., 2 of 1s. 4d., 13 of 1s. 6d., 13 from 1s. 8d. to 1s. 10d., 11 of 2s., 2 of 2s. 3d., 1 of 2s. 4d., and 1 of 2s. 6d. Of the 148 shires, 1 levied a rate of 6d. in the £1, 1 of 9d., 102 levied rates of 1s., 1 of 1s. 1d., 16 of 1s. 3d., 5 of 1s. 4d., 14 of 1s. 6d., 3 of 1s. 7d. to 1s. 10d., 4 of 2s., and 1 of 2s. 3d. in the £. These figures give an average rating of 1s. 7d. in the £ in cities, towns, and boroughs, and 1s. 1½d. in shires. The rating in the urban districts is thus shown to be 5½d. in the £ more than in the rural districts.

Ratings in municipalities, 1903.

## MUNICIPAL LOANS.

Municipal indebtedness.

The total indebtedness of the municipalities at the end of their financial year was £4,212,051; £275,974 due to the Government, and £3,936,077 due to the public. The total indebtedness of the shires was £639,131; £131,827 due to the Government, and £507,304 other loans. The total indebtedness of the cities was £3,572,920, of which £144,147 was due to the Government, and £3,428,773 otherwise.

## MUNICIPAL LOAN RECEIPTS AND EXPENDITURE, 1903.

	Cities, Towns, and Boroughs.	Shires.	Total.
	£	£	£
Receipts during the year ...	36,514	45,071	81,585
Balance unexpended from previous year ...	252,813	21,270	274,083
Expenditure during the year ...	83,535	48,509	132,044
Balance unexpended at the end of 1903 ...	205,792	17,832	223,624

Municipal loan expenditure, 1899 to 1903.

The municipal expenditure of loan moneys during the year 1903 amounted to £132,044, of which £83,535 was spent by cities, towns, and boroughs, and £48,509 by shires. This almost equalled the total expended in the preceding year, but was only a little more than half of that spent in 1901.

## MUNICIPAL LOAN RECEIPTS AND EXPENDITURE: RETURN FOR FIVE YEARS.

Year.	Balance on Hand from Previous Year.	Receipts.	Expenditure.
	£	£	£
1899 ...	242,551	42,361	58,289
1900 ...	226,623	93,098	61,600
1901 ...	258,121	375,683	254,098
1902 ...	379,706	29,628	135,251
1903 ...	274,083	81,585	132,044

Loans raised by municipalities, 1903.

Of the total loan receipts for the year (£81,585), £685 was received from the Government—£485 of which was lent to the Shire of Borung and £200 to Kerang; the balance (£80,900) was raised from the public by the following districts. All the loans were floated in Melbourne, except as regards the Municipalities of Ballarat, Ballarat East, and Geelong, which were negotiated locally:—

## LOANS RECEIPTS BY MUNICIPALITIES, 1903.

Loans from the Public—	Amount.
Cities, Towns, and Boroughs—	£
Ballarat ...	20,000
Ballarat East ...	8,000
Geelong ...	5,014
Northcote ...	3,200
Port Fairy ...	300
Total ...	36,514

LOANS RECEIPTS BY MUNICIPALITIES, 1903—Continued.

Loans from the Public—	Amount.
Shires—	£
Camberwell and Boroondara ...	30,000
Heidelberg ... ..	4,000
Moorabbin ... ..	4,014
Nunawading ... ..	5,100
Phillip Island and Woolamai ...	272
Towong ... ..	1,000
Total from the Public ...	44,386
Government Loans—	
Borong Shire ... ..	485
Kerang „ ... ..	200
Total Shires ... ..	45,071
Grand Total ... ..	81,585

At the end of the year 1902-3, the total amount of loan money in hand was £223,624—£205,792 to the credit of cities, towns, and boroughs, and £17,832 to the credit of shires. The following return shows the municipalities having such credits, and the amounts in each district:—

Loan  
moneys to  
the credit  
of munic-  
ipalities,  
1903.

LOANS UNEXPENDED IN MUNICIPALITIES, 1903.

CITIES, TOWNS, AND BOROUGHS—	£	CITIES, TOWNS, AND BOROUGHS	£
Ballarat ... ..	12,262	<i>continued—</i>	
„ East ... ..	7,290	Warrnambool ... ..	1,057
Brighton ... ..	1,667	„ Williamstown ... ..	1,059
Brunswick ... ..	3,579	Total Cities ... ..	205,792
Caulfield ... ..	599		
Collingwood ... ..	532	SHIRES—	
Essendon ... ..	1,315	Birchip ... ..	389
Fitzroy ... ..	3,107	Camberwell and Boroondara	987
Flemington and Kensington	1,100	Coburg ... ..	890
Footscray ... ..	16,119	Colac ... ..	178
Geelong ... ..	82	Dandenong ... ..	53
Hamilton ... ..	7	Dimboola ... ..	290
Hawthorn ... ..	1,077	Kerang ... ..	3,373
Kew ... ..	2,901	Mildura ... ..	102
Malvern ... ..	1,722	Moorabbin ... ..	2,061
Maryborough ... ..	723	Mulgrave ... ..	75
Melbourne ... ..	112,989	Numurkah ... ..	1,405
Newtown and Chilwell ...	34	Nunawading ... ..	4,101
Northcote ... ..	1,405	Omeo ... ..	1,240
North Melbourne ... ..	1,359	Phillip Island and Woolamai	1,057
Oakleigh ... ..	498	Preston ... ..	640
Port Fairy ... ..	211	Seymour ... ..	194
Port Melbourne ... ..	4,536	Towong ... ..	847
Prahran ... ..	5,667	Total Shires ... ..	17,832
Queenscliff ... ..	164	Grand Total ... ..	223,624
Rutherglen ... ..	33		
South Melbourne ... ..	14,961		
St. Kilda ... ..	7,728		
Wangaratta ... ..	9		

City of  
Melbourne  
revenue  
and expen-  
diture  
under  
various  
heads.

Of the total revenue of the City of Melbourne in 1903, about 37 per cent. was derived from rates, more than 17 per cent. from the sale of electric light, about 16 $\frac{3}{4}$  per cent. from the rental of city property—chiefly markets and shops, nearly 14 per cent. from market and weighbridge fees, 8 per cent. from licences, principally publicans, and 7 $\frac{1}{4}$  per cent. from other sources. On public works maintenance, such as roads and bridges, markets, abattoirs, &c., about 28 per cent. of the total expenditure was incurred; interest on loans and expenses, 26 per cent.; the electric light service, 15 per cent.; repayment of loans and payments to sinking funds, 11 per cent.; street cleansing, 8 per cent.; salaries, allowances, and commissions, 6 per cent.; and miscellaneous expenditure, 6 per cent.

The following is a statement of the revenue and expenditure of the City of Melbourne for the year 1903:—

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1903.

Rates—	Heads of Revenue.	£
General ... ..	...	68,249
Lighting ... ..	...	22,823
Licences—		
Publicans'—Equivalent for—From Licensing Act	...	14,455
Abattoirs—Slaughtering Fees...	...	2,909
Dairy ... ..	...	123
Noxious Trades ... ..	...	190
Drays and Hackney Carriages. £2,464 (less £302 paid to other Municipalities)	...	2,162
Lodging-houses ... ..	...	24
Places for Pastime ... ..	...	52
Fees under Dog Act ... ..	...	740
Market and Weighbridge Fees ... ..	...	34,263
Contributions for Forming Private Streets, &c. ... ..	...	286
Contributions for Flagging, Asphalted Footpaths ... ..	...	1,031
Lighting—Sale of Electric Current and Rent of Meters, &c....	...	43,249
Fines—Police Court ... ..	...	1,363
Costs allowed at Police Court ... ..	...	44
Rents—		
Abattoirs ... ..	...	5,286
Markets and Shops ... ..	...	32,680
Boat Sites and Shops ... ..	...	82
Baths ... ..	...	96
Town Hall Premises and Rooms ... ..	...	3,414
Interest on Fixed Deposits ... ..	...	5,805
Miscellaneous—		
Reimbursements in Aid—		
Abattoirs—Sale of Fertilizer ... ..	...	5,236
Lighting—Gas Repayments ... ..	...	325
„ Sale of Gas-lamps, and Sundry Receipts ... ..	...	236
Cleansing Streets—Sale of Manure ... ..	...	1,369
„ Cesspools—Sale of Night-soil ... ..	...	73
„ Extra Cleansing ... ..	...	14
Public Conveniences ... ..	...	210
Other Receipts—		
Fees under Building Act ... ..	...	507
„ Weights and Measures Act ... ..	...	251
Sundries ... ..	...	512
Total ... ..	...	248,059

CITY OF MELBOURNE: REVENUE AND EXPENDITURE, 1903—

Continued.

Heads of Expenditure.		£
Salaries, &c.—		
Administrative Staff	...	9,941
Allowance to Mayor	...	1,500
Commissions—Rate Collectors	...	1,744
Hall Porter and Housekeeper	...	200
Valuation	...	200
Citizens' Lists—Collection of	...	223
Closet Cleansing and Sanitary Works	...	1,440
Street Cleansing, &c.	...	18,720
Lighting—Gas supplied, &c.	...	845
"    Electric—Maintenance	...	34,639
Fire Brigades Board—Contribution	...	3,820
Public Works—Maintenance—		
Roads and Bridges	...	31,157
Markets	...	15,603
Weighbridges	...	1,020
Abattoirs—Slaughtering Account	...	8,662
"    Labour, &c., producing Fertilizer	...	3,351
Town Hall and City Court Property	...	125
Baths	...	64
Parks and Planting Trees in Streets	...	3,741
Public Conveniences	...	275
Repayment of Loan	...	10,000
Interest on Loans from the Government	...	240
"    "    Public	...	58,875
Payments towards Redemption of Government Loans	...	210
Sinking Funds—Loans from the Public	...	15,635
Expenses of paying Interest on Loans	...	535
Contributions to Charitable Institutions	...	1,023
Law Costs	...	238
Printing, Advertising, and Stationery	...	989
Miscellaneous—		
Rewards and Sundries	...	707
Inspection—Weights and Measures Act	...	550
"    Under Health Act	...	1,133
"    Under Dog Act	...	403
Insurance and Guarantee Premiums	...	772
Elections	...	154
Analyst and Sundries	...	288
Town Hall Organ—Organist's Fees, Tuning, &c.	...	181
Metropolitan Gas Act (Expenses)	...	797
Sundries	...	144
Total	...	230,144

Of each £100 of revenue received by the City of Ballarat in 1903, general rates amounted to £54; licences to £13; sanitary rates to £12; market and weighbridge dues to £12; rents to £3; and other receipts to £6. £38 per £100 of expenditure was on public works; £17 on interest on loans and payments to sinking funds; £13 on sanitary expenses; £8 on lighting; £7 on salaries and allowances; £3 on street cleansing; and £14 on all other items.

City of  
Ballarat  
revenue  
and expen-  
diture,  
1903.

REVENUE AND EXPENDITURE OF THE CITY OF BALLARAT FOR THE  
YEAR ENDED 30TH SEPTEMBER, 1903.

Revenue.		Amount.	Expenditure.		Amount.
Special Grants—From Govern- ment		£215	Salaries ... ..	...	£1,628
General Rates ... ..	16,321		Allowance to Mayor ... ..	...	300
Licences—From Licensing Act	3,626		Sanitary Expenses ... ..	...	3,858
Fund			Street Cleaning ... ..	...	765
" Other ... ..	324		Lighting ... ..	...	2,394
Market and Weighbridge Dues...	3,543		Fire Brigades' Board—Contri- bution ... ..	...	435
Dog Fees ... ..	273		Public Works { Construction	634	
Pound Fees ... ..	105		{ Maintenance	10,220	
Contributions for Formation of Private Streets, &c.	47		Payment towards Redemption of Government Loans	115	
Closest Cleansing and Sanitary Rates and Fees	3,700		Payment to Sinking Funds on Loans from the Public	1,190	
Rents ... ..	988		Interest—Government Loans	94	
Other Sources ... ..	1,059		" Loans from the Public	3,430	
			Bank Overdraft ... ..	196	
			Contributions to Charitable In- stitutions	330	
			Other Expenditure ... ..	3,188	
Total ... ..	30,201		Total ... ..	28,777	

Revenue  
and expen-  
diture of  
the Town  
of Ballarat  
East, 1903.

As much as 65 per cent. of the income of the Town of Ballarat East, in 1903, was derived from rates, 19 per cent. from licences, 12 per cent. from gasworks, and 4 per cent. from other sources. Twenty-eight per cent. of the expenditure was for public works construction and maintenance, 14 per cent. for street cleansing, 12 per cent. for interest on loans and payments to sinking funds, &c., 12 per cent. for salaries and allowances, 11 per cent. for sanitary expenses, 9 per cent. for lighting, and 14 per cent. for all other services.

REVENUE AND EXPENDITURE OF THE TOWN OF BALLARAT EAST  
FOR THE YEAR ENDED 30TH SEPTEMBER, 1903.

Revenue.		Amount.	Expenditure.		Amount.
Special Grants—From Govern- ment		£31	Salaries ... ..	...	£1,133
General Rates ... ..	7,911		Allowance to Mayor ... ..	...	225
Licences—From Licensing Act	2,161		Sanitary Expenses ... ..	...	1,282
Fund			Street Cleansing ... ..	...	1,640
" Other ... ..	126		Lighting ... ..	...	1,045
Market and Weighbridge Dues...	96		Fire Brigades' Board—Contribution	217	
Dog Fees ... ..	134		Public Works { Construction ...	1,059	
Pound Fees ... ..	42		{ Maintenance ...	2,141	
Contributions for Flagging, As- phalting Footpaths, &c.	7		Flagging, Asphalting Footpaths, &c.	423	
Gas Works ... ..	1,445		Payment towards Redemption of Government Loans	115	
Closest Cleansing and Sanitary Rates and Fees	5		Payment to Sinking Funds on Loans from the Public	552	
Other Sources ... ..	185		Interest—Government Loans ...	94	
			" Loans from the Public	620	
			Contributions to Charitable In- stitutions	240	
			Other Expenditure ... ..	732	
Total ... ..	12,143		Total ... ..	11,518	

In the City of Bendigo, in 1903, the following were the proportions of total revenue obtained under the different headings:—General rates, 46 per cent.; licences, 17 per cent.; sanitary rates and fees, 17 per cent.; market and weighbridge dues,  $7\frac{1}{2}$  per cent.; rents, 7 per cent., and other sources 5 per cent. The proportions of the total expenditure on various services were:—Public works construction and maintenance, 39 per cent.; sanitary expenses, 15 per cent.; interest on loans and payments to sinking funds, 11 per cent.; salaries and allowances,  $7\frac{3}{4}$  per cent.; lighting,  $7\frac{3}{4}$  per cent.; street cleansing,  $5\frac{3}{4}$  per cent.; and miscellaneous expenditure, 13 per cent.

Revenue and expenditure of City of Bendigo, 1903.

REVENUE AND EXPENDITURE OF THE CITY OF BENDIGO FOR THE YEAR ENDED THE 30TH SEPTEMBER, 1903.

Revenue.	Amount.	Expenditure.	Amount.
	£		£
Special Grants—From Government	148	Salaries ... ..	2,060
General Rates ... ..	14,270	Allowance to Mayor ... ..	300
Licenses—From Licensing Act	5,052	Sanitary Expenses ... ..	4,648
Fund		Street Cleansing ... ..	1,735
Other ... ..	290	Lighting ... ..	2,354
Market and Weighbridge Dues	2,333	Fire Brigades Board—Contribution	551
Dog Fees ... ..	319	Public Works—Construction ...	1,364
Pound Fees ... ..	13	Maintenance ... ..	10,583
Contributions for Flagging,	89	Payments to Sinking Fund on	1,000
Asphalting, &c. ... ..		Loans from the Public	
Closet Cleansing and Sanitary	5,262	Interest on Loans from the Public	2,256
Rates and Fees ... ..		Bank Overdraft ... ..	159
Rents ... ..	2,208	Contributions to Charitable Institutions	397
Other Sources ... ..	959	Other Expenditure ... ..	3,089
Total ... ..	30,943	Total ... ..	30,496

About three-fifths of the revenue of the Town of Geelong, in 1903, was derived from rates, nearly one-fifth from licences, chiefly publicans', one-ninth from rents, and the balance from miscellaneous sources. Nearly one-half of the expenditure was devoted to the maintenance of public works, more than one-fifth to the payment of interest on loans and payments to sinking funds, &c., about one-ninth to salaries and allowances, and the remainder to lighting, formation of private streets, street cleansing, and other purposes.

Revenue and expenditure of the Town of Geelong, 1903.

REVENUE AND EXPENDITURE OF THE TOWN OF GEELONG FOR  
THE YEAR ENDED 31ST AUGUST, 1903.

Revenue.	Amount. £	Expenditure.	Amount £
General Rates ... ..	8,102	Salaries ... ..	1,291
Lighting Rates ... ..	721	Allowance to Mayor ... ..	300
Government Subsidy for Parks and Gardens	280	Public Works—Maintenance ... ..	6,639
Licences—Publicans' & Grocers'	2,282	Street Cleansing, Closet and Sanitary Work	483
" Other ... ..	284	Lighting ... ..	980
Market and Weighbridge Rents and Dues	235	Interest on Loans ... ..	2,175
Kents ... ..	1,577	Repayment of Loans ... ..	500
Contributions for Private Streets, &c.	95	Payments to Sinking Funds ... ..	251
All other ... ..	281	Formation of Private Streets, &c.	596
		Fire Brigades' Board Contribution	189
		Contributions to Charitable Insti- tutions	78
		Other expenditure ... ..	397
<b>Total Revenue</b> ... ..	<b>13,857</b>	<b>Total Expenditure</b> ... ..	<b>13,879</b>

MELBOURNE HARBOR TRUST.

Melbourne  
Harbor  
Trust—  
receipts  
and expen-  
diture.

The Melbourne Harbor Trust is a corporate body established in 1876 to regulate, manage, and improve the Port of Melbourne and portions of the Yarra and Saltwater Rivers adjacent, for which purpose certain lands and properties are vested in seventeen Commissioners, two of whom are elected by the Melbourne City Council, one each by the ratepayers of the municipalities of South Melbourne, Port Melbourne, Williamstown, and Footscray, three by the owners of ships registered at Melbourne, three by merchants and traders paying wharfage rates, and five are appointed by the Governor-in-Council. The following are particulars of the receipts and expenditure during each of the last five years:—

MELBOURNE HARBOR TRUST.—ORDINARY RECEIPTS AND  
EXPENDITURE: RETURN FOR FIVE YEARS.

Net Receipts from—	1899.	1900.	1901.	1902.	1903.
	£	£	£	£	£
Wharfage Rates ... ..	110,393	127,785	136,178	140,258	164,611
Rents and Licence Fees ... ..	10,904	11,091	10,907	11,861	9,773
Other Receipts ... ..	5,649	4,486	4,298	3,394	2,849
<b>Total</b> ... ..	<b>126,946</b>	<b>143,362</b>	<b>151,383</b>	<b>155,513</b>	<b>177,233</b>
Net Expenditure on—					
Harbour Improvements and Main- tenance	19,668	24,608	28,006	32,062	27,714
Wharves, &c. — Construction and Maintenance	17,746	25,638	32,414	32,871	24,303
General Management, &c. ... ..	9,644	10,150	10,107	10,196	10,679
Interest on Loans and Expenses ... ..	88,549	88,216	87,480	87,474	87,478
<b>Total</b> ... ..	<b>135,607</b>	<b>148,612</b>	<b>158,007</b>	<b>162,603</b>	<b>150,174</b>

During the 26½ years since the Trust has been in existence, the net receipts have amounted to £3,628,743, and the expenditure to £5,588,142, or £1,959,399 in excess of the receipts, to meet which loans amounting to £2,000,000 have been raised. Of this expenditure of more than 5½ millions, £1,850,518 has been expended on harbour improvements and maintenance, including dredging, landing and depositing silt; £1,407,995 on wharves and approaches, construction and maintenance; and £533,349 on plant.

FIRE BRIGADES BOARDS.

There are two Fire Brigades Boards, viz.:—A Metropolitan Board having jurisdiction within a radius of 10 miles from the General Post Office; and a Country Board for other parts of the State. Each Board consists of nine members, 3 of whom are appointed by the Governor-in-Council, and in the case of the Metropolitan Board, 3 are elected by the municipalities and 3 by the fire offices; and in the case of the Country Board, 2 are elected by the municipalities, 2 by the fire offices, and 2 by the brigades. Particulars of receipts and expenditure during the five years ended 30th June, 1903, are as follow:—

Fire  
Brigades  
Boards—  
receipts  
and expen-  
diture.

REVENUE AND EXPENDITURE OF FIRE BRIGADES BOARDS:  
RETURN FOR FIVE YEARS

	1899.	1900.	1901.	1902.	1903.
<i>Ordinary Receipts.</i>					
Contributions—Government, Municipal, and Insurance	£ 42,607	£ 46,852	£ 48,494	£ 49,280	£ 49,002
Receipts for Services ... ..	682	815	1,344	2,062	727
Interest and Sundries ... ..	1,631	1,774	2,324	1,954	4,626
Total ... ..	44,920	49,441	52,162	53,296	54,355
<i>Ordinary Expenditure.</i>					
Salaries ... ..	18,585	19,494	22,000	22,865	23,112
Fire Expenses ... ..	2,992	3,013	2,917	3,027	2,873
Horses, Quarters, &c. ... ..	12,177	12,649	13,654	13,009	12,002
Plant—Purchase and Repairs ... ..	3,736	6,962	4,403	2,866	4,862
Interest ... ..	6,066	6,071	6,087	6,080	6,073
Sinking Fund ... ..	2,000	2,000	2,000	1,971	2,028
Miscellaneous ... ..	799	860	1,001	1,087	2,221
Total ... ..	46,355	51,049	52,062	50,905	53,171
<i>Loan Expenditure.</i>					
Sewerage Connections ... ..	1,533	1,609	...	...	...

## MELBOURNE TRAMWAYS TRUST.

Tramways

By the "Melbourne Tramway and Omnibus Company's Act 1883" (47 Vict. No. 765), passed on the 12th October, 1883, the company was authorized to construct tramways in the streets of Melbourne and suburbs, unless the twelve municipalities interested, viz., the cities of Melbourne, Prahran, Richmond, Fitzroy, Collingwood, South Melbourne, Hawthorn, and St. Kilda; the towns of North Melbourne, Brunswick, and Port Melbourne; and the borough of Kew; who had the prior right, elected to do so. All the municipalities, however, decided to exercise the powers conferred upon them, and, the necessary notice to the company having been given, a Tramways Trust was formed, as provided by the Act. This body, which consists of seven delegates from the Melbourne City Council, and one from each of the other eleven municipalities, received full power to construct tramways, and to borrow money for that purpose, secured on the municipal properties and revenues and on the tramways themselves. The Trust was required by the above-mentioned Act, as modified by the amending Acts (51 Vict. No. 952 and 56 Vict. No. 1278), to complete the tramways by the 31st December, 1893, and to grant a 32 years' lease of the tramways to the company, dating from the 1st July, 1884 (when the liability for interest commenced), and expiring on the 1st July, 1916. The company, on its part, is required to find all the rolling-stock, to keep the tramways and adjoining road, a total width of 17 feet, in complete repair; to hand back the lines in good working condition to the Trust at the expiration of the lease, and to pay to the Trust the annual interest on the moneys borrowed; also to contribute annually a certain varying percentage on the sums borrowed, so as to form a sinking fund towards the ultimate extinction of the loans. The expenses of the Trust to the 31st December, 1893, were defrayed out of the loan; after that period by the company to an amount not exceeding £1,000 per annum, and the remainder by the municipalities; and the liability on account of loans is by Act 48 Vict. No. 788 made a joint and several charge on the properties and revenues of the several municipalities. The total amount the Trust is empowered to borrow is £1,650,000, which has been raised in London by means of debentures bearing interest at 4½ per cent. The premiums received amounted to £55,794, making a total of £1,705,794. The whole of this was expended by the 31st December, 1893, when all outlay from loan moneys ceased in accordance with Act No. 1278. The sinking fund on the

2nd January, 1904, amounted to £704,000. The following particulars have been kindly furnished by Mr. T. Hamilton, secretary to the Tramways Trust:—

The total length of tramways authorized and constructed amounts to 47 miles 4 furlongs, of which 43 miles 6 furlongs are worked by cables and stationary steam-engines, and the remaining 3 miles 6 furlongs by horses.

The cable lines form one of the largest systems of this description of tramway in the world, and the method of construction adopted combined all the best features and latest improvements of lines constructed both in America and Europe.

A uniform fare of 3d. is authorized to be charged on the tramway lines, except on the section between the Spencer-street and Prince's-bridge Railway Stations, and Flinders-street, on which the fare is 1d. But the company is required to run, upon all lines open for traffic, every morning between the hours of 6 and 7, and every evening between the hours of 5.30 and 6.30 (Sundays and public holidays excepted), two or more carriages for workmen at a fare of 1½d. per journey. All fares will be, by Act No. 765, section 26, subject to revision by Parliament after the lapse of ten years from the date of the first 20 miles of tramway being opened for traffic, viz., on the 31st December, 1897.

The lengths of the several lines and the dates on which they were opened for traffic were given in previous issues of this work.

#### TRAMWAYS COMPANIES.

Besides the lines of the Melbourne Tramway and Omnibus Company, there is a cable tramway, 2¼ miles in length, between Clifton Hill and Preston; a horse tramway, 7 miles in length, between Sandringham and Cheltenham (Beaumaris); and a horse tramway, 1½ mile in length, between Brunswick and Coburg. There are two other tramway lines, one at Ballarat, and one at Bendigo. Particulars of the receipts and expenditure of all these companies are not available. All the lines are the property of, and are worked by, limited liability companies.

Other tramways.

## VITAL STATISTICS.

Law as to  
marriages  
in Victoria.

Marriages in Victoria can only be celebrated by a minister of religion whose name is registered in the office of the Government Statist, or by the Government Statist, or any duly appointed registrar of marriages. In order to guard against the celebration of marriages by undesirable persons, the present law provides that no person shall be registered as a minister of religion unless he ordinarily officiates as such in one of the officially recognized religious denominations, is supported by the recognized head of the denomination in Victoria, or, if there be no such head, then by at least two registered ministers; and satisfies the Government Statist that he is a fit and proper person to celebrate marriages. The Governor-in-Council may prohibit from celebrating marriages any minister who is proved guilty of any offence, misconduct, or impropriety unworthy of his calling; and the Government Statist may cancel the registration of any minister who ceases to officiate or otherwise loses his qualifications. Any clergyman or person officiating as such who celebrates a marriage without being duly registered, or any person who obtains registration by untruly representing himself as an officiating minister, or who personates a registrar, shall be guilty of a misdemeanour, punishable by a penalty not exceeding £500, or by imprisonment not exceeding five years, or by both; but if the omission were accidental, the penalty is reduced to a maximum of £20 on summary conviction. Marriages of Jews and Quakers are exempted from the above provisions, and are deemed legal and valid if celebrated according to their respective usages. To guard against the abuse of the system of matrimonial agencies, the Governor-in-Council is empowered, if deemed expedient, to prohibit ministers from celebrating marriages in any undesirable place or building. No marriage shall be invalid by reason of having been celebrated by an unqualified person, if either of the parties shall have believed at the time that such person was qualified, nor by reason of any formal defect or irregularity. Marriage with a deceased wife's sister has been legalized in Victoria since 1873; but there is no provision to validate a marriage of a woman with a deceased husband's brother.

The present official system of compulsory registration of births, deaths, and marriages in Victoria has been in force since 1853; and the registers—framed on the best models—are replete with all necessary information bearing on the family history of the people. The statutory duties under the Registration Acts are performed by the Government Statist, who has control over the local registrars of births and deaths, and (so far as regards their registration duties) of the officiating clergymen and lay registrars; and copies of all entries certified by him or by the assistant Government Statist, are *prima facie* evidence in the Courts of Australia of the facts to which they relate. At the head office in Melbourne there is kept for reference a complete collection of all registrations effected since 1st July, 1853, as well as certified copies or originals of all existing church records relating to earlier periods, as far back as 1837. For the registration of births and deaths, the State is divided into 634 registrars' districts, for each of which a registrar is appointed, who (if not a public servant) is paid by fees at the rate of 2s. 6d. per entry, but is not prevented from following his or her own private business; whilst the marriages are recorded by the clergyman or lay registrar who performs the ceremony. Registrations of marriages are made in triplicate, and of births and deaths in duplicate—each copy bearing the original signatures of the parties married and witnesses (in case of marriage), or of the informant (in case of a birth or death), and of the registrar. One copy is retained by the registrar or clergyman; one forwarded to the Government Statist—to be kept as a permanent record; and the third (in case of marriage only) is given to one of the parties married. The parents of a legitimate child born in Victoria, or the occupier of a house wherein a birth or death occurs, is required under a penalty of £10 to give notice (either personally or by authorized agent) to the registrar of the district within 60 days after the birth, and within 15 days after the death. (As an alternative, the notice may be given by the attending doctor or nurse). If an illegitimate child is born in any house or place of which the mother of the child is not the occupier, or if an illegitimate child, under 5 years of age, dies in, or its dead body is brought to, any house or place, the occupier must give notice to the deputy-registrar within 3 days if within any city, town, or borough, or to either the deputy-registrar or police officer in charge if elsewhere. In the case of an illegitimate birth, if the mother is the occupier the notice must be given within 3 weeks. The penalty for breach of this is imprisonment for 6 months or a penalty of £25. No fee is charged for registration, except in the case of a birth registered after 60 days, when 5s. is charged if within 12 months, and 12s. 6d. if over one year. By an Act

Registration.

Church records.

(No. 1835), passed on the 6th April, 1903, an illegitimate child, whose parents marry after the passing of the Act, may, provided there was no lawful impediment, at the time of the birth, to the marriage of the parents, be legitimized if the birth be registered for that purpose within six months after the date of the marriage. If the parents had married before the passing of the Act, the child must have been registered within 6 months after the passing of the Act. Applicants for searches or certificates of births, deaths, or marriages should, in applying to the Government Statist, furnish particulars of the date and place of the event; also the names of the parties in the case of a marriage, or the name, age (if a death), and parentage in the case of a birth or death.

#### MARRIAGES.

Marriages,  
1899-1903.

The number of marriages celebrated in Victoria during the year 1903 was 7,605, as against 8,477 in 1902, and 8,406 in 1901, and an average of 8,187 during the last five years.

Marriage  
rates.

The ordinary marriage rate is the number of marriages per 1,000 of the total population. Like the ordinary birth and death rates similarly estimated, it is only adapted to effect comparisons in old and settled communities where the age constitution of the people remains almost unchanged. It is not suitable for comparative purposes in newly settled countries, such as Australasia, especially in the earlier days. As, however, it furnishes a ready and closely approximate comparison between different years which are not widely separated, the figures are given for the last five years in Victoria:—

1899	...	...	...	...	6.86
1900	...	...	...	...	6.96
1901	...	...	...	...	6.97
1902	...	...	...	...	7.00
1903	...	...	...	...	6.29

It will be noticed that, although there was a steady increase from 1899 up to 1902, there was a sudden fall in 1903. The number of marriages celebrated in the latter year was less than in any year since 1897. Though the migration of marriageable men from Victoria accounts to some small extent for the reduction, yet the probable explanation of the decline in the marriage rate is to be found in the prevailing economic conditions.

Factors in  
marriage  
rates.

It has been shown upon more than one occasion that the frequency of marriage is not dependent upon the number of the total population, still less upon the number of marriageable women, but almost entirely upon the number of marriageable men the community contains, the tendency of whom to

marry is modified by their occupations, and upon the view they take of their future prospects. To demonstrate this, the following table has been constructed, showing the proportion of marriages to the population, to the number of single men, and to the number of single women, in each census year from 1854 to 1901:—

PROPORTION OF MARRIAGES PER 1,000 OF POPULATION AND OF SINGLE MEN AND WOMEN, 1854-1901.

Year of Census.	Exclusive of Chinese and Aborigines.						
	Enumerated Population.	Number Marriageable—		Marriages.	Proportion of Marriages per 1,000 of the—		
		Men.	Women.		Population.	Marriageable Men.	Marriageable Women.
1854 ...	234,361	70,865	15,083	3,696	15·77	52·16	245·04
1857 ...	383,668	95,427	26,317	4,465	11·64	46·79	169·66
1861 ...	513,896	106,940	37,006	4,528	8·81	42·34	122·36
1871 ...	712,263	89,921	65,386	4,715	6·62	52·43	72·11
1881 ...	849,438	99,824	119,360	5,732	6·75	57·42	48·02
1891 ...	1,130,463	163,048	173,138	9,007	7·97	55·24	52·02
1901 ...	1,193,340	154,334	211,087	8,468	7·08	54·87	40·12

It will thus be observed that, whilst the proportion of marriages to the population (marriage rate) and to the marriageable women has fluctuated considerably, the proportion to the marriageable men has been tolerably constant, the extremes being  $57\frac{1}{2}$  in 1881, and 42·1·3 in 1861, and the usual range was between the narrow limits of 52 and 55. This proportion steadily diminished from  $57\frac{1}{2}$  in 1881 to 55 in 1901, although the latter was higher than at any period prior to 1881. The proportion of marriages per 1,000 married women, on the other hand, has fallen off considerably. Even in the more settled times, after the gold rush, it fell from 72 in 1871 to a level of about 50 in 1881 and 1891, and still further to as low as 40 in 1901, owing to the generally increased proportion of marriageable women to men, which at the last period reached to as high as 137 per 100 men. In other words, the chances of a woman marrying in Victoria are now very much smaller than at any earlier period, the proportions having fallen from about 1 in every 4 of the marriageable women in 1854, 1 in 8 in 1861, to 1 in 20 in 1891, and 1 in every 25 in 1901.

To further investigate this subject, it will be interesting to ascertain the marriage rates amongst marriageable men and women at different periods of life, and, with this view, the rates have been computed for various age groups between

Fluctuations in marriage rate.

marriage rates in certain age-groups, 1881-1901.

15 and 50 at each of the last three census periods, and are shown in the following table:—

PROPORTION OF MARRIAGES PER 1,000 MARRIAGEABLE MEN AND WOMEN AT EACH AGE.

Age Group.	Men.			Women.		
	1881.	1891.	1901.	1881.	1891.	1901.
15—21 ... ..			...	24·6	23·6	18·8
21—25* ... ..	57·8	44·3	44·6	118·8	106·0	87·2
25—30 ... ..	114·2	85·9	90·5	105·7	100·5	84·7
30—35 ... ..	82·9	75·2	82·1	73·1	66·4	57·9
35—40 ... ..	56·4	51·1	62·6	53·8	46·4	37·2
40—45 ... ..	30·5	33·4	39·9	32·5	27·7	22·3
45—50 ... ..	21·8	25·9	29·8	22·1	17·8	14·3
50 upwards ... ..	10·5	9·1	9·1	4·9	4·2	2·4
15—45 ... ..	...	...	...	55·9	58·7†	49·0

Tendency amongst men to defer marriage.

In the last two periods, as compared with the first, there is every evidence of a tendency amongst men to defer marriage to a later period in life—the turning point being age group 30-35, for there has been a marked decrease in the rates below, but an increase in the rates above that age. In 1901, as compared with 1891, however, there was a considerable increase in the rate at every age period except 20-25 and over 50.

Fall in marriage rates of women at all ages.

In the case of marriageable women, there was, it will be observed, a slight fall between 1881 and 1891, but a considerable fall between 1891 and 1901 in the proportion marrying at each age group under 35; but a rapid fall from each census to the subsequent one in the proportions at ages over 35. The fall between 1891 and 1901 was almost uniformly distributed over the various age groups, and averaged about 18 per cent. In this connexion it may be noted that whilst the marriageable women between 15 and 45 increased by 25,300 during the intercensal period 1891-1901, the number of marriageable men between 20 and 50 decreased by 9,156—a decrease chiefly due to the efflux of single men to Western Australia and South Africa. Thus, there were resident in Western Australia, according to the recent census returns of that State, 17,433 adult males of Victorian birth (besides 6,909 minors) of whom 6,701 were married, and 10,732 were single.

\* In the case of men 20—25.

† The apparent anomaly of the rate for women between 15 and 45 being higher in 1891 than in 1881, whilst the rate in each age group in 1881 is higher than that in the corresponding period in 1891, is due to the changes in the age constitution of women under 45 years of age.

There has been a sensible increase in the mean ages at marriage of both brides and bridegrooms during the last 20 years, as will be seen from the following statement, which shows for certain quinquennial periods the mean ages of brides marrying under 45 years of age, and of the bridegrooms marrying such brides:—

Ages at marriage.

AGE AT MARRIAGE.

Period.	Brides under 45.	Bridegrooms of Brides under 45.
1870-4 ... ..	24.13 years.	29.93 years.
1880-4 ... ..	23.83 "	28.61 "
1890-4 ... ..	24.66 "	28.66 "
1898-1902 ... ..	25.49 "	29.75 "

In the following table are shown the marriage rates per 1,000 of the population in the Australian States and New Zealand for each of the last five years, and also the mean rates for the whole period:—

Marriage rates in Australian States and New Zealand.

MARRIAGE RATES IN THE AUSTRALIAN STATES AND NEW ZEALAND :  
RETURN FOR FIVE YEARS.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Commonwealth.	New Zealand.
1899 ..	6.86	6.95	6.78	6.45	9.92	6.72	7.03	7.28
1900 ...	6.96	7.38	6.88	6.37	10.06	7.71	7.24	7.67
1901 ...	6.97	7.68	6.61	6.43	9.66	7.71	7.29	7.81
1902 ...	7.00	7.53	6.31	6.61	9.77	7.46	7.23	8.01
1903 ...	6.29	6.88	5.72	6.21	9.33	7.53	6.67	8.27
Mean	6.81	7.28	6.46	6.41	9.75	7.43	7.09	7.81

It will be observed that, according to the average of the five years, the lowest marriage rates prevailed in South Australia and Queensland, and by far the highest in Western Australia. In Victoria the rate was somewhat below, and in New South Wales slightly above the average. For the year 1903, all the States, except Tasmania, showed a decrease in the marriage rate, varying from 10 to 5 per cent., whilst that of the Commonwealth fell nearly 8 per cent. during the year. New Zealand, however, showed an increase of 3 per cent.

Marriage rates in different States compared.

For reasons already explained, a better and more reliable index of the frequency of marriage in the different States is a comparison of the marriages with the number of marriageable male adults per 1,000, aged 21 and upwards, such as is

Marriages in proportion to marriageable males in Australian States and New Zealand

contained in the following statement for the average of the three years, 1900 to 1902:—

**MARRIAGES PER 1,000 MARRIAGEABLE MALES IN AUSTRALASIA.**

Victoria	...	...	...	56.0
New South Wales	...	...	...	58.3
Queensland	...	...	...	41.6
South Australia	...	...	...	56.8
Western Australia	...	...	...	41.9
Tasmania	...	...	...	65.7
Total Australia	...	...	...	55.7
New Zealand	...	...	...	55.1

Although the marriage rates are generally regarded as evidence of prosperity in a community, it can hardly be regarded as such in some of the Australian States, where the age and sex constitutions are not normal. Thus, in Queensland and Western Australia, the low rates amongst marriageable men cannot be said to be due to the absence of prosperity, as compared with the other States, or to greater disinclination on the part of the men to marry, but rather to the fact that the number of marriageable women to that of men is small in both those States.

Marriage rates in various countries.

The average marriage rate of Australia is about the same as in Norway, but is lower than in 11 out of the 15 European countries shown in the following table for the period, 1896-1900:—

**MARRIAGE RATES IN VARIOUS COUNTRIES.**

Hungary	...	8.4	Holland	...	7.4
German Empire	...	8.4	Denmark	...	7.4
Belgium	...	8.3	Scotland	...	7.3
England and Wales	...	8.1	Australia (1899-03)	...	7.1
Austria	...	8.0	Italy	...	7.1
Spain	...	7.7	Norway	...	6.9
Switzerland	...	7.7	Sweden	...	6.1
France	...	7.5	Ireland	...	4.9

Marriage rates in urban and rural districts.

Formerly the marriages which were celebrated in urban and rural districts were compared with the populations of those districts respectively, but as the place where a marriage was solemnized is no guide as to domicile, the method has been abandoned, and the classification according to the usual residence of the parties adopted instead. The following table gives the average annual numbers and rates per 1,000 of the population, of brides and of bridegrooms, whose usual place of residence (if in Victoria) was in Melbourne and suburbs, other

urban districts, or rural districts respectively, or was outside the State—during the three years, 1900 to 1902:—

USUAL RESIDENCE OF BRIDES AND BRIDEGROOMS, 1900-2.

Usual Residence of Bridegroom.	Usual Residence of Bride.				Total Bridegrooms.	Proportion of Bridegrooms per 1,000 of Population.
	Metropolitan.	Other Urban.	Rural.	Outside Victoria.		
In Victoria—						
Metropolitan Districts	3,274	120	191	34	3,619	7·2
Other Urban    "	105	1,167	212	11	1,495	7·2
Rural           "	288	261	2,318	22	2,889	5·8
Outside Victoria	166	52	82	94	394	...
Total Brides	3,833	1,600	2,803	161	8,397	6·99
Proportion of Brides per 1,000 of Population	7·7	7·7	5·6	...	6·99	...

It will first be noticed that nearly 4½ per cent. of the bridegrooms, and nearly 2 per cent. of the brides resided outside the State. Excluding non-residents, the figures show that the marriage rate—for both males and females—was the same amongst residents of the metropolitan as amongst those of the other urban districts, whilst in both cases it was considerably higher than amongst residents of the rural districts.

Lower Marriage rate in rural than urban districts.

The following table shows the marriages per 1,000 of the population, males and females, in the metropolitan, urban, and rural districts for the period 1900-2 and for the year 1903, also the decline per cent. during 1903:—

Rates in districts in 1903 and previous years.

PROPORTION OF MARRIAGES TO POPULATION IN DISTRICTS, 1900-2 AND 1903.

Period.	Number of Marriages per 1,000 of Population in		
	Metropolitan Districts.	Urban Districts.	Rural Districts.
Males { 1900-2 ...	7·2	7·2	5·8
{ 1903 ...	6·5	6·4	5·3
Decrease per cent.—Males...	9·7	11·1	8·6
Females { 1900-2 ...	7·7	7·7	5·6
{ 1903 ...	7·1	6·4	5·1
Decrease per cent.—Females	7·8	16·9	8·9
"    "    Both Sexes	8·7	14·0	8·7

During 1903 the rates for the urban districts were most affected, the decrease in the case of males being 11 per cent., and in the case of females 17 per cent., below the rates of the period 1900-2. In the metropolitan district the decrease was 10 and 8 per cent. respectively, and in the rural districts about 9 per cent. for both sexes.

Causes of  
lower  
marriage  
rate in  
rural  
districts

To what extent the lower rates in the rural districts are due to variations in sex, age, and conjugal condition, is a problem which may be solved by an examination of the recent census returns. The first striking fact disclosed is the great preponderance of females over males in both urban districts, whilst the reverse was the case in the rural districts—there being over 111½ females to every 100 males in the former, as compared with only 86½ females to every 100 males in the latter. Secondly, there was, when compared with the total population, a larger proportion of adult males, but a much smaller proportion of adult females, in the rural than in the urban districts at each of the three age groups, 15 to 21, 21 to 45, and 45 and over.

The tendency which undoubtedly existed in former years for young men starting life to leave their homes in the country and gravitate to the towns, where life is considered more attractive, and higher wages and easier employment usually prevailed, has, owing to economic causes, been, at least for a time, reversed; although it still continues in the case of women, who can always readily find remunerative employment in the towns. Then again, the census returns show that there is a much larger proportion of marriageable men, but a much smaller proportion of marriageable women, in the country than in either of the two urban districts—the percentage of marriageable men (aged 21 and upwards) in the total population being 14·4 in the rural, as against 11·1 in the metropolitan and 10·3 in the other urban districts; and that of marriageable women (aged 15 to 45) 11·9, as against 15·2 and 16·0 respectively. To arrive at definite results in regard to the marriage rate, it will, therefore, be necessary to compare, according to the plan already adopted, the marriages, with the marriageable population of each sex in the three districts. Such a comparison shows that the marriage rate of men is far less in the country than in the towns, but that an eligible woman in the country has—under general conditions—a better chance of marriage than one residing in the metropolis, or in the other urban districts; as, out of every 100 eligible men in the rural districts, 4 marry annually, as against nearly 7 in every 100 in the urban districts; whereas of eligible women more than one-twentieth in the rural, but less than one-twentieth in the urban districts,

marry within twelve months. The following are the proportions of marriages per 1,000 marriageable persons, viz., men aged 21 or upwards, or women aged 15 to 45, in each district according to the average of the three years, 1900 to 1902:—

PROPORTIONS OF MARRIAGES PER 1,000 MARRIAGEABLE PERSONS IN METROPOLITAN, URBAN, AND RURAL DISTRICTS.

District.	Men.	Women.
Metropolitan ... ..	66·9	48·5
Other Urban ... ..	69·1	46·7
Rural ... ..	38·9	51·5

These results confirm those obtained when comparing the marriages per 1,000 marriageable men in the different States, when it was shown that where there was an excess of marriageable women, such rate was high, but where the proportion of marriageable women to marriageable men was abnormally low, such rate is low, but the rate for women is high.

During the twenty years, 1881 to 1900, of the 153,399 marriages celebrated in Victoria, 26·73 per cent. were celebrated in the Autumn quarter, 25·97 per cent. in the Spring, 24·00 in the Summer, and 23·30 in the Winter. In the years 1901 and 1902, the percentages were 27·58 in the Autumn, 25·15 in the Summer, 24·57 in the Spring, and 22·70 in the Winter quarter. It would thus appear that marriages are most numerous in the Autumn, and least in the Winter quarters.

The following statement shows the percentages of persons in each conjugal condition, who married at the periods specified:—

CONJUGAL CONDITIONS OF PERSONS MARRYING, 1871-1903.

Conjugal Conditions.	1871-80.	1881-90.	1891-1900.	1901-02.	1903.
Bachelors and Spinsters	80·59	85·84	87·22	87·35	88·30
Bachelors and Widows	7·10	4·72	4·23	3·95	3·60
Widowers and Spinsters	7·75	6·17	6·07	6·22	5·85
Widowers and Widows	4·56	3·27	2·48	2·48	2·25

That these percentages are now approaching somewhat those of a settled community, might be inferred from the slight alteration during the last ten years. This is corroborated by the similar percentages for England and Wales during the year 1900, which were 87·30 for marriages contracted between

bachelors and spinsters, 3·27 between bachelors and widows, 5·89 between widowers and spinsters, and 3·54 between widowers and widows.

Divorced persons re-marrying, 1899-1903.

The number of divorced persons remarrying has shown a steady increase in each year since 1899, except during 1903. A larger number of divorced women remarry than divorced men; the ratio for the last five years being about 11 of the former to every 8 of the latter. The following are the numbers of divorced persons remarrying for the last five years:—

DIVORCED PERSONS RE-MARRYING: RETURN FOR FIVE YEARS.

Year.	Males.	Females.	Total.
1899 ... ..	25	46	71
1900 ... ..	40	45	85
1901 ... ..	41	45	86
1902 ... ..	34	59	93
1903 ... ..	33	37	70

The reduction in 1903 accords with the decline in the total marriages of that year.

Marriages of minors.

In all civilized countries minors are not permitted to marry without the consent of their parents or guardians. The following table shows the numbers of males and females who marry under 21 to every 100 marriages, for the periods, 1881-90, 1891-5, 1898-1902, and 1903, in Victoria, and for the period 1897-1901 in England and Wales:—

MARRIAGES OF PERSONS UNDER 21 YEARS IN VICTORIA AND ENGLAND AND WALES.

	Number under 21 in every 100 Marriages in Victoria.				Number under 21 in every 100 Marriages in England and Wales.
	1903.	1898-1902.	1891-5.	1881-90.	1897-1901.
Bridegroom ... ..	2·57	1·95	1·80	2·26	5·06
Bride ... ..	15·68	15·44	17·13	21·00	16·52
Mean ... ..	9·12	8·74	9·51	11·63	10·79

Marriages by principal denominations.

During the five years, 1899 to 1903, an annual average of 8,187 marriages was registered, of which only 159, or a little under 2 per cent., were celebrated by lay registrars. This proportion was as high as 7 in the ten years, 1881-90, but suddenly dropped from 6·6 to 3·7 in 1894, and has since declined to 1·6 in 1903, probably owing to the competition of matrimonial

agencies, which sprang up about 1894. Of the other marriages, 1,661 were solemnized according to the rites of the Church of England, 1,289 of the Presbyterians, 1,704 of the Methodists, 412 of the Baptists, 289 of the Independents, 1,367 of "other sects"—chiefly Protestants—1,280 of the Roman Catholic Church, and 26 according to those of the Jews.

The number of marriages solemnized at matrimonial or advertising agencies gradually rose from 1,409 in 1898 to 1,701 in 1900, and fell to 1,188 in 1902, but increased again to 1,353 in 1903. About 20 per cent. of the total marriages were performed in such agencies in 1900, and 18 per cent. in 1903. This accounts for the unduly large proportion of marriages celebrated by "other sects," whose clergymen acted for such agencies.

Marriages at matrimonial or advertising agencies.

BIRTHS.

The number of births registered in Victoria during the year 1903 was 29,569—15,115 males and 14,454 females. This was 892 below the number recorded for the preceding year, and 4,060 fewer than the average of the ten years ended 1900. The figures for each year since 1890 were:—

Number of Births, 1903.

NUMBER OF BIRTHS IN VICTORIA, 1891-1903.

1891	... 38,505	1896	... 32,178	1900	... 30,779
1892	... 37,831	1897	... 31,310	1901	... 31,008
1893	... 36,552	1898	... 30,172	1902	... 30,461
1894	... 34,258	1899	... 31,008	1903	... 29,569
1895	... 33,706				

During the twenty years ended with 1883, the number of births remained almost stationary; but in 1884 a marked increase took place, which continued during the subsequent seven years; the number in 1891 being the highest. Since 1891, however, a rapid falling off has taken place down to the period embraced in the last five years, when the number has fluctuated at a lower level than that which had prevailed at any other period since 1886. The number of births in 1903 was the lowest since 1884.

In connection with this decline in the number of births since 1891, it must be borne in mind that during the whole of the intervening period there has been an extensive emigration from Victoria—the excess of departures over arrivals amounting to 143,542 persons—and as these emigrants were for the most part adults of the reproductive period of life, the diminution in the number of births shown in the last table can be readily understood.

The following table shows the birth rates in Victoria from 1860 to 1903:—

Birth rates, 1860 to 1903.

## BIRTH RATES IN VICTORIA, 1860-1903.

Year.	Birth Rate.	Year.	Birth Rate.	Year.	Birth Rate.
1860 ...	42·81	1891 ...	33·57	1898 ...	25·51
1865 ...	42·40	1892 ...	32·51	1899 ...	26·14
1870 ...	38·07	1893 ...	31·18	1900 ...	25·79
1875 ...	33·94	1894 ...	29·05	1901 ...	25·78
1880 ...	30·75	1895 ...	28·46	1902 ...	25·15
1885 ...	31·33	1896 ...	27·19	1903 ...	24·46
1890 ...	33·60	1897 ...	26·49		

The above rates, based upon the number of births to every 1,000 of the population, are, like marriage rates, calculated on a similar basis, apt to mislead, unless the different constituents or elements of the population bear a normal proportion to one another.

Ordinary birth rate misleading in new countries.

The method is, at all events in young communities, absolutely unreliable and misleading. In the earlier years when, owing to immigration, the population consisted for the most part of men and women at the reproductive period of life, the birth rate is obviously high. As time proceeds, however, notwithstanding that immigration of reproductive adults may be maintained, the proportion of such to the total population must continuously diminish, and with it, of necessity, this birth rate. The decline in Victoria in the latter years is accentuated on account, not only of the cessation of immigration, but on the absolute emigration of adults. Under these circumstances, the figures in the table do not show the true measure of the fall in the birth rate.

Proportion of births to population and married women.

A more correct birth rate is the ratio of the number of legitimate births to that of married women under 45, and the following table shows the birth rate computed in the ordinary manner, also the proportion of legitimate births per 1,000 of such women during the last four census years:—

LEGITIMATE BIRTHS PER 1,000 OF THE POPULATION AND OF MARRIED WOMEN UNDER 45 YEARS OF AGE.

Year.	Enumerated Population.	Married Women under 45 years of Age.	Legitimate Births.	Proportion of Legitimate Births.	
				Per 1,000 of the Population.	Per 1,000 Married Women under 45 years of Age.
1871	731,528	88,561	26,805	36·64	302·67
1881	862,346	84,831	25,675	29·77	302·66
1891	1,140,405	120,700	35,853	31·44	297·04
1901	1,201,341	127,858	29,279	24·37	229·00

It will be observed that, although the proportion of legitimate births per 1,000 of the population fluctuated considerably during the four census periods, the proportions per 1,000 of married women remained fairly uniform during the first three census years, but showed a remarkable decline in 1901 from 297 to 229, being equivalent to nearly 23 per cent. A noticeable instance of the unreliability of the ordinary birth rate in a new country such as this, appears in the above table on comparing 1881 with 1891, for whereas the birth rate per 1,000 of the population was considerably higher (by nearly  $1\frac{1}{2}$  per 1,000) in the later than in the earlier year, yet the proportion of births per 1,000 married women was actually lower. The fluctuations in the ordinary birth rate from 1871 to 1891 are, therefore, found to have been mainly due to varying proportions of married women in the community at the fruitful period of life. The exceptional fall since 1901, however, cannot be so explained, as other factors must be involved which require further investigation, and which will be dealt with in the following paragraphs.

An analysis of the minor age groups, of which the whole age group, 15 to 45, is composed, will disclose the fact that there has been a considerable falling off in 1901, as compared with previous census periods, in the proportion of married women at the younger, and more fertile ages, but a counterbalancing increase in that at the higher ages—a result chiefly brought about by a decrease in the proportion of young men at marriageable ages, through emigration, and the consequent decline of the female marriage rates at the lower age groups. Thus, the number of married women under 30 years of age fell from 53,778 in 1891 to 39,230 in 1901, or by 27 per cent., whereas the number over 35 but under 45 increased during the same period from 37,460 to 57,161, or by  $52\frac{1}{2}$  per cent. Relatively to the whole number at child-bearing ages, the married women under 30 years of age fell from  $44\frac{1}{2}$  per cent. in 1891 to  $30\frac{1}{2}$  in 1901; whilst those at the higher ages, between 35 and 45, rose from 31 to  $44\frac{1}{2}$  per cent. This will be seen in the following statement:—

Percentage of married women in quinquennial groups under 45 years of age

PERCENTAGE OF MARRIED WOMEN IN AGE GROUPS UNDER 45 YEARS AT FOUR LAST CENSUS YEARS.

Census Year.	Percentage of Married Women Under 45 Years of Age.					
	15—20.	20—25.	25—30.	30—35.	35—40.	40—45.
1871	2·03	13·04	21·14	23·07	23·32	17·40
1881	1·73	15·95	20·46	20·60	20·97	20·29
1891	1·35	15·69	27·52	24·41	17·21	13·82
1901	·81	9·90	19·83	24·96	24·92	19·58

Rates of  
legitimate  
natality at  
various  
ages in  
Sweden

To estimate the extent to which these changes in age distribution between the two last periods would influence the birth rate, it is necessary to ascertain the rates of natality for married women at different ages. Up to the present, the available information relating to Victoria on which such rates might be computed, has not yet been tabulated in respect to all married women, although it was done for one year in respect to newly married women.\* Such rates were, however, published in a previous issue of this work† for several European countries and towns, from which it is proposed to select the rates for Sweden—which it has been decided to adopt as a standard for measuring the extent of the decline in the productiveness of married women in Victoria during the last ten years, owing to changes in their age constitution. The following were the rates of natality in Sweden in 1891, at each quinquennial age group under 45:—

Age of Wives.	Births per 100 Wives.
15—20 ... ..	51·8
20—25 ... ..	45·1
25—30 ... ..	37·5
30—35 ... ..	31·2
35—40 ... ..	25·0
40—45 ... ..	14·2

Applying these proportions to the numbers of married women at similar age groups in Victoria in 1891 and 1901, it is found that the relative fertility of such women diminished by 9 per cent. in the interval, owing to their increased average age alone. This will, however, account for little more than a third of the fall since 1891 in the rate actually experienced. It is also found that in 1891 the rate in Victoria was only  $5\frac{1}{2}$  per cent. below that of Sweden under similar age conditions, whereas in 1901 the former was nearly 22 per cent. below the latter. The following are the results:—

Year.	Births per 1,000 Married Women 15 to 45.		Percentage of Victorian rate below Swedish.
	Actual.	Applying Swedish rates to Victoria.	
1891 ... ..	302·1	319·8	5·5
1901 ... ..	227·9	291·2	21·7
Decrease ... ..	74·2	28·6	...
„ per cent.	24·6	8·9	...

\* For particulars, see "Victorian Year-Book," 1895-8, page 663, et seq.  
† Ibid, page 666.

Prior to 1891, immigration, voluntary and assisted, had practically ceased, and as the bulk of the immigrants belonged to the latter class, they were physically a selected class under the immigration laws, and amongst whom a high birth rate was to be expected. This cessation was probably chiefly responsible for the decline in 1891, and for the larger decline in 1901, when the more prolific women (as a class) were approaching, or had actually passed, the reproductive limit, and the women as a whole were reaching the conditions of a more settled population, with its due proportion of frail and infirm. In brief, the average physique of women now is not equal to that of the earlier years—owing entirely to natural causes, the average in the earlier period being that of a specially selected class, whilst the average of the present is that of nearly a normal population. As further contributing towards the decline from 1891 to 1901, it is pointed out that the conditions obtaining in 1891 were entirely different from those of 1901, the former being a year in a prosperous period, and the latter representing the sixth year of an unprecedented drought, both as regards duration and intensity. Doubtless under these extreme circumstances, prudence was also a factor bringing about the results shown in 1901, and this may be considered a natural, and not an artificial cause, and a condition which can only be regarded as temporary, and which will doubtless pass away with returning prosperity.

Cessation of immigration chief factor in decline of birth rate

The following table gives the birth rates, calculated in the ordinary way, per thousand of the population in the Australian States and New Zealand for 1891, and for each of the last five years:—

Birth rates in Australian States and New Zealand.

BIRTH RATES IN THE AUSTRALIAN STATES AND NEW ZEALAND: RETURN FOR 1891 AND THE LAST FIVE YEARS.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania	Australia	New Zealand.
1891 ...	33·57	34·50	36·35	33·92	34·85	33·37	34·23	29·01
1899 ...	26·14	27·34	27·31	26·64	30·70	26·84	27·27	25·12
1900 ...	25·79	27·43	30·19	25·55	30·80	28·16	27·31	25·60
1901 ...	25·78	27·60	28·28	25·09	30·32	28·40	27·05	26·34
1902 ...	25·15	27·17	27·68	24·60	30·09	28·92	26·63	25·89
1903 ...	24·46	25·35	24·62	23·24	30·27	28·47	25·21	26·61
Mean of 5 Years	25·46	26·98	27·62	25·02	30·44	28·16	26·69	25·91

Decline in  
the number  
of legiti-  
mate  
births.

According to the average of the last five years, the highest birth rate prevailed in Western Australia and the lowest in South Australia, the latter being but slightly less than those of Victoria and New Zealand. The comparison of these rates is not a reliable one, but it is useful for certain purposes. As already explained in the case of Victoria, it cannot be relied on as an index of the productiveness of married women, which can be more closely gauged by a comparison of the legitimate births with the number of married women at reproductive ages. Such a comparison is effected in the subjoined return, which shows the results for each Australian State and for New Zealand at the two last census years:—

PROPORTION OF LEGITIMATE BIRTHS PER 1,000 MARRIED WOMEN  
UNDER 45 YEARS OF AGE.

State.	Proportion of Legitimate Births per 1,000 Married Women, aged 15 to 45.		Decrease per cent.
	1891.	1901.	
Victoria ... ..	302·1	227·9	24·6
New South Wales ... ..	298·9	235·6	21·2
Queensland ... ..	315·0	251·0	20·3
South Australia ... ..	311·1	235·0	24·5
Western Australia ... ..	352·8	244·0	31·1
Tasmania ... ..	315·9	254·6	19·4
New Zealand ... ..	279·1	246·1	11·8

It will be seen from these figures that between 1891 and 1901 there was a pronounced decline in the percentage of legitimate births to married women under 45 years of age in the different States, varying from 31 per cent. in Western Australia, and 24 in Victoria and South Australia, to about 20 in Queensland and Tasmania, and to nearly 12 per cent. in New Zealand. The remarks already made regarding changes in age constitution and physique when dealing with the decline in Victoria are equally applicable to other States, except Western Australia, where, although immigrants are still received from the other States, yet they do not belong to the selected classes of former years.

Birth  
rates in  
European  
countries

The following is a statement of the birth rates in the principal European countries for the year 1901, also the average birth rates for the 25 years, 1876-1900, arranged in order according to the rates in 1901 (the latest available):—

## BIRTH RATES IN EUROPEAN COUNTRIES.

Country.	Births per 1,000 of Population.		Decline per cent.
	1901.	1876-1900.	
Hungary ... ..	37·8	42·9	12
Austria ... ..	36·9	37·8	2
Prussia ... ..	36·2	37·7	4
German Empire ... ..	35·7	37·4	4½
Spain ... ..	34·7	35·9	3
Italy ... ..	32·6	36·6	11
Holland ... ..	32·3	34·2	6
Denmark ... ..	29·9	31·3	4½
Norway ... ..	29·8	30·7	3
Scotland ... ..	29·5	32·2	8½
Belgium ... ..	29·4	30·1	2
Switzerland ... ..	29·1	28·9	1 (increase)
England and Wales ... ..	28·5	32·3	12
Sweden ... ..	26·8	28·7	7
Ireland ... ..	22·7	23·8	5
France ... ..	22·0	23·7	7

It will be seen that there was a decline in the birth rates for 1901 as compared with the averages of the 25 year period in all the countries named with the exception of Switzerland. The decline was relatively greatest (*viz.*, 12 per cent.) in the case of England and Wales, and of Hungary (where the birth rate is still the highest in Europe, with the exception of Russia), and was also very marked in Italy, with a fall of 11 per cent., in Scotland (8½ per cent.), Sweden (7), France (7), Holland (6), and Ireland (5), whilst the fall was less than 5 per cent. in all the other countries shown. The average rate in the Commonwealth of Australia for the past five years was lower than the rate for 1901 in any of the European countries except Sweden, Ireland, and France; but, as already explained, there are exceptional reasons why the rate in Australia is so abnormally low. By a comparison of the birth and marriage rates in European countries, it is found that a high birth rate is generally concurrent with a high marriage rate and vice versa. A notable exception to this is France, in which a high marriage rate is co-existent with a lower birth rate than in any other European country.

The following table shows the number of births per 1,000 of the population in the metropolitan, the other urban, and the rural districts, for 1875 and each subsequent fifth year, and the averages of the years 1901-3:—

Birth rates  
in town and  
country.

BIRTH RATES IN METROPOLITAN, OTHER URBAN, AND RURAL DISTRICTS.

Year.	Number per 1,000 of the Population.			
	Metropolitan District.	Other Urban Districts.	Rural Districts.	Victoria.
1875 ... ..	33·63	38·63	31·54	33·94
1880 ... ..	31·19	34·21	28·72	30·75
1885 ... ..	34·94	31·87	28·12	31·33
1890 ... ..	37·71	34·43	28·93	33·60
1895 ... ..	29·46	34·03	25·49	28·46
1900 ... ..	24·54	32·29	24·26	25·79
1901-03 ... ..	24·54	31·18	23·27	25·13

It will be noticed that in the last three years, as compared with 1890, the birth rate in the metropolitan district fell off by nearly 35 per cent., in the rural districts by 19 per cent., and in the other urban districts by only 9 per cent.

Illegitimate births and rates.

The number of illegitimate births registered in Victoria during the year 1903 was 1,695, which gives a proportion of 5·73 to every 100 births registered, as compared with 5·50 in 1902, which was identical with the average of the five years ended with 1902. This proportion has been fairly constant during the last twelve years, when it was decidedly higher than at any earlier period within the last 30 years. The proportion in Victoria was much lower than in Queensland and New South Wales, and slightly lower than in Tasmania, but higher than in any other of the Australian States or New Zealand; it was also lower than in Scotland, but much higher than in the other portions of the United Kingdom; it was also lower than in 13 out of 18 countries on the continent of Europe, respecting which particulars are available, in six of which the rates run as high as from 10 to 15 per cent.\* The following are the proportions of illegitimate births to every 100 children born in the Australian States and New Zealand, for the five years ended with 1902, and in the United Kingdom for the ten years, 1891-00:—

ILLEGITIMATE BIRTH RATES.

<i>Australasia—</i>		<i>Australasia—</i>	
Victoria ... ..	5·6	South Australia ... ..	4·0
New South Wales ... ..	6·9		
Queensland ... ..	6·0	<i>United Kingdom—</i>	
Tasmania ... ..	5·7	Scotland ... ..	7·2
Western Australia ... ..	4·5	England ... ..	4·2
New Zealand ... ..	4·4	Ireland ... ..	2·6

\* For particulars, see edition of this work for 1895-8, page 654.

It will readily be supposed that a larger proportion of illegitimacy prevails in Melbourne and suburbs than in any other district of Victoria, and that the proportion in country districts is the smallest of all. In 1902, in the metropolitan district, about 1 birth in 12; in the other urban districts, about 1 in 18; and in the rural districts, only 1 birth in 44 was registered as illegitimate. During the five years, 1899-1903, the averages were 1 in 12, 1 in 19, and 1 in 39 respectively. Of 32 foreign cities, respecting which the information was given in a previous issue of this work, each is burdened with a larger amount of illegitimacy than that prevailing in Melbourne.

Illegitimacy  
in town and  
country.

Although the proportion of illegitimate births to the total births, as already stated, has varied so little for several years past, yet the proportion of such births to the number of unmarried women and widows, between the ages of 15 and 45, shows the same remarkable decline between 1891 and 1901, amounting to 29 per cent., as has already been observed in the proportion of legitimate births to married women at similar ages. With the exception of altered age distribution, which in this instance is estimated to account for less than 1¼ per cent. of the fall, the many causes, which have contributed so largely to the decline in the legitimate birth rate, have no doubt operated—but in a major degree—to bring about a reduction in the illegitimate birth rate per 1,000 single women, which will be seen on comparing the rate for 1901 with that of the previous census, 1891, as given in the subjoined statement:—

Fall in ille-  
gitimate  
birth rate.

ILLEGITIMATE BIRTHS PER 1,000 SINGLE WOMEN.

Period.	Single Women Aged 15 to 45.	Illegitimate Births.	Illegitimate Births Per 1,000 Single Women.
1891 ... ..	142,443	2,064	14.49
1901 ... ..	167,760	1,729	10.31

CORRELATION BETWEEN BIRTH RATE AND INFANTILE MORTALITY.

In its incidence upon the birth rate, infantile mortality appears to have been almost entirely overlooked, notwithstanding that it occupies in old and populous communities the position of perhaps the most prominent determinant of the birth rate. A cursory glance at the next table, which shows the ordinary birth rate and the infantile mortality (that is, the percentage of infants dying under one year), is *prima facie* evidence of the intimate connection existing between the two events:—

## BIRTH AND INFANTILE DEATH RATES IN VARIOUS COUNTRIES.

Country.	Birth Rate per 1,000 of the Population.	Deaths under 1 year per 100 Births.
South Australia ... ..	25·5	10·9
Victoria ... ..	25·7	11·0
New Zealand ... ..	25·7	8·1
Sweden ... ..	26·9	10·0
Commonwealth of Australia ... ..	27·1	11·0
New South Wales ... ..	27·4	11·1
Tasmania ... ..	28·1	9·6
Switzerland ... ..	28·4	19·0
Queensland ... ..	28·5	10·4
Great Britain... ..	28·7	15·0
Belgium ... ..	28·9	17·0
Japan ... ..	29·8	15·2
Denmark ... ..	30·0	14·0
Western Australia ... ..	30·6	14·0
Italy ... ..	33·9	19·0
Holland ... ..	32·1	20·0
Prussia ... ..	36·5	21·0
Austria ... ..	37·2	25·0
Hungary ... ..	38·9	25·6
Saxony ... ..	39·9	28·3

France and Ireland have been intentionally omitted from this table—the former because the low birth rate is due to the practice of well-known restrictive measures, the latter to the excessive withdrawal of reproductive adults by emigration. Russia is also omitted in consequence of want of reliable figures, but it is generally understood that both the birth rate and infantile mortality are the highest in the civilized world.

This association of high birth rate and high infantile mortality, and low birth rate and low infantile mortality, cannot be regarded as fortuitous, and may readily be submitted to mathematical investigation. Thus, to put the matter very briefly, if depending upon chance alone, the probability that the highest birth rate would become associated with the highest infantile mortality in the twenty countries named in the table is  $\frac{1}{20}$ ; that the first and second in the one series should become so associated with the first and second in the other, and in that order, the probability becomes  $\frac{1}{20} \times \frac{1}{19} = \frac{1}{380}$ , or 379 chances against 1. The probability of the third association is  $\frac{1}{20} \times \frac{1}{19} \times \frac{1}{18} = \frac{1}{6840}$ , or 6,839 chances to 1. It is therefore, impossible to doubt the correlation which exists between the two series of events.

The results shown in the table are only those which could reasonably be expected after a scientific investigation of the subject, for it is obvious that the death of an infant under 1 year (and according to the experiences of Victoria, New South Wales, and England, about one-half of those who die under 1 year, die within three months of birth), if it does not

facilitate, certainly does not present any obstacle to conception of another child, though on the other hand the nurture of a child is generally an insuperable obstacle.

In Sweden, as will be seen from the last table, the lowest birth rate in Europe is to be found, and also in accordance with the theory just propounded, the lowest infantile mortality.

Hugh R. Jones, M.A., M.D., B.Sc., in a paper contributed to the Journal of the Royal Statistical Society for March, 1894, writes—"If we examine the statistics of infant mortality in the different European States, the close dependence of feeding and mortality on each other is very clearly shown. The lowest mortality (10 to 13 per cent.) is in Sweden and Norway, where almost every child is nursed by its own mother. In Wurtemberg, on the other hand, only 33 per cent. of infants are brought up on the breast. The mortality of the breast-fed children was 13·5 per cent., while that of the artificially-fed rose to 42·7 per cent. In Lower Bavaria, the infant mortality reached the extraordinary high proportion of 50 per cent. There, maternal nursing has become the exception . . . It is therefore obvious that infant feeding exercises an enormous influence on infant mortality." No one who has read Dr. Jones' paper would dispute this deduction, and hence it would appear that the birth rate which depends upon the infantile mortality, is therefore primarily dependent upon infant feeding. This quotation also corroborates the opinion that the nurture of a child is opposed to conception, and this doubtless is responsible for the low birth rate of Sweden. On the other hand, the high birth rates of the German States are probably due to the large proportion of infants who are artificially fed, and consequent high infantile mortality.

It has been computed\* that the numbers of survivors at the age of five out of every 1,000 children born are for various countries as follows:—

#### CHILDREN PER 1,000 SURVIVING THEIR FIFTH YEAR.

Countries.	Survivors.	Countries.	Survivors.
New Zealand	889	Belgium	756
New South Wales	850	Denmark	755
Victoria	844	France	751
Norway	838	Switzerland	748
Ireland	837	Italy	632
Sweden†	783	Austria	614
Scotland	780	Hungary	598
England and Wales	762	Spain	571

\* The European figures have been taken from Mulhall, and those of New Zealand, New South Wales, and Victoria, computed in the Statist's Office, Melbourne.  
 According to a recent Life Table for Sweden, computed from the census in 1900, it has been found that of 1,000 births 839 live to attain the age of 5 years.

So great indeed is the mortality per 1,000 births in the high birth rate countries, that the ultimate gain to the population of these countries at the expiration of five years is, in some cases, below that of the low birth rate countries, and it is highly probable that, could the mortality have been traced beyond that period, it would be found that the supremacy rests with the low birth rate countries. The following statement shows the birth rates per 1,000 of the population, and the number surviving their fifth year similarly estimated:—

## BIRTH RATES AND SURVIVORS.

Country.	Birth Rate.	Surviving their Fifth Year.
Hungary ... ..	39·4	23·6
Austria ... ..	37·2	22·8
Prussia ... ..	36·5	25·0
Spain ... ..	34·8	19·9
Italy ... ..	33·9	21·4
Holland ... ..	32·1	25·6
Norway ... ..	30·3	25·4
Denmark ... ..	30·0	22·7
England ... ..	29·2	22·2
Belgium ... ..	28·9	21·9
Switzerland ... ..	28·4	21·2
New South Wales ... ..	27·4	23·3
Sweden ... ..	26·9	21·1*
New Zealand ... ..	25·7	22·8
Victoria ... ..	25·7	21·7
France ... ..	22·0	16·5

Although infantile mortality plays such a prominent part in the determination of the birth rate in old countries, yet in young communities its influence is not so pronounced, its effects being masked by the movements of population through migration. For, although the Australian infantile mortality can never be said to have been large compared with the old communities of the world, yet there has been a distinct decline in the Victorian rates (which doubtless is characteristic of all the Australian States), as is evident from the following figures:—

## INFANTILE MORTALITY IN VICTORIA, 1867-1903.

Period.	Infantile Mortality.
1867-9 ... ..	13·32 per cent.
1870-4 ... ..	11·61 "
1875-9 ... ..	12·47 "
1880-4 ... ..	12·02 "
1885-9 ... ..	13·27 "
1890-4 ... ..	11·44 "
1895-9 ... ..	11·28 "
1900-3 ... ..	10·33 "

\* In accordance with previous note (t) this figure becomes 22·5.

It may here well be asked if the birth rate is so dependent upon infantile mortality as it is claimed, how is it in the early years of the State when the infantile mortality was not high that the birth rate was high? To that it may be answered, that the latter circumstance was entirely due, as has been previously shown, to the abnormal proportion of specially selected lives at the reproductive period introduced into the States by immigration. Indeed, it is certain that had the infantile mortality of Australia in the early days been comparable with those of the European States, the birth rate would have been considerably higher than it was.

This association of the two events has apparently always existed. Certain Vital Statistics in European towns and countries in the eighteenth century show that in Sweden, for the period 1755 to 1776, the birth rate was 36·9, and the infantile mortality 23·0 per cent. of the births, as against the modern figures, 26·9 and 10 respectively. In the town of Stockholm, the birth rate was for the same period 35·7, the infant mortality 42·2. In the low birth rate countries of that period, the provinces of Vaud and Brandenburg, where such rates were 27·9 and 26·0 respectively, the infantile mortality rates were 18·9 and 22·5 respectively, which, though not to be regarded as low when compared with modern figures, were the lowest when compared with the rates current at the time. It has also been possible to ascertain the number of survivors attaining 5 years of age per 1,000 births in localities where the birth rates mostly ranged from 30 to 40 per 1,000 of population, and which are presented in the following table:—

#### INFANTILE MORTALITY IN THE EIGHTEENTH CENTURY.

Period.	Locality.	Infantile Mortality.	Surviving 5th year per 1000 Births.
Circ. 1750 ...	Vaud ...	18·9 ...	701
1750-80 ...	Shrewsbury ...	18·3 ...	651
1755-76 ...	Sweden ...	23·0 ...	647
1710-59 ...	Brandenburg ...	22·5 ...	642
1772-81 ...	Chester ...	19·8 ...	598
1735-80 ...	Northampton ...	25·8 ...	536
1730-69 ...	Norwich ...	27·0 ...	498
1773-81 ...	Warrington ...	24·3 ...	483
1728-37 ...	London ...	32·0 ...	452
1759-68 ...	London ...	32·0 ...	425
1752-55 ...	Berlin ...	36·7 ...	402
1755-63 ...	Stockholm ...	42·2 ...	381
Circ. 1750 ...	Vienna ...	45·8 ...	374

## DEATHS.

The following return shows the number of deaths—males and females—also the quarters in which they were registered and proportion per 1,000 of the population, during the years 1899-1903:—

## DEATHS IN EACH QUARTER: RETURN FOR FIVE YEARS.

Year.	Total Deaths.	Sex.		Quarter of Registration.				Death Rate per 1,000 of the Population.
		Males.	Females.	March.	June.	September.	December.	
1899	16,578	9,286	7,292	4,153	3,806	3,717	4,902	13·97
1900	15,215	8,627	6,588	4,113	3,393	3,758	3,951	12·74
1901	15,904	9,035	6,869	4,129	3,844	4,120	3,811	13·22
1902	16,177	9,152	7,025	3,886	3,930	4,281	4,080	13·40
1903	15,595	8,626	6,969	4,036	3,994	3,810	3,775	12·90
Average	15,894	8,945	6,949	4,063	3,794	3,937	4,100	13·25

## Deaths.

The number of deaths during the year 1903 was 15,595—8,626 males and 6,969 females—a result somewhat under the average of the last five years, when the total was 15,894—the males 8,945, and the females 6,949. According to the experience of the five years, 1899-1903, the quarter of the year ending 31st December is the most fatal, the next in order being the quarter ending 31st March. These positions, however, were not maintained in the year under review, when the greatest number of deaths occurred in the March quarter, and the next in the June quarter. Excepting the year 1900, the death rate for 1903 is the lowest experienced during the last five years.

## Death rates in Australian States and New Zealand.

For purposes of comparison the death rates per 1,000 of the population for each of the Australian States and New Zealand are shown in the following statement, for a period of five years from 1899 to 1903:—

## DEATH RATES IN THE AUSTRALIAN STATES AND NEW ZEALAND: RETURN FOR FIVE YEARS.

Year.	Victoria	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania	Australian States.	New Zealand.
1899 ...	13·97	11·92	12·07	12·65	13·79	12·91	12·90	10·24
1900 ...	12·74	11·16	11·72	10·68	12·65	11·02	11·77	9·43
1901 ...	13·22	11·68	11·88	11·22	13·36	10·45	12·17	9·81
1902 ...	13·40	11·95	12·08	11·86	13·63	10·90	12·45	10·50
1903 ...	12·90	11·63	12·38	10·79	12·60	11·86	12·09	10·40
Average ...	13·25	11·67	12·03	11·44	13·20	11·45	12·29	10·08

Although the death rate of Victoria, according to the average of the five years, 1899-1903, was higher than in any other State, this result is due, as will be shown later on, to the larger proportion of persons aged 60 years and over, amongst whom the death rate is very high.

The following were the maximum, minimum, and mean death rates per 1,000 of the population, in the principal European countries during the five years ended with 1900, also the average of the 25 years ended with the same year. It is remarkable that, with the exception of Sweden, Austria and Hungary, Spain and Italy, the minimum rate during the five year period almost invariably occurred in 1896, and the maximum in 1900. In all, except Ireland, there has been a noticeable decrease, and in Austria, Hungary, Switzerland, Germany (including Prussia), Holland, and Italy, a considerable decrease in the recent five year period, as compared with the average of 25 years. The countries are arranged in order according to the average rate of mortality in the more recent period:—

Death rates in European countries.

DEATH RATES IN EUROPEAN COUNTRIES.

Country.	Five Years 1896-1900.			Average of 25 Years.
	Max.	Min.	Mean.	
1. Norway ... ..	15.8	15.2	15.7	16.6
2. Sweden ... ..	17.7	15.1	16.1	17.1
3. Denmark ... ..	17.3	15.5	16.4	18.3
4. Holland ... ..	17.8	16.9	17.2	20.3
5. England and Wales ... ..	18.2	17.0	17.7	19.1
6. United Kingdom ... ..	18.4	17.0	17.8	19.0
7. Scotland ... ..	18.5	16.6	17.9	19.2
8. Ireland ... ..	19.6	16.6	18.1	18.2
9. Belgium ... ..	19.3	17.2	18.1	20.1
10. Switzerland ... ..	19.3	17.6	18.1	20.6
11. France ... ..	21.9	19.5	20.7	21.9
12. Prussia ... ..	21.8	20.0	21.0	23.7
13. Germany ... ..	22.1	20.5	21.2	24.2
14. Italy ... ..	24.0	21.8	22.9	26.4
15. Austria ... ..	26.4	24.9	25.6	28.8
16. Hungary ... ..	28.9	26.9	27.9	32.3
17. Spain ... ..	29.9	28.6	29.2	30.6

Comparing this statement with a previous one, it will be noticed that the death rate of Victoria—the highest in Australasia, is considerably lower than that in Norway—the lowest in Europe. And although, owing to the fact that emigration from the old to the newer countries tends to raise the death rate in the former, but to lower it in the latter, the

Death rates of European and Australasian States compared.

death rates, calculated on the total population, would naturally be on a higher level in Europe than in Australasia, yet it may be safely affirmed that the true rate of mortality, allowing for differences in the age constitution of the people, is lighter in Australasia than in any State in Europe, except, perhaps, Norway, Sweden, and Denmark.

Death rates  
in town and  
country.

In every country the death rate is higher in towns than it is in the country districts. This circumstance, although no doubt partly attributable to the superior healthfulness and immunity from contagion prevailing in the latter, is also to a great extent due to the fact that hospitals and charitable institutions, which are frequented by patients from the country as well as by town residents, are generally situated in the towns; and further, that outside of charitable institutions many persons die who have come from the country on the approach of a serious illness for the sake of the superior nursing and medical attendance to be obtained in town. In the ten years ended with 1890, the rate in the metropolitan district was higher than in the other urban districts, but in more recent years was much lower, in consequence of a marked decrease in the rate in the former district; whilst in the rural districts the rate has remained fairly constant, at about 9 per 1,000, or much less than half the rate in the extra-metropolitan towns. The following are the figures for the means for the periods, 1881-90 and 1891-1900, and the years 1901, 1902, and 1903:—

DEATH RATES IN METROPOLITAN, OTHER URBAN, AND  
RURAL DISTRICTS.

Period.	Metropolitan District.	Other Urban Districts.	Rural Districts.
1881-90 ... ..	20·65	19·90	8·90
1891-1900 ... ..	16·25	21·17	8·98
1901 ... ..	15·09	19·54	8·73
1902 ... ..	14·93	20·86	8·77
1903 ... ..	14·37	20·17	8·41

Proportion  
of deaths in  
general  
hospitals,  
1899-1903.

In Victoria during the past five years one in every seven deaths occurred in general hospitals, and in Melbourne and suburbs during the same period one in every four took place in some public institution.

Unre-  
liability of  
ordinary  
death rate.

The misleading results arrived at by a comparison of the ordinary death rates of different countries, or of the same country at different periods, unless the age distribution is identical, have often been pointed out in former editions of this work. This applies more especially to such a comparison

of newly-settled communities—such as the Australian States—with one another, and with the old-established countries of (say) Europe. In the former, the population is, on the average, younger than in the older countries, and is, moreover, constantly being strengthened by immigrants at the younger adult ages, at which the mortality is low; whereas in the latter, not only is the age distribution more constant from year to year, but there is relatively a much larger proportion of elderly people, amongst whom the death rate is very high, concurrent with a smaller proportion of the younger and middle-aged adults, at the most vigorous period of life. Some idea of the differences of age distribution at present existing between European countries and the Australian States (as a whole) will be obtained by the following comparison of the proportions of the population living at various age groups in Sweden—as representative of the former—and in Australia:—

PERCENTAGE OF POPULATION IN AGE GROUPS, SWEDEN AND AUSTRALIA.

Age Group. (Years).	Percentage of Population Living at each Age Group in—	
	Sweden in 1890.	Australia in 1901.
Under 1 year ... ..	2·55	2·47
1 to 5 ... ..	9·25	9·05
5 to 15 ... ..	21·10	23·60
15 to 20 ... ..	9·50	10·04
20 to 25 ... ..	8·20	9·36
25 to 30 ... ..	6·70	8·50
30 to 35 ... ..	6·00	7·79
35 to 40 ... ..	6·00	7·25
40 to 45 ... ..	5·60	5·88
45 to 55 ... ..	9·40	7·29
55 to 65* ... ..	7·70	4·76
65 to 75 ... ..	5·40	3·01
75 to 85 ... ..	2·34	·89
85 and over ... ..	·26	·11
Total ... ..	100·00	100·00

It will be observed that the most striking differences occur between the ages of 20 and 40—the migratory period—under which ranged 33 per cent. of the population in Australia, as against only 27 per cent. in Sweden; and at ages over 45, at which the preponderance was in favour of Sweden, where there were 25 per cent. over that age as against only 16 in Australia.

\* At age 55 to 60 the proportion in Sweden was 4·20, and in Australia 2·54 per cent.

Index of  
mortality.

In accordance with the decision of the Conference of Statisticians, held at Hobart in 1902, that "for computing the 'Index of Mortality' the table of age groups adopted by the Congress of International Statistics be followed, viz.:—Under 1 year, 1 to 20 years, 20 to 40 years, 40 to 60 years, and 60 years and over, and that the population of Sweden, as enumerated at the last census at those ages, be taken as a standard," the method referred to has been adopted in Victoria. It consists of applying the ascertained death rates in the age groups specified to a population whose age distribution corresponds with that of Sweden in 1890.

The following was the result for Victoria in 1901, when the populations within the several age groups were accurately known, and the incidental death rates could be established:—

"INDEX OF MORTALITY," VICTORIA, 1901.

Age.	Standard Population per 1,000. (Sweden, 1890.)	Death Rate per 1,000 at each Age in Victoria, 1901.	Index of Mortality for Victoria, 1901.
0—1 ... ..	25·5	112·55	2·88
1—20 ... ..	398·0	4·19	1·67
20—40 ... ..	269·6	6·21	1·68
40—60 ... ..	192·3	13·19	2·54
60 and over ...	114·6	59·81	6·86
Total ... ..	1,000·0	13·22	15·63

Proportions of population at five age-groups in Australian States and New Zealand.

In order to compare with the proportion in Sweden, as shown in the second column of the previous table, as well as to afford a basis for the computation of the "Index of Mortality," the proportions per 10,000 living at the same five age groups in each Australian State and New Zealand, for the year 1901, are given in the following table for both sexes, and also for males. The great preponderance of population at the age groups between 1 and 40, and the large and increasing deficiency at age groups over 40, are the characteristic features of the Australian populations when compared with the Swedish. Amongst the Australian States, Victoria is conspicuous in having by far the largest proportion of persons aged 60 and over—an age group which has an important influence in determining the death rate. On the other hand, Victoria has, with one exception, the lowest proportion of both sexes between 1 and 20, and also, with one exception, the lowest proportion of males between 20 and 40—at which age groups the death rate is lightest:—

PROPORTIONS LIVING AT FIVE AGE GROUPS IN AUSTRALIAN STATES AND NEW ZEALAND, 1901.

State.	Proportion per 10,000 of Total Population Living at the Age Period--					Total.
	Under 1 Year.	1 to 20.	20 to 40.	40 to 60.	60 and over.	
<b>Both Sexes.</b>						
Victoria ...	236	4,163	3,272	1,581	798	10,000
New South Wales ...	253	4,382	3,210	1,597	558	10,000
Queensland ...	260	4,348	3,309	1,601	482	10,000
South Australia ...	227	4,445	3,054	1,641	633	10,000
Western Australia ...	273	3,324	4,548	1,529	326	10,000
Tasmania ...	267	4,519	3,118	1,488	608	10,000
Australia ...	247	4,269	3,290	1,571	623	10,000
New Zealand ...	238	4,195	3,295	1,596	676	10,000
<b>Males Only.</b>						
Victoria ...	120	2,093	1,585	795	434	5,027
New South Wales ...	127	2,210	1,664	915	324	5,240
Queensland ...	132	2,201	1,910	1,016	302	5,561
South Australia ...	116	2,234	1,527	897	312	5,086
Western Australia ...	140	1,704	2,994	1,073	219	6,130
Tasmania ...	135	2,297	1,639	802	323	5,196
Australia ...	125	2,154	1,723	890	350	5,242
New Zealand ...	124	2,117	1,692	906	415	5,254

The "Index of Mortality" has been computed for each Australian State and New Zealand for the year 1901, with the following results, which is contrasted with the death rate per 1,000 of the total population for the same year. The death rates for 1901 differ but slightly from the average of the 3 years, 1900-2:—

Index of mortality in Australian States, 1901.

"INDEX OF MORTALITY" IN EACH AUSTRALIAN STATE AND NEW ZEALAND, 1901.

State.	Ordinary Death Rate.	"Index of Mortality."
Victoria ...	13.22	15.63
New South Wales ...	11.68	15.33
Queensland ...	11.88	15.24
South Australia ...	11.22	14.30
Western Australia ...	13.36	17.89
Tasmania ...	10.45	13.82
Australia ...	12.17	15.41
New Zealand ...	9.81	12.42

Although the order of the States is but slightly affected by the new method, Western Australia is shown to have really a far higher rate of mortality than that indicated by the ordinary method; but Victoria only a slightly higher rate than in the two other principal Australian States—New South Wales and Queensland—and probably even this small difference in favour of the latter States would disappear if the old age group 60 and upwards were subdivided. New Zealand enjoys the enviable position of supremacy—its death rate not only being the lowest Australasian, but probably the lowest of any country in the world for which statistics are available.

"Adjusted" death rates, 1871 to 1902

The "Index of Mortality" has not yet been computed for earlier years, or for other countries, except Sweden (where it was, in 1900, 16·72); but an equally fair comparison is available for Victoria, for three successive decades, and for the triennial period 1900-2, by means of the "Adjusted"\* death rates, already alluded to, and these are embodied in the following table for each sex, together with the ordinary death rates, based on the total population of either sex, irrespective of age variations:—

#### ADJUSTED DEATH RATES IN VICTORIA, 1871-1902.

Period.	Ordinary Death Rate. †		Adjusted Death Rate. ‡	
	Males.	Females.	Males.	Females.
1871 to 1880 ...	16·45	14·15	16·48	14·64
1881 to 1890 ...	16·65	13·56	15·97	13·85
1891 to 1900 ...	15·47	12·36	14·14	12·04
1900 to 1902 ...	14·80	11·43	13·05	10·75

Diminishing rate of mortality in Victoria.

The "adjusted" rates indicate that there has been a considerable falling off in the true rates of mortality at each successive decade, more especially the last, at which the rate was about  $2\frac{1}{2}$  per 1,000 lower than in the first decade, and over  $1\frac{1}{2}$  lower than in the second one. A further fall occurred during the three years, 1900-1902, when the mortality was exceptionally low, being more than 1 per 1,000 below that of the ten years, 1891-00.

Proportion of deaths at each age to population.

The following are the death rates at various age groups in Victoria, according to the average of the ten years, 1891-00, and of the three years, 1900-2. The population on which the rates in the last column but one are based is the mean of the populations enumerated at the censuses of 1891 and 1901; and

\* For the method of calculating the "Adjusted death rate" see "Victorian Year Book, 1892," Vol. I., paragraph 656 *et seq.*

† Per 1,000 of the actual population.

‡ Per 1,000 of the standard population. See "Year-Book, 1892," paragraph 656.

the population, according to the census of 1901, taken at the end of March, was used for computing the rates in the last column:—

DEATH RATES AT VARIOUS AGE GROUPS IN VICTORIA, 1891-1900 AND 1900-2.

Ages.	Deaths.		Deaths per 1,000 Living at each Age.	
	Average of Ten Years, 1891-1900.	Average of Three Years, 1900-2.	Average of Ten Years, 1891-1900.	Average of Three Years, 1900-2.
<b>Males—</b>				
Under 5 years ...	2,794	2,282	39.29	34.07
5—10 ...	231	195	3.36	2.70
10—15 ...	139	142	2.20	2.10
15—20 ...	191	184	3.28	3.11
20—25 ...	274	249	4.79	4.90
25—35 ...	672	579	6.60	6.25
35—45 ...	633	742	9.03	8.81
45—55 ...	671	655	15.32	15.34
55—65 ...	1,200	910	32.90	29.86
65—75 ...	1,460	1,724	62.99	61.57
75 and upwards ...	1,032	1,276	145.05	141.59
All Ages ...	9,297	8,938	15.47	14.80
<b>Females—</b>				
Under 5 years ...	2,367	1,900	34.09	29.10
5—10 ...	209	186	3.12	2.63
10—15 ...	128	128	2.06	1.92
15—20 ...	202	175	3.43	2.92
20—25 ...	289	237	4.81	4.10
25—35 ...	676	608	6.89	6.00
35—45 ...	543	642	8.68	8.32
45—55 ...	476	454	12.12	11.48
55—65 ...	693	635	23.64	21.49
65—75 ...	785	994	45.87	45.07
75 and upwards ...	673	868	124.33	122.77
All Ages ...	7,041	6,827	12.36	11.43

It will be observed that the rate of mortality in the three years, 1900-1902, was lower at every age group in the case of females, and at all age groups except two—20 to 25 and 45 to 55—in the case of males.

Low mortality in 1900-2.

A still greater improvement is noticeable on comparing the rates for the decade, 1891-00, with those for the previous one;\* for in the case of males, there was a much diminished rate of mortality at every age group below 55, and only a slight increase in the groups over that age, and, in the case of females, a considerable decrease at every age group except 55-65.

Decreased mortality at various ages, 1891-90 to 1891-1900.

\* See "Victorian Year Book," 1895-8, page 685.

Infantile mortality, 1903.

Infantile mortality showed a slight decrease in 1903, as compared with the preceding year, and was lower than the average of the ten years ended 1900. The total number under 1 year of age who died in 1903 was 3,146, and as the births numbered 29,569, it follows that 1 infant died in every 9·4 births, or 10·64 infants to every 100 births. In the ten years ended with 1900, the proportion of infants dying before completing their first year was 11·11 to every 100 births.\*

Infantile mortality of illegitimates.

The mortality of illegitimate infants under 1 year of age, during the years 1901 and 1903, was nearly three times as great as that prevailing amongst children legitimately born. On the average of the two years under review, of every 100 illegitimate children born, 26·4 died within a year, as compared with only 9·5 deaths to every 100 legitimate births.

Deaths of infants at different ages.

In classifying the deaths of infants, those are distinguished which occur at under the age of one month, at from 1 to 3 months, at from 3 to 6 months, and at from 6 to 12 months. The annual numbers of these during the ten years ended with 1900, and the period, 1900 to 1903, are shown in the following table, together with the proportion of deaths at each of those periods of age and the number at each such period to every 100 births—after making due allowance for immigration. It will be noticed that in the last three years the mortality of infants under 1 month was above, but that of those at every other age period was below, the average of the ten years ended with 1900:—

DEATHS OF INFANTS AT VARIOUS AGES, 1891-1900 AND 1900-3.

Ages.	Average Annual Deaths at under 1 year of Age.					
	Ten Years—1891 to 1900.			Four Years—1900-3.		
	Number.	Percentage at each Age.	Number per 100 Births.	Number.	Percentage at each Age.	Number per 100 Births.
<i>Boys.</i>						
Under 1 month	650	31·7	3·79	596	34·5	3·82
1 to 3 months	355	17·3	2·07	315	18·2	2·02
3 to 6 "	445	21·7	2·59	367	21·2	2·35
6 to 12 "	600	29·3	3·50	452	26·1	2·90
Total ...	2,050	100·0	11·95	1,730	100·0	11·09
<i>Girls.</i>						
Under 1 month	488	28·7	2·98	476	33·6	3·21
1 to 3 months	301	17·7	1·84	230	16·3	1·55
3 to 6 "	385	22·6	2·35	311	22·0	2·09
6 to 12 "	528	31·0	3·23	398	28·1	2·68
Total ...	1,702	100·0	10·40	1,415	100·0	9·53

\* See next table but one

During both periods referred to in the table, the mortality of male infants in proportion to the number born exceeded that of female infants at each of the age periods—more especially in the first month of life, when the excess was about one-fourth. During the period of ten years, the births of male infants were in the proportion of about 105 to every 100 female infants; but as the numbers shown above indicate a proportion of 120½ deaths of the former to 100 of the latter, the proportion alive at the end of the first year is reduced to 103 males to every 100 females. These proportions remained undisturbed during the four year period 1900-3.

More death of male than female infants at all ages.

In the same period of ten years, nearly a third of the male and nearly two-sevenths of the female infants who died before they were a year old died in the first month after birth; over a sixth of both males and females in the next two months; between a fourth and a fifth of both males and females in the next three months; and about three-tenths in the next six months.

Periods at which infants die.

Of infants of both sexes who died, under 12 months, 47·8 were under 3 months, 22·1 were from 3 to 6 months, and 30·1 per cent. from 6 to 12 months. In England and Wales, for the same period, the percentages were—under 3 months, 48·4; 3 to 6 months, 20·9; 6 to 12 months, 30·7. In New South Wales the percentages were 50·3, 22·6, and 27·1 respectively.

Infantile mortality in Victoria, England, and New South Wales.

According to the experience of the ten years 1891-00, it appears that of every 20,000 newly-born boys and girls in equal numbers, 379 of the former and 298 of the latter may be expected to die before they are a month old; 207 more boys and 184 more girls may be expected to die between one and three months of age; 259 more boys and 235 more girls between three and six months; 350 more boys and 323 more girls between six and twelve months. At the end of a year it is probable that 1,195 of the boys and 1,040 of the girls will have died, and 8,805 of the former and 8,960 of the latter, or 17,765 of mixed sexes, will be still living. In the previous ten years, the proportion surviving the first year was 8,652 males and 8,816 females. Hence there has been an improvement in the rate of infantile mortality in the last decade, as compared with the previous one, which has resulted in the saving of 148 lives in every 10,000 infants of both sexes.

Probable mortality of infants.

The following table shows the proportion of deaths of infants under one year to the total births in each Australian State and in New Zealand for each of the last five years, and the average for the ten years ended with 1900:—

Infantile mortality in Australian States and New Zealand.

## INFANTILE MORTALITY IN AUSTRALASIA.

Year.	Deaths Under 1 Year per 100 Births.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1891—1900 ...	11·11	11·22	10·34	10·54	14·48	9·58	8·38
1899 ...	11·09	11·87	10·94	11·13	13·99	11·61	9·59
1900 ...	9·53	10·32	9·84	9·93	12·61	7·99	7·51
1901 ...	10·29	10·37	10·19	10·01	12·89	8·90	7·14
1902 ...	10·86	10·97	10·02	9·40	14·20	7·91	8·29
1903 ...	10·64	11·63	11·99	9·71	14·12	11·08	8·11

It will be observed that the average rate for the ten years, 1891-00, was far higher in Western Australia, and much lower in New Zealand and Tasmania, than in any other Australasian State. Next to Western Australia, New South Wales and Victoria—which in this respect were nearly on a level—had the highest rates; and next South Australia and Queensland.

Infantile mortality in various countries.

Of all the countries respecting which information is available, infantile mortality is highest in Russia, Austria, and some of the German States—where at least one out of every four infants born die within twelve months—whilst it is lower in Tasmania and New Zealand than in any of the European countries, and lower in all the Australian States than in any except Sweden and Ireland. The following table shows the various rates:—

## INFANTILE MORTALITY IN VARIOUS COUNTRIES.

Deaths under 1 Year of Age to 100 Births.		Deaths under 1 Year of Age to 100 Births.		Deaths under 1 Year of Age to 100 Births.	
Russia ...	30·0	Italy ...	19·0	Victoria ...	11·1
Bavaria ...	27·0	Belgium ...	17·0	South Australia ...	10·5
Austria ...	25·0	France ...	17·0	Queensland ...	10·3
Wurtemberg ...	25·0	Great Britain ...	15·0	Sweden ...	10·0
Prussia ...	21·0	Greece ...	15·0	Ireland ...	10·0
Holland ...	20·0	Western Australia ...	14·5	Tasmania ...	9·6
Roumania ...	20·0	Denmark ...	14·0	New Zealand ...	8·4
Switzerland ...	19·0	New South Wales ...	11·2		

NOTE.—The information respecting all the countries except the Australasian States is for the year 1895 and was obtained from "Mulhall," (page 635). That respecting the Australasian States is based on the average of the ten years ended with 1900.

Deaths of children under 5.

In the year 1903 deaths of male children under 5 years of age numbered 2,188, and deaths of female children under that age numbered 1,940—the former being in the proportion of about 25 per cent., and the latter of about 28 per cent., to the total number of deaths at all ages. These proportions are much below the average of former years. Comparing the averages of the last three decades, a marked falling off took place, from period to period, in the mortality of children

relatively to that of persons of all ages, and the following table shows the annual number of such deaths at each year of age, and their proportion to the deaths at all ages, in each of the last three years and during the three decennial periods ended with 1880, 1890, and 1900, respectively:—

MORTALITY OF CHILDREN UNDER FIVE YEARS.

Period.	Years of Age at Death.					Total Under 5 Years.	
	0	1	2	3	4	Number.	Proportion Per 100 Deaths at all ages.
<b>Males.</b>							
1871-80 ...	1,783	508	206	148	119	2,764	39·41
1881-90 ...	2,158	464	161	114	92	2,989	34·28
1891-1900 ...	2,050	432	143	93	76	2,794	30·05
1901 ...	1,788	317	90	77	58	2,330	25·79
1902 ...	1,793	345	106	67	37	2,348	25·65
1903 ...	1,694	271	100	76	47	2,188	25·36
<b>Females.</b>							
1871-1880 ...	1,482	482	198	139	106	2,407	46·06
1881-1890 ...	1,805	423	151	105	84	2,568	39·61
1891-1900 ...	1,702	385	129	82	68	2,366	33·61
1901 ...	1,404	308	100	61	48	1,921	28·11
1902 ...	1,515	285	110	52	51	2,013	28·65
1903 ...	1,452	267	103	67	51	1,940	27·84

The average number of male and female children at each year of age under 5 living, during the period of ten years ended with 1900, is compared in the next table with the average number of deaths of children of the same sexes at those ages which occurred annually during that period:—

Number of children under 5 and their deaths.

DEATHS OF CHILDREN UNDER FIVE IN PROPORTION TO POPULATION.

Age last Birth-day.	Males.				Females.			
	Mean Number Living, 1891 and 1901.	Annual Deaths, 1891 to 1900.		Deaths per 1,000 Children Living.	Mean Number Living, 1891 and 1901.	Annual Deaths, 1891 to 1900.		Deaths per 1,000 Children Living.
		Number.	Per-centage.			Number.	Per-centage.	
0	15,516	2,050	73·38	132·12	15,089	1,702	71·94	112·80
1	14,124	432	15·46	30·59	13,783	385	16·27	27·94
2	13,981	143	5·11	10·23	13,428	129	5·45	9·61
3	13,780	93	3·33	6·75	13,667	82	3·47	6·00
4	13,698	76	2·72	5·55	13,437	68	2·87	5·06
Total	71,099	2,794	100·00	39·29	69,404	2,366	100·00	34·09

Proportion  
of infants  
dying  
annually.

Of every 1,000 boys under 1 year of age, 132, and of every 1,000 girls under 1 year of age, 113, died annually in the decade under notice; the corresponding proportions for the previous ten years being 152 and 130 respectively. These proportions are naturally higher than those quoted in the table showing the comparison of deaths of children under 1 with the births, the proportions in which were 120 deaths of male infants and 104 deaths of female infants to every 1,000 births of infants of those sexes respectively during the recent decade, and 135 and 118 respectively during the previous one.

More boys  
died than  
girls.

In proportion to their respective numbers in the population, more boys than girls died at every year of age, the difference per 1,000 living being as much as 19 at under 1 year, but only about 2-2.3 at from 1 to 2, and less than 1 at subsequent ages.

Boys and  
girls dying  
under 1  
year.

According to the figures, deaths of boys under 1 year of age furnish a larger proportion to the total deaths of boys under 5 than deaths of girls under 1 do to the total deaths of girls under 5, but the reverse is the case at each of the years of age after the first.

Proportion  
of deaths of  
children at  
each age.

Of the whole number of children who died before they attained the age of 5, nearly three-fourths, viz., 73 per cent. of the boys, and 72 per cent. of the girls, were under 1 year of age; less than a sixth of the boys and about a sixth of the girls were between 1 and 2; about 1 in 19 of the boys and about 1 in 18 of the girls were between 2 and 3; 1 in 33 of the boys and 1 in 28 of the girls were between 3 and 4; 1 in 37 of the boys and 1 in 35 of the girls were between 4 and 5.

Probable  
mortality  
of children  
under 5  
years.

It results from actuarial calculations, based upon the figures for the decade 1891-00 in the last table, that of every 20,000 boys and girls in equal numbers born in Victoria, 1,195 boys and 1,040 girls may be expected to die before they complete a year of life, 265 more boys and 247 more girls before they complete 2 years, 81 more boys and 84 more girls before they complete 3 years, 63 more boys and 52 more girls before they complete 4 years, and 47 more boys and 43 more girls before they complete 5 years. At the end of that period it is probable that 1,651 of the boys and 1,466 of the girls will have died; and 8,349 of the boys and 8,534 of the girls will be still living. The average result for both sexes is 8,441 per 10,000, which is more favourable than that deduced from the mortality of either of the two previous decades 1881-90, and 1871-80, which showed the number of survivors at the end of the first five years of life to be 8,211 and 8,103 respectively.

Out of every 10,000 infants born in Victoria, there will on the average be 5,120 boys and 4,880 girls—being in the ratio of 105 of the former to every 100 of the latter. These, according to the results just arrived at, will be reduced at the end of 5 years to 4,275 boys and 4,165 girls—or in the ratio of 103 of the former to every 100 of the latter. Thus, one-half of the excess of males over females at birth is neutralized in the first five years.

Tendency the sexes towards equality in the first 5 years after birth.

The number of survivors at the age of 5 out of every 1,000 children born has also been computed in this office for New South Wales and New Zealand, and the results are compared with those given in "Mulhall's Dictionary of Statistics" for several European countries, as follow. It will be noticed that a larger number of infants survive the first five years in New Zealand, New South Wales, and Victoria than in any European country:—

Survivors at age 5 out of every 1,000 born.

CHILDREN SURVIVING THEIR FIFTH YEAR IN VARIOUS COUNTRIES.

	No. of Survivors.		No. of Survivors.
New Zealand ...	889	Denmark ...	755
New South Wales ...	850	France ...	751
Victoria ...	844	Switzerland ...	748
Norway ...	838	Prussia ...	684
Ireland ...	837	Italy ...	632
Sweden ...	783	Austria ...	614
Scotland ...	780	Hungary ...	598
England and Wales ...	762	Spain ...	571
Belgium ...	756		

It is remarkable that those countries (with the exception of France) in which the greatest infantile mortality occurs are those which possess a high birth rate, and on the contrary those countries which have a low birth rate have also the lightest mortality. It is evident, therefore, that there is an intimate association between the birth rate and the infantile mortality, and in view of the importance at present attaching to the subject of the declining birth rate, both by medical men and economists, the figures shown above should prove of some interest. So great indeed is the mortality per 1,000 births in the high birth rate countries that the ultimate gain to the population of those countries at the expiration of five years is in some cases below that of the low birth rate countries, and it is highly probable that could the mortality have been traced for a year or two beyond that period, it would be found that the supremacy rests with the low birth rate countries. The following statement shows the birth rate per 1,000 of the population, and the number surviving their fifth year similarly estimated:—

Connection between infantile mortality and birth rate.

## BIRTH RATES AND SURVIVORS IN VARIOUS COUNTRIES.

Country.	Birthrate.	Surviving the 5th Year.
Hungary ... ..	39·4	23·6
Austria ... ..	37·2	22·8
Prussia ... ..	36·5	25·0
Spain ... ..	34·8	19·9
Italy ... ..	33·9	21·4
Holland ... ..	32·1	25·6
Norway ... ..	30·3	25·4
Denmark ... ..	30·0	22·7
England ... ..	29·2	22·2
Belgium ... ..	28·9	21·9
Switzerland ... ..	28·4	21·2
New South Wales ... ..	27·4	23·3
Sweden ... ..	26·9	21·1
New Zealand ... ..	25·7	22·8
Victoria ... ..	25·7	21·7
Frauce ... ..	22·0	16·5

Thus it will be seen that the superiority of the birth rate of European States, so far as population is concerned, has for the most part disappeared at the end of five years.

Deaths in  
childbed.

The death rate of women in childbed is usually ascertained by comparing the number of deaths of parturient women with the total number of births. Such deaths are classified in two ways. If the death is supposed to occur merely from the consequences of childbearing without specific disease, it is set down under the head of childbirth, Class VI., Sub-class 9; but, if it should arise from puerperal fever, it is placed under that head, Class I., Sub-class 6. The proportion of deaths of child-bearing women has fallen decade by decade from 64 per 10,000 in 1871-80 to 56 in 1891-00. In the years 1901 and 1902, however, the rate was as high as in the decade 1871-80. This rise was no doubt partly attributable to the increased average age of mothers, previously referred to. The proportions which prevailed in the last three years, and the averages of previous periods back to 1864, are shown in the following table:—

## DEATHS OF MOTHERS TO EVERY 10,000 CHILDREN BORN ALIVE.

Period.	The Number of Women who Died Annually of—			Deaths of Mothers to every 10,000 Children Born Alive.
	Child Birth.	Puerperal Fever.	Total.	
1864-70 ... ..	108	20	128	49·06
1871-1880 ... ..	127	46	173	64·38
1881-1890 ... ..	121	64	185	59·19
1891-1900 ... ..	117	66	183	56·01
1901 ... ..	130	71	201	64·82
1902 ... ..	131	68	199	65·32
1903 ... ..	136	53	189	63·92

The natural increase, i.e., the excess of births over deaths, per 1,000 of the population, in the various Australian States and New Zealand for each of the years 1899 to 1903, and also for the mean of that period, is shown in the following table:—

Natural increase per 1,000 of population in Australasia

NATURAL INCREASE PER 1,000 OF THE POPULATION, AUSTRALIAN STATES AND NEW ZEALAND.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australian States.	New Zealand.
1899	12·17	15·42	15·24	13·99	16·91	13·93	14·37	14·88
1900	13·05	16·27	18·47	14·87	18·15	17·14	15·54	16·17
1901	12·56	15·92	16·40	13·87	16·96	17·95	14·88	16·53
1902	11·78	15·22	15·60	12·74	16·46	18·02	14·18	15·39
1903	11·56	13·72	12·24	12·45	17·67	16·61	13·12	16·21
Mean	12·22	15·31	15·59	13·58	17·23	16·71	14·42	15·83

The mean natural increase of the Australian States for the period 1899-1903, viz., 14·42, is probably not far from that which will be attained under ordinary circumstances when the age constitution of the population will have become normal, and when undisturbed by migration. At the present time, the birth rate and death rate are both below normal, owing to factors in operation which have already been discussed in dealing with the birth and death rates. This annual rate of increase, 14·4, of the population will enable a population to double itself in about 48 years. It will, however, be noticed that the rate for the last year was 1·3 below the average of the five years, and if this reduced rate were maintained, the population would take about 54 years to double itself.

The following table shows the natural increase per 1,000 of the population in various European countries—the mean of the five years, 1897-1901, being adopted, and the countries placed in order of increase:—

Natural increase per 1,000 of population in European countries.

NATURAL INCREASE PER 1,000 OF POPULATION—EUROPEAN COUNTRIES—MEAN OF FIVE YEARS, 1897 TO 1901.

Country.	Natural Increase.	Country.	Natural Increase.
1. Prussia ... ..	15·5	10. Italy ... ..	11·0
2. The Netherlands ... ..	14·8	11. Belgium ... ..	10·9
3. German Empire ... ..	14·6	12. United Kingdom ... ..	10·7
4. Norway ... ..	14·5	13. Sweden ... ..	10·6
5. Denmark ... ..	13·5	14. Switzerland ... ..	10·5
6. Austria ... ..	11·9	15. Spain ... ..	5·6
7. Hungary ... ..	11·7	16. Ireland ... ..	4·7
8. Scotland ... ..	11·6	17. France ... ..	1·2
9. England and Wales ... ..	11·4		

It is seen from this statement that the present Australian rate is below the first four countries shown, and it might

therefore be inferred that those countries were increasing their populations at a greater rate than the Commonwealth of Australia, but emigration must be taken into account when dealing with European countries.

Actual rates of increase of population in European countries.

The actual rates of increase in various European countries have been computed and are set forth in the following table, which also shows the periods from which such rates were obtained, and also the periods in which the population would double itself at the computed rate of increase:—

ACTUAL RATE OF INCREASE OF POPULATION IN VARIOUS EUROPEAN COUNTRIES.

Country.	Annual Rate of Increase per cent.	Experience.	Period required to double Population.
1. German Empire ...	1.12	1872-1901	62½
2. Prussia ...	1.11	1867-1901	62¼
3. The Netherlands ...	1.05	1853-1901	66¼
4. Denmark ...	1.03	1861-1901	67½
5. Great Britain ...	.91	1864-1901	76½
6. Hungary ...	.97	1876-1901	71¾
7. Belgium ...	.84	1853-1901	83
8. Norway ...	.81	1871-1901	86
9. Sweden ...	.77	1852-1901	90¼
10. Austria ...	.77	1853-1901	90¼
11. Switzerland ..	.72	1868-1901	96½
12. Italy ...	.64	1872-1901	108½
13. Spain ...	.45	1861-1901	154¼
14. France ...	.16	1854-1901	433½

Even at the present rate of natural increase in Australia, the period required to double its population, viz., about 50 years—and which is independent of immigration—is considerably less than that required by any of the European countries, based upon actual experience.

Excess per cent. of births over deaths in Australasia.

The following table shows the excess per cent. of births over deaths in each of the Australian States and New Zealand for each of the five years, 1899 to 1903, together with the mean of the same period:—

EXCESS PER CENT. OF BIRTHS OVER DEATHS, AUSTRALIAN STATES AND NEW ZEALAND.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australian States.	New Zealand.
1899	87	129	126	111	123	108	111	145.
1900	102	146	158	139	143	156	132	171
1901	95	136	138	124	127	172	122	169
1902	88	127	129	107	121	165	113	147
1903	90	118	99	115	140	140	109	156
Mean	92	131	130	119	131	148	117	157

From this it is seen that the least excess in Australasia is in Victoria and the greatest in New Zealand. To every hundred deaths that occur in Victoria there are 192 births, in New South Wales 231, in Queensland 230, in South Australia 219, in Western Australia 231, in Tasmania 248, whilst in New Zealand there are 257. The position occupied by Victoria is due to the excessive emigration of adults in recent years, which is also chiefly responsible for the low birth rate, and (compared with Australian rates) to some extent for its somewhat high death rate. But even under these adverse circumstances, the excess in Victoria compares advantageously with those of European countries, as will be seen from the following table, which shows the excess in those countries as derived from the mean of the five years, 1897-1901:—

Excess of births over deaths in European countries.

EXCESS PER CENT. OF BIRTHS OVER DEATHS IN EUROPEAN COUNTRIES.

Country.	Excess.	Country.	Excess.
1. Norway	92	10. Great Britain	60
2. The Netherlands	86	11. Switzerland	58
3. Denmark	82	12. Italy	49
4. Prussia	74	13. Austria	47
5. German Empire	69	14. Hungary	43
6. England and Wales	65	15. Ireland	26
7. Sweden	65	16. Spain	20
8. Scotland	64	17. France	6
9. Belgium	61		

Thus it will be seen that in no European country does the excess per cent. of births over deaths reach the average of the Australian Commonwealth, and in only one country, Norway, does it reach that of the lowest Australian State, Victoria. In Hungary, which has the highest birth rate amongst the European States quoted, viz., 38.9, the death rate is so high, viz., 27.2 per 1,000 of the population, that the excess per cent. of births over deaths is only 43, whilst Australia, with its birth rate of only 26.7, has an excess of 117 per cent. In other words, whilst in Hungary the loss caused by every 100 deaths is replaced by 143 births, in Australia such loss is replaced by 217 births. In New Zealand, which has a birth rate of only 25.9, the 100 deaths are replaced by no less than 257 births. In Germany every 100 deaths are replaced by 169 births, in Great Britain by 160, and in France by only 106. The comparison, it is obvious, is entirely to the advantage of Australasia.

Comparison between excess per cent. of births over deaths in Australasia and European countries.

The mean population of Greater Melbourne was 502,060 for the year 1903. This area embraces a radius of ten miles, and is divided into 31 sub-districts. At the end of 1903, there was living within the area an average of 3 persons to the acre. The density varies considerably, however, in the several sub-districts, ranging from 36 persons to the acre in Fitzroy, 32

Vital statistics of Greater Melbourne.

in North Melbourne, and 31 in Richmond, to 1 person to the acre in Boroondara, and less than 1 in Preston, Oakleigh, and other outlying districts. The density is calculated exclusive of parks, gardens, and other public reserves within the area, which contained, on 31st December, 5,323 acres.

The births and deaths for the twelve months were:—

	Males.	Females.	Total.
Births ... ..	6,116	5,896	12,012
Deaths ... ..	3,772	3,445	7,217
Natural increase ...	2,344	2,451	4,795
The illegitimate births numbered	...	...	1,031
The cases of twins numbered	...	...	101
The cases of triplets numbered	...	...	4

The number of illegitimate births, 1,031, is 27 less than in 1902. Over two-fifths took place in the Women's Hospital or in buildings under the supervision of the officers of that institution. The proportion of illegitimate births to the whole number registered in Greater Melbourne was 1 in 12, as against 1 in 12 in 1902 and 1901, 1 in 11 in 1900, and 1 in 12 in the 8 previous years. The birth rate, exclusive of public and charitable institutions, was 21·78 per thousand of the mean population, and including these establishments it was 23·93. The corresponding averages for the ten years, 1892-1901, were 26·83 and 28·55 per thousand.

The highest rate, 29·23 per thousand, obtained in the sub-district of Oakleigh, and the lowest, 17·73, in Camberwell and Boroondara. In these districts, however, the population is comparatively small. Further examination will disclose that the birth rate varied in groups of districts, as well as districts, as will be seen by combining Collingwood, Brunswick, Fitzroy, North Melbourne, Footscray, Port Melbourne, and Richmond, and Kew, Hawthorn, Brighton, St. Kilda, Caulfield, Malvern, and Camberwell. In the former, the rate is 24·18, and in the latter, only 19·63, per thousand of the population. The death rate, exclusive of public and charitable institutions, was 11·01 per thousand, and including these establishments, 14·37; whilst the corresponding averages for the previous decade were 12·39 and 15·76.

The municipal estimate of population, the births and deaths, and their proportions to the population, the excess of births over deaths, the mean temperature in the shade, the rainfall, and the mean atmospheric pressure in Greater Melbourne, during each of the twenty years ended with 1903, were as follow:—

POPULATION, BIRTHS AND DEATHS, ETC., IN GREATER MELBOURNE, 1884 TO 1903.

Year.	Mean Population.	Number of Births.		Number of Deaths.		Excess of Births over Deaths.		Mean Temperature in the Shade.	Rainfall.	Mean Height of Barometer.*
		Total.	Per 1,000 of the Population.	Total.	Per 1,000 of the Population.	Number.	Per cent.			
1884 ...	322,690	10,911	33·81	6,628	20·54	4,283	65	56·7	Inches.	Inches.
1885 ...	345,380	12,066	34·94	6,960	20·15	5,106	73	57·1	25·85	29·94
1886 ...	371,630	12,941	34·82	7,590	20·42	5,351	71	57·1	26·94	30·00
1887 ...	391,546	14,583	37·24	8,321	21·25	6,262	75	58·1	24·00	29·96
1888 ...	419,490	15,645	37·30	8,606	20·52	7,039	82	57·5	32·39	29·94
1889 ...	445,220	16,934	38·04	10,412	23·39	6,522	68	58·5	19·42	29·99
1890 ...	473,500	17,859	37·71	9,297	19·63	8,562	92	58·7	27·14	29·94
1891 ...	491,700	18,018	36·64	9,368	19·05	8,650	92	57·6	24·24	29·92
1892 ...	481,550	17,399	36·13	7,698	15·99	9,701	126	57·4	26·73	29·98
1893 ...	457,230	15,338	33·55	7,805	17·07	7,533	97	57·9	24·96	29·93
Average for 10 yrs }	419,994	15,169	36·12	8,268	19·69	6,901	83	57·7	26·81	29·88
1894 ...	441,890	13,672	30·94	6,871	15·55	6,801	99	58·4	25·85	29·95
1895 ...	448,250	13,208	29·45	7,076	15·79	6,132	87	58·5	25·85	29·93
1896 ...	456,170	12,769	27·99	7,121	15·61	5,648	79	57·8	17·04	29·93
1897 ...	460,430	12,303	26·72	6,833	14·84	5,470	80	57·6	25·16	29·95
1898 ...	476,360	12,016	25·38	8,523	18·01	3,493	41	58·7	25·85	29·94
1899 ...	487,420	12,435	25·51	7,317	15·01	5,118	70	57·1	15·61	29·91
1900 ...	491,780	12,067	24·54	7,021	14·28	5,046	72	56·3	28·87	29·95
1901 ...	498,030	12,375	24·85	7,515	15·09	4,860	65	56·9	28·09	29·92
1902 ...	502,120	12,478	24·85	7,496	14·93	4,982	66	56·9	27·45	29·95
19 3 ...	502,060	12,012	23·93	7,217	14·37	4,795	66	57·0	23·08	29·97
Average for 10 yrs }	476,451	12,534	26·31	7,299	15·32	5,235	72	57·5	28·43	29·92
									24·22	29·94

Vital Statistics.

The proportion of deaths of elderly persons—aged 75 and upwards—has shown a marked increase in the last thirteen years, thus indicating that the percentage of elderly persons in the population has considerably increased, and has apparently not yet reached a maximum; and this is proved by a comparison of the results of the past two censuses, which show that the male population at those ages has increased from 1,552 in 1891 to 2,795 in 1901, and the females from 1,551 to 3,065. There are now nearly 12 persons aged 75 and upwards in every 1,000 of the population, as compared with a proportion of only  $6\frac{1}{2}$  ten years previously.

DEATHS OF PERSONS AGED 75 YEARS AND UPWARDS IN GREATER MELBOURNE, 1891-1903.

Year.	Males.	Females.	Total.	Per cent. of Deaths at all Ages.
1891	286	271	557	5·94
1892	263	219	482	6·26
1893	264	233	497	6·37
1894	284	279	563	8·19
1895	353	284	637	9·00
1896	352	299	651	9·14
1897	327	290	617	9·03
1898	418	372	790	9·27
1899	421	326	747	10·21
1900	402	376	778	11·08
1901	443	415	858	11·42
1902	500	404	904	12·06
1903	432	424	856	11·86

Deaths of females were more numerous than those of males at the age periods between 5 and 35, but less at all other periods except the age periods between 1 and 5, when they were equal. The following were the numbers of those of either sex who died at various periods of age in 1903, and the proportion of the deaths at each period to the total number during the year:—

AGES AT DEATH IN GREATER MELBOURNE, 1903.

Ages.	Males.	Females.	Both Sexes.	
			Total.	Proportions per cent.
Under 1 year ...	793	700	1,493	20·69
1 to 5 years ...	223	223	446	6·18
5 to 15 " ...	146	158	304	4·21
15 to 25 " ...	146	215	361	5·00
25 to 35 " ...	250	292	542	7·51
35 to 45 " ...	384	346	730	10·12
45 to 55 " ...	385	264	649	8·99
55 to 65 " ...	394	320	714	9·89
65 to 75 " ...	619	503	1,122	15·55
75 years and over	432	424	856	11·86
Total ...	3,772	3,445	7,217	100·00

DEATHS IN PUBLIC INSTITUTIONS IN GREATER MELBOURNE, 1903.

	No.		No.
Melbourne Hospital ...	692	Benevolent Asylum ...	122
Alfred Hospital ...	190	Infant Asylum ...	6
St. Vincent's Hospital ...	25	Convent of the Little Sisters of the Poor ...	37
Women's Hospital ...	79	Protestant Refuge ...	10
Children's Hospital ...	150	Eye and Ear Hospital ...	3
Homœopathic Hospital ...	69	Melbourne Gaol ...	17
Austin Hospital ...	79	Pentridge Stockade ...	5
Foundling Hospital ...	29		
Metropolitan Lunatic Asylum ...	87		
Yarra Bend Lunatic Asylum ...	65	Total ...	1,774
Victorian Homes for Aged and Infirm ...	109		

Of the total number, 1,256 took place in Melbourne City, 122 in North Melbourne, 87 in Kew, 69 in South Melbourne, 25 in Fitzroy, 37 in Northcote, 5 in Coburg, and 173 in the remainder of district. These figures, compared with the total deaths (7,217), furnish a proportion of 25 per cent., or, in other words, 1 person in every 4 who died in Greater Melbourne during 1903 ended his or her days in a public or charitable institution.

Nearly one-third of all who died at the age of 5 or upwards in 1903, three-fifths of those who died of typhoid fever, half of those who died of diphtheria, about one-third of those who died of cancer, the same proportion of victims of accident, and more than one-fourth of those who died of phthisis, ended their days in public or charitable institutions, as will be seen from the following statement:—

DEATHS OCCURRING IN AND OUTSIDE HOSPITALS, ETC., 1903.

	In Hospitals, &c.	Outside Hospitals, &c.	Total.
Total Deaths ...	1,739	5,478	7,217
Deaths under five years...	203	1,736	1,939
Deaths from—			
Typhoid Fever ...	38	27	65
Diphtheria ...	21	19	40
Cancer ...	128	322	450
Phthisis ...	178	526	704
Accidents ...	75	145	220
Other Causes ...	1,299	4,439	5,738

The following is a summary of the deaths from some of the principal diseases during each of the last twenty years, the averages of the decades, 1884-93 and 1894-1903, being also shown:—

DEATHS FROM CERTAIN DISEASES IN GREATER MELBOURNE, 1884 TO 1903.

Year.	Measles.	Scarlet Fever.	Influenza.	Diphtheria and Group.	Whooping-cough.	Typhoid Fever.	Diarrhoeal Diseases.	Erysipelas.	Cancer.	Phthisis.	Tubercular Diseases (exclusive of Phthisis).	Diseases of the Brain and Nerves.	Heart Diseases, &c.	Diseases of the Digestive System.	Bronchitis and Laryngitis.	Other Lung Diseases.	Diseases of the Urinary System.	Child-bearing.
1884 ...	176	10	8	99	161	220	405	19	180	789	173	869	323	608	335	516	179	93
1885 ...	6	3	15	129	38	183	506	19	214	826	202	855	382	681	305	655	196	75
1886 ...	12	5	9	104	127	294	642	34	239	790	237	897	407	703	290	617	221	81
1887 ...	64	3	2	137	43	338	652	13	248	909	254	988	528	895	344	523	238	92
1888 ...	15	17	3	269	10	326	546	13	232	904	270	886	556	1,064	346	501	243	96
1889 ...	6	18	11	465	179	560	608	15	322	923	305	1,023	583	1,350	381	628	336	72
1890 ...	1	41	57	541	44	403	335	13	288	948	310	962	619	982	358	637	288	96
1891 ...	3	3	406	208	99	192	415	10	325	849	324	970	666	1,104	472	712	255	82
1892 ...	...	13	34	121	76	154	320	8	313	925	256	827	583	1,025	292	536	241	94
1893 ...	386	18	69	43	54	120	251	12	358	846	206	765	572	1,023	322	609	284	86
Average } for 10 yrs }	67	13	61	212	83	279	468	16	272	871	254	904	522	944	345	594	248	87
1894 ...	1	30	55	60	159	155	171	3	362	778	190	738	551	888	237	538	342	78
1895 ...	...	19	134	72	43	144	152	25	377	814	198	732	609	896	270	575	329	97
1896 ...	2	17	49	108	32	149	178	12	381	722	198	693	665	1,110	236	588	352	72
1897 ...	6	26	65	173	3	121	145	11	366	739	182	739	632	847	252	514	355	82
1898 ...	403	12	91	143	52	222	219	14	427	801	244	788	705	1,200	269	765	345	77
1899 ...	3	3	329	69	132	143	172	9	416	654	197	757	685	949	227	596	395	81
1900 ...	95	3	62	80	12	94	104	11	426	698	212	752	757	875	219	549	421	65
1901 ...	10	2	142	52	125	69	124	9	445	771	218	829	810	865	227	557	465	88
1902 ...	35	11	116	43	55	72	153	23	437	721	197	770	785	1,039	243	650	407	105
1903 ...	11	28	59	42	60	65	129	31	450	704	212	696	821	925	220	586	478	70
Average } for 10 yrs }	57	15	110	84	67	123	155	15	409	740	205	749	702	959	240	592	389	82

The decline which has taken place in the deaths from certain diseases is worthy of notice, especially that from diphtheria and croup, typhoid, diarrhoeal diseases, bronchitis and laryngitis. On the other hand, an increase has taken place in the number of deaths from influenza, cancer, heart diseases, and diseases of the urinary system. The number of deaths in child-bearing remains about the same in both decades. The increase in the annual number of deaths from cancer, viz., from 272 in the decennium, 1884-1893, to that of 409 in the decennium, 1894-1903, is partly due to the greater number of middle-aged and old people in the later period than at the earlier, for cancer is essentially a disease of those periods of life. Part also is probably due to better diagnosis in the later decennium. Probably some part also is really due to an actual increase in the disease.

The following table shows the number of deaths in Greater Melbourne from all causes, also from typhoid fever, diarrhoeal diseases, and diphtheria and croup, registered in each month of the last ten years:—

DEATHS IN EACH MONTH FROM ALL CAUSES, AND FROM TYPHOID FEVER, DIARRHOEAL DISEASES, AND DIPHTHERIA, 1894 TO 1903.

Months.	Number of Deaths in Ten Years from—			
	All Causes.	Typhoid Fever.	Diarrhoeal Diseases.	Diphtheria and Croup.
January ...	6,822	204	282	27
February ...	5,806	199	184	51
March ...	6,238	207	221	73
April ...	5,665	211	137	90
May ...	5,668	137	73	93
June ...	5,921	55	43	83
July ...	6,136	28	34	89
August ...	6,156	27	21	81
September ...	5,579	15	29	65
October ...	5,412	14	37	79
November ...	6,050	31	163	61
December ...	7,538	106	323	50
Total ...	72,991	1,234	1,547	842

The estimated mean population, the births and deaths, and their proportions to population, and the excess of births over deaths in each of the metropolitan cities of Australasia in 1903, were as follow:—

## VITAL STATISTICS OF AUSTRALASIAN CAPITALS, 1903.

Capital Cities (with Suburbs).	Mean Population	Births.		Deaths.		Excess of Births over Deaths.	
		Total Number.	Number per 1,000 of the Population.	Total Number.	Number per 1,000 of the Population.	Numerical.	Centes- imal.
Melbourne ...	502,080	12,012	23·93	7,217	14·37	4,795	66
Sydney ...	509,770	12,749	25·01	5,913	11·60	6,836	116
Brisbane ...	121,500	3,190	26·26	1,610	13·25	1,580	98
Adelaide ...	166,895	3,788	22·70	2,114	12·67	1,674	79
Perth ...	45,200	1,666	36·85	805	17·81	861	107
Hobart ...	34,871	947	27·16	636	18·24	311	49
Wellington...	53,082	1,520	28·63	580	10·93	940	162

## PREVALENCE OF TUBERCULOSIS IN VICTORIA.

By D. A. GRESSWELL, M.A., M.D., OXON., PERMANENT HEAD OF THE HEALTH DEPARTMENT, AND CHAIRMAN OF THE BOARD OF PUBLIC HEALTH.

In June, 1902, in reporting to the Board of Public Health on "Measures to be adopted for the prevention and cure of Tuberculosis," I furnished a table showing the average yearly death rates per 100,000 of the population for successive triennial periods between 1862 and 1902, from phthisis and other tubercular diseases in the metropolitan and the extra metropolitan districts as follows:—

AVERAGE YEARLY DEATH RATES PER 100,000 OF THE POPULATION  
IN TRIENNIAL PERIODS BETWEEN 1862 AND 1902.

Locality.	(a) From Phthisis.												
	1863-65	1866-68	1869-71	1872-74	1875-77	1878-80	1881-83	1884-86	1887-89	1890-92	1893-95	1896-98	1899-1901
Metropolitan Dis- tricts	216	205	223	202	221	224	226	231	217	188	181	164	144
Extra-Metropolitan Districts	93	83	78	82	85	87	93	92	100	99	103	95	96
	(b) From Other Tubercular Diseases.												
Metropolitan Dis- tricts	84	69	58	50	65	56	56	58	65	61	44	45	42
Extra-Metropolitan Districts	43	47	30	30	32	22	19	20	19	20	20	23	22

From this it will be seen that the rates for the 9 years preceding 1902 were lower than those for any of the previous years in regard both to phthisis and to other tubercular diseases. In the same report I also furnished a chart showing that the mortality in Victoria from tuberculosis in all its forms during the 14 years prior to 1902 had fallen fairly steadily from 180 to 149 per 100,000 of the population, a rate, it may be added, that still further fell during the year 1902.

Striking as these facts are, and conclusive as they may appear to be in deciding the question whether the prevalence of tubercular diseases can properly be said to have diminished or not in Victoria, it was pointed out in the report that there were considerations to be entered upon before that conclusion could be definitely accepted. Some of them were in part discussed in the report referred to, but in this place it will be possible to add somewhat to the discussion in the light of other data that have since been put together.

First, it may be asked whether the selection of Victoria as a place of residence for consumptives from other States or other countries has of late years been materially checked. But, though unable to give evidence in support of a negative reply, there is, it should be said, an impression in the minds of the Port Health Officers that there has been some reduction in the number of consumptives arriving in Victoria.

Secondly, the question may be put whether the fall is due to any excess in the number of deaths from other diseases. To supply the answer to this question, it will be necessary to refer to the mortality as a whole, and to the mortality from diseases that may be thought of as having taken the place of tuberculosis as a cause of death.

Table A shows that the general mortality has fallen somewhat markedly, and especially during the last ten years, so that the table cannot be used as an argument in support of the view that the fall of the tubercular death rate has been due to excess of deaths from other causes, nor can it be adduced for that purpose unless it be shown that certain concurrent changes took place in the age constitution of the population and in that of the groups that died.

When the different fatal diseases are brought under consideration, there are similar difficulties to be dealt with, such as I have pointed out in my report. For instance, influenza in its epidemic prevalences has, in the opinion of many, caused large numbers of deaths among consumptives, and so, from time to time, has more or less cleared the field, as it were, of persons that would later have died of consumption; and when

dealing in the report with the great fall of mortality from tubercular diseases that has taken place in the metropolis, I gave data concerning influenza and respiratory diseases, serving to suggest that the fall may have been in part a matter of compensation.

It has been suggested that possibly more definite conclusions might be arrived at on examination of the mortality from the diseases just mentioned during triennials, the middle third of each of which was a census year, and accordingly several tables, B, C, D, E, F, G, and H, have been prepared for the triennial periods 1870-2, 1880-2, 1890-2, and 1900-2.

It will be seen that in the first three of these triennials there was a progressively increasing mortality from respiratory diseases and influenza, both among males and females, and with one or two small exceptions, for each age group, and that in the fourth triennial there was both among males and females, and with one or two small exceptions, for each age group, a very considerable fall. It will also be seen that among females the mortality from phthisis rose in the second triennial for all of the age groups, and that it fell in the third, and still further, except in regard to one age group, in the fourth; and that among males the mortality in all but one of the age groups rose in the second, and in some age groups rose further in the third triennial, and that in the fourth triennial it fell for all but two of the age groups. Other tubercular diseases may in this connexion be almost ignored, but it may be mentioned that for persons from 1 to 15 years of age, i.e., for the group in which those diseases are most fatal, both among males and females, the same order of facts is revealed.

Speaking generally, it may be said that the mortality from phthisis, the mortality from other tubercular diseases, and the mortality from respiratory diseases and influenza, increased during the first three triennials under consideration, and diminished during the fourth, the latest, triennial. This is practically shown also in Table E, which sets out the death rates for different age groups from consumption and other tubercular diseases, together with influenza and respiratory diseases; and it may be argued that had it not been for the influenzal outbreaks, the reduction in the fourth period would not have occurred. In other words, my argument put out in the report cannot, on the further data here furnished, be dismissed, though it cannot, I think, be said that those data afford any material aid in solving the problem; while there still remain for reflection the widespread and fatal epidemics of influenza that took place in years not coinciding with the periods under review.

Brief reference may now be made to the marked fall in the tubercular mortality that has occurred of late years in the metropolis, and to the question whether this similarly can be accepted as showing removal of conditions that favoured the spread of tubercular diseases; and here the same order of questions arises as was presented when dealing with Victoria as a whole.

In the report already several times adverted to, I drew attention to the fact that the table showed a very considerable fall of mortality during the last 9 to 12 years in the metropolitan districts both from phthisis and from other tubercular diseases, and but little change of mortality during that period from those diseases in the extra metropolitan districts, at the same time noting that as the mortality from phthisis and from other tubercular diseases was only rarely half as high in the extra metropolitan as in the metropolitan districts, there had not been the same room for improvement in the former as in the latter, though in some parts of the former high death rates from consumption had ruled for years, as, for instance, in the great mining centres of Ballarat\* and Bendigo,\* and I invited attention to the chart, which showed that the tubercular mortality in the metropolis had presented an almost continuous yearly fall from 27·8 in 1888 to 19·8 in 1901 (here I may add to 18 in 1902) per 10,000 of the population.

As just said, the question as to the full meaning of this reduction raises the same order of questions as was dealt with in regard to Victoria as a whole.

First, it may be asked whether of late years any large migration of tubercular patients has taken place countrywards from the metropolis, or whether any large customary migration to the metropolis of such patients has of late years been much reduced. I know of no data to support the view that there has been any such great change in the place of residence of the consumptives of Victoria at the time of death, though I am inclined to think that there has been some such change. Moreover, seeing that the population of the metropolis constitutes almost one-half of that of the State, there is for special notice the fact already mentioned that, while the metropolitan mortality from tuberculosis has fallen greatly, the extra metropolitan has not sensibly, if at all, changed.

Secondly, the question already dealt with may again be put, whether the selection of Victoria as a place of residence

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\* The average yearly rate per 10,000 of the population during the 13 years prior to 1902 was 24·8 in the case of Bendigo and suburbs, and 16·9 in that of Ballarat and suburbs, the excess of these rates being no doubt attributable in part to mining operations, and in the case of Bendigo to the selection of that city as a place of residence by consumptives.

for consumptives from other States and other countries has of late years been materially checked, a question to which I am not able to give an affirmative reply, though there is a belief that consumptives have of late years arrived in Victoria in somewhat smaller numbers than previously. The general mortality, too, cannot be adduced as evidence that there has been no abolition of the factors favourable to the dissemination of tuberculosis. But, as stated in my report several times referred to, "Comparison of the mortality from respiratory diseases and influenza on the one hand, with that from consumption and all tubercular diseases on the other, will serve, I think, to suggest that the fall in the latter may have been in part a matter of compensation."

Statistics in this connexion are as follow:—"In successive quinquennial periods from 1864 to 1898, both years included, the average yearly death rates in Melbourne and suburbs per 100,000 of the population were—(1) in the case of phthisis, 206, 211, 221, 227, 191, and 170; (2) in the case of respiratory diseases and influenza, 165, 155, 199, 225, 227, 227, and 198; and (3) in the case of all tubercular diseases, 282, 264, 283, 282, 288, 250, and 214."

Of course the question of age constitution of the population needs also to be considered, but until the age constitution is known, both of the population in general and of those that died during the period under review, no absolutely definite conclusion can be arrived at. At the same time, while allowing that the view I expressed in my report as to the fall having been, in part, a matter of compensation, is not set aside by the further data brought to bear on the discussion, there is nothing to show that there has not been an absolutely material reduction of the factors fostering tuberculosis in the metropolis, while it can scarcely be supposed that the reports distributed by the Board of Public Health to the municipal councils, as the local sanitary authorities, and the placards of information that have been distributed by the Board throughout the State, reports and placards that have, during the past 13 years, numbered some hundreds of thousands, and the action taken by the councils thereon, have failed to produce any beneficial results.

The object of this inquiry will be further prosecuted with the aid of statistics of mortality and age constitution for the successive years of the period reviewed in this report, and with the aid also of statistics as to immigration of consumptives into the State during the same period.

A.

RETURN SHOWING MALE AND FEMALE DEATH RATES PER 1,000 OF THE POPULATION OF VICTORIA FOR EACH YEAR, 1861-1902.

Year.	Death Rate per 1,000 of the Population.		Year.	Death Rate per 1,000 of the Population.	
	Males.	Females.		Males.	Females.
1861	18.84	20.47	1882	16.91	13.57
1862	18.28	18.56	1883	15.52	12.95
1863	17.34	16.25	1884	15.49	13.18
1864	15.52	14.67	1885	16.47	13.39
1865	17.74	16.29	1886	16.49	13.72
1866	19.82	19.16	1887	17.14	14.18
1867	18.39	17.99	1888	16.80	13.91
1868	15.95	14.23	1889	19.19	16.20
1869	16.40	14.32	1890	17.59	14.44
1870	15.59	13.41	1891	17.74	14.63
1871	14.49	12.21	1892	14.99	12.15
1872	15.42	13.14	1893	15.69	12.35
1873	15.91	13.99	1894	14.60	11.47
1874	16.78	14.48	1895	14.58	11.74
1875	20.40	18.29	1896	14.73	11.77
1876	18.25	15.64	1897	14.22	11.34
1877	17.17	14.26	1898	17.57	13.99
1878	16.57	14.22	1899	15.48	12.43
1879	16.04	12.93	1900	14.34	11.11
1880	14.80	12.48	1901	14.90	11.48
1881	15.38	12.77	1902	15.13	11.66

B.

DEATH RATES IN VICTORIA PER 10,000 FROM INFLUENZA.

Age Group.	Males.				Females.			
	1870-2.	1880-2.	1890-2.	1900-2.	1870-2.	1880-2.	1890-2.	1900-2.
0—15 ...	0.69	.34	2.50	1.10	.52	.34	1.86	1.15
15—20 ...	...	.07	.64	.34	—	—	.92	.83
20—25 ...	...	...	1.20	.59	—	—	1.28	.69
25—35 ...	0.05	.07	1.50	.79	.07	.07	2.35	.89
35—45 ...	0.05	...	3.04	1.31	—	.08	4.11	1.86
45—55 ...	0.09	.24	5.12	3.20	.17	—	5.39	2.02
55—65 ...	0.67	.24	12.65	5.25	.39	.62	11.46	5.53
65 upwards ...	1.09	2.36	27.13	17.02	.84	3.18	35.22	16.02
All ages ...	0.33	.25	3.94	2.30	.28	.24	3.72	2.13

## C.

## DEATH RATES IN VICTORIA PER 10,000 FROM RESPIRATORY DISEASES.

Age Group.	Males.				Females.			
	1870-2.	1880-2.	1890-2.	1900-2.	1870-2.	1880-2.	1890-2.	1900-2.
0—15 ...	22·65	29·02	28·52	16·53	18·50	24·18	24·13	13·85
15—20 ...	3·45	3·30	2·92	2·70	1·88	2·02	3·52	2·34
20—25 ...	5·70	5·34	4·88	4·85	3·54	4·23	3·05	3·34
25—35 ...	4·69	8·31	6·85	5·94	4·51	5·72	5·65	3·75
35—45 ...	10·28	15·80	13·55	9·49	7·94	12·53	11·55	7·68
45—55 ...	20·43	26·59	25·18	18·04	7·87	13·63	17·01	11·80
55—65 ...	41·79	51·65	56·51	38·37	22·97	29·15	32·10	27·42
65 upwards ...	108·11	136·54	141·07	112·38	73·10	116·12	112·38	86·78
All ages ...	17·29	24·48	24·30	18·66	12·63	17·08	17·62	13·28

## D.

## AVERAGE YEARLY DEATH RATE PER 10,000 PERSONS DYING FROM TUBERCULAR DISEASES (PHTHISIS EXCEPTED) DURING THE YEARS 1870-2, 1880-2, 1890-2, 1900-2.

## MALES.

Ages.	Death-rate per 10,000 persons during—			
	1870-2.	1880-2.	1890-2.	1900-2.
0—15 ...	7·53	7·98	10·36	5·64
15—20 ...	·64	·81	1·17	1·12
20—25 ...	1·80	1·23	·89	1·77
25—35 ...	·70	·66	·84	1·91
35—45 ...	·77	·88	·77	1·39
45—55 ...	·95	·85	·67	1·64
55—65 ...	·88	1·07	·78	2·40
65 and over ...	1·09	2·36	·56	1·17
All ages ...	3·46	3·55	4·02	2·99

## FEMALES.

0—15 ...	5·89	7·28	8·43	5·33
15—20 ...	·82	1·30	1·27	1·95
20—25 ...	·52	·69	1·23	2·09
25—35 ...	·54	·41	·88	1·98
35—45 ...	1·04	·70	·42	1·77
45—55 ...	·17	·67	·34	1·01
55—65 ...	·39	·62	·69	·71
65 and over ...	1·69	1·19	·64	·71
All ages ...	3·10	3·39	3·58	2·91

## E.

## DEATH RATES IN VICTORIA PER 10,000 LIVING AT DIFFERENT AGES FROM PHTHISIS, OTHER TUBERCULAR AND RESPIRATORY DISEASES, AND INFLUENZA.

Ages.	1870-2.				1880-2.				1890-2.				1900-2.			
	Phthi- sis.	Other Tuber- cular Diseases	Respi- ratory and Influ- enza.	Total.												
MALES.																
0-15	1.22	7.53	23.34	32.09	1.74	7.98	29.36	39.08	.90	10.36	31.02	42.28	.38	5.64	17.63	23.65
15-20	5.71	.61	3.05	9.40	6.88	.81	3.37	11.06	3.41	1.17	3.56	8.14	5.06	1.12	3.04	9.22
20-25	18.75	1.80	5.70	26.25	21.19	1.23	5.34	27.76	18.29	.89	6.08	25.26	14.35	1.77	5.44	21.56
25-35	22.21	.70	5.74	28.65	30.33	.66	8.38	39.37	23.70	.84	8.35	32.89	20.31	1.91	6.73	28.95
35-45	21.83	.77	10.33	32.93	25.11	.88	15.80	41.79	28.28	.77	16.59	45.64	22.07	1.39	10.80	34.26
45-55	22.24	.95	20.52	43.71	28.65	.85	26.83	56.33	31.17	.67	30.30	62.14	25.05	1.64	21.24	47.93
55-65	27.86	.88	42.46	71.20	31.41	1.07	51.89	84.37	36.48	.78	69.16	106.42	35.75	2.40	43.62	81.77
65 and over	19.56	1.09	109.20	129.85	18.08	2.36	138.90	159.34	25.40	.56	168.20	194.16	31.07	1.17	129.40	161.64
All ages	12.89	3.46	17.62	33.97	15.33	3.55	24.73	43.61	15.73	4.02	28.24	47.99	13.51	2.99	20.96	37.46
z																
FEMALES.																
0-15	0.98	5.89	19.02	25.89	1.76	7.28	24.52	33.56	1.43	8.43	25.99	35.85	.93	5.33	15.00	21.26
15-20	12.37	.82	1.88	15.07	12.50	1.30	2.02	15.82	9.51	1.27	4.44	15.22	8.18	1.95	3.17	13.30
20-25	19.28	.52	3.54	23.34	21.00	.69	4.23	25.92	18.49	1.23	4.33	24.05	12.79	2.09	4.03	18.91
25-35	22.02	.54	4.58	27.14	26.56	.41	5.79	32.76	21.77	.88	8.00	30.65	18.15	1.98	4.64	24.77
35-45	21.65	1.04	7.94	30.63	24.06	.70	12.61	37.37	22.53	.42	15.66	38.61	17.74	1.77	9.54	29.05
45-55	19.60	.17	8.04	27.81	20.72	.67	13.63	35.02	16.13	.34	22.40	38.87	14.41	1.01	13.82	29.24
55-65	10.51	.39	23.36	34.26	14.26	.62	29.77	44.65	12.35	.69	43.56	56.60	12.52	.71	32.95	46.18
65 and over	12.61	1.69	73.94	88.24	13.12	1.19	119.30	133.61	8.25	.64	147.60	156.49	8.18	.71	102.80	111.69
All ages	10.62	3.10	12.91	26.63	12.75	3.39	17.32	33.46	11.51	3.58	21.34	36.43	9.72	2.91	15.41	23.04

## F.

## DEATHS FROM PHTHISIS IN VICTORIA FOR THE YEARS 1860-1902.

Year.	Deaths from Phthisis.		Year.	Deaths from Phthisis.	
	Total Number.	Number per 10,000 Persons Living.		Total Number.	Number per 10,000 Persons Living.
1860 ...	772	14.46	1898 ...	1,520	12.85
1865 ...	741	12.12	1899 ...	1,339	11.29
1870 ...	888	12.45	1900 ...	1,387	11.62
1875 ...	1,027	13.04	1901 ...	1,416	11.77
1880 ...	1,175	13.82	1902 ...	1,412	11.69
1885 ...	1,384	14.46			
1890 ...	1,631	14.58	Sum and		
1895 ...	1,567	13.23	Mean of	49,579	13.15
			43 Years		

## G.

## DEATH RATES IN VICTORIA FROM PHTHISIS AT DIFFERENT AGES AT FIVE CENSUS PERIODS, 1860-2, 1870-2, 1880-2, 1890-2, 1900-2.

## MALES.

Ages.	Annual Mortality from Phthisis per 10,000 of the Population.				
	1860-2.	1870-2.	1880-2.	1890-2.	1900-2.
0-15 ...	2.55	1.22	1.74	.90	.38
15-20 ...	7.72	5.71	6.88	3.41	5.06
20-25 ...	12.23	18.75	21.19	18.29	14.35
25-35 ...	16.53	22.21	30.33	23.70	20.31
35-45 ...	21.63	21.83	25.11	28.28	22.07
45-55 ...	23.14	22.24	28.65	31.17	25.05
55-65 ...	25.63	27.86	31.41	36.48	35.75
65 and upwards ...	23.20	19.56	18.08	25.40	31.07
All ages ...	13.33	12.89	15.33	15.73	13.51

## FEMALES.

0-15 ...	3.70	.98	1.76	1.43	.93
15-20 ...	14.07	12.37	12.50	9.51	8.18
20-25 ...	18.95	19.28	21.00	18.49	12.79
25-35 ...	24.76	22.02	26.56	21.77	18.15
35-45 ...	25.62	21.65	24.06	22.53	17.74
45-55 ...	25.01	19.60	20.72	16.13	14.41
55-65 ...	22.59	10.51	14.26	12.35	12.52
65 and upwards ...	18.03	12.61	13.12	8.25	8.18
All ages ...	14.46	10.62	12.75	11.51	9.72

H.

AVERAGE YEARLY DEATH RATES IN VICTORIA FROM INFLUENZA AND RESPIRATORY DISEASES (COMBINED) PER 10,000 LIVING AT DIFFERENT AGES, DURING 1870-72, 1880-82, 1890-92, AND 1900-1902.

Age Group.	1870-72.	1880-82.	1890-92.	1900-02.
<b>MALES.</b>				
0—15 ... ..	23·34	29·36	31·02	17·63
15—20 ... ..	3·05	3·37	3·56	3·04
20—25 ... ..	5·70	5·34	6·08	5·44
25—35 ... ..	5·74	8·38	8·35	6·73
35—45 ... ..	10·33	15·80	16·59	10·80
45—55 ... ..	20·52	26·83	30·30	21·24
55—65 ... ..	42·46	51·89	69·16	43·62
65 and upwards ... ..	109·20	138·90	168·20	129·40
All ages ... ..	17·62	24·73	28·24	20·96
<b>FEMALES.</b>				
0—15 ... ..	19·02	24·52	25·99	15·00
15—20 ... ..	1·88	2·02	4·44	3·17
20—25 ... ..	3·54	4·23	4·33	4·03
25—35 ... ..	4·58	5·79	8·00	4·64
35—45 ... ..	7·94	12·61	15·66	9·54
45—55 ... ..	8·04	13·63	22·40	13·82
55—65 ... ..	23·36	29·77	43·56	32·95
65 and upwards ... ..	73·94	119·30	147·60	102·80
All ages ... ..	12·91	17·32	21·34	15·41

## INTERCHANGE.

Customs and  
Excise  
transferred  
to Com-  
monwealth.

By the Commonwealth Constitution the collection of Customs and Excise duties was transferred to the Federal Government on the 1st January, 1901, and the departments of Posts and Telegraphs and Defence were transferred by proclamation on 1st March following. The Commonwealth Government collects the revenue of these departments, and after deducting the expenditure of the transferred departments incurred in the State, and the State's proportion of new expenditure on a population basis, returns the balance to the State.

A limit to the amount which the Commonwealth may expend is fixed by Section 87 of the Constitution, which provides that not more than one-fourth of the net revenue from Customs and Excise shall be applied to the expenses of the Commonwealth. Ten years after the introduction of uniform duties, the Commonwealth Parliament may repeal or alter this provision. After 8th October, 1906, the Commonwealth Parliament may alter the basis of the distribution of Customs and Excise revenue amongst the States, and may provide for distribution on a population of any other basis. A provisional tariff was introduced by resolution of the House of Representatives on the 8th October, 1901; and the tariff, in its present form, was finally passed on 16th September, 1902, with various modifications of the duties as first proposed. The classification of imports and exports differs in regard to many items in the various States; so that to compare items or classes of products or manufactures in one State with those in another, it is sometimes necessary to search through the whole returns of one State for separated items, which in another State may together form one item.

Imports and  
exports.

The total value of Victoria's imports and exports and their value per head of the population for each of the five years, 1899 to 1903, are shown in the following table, the

imports being subdivided according as they are subject to ad valorem, fixed or composite rates of duty, or are free of duty:—

VALUE OF IMPORTS AND EXPORTS: RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
<i>Imports.</i>					
Value of Articles at Ad Valorem Rates of Duty	£ 2,212,665	£ 2,587,079	£ 3,170,147	£ 5,123,164	£ 4,812,515
"    "    Fixed    "    "	3,722,261	4,175,245	4,318,682	3,333,945	4,766,539
"    "    Composite    "    "	.. .. .	.. .. .	.. .. .	75,655	47,372
"    "    Free    ..    "	12,017,968	11,539,487	11,438,511	9,737,481	8,232,745
Total Value .. .. .	17,952,894	18,301,811	18,927,340	18,270,245	17,859,171
Value per Head of Population .. .. .	£ s. d. 15 2 8	£ s. d. 15 6 9	£ s. d. 15 14 8	£ s. d. 15 2 8	£ s. d. 14 15 6
<i>Exports.</i>					
Total Value .. .. .	£ 18,567,780	£ 17,422,552	£ 18,646,097	£ 18,210,523	£ 19,707,068
Value per Head of Population .. .. .	£ s. d. 15 13 0	£ s. d. 14 12 0	£ s. d. 15 10 0	£ s. d. 15 1 8	£ s. d. 16 6 0

The value of imports in 1903 was less than that of any of the preceding four years, being over a million less than in 1901, which was the greatest of the years under review. The impending new Federal tariff was doubtless responsible for the heavy imports of 1901. The change from the State to the Federal tariff has put a much greater portion of the imports on the duty list, the value of goods subject to duty in 1903 being greater by over two millions sterling than in 1901. The value per head of population increased from £15 2s. 8d. in 1899 to £15 14s. 8d. in 1901, but dropped to £14 15s. 6d. per head in 1903.

The value of exports in 1903 was considerably higher than in any of the years shown, being nearly two and a quarter millions sterling more than in 1900. The value per head of the population was highest in 1903, being equal to £16 6s. per head. The greatest difference between the values per head in the imports and exports occurred in 1903, when the exports were £1 10s. 6d. per head more than the imports, while in 1900 the imports were the greater by 14s. 9d. per head. In 1899 the exports were 10s. 4d. more per head, and in 1901 and 1902 4s. 8d. and 1s. respectively less per head than the imports.

The value of Victorian trade with the other Australian States, New Zealand, the United Kingdom, other British possessions, and all Foreign countries in each of the last five years was as follows:—

Imports and exports to principal countries.

IMPORTS FROM AND EXPORTS TO DIFFERENT COUNTRIES :  
RETURN FOR FIVE YEARS.

Country.		1899.	1900.	1901.	1902.	1903.
Imports.						
From—		£	£	£	£	£
Other Australian States		8,050,519	6,364,167	6,240,460	5,412,520	5,519,556
New Zealand ...		356,311	404,356	619,894	1,151,179	1,043,509
United Kingdom ...		5,990,027	7,055,028	7,221,801	6,935,040	5,977,947
Other British Possessions		769,483	935,136	1,040,342	1,129,034	1,106,732
Foreign Countries ...		2,786,554	3,543,124	3,804,843	3,642,472	4,211,427
Total		17,952,894	18,301,811	18,927,340	18,270,245	17,859,171
Exports.						
To—		£	£	£	£	£
Other Australian States		4,838,185	5,257,188	5,570,838	7,841,188	8,522,056
New Zealand ...		345,087	437,322	465,704	638,735	524,898
United Kingdom ...		5,648,150	6,363,685	5,425,772	3,433,310	3,280,134
South Africa ...		1,324,082	1,926,433	3,891,057	2,823,677	1,226,981
Other British Possessions		2,701,961	1,377,275	958,410	1,438,833	3,684,994
Foreign Countries ...		3,710,315	2,060,649	2,334,316	2,034,780	2,468,005
Total		18,567,780	17,422,552	18,646,097	18,210,523	19,707,068

This table shows that Victoria's imports from the other Australian States amounted to £8,050,519, or 45 per cent. of the total imports in 1899; but that they fell away during the next four years, and amounted to about 30 per cent. in 1902 and 1903. The imports from the United Kingdom, which were valued at £5,977,947 in 1903, forming 33 per cent. of the total, were about the same as in 1899; but they formed 38 per cent. of the total imports in each of the intervening three years. Imports from New Zealand rose from the value of £356,311, or only 2 per cent. of the whole in 1899, to the value of over a million sterling, or 6 per cent., in each of the last two years. Other British possessions contributed 4 per cent. of the imports in 1899, 5 per cent. in 1900, and 6 per cent. in the three years since. The imports from Foreign countries were valued at £2,786,554, or 16 per cent. of the whole, in 1899, but increased considerably in the four following years, amounting to 24 per cent in 1903. These figures disclose that while the import trade from Great Britain showed no increase in the five years, the imports from Foreign countries increased by 50 per cent. in the same period. Victorian exports to the other States of the Commonwealth were valued at £4,838,185, or only 26 per cent. in 1899, rose to 30 per cent. in 1900 and 1901, and to 43 per cent. of the total in 1902 and 1903. The exports to the United Kingdom formed only 30 per cent. of the total in 1899, 36 per cent. in 1900, 29 per cent. in 1901, 19 per cent. in 1902, and 17 per cent. in 1903; the

value in 1903 being little more than half of that in 1899. The exports to South Africa in 1899 were valued at £1,324,082, or 7 per cent. of the whole; during the next two years they rose to the value of £3,891,057, or 21 per cent; but have since fallen to 6 per cent. of the total exports. Exports to New Zealand formed about 2 per cent. of the whole in 1899, and gradually increased in value and proportion to 3 per cent. in 1902 and 1903. Other British possessions took about 14 per cent. of the exports in 1899, 8 per cent. in 1900, 5 per cent. in 1901, 8 per cent. in 1902, and 19 per cent. in 1903. Exports to Foreign countries amounted to 20 per cent. of the whole in 1899, 12 per cent. in the next two years, 11 per cent. in 1902, and 12 per cent. in 1903. The exports to the other Australian States, New Zealand, and other British possessions show an improvement, but those to Great Britain, South Africa, and Foreign countries show a falling off.

The value of Victorian trade with each of the other States of the Commonwealth in each of the last five years was as follows:—

Imports and exports to Australian States.

IMPORTS FROM AND EXPORTS TO OTHER STATES: RETURN FOR FIVE YEARS.

State.	1899.	1900.	1901.	1902.	1903.
Imports.					
From—	£	£	£	£	£
New South Wales ...	3,990,626	4,136,297	4,597,861	3,669,446	3,297,545
Queensland ...	1,066,206	588,413	517,696	499,595	400,766
South Australia ...	521,995	513,049	492,654	524,952	904,962
Western Australia ...	2,119,618	780,291	276,832	291,004	221,989
Tasmania ...	352,074	346,117	355,417	427,523	694,294
Total Inter-State	8,050,519	6,364,167	6,240,460	5,412,520	5,519,556
Exports.					
To—					
New South Wales ...	2,436,216	2,953,510	2,992,342	3,747,504	4,430,742
Queensland ...	423,811	312,498	366,783	1,024,894	738,498
South Australia ...	526,477	462,966	523,978	702,157	857,498
Western Australia ...	795,425	852,167	988,481	1,122,500	1,243,833
Tasmania... ..	656,256	676,047	699,254	1,244,133	1,251,485
Total Inter-State	4,838,185	5,257,188	5,570,838	7,841,188	8,522,056

The information contained in this return shows that imports to Victoria from other States have declined, and exports from Victoria to other States have increased, since the abolition of interstate duties, on 8th October, 1901. The increase in exports is made up of Victorian produce and imports from abroad, and tends to show that the influence of Melbourne as a distributing and manufacturing centre has been largely developed since the inauguration of interstate free-

trade. The principal decline in imports from other States was from Western Australia, and this is accounted for by the fact that gold which in earlier years was forwarded to the Victorian mint is now minted locally. In the three years, 1899 to 1901, interstate trade showed an excess in favour of imports to the extent of £4,342,716 from New South Wales, £1,069,223 from Queensland, £14,277 from South Australia, £540,668 from Western Australia; but with Tasmania there was an excess of exports amounting to £977,949. Under interstate freetrade the position has completely altered, as in the last two years, 1902 and 1903, the trade showed an excess of exports of £1,211,255 to New South Wales, £863,031 to Queensland, £129,741 to South Australia, £1,853,340 to Western Australia, and £1,373,801 to Tasmania. Dealing with the total interstate trade, it is worthy of note that while Victoria received from the other States goods to the value of £4,988,935 more than it exported thereto in the first three years under review, in the two later years Victorian exports to those States in excess of imports therefrom amounted to £5,431,168.

Exports of  
home  
produce.

The values of the principal articles of export entered at the Customs by exporters as being the produce or manufactures of Victoria during each of the last five years were as follow:—

EXPORTS OF VICTORIAN PRODUCE: RETURN FOR FIVE YEARS.

Principal Articles.	1899.	1900.	1901.	1902.	1903.
	£	£	£	£	£
Wool .. ...	3,350,351	2,289,341	2,511,019	2,331,657	1,848,925
Grain and Pulse—					
Wheat .. ...	1,213,747	700,814	1,064,649	500,436	33,052
Other .. ...	65,154	292,705	317,010	340,734	181,131
Butter and Cheese .. ...	1,419,294	1,509,383	1,246,739	796,789	1,303,422
Hay and Chaff .. ...	257,496	316,352	407,433	1,242,186	339,660
Flour .. ...	229,901	196,899	199,506	179,293	74,479
Sugar (refined) and Molasses .. ...	142,117	103,302	133,666	127,975	112,618
Leather .. ...	292,474	311,240	300,905	237,442	225,858
Tallow .. ...	138,727	172,397	92,482	82,478	53,165
Skins and Hides .. ...	260,275	165,604	252,682	365,659	323,245
Horses, Cattle, and Sheep .. ...	232,629	455,245	514,870	444,293	1,203,017
Other Articles .. ...	1,831,185	2,149,850	2,542,667	3,598,780	3,820,478
Total Merchandise .. ...	9,433,350	8,663,132	9,583,628	10,247,722	9,519,050
Gold (Bullion and Specie) .. ...	1,555,989	2,663,220	3,104,911	2,945,511	4,353,171
Total .. ...	10,989,339	11,326,352	12,688,539	13,193,233	13,872,221
	£ s. d.				
Per Head of Population	9 5 3	9 9 10	10 10 9	10 18 7	11 9 6
Percentage of Total Exports	59·185	65·010	68·049	72·448	70·392

These figures afford some indication of the condition of trade in local products. Owing to the value of Victorian wool and gold, as given by the exporters, being defective, the value of the net exports of those articles (i.e., excess of exports over imports) has been substituted therefor in this statement. The exports of home produce as a whole show considerable improvement during the past five years; in 1899 they were valued at nearly eleven millions sterling; in 1900, 11 1-3 millions; in 1901, 12 2-3 millions; in 1902, 13 1-5 millions; and in 1903, at nearly 14 millions. The average value of these exports for the five years under review amounts to £12,413,937, that for the previous five years being £9,064,500. The value per head of the population rose from £9 5s. 3d. in 1899 to £11 9s. 6d. in 1903, and the proportion to the total exports from 59 per cent. in 1899 to 70 per cent. in 1903. Hay shows a larger growth in value than any other article, in the five years dealt with, 1900, 1901, and 1902 being each successively a record year, and the value in 1902 three times as much as that of 1901, but as a result of the drought a serious decline took place in 1903. After a bad year in 1899, gold was well up to the average in the next three years, and in 1903 considerably above it. Except for a large rise in 1899, and a decline in 1903, wool has been fairly uniform throughout the period under notice. Wheat has had considerable fluctuations, being very low in 1903, while 1899 was the best year since 1884. The butter and cheese figures for 1899 and 1900 eclipse those of all previous years, but have since not been maintained. The value of live stock in 1903 is the highest recorded. The value of all domestic exports in 1903, as compared with 1899, increased 3 millions, the specified articles showing increases were—gold, £2,797,182; live stock, £970,388; hay and chaff, £82,164; and skins and hides, £62,970; and those showing decreases were—wool, £1,501,426; grain, £1,064,718; flour, £155,422; butter and cheese, £115,872; tallow, £85,562; leather, £66,616; and sugar, £29,499. The value per head of the population of Victorian produce exported has shown a substantial annual increase during the last five years, but the proportion to the total exports in 1903 was lower than in 1902, although higher than in the other three years.

The item in the preceding table which shows the largest and most consistent increase is "Other Articles," the exports of which have increased by nearly £2,000,000, or by 108 per cent., since 1899. This item includes a number of natural products not separately enumerated in the table, such as frozen meats, bacon, fruits, ores, metals, plants, bark, and

Exports of  
locally  
manufactured  
articles to  
the other  
States.

timber; but mainly consists of exports to the other States of various articles manufactured in Victoria. By the establishment of interstate freetrade, and the imposition of moderate protective duties on many articles under the Federal tariff, the manufacturers of Victoria have had thrown open to them a protected market of nearly 4 million consumers in place of one, more highly protected, of 1,200,000 consumers. No time has been lost in taking advantage of this, and Victoria is pushing her manufactures in the other States to a very considerable extent, as is seen by the following table, which shows the exports to the other States of 24 of the principal items in 1900, the year before the introduction of the Federal tariff, and in 1902 and 1903, the two years which have elapsed since its introduction. The increase in 1903, as compared with 1900, is also shown:—

PRINCIPAL LOCALLY MANUFACTURED ARTICLES EXPORTED TO THE  
OTHER STATES, 1900, 1902, AND 1903.

Articles.	1900.	1902.	1903.	Increase in 1903 over 1900.
	£	£	£	£
Apparel and Attire ... ..	136,414	246,224	336,313	199,899
Boots and Shoes ... ..	58,404	184,474	235,129	176,725
Metals, General Manufactures of	82,338	113,114	144,942	62,604
Tobacco (manufactured), Cigars and Cigarettes	1,984	133,010	124,867	122,883
Machinery, Engines, etc. ...	122,994	118,522	100,124	-22,870*
Confectionery and Biscuits ...	44,280	77,524	90,780	46,500
Agricultural, etc., Implements...	95,421	47,277	85,227	-10,194*
Jewellery ... ..	18,228	48,744	78,967	60,739
Jams and Jellies ... ..	22,367	76,008	78,388	56,021
Stationery ... ..	32,466	53,685	69,245	36,779
Leather ... ..	36,474	71,896	69,430	32,956
Indiarubber Manufactures ...	2,487	19,059	63,559	61,072
Hats and Caps ... ..	8,216	50,167	61,767	53,551
Starch ... ..	22,534	32,535	43,513	20,979
Woollen Piece Goods ... ..	7,419	31,337	38,566	31,147
Ale, Porter, and Beer ... ..	7,928	33,441	35,821	27,893
Candles and Stearine ... ..	2,438	30,405	30,483	28,045
Medicines ... ..	6,043	17,344	24,935	18,892
Soap ... ..	4,626	14,015	22,967	18,341
Glass Manufactures ... ..	9,640	18,316	20,620	10,980
Wine ... ..	2,195	20,319	19,949	17,754
Woollen Flannels ... ..	414	11,539	18,423	18,009
Woollen Blankets and Rugs ...	1,566	11,283	17,049	15,483
Pickles, Sauces, etc. ... ..	10,779	15,777	15,746	4,967
Total, 24 items ... ..	737,655	1,476,015	1,826,810	1,089,155

\* The minus sign (—) denotes a decrease.

The increase in many of the above items is remarkable. The increase during the first year after the introduction of the tariff, in respect of the 24 items above enumerated, amounted to £738,360, or just over 100 per cent.; and in the second year, viz., 1903, there was a further substantial increase. The items which seem to be quickly finding a ready market in the other States are apparel, boots, tobacco, jewellery, hats and caps, india-rubber manufactures, jams and jellies, and confectionery and biscuits. Many of the other items show a substantial increase during the first year, which has not been sustained to any extent. The only two items which show a decrease are machinery, engines, &c., and agricultural, &c., implements; but a number of the articles which comprise these items are duty free, whilst several others have very low rates imposed. A new classification has been adopted in the compilation of the detailed imports and exports, and great care must now be exercised in comparing items in 1903 and subsequent years with apparently similar items in previous years. Care has been taken in the above comparison to see that like is compared with like; but several items of importance have been omitted on account of the impossibility of reconciling the differences.

Victoria imports a considerable quantity of timber, including large quantities of American oregon and Baltic deal. The following is a statement of the imports and exports during the four years, 1899 to 1902:—

Imports and  
exports of  
timber.

VALUE OF TIMBER IMPORTED AND EXPORTED, 1899 TO 1902.

	1899.	1900.	1901.	1902.
	£	£	£	£
Total Imports ... ..	441,277	569,101	600,304	640,392
Imports from Australian States and New Zealand	100,376	136,841	150,539	144,699
Imports of Australasian Timber ...	88,946	116,337	147,700	141,214
Total Exports ... ..	21,892	35,392	35,785	42,800
Exports to Australian States and New Zealand	21,332	34,621	35,269	41,712
Exports of Victorian Timber ...	9,057	10,280	9,724	14,597
Victorian Timber exported to Aus- tralian States and New Zealand	8,691	10,221	9,583	14,398

By deducting from the total imports the value of timber which had been imported and then exported, the value of foreign timber (i.e., timber produced outside Victoria) required for use within the State is obtained. Such net imports were valued at £428,442 in 1899, £543,989 in 1900, £574,243 in 1901 and £612,189 in 1902.

The large increase in the value of timber imported during the four years under review indicates a satisfactory revival in the building trade, the increase between 1899 and 1902 being nearly £200,000. Of the Australasian timber (i.e., timber produced in, or foreign timber treated in, Australasia) imported into Victoria in 1902, New Zealand contributed £96,443 worth. The Australasian timber imported in that year was valued at £141,214, whilst the Victorian timber exported to Australasia was only worth £14,398. All the export trade in Victorian timber has been done with the adjoining States, very little reaching foreign markets.

Net revenue  
of Customs  
Depart-  
ment.

The following are the net amounts of Customs and Excise duty collected in each of the last five years, the principal articles being separately distinguished:—

REVENUE OF CUSTOMS DEPARTMENT: RETURN FOR FIVE YEARS.

Articles.	1899.	1900.	1901.	1902.	1903.
Import duty—	£	£	£	£	£
Alcoholic Liquors ...	471,113	494,377	669,625	431,219	501,330
Narcotics ...	244,810	246,314	309,506	188,685	222,489
Sugar and Molasses	273,255	275,787	281,557	249,183	295,485
Rice ...	17,948	18,184	21,797	} 1,144,154	} 1,071,536
Dried and Preserved Fruits and Vegetables	58,133	38,066	34,632		
All Other Articles at Fixed Rates	434,177	419,643	377,078		
Articles at Ad Valorem Rates	404,669	488,008	539,187		
<b>Total Import Duties</b>	<b>1,904,105</b>	<b>1,980,379</b>	<b>2,233,382</b>	<b>2,013,241</b>	<b>2,090,840</b>
Excise Duty—					
Spirits ...	89,427	87,236	132,180	64,838	78,828
Beer ...	169,913	176,787	185,019	184,890	169,190
Tobacco, etc. ...	61,777	76,655	112,200	109,915	135,805
Sugar ...	...	...	9,870	31,524	10,251
Starch ...	...	...	...	9,054	7,604
<b>Total Excise Duties</b>	<b>321,117</b>	<b>340,678</b>	<b>439,269</b>	<b>400,221</b>	<b>401,678</b>
Miscellaneous ...	80,559	92,632	49,494	44,375	52,091
<b>Grand Total...</b>	<b>2,305,781</b>	<b>2,413,689</b>	<b>2,722,145</b>	<b>2,457,837</b>	<b>2,544,609</b>

The net revenue collected by the Department of Trade and Customs in Victoria from all sources, after deducting drawbacks, refunds, and rebates, amounted to £2,544,609 in 1903, being £70,000 above the average of the other four years shown above; £239,000 more than in 1899; £131,000 more than in 1900; £87,000 more than in 1902; but £177,500 less than in 1901. The revenue from Customs duties in 1903 was £58,000 above the average of the other four years; £187,000 more than in 1899; £110,000 more than in 1900; £78,000 more than in 1902; but £142,500 less than in 1901. The revenue from Excise duties in 1903 was £26,000 above the average of the other four years; £80,000 more than in 1899; £61,000 more than in 1900; £1,500 more than in 1902; but £37,600 less than in 1901.

Imported goods, other than stimulants and narcotics, on which duty has been paid are allowed drawback, which is equivalent to a refund of the duty paid, if subsequently exported. Drawback is allowed not only on goods exported in the same condition as when imported, but also upon imported goods which have been subjected to some process of manufacture in Victoria. Drawbacks are included in the general exports. The following are the figures for the last five years:—

EXPORTS FOR DRAWBACK : RETURN FOR FIVE YEARS..

Year.	Value of Goods Exported for Drawback.	Amount Paid as Drawback.
	£	£
1899 ... ..	508,560	97,962
1900 ... ..	568,456	92,404
1901 ... ..	577,928	115,283
1902 ... ..	...	45,022
1903 ... ..	...	35,705

From 1872, when the system of allowing drawbacks was first introduced, to the end of 1903, the total amount of duty repaid as drawback was £2,886,403. The withdrawals were heavy in 1901, but very light in 1903, when £3,832 drawback was paid on excise.

Victorian shipping has considerably increased during the last five years; the number of vessels (excluding those engaged in the Victorian coastal trade) entered and cleared at Victorian ports, their gross tonnage, and the number of men forming their crews in each of the years 1899 to 1903 being:—

Vessels entered and cleared.

## SHIPPING INWARDS AND OUTWARDS: RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
<b>Vessels Entered—</b>					
Number ... ..	2,024	2,101	2,418	2,278	2,204
Tons ... ..	2,662,792	2,929,389	3,392,226	3,366,485	3,409,288
Men ... ..	92,397	97,770	107,120	110,134	112,064
<b>Vessels Cleared—</b>					
Number ... ..	2,031	2,134	2,347	2,286	2,263
Tons ... ..	2,678,663	2,944,192	3,323,265	3,372,555	3,448,566
Men ... ..	93,196	97,885	105,798	110,293	113,376
<b>Total Vessels Entered and Cleared—</b>					
Number ... ..	4,055	4,235	4,765	4,564	4,467
Tons ... ..	5,341,455	5,873,581	6,715,491	6,739,040	6,857,854

The number of vessels entered and cleared in 1903, though less than in 1901 and 1902, has increased by 10 per cent., as compared with 1899, their tonnage by 28 per cent., and the number of men forming their crews by 21 per cent. In both tonnage and men the figures in 1903 are the highest of the years under review.

Nationality  
of vessels.

The nationality of vessels entered and cleared at Victorian ports in each of the years 1899 to 1903 was as shown hereunder:—

## NATIONALITY OF VESSELS ENTERED AND CLEARED: RETURN FOR FIVE YEARS.

Year.	Total.	British.	Colonial.	Foreign.
	Entered.			
1899	2,024	416	1,453	155
1900	2,101	748	1,189	164
1901	2,418	580	1,640	198
1902	2,278	497	1,613	168
1903	2,204	466	1,579	159
	Cleared.			
1899	2,031	420	1,459	152
1900	2,134	807	1,159	168
1901	2,347	561	1,598	188
1902	2,286	517	1,602	167
1903	2,263	460	1,644	159

Sixteen per cent. of the Victorian shipping has wavered from Colonial to British ownership and back again between the years 1899 and 1903. Colonial vessels formed 72 per cent.

of the total inwards and outwards in 1899, 55 in 1900, 68 in 1901, 71 in 1902, and 72 per cent. in 1903. British vessels amounted to 21 per cent. in 1899, 37 in 1900, 24 in 1901, 22 in 1902, and 21 per cent. in 1903. Foreign vessels were 7 per cent. of the total in 1899, 8 per cent. in 1900 and 1901, and 7 per cent. in 1902 and in 1903.

The vessels on the Victorian register were as follow on the 31st December, 1903, the ports of their registration and their net tonnage being distinguished:—

Vessels on  
Victorian  
register.

## VESSELS ON THE REGISTER, 1903.

Port.	Steamers.		Sailing Vessels.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
Melbourne ... ..	157	124,242	219	36,258	376	160,500
Geelong ... ..	...	...	4	358	4	358
Total ... ..	157	124,242	223	36,616	380	160,858

The following is a statement of the number and net tonnage of vessels on the registers of all the Australian States and New Zealand on the 30th June, 1903. It will be seen that the tonnage on the Victorian and New South Wales registers exceeded 100,000 tons:—

Vessels on  
Austral-  
asian  
registers.

## VESSELS OWNED IN AUSTRALIAN STATES AND NEW ZEALAND, 1903.

State.	Steamers.		Sailing Vessels.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
Victoria ... ..	154	80,009	228	37,824	382	117,833
New South Wales ... ..	531	66,938	549	57,509	1,080	124,447
Queensland ... ..	101	15,006	167	10,218	268	25,224
South Australia ... ..	112	31,535	266	20,469	378	52,004
Western Australia ... ..	29	5,366	233	7,273	262	12,639
Tasmania ... ..	54	9,952	152	9,350	206	19,302
Total Australia ... ..	981	208,806	1,595	142,643	2,576	351,449
New Zealand ... ..	222	59,163	224	40,147	446	99,310
Total ... ..	1,203	267,969	1,819	182,790	3,022	450,759

These figures appeared in the Year-Book of 1902, but up to the present no information of later date has come to hand.

The following return contains particulars of the lights and lighthouses on the Victorian coast:—

Light-  
houses.

LIGHTS AND LIGHTHOUSES, 1903.

Where Situated.	Description.	Nature.	Power in Lighthouse. (Units of 1,000 Candles.)			Colour.	Distance Visible.	No. of Hands.	Ordinary Expenditure during the Financial Year 1902-3.	Capital Cost.
			White.	Red.	Green.				£	£
Cape Nelson ...	Dioptric	Fixed ...	4½	3¼	...	*White ...	19	} 3	494	16,178
"  Auxiliary ...	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "			
Portland ...	Dioptric	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	Green ...	12	} 2	308	2,573
Port Fairy ...	"  "  "  "  "  "	Fixed and Flashing	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	Red ...	9			
Warrnambool (upper light) ...	"  "  "  "  "  "	Fixed ...	¼	...	...	White ...	14	} 2	321	7,917
"  (lower light) ...	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	Red ...	5			
Cape Otway ...	"  "  "  "  "  "	Triple Flashing	24	...	...	White ...	24	} 3	611	10,367
"  Auxiliary ...	"  "  "  "  "  "	Fixed ...	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	Red ...	4 to 8			
Split Point ...	Dioptric	"  "  "  "  "  "	7¾	5½	...	†Red ...	18	} 3	490	11,838
"  Auxiliary ...	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	White ...	3			
Port Phillip—Point Lonsdale...	Dioptric	Occulting	22	13	...	White and Red	17	} 3	490	4,113
"  Queenscliff (high) ...	Catadioptric	Fixed ...	2½	...	...	White ...	17			
"  "  (low) ...	Dioptric	"  "  "  "  "  "	2	¾	...	Red and White	10 & 14	} 8	1,248	19,071
"  West Channel Pile Light	"  "  "  "  "  "	"  "  "  "  "  "	2	1	...	"  "  "  "  "  "	11			
"  South Channel (Eastern Light)	"  "  "  "  "  "	"  "  "  "  "  "	2½	2½	...	"  "  "  "  "  "	13	} 4	613	9,456
"  South Channel (pile) ...	"  "  "  "  "  "	"  "  "  "  "  "	¼	⅙	...	"  "  "  "  "  "	10			
"  Schnapper Point ...	"  "  "  "  "  "	"  "  "  "  "  "	⅞	...	...	White ...	10	...	14	...
"  Gellibrand's Pt. (lightship)	"  "  "  "  "  "	"  "  "  "  "  "	...	½	...	Red ...	10	2	436	5,005
"  Geelong (Hopetoun Chn. N.S.)	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	White ...	6	...	...	...
"  "  (Hopetoun Chn. S.S.)	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	Red ...	4	...	...	...
Cape Schanck ...	Catadioptric	Fixed and Flashing	4½ f.	} 48½ f.	...	White ...	23	} 3	463	19,278
"  Auxiliary ...	"  "  "  "  "  "	Fixed ...	"  "  "  "  "  "		"  "  "  "  "  "	"  "  "  "  "  "	Red ...			
Wilson's Promontory ...	Catoptric	"  "  "  "  "  "	2¾	...	...	White ...	24	3	840	24,433
Cliffy Island ...	Dioptric	Flashing ...	...	4¼	...	Red ...	15	3	427	13,225
Cape Everard ...	Holophotal...	Double Flashing	30	12	...	*White ...	21	} 3	498	21,785
"  Auxiliary ...	"  "  "  "  "  "	Fixed ...	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	Red ...	2			
Gabo Island ...	Catadioptric	"  "  "  "  "  "	4½	...	...	White ...	20	} 3	822	22,631
"  Auxiliary ...	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	"  "  "  "  "  "	Red ...	3			
* Red sectors between the limits of white light and shore at either side.								8,369	191,727	
† White sectors between the limits of red light and shore at either side.										
Total ...							...	...	8,369	191,727

In 1903 the Melbourne Harbor Trust possessed five dredges, having an aggregate maximum lifting capacity of 3,859 tons per hour, but varying according to the character of the material dredged, whether silt, sand, clay, rotten rock, &c. Of the above dredges, two are end-cutting, two are central-ladder, and one is side-cutting ladder.

The total quantity of dredgings by the Harbor Trust actually raised in 1903 amounted to 938,303 cubic yards, viz., 253,436 cubic yards from Hobson's Bay, and 684,867 cubic yards from the River Yarra and Victoria Dock. Since the establishment of the Trust, the river dredgings have amounted to 20,243,671 cubic yards, and the bay dredgings to 11,919,860 cubic yards, making a total of 32,163,531 cubic yards. Of the dredgings, 22,435,563 cubic yards were deposited at sea, and 9,727,968 cubic yards were landed for roads and reclamation work. The average cost of dredging in 1903 was 2.50d. per cubic yard.

Post Offices are now under Federal control. The following table shows the number of offices and of letters, &c., handled since 1898:—

POSTAL RETURNS FOR LAST FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
Number of Post Offices	1,593	1,615	1,637	1,645	1,646
Posted and Received—					
Letters and Post Cards	78,977,930	74,291,204	83,973,499	98,342,507	105,922,527
Newspapers ...	23,614,234	25,466,342	27,125,251	33,638,532	41,101,050
Packets ...	10,674,436	11,904,221	13,172,858	16,966,644	13,653,569
Parcels ...	283,426	298,352	309,118	365,898	429,084
Total ...	113,550,026	111,960,119	124,580,726	149,313,581	161,106,230

The volume of business done by the Post Office has grown considerably in the five years under review, that for 1903 being 42 per cent. more than that for 1899. The number of letters for 1903 is 34 per cent. higher than the number for 1899.

Money order offices are established at 473 places in connexion with the Post Office. Money orders are payable throughout the Commonwealth, New Zealand, Great Britain, and Ireland, and most of the principal British and Foreign

Money orders and postal notes.

countries. The maximum amount for which orders payable in most countries outside the Commonwealth are issued is £10, for orders payable within the Commonwealth and certain other countries £20. The charges range from 1 1-5d. in the pound on orders for £20 issued inland to 6d. in the pound for any amount issued to places beyond Australia, New Zealand, and Fiji. Postal notes, ranging from 1s. to £1 in value, are issued and paid throughout the Commonwealth, the poundage ranging from ½d. to 3d. The following is a comparative statement of the business done since 1898:—

MONEY ORDERS AND POSTAL NOTES : RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
Money Orders Issued—					
Number ... ..	223,335	223,566	228,931	217,634	215,694
Amount ... ..	£681,962	£675,982	£700,618	£706,791	£721,017
Money Orders Paid—					
Number ... ..	280,139	287,219	298,860	306,510	318,766
Amount ... ..	£943,672	£961,270	£1,004,725	£1,053,313	£1,121,807
Postal Notes—					
Victorian — Paid in Victoria	£454,135	£474,907	£504,089	£498,174	£514,464
Victorian — Paid in Other States	£17,550	£18,270	£19,171	£30,207	£44,512
Of Other States— Paid in Victoria	£26,080	£27,583	£28,205	£46,805	£77,341

The issue of money orders has varied both in number and amount during the past five years, from 223,335 for £681,962 in 1899 and 228,931 for £700,618 in 1901, to 215,694 for £721,017 in 1903. Money orders paid show a yearly increase, having risen from 280,139 for £943,672 in 1899 to 318,766 for £1,121,807 in 1903. The business in postal notes has increased considerably, the amount of Victorian notes paid within the State being £60,000 more in 1903 than in 1899. The business with the other States, after a gradual improvement in the first three years, shows a big rise in 1902 and 1903, attributable to the removal of Interstate restrictions which existed prior to the federation of the States.

Telegraphs  
and tele-  
grams.

Telegraphic communication exists between 878 stations within the State. Victorian lines are connected with those of New South Wales, and by means of them with Queensland and the submarine cable to New Zealand, also with the lines in South Australia, and through them with those of Western Australia, the Eastern Archipelago, Asia, Europe, Africa, and America; also with the submarine cable to Tasmania; the length of lines and wire open, and the number of telegrams sent from Victorian stations in the last five years are as follow:—

## TELEGRAPHS AND TELEGRAMS: RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
Number of Stations... ..	830	824	843	875	878
Miles open—					
Line (poles) ... ..	6,579	6,445	6,468	6,589	6,596
Wire ... ..	14,922	15,198	15,356	15,611	15,883
Number of Telegrams sent—					
Paid—Inland ... ..	1,416,488	1,522,642	1,513,217	1,524,236	1,706,497
Interstate ... ..	376,195	360,789	410,970	434,807	476,881
International ... ..	21,328	23,075	22,725	41,822	50,320
Unpaid—O.H.M.S. ... ..	75,477	86,503	110,768	93,892	
Total ... ..	1,889,488	1,993,009	2,057,680	2,094,757	2,233,698

In 1903 there were 48 telegraph stations, and nearly 1,000 miles of telegraph wire more than in 1899. The total number of telegrams sent was greater in 1903 than in 1899 by 344,210, the greatest increase between any two successive years being that of 138,941 between 1902 and 1903. On 1st November, 1902, unpaid O.H.M.S. telegrams were discontinued. New Zealand telegrams for the last two years are included with International, for previous years they are included with Interstate.

The telephone exchanges were worked by a private company until September, 1887, in which month the business, buildings, and plant were purchased by the Government. The annual rental for business telephones in Melbourne and suburbs is £9, in country towns £7. For private residence telephones in Melbourne, suburbs, and country the rental is £5. The country exchanges are at Ballarat, Bendigo, Geelong, Echuca, Hamilton, Warrnambool, and Queenscliff. The following statement shows for the past five years the length of lines and wire open, the number of exchanges, subscribers, bureaux, and private lines:—

## TELEPHONES: RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
Miles Open—					
Lines (Poles and under-ground Cables)	889	1,109	1,224	1,275	1,310
Wire ... ..	13,794	16,748	17,763	21,308	22,995
Exchanges—					
Number ... ..	14	17	20	20	20
Subscribers ... ..	4,407	5,136	6,049	6,847	7,610
Bureaux ... ..	64	64	70	74	90
Private Lines ... ..	281	311	383	388	392

The length of wire has increased 67 per cent., and the number of subscribers 73 per cent. since 1899.

Railways,  
length and  
cost.

The railways of Victoria are owned by the State. The length of lines constructed on the 30th June, 1903, was 3,401 miles, including  $1\frac{1}{4}$  miles constructed on disputed territory on the South Australian border,  $16\frac{1}{4}$  miles dismantled in 1898,  $8\frac{3}{4}$  miles closed to traffic, and the Dookie to Katamatite tramway, 17 miles in length, taken over from the Yarrowonga Shire Council in 1898. The following table shows the length of double and single lines, the cost of construction, and average cost per mile for the last five years:—

RAILWAYS, LENGTH AND COST OF CONSTRUCTION: RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
Length of Lines on 30th June—					
Double Lines ...	294	294	294	297 $\frac{1}{4}$	297 $\frac{1}{4}$
Single Lines ...	2,849 $\frac{1}{2}$	2,924 $\frac{1}{2}$	2,944 $\frac{1}{2}$	3,005 $\frac{3}{4}$	3,103 $\frac{3}{4}$
Total ...	3,143 $\frac{3}{4}$	3,218 $\frac{3}{4}$	3,238 $\frac{1}{2}$	3,303	3,401
	£	£	£	£	£
Cost of Construction ...	30,713,587	31,044,239	31,232,023	31,716,408	32,052,954
Average Cost per mile	9,770	9,645	9,645	9,602	9,425

Owing to the care taken in keeping down the cost of construction of new lines, the average cost per mile of railway as a whole has been gradually reduced during the past five years, that for 1903 being £345 less than that for 1899. The only line in progress on the 30th June, 1903, was that from Nowingi to Yelta,  $46\frac{1}{4}$  miles in length. The Spring Vale Cemetery line was completed on 15th December, 1902, at a cost of £8,313, but had not been opened to traffic on 30th June, 1903. The above and following tables do not include any particulars of these two lines.

Railway  
traffic.

Since 1899, 257 $\frac{1}{2}$  miles of new lines have been opened for traffic, and the length of lines closed to traffic reduced by 31 miles. The following statement shows the number of train miles run, and the passenger and goods traffic during the five years ended 30th June, 1903:—

RAILWAYS—MILEAGE AND TRAFFIC: RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
Miles Constructed ...	3,143 $\frac{3}{4}$	3,218 $\frac{3}{4}$	3,238 $\frac{1}{2}$	3,303	3,401
„ Dismantled ...	16 $\frac{1}{4}$	16 $\frac{1}{4}$	16 $\frac{1}{4}$	16 $\frac{1}{4}$	16 $\frac{1}{4}$
„ Closed to Traffic ...	39 $\frac{3}{4}$	8 $\frac{3}{4}$	8 $\frac{3}{4}$	8 $\frac{3}{4}$	8 $\frac{3}{4}$
„ Open for Traffic ...	3,087 $\frac{3}{4}$	3,193 $\frac{3}{4}$	3,213 $\frac{1}{2}$	3,278	3,376
Train Mileage ...	9,714,298	10,107,549	11,066,016	11,284,944	10,286,272
Passengers carried ...	45,805,043	49,332,899	54,704,062	57,465,077	54,798,073
Goods and Live Stock Carried (Tons)	2,779,748	2,998,303	3,381,860	3,433,627	3,093,997

There was a steady rise from 1899 to 1902 in the number of train miles run, and it is satisfactory to note that the passengers, goods, and live stock carried also progressed steadily during that period. The train mileage of 1902 was 16 per cent. higher than that of 1899, whilst the number of passengers carried was 26 per cent., and the tonnage of goods and live stock 24 per cent. more in 1902 than in 1899. The mileage and traffic of 1903 were below those of 1902, which was only to be expected as a consequence of the drought.

The receipts and working expenses of the railways during the financial years 1898-9 to 1902-3 were as follow:—

Railway receipts and expenditure.

**RAILWAY RECEIPTS AND EXPENDITURE : RETURN FOR FIVE YEARS.**

	Year ended June.				
	1899.	1900.	1901.	1902.	1903.
Receipts—	£	£	£	£	£
Passenger Fares ...	1,127,870	1,214,348	1,368,311	1,378,746	1,325,565
Freight on Goods and Live Stock	1,501,729	1,555,252	1,711,894	1,719,462	1,454,770
Sundries ...	244,130	255,562	257,592	269,635	266,523
Total ...	2,873,729	3,025,162	3,337,797	3,367,843	3,046,858
Working Expenses—					
Maintenance ...	480,792	498,459	518,488	501,938	528,253
Locomotive Charges	502,763	537,340	646,192	710,105	641,319
Carriages and Wag-gons	130,659	142,639	147,153	145,359	133,614
Traffic Charges ...	546,754	564,908	609,000	640,442	582,167
Compensation ...	3,611	6,862	7,945	31,145	10,729
General Charges	133,147	152,332	146,461	137,129	136,005
Total ...	1,797,726	1,902,540	2,075,239	2,166,118	2,032,087
Net Receipts ...	1,076,003	1,122,622	1,262,558	1,201,725	1,014,771
Proportion of Expenses to Receipts	62.56	62.89	62.17	64.32	66.70

The receipts from passenger fares were slightly less in 1903 than in either of the two previous years, though showing a good increase over those for 1899 and 1900. The receipts from freights suffered considerably in 1903, the amount received under this heading being lower than that of any of the other years under review. The working expenses, which include pensions and gratuities, have increased during the five years by about a quarter of a million sterling, the increase being chiefly under the heads of locomotive charges, general

maintenance, and traffic charges. The net receipts for 1902-3 were less, but the proportion of working expenses higher, than in any of the other years.

Railway earnings and expenses per mile.

The earnings, expenses, and net profits per mile of railway open, for the years ended 30th June, 1899, to 1903, were as follow:—

RAILWAY RECEIPTS AND EXPENDITURE PER TRAIN MILE: RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
Average Number of Miles Open ...	3,123 $\frac{1}{4}$	3,187 $\frac{1}{4}$	3,229 $\frac{1}{2}$	3,266 $\frac{1}{2}$	3,328
	£	£	£	£	£
Gross Earnings per Mile ...	920	949	1,033	1,031	916
Expenses per Mile ...	576	597	642	663	611
Net Profits per Mile ...	344	352	391	368	305

The receipts per mile were lower in 1903 than in any other year since 1898, being £115 less than in 1902. The expenses were lower than those of 1901 and 1902, but higher than those of the other two years. The net profits per mile in 1903 were considerably below any of the preceding four years. It must be understood that the above table excludes all consideration of interest payable on railway loans, and expenses of paying same, which amounted to £1,473,532 in 1902-3, equal to a charge of £443 per mile open.

Victorian coal used.

Victorian coal has been largely used by the Railway Department for steaming purposes. In 1900, 76,233 tons were consumed; in 1901, 95,273 tons; in 1902, 120,854 tons; and in the year ended 31st December, 1903, 23,694 tons. The quantity carried for use by the general public was 140,740 tons in 1900, 109,801 tons in 1901, 98,781 tons in 1902, and 46,599 tons in 1903; the rate of the carriage being  $\frac{3}{4}$ d. per ton per mile, of which  $\frac{1}{4}$ d. per ton per mile was paid by the Government.

Melbourne tramways.

The succeeding table has been compiled from information furnished by the secretary of the Melbourne Tramway and Omnibus Company:—

MELBOURNE TRAMWAYS: RETURN FOR FIVE YEARS.

Year ended 30th June.	Length of Lines Open.	Tram Mileage.	Passengers Carried.	Traffic Receipts.
				£
1899 ...	48	8,364,707	38,875,210	389,427
1900 ...	48	8,411,159	41,661,580	415,023
1901 ...	48	8,964,734	47,195,647	465,427
1902 ...	48	9,226,883	47,261,572	454,683
1903 ...	48	9,044,282	46,832,910	432,505

The tram mileage steadily increased until 1903 when it was slightly below that of the previous year; in 1902 it was the greatest since the opening of the first tram line in 1885. Though the mileage in 1903 was greater than that in 1901, the passengers and receipts were less in the former than in the latter year. The number of passengers carried has grown considerably; those for 1902 being second only to the number carried in 1891, when they were nearly 800,000 more. The traffic receipts reached £562,541 in 1891, but in the next few years there was a fall to £346,582 in 1896; since then, however, there has been a steady recovery year by year, until in 1901 they amounted to £465,427. On account of the reduction in fares the receipts for 1902 and 1903 show a slight decline.

Besides the lines of the Melbourne Tramway and Omnibus Company, there is a cable tramway,  $2\frac{1}{4}$  miles in length, between Clifton Hill and Preston; a horse tramway, 7 miles in length, between Sandringham and Cheltenham (Beaumaris); and a horse tramway,  $1\frac{1}{2}$  miles in length, between Brunswick and Coburg. There are also tramways at Ballarat and Bendigo. The cost of the Beaumaris tramway to 30th June, 1901, was £21,813. The following were the traffic receipts, &c., on this line during the last five years:—

BEAUMARIS TRAMWAY: RETURN FOR FIVE YEARS.

Year.	Miles run.	Receipts.	Working expenses.
1898-9 ... ..	35,622	£ 1,270	£ 1,207
1899-00 ... ..	37,327	1,241	1,339
1900-01 ... ..	38,723	1,323	1,281
1901-2 ... ..	39,500	1,528	1,622
1902-3 ... ..	39,150	1,410	1,644

The number of vehicles licensed for the conveyance of passengers in Melbourne, and for a distance of 8 miles beyond the corporate limits, in 1903, was 866, of which 613 were cabs; whilst the number of drivers licensed for the conveyance of goods was 1,299. The following are the particulars for the last five years:—

Other sub-urban and country tramways.

Licensed vehicles in Melbourne.

## LICENSED VEHICLES IN MELBOURNE : RETURN FOR FIVE YEARS.

	Number in—				
	1899.	1900.	1901.	1902	1903.
<i>For Passenger Traffic.</i>					
Cabs (4 wheels) ... ..	682	663	657	637	613
Hansoms ... ..	218	208	199	210	200
Omnibuses ... ..	18	19	22	57	37
Tram cars ... ..	361	376	372	372	11
„ dummies ... ..	327	340	359	344	5
Total ... ..	1,606	1,606	1,609	1,620	866
<i>For Conveyance of Goods.</i>					
Drivers licensed ... ..	1,388	1,388	1,265	1,339	1,299

Scarcely any tramcars or dummies were licensed in 1903. This arose through the Tramway Company having taken legal steps to test the validity of the municipal by-law relating to the licensing of the Company's cars, and awaiting a decision on the legal question.

## ACCUMULATION.

## PRIVATE WEALTH.

The returns of the Probate Office provide a means whereby an approximate estimate may be made of the private wealth of the people. Of course the estimate must only be taken as a rough approximation, but it will be shown exactly how far the method can be relied on, and what are its defects. The property left by persons who died during the five years, 1898 to 1902, is the basis whereby the property owned by the people alive, as shown by the census of 1901, is estimated. A period of five years is taken, because the returns for a single year may be unduly inflated by the falling in of one or several very large estates; but the period of five years balances any inequality in a single year. The average amount left by each adult who died during the period is assumed to be the average amount owned by each adult alive at the census of 1901. The accumulated wealth of an individual is believed to be greater at a more advanced than at a less advanced age, and is probably greatest at death. Whatever advantage there may be is probably counterbalanced by the small estates, for which no probate or administration is taken out. In Victoria, for instance, deposits in Savings Banks up to £100, and life insurance policies up to £200, may be divided amongst those entitled without taking out probate or administration; and on 30th June, 1902, such deposits amounted to 5½ millions, most of which is thus unaccounted for in the estimate made. Notwithstanding the stringent provisions of the "Probate and Administration Act," making chargeable with probate duty settlements and deeds of gift intended to evade payment of the duty, it is probable that some of these escape detection, and would also be unaccounted for in the calculation. The following is a statement, on the basis explained, of the private wealth in several Australian States and New Zealand:—

PRIVATE WEALTH: AVERAGE DURING 1898 TO 1902 IN VICTORIA,  
NEW SOUTH WALES, SOUTH AUSTRALIA, AND NEW ZEALAND.

State of—	Estates of Deceased Persons. Net Amount Sworn to.	Deaths of Adults.	Average Amount left by each Adult.	Adults Alive at Census, 1901.	Private Wealth.	
					Total.	Per Head.
	£		£		£	£
Victoria ...	25,633,200*	53,213	482	651,143	313,851,000	261
New South Wales	24,027,400	46,710	514	700,480	360,047,000	266
South Australia ...	6,383,000*	12,591	507	186,327	94,468,000	260
Colony of New Zealand ...	11,329,700	24,645†	459	437,208†	200,678,000	246†

\*Estimated.

†Including Maoris.

The values of estates returned by the Victorian and South Australian probate offices are the gross values, without deducting mortgages and debts, whilst the New Zealand figures refer to the net value, and in New South Wales both the gross and the net values are returned. Any estimate of wealth, founded on the probate returns, must be based on the net values of estates left by deceased persons, for the reason that the debts of some people are the assets of others. If such debts were not deducted, the total amount of mortgages and debts would thus be counted twice over in the computation of the total wealth. The net values have, therefore, been estimated in the case of Victoria and South Australia by assuming that the gross bears the same ratio to the net as in New South Wales, and reducing the gross amount accordingly. Although the property left in Victoria by people dying during the five years amounted to £25 2·3 millions, as against £24 millions in New South Wales, the Victorian property was left by a larger number of adults who died, which brings out the wealth per head slightly greater in New South Wales. It must be remembered, however, that the wealth represented by this estimate is the private wealth "in" the State, and not that "of" the State. Probates, &c., of persons dying out of the State leaving property in the State are included in the figures quoted; but on the other hand, many Victorians have large interests, pastoral, mining, and other, in the other States. Taking the net incomes from property of absentees in 1900 and capitalizing the same on a 4 per cent. basis, the income-returning property owned by outside investors in Victoria would appear to be about £26,340,000.

It has been found impossible to give a similar estimate of wealth for Queensland, Western Australia, and Tasmania, owing to the probate returns for those States being faulty or incomplete, or apparently not accounting for anything like the whole of the property left by persons dying. In regard to New Zealand also it is probable that the wealth of that colony has been somewhat under estimated, as it is stated in the New Zealand Official Year-Book that certain estates upon which no duty is payable are not included in their returns. The Registrar-General of New Zealand estimates the average wealth during 1898-1902, on a somewhat similar basis to that above adopted, to be £227,326,000 or £279 per head, which is slightly higher than in the three Australian States for which estimates are given. That estimate, however, is based on the assumption that the average left by each person dying, including infants and children, is the amount owned by each person alive; and Maoris are not taken into account, although many of them are property owners. In the estimate in the preceding table (£246 per head), adults only are taken into account, and Maoris are included.

Another method of estimating wealth is by dividing it into its principal component parts, and valuing each part separately. Thus, where there is a general land tax, with no exemption or a very small one, the value of the land is obtainable; or where, as in Victoria, municipal government is universal, the rateable values are taken. Live stock is valued at so much per head; coin and bullion is taken to be the amount in the banks, with an addition for the amount of coin in circulation; shipping is valued at so much per ton for steamers and so much for sailing vessels; whilst houses and furniture are approximately arrived at by formulating an estimate based on the census returns. As regards mining properties, merchandise and produce, personal effects, and plant and machinery, several arbitrary methods are adopted which may or may not be wide of or near the mark; whilst such an important item of wealth as the goodwill of businesses appears to be entirely ignored in the computation. Seeing that this method cannot be relied upon, even approximately, it has been decided to adhere to the method of basing the wealth of the living on that of the dead as proved in the probate office, it being assumed, as previously pointed out, that any overstatement, due to the fact that the average age of an adult at death is greater than the average age of adults alive, is fully counterbalanced by the omission of the other property mentioned. Mr. Mulhall, in his "Industries and Wealth of Nations," bases his estimate of the wealth of the United Kingdom on the probate returns. He recognises this as the better method of the two, for he states that the "probate returns enable us to determine the exact amount of wealth." While it can hardly be claimed that an estimate of wealth in the Australian States as at present based upon these returns can be exact, yet if it were possible to obtain for a number of recent years the ages of persons leaving property, with the amount left by persons of each age, it would be possible to arrive at the estimate with greater accuracy; and, if the number of probates or letters of administration granted elsewhere and sealed in Victoria in respect of Victorian assets could be separated from the probates or administrations granted in Victoria, it would be possible to distinguish between the wealth in Victoria owned by Victorians and that owned by non-residents. Owing to the time and trouble which would be involved in obtaining the above information it cannot at present be given.

Mr. Mulhall, in his Dictionary of Statistics, 4th edition, of 1898, gives an estimate of the private wealth of the principal nations of the world. For the purpose of his calculations he divided wealth under ten headings. Land was capitalised at thirty times the annual assessed value; cattle were taken from official estimates; farm implements were computed as

Wealth of  
various  
countries.

10 per cent. of the aggregate value of land and stock; houses were capitalised at  $16\frac{1}{2}$  times the rental; furniture was estimated at 50 per cent. of the value of the house in which it was situated, and included books, jewellery, clothing, carriages, &c.; railways were put down at cost of construction; factories were valued at one-third of their annual output; bullion estimates were official; merchandise was reckoned at 50 per cent. of the annual amount locally produced and imported; whilst sundries embraced all other components of wealth, and were estimated at 20 per cent. of the total. The returns relating to the United Kingdom were, however, based on the probate returns.

The following are the estimates of Mr. Mulhall, except in the case of Victoria, New South Wales, South Australia, and New Zealand, in respect of which the estimates, previously given, have been substituted. The figures for these Australian States and New Zealand refer to the year 1901, and those for other countries to 1895:—

PRIVATE WEALTH OF PRINCIPAL COUNTRIES OF THE WORLD.

Country.	Wealth per Head.	Country.	Wealth per Head.
	£		£
United Kingdom	... 302	Germany	... 156
New South Wales	... 266	Argentina	... 154
Victoria	... 261	Belgium	... 154
South Australia	... 260	Europe	... 139
France	... 252	Spain	... 135
New Zealand	... 246	Sweden and Norway	... 114
United States	... 234	Austria	... 104
Denmark	... 230	Greece	... 101
Canada	... 196	Danubian States	... 90
Holland	... 183	Portugal	... 87
Switzerland	... 164	Russia	... 61

It will be seen from these figures that the three Australian States stand above all other countries, except the United Kingdom, and that New Zealand is only exceeded by the United Kingdom and France, in regard to private wealth per head.

Diffusion of  
wealth.

The diffusion of wealth appears to be far wider in Victoria and South Australia than in New South Wales or New Zealand, according to the proportion of adults who die leaving property in respect of which probate or administration is taken out. For the reason previously mentioned, the comparison must be restricted to these three States and New Zealand. The following are the number of persons who died leaving property, as shown by the probate returns, the number of adult deaths, and the proportion of the former to the latter during the five years, 1898-1902:—

DIFFUSION OF WEALTH IN SEVERAL AUSTRALIAN STATES AND  
NEW ZEALAND, 1898-1902.

	Deaths of Adults.	Estates Proved.	
		Number.	Number per 1,000 Deaths of Adults.
Victoria ...	53,213	19,014	357
New South Wales ...	46,710	12,627	269
South Australia ...	12,591	4,422	351
New Zealand ...	24,645	6,855	278

It would appear from these figures that more than one-third of the adults who died in Victoria and South Australia during the five years, 1898-1902, were possessed of accumulated property in respect of which it was found necessary to obtain probate or letters of administration. An allowance should be made for the number of probates sealed of persons dying out of the State; but it is estimated that five per cent. would cover this.

PRIVATE LANDS: TOTAL AND GROUND VALUES.

The whole of Victoria, with the exception of about  $\frac{3}{4}$  per cent. of its area, being divided into municipalities for the purposes of local government, the value of real property, based on the municipal valuations, can be given with some degree of accuracy. Returns are obtained annually from each city, town, borough, and shire; and the following figures show the net annual rateable value and the capital value estimated by the municipalities over a series of years:—

RATEABLE PROPERTY: ANNUAL AND CAPITAL VALUES, 1880 TO 1904.

Year ended 30th Sept.	Estimated Value of Rateable Property.		Year ended 30th Sept.	Estimated Value of Rateable Property.	
	Annual.	Capital.		Amount.	Capital.
	£	£		£	£
1880 ...	7,117,946	83,847,418	1893 ...	12,779,600	189,461,350
1881 ...	7,175,289	87,642,459	1894 ...	11,676,079	174,984,851
1882 ...	7,433,812	91,792,547	1895 ...	10,641,200	167,197,780
1883 ...	7,692,706	95,610,959	1896 ...	10,393,000	168,427,700
1884 ...	8,098,814	103,795,832	1897 ...	10,345,535	171,253,984
1885 ...	8,793,490	114,283,570	1898 ...	10,152,500	168,611,906
1886 ...	9,621,135	125,878,748	1899 ...	10,134,108	168,456,523
1887 ...	10,153,771	137,885,701	1900 ...	10,283,500	169,911,900
1888 ...	11,913,473	167,885,210	1901 ...	10,537,497	174,141,754
1889 ...	12,931,526	187,558,511	1902 ...	10,885,087	185,101,993
1890 ...	13,265,543	194,313,646	1903 ...	11,188,932	203,902,919
1891 ...	13,733,770	203,351,360	1904 ...	11,437,830	209,143,730
1892 ...	13,605,990	197,366,940			

The capital values given in the preceding table are not to be relied upon for purposes of accurate comparison. Most municipalities capitalize the net annual value on a 5 per cent. basis; but many assume the capital value to be much less in proportion to the annual value, some estimating 17, 16, 15, down to as low as 7 years' purchase, whilst in one case five years' purchase is given as the capital value. Twenty years' purchase is adopted by most of the metropolitan municipalities, one being about 17 and four about 12 years; whilst the majority of country towns adopt from 7 to 12 years' purchase as the basis, one returning figures showing about 5 years' purchase as the capital value. Most of the shires adopt 20 years' purchase; but others vary from 16 to 8 years.

Landed<sup>1</sup>  
property,  
capital and  
unim-  
proved or  
ground  
values.

The following is an estimate of the capital value of land with and without improvements, the latter of which is commonly called the unimproved value, but should more correctly be termed the ground value:—

VALUE OF LAND WITH AND WITHOUT IMPROVEMENTS, 1903-4.

District.	Annual Rateable Value.	Number of Years Purchase (Assumed).	Capital Value with Improvements.	Unimproved or Ground Value.
	£		£	£
Urban ... ..	5,542,981	16	88,687,696	44,343,848
Rural ... ..	5,894,849	20	117,896,980	78,597,987
Total ... ..	11,437,830	18.06	206,584,676	122,941,835

Improvements are estimated at one-half in the case of urban properties, and one-third in the case of rural, which are about the proportions which are found to prevail in New Zealand, according to the valuations of the Valuer-General, revised to 1903. If the Victorian estimate were based upon the New Zealand proportion, without distinguishing urban and rural, the ground value would be about £126,000,000, which is approximate to the above estimate. These proportions have also been checked by an examination of the census returns, which give the number of rooms in each house and the materials of which same were built. In Melbourne city an average of £100, and in suburbs and country towns £70, per room for brick, &c., houses were allowed; whilst in urban districts £45 per room, and in rural £40 per room, were allowed for wooden houses. On this system the above estimates were verified as being remarkably close, allowing for other improvements, besides houses, in rural districts.

Property  
left by  
deceased  
persons,  
1878 to  
1903.

The following table shows for each of the last 26 years the number, value, and average value of estates of deceased persons leaving property in Victoria; the proportion of the number and value of estates left in the State to the total

number of adults dying in the State in the same year; and also the percentage of properties of persons dying intestate:—

## ESTATES OF DECEASED PERSONS, 1878 TO 1903.

Year.	Estates of Deceased Persons dealt with in the Victorian Probate Office.			Per 100 Deaths of Persons over 21 Years.		Percentage of Intestates.
	Number.	Value Sworn Under. (Debts not deducted.)	Average Value of each Estate.	Number of Estates.	Amount of Property Left.	
		£	£		£	
1878	1,341	2,919,215	2,177	24·4	46,581	43·2
1879	1,385	2,666,433	1,925	22·2	42,731	48·2
1880	1,235	1,890,100	1,530	20·4	31,267	40·0
1881	1,548	2,935,070	1,961	22·8	43,290	39·3
1882	1,698	3,482,938	2,051	23·2	47,607	40·0
1883	1,794	3,748,344	2,089	24·5	51,172	42·1
1884	1,890	5,113,687	2,706	25·7	69,536	38·6
1885	1,938	4,297,919	2,218	25·5	53,791	36·1
1886	2,126	4,532,271	2,137	25·6	54,619	40·7
1887	2,348	5,201,130	2,215	26·9	59,578	38·2
1888	2,276	7,026,984	3,088	25·6	79,026	38·5
1889	2,908	11,252,096	3,869	29·4	113,681	39·7
1890	3,107	8,667,127	2,789	31·3	87,291	42·0
1891	2,714	7,581,678	2,797	25·0	70,658	31·6
1892	3,208	9,669,784	3,014	34·9	105,152	38·0
1893	2,801	6,231,931	2,225	30·8	68,558	34·6
1894	2,805	5,419,225	1,932	33·5	58,077	34·6
1895	3,153	5,340,052	1,694	31·9	53,999	36·5
1896	3,335	6,091,421	1,852	34·0	61,993	36·2
1897	3,291	5,782,173	1,757	34·6	60,746	36·1
1898	3,590	6,269,345	1,746	32·4	56,649	36·2
1899	3,641	5,920,104	1,626	34·0	55,261	35·3
1900	3,961	6,918,533	1,747	38·9	67,882	36·0
1901	3,846	6,527,235	1,697	36·5	61,990	34·8
1902	3,976	7,571,482	1,904	37·0	70,470	34·9
1903	3,884	6,074,077	1,564	37·4	58,520	34·9

A glance at the above figures will show that the increase in the number of estates has been remarkable, as will be evidenced by the following figures, which must be taken as proving that the economic conditions, prevalent in Victoria during the period reviewed in the above table, have led to a wide and growing diffusion of wealth amongst the people:—

Period of Five Years.	Percentage of Adults who died leaving estates which went through the Probate Court. Yearly average.
1879-83	22·6
1884-88	25·9
1889-93	30·3
1894-98	33·3
1899-1903	36·7

The average value of each estate left has fallen off very considerably since 1893, as compared with the values during

the previous decade, which is very natural, seeing that during that period values were much inflated, and were, as things afterwards proved, merely fictitious. The last column in the preceding table shows that the tendency to die without leaving a will is growing less, the percentage who died intestate having decreased from an average of 40·5 per cent. during 1878-90 to an average of 35·3 during 1891 to 1903.

## ROYAL MINT.

Royal mint returns.

A branch of the Royal Mint was established in Melbourne in 1872, and from that year until the end of 1903, 26,860,024 ounces of gold were received. This gold averages nearly £4 per ounce in value, being above the standard, which is £3 17s. 10½d. In the following table particulars are given, for the period 1872 to 1898 and for each of the last five years, showing the quantity of gold received at the Mint, where the same was raised, and its coinage value; also gold coin and bullion issued during the same periods:—

## ROYAL MINT RETURNS, 1872 TO 1903.

Gold Received.		1872 to 1898.	1899	1900.	1901.	1902.	1903.
<i>Gross Weight.</i>							
Raised in Victoria ...	oz.	15,370,782	872,742	795,721	805,812	825,335	812,823
„ New Zealand ..	„	2,108,239	41,731	47,471	89,245	185,848	166,513
„ Western Australia ..	„	1,824,245	507,072	222,319	67,022	55,387	51,306
„ elsewhere ...	„	1,589,384	99,194	93,140	86,160	75,674	66,859
<b>Total</b> ...	„	<b>20,892,650</b>	<b>1,520,739</b>	<b>1,158,651</b>	<b>1,048,239</b>	<b>1,142,244</b>	<b>1,097,501</b>
<b>Coinage Value</b>	£	<b>82,873,785</b>	<b>5,834,916</b>	<b>4,485,955</b>	<b>4,077,194</b>	<b>4,470,378</b>	<b>4,313,140</b>
<i>Gold Issued.</i>							
<i>Coin—</i>							
Sovereigns ...	No.	76,117,421	5,579,157	4,305,904	3,987,701	4,267,157	3,521,780
Half-Sovereigns ..	„	884,584	97,221	112,920	...	...	...
Bullion—Quantity	oz.	1,516,309	49,364	29,171	20,977	46,407	187,665
„ Value ...	£	6,310,693	207,503	122,291	87,534	195,410	792,594
<b>Total Value</b> Coin and Bullion	£	<b>82,870,406</b>	<b>5,835,270</b>	<b>4,484,655</b>	<b>4,075,235</b>	<b>4,462,567</b>	<b>4,314,374</b>

Perth mint, 1899-1902.

The Perth branch of the Royal Mint, having been opened on the 20th June, 1899, accounts for the large decrease of gold received from Western Australia during the last four years, as compared with 1899. From that date to the end of 1902, 2,877,263 ounces of gold, valued at £10,228,251, have been received at the Perth Mint, all of which, with the exception of 230 ounces, was raised in Western Australia. The production of gold in Western Australia during 1902 was 2,177,442

ounces, the quantity received at the Perth Mint that year being 1,320,618 ounces, valued at £4,668,905. The total value of coin and bullion issued from the Mint during 1902 was £4,675,110, consisting of 4,289,122 sovereigns and 91,230 ounces of bullion. Since commencing operations, until the end of 1902, the Perth Mint has coined 9,755,536 sovereigns, 59,688 half sovereigns, and issued bullion worth £407,245.

Since the establishment of the Melbourne Mint, the gold coin exported from Victoria, less that imported, has amounted to £84,249,177, or less by £14,077,305 than the total gold coin issued from the Mint. The following particulars are given of the value of gold and silver coin and bullion imported and exported during each of the last five years:—

INTERCHANGE OF COIN AND BULLION, 1899 TO 1903.

Imports of—	1899.	1900.	1901.	1902.	1903.
Gold Coin ... £	180,350	204,585	275,000	114,380	10,000
„ Bullion ... „	2,625,525	1,264,256	918,707	1,245,806	1,057,803
Silver Coin ... „	60,849	63,032	48,787	28,250	17,346
„ Bullion ... „	2,232	2,372	1,934	1,418	1,656
Exports of—					
Gold Coin ... £	4,164,222	4,045,461	4,202,231	4,109,661	4,704,740
„ Bullion ... „	197,642	86,600	96,297	196,036	716,234
Silver Coin ... „	28,900	22,975	6,100	13,963	7,660
„ Bullion ... „	270	299	743	167	319

It will be seen from the above figures that the net exports of coin and bullion in 1903 exceeded the amount in 1902 (an average year in this respect) by £1,412,175, which is entirely accounted for by the fact that the balance of trade against Victoria in 1903 was increased to that extent by the utter failure of the harvest, thus necessitating large imports of food stuffs instead of exports as in normal years. The net exports of gold coin and bullion in 1903 exceeded the total production of gold from the soil during the same year by more than one million pounds.

BANKING.

During 1903 there were 11 banks of issue in Victoria, possessing 525 branches or agencies, being an increase of 26 over the previous year. The financial position of these banks, on 31st December in each of the last five years, is shown by the following return:—

Finances of banks.

## VICTORIAN BANK RETURNS, 1899 TO 1903.

In Victoria.	1899.	1900.	1901.	1902.	1903.
<i>Liabilities.</i>					
Deposits bearing Interest	£ 17,729,041	£ 18,373,300	£ 18,397,496	£ 18,981,740	£ 19,148,880
Deposits not bearing Interest	12,321,388	12,264,985	12,220,566	11,978,484	11,280,423
Notes in Circulation ...	951,795	963,447	947,597	940,082	913,590
Other ... ..	272,150	293,839	290,838	325,324	210,441
<b>Total ...</b>	<b>31,274,374</b>	<b>31,895,571</b>	<b>31,856,497</b>	<b>32,225,630</b>	<b>31,553,334</b>
<i>Assets.</i>					
Coin and Bullion ...	6,971,796	7,777,856	7,015,316	7,396,912	6,452,687
Debts due ... ..	30,143,322	30,612,533	31,263,826	29,861,071	30,401,807
Property ... ..	2,843,847	2,800,419	2,741,347	1,999,574	1,957,544
Other ... ..	563,150	565,120	440,145	538,236	479,087
<b>Total ...</b>	<b>40,522,115</b>	<b>41,755,928</b>	<b>41,460,634</b>	<b>39,795,793</b>	<b>39,291,125</b>
<i>Capital and Profits.</i>					
Capital Stock paid up	16,589,656	15,746,458	15,827,886	14,760,316	14,392,320
Reserved Profits (ex Dividend)	3,087,479	3,304,336	3,521,620	3,828,311	4,045,092
Last Dividend—					
Amount ... ..	234,794	337,494	371,024	418,555	396,488
Average Rate per annum per cent	2.76	4.29	4.69	5.67	6.45

Recovery in banking business.

A remarkable recovery in banking business is revealed by the annual increase in dividends paid and reserved profits. The last dividend paid in 1902 was nearly twice the amount of that in 1898, and the average rate of the dividend per cent. per annum on paid-up capital was considerably more than twice the rate in 1898. The amount of the last dividend in 1903 is exclusive of that of the Bank of New Zealand, the returns of which were not to hand; but the absence of these returns will not, to any appreciable extent, affect the average rate of dividend, which is nearly one per cent. higher than that in 1902, and is more than  $2\frac{1}{2}$  times the rate in 1898. Deposits show a satisfactory increase, whilst of the assets, coin and bullion decreased by nearly a million as compared with the previous year. In 1902 the banks probably found it advisable to call in a considerable number of advances and restrict new loans, as the debts due fell off by nearly a million and a half in 1902, as compared with the previous year. The large increase in the number and amount of mortgages registered shows, however, that the banks' customers were, most of them, able to raise sufficient on their securities to clear off their overdrafts from the banks when called upon.

In 1903, however, as compared with 1902, there was an increase of more than half a million in advances outstanding.

The amount of Government deposits with banks in Victoria during each of the last twelve years was as follows:—

	£		£
1892 ... ..	2,003,530	1898 ... ..	1,796,075
1893 ... ..	2,122,754	1899 ... ..	2,705,243
1894 ... ..	2,303,450	1900 ... ..	2,840,102
1895 ... ..	2,405,285	1901 ... ..	2,557,811
1896 ... ..	2,338,970	1902 ... ..	2,455,773
1897 ... ..	2,260,566	1903 ... ..	2,201,989

Government deposits in banks.

There are twenty-two banks in Australasia, many of which do business in several States. Eleven do business in Victoria and Queensland, thirteen in New South Wales, seven in South Australia, six in Western Australia, four in Tasmania, and five in New Zealand. The amounts of deposits, advances, notes in circulation, and coin and bullion for the quarter ended 31st December, 1903, are as follow:—

Banks in Australia and New Zealand.

#### AUSTRALASIAN BANKING BUSINESS, 31ST DECEMBER, 1903.

Name of State.	Deposits.	Advances, &c.	Notes in Circulation.	Coin and Bullion.
	£	£	£	£
Victoria ... ..	30,420,303	30,401,807	913,590	6,452,687
New South Wales ... ..	32,507,081	34,645,192	1,378,643	6,043,199
Queensland ... ..	12,645,361	13,997,526	...	2,036,113
South Australia ... ..	6,368,359	4,441,707	380,115	1,565,549
Western Australia ... ..	4,810,041	3,823,799	397,863	2,279,266
Tasmania ... ..	3,582,956	2,580,267	154,595	757,659
Australia ... ..	90,334,101	89,890,298	3,224,806	19,134,473
New Zealand ... ..	18,788,872	16,340,177	1,466,279	3,746,581
Australasia ... ..	109,122,973	106,230,475	4,691,085	22,881,054

These figures have been taken from the "Australasian Insurance and Banking Record." In Queensland Treasury notes have taken the place of bank notes. In New South Wales and Queensland the advances outstanding exceed the deposits, whilst in every other State this condition is reversed.

As compared with the previous year, deposits have shown an increase of £560,903, or about one-half per cent., in the whole of Australasia; but a decrease in the Commonwealth of Australia of £698,572, a very small amount, considering the failure of the harvest in all the eastern States early in the year, which necessitated an increased net export of gold, amounting to about £4,000,000 above the average, to pay for the increase in the balance of trade against Australia by the decreased export of produce and the increased import of food stuffs for local consumption. Advances, compared with the previous year, show a decrease in Australia of nearly 3 millions, which is made up of a decrease of nearly 4½ millions

in New South Wales, and small increases in all the other States, amounting to about  $1\frac{1}{2}$  millions. Notes in circulation have not altered to any appreciable extent, there being a decrease of a few thousands in Australasia; but the coin and bullion decreased by £2,143,922 in Australia, and increased by £454,492 in New Zealand.

Savings  
Banks.

The two classes of Savings Banks which formerly existed in Victoria, viz., the Post Office and the Trustees, were, in 1897, merged into one institution controlled by the Savings Banks Commissioners. The following are the particulars of depositors and deposits for a number of years:—

SAVINGS BANKS: DEPOSITS AND DEPOSITORS, 1875 TO 1903.

On the 30th June.	Number of Depositors.		Amount remaining on Deposit.		
	Total.	Per 1,000 of Population.	Total.	Average to each Depositor.	
			£	£	s. d.
1875 ...	65,837	81	1,469,849	22	6 6
1880 ...	92,115	108	1,661,409	18	0 9
1885 ...	170,014	174	3,337,018	19	12 7
1890 ...	281,509	252	5,262,105	18	13 10
1895 ...	338,480	286	7,316,129	21	12 3
1899 ...	356,074	300	8,517,006	23	18 5
1900 ...	375,070	314	9,110,793	24	5 9
1901 ...	393,026	327	9,662,006	24	11 8
1902 ...	410,126	340	10,131,604	24	14 1
1903 ...	418,511	347	10,341,857	24	14 3

The best evidence of the growing habit of thrift, as well as the wide diffusion of wealth amongst the middle and poorer classes in Victoria, is contained in the Savings Banks returns, the number of depositors, in proportion to population, having increased by nearly one-sixth during the last four years. On the 30th June, 1903, more than 1 person out of every 3 in the State (including children and infants, who themselves number more than one-third of the population) was a depositor with a credit balance, on the average, of nearly twenty-five pounds.

Savings  
Banks,  
loans to  
farmers.

An advance department was established in 1896 by the Act amalgamating the Post Office and Commissioners' Savings Banks. The funds for this purpose are raised by sale of mortgage bonds for £25 each, and by debentures in denominations of £100 and over, redeemable at fixed dates not more than ten years from date of issue. The total issues up to 30th June, 1903, amounted to £1,602,880, of which mortgage bonds for £275,625 have been redeemed or repurchased, leaving £1,327,255 outstanding, £387,730 of which have been taken up by the public and the balance by the Commissioners themselves with Savings Bank funds. The amount advanced during

the year 1902-3 was £224,974, making with the amounts previously advanced a total of £1,589,484, of which £319,913 has been repaid, leaving the amount outstanding on 30th June, 1903, at £1,269,571, representing 2,911 loans, which thus averaged £436. As a measure of the safety with which the advance department has been conducted, it may be mentioned that the instalments of principal in arrear amounted on 30th June, 1902, to only £111, and of interest to £282. Considering the severity of the long drought which culminated in the utter failure of the harvest early in 1903, it would be expected that there should be a considerable increase in arrears on 30th June, 1903, but notwithstanding the fact that the season 1902-3 was by far the worst ever experienced, the amount in arrear was only £1,068 for interest and £505 principal. After the extraordinary record harvest of 1903-4 it may be expected that practically the whole of the arrears will be paid off.

There are both Government and Trustee Banks in New South Wales, Tasmania, and New Zealand; Government Savings Banks only in Queensland and Western Australia; and Trustee Banks only in South Australia and Victoria—those in the latter State being guaranteed by, and under the supervision of the Government.

Savings  
Banks in  
Australasia

The following were the number of depositors, the amount on deposit, including interest, in each of the Australian States and New Zealand; on 31st December, 1902, in the case of New South Wales and New Zealand; 30th June, 1903, in the case of Victoria; and 30th June, 1902, in the case of the other States:—

SAVINGS BANK DEPOSITORS IN AUSTRALIA AND NEW ZEALAND,  
1902-3.

State.	Number of Depositors.		Amount remaining on Deposit.	
	Total.	Per 1000 of the Population.	Total.	Average to each Depositor.
			£	£ s. d.
Victoria ... ..	418,511	347	10,341,857	24 14 3
New South Wales ... ..	323,212	230	12,425,464	38 8 11
Queensland ... ..	84,685	165	4,118,337	48 12 8
South Australia ... ..	116,436	320	3,974,709	34 2 9
Western Australia ... ..	45,108	218	1,889,082	41 17 7
Tasmania ... ..	46,451	264	1,193,899	25 14 0
Australia ... ..	1,034,403	268	33,943,348	32 16 4
New Zealand ... ..	261,948	328	7,876,877	30 1 5
Australasia ... ..	1,296,351	278	41,820,225	32 5 3

The number of depositors in Victoria is greater than in the other States and New Zealand in proportion to population, although the average amount standing to the credit of each depositor is not so large. It has already been shown that the diffusion of wealth, as evidenced by the proportion of persons dying leaving property, is wider in Victoria, and this is corroborated by the above figures. More than one-third of the population of Victoria are depositors, nearly one-third in New Zealand and South Australia, a little more than one-fourth in Tasmania, nearly one-fourth in New South Wales, more than one-fifth in Western Australia, and one-sixth in Queensland. As compared with other countries, the percentage of depositors in Victoria is only exceeded in Denmark and Switzerland.

PRICES, &c, OF GOVERNMENT STOCK.

Comparative prices of Victorian stocks, 1885 to 1904.

Selecting one of the leading 4 per cent. and one of the leading 3½ per cent. Victorian stocks, and finding the highest prices quoted in 1885 and each subsequent year, an adequate idea may be formed of the general course of prices in London during the last twenty years. These are shown in the following table, together with the equivalent returns to the investor, which are also collated with the actual rate of interest payable by the Government on the loans floated in each year:—

PRICES OF VICTORIAN REPRESENTATIVE STOCKS IN LONDON, 1885 to 1904.

Year.	Highest Prices quoted on Stock Exchange.		Minimum Return to Investor.		Actual Interest payable by Government on Loans floated each year.
	4 per cents. (due 1920).	3½ per cents. (due 1923).	4 per cents.	3½ per cents.	
1885	104½	...	£ s. d. 3 15 10	...	£ s. d. 4 2 5
1886	107½	...	3 13 2	...	3 15 5
1887	108½	...	3 13 1	...	3 18 9
1888	114½	...	3 6 5	...	3 12 9
1889	114½	105	3 5 8	3 5 5	3 8 5
1890	111½	103½	3 8 0	3 7 0	3 11 1
1891	109½	100½	3 10 3	3 9 9	3 15 6
1892	106½	98	3 13 9	3 13 5	4 1 5
1893	103½	93½	3 18 6	4 3 4	4 11 7
1894	106½	99½	3 15 2	3 10 2	...
1895	111½	105½	3 9 0	3 6 1	...
1896	116½	109½	3 2 7	3 1 6	...
1897	115	108½	3 4 0	3 2 7	...
1898	113½	107½	3 5 1	3 3 6	...
1899	114	107½	3 4 5	3 2 10	3 7 3
1900	111½	105½	3 6 8	3 5 0	...
1901	112½	106½	3 5 3	3 4 1	3 11 10
1902	112½	104½	3 5 3	3 6 0	3 7 6
1903	107½	101½	3 11 2	3 10 0	3 19 6
1904 (to April 2)	107	97½	3 11 10	3 16 1	...

The minimum return to the investor is calculated after allowing for accrued interest and redemption at par on maturity; and the actual interest payable is arrived at after allowing for redemption and expenses of floating loans.

Yield to investors in Victorian securities in various years.

On comparing the amounts in the last column in the table with those in the two preceding columns, it will be found that the State, when raising or converting a loan, has, as a rule, to pay from 3s. to 10s. per £100 more than is received by British investors on similar securities at maximum prices. It will be noticed that the effective rate of interest payable on the conversion of the £5,000,000 loan during the latter half of 1903 amounts to almost 4 per cent., which is higher than any previous loan since 1893, the year of the bank crisis.

The following are the means between the highest and lowest prices of Australasian stocks in London during each of the last ten years, the figures for 1904 being from 1st January to 2nd April. The stocks selected are the representative issues of 4 and 3½ per cents.—

Prices of Australasian stocks, 1894 to 1904.

MEAN PRICES OF AUSTRALASIAN STOCKS IN LONDON, 1894 TO 1904.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	FOUR PER CENTS. REDEEMABLE IN—						
	1920.	1933.	1915.	1917-36.	1934.	1920-40.	1929.
1894 ...	103¼	107½	105¾	105¾	108½	...	107¾
1895 ...	104¾	113¾	109¾	109¾	117¼	...	109¾
1896 ...	111½	118½	111¼	111¾	124¼	...	112¾
1897 ...	113	120¾	113½	112¾	121¾	...	114¾
1898 ...	111½	117½	109¾	110	118½	...	112¾
1899 ...	110	115¼	109	108½	116½	...	111
1900 ...	109½	114¾	108½	108¾	115¾	110½	111½
1901 ...	110¾	114¾	107¼	107¾	113¾	109½	113
1902 ...	108¾	112¾	105¼	105¾	112¾	110	111½
1903 ...	104¾	107¾	102½	102¾	109¾	107¾	107¾
1904 (to April 2)	105¾	106½	102¾	101½	107¾	105	105¾
	THREE AND A HALF PER CENTS. REDEEMABLE IN—						
	1923.	1924.	1924.	1939.	1915-35.	1920-40.	1940.
1894 ...	95¾	99½	95¼	97¾	...	96¾	99¾
1895 ...	98¾	104¼	102¼	104¾	...	102¾	103¾
1896 ...	104¾	108	106¼	108¾	...	107¾	106
1897 ...	106¼	109¾	106¾	111¾	...	108¼	107¾
1898 ...	104¾	106¼	104¾	108	...	107¾	106½
1899 ...	103¾	105½	103¾	106¾	...	103¾	105½
1900 ...	103¾	105	103½	105¾	102¼	102¾	105
1901 ...	104	104¾	102¾	104¾	101½	102¾	106¾
1902 ...	102¾	103½	101¾	103½	100¾	103¾	105¾
1903 ...	98	99½	97¼	101½	98¼	100¾	102½
1904 (to April 2)	96¼	98	96¼	98¾	96¼	97¼	100½

It will be noticed from these figures that immediately after 1894 there was a remarkable and rapid rise of all the above stocks; but in 1898 there was a sudden drop, which continued gradually until 1902. The decline in the prices was accentuated in 1903 when there was another large fall, which reduced the prices to something like the level ruling in 1894. These figures, however, as they stand, do not afford an indication of the real values of the stocks concerned. To effect a correct comparison, the rate of interest obtained by the investor must be determined when allowance has been made for redemption at par on maturity. The foregoing table shows the mean between the highest and lowest prices for the year. Other things being equal, the maximum price would be when 6 months' interest is about to become due, whilst the minimum would be when the interest has just been paid; so that it may be fairly assumed that the mean price includes 3 months' accrued interest. To make a proper comparison therefore of the rise and fall of Australasian stocks, recourse must be had to a method which will allow for differences in the currencies of the various stocks. For instance, to compare Victorian four per cents. in 1904 with those in 1894, allowance must be made for the fact that these stocks in the latter year have ten years less to run, which somewhat reduces the price. For a similar reason a comparison between the stocks of the States and New Zealand bearing different dates of maturity is extremely faulty.

Investor's  
return from  
Austral-  
asian  
stocks.

The best method of comparing the value of stocks over a series of years, or of comparing the different values placed upon the stocks of different States by investors, is to show the actual or effective rate of interest the investor is satisfied with, as evidenced by the mean between the highest and lowest quotations during the year. This is done in the following table, allowance being made for an average of 3 months' accrued interest, which is deducted from the market price before the computation is made. In computing the yield to the investor, the bonus received or loss incurred by redemption at par at maturity is taken into account:—

INVESTORS' INTEREST RETURN FROM AUSTRALASIAN STOCKS,  
1894, 1897, 1900, 1902, AND 1904.

Year.	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	FOUR PER CENTS.						
	Per cent. £ s. d.	Per cent. £ s. d.	Per cent. £ s. d.				
1894 ...	3 17 2	3 13 7	3 13 10	3 13 9	3 13 0	...	3 13 4
1897 ...	3 5 1	3 2 2	3 2 2	3 4 1	3 1 3	...	3 6 2
1900 ...	3 8 8	3 6 4	3 7 6	3 7 10	3 6 2	3 7 0	3 9 0
1902 ...	3 8 4	3 8 2	3 11 10	3 11 8	3 8 0	3 6 9	3 8 5
1904 (to April 2)	3 12 3	3 14 1	3 15 10	3 19 9	3 13 2	3 13 5	3 13 9

INVESTORS' INTEREST RETURN FROM AUSTRALASIAN STOCKS,  
1894, 1897, 1900, 1902, AND 1904—*Continued.*

Year.	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.	New Zealand.
THREE AND A HALF PER CENTS.							
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1894 ...	3 15 11	3 11 11	3 16 4	3 12 10	...	3 15 2	3 11 0
1897 ...	3 3 11	3 0 6	3 3 7	3 1 0	...	3 1 1	3 3 11
1900 ...	3 6 10	3 5 0	3 6 10	3 5 9	3 7 7	3 7 3	3 6 4
1902 ...	3 7 10	3 6 8	3 9 0	3 7 6	3 10 3	3 6 9	3 5 6
1904 (to April 2)	3 16 10	3 14 1	3 16 8	3 12 0	4 1 1	3 16 3	3 10 5

NOTE.—Where the date of redemption is optional, the earliest date has been adopted for the calculation.

There are several points worthy of remark in the above table, and there are some inconsistencies which, to the ordinary observer, may seem strange, though they are probably well understood by those who deal with and operate on Colonial securities in London. It is hard to determine what considerations weigh with the British investor in regulating the market prices and the yield to the investor in Australasian stocks. The first point to be noticed in the preceding table is the wide divergence in some cases of the yield to the investor from the 4 per cent. and 3½ per cent. stocks. The investor in Victorian 4 per cents. is satisfied with a yield of £3 12s. 3d. per cent., whilst the investor in 3½ per cents. expects £3 16s. 10d. per cent. The same thing applies to the stocks of Tasmania and Western Australia; investors in the stocks of the latter State receiving a return of £4 1s. 1d. per cent. from the 3½ per cents., and being satisfied with £3 13s. 2d. per cent. from the 4 per cents. On the other hand, investors in the stocks of New Zealand and South Australia receive a better return from the 4 per cents., the yield to the investor in the latter State being almost 4 per cent. on the 4 per cents., and no more than £3 12s. per cent. on the 3½ per cents.

Taking the 3½ per cents. as being the representative stocks, it appears that, judging from the quotations in 1904, those of New Zealand return the least to the investor, South Australia being second in this respect, and Western Australia last, the net return in that State being over 4 per cent. The Victorian 3½ per cents. have doubtless been affected by the bearing of the market in connection with the £5,000,000 loan, which fell due on 1st January, 1904, and was converted into 3½ per cent. stock, portion being temporarily floated into short-dated 4 per cent. bonds, with a view to conversion afterwards into 3½ per cent. stock. This is borne out by the fact that, although the interest return to the investor in Victorian 3½ per cents. is more than that from any of the others except Western Australia, yet the return from Victorian 4 per cents. is lower

than from the 4 per cent. stock of any of the other States or of New Zealand.

Prices of representative British and Colonial stocks in London.

The following is a statement of the interest return to the investor in the principal issues of Colonial stocks and from British Consols, as indicated by the mean between the highest and lowest market prices quoted during the year 1900 and during the first three months of 1904:—

MEAN PRICES OF BRITISH CONSOLS AND COLONIAL STOCKS,  
1900 AND 1904.

Country.	Date of Maturity.	Rate of Interest on Stock.	Return to Investor. Per Cent.		
			1900.	1904 (to 2nd April).	Increase.
		Per Cent.	£ s. d.	£ s. d.	£ s. d.
United Kingdom Consols	Inter-minable.	2½*	2 10 0	2 17 9	0 7 9
Canada ... ..	1947	2½	2 17 1	3 3 0	0 5 11
" ... ..	1938	3	3 0 0	3 3 7	0 3 7
Natal ... ..	1937	4	3 10 1	3 8 2	-0 1 11†
Ceylon ... ..	1934	4	3 6 11	3 9 7	0 2 8
Natal ... ..	1914-39	3½	3 7 11	3 10 0	0 2 1
Hong Kong ... ..	1918-43	3½	3 7 5	3 11 7	0 4 2
New Zealand ... ..	1940	3½	3 6 4	3 10 5	0 4 1
South Australia ... ..	1939	3½	3 5 9	3 12 0	0 6 3
Victoria ... ..	1920	4	3 8 8	3 12 3	0 3 7
New Zealand ... ..	1945	3	3 3 2	3 12 0	0 8 10
Cape Colony ... ..	1923	4	3 10 4	3 12 9	0 2 5
British Guiana ... ..	1935	4	3 12 3	3 13 1	0 0 10
Western Australia ... ..	1934	4	3 6 2	3 13 2	0 7 0
Cape Colony ... ..	1929-49	3½	3 5 3	3 13 8	0 8 5
Newfoundland ... ..	1935	4	3 11 1	3 13 8	0 2 7
Tasmania ... ..	1920-40	4	3 7 0	3 13 5	0 6 5
Jamaica ... ..	1934	4	3 10 11	3 13 10	0 2 11
New South Wales ... ..	1933	4	3 6 4	3 14 1	0 7 9
" " ... ..	1924	3½	3 5 0	3 14 1	0 9 1
New Zealand ... ..	1929	4	3 9 0	3 13 9	0 4 9
Natal ... ..	1929-49	3	3 4 9	3 14 4	0 9 7
Trinidad ... ..	1922-44	3	3 6 11	3 14 6	0 7 7
Queensland ... ..	1915	4	3 7 6	3 15 10	0 8 4
Tasmania ... ..	1920-40	3½	3 7 3	3 16 3	0 9 0
Queensland ... ..	1924	3½	3 6 10	3 16 8	0 9 10
Victoria ... ..	1923	3½	3 6 10	3 16 10	0 10 0
" " ... ..	1929-49	3	3 4 10	3 17 7	0 12 9
New South Wales ... ..	1935	3	3 0 11	3 17 1	0 16 2
British Guiana ... ..	1923-45	3	3 7 2	3 19 0	0 11 10
Trinidad ... ..	1917-42	4	3 7 8	3 19 0	0 11 4
Quebec ... ..	1937	3	3 10 7	3 19 6	0 8 11
South Australia ... ..	1917-36	4	3 7 10	3 19 9	0 11 11
Jamaica ... ..	1922-44	3	3 6 1	4 0 9	0 14 8
Western Australia ... ..	1915-35	3½	3 7 7	4 1 1	0 13 6
Queensland ... ..	1922-47	3	3 6 1	4 2 4	0 16 3
South Australia ... ..	1916	3	3 10 2	4 10 8	1 0 6
Western Australia ... ..	1916-36	3	3 12 0	4 10 8	0 18 8

\*Consols carried 2½ per cent. interest until 1903; but the rate of interest to a permanent investor in 1900 is only reckoned at 2½, which is now the permanent rate.

†The minus sign denotes a decrease.

It will be observed from a study of the preceding table that, generally speaking, the British investor does not approve of the issue of 3 per cent. stocks by the Australian States. This is borne out by the fact that in nearly every case the market prices of these stocks are relatively lower than the prices of the 4 and  $3\frac{1}{2}$  per cents., thus returning to the investor (including redemption at par on maturity) a much higher rate of interest. Thus, according to the mean between the highest and lowest prices quoted during the first three months of 1904, New South Wales 3 per cents. return 3s. per cent. more to the investor than the 4 and  $3\frac{1}{2}$  per cents.; South Australian 3 per cents. return 10s. 11d. per cent. more than the 4 per cents., and nearly 19s. per cent. more than the  $3\frac{1}{2}$  per cents.; Western Australian 3 per cents. return 9s. 7d. and 17s. 6d. per cent. more than the  $3\frac{1}{2}$  and 4 per cents. respectively; and Queensland, 5s. 8d. and 6s. 6d. per cent. more. The recent conversion of a £5,000,000  $4\frac{1}{2}$  per cent. loan which fell due on 1st January, 1904, has had the effect of making the relative market prices of the Victorian 3 and  $3\frac{1}{2}$  per cent. stocks about the same; but the return to the investor from the 3 per cents. is 5s. 4d. more than from the 4 per cents. It will likewise be noticed that the return to the investor from the  $3\frac{1}{2}$  per cent. Australian stocks is greater than from the 4 per cents. The probable explanation of all this is that the British investor considers it a sounder policy on the part of colonies, whose indebtedness is considerable, to issue stock which will tend to decrease the amount of principal repayable, which would act in the nature of a sinking fund. For instance, the conversion of a loan of £5,000,000 at 3 per cent., at a price of £85 per £100, increases the debt by £882,353; and in effect postpones payment of portion of the interest until the maturity of the loan, when it becomes part of the principal. The only Colonial 3 per cent. stock, besides that of Canada, which is appreciated to any extent is that of New Zealand, which gives a smaller return than the 3 per cent. stock of any of the Australian States.

The amount of Victorian Government stock and debentures, payable in Melbourne, outstanding on 30th June; the closing price in January, and the return to the investor per cent. for the last five years, are as follow. The market prices

Price of  
debentures  
and stock  
in Mel-  
bourne.

are taken from the "Australasian Insurance and Banking Record":—

Year.	Amount Outstanding on 30th June.	Closing Price in January.	Return to Investor per cent.		
			£	s.	d.
3 per cent. Stock, due 1917.					
1899 ...	2,790,482	100 $\frac{1}{2}$	2	19	4
1900 ...	3,059,511	100-100 $\frac{1}{4}$	2	19	10
1901 ...	3,146,000	98 $\frac{1}{2}$ -99 $\frac{1}{2}$	3	1	7
1902 ...	3,195,619	99 $\frac{3}{8}$	3	1	0
1903 ...	3,196,933	97	3	5	6
1904 ...	...	92 $\frac{1}{2}$	3	15	1
3 per cent. Debentures, due 1921.					
1901 ...	532,000	97 $\frac{1}{2}$ -97 $\frac{1}{2}$	3	3	7
1902 ...	1,000,000	95-95 $\frac{3}{4}$	3	6	8
1903 ...	1,000,000	93 $\frac{1}{2}$ -93 $\frac{3}{4}$	3	9	8
1904 ...	...	88-90	3	18	5
4 per cent. Debentures, due 1913-23.					
1899 ...	746,795	111-112	3	0	4
1900 ...	746,795	112	2	18	3
1901 ...	746,795	105-107 $\frac{1}{2}$	3	7	6
1902 ...	746,795	106	3	7	1
1903 ...	746,795	104 $\frac{1}{4}$	3	9	11
1904 ...	...	103	3	12	2

In comparing the return to the local investor in Victorian 4 per cent. debentures, as disclosed in the above table, it will be seen that the yield per cent. is the same as that in London from 4 per cent. stock, as disclosed in the preceding table; and that the local investor is satisfied with a smaller return from the 3 per cent. stock than the investor in the 3 per cent. Victorian stock in London.

#### LIFE ASSURANCE POLICIES.

Life assurance policies in force in Victoria

Under the provisions of the "Companies Act 1890," life assurance companies, whose head offices are outside Victoria, and who have branches in Victoria, are required to file returns with the Registrar-General showing the number of policies in force in Victoria during the preceding year. These returns are not required to be lodged before the end of September, and consequently this information has not been available as early as was desirable; but returns for 1903 have been obtained direct from all the companies except two of the least important, for which the figures of the preceding year have been repeated. This will not affect the comparison of 1903 with previous years, as the number of policies of those two offices was inconsiderable in comparison with the total. The following are the number and amount of policies in force in Victoria in companies whose head offices are inside, and those

whose head offices are outside, Victoria, during the years 1899 to 1903:—

## LIFE POLICIES IN FORCE IN VICTORIA, 1899 TO 1903

Year.	Companies with Head Offices in—				Total.
	Victoria.	New South Wales.	United Kingdom.	America.	
NUMBER.					
1899 ...	57,254	98,372	1,270	5,161	162,057
1900 ...	59,997	105,851	1,203	5,662	172,713
1901 ...	70,115	117,958	1,130	6,833	196,036
1902 ...	76,958	125,075	1,052	7,837	210,922
1903 ...	77,938	127,134	1,004	8,436	214,512
AMOUNT.					
	£	£	£	£	£
1899 ...	8,207,471	13,862,178	638,949	2,536,989	25,245,587
1900 ...	8,268,635	14,917,162	554,124	2,575,941	26,315,862
1901 ...	9,267,205	15,952,982	523,560	2,821,142	28,564,889
1902 ...	9,610,224	16,798,243	477,934	2,991,761	29,878,162
1903 ...	9,458,538	17,157,811	458,820	3,125,937	30,201,106

The policies dealt with in the preceding table include ordinary life assurance, endowment assurance, and pure endowment. The companies are required to distinguish between assurance and endowment in their returns to the Registrar-General; but it would appear that some have included only pure endowment under the latter head, and others have included endowment assurance as well, thus rendering the distinction between the two impossible for comparative purposes.

The increase in the number and amount of policies during the last four years has been most satisfactory; and a further evidence of the thrift of the Victorian people is afforded by the fact that at the end of 1903 nearly 18 per cent. of the total population, including women and children, were insured for an average sum of £141. Another noteworthy fact, established by the above table, is that, notwithstanding the keen competition of the four American and the three English companies, 95·6 per cent. of the policies, and 88·1 per cent. of the amount of assurance, are in Australian offices, of which there are eleven doing business in Victoria; 24·5 per cent. of the policies and 45·1 per cent. of the amount assured being in the Australian Mutual Provident Society, the head office of which is in Sydney.

Satisfactory position of the Australian offices.

The percentage of policies held in Australian and foreign offices in Victoria, and the percentage increase or decrease during the last 4 years, are as follow:—

Life policies. Growth of business, Australian and foreign companies.

LIFE ASSURANCE POLICIES: PERCENTAGE AND GROWTH OF VICTORIAN BUSINESS IN AUSTRALIAN AND FOREIGN OFFICES, 1899 TO 1903.

Companies with Head Offices in—	Percentage of—		Increase in 1903 as compared with 1899.	
	Total Policies.	Total Amount Assured.	Number.	Amount.
Victoria ... ..	35·79	31·97	Per cent. 36·13	Per cent. 15·24
New South Wales ... ..	60·07	56·12	29·23	23·78
United Kingdom ... ..	·59	1·89	—20·95*	—28·19*
America ... ..	3·55	10·02	63·46	23·22
Total ... ..	100·00	100·00	32·37	19·63

Thus, while there has been a decided increase in the business of the Australian and American offices, there has been a large falling off in the business of the British companies. The percentage increase has been greatest in the American offices; but all comparisons by way of percentage increases are faulty, unless taken in conjunction with the respective amounts. For instance, the number of policies in American offices has increased by nearly two-thirds during the last four years, and the amount assured by nearly one-quarter, whilst the percentage increases in Australian offices are much smaller; yet, as will be seen from a glance at the table preceding the above, the increase in the number of policies and the amounts assured in Australian is 49,446 and £4,546,700 respectively, as against 3,275 and £588,948 respectively in American offices.

Annuity policies in Victoria.

The following are the number and amount of annuity policies in force in Victoria at the end of each of the last five years, distinguishing between those in force in companies whose head offices are inside, and those whose head offices are outside, Victoria:—

ANNUITY POLICIES IN FORCE IN VICTORIA, 1899 TO 1903.

Year.	Head Offices in Victoria.		Head Offices Outside Victoria.		Total.	
	Number.	Amount per Annum.	Number.	Amount per Annum.	Number.	Amount per Annum.
1899 ...	57	£ 2,992	166	£ 11,065	223	£ 14,057
1900 ...	65	3,877	189	12,307	254	16,184
1901 ...	81	4,221	229	15,150	310	19,371
1902 ...	85	4,958	269	15,990	354	20,948
1903 ...	91	4,850	294	13,971	385	18,821

There was an increase in both the number and amount of annuities outstanding at the end of each year up to 1902; and at the end of 1903 the number of annuities outstanding

\*The minus sign denotes a decrease.

had substantially increased, but the annual amount payable was several thousands less than at the end of the previous year. It would therefore appear, from the returns furnished, that the new policies taken out in 1903 must have been for very small amounts, and that several large annuities must have fallen in by death, thus reducing the annual amount outstanding.

Returns have been obtained from four of the six companies whose head offices are in Victoria, showing the number and amount of policies in force outside Victoria at the end of each of the last five years. The companies which furnished returns are—the Australasian Temperance and General Mutual, the Australian Widows' Fund, the Colonial Mutual, and the National Mutual; whilst returns have not been received from the Australian Alliance, and the Victoria Life and General. The following are the particulars in respect of the four companies who furnished the information:—

Life policies  
in Victorian  
companies  
outside  
Victoria.

LIFE POLICIES IN FOUR VICTORIAN COMPANIES IN FORCE OUTSIDE VICTORIA, 1899 TO 1903.

Year.	Assurance and Endowment Policies.		Annuity Policies.	
	Number.	Amount.	Number.	Amount per Annum.
		£		£
1899 ...	80,801	19,279,944	48	3,151
1900 ...	86,305	19,716,014	55	3,509
1901 ...	94,313	20,360,324	88	5,804
1902 ...	102,049	21,315,990	123	7,684
1903 ...	113,867	22,763,193	144	8,648

Comparing these figures with those in the table, showing the business in Victoria of the six Victorian companies, it will be seen that the business of the four above mentioned outside the State is increasing year by year, hand in hand with the increase of the business in the State, and that a much greater proportion of the business of these companies is done in the other States than in Victoria.

BUILDING SOCIETIES.

Building societies in Victoria date from an early period in the history of the State, and prior to the crisis of 1893 much success had attended their operations. The collapse of the land boom, in 1891, was responsible for an almost entire cessation of new building society business, the amount of advances falling from 4 1-3 millions in 1888, when land transactions were heaviest, to 2 millions in 1891, to half a million in 1892, and to £65,395 in 1897, since which year, however, as will be seen from the following figures, a slight recovery has set in. Thirty-two institutions sent in returns during

Building  
societies.

1903. The following are the principal items furnished for the last five years. It should be mentioned that the returns of some of the societies were not complete:—

BUILDING SOCIETIES: RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
Number of Societies ...	35	38	32	31	32
„ Shareholders ...	6,645	12,120	6,010	6,160	6,365
„ Borrowers ...	5,019	6,910	4,933	6,167	6,105
	£	£	£	£	£
Value of Landed Property ...	145,098	224,199	317,369	342,047	321,259
During the Year—					
Advances ...	94,117	115,343	150,043	164,786	145,186
Repayments ...	242,965	286,536	254,419	275,720	267,193
Working Expenses ...	19,568	23,546	34,347	28,832	22,025
At end of Year—					
Bank Overdraft ...	102,737	107,047	31,978	90,623	75,476
Deposits... ..	699,797	1,353,912*	471,861	737,405	735,017

Advances by building societies, 1876 to 1903.

The following figures, showing the advances made by building societies during each of the last 28 years, indicate the havoc wrought in building society business by the financial crisis of 1893. It will be seen that the advances have not of late years attained to anything like their normal proportions. In fact after an annual increase from 1897 to 1902 there was a decline in 1903, as compared with 1901 and 1902:—

ADVANCES BY BUILDING SOCIETIES, 1876 TO 1903.

	£		£
1876 ... ..	870,203	1890 ... ..	2,426,127
1877 ... ..	815,860	1891 ... ..	2,059,627
1878 ... ..	703,932	1892 ... ..	504,089
1879 ... ..	489,312	1893 ... ..	96,364
1880 ... ..	564,411	1894 ... ..	82,897
1881 ... ..	805,551	1895 ... ..	124,127
1882 ... ..	1,040,965	1896 ... ..	124,113
1883 ... ..	1,089,480	1897 ... ..	65,395
1884 ... ..	1,469,542	1898 ... ..	90,604
1885 ... ..	2,073,189	1899 ... ..	94,117
1886 ... ..	2,358,729	1900 ... ..	115,343
1887 ... ..	2,544,688	1901 ... ..	150,043
1888 ... ..	4,381,330	1902 ... ..	164,786
1889 ... ..	3,264,984	1903 ... ..	145,186

MORTGAGES, LIENS, &c.

Land mortgages and releases.

A statement of the number and amount of registered mortgages and releases of land in each of the last five years is hereunder. Generally in about 13 per cent. of the mortgages the amount of the loan is for an indefinite amount and is not stated, so that the amounts stated in the following table may be taken as understating the total by about that proportion. No account is taken of unregistered or equitable mortgages to banks and individuals, as there is no public

\*Including amount due to debenture-holders.

record of these dealings; nor are building society mortgages over land held under the "Transfer of Land Act" included, they being registered as absolute transfers. Besides releases registered as such, some mortgages are released or lapse in other ways, e.g., by a transfer from mortgagor to mortgagee, by sale by mortgagee, or by foreclosure:—

LAND MORTGAGES AND RELEASES: RETURN FOR FIVE YEARS.

Registered During Year.	1899.	1900.	1901.	1902.	1903.
<b>Mortgages—</b>					
Number ...	7,460	6,927	7,698	8,951	9,199
Amount ... £	6,298,982	5,300,951	5,768,957	7,626,922	6,452,908
<b>Releases—</b>					
Number ...	5,673	5,783	5,940	5,985	4,241
Amount ... £	4,598,419	4,867,113	4,777,258	5,472,950	5,324,527

There is nothing to show the number of new mortgages given during the year, for the majority of the mortgages registered simply replace old mortgages. It appears, however, that in 1902 and 1903 there must have been a considerable number of new mortgages, which is probably accounted for by the calling in of overdrafts by the banks in 1902, which forced a number of people to pay off the banks by mortgaging their properties; and by the disastrous failure of the harvest of 1902-3, which must have necessitated a large number of new and increased mortgages. Owing to the imperfection and incompleteness of the returns mentioned above, it would be unsafe to make any further deduction from the figures.

The number and amount of stock mortgages, liens on wool, and liens on crops registered during each of the last five years were as follow. Releases are not shown, as releases of liens are not required to be registered, being removed from the register after the expiration of twelve months; and very few of the mortgagors of stock trouble to secure themselves by a registered release:—

STOCK MORTGAGES, LIENS ON WOOL AND CROPS: RETURN FOR FIVE YEARS.

Security.	1899.	1900.	1901.	1902.	1903.
<b>Stock Mortgages:—</b>					
Number ...	769	641	706	717	742
Amount ... £	157,526	90,327	165,806	118,648	99,517
<b>Liens on Wool:—</b>					
Number ...	290	283	287	278	229
Amount ... £	113,976	116,057	86,691	66,570	48,029
<b>Liens on Crops:—</b>					
Number ...	1,194	971	737	565	3,835
Amount ... £	204,656	145,485	116,159	82,999	206,737
<b>Total:—</b>					
Number ...	2,253	1,895	1,730	1,560	4,806
Amount ... £	476,158	351,869	368,656	268,217	354,283

Stock mortgages, liens on wool and crops.

Notwithstanding the number of bad seasons lately experienced, the number of these dealings has fallen off since 1899, and since 1894 the fall had been from 4,000 to 2,408 in 1898. It is not, however, to be inferred that this is evidence of absence of necessity on the part of farmers, graziers, and pastoralists, but it rather points to the conclusion that the banks and store-keepers are restricting advances on the securities of this description that are being offered. The large increase of liens on crops in 1903, as compared with the four preceding years, is due to the fact that 2,955 were liens to the Board of Land and Works, under the "Seed Advances Act 1903."

Bills and  
contracts  
of sale.

Two forms of security are taken by lenders over personal chattels, viz., a bill of sale, or a contract of sale and for letting and hiring. The former is a simple mortgage of the chattels, whilst the latter purports to be an absolute sale of the chattels to the lender, with an agreement by the lender to hire the goods back to the borrower at a certain rental, which takes the place of interest. The number and amounts of those filed in each of the last five years are as follow:—

BILLS AND CONTRACTS OF SALE: RETURN FOR FIVE YEARS.

Security.	1899.	1900.	1901.	1902.	1903.
Bills of Sale—					
Number ... ..	1,902	2,007	2,124	1,958	1,967
Amount ... ..	£ 247,611	180,061	186,932	225,544	221,114
Contracts of Sale—					
Number ... ..	455	393	370	327	425
Amount ... ..	£ 15,062	15,985	11,723	9,277	12,505

Before filing a bill of sale, 14 days' notice of intention to file must be lodged with the Registrar-General, within which period any creditor may lodge a "caveat" to prevent the filing of the bill without the payment by the borrower of his claim. To circumvent this, the practice arose, in 1877, whereby the borrower purported to sell the chattels to the lender, who hired them back to the borrower, and this became the form of security more generally adopted until 1887, when a decision was given that if there were any tacit understanding that the transaction should be considered as a loan, the security would be void unless registered as a bill of sale. In consequence of this, the number of contracts of sale has gradually decreased,

until in 1903 the bills of sale were nearly five times their number, and the amount secured about eighteen times as great.

A statement of the number and nature of trading companies floated and registered in Victoria during the five years period, 1894-8, and during each of the last five years, is appended:—

Trading companies registered 1894 to 1903.

TRADING COMPANIES REGISTERED IN VICTORIA, 1894 TO 1903.

Nature of Company.	1894 to 1898.	1899.	1900.	1901.	1902.	1903.
<b>Finance—</b>						
Land, Property, Investment ...	10	1	...	2	4	5
Building Society ...	1	...	...	...	1	...
Finance Agency, &c. ...	8	...	...	1	1	2
Insurance ...	2	...	...	...	1	...
<b>Trade—</b>						
Cycling ...	7	4	1	1	...	...
Export ...	1	...	...	1	3	...
Produce ...	12	...	1	1	1	1
Supply and Trading ...	8	1	1	...	2	5
Merchants' Imports ...	10	3	4	3	6	2
<b>Transport—</b>						
Carrying ...	6	...	1	1	1	1
Railways and Rolling Stock ...	4	...	1	...	...	...
Tramways ...	3	...	...	1	...	...
Steamship ...	1	...	1	1	2	2
Others ...	6	1	2	...	...	...
<b>Industrial—</b>						
Bacon Curing ...	3	1	1	1	...	...
Brewing ...	4	...	...	...	1	...
Bricks, Tiles ...	5	...	...	...	1	...
Electric ...	3	...	1	1	...	...
Engineering, Machinery ...	3	2	...	4	...	...
Explosives, &c. ...	5	...	...	...	...	...
Freezing ...	4	1	...	...	...	...
Manufacturing (undefined) ...	7	2	...	...	2	2
Tobacco ...	3	...	1	...	1	1
Preserving ...	9	1	...	...	...	...
Printing ...	4	...	...	1	1	1
Wine Making ...	3	...	1	...	...	2
Others ...	73	13	18	14	26	17
<b>Primary Production—</b>						
Cultivation ...	2	...	...	...	...	...
Dairying, &c. ...	64	3	6	3	2	5
Mining, Prospecting, &c. ...	24	2	4	2	3	1
Gold Saving, Extracting, &c. ...	5	...	...	...	4	...
Pastoral ...	2	...	2	...	1	...
<b>Miscellaneous—</b>						
Newspaper, Magazine ...	11	3	4	1	3	1
Public Halls ...	12	1	...	2	1	...
Other ...	45	6	4	8	1	8
<b>Total</b> ...	<b>370</b>	<b>45</b>	<b>53</b>	<b>49</b>	<b>69</b>	<b>56</b>

The figures in the above table refer only to companies registered under Part I. of the "Companies Act 1890," and are, therefore, exclusive of ordinary mining, life, and trustees and executors companies, as well as building societies. From the above figures it may be ascertained that of the 642 new companies registered during the last ten years, 244, or 38 per cent., were industrial; 135, or 21 per cent., were connected with primary production; 79, or 12 1-3 per cent., with trade; 39, or 6 per cent., with finance; 34, or 5 1-3 per cent., with transport; whilst 111, or 17 1-3 per cent., were of a miscellaneous character, including newspapers, magazines, public halls, and various societies and associations. Those industrial companies, included under the term "others," are principally companies registered for the manufacture of a particular patented article, but include a number of companies formed for the manufacture of various commodities and for the treatment of natural products.

Number of  
existing  
companies.

According to records in the Registrar-General's office, there were 1,143 trading companies in 1903 still actively engaged in the operations for which they were formed, as against 1,073 in 1902, 1,074 in 1901, 989 in 1900, 953 in 1899, 924 in 1898, 781 in 1897, and 799 in 1896, prior to which year this information was not obtainable. It will be seen from these figures that there has been a very decided and satisfactory increase in the number of active companies since 1897.

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## LAW, CRIME, &amp;c.

The law of Victoria, in its basic principles and main provisions, is founded on the law of England. All laws in force in England in 1828 were, so far as they should be held to apply to the circumstances of Australia, by Imperial Statute made law in New South Wales (which then included Victoria); and in case of any doubt as to the applicability, the Colonial Legislature was empowered to declare whether or not they do apply, or to establish any modification or limitation of them within the colony. The same Statute established a legislature within New South Wales with power to make laws for that colony; and Supreme and other courts were established. On the separation of Port Phillip from New South Wales in 1850, the new colony of Victoria was invested with similar powers, which were widened on the establishment of responsible government in 1855. In order, therefore, to ascertain the law of Victoria as to any particular matter or point, considerable research is often involved. The first step is a search of the Victorian Statutes; and if the matter is fully dealt with there, the labour is concluded; but, if it has never been dealt with by any Victorian Act, recourse must be had to the Statutes of New South Wales, and the Imperial Statutes specially applicable to New South Wales passed between 1828 and 1850. If no law on the point is obtainable from these sources, the law of England in 1828 must be ascertained, which in most cases is found in the English text-books. Having found the apparent law from either of these sources, it is still necessary to search through series of law reports for decisions which may either modify or interpret same.

The legal system.

## LITIGATION AND LEGAL BUSINESS.

The Supreme Court was first established in 1852, and its constitution and powers remain substantially unaltered by recent legislation, although the procedure has been entirely remoulded by the "Judicature Act of 1883." There were in 1903 five judges, viz., a Chief Justice and four Puisne Judges.

Supreme Court civil business.

The following is a statement of Supreme Court business during 1891, 1895, and the last five years:—

## SUPREME COURT CIVIL CASES, 1891 TO 1903.

Year.	Writs of Summons.		Causes Entered for Trial.	Causes Tried.	Verdicts for		Amount Awarded.
	Number Issued.	Amount Claimed.			Plaintiff.	Defendant.	
		£					£
1891 ...	5,744	304,377	479	247	119	64	57,713
1895 ...	2,115	140,292	254	187	101	33	41,487
1899 ...	937	90,957	180	122	68	29	15,203
1900 ...	825	137,083	161	106	62	31	101,896
1901 ...	823	69,788	156	97	38	20	4,640
1902 ...	844	109,012	191	101	52	16	6,717
1903 ...	770	148,516	172	122	54	40	11,135

Decline in litigation.

The extraordinary decline in litigation in the Supreme Court since 1891, to which attention was directed in the last issue of this work, still continues. In 1903 the writs issued were less than one-seventh; the amount sued for, and the causes which actually came to trial were only about one-half of the number in 1891. Notwithstanding this great decrease in litigation, the census of 1901 showed the number of barristers and solicitors as 820, an increase of 90 over the number as shown at the previous census of 1891. The figures show that a very small proportion of writs result in actual trials whilst a large number of trials are either abandoned before a verdict is given, adjourned to another sitting, or compromised.

County Courts business

County Courts have a jurisdiction both in equity and common law cases, limited to £500; and to try cases remitted by the Supreme Court. The cause of action must have arisen within 100 miles of the Court in which proceedings are taken, which Court must not be more than 10 miles further away from defendant's residence than some other County Court in which the plaintiff might have sued. In 1903 there were 116 sessions lasting 346 days held in 46 places. Particulars of litigation in 1891, 1895, and the last five years are as follow:—

## COUNTY COURT CASES, 1891 TO 1903.

Year.	Number of Cases Tried.	Amount Sued For.	Amount Awarded.	Costs Awarded to—	
				Plaintiff.	Defendant.
		£	£	£	£
1891 ...	9,947	293,073	115,199	14,006	7,263
1895 ...	1,361	219,285	73,091	7,256	5,514
1899 ...	874	124,466	62,708	5,577	2,868
1900 ...	789	160,676	49,595	5,188	2,782
1901 ...	572	137,227	43,222	5,012	4,143
1902 ...	622	169,968	52,202	5,662	2,331
1903 ...	584	126,670	42,004	3,923	2,923

The falling off in the number of causes tried is enormous and still continues, the number in 1903 being less than in any preceding year, and only one-seventeenth of that in 1891; but

the amount sued for and awarded, and costs awarded, have not fallen off to anything like the same extent. This would seem to indicate that litigants are much more cautious in instituting proceedings than formerly; and that the County Court is not resorted to for the recovery of petty and trade debts to the same extent as in former years.

Courts of Petty Sessions were held at 233 places in Victoria in 1903 by stipendiary magistrates and honorary justices. Clerks of Courts of ten years' standing, who have passed the prescribed examination, and barristers of five years' standing are eligible for appointment as Police Magistrates; but there is no legal training or knowledge of the law required as a condition precedent to the appointment of a person as an honorary Justice of the Peace. The jurisdiction is limited to what may be called ordinary debts, damages for assault, or restitution of goods, where the amount in dispute does not exceed £50. Particulars of the debt cases heard during a series of years are as follow:—

Petty Sessions civil business.

COURTS OF PETTY SESSIONS: CIVIL CASES, 1891 TO 1903.

Year.	Cases heard.	Amount claimed.	Amount awarded.
		£	£
1891	33,030	210,255	144,158
1895	30,609	168,143	138,722
1899	20,196	118,321	87,907
1900	17,577	95,890	80,960
1901	17,646	104,884	86,199
1902	20,421	116,936	96,166
1903	22,012	126,051	107,502

In addition to the ordinary civil cases above mentioned, and to the criminal jurisdiction hereinafter mentioned, Courts of Petty Sessions deal with other business of a civil and quasi-criminal nature. During the year 1903, 674 appeals against municipal ratings, 762 maintenance cases, 558 fraud summonses against debtors, 9,136 electoral revision cases, 6,010 licenses and certificates, and 1,189 miscellaneous cases were heard, and 517 lunatics were examined. It will be seen that there has been a large decrease in the debt cases heard before magistrates, and in the aggregate amount claimed and awarded, since 1891; but since 1900 there has been an increase under each of the three headings.

As compared with 1902, there has been a small decrease in the number of probates and letters of administration issued, and a considerable falling off has taken place in the value of property devised and bequeathed. Thus, in 1902, as compared with 1899, the number increased by 9 per cent., and the value of property by 28 per cent., whilst a corresponding comparison of 1903 with the same year shows an increase of

Probates and letters of administration.

only 7 and 3 per cent. There must, however, naturally be large differences in the aggregate value of property left in different years on account of the falling in of one or several very large estates during certain years. This matter is dealt with more fully over a long series of years in part Accumulation of this work. The following information is furnished for the last five years:—

PROBATES AND LETTERS OF ADMINISTRATION: RETURN FOR FIVE YEARS.

Year.	Probates.		Letters of Administration.		Both.	
	Number.	Property Sworn Under.	Number.	Property Sworn Under.	Number.	Property Sworn Under.
		£		£		£
1899	2,355	4,727,698	1,286	1,192,406	3,641	5,920,104
1900	2,534	5,835,594	1,427	1,082,939	3,961	6,918,533
1901	2,509	5,596,261	1,337	930,974	3,846	6,527,235
1902	2,590	6,483,077	1,386	1,088,405	3,976	7,571,482
1903	2,527	5,239,913	1,357	834,164	3,884	6,074,077

INSOLVENCIES.

Insolvencies, &c.

Prior to 1898, the returns of insolvencies were defective, inasmuch as private arrangements with creditors were not taken into account until that year. The number of failures and the declared assets and liabilities during the last five years were:—

INSOLVENCIES AND PRIVATE ARRANGEMENTS: RETURN FOR FIVE YEARS.

Year.	Insolvencies.			Private Arrangements.		
	Number.	Declared Liabilities.	Declared Assets.	Number.	Declared Liabilities.	Declared Assets.
		£	£		£	£
1899	360	274,288	131,859	150	256,796	203,305
1900	346	185,198	89,462	149	168,700	159,771
1901	327	216,198	86,391	183	222,608	189,908
1902	406	364,630	270,061	206	200,128	178,337
1903	505	210,086	84,611	194	202,475	164,481

The number of insolvencies was greater in 1903 than in any of the four preceding years, but the declared liabilities, with the exception of those in 1900, were the lowest recorded for the five years. Insolvencies are still much below the average in normal times. Thus the average number during the last five years was 389, and the declared liabilities £250,080, whereas during the ten years, 1879 to 1888, the average yearly number was 612, with declared liabilities £661,720. During the ten years, 1889 to 1898, when the failures resulting from the collapse of the land boom and the consequent banking crisis in 1893 swelled the returns, the yearly average number was 833, with declared liabilities £2,213,592.

In the following return will be found the occupations, in six classes, of those who became insolvent during the last five years, also the number of breadwinners in each class at the census of 1901, and the proportion of the former to the latter. The total number of insolvents does not include 102 whose occupations were not returned:—

Occupations  
of insol-  
vents.

## OCCUPATIONS OF INSOLVENTS, 1899 TO 1903.

Occupation Groups.	Number of Breadwinners, Census, 1901.	Number of Insolvents, 1899 to 1903.	Proportion of Insolvents to every 1,000 Breadwinners.
Professional ... ..	35,224	202	5·73
Domestic ... ..	66,815	160	2·39
Commercial ... ..	79,048	643	8·13
Transport and Communication ... ..	31,516	245	7·77
Industrial ... ..	146,233	1,037	7·09
Primary Producers ... ..	165,147	437	2·65
Total ... ..	523,983*	2,724	5·20

As might be expected, fewer breadwinners of the domestic and primary producing classes become insolvent than those of other classes, in proportion to their numbers in the community; whilst a greater proportion of the commercial than any other class find it necessary to file their schedules or compound with their creditors.

The number of insolvencies by way of sequestration of the estate of the debtor, distinguishing between voluntary and compulsory; also the declared liabilities and assets, are appended. Besides these insolvencies there are a number of liquidations in Queensland, and large numbers of private arrangements with creditors, which are virtually insolvencies, and are only recorded in Victoria and South Australia, but are not included in any case in the following table:—

Insolvency  
in Australia  
and New  
Zealand.

## INSOLVENCIES IN AUSTRALIAN STATES AND NEW ZEALAND, 1902.

State.	Number of Petitions.			Total Liabilities.	Total Assets.
	Compulsory.	Voluntary.	Total.		
Victoria ... ..	32	371	403	£ 359,802	£ 267,259
New South Wales ... ..	112	373	485	281,204	124,427
Queensland ... ..	28	406	434	88,311	30,321
South Australia ... ..	8	27	35	40,797	25,138
Western Australia ... ..	21	55	76	51,548	17,247
Tasmania (1901) ... ..	7	62	69	2,439	508
Australia ... ..	208	1,294	1,502	824,101	464,900
New Zealand ... ..	24	181	205	120,401	61,604

\* Exclusive of 10,066 persons of independent means.

Victoria heads the list in respect to the total amount of declared assets and liabilities; but no comparison of any value can be made on the above figures on account of the partial character of the returns.

#### DIVORCE.

Divorces, &c.

The "Divorce Act 1889," which considerably extended the grounds on which divorce may be granted, is responsible for a great increase in the number since that year. The added grounds of divorce, provided by that Act, will be found on page 1008 of the issue of this work for 1895-8. The number of petitions and decrees for dissolution of marriage and judicial separation during the last five years were as follow:—

#### DIVORCES AND JUDICIAL SEPARATIONS: RETURN FOR FIVE YEARS.

Year.	Petitions for—		Decrees for—	
	Dissolution of Marriage.	Judicial Separation.	Dissolution of Marriage.	Judicial Separation.
1899 ... ..	160	3	105	2
1900 ... ..	159	2	93	...
1901 ... ..	148	2	83	...
1902 ... ..	157	...	109	...
1903 ... ..	199	1	101	...

Since jurisdiction was first conferred upon the Supreme Court of Victoria in matters matrimonial in 1861, 1,590 decrees for dissolution of marriage and 85 decrees for judicial separation have been granted. Of these, 1,242 and 14 respectively were granted since 1890.

Divorce in Australia and New Zealand.

The following were the petitions and decrees for divorce in the Australian States and New Zealand during 1902, also the divorces per 10,000 married couples living:—

#### DIVORCES IN AUSTRALIAN STATES AND NEW ZEALAND, 1902.

State.	Petitions for—		Decrees for—		Divorces per 10,000 Married Couples.
	Dissolution of Marriage.	Judicial Separation	Dissolution of Marriage.	Judicial Separation	
Victoria ... ..	157	...	109	...	6.04
New South Wales ... ..	332	37	241	21	12.79
Queensland ... ..	14	2	6	...	.83
South Australia ... ..	20	2	2	...	.36
Western Australia (1901)	16	1	12	1	4.39
Tasmania ... ..	7	2	3	...	1.17
New Zealand ... ..	136	2	91	...	7.68

The grounds of divorce are now substantially the same in Victoria and New South Wales, and were extended in New Zealand in 1898. The extension of the grounds upon which divorce may be obtained has in each case had the effect of greatly increasing the number of petitions and decrees. It will be seen from the last column of the above table that, according to the decrees in 1902, divorce is twice as rife in New South Wales as in Victoria, and is now also more rife in New Zealand. Comparisons with the other States are valueless on account of the wide divergence in the grounds of divorce.

JUDICIAL AND LEGAL REVENUE AND EXPENDITURE.

The following return shows for the five years, 1899-1903, the revenue derived from fees in connection with the administration of the Transfer of Land Act, the Stamps Act, from the Registrar-General, for registration of patents, from equity, probate, and all other judicial and legal sources. The amount has increased from £91,682 in 1899 to £112,383 in 1903. The legal and judicial expenditure showed a decrease of £13,238 in 1902-3, as compared with the previous year, in which the amount was greater than either of the three preceding years. Owing to the large receipts for fees for lodging dealings, searches, &c., under the Transfer of Land and Stamps Acts, and for other services, the net cost to the taxpayer of the judicial and legal system during the year 1902-3 was reduced from £165,898 to £53,515, a considerable decrease as compared with the four previous years. A portion of the expenditure on salaries of judges and Crown law officers, sheriffs, &c., must, however, be regarded as having been expended in connection with order and protection.

Legal and  
judicial ex-  
penditure.

REVENUE FROM AND EXPENDITURE ON LEGAL SERVICES:  
RETURN FOR FIVE YEARS.

	1899.	1900.	1901.	1902.	1903.
REVENUE.					
Transfer of Land Act ...	£ 29,214	£ 30,233	£ 33,061	£ 33,984	£ 35,857
Stamps Act ...	41,859	47,337	47,682	55,258	53,902
Registrar General ...	6,368	6,135	5,963	6,441	6,562
Patents Office ...	4,325	4,289	4,352	5,107	4,987
Equity and Probate ...	4,963	5,643	6,453	6,573	6,577
Others ...	4,953	4,469	4,778	4,469	4,498
Total ...	91,682	98,106	102,289	111,832	112,383

REVENUE FROM AND EXPENDITURE ON LEGAL SERVICE:  
RETURN FOR FIVE YEARS.—*Continued.*

—	1899.	1900.	1901.	1902.	1903.
EXPENDITURE.					
	£	£	£	£	£
Judges' Salaries (including Master-in-Equity)	19,775	20,000	20,000	20,000	19,679
Crown Law Officers and Crown Solicitor	20,882	20,381	21,026	21,181	19,217
Registrar General and Registrar of Titles	24,942	26,700	27,936	29,841	28,000
Sheriffs ... ..	13,676	13,745	13,232	13,704	12,479
Police Magistrates and Wardens	14,084	15,650	17,852	16,008	15,247
Clerks of Courts ... ..	19,392	20,135	20,174	20,160	18,413
Others ... ..	49,775	55,227	56,965	58,242	52,863
Total ... ..	162,526	171,838	177,185	179,136	165,898
NET EXPENDITURE.					
—	70,844	73,732	74,896	67,304	53,515

## CRIME.

## ADMINISTRATION OF THE CRIMINAL LAW.

Administra-  
tion of the  
criminal  
law.

In nearly all cases where the criminal law has been broken, the alleged offender is brought at the very first opportunity before a Court of Petty Sessions, before two honorary justices or a police magistrate, or both, who, if the matter is one which comes within their summary jurisdiction, dispose of the case summarily. If the offence is an indictable one, the magistrates hold a preliminary investigation; and, if satisfied that a "prima facie" case is made out by the prosecution, the accused is committed for trial to a superior Court. There are two superior Courts with criminal jurisdiction, viz., the Supreme Court, and a Court of General Sessions, which are held at various places throughout the State. The latter Court corresponds with the Quarter Sessions in England, and may deal with all cases of a criminal nature except such as are expressly excluded from its jurisdiction, viz., 19 of the most serious crimes. A person may be brought before magistrates by three modes of procedure, viz., by an arrest by a police officer on warrant issued on a sworn information, or without an information if the offence is witnessed by the arresting constable; by private summons; and by a police summons. If at a coroner's inquest a verdict is returned for murder or manslaughter, the accused person is sent for trial to the Supreme Court without any investigation before magistrates.

The Attorney-General or Solicitor-General has also the power of presenting any person for trial before a superior Court without the necessity of any preliminary magisterial hearing; and upon the application of any person, properly supported by affidavit, a grand jury may be summoned, on the order of the Full Court, if the affidavit discloses that an indictable offence has been committed by a corporate body; or that such an offence has been committed by any person, and that some justice has refused to commit such person for trial. The grand jury consists of twenty-three men, who investigate the charge, and if they are of opinion that a "prima facie" case has been made out, the case is sent for trial. The cases which are presented under these two latter forms of procedure, are, however, very rare.

POLICE PROTECTION.

The following figures denote the numerical strength of the police force in Australia, the States, and New Zealand, and the proportion of same to population on the 31st December, 1903:—

Strength of police force in Australia and New Zealand.

POLICE IN AUSTRALIAN STATES AND NEW ZEALAND, 1903.

State.	Number.			Proportion per 10,000 of Population.
	Metropolitan.	Country.	Total.	
Victoria ...	824	671	1,495	12.37
New South Wales ...	979	1,291	2,270	15.90
Queensland ...	228	616	844	16.37
South Australia ...	227	165	392	10.63
Western Australia ...	136	355	491	21.63
Tasmania ...	41	194	235	13.09
Total Australia ...	2,435	3,292	5,727	14.58
New Zealand ...	66	551	617	7.41

It will be seen that Western Australia has the greatest police protection in proportion to population, Queensland and New South Wales next, New Zealand having by far the lowest. Of course, where the population is scattered, it is natural that more police in proportion to population will be required than in a densely populated centre where the area requiring protection is comparatively small.

CHARGES BEFORE MAGISTRATES.

Of the offenders who are reported as having committed offences, generally about 50 per cent. are arrested, 38 per cent. are summoned, whilst about 11 per cent. are still at large at the end of March of the year following that in which the offence was reported, but in 1903 the rates were 44, 44,

Offences reported and undetected crimes.

and 12 per cent. respectively. The following are particulars for the last five years:—

SUMMONSES, ARRESTS, AND UNDETECTED CRIMES: RETURN FOR FIVE YEARS.

Offences in respect to which persons were—	1899.	1900.	1901.	1902.	1903.
Brought before Magistrates on Summons	20,950	22,482	21,130	20,478	24,207
Apprehended by the Police ... ..	24,907	28,866	30,957	26,402	24,268
Still at large ... ..	6,032	6,449	6,472	6,153	6,593
Total ... ..	51,889	57,797	58,559	53,033	55,068

In this table each separate charge against a person is considered as a separate offence; for instance, a charge of drunk and disorderly, of resisting the police, of riotous conduct, and of tearing uniform would appear as four separate offences, although the occasion is the same. Of the offences in respect of which persons were still at large, 93 per cent. were offences against property, 3 per cent. were offences against the person, and the balance, 4 per cent., were of a miscellaneous character.

Offences dealt with by magistrates.

The following are particulars of cases brought before magistrates, from which it will be seen that about three-fourths are generally summarily convicted, one-fourth discharged, whilst an average of between 600 and 700 are sent for trial by superior courts:—

ARRESTS AND SUMMONSES DEALT WITH BY MAGISTRATES: RETURN FOR FIVE YEARS.

Number of Persons—	1899.	1900.	1901.	1902.	1903.
Arrested or Summoned ... ..	44,165	49,589	50,169	45,198	46,682
Discharged by Magistrates ... ..	11,120	11,664	12,564	11,096	10,020
Summarily Convicted or Dealt with	32,476	37,224	36,905	33,461	36,031
Committed for Trial ... ..	569	701	700	641	631

In regard to persons arrested included in these figures, minor charges are excluded, and only that charge which throughout the hearing of the case has been most prominent is taken account of; but in regard to summons cases, the unit is each separate charge or case. It will be noticed that the proportion summarily convicted in 1903 was considerably above the average.

Males and females arrested.

The sexes of persons brought up on summons are not recorded; but about 20 per cent. of the arrests are always found to be females. The males and females arrested, and the disposal of the cases, in 1903, were as follow:—

MALES AND FEMALES ARRESTED, 1903.

Disposal.	Arrests.		
	Males.	Females.	Total.
Summarily Convicted ...	12,424	3,317	15,741
Discharged by Magistrates ...	4,914	1,248	6,162
Committed for Trial ...	503	69	572
Total ...	17,841	4,634	22,475

The arrests during the last five years numbered 23,215 in 1899, 27,107 in 1900, 29,039 in 1901, 24,720 in 1902, and 22,475 in 1903.

DRUNKENNESS.

The following are the number, and proportion per 1,000 of the population, of persons arrested for drunkenness during the last five years. Summons cases for drunkenness are not included, particulars regarding them being unavailable before 1902, but the number of such cases is inconsiderable, being only 117 in 1903:—

Arrests for drunkenness, 1899 to 1903.

ARRESTS FOR DRUNKENNESS : RETURN FOR FIVE YEARS.

Year.	Number.	Proportion per 1,000 of Population.
1899 ...	12,998	10.96
1900 ...	15,878	13.31
1901 ...	17,360	14.43
1902 ...	13,897	11.51
1903 ...	12,513	10.35

The arrests for drunkenness were fewer during last year than in any of the four preceding years. A comparison of the last year and the preceding five years with previous periods is given below. The amount of drunkenness, as evidenced by arrests, being taken as 100 in 1874-8, the numbers for the subsequent periods will show the increase or decrease by comparison:—

Drunkenness—Comparison with previous years.

Period.	Index Number.
1874-8	100
1879-85	88
1886-92	106
1893-97	65
1898-1902	83
1903	74

A very considerable decrease in drunkenness is shown during the five years following the banking crisis, which was a period of general depression; but during the five years,

1898-1902, the arrests for drunkenness are assuming something nearer their normal proportions. In 1903, however, the arrests for drunkenness were fewer than in either of the five preceding years.

Drunkenness in Australian States and New Zealand.

Drunkenness in each of the Australian States and New Zealand, over a series of years, is dealt with in company with other offences on the next and the following pages.

#### DECREASE IN CRIME.

Decrease of crime in Victoria.

It is difficult to make a proper comparison of crime in recent years with former periods on account of the differences in the sex and age constitution of the people at different periods. The bulk of arrests consist of males from 20 to 50 years of age. The proportion of women and children arrested is comparatively very small; so that it is natural that, at a period like the present, when the percentage of males at those ages is much less than ten years ago, the proportion of arrests per 10,000 of the population is not a true index of crime, and makes the decrease appear greater than it really is. It is therefore necessary to divide the sexes of arrested persons, and each sex into age groups, and to show the number of charges laid against males and females at various ages between 10 and 50, per 10,000 alive at each age, as shown by the census. The following are the particulars on this basis at the last four census years:—

CHARGES PER 10,000 ALIVE AT EACH AGE AGAINST PERSONS ARRESTED, 1871, 1881, 1891 AND 1901.

Ages.	1871.	1881.	1891.	1901.
	Males.			
10 to 15 years	104	111	96	51
15 to 20 years	338	335	305	209
20 to 25 years	773	720	688	570
25 to 30 years	834	823	777	712
30 to 40 years	771	865	869	700
40 to 50 years	726	721	1,053	873
50 to 60 years	830	623	760	804
60 years and over	756	661	586	443
	Females.			
10 to 15 years	37	26	15	15
15 to 20 years	80	90	50	28
20 to 25 years	141	178	139	116
25 to 30 years	232	219	171	172
30 to 40 years	303	290	189	168
40 to 50 years	272	322	238	166
50 to 60 years	245	223	215	116
60 years and over	186	166	144	110

During the years 1871, 1881, and 1891 the tabulations were based on each separate charge against arrested persons, and in 1901 on each separate arrest, only the most prominent charge being counted in the latter year. The percentage by which the total charges exceeded the arrests during 1901, has, however, been added on to the figures for each age group for the purpose of comparison. A study of the figures shows that the proportion of offences has on the whole fallen off in 1901 as compared with the three previous periods. In regard to males, there has been a falling off in 1901 as compared with the three previous periods at all ages except 50 to 60, in which group the proportion of arrests was in excess of that in 1891 and 1881. The falling off is more marked amongst the very old people (60 years and over) and the young people under 20, than at other ages. The ages at which the largest proportion of arrests was made were 40 to 50 years in 1901 and 1891, 30 to 40 years in 1881, and 25 to 30 and 50 to 60 years in 1871. In regard to females there has been a very decided falling off at all ages, the ages at which the largest proportion of arrests were made being 25 to 50 in 1901, 40 to 60 in 1891, and 30 to 50 in 1881 and 1871.

#### CRIME AND DRUNKENNESS IN AUSTRALASIA.

A scientific comparison of crime cannot be made between different States or countries unless several considerations are taken into account. The first point necessary is that the criminal law, in the places compared, should be substantially the same; the second, that it should be administered with equal strictness; and the third, that proper allowances are made for differences in the age and sex constitution of the population. As previously pointed out, the latter consideration is one that must also be taken into account in comparing crime in recent years with previous periods when the population was very differently constituted in regard to sex and age. The returns of the States and New Zealand do not afford sufficient data to allow for these differences; but in regard to the first two points above mentioned the basis and main provisions of the criminal law are the same in each State; and it must be presumed, in the absence of any evidence to the contrary, that the law is administered with equal strictness in each State. The following table shows, for a series of years, the number of charges against persons arrested or summoned per 1,000 of the population for the only four classes of offences for which complete comparisons can be made:—

Offences and  
drunken-  
ness in  
Australia  
and New  
Zealand.

CRIME IN AUSTRALIAN STATES AND NEW ZEALAND, 1890, 1895,  
AND 1899 TO 1902.

State.	Year.	Number of Charges Against Persons Arrested or Summoned for—				
		Offences Against the Person.	Offences Against Property.	Drunk- enness.	Other Offences.	Total.
Victoria ...	1890	4,091	5,036	18,501	37,156	64,784
	1895	2,500	4,068	11,143	22,616	40,327
	1899	2,242	3,460	12,998	27,613	46,313
	1900	2,238	3,540	15,878	30,192	51,848
	1901	2,152	3,521	17,360	29,054	52,087
	1902	2,121	3,882	13,897	26,337	46,237
New South Wales ...	1890	8,729	7,616	18,654	31,088	66,087
	1895	4,459	6,153	18,379	35,987	64,978
	1899	4,527	6,857	19,938	28,040	59,362
	1900	4,435	6,675	21,003	30,747	62,860
	1901	4,336	6,437	21,123	32,729	64,625
	1902	4,223	7,292	21,577	33,608	66,700
Queensland ...	1890	2,713	2,487	6,332	7,464	18,996
	1895	2,073	2,085	4,993	8,522	17,673
	1899	1,933	2,243	8,337	10,172	22,685
	1900	1,937	2,552	9,254	10,621	24,364
	1901	1,846	2,547	9,791	9,736	23,920
	1902	1,908	2,375	8,123	8,709	21,115
South Australia ...	1890	520	501	2,382	3,596	6,999
	1895	411	677	1,763	2,128	4,979
	1899	393	609	1,999	2,719	5,720
	1900	304	575	2,249	3,072	6,200
	1901	260	528	2,047	3,392	6,227
	1902	232	509	2,431	3,416	6,608
Western Australia ...	1890	371	536	1,181	2,602	4,690
	1895	654	1,080	2,154	4,489	8,377
	1899	978	1,657	2,826	8,419	13,880
	1900	1,037	1,746	3,070	9,010	14,863
	1901	1,040	1,593	3,348	9,352	15,333
	1902	845	1,889	3,311	10,398	16,443
Tasmania ...	1890	483	619	1,151	4,158	6,411
	1895	353	710	463	3,240	4,766
	1899	396	600	885	3,108	4,989
	1900	368	676	832	3,505	5,381
	1901	341	647	743	3,768	5,499
	1902	248	618	636	4,669	6,171
Total Australian States ...	1890	16,907	16,795	48,201	86,064	167,967
	1895	10,450	14,773	38,895	76,982	141,100
	1899	10,469	15,426	46,983	80,071	152,949
	1900	10,319	15,764	52,286	87,147	165,516
	1901	9,975	15,273	54,412	88,031	167,691
	1902	9,597	16,565	50,618	87,137	163,917
New Zealand	1890	1,516	2,297	5,830	8,604	18,247
	1895	1,281	2,557	5,104	8,639	17,581
	1899	1,435	2,740	6,279	12,220	22,674
	1900	1,526	2,680	7,319	13,165	24,690
	1901	1,586	3,048	8,086	13,105	25,825
	1902	1,114	3,083	8,311	15,568	28,076

The following table shows the number of charges laid against persons arrested or summoned per 1,000 of the

population in the Australian States and New Zealand during a series of years:—

PROPORTION OF VARIOUS OFFENCES TO POPULATION IN EACH AUSTRALIAN STATE AND NEW ZEALAND, 1890, 1895, AND 1899 TO 1902.

State.	Year.	Charges against Persons Arrested or Summoned per 1,000 of the Population for:—			
		Offences against the Person.	Offences against Property.	Drunkenness.	Other Offences.
Victoria	1890	3.66	4.50	16.54	33.22
	1895	2.12	3.45	9.44	19.17
	1899	1.93	2.98	11.20	23.79
	1900	1.88	2.97	13.31	25.30
	1901	1.79	2.93	14.43	24.15
	1902	1.76	3.22	11.51	21.82
New South Wales	1890	7.92	6.91	16.93	28.21
	1895	3.53	4.87	14.53	28.46
	1899	3.39	5.14	14.95	21.03
	1900	3.28	4.93	15.51	22.70
	1901	3.16	4.69	15.39	23.85
	1902	3.03	5.23	15.49	24.12
Queensland	1890	7.03	6.45	16.41	19.35
	1895	4.58	4.60	11.03	18.82
	1899	4.07	4.72	17.53	21.40
	1900	3.95	5.21	18.90	21.68
	1901	3.65	5.04	19.36	19.25
	1902	3.71	4.62	15.82	16.96
South Australia	1890	1.64	1.60	7.53	11.35
	1895	1.18	1.94	5.06	6.11
	1899	1.07	1.66	5.43	7.39
	1900	.85	1.60	6.26	8.55
	1901	.72	1.46	5.65	9.37
	1902	.69	1.40	6.68	9.39
Western Australia	1890	8.28	11.97	26.37	58.09
	1895	7.06	11.66	23.25	48.45
	1899	5.80	9.83	16.77	49.96
	1900	5.86	9.86	17.34	50.88
	1901	5.51	8.45	17.75	49.59
	1902	4.08	9.12	15.98	50.20
Tasmania	1890	3.36	4.31	8.01	28.93
	1895	2.22	4.46	2.91	20.36
	1899	2.32	3.52	5.19	18.21
	1900	2.13	3.91	4.82	20.29
	1901	1.96	3.73	4.28	21.70
	1902	1.41	3.52	3.48	26.72
Australian States	1890	5.43	5.39	15.48	27.64
	1895	2.98	4.22	11.11	21.99
	1899	2.85	4.20	12.78	21.78
	1900	2.75	4.21	13.96	23.26
	1901	2.62	4.01	14.30	23.13
	1902	2.49	4.29	13.10	22.57
New Zealand	1890	2.44	3.70	9.39	13.86
	1895	1.85	3.71	7.37	12.48
	1899	1.91	3.65	8.37	16.29
	1900	2.00	3.51	9.58	17.24
	1901	2.04	3.92	10.39	16.85
	1902	1.40	3.86	10.42	19.51

Almost all serious crimes are either offences against the person or offences against property, the only serious crimes included under "Other Offences" being forgery, counterfeiting, and perjury, which are very few in number, being in Victoria in 1902, only 59 out of a total of 26,337 included under that category. A large proportion of these cases are merely breaches of various Acts of Parliament, bye-laws, &c., which indicate no degree of criminal instinct or intent on the part of the person charged. They also include a large number of offences against good order, including insulting behaviour, &c., vagrancy, and soliciting prostitution. Comparison between the States of "Other Offences" is not of much value, on account of the differences in the laws of the States in these matters, and on account of the large proportion of these offences which are not crimes, but mere breaches of various Acts and bye-laws.

Offences  
against the  
person.

Offences against the person set out in the first column of the preceding table, consist mainly of assaults, but include murder, manslaughter, shooting, wounding, and all crimes of lust. A glance at the above figures shows that since 1890 there has been a very large decline in these crimes in every State in proportion to population. South Australia easily holds the pride of place, then coming New Zealand and Tasmania, closely followed by Victoria. New South Wales occupies a considerably worse position than Victoria, and the two last are Queensland and Western Australia, in that order, although the positions of these two would be reversed in 1902 if allowance were made for the exceptionally large proportion of adult males in the population of Western Australia.

Offences  
against  
property.

A decrease, as compared with 1890, will also be noticed in the proportion of offences against property in all the Australian States; but there has been a small increase in New Zealand, and a relapse in 1902 in Victoria and New South Wales. The decrease in respect of these offences is, however, not nearly so marked as that in respect of offences against the person. Offences against property are far less rife in South Australia than in any other State or New Zealand, Victoria coming next, closely followed by Tasmania, New Zealand, Queensland, and New South Wales, in that order. These crimes are far more rife in Western Australia than in any other State, although the proportion in excess would be considerably reduced if allowance were made for the large proportion of adult males in the population of that State. Offences against property consist principally of larceny and similar offences; but include burglary, robbery, &c., cattle stealing, and wilful damage to property.

Drunken-  
ness.

In every Australian State there has been a decrease in drunkenness cases before magistrates in 1902, as compared

with 1890; but an increase as compared with 1895 in every case except Western Australia. This offence is much less frequent in Tasmania than in any other State, South Australia coming next, and then following New Zealand, Victoria, New South Wales, Queensland, and Western Australia, in that order. If allowance were made for the large proportion of adult males in the latter State, Western Australia would now occupy a better position than Queensland, or New South Wales, and would be about equal to Victoria. In the latter State summons cases for drunkenness are not included, not being recorded for back years, but the number of such cases in 1903 was so small that the comparison is not appreciably affected by their omission.

The following table shows the average consumption during the five years, 1898 to 1902, of intoxicating liquors in the Australian States and New Zealand:—

AVERAGE CONSUMPTION OF SPIRITS, BEER, AND WINE IN AUSTRALIAN STATES AND NEW ZEALAND DURING THE FIVE YEARS, 1898 TO 1902.

State.	Yearly Average Quantity Consumed, 1898 to 1902.			Proportion per head.		
	Spirits.	Beer.	Wine.	Spirits.	Beer.	Wine.
Victoria ...	Gallons. 925,167	Gallons. 15,545,778	Gallons. 1,566,966	Gallons. ·76	Gallons. 13·09	Gallons. 1·30
New South Wales ...	1,131,610	14,160,690	916,495	·84	10·46	·68
Queensland ...	527,288	5,586,302	205,379	1·07	11·28	·41
South Australia ...	237,525	3,229,508	644,559	·65	8·89	1·77
Western Australia ...	291,075	4,522,359	185,461	1·60	24·84	1·02
Tasmania ...	86,384	1,509,619	24,591	·50	8·78	·14
New Zealand ...	551,051	6,880,583	116,975	·72	8·99	·15

Consumption of intoxicating liquors.

It will be seen that Victoria consumes more beer per head than New Zealand or any of the States except Western Australia. Western Australia, Queensland, and New South Wales consume more spirits per head, and South Australia more wine per head than Victoria.

With the assistance of the figures in the preceding table, it is not a very difficult matter to estimate, with some degree of accuracy, the approximate expenditure of the people on intoxicating liquors. Assuming that three-fourths of the spirits are consumed in hotels and clubs, and the balance privately, it would appear that each gallon of spirits costs the consumer 35s. It is estimated, allowing for imported ale and stout, that 3s. is paid for every gallon of beer consumed; and that 10s. per gallon is a fair average for wine, assuming that half is consumed in hotels, clubs, and saloons, and half privately, and allowing for imported champagnes and other wines.

Expenditure by the people on intoxicating liquor.

The following table shows the approximate amount spent by the people on spirits, beer, and wine, during an average year, the figures being based on the average quantity consumed during the five years, 1898 to 1902. The amount per head of population and per adult male over 20 years of age is also shown:—

AUSTRALASIAN DRINK BILL: YEARLY AVERAGE, 1898 TO 1902.

State of—	Expenditure by the People on—					
	Spirits.	Beer.	Wine.	Total.		
				Amount.	Per Head.	Per Adult Male.
	£	£	£	£	£ s. d.	£ s. d.
Victoria ...	1,619,043	2,331,867	783,483	4,734,393	3 18 10	14 0 3
New South Wales	1,980,317	2,124,103	458,248	4,562,668	3 7 4	11 12 0
Queensland ...	922,754	837,945	102,689	1,863,388	3 14 10	11 11 9
South Australia...	415,669	484,426	322,279	1,222,374	3 7 4	12 6 1
Western Australia	509,382	678,354	92,730	1,280,466	6 19 1	16 4 6
Tasmania ...	151,172	226,443	12,295	389,910	2 5 3	8 3 7
Commonwealth } of Australia }	5,598,337	6,683,138	1,771,724	14,053,199	3 14 6	12 11 5
Colony of } New Zealand }	964,340	1,032,087	58,488	2,054,915	2 13 2	8 16 7

It is a fact worthy of notice that, although South Australia spends more per adult on drink than New South Wales or Queensland, yet drunkenness, as evidenced by cases before magistrates, is far less prevalent in that State. It is also noticeable that drunkenness cases are less frequent in Victoria than in the same two States, although the amount spent on drink is greater per head and per adult male. In this connection, however, it will be noted that both Victoria and South Australia consume a much larger proportion of wine than any other State, and that New South Wales and Queensland consume a greater proportion of spirits. It has often been asserted that wine drinking countries are the most temperate, although there is no satisfactory statistical proof of the contention. It is, however, a very significant fact that the three States in which drunkenness is most frequent, as evidenced by cases before magistrates, are those in which the consumption of spirits is greatest. The quality of the liquor supplied is another point which bears on this phase of the question; for less drunkenness would naturally be caused by the consumption of a greater quantity of superior liquor, than by a smaller quantity of inferior quality.

It has been claimed on behalf of New South Wales as a reason why cases of drunkenness are more frequent in that State than in Victoria, that in the latter State drunkenness itself is no crime, but must be allied with disorderly conduct

before the person may be punished. This statement is incorrect, for Section 153 of the "Licensing Act 1890" (No. 1,111) provides that: "Every person found drunk in any highway or other public place, whether a building or not, or on any licensed victualler's premises, may be taken into custody by the police, and shall be liable to a penalty not exceeding Ten shillings, &c." It is true that most of the cases of drunkenness are brought under the "Police Offences Act"; but the degree of disorderly conduct required is very slight, the mere fact of a person being so drunk as to be a nuisance or dangerous to himself or others being sufficient. If any doubt arises as to whether the accused is disorderly within the meaning of the section, the charge is laid under the section of the Licensing Act mentioned above, but such cases are comparatively few.

The following is a statement of the number of charges of drunkenness made against persons in each State and in New Zealand during 1902, also the number of convictions, and the percentage of the latter to the former:—

Leniency of magistrates in drunkenness cases in Victoria.

PERCENTAGE OF CONVICTIONS FOR DRUNKENNESS IN AUSTRALIAN STATES AND NEW ZEALAND, 1902.

State.	Charges of Drunkenness.	Convictions.	
		Total.	Percentage of Charges.
Victoria ... ..	14,540	9,394	64·61
New South Wales ... ..	21,577	21,472	99·51
Queensland ... ..	8,123	8,102	99·74
South Australia... ..	2,431	2,394	98·48
Western Australia ... ..	3,311	2,026	61·49
Tasmania ... ..	636	602	94·65
Commonwealth ... ..	50,618	44,000	86·93
New Zealand ... ..	8,311	8,244	99·19
Australasia ... ..	58,904	52,244	88·69

It will be seen from the last column in the above table that the percentage of convictions in Victoria and Western Australia was much less than in the other States and New Zealand, nearly every case resulting in a conviction in the latter, and in less than 2 out of every 3 cases in the former. These figures seemed to denote such a comparative leniency on the part of magistrates in drunkenness cases in Victoria and Western Australia that the matter was brought under the notice of the Victorian Chief Commissioner of Police, who called for a report from the police officials best qualified to judge in Melbourne and the six principal country centres. It appears from the reports received, that it is the practice at the

Melbourne City Police Court to discharge a person on his first appearance, and also upon the second offence if more than 12 months have elapsed since his first appearance; and also, generally throughout the State, to discharge first offenders and those who have been arrested on a Saturday and were necessarily detained in custody till Monday, as it is considered the latter have already been sufficiently punished. In some cases, also, when an offender has been admitted to bail after arrest, he is discharged on promising to put a donation in the poor box. In all these cases no conviction is recorded in Victoria, and a similar practice is probably adopted in Western Australia; but in the other States a conviction is entered on the records in nearly every case, whether any punishment is inflicted or not. As regards the leniency in drunkenness cases in Victoria, the Chief Commissioner of Police states that magistrates seem to take a common-sense view of the cases which come before them; and that he sees no reason to find fault with their action. Although the percentage of convictions entered on the records in Victoria and Western Australia is small in comparison to the other States, the extent to which persons are arrested for drunkenness is not affected thereby.

A large proportion of the offences dealt with by magistrates cannot be classed as crimes properly so called, but are mere breaches of Acts of Parliament and show no degree of criminality in the person charged. A still larger proportion consists of drunkenness and offences against good order, including vagrancy, larrikinism, &c. The number of serious crimes preliminarily investigated by magistrates in Victoria and New South Wales during 1902 was:—

SERIOUS CRIMES IN VICTORIA AND NEW SOUTH WALES DURING 1902.

Class of Crime.	Victoria.	New South Wales.
Murder and attempts, manslaughter, shooting, wounding, &c.	90	203
Robbery, burglary, &c. ... ..	190	392
Crimes of lust ... ..	86	130
Horse, sheep, and cattle stealing ... ..	116	158
Total ... ..	482	883

The total per 10,000 of the population was 6.34 in New South Wales, and 4.00 in Victoria. Multiple charges are excluded in the above figures, each separate arrest only being counted. It is claimed on behalf of New South Wales that the comparatively large number of criminals in that State is due to the want of a proper law to prevent the influx of such persons from other places.

BIRTHPLACES OF ARRESTED PERSONS.

The following is a statement of the principal countries in which persons arrested during 1903 were born, and the proportion per 1,000 of the persons of such nationalities living in the State at the census of 1901:—

Birthplaces of persons arrested.

BIRTHPLACES OF PERSONS ARRESTED, 1903.

Birthplace.	Number.	Proportion per 1000 living.
Victoria ... ..	11,291	12.89
Other Australian States ... ..	1,813	27.85
New Zealand ... ..	338	37.47
England and Wales ... ..	3,228	27.56
Scotland ... ..	1,219	34.10
Ireland ... ..	3,060	49.75
China ... ..	91	14.61
Other Countries ... ..	1,435	46.86
<b>Total ... ..</b>	<b>22,475</b>	<b>18.71</b>

As the ages of the people were not tabulated in conjunction with their birthplaces at the census, the proportion of Victorian arrests does not afford a proper comparison with the proportions indicated for other Australian States, Great Britain, and foreign countries. The Victorian born population includes a large proportion of women and children, whereas there is so small a number of children in the State born in places outside Victoria, that the arrests of persons born outside the State may be regarded almost entirely as those of adults, and mostly of adult males. If the proportion of adult males arrested in Victoria be taken, it would in all probability approximate to those of the other Australian States.

EDUCATION OF ARRESTED PERSONS.

The ages of those arrested in 1903, and the degree of instruction possessed by them, are shown in the following table:—

Age and degree of instruction

AGE AND DEGREE OF INSTRUCTION OF PERSONS ARRESTED, 1903.

Ages.	Superior Education.	Read and Write Well.	Read Only, or Read and Write Imperfectly.	Unable to Read.	Total
Under 10 years ... ..	...	...	65	278	343
10 to 15 " ... ..	...	...	362	34	396
15 to 20 " ... ..	...	28	1,094	41	1,163
20 to 25 " ... ..	1	84	2,559	70	2,714
25 to 30 " ... ..	4	130	2,886	89	3,109
30 to 40 " ... ..	15	266	5,455	164	5,900
40 to 50 " ... ..	18	217	4,320	192	4,747
50 to 60 " ... ..	24	88	2,034	156	2,302
60 and upwards ... ..	7	58	1,537	199	1,801
<b>Total ... ..</b>	<b>69</b>	<b>871</b>	<b>20,312</b>	<b>1,223</b>	<b>22,475</b>

Education  
of children  
arrested.

The returns of those under 15 years of age arrested by the police consist mainly of neglected and deserted children. Of the 739 children under 15 arrested during 1903, not one was possessed of superior instruction nor could read and write well; and 312, or 42 per cent., were unable to read.

#### OFFENCES HEARD BY MAGISTRATES.

Arrests and  
summonses  
for various  
offences.

Prior to 1902, information relating to various offences has been incomplete on account of there being no returns as to summons cases other than "against the person," "against property," and "other offences." As will be seen below, there is a large proportion of assaults and offences against good order initiated by summons, and the following are particulars of the different classes of offences in 1903, distinguishing between arrest and summons cases, multiple charges against the same individual being each counted as an offence:—

#### ARRESTS AND SUMMONSES FOR VARIOUS OFFENCES, 1903.

Nature of Offence.	Number of Offences for which—		Total Offences Heard.
	Arrests were made.	Summonses were issued.	
Against the Person—			
Murder and attempts, manslaughter, shooting at, &c.	69	...	69
Assaults ... ..	713	862	1,575
Others ... ..	148	144	292
Against Property—			
Robbery, burglary, &c. ...	329	...	329
Larceny and similar offences ...	2,216	410	2,626
Wilful damage to property ...	246	247	493
Others ... ..	223	297	520
Against Good Order—			
Drunkenness ... ..	12,513	117	12,630
Others ... ..	6,688	5,893	12,581
Breaches of Licensing Act ...	...	647	647
Other Offences ... ..	1,123	15,590	16,713
Total ... ..	24,268	24,207	48,475

Of the 24,268 arrests, 1,793 were multiple charges, leaving the number of separate arrests 22,475, of which 15,741 were summarily convicted, 6,162 were discharged, and 572 were committed for trial. Of the 24,207 summons cases, 20,290 were summarily convicted, 3,858 were discharged, and 59 were committed for trial. Of the total persons dealt with (46,682), the number summarily convicted was 36,031, 10,020 were discharged, and 631 were committed for trial.

## SENTENCES PASSED.

During 1903 there were 15,741 sentences by magistrates Sentences by magistrates. in exercise of their summary jurisdiction, 12,424 of which were of males and 3,317 of females. These figures do not represent the number of distinct individuals sentenced during the year, for many of them, particularly the habitual drunkard class, were brought up and sentenced several times during the year. Of every 1,000 males sentenced, 448 were fined, 391 were imprisoned for a period less than 1 month, 107 for a period between 1 and 12 months, 10 for 1 year or over, and 44 were sent to reformatory schools, ordered to find bail, or otherwise dealt with. Of every 1,000 females sentenced, 352 were fined, 467 were imprisoned under 1 month, 110 over 1 and under 12 months, 7 over 12 months, and 64 were sent to the industrial or reformatory schools. In addition to these sentences, there were 739 cases (666 males, 73 females) in which the magistrates, having found the accused persons guilty, deemed it inexpedient to inflict any punishment, and "admonished" such persons, that is, let them off with a caution. In addition to the sentence of imprisonment, 1 prisoner was ordered 1 whipping of 25 lashes.

During 1903, 371 persons were sentenced by superior Sentences in superior courts. courts, of whom 43 were females. Of the 328 males, 2 were sentenced to death, 3 to periods between 10 and 15 years, 5 between 7 and 10 years, 23 between 4 and 7 years; 104, or 32 per cent., between 1 and 4 years; and 155, or 47 per cent., to periods under 1 year; whilst 5 were fined, 28 were required to find bail to appear when called upon, and 7 were sent to a reformatory or lunatic asylum. Of the 43 females, 1 was sentenced to 5 years, 2 between 1 and 2 years, and 28 under 12 months, whilst 10 were discharged on finding bail. In addition to the term of imprisonment, 4 persons were ordered to be kept in solitary confinement during various portions of their terms of imprisonment, and 15 were ordered to be whipped, 1 to receive 2 and 14 one whipping each.

## GAOLS AND PRISONERS.

There are nine gaols in Victoria, including the Pentridge Gaols and prisoners. Penal Establishment, Ararat and Portland gaols having been closed several years ago, and Maryborough recently. The gaols at Sale and Castlemaine have been reduced to receiving stations for local committals with very short sentences. The following statement gives for the year 1903 the accommodation, daily average in confinement, number received during

the year, and the number in confinement at the end of the year:—

## GAOL ACCOMMODATION AND PRISONERS, 1903.

Name.	Number of Prisoners.							
	For Whom there is Accommodation.		Daily Average.		Total Received.		In Confinement, 31.12.03.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Pentridge ...	800	...	489	...	532	...	473	...
Ballarat ...	62	18	23	2.0	369	58	31	3
Beechworth ...	66	15	35	.30	190	14	35	...
Bendigo ...	116	28	23	2.46	321	65	28	3
Castlemaine ...	99	...	12	.02	93	3	3	...
Coburg Female Prison	..	324	...	95.58	...	225	...	97
Geelong ...	187	29	98	.31	330	16	90	...
Melbourne ...	485	114	209	39.53	3,961	1,102	174	26
Sale ...	30	5	9	.50	156	7	6	...
Total ...	1,845	533	898	140.7	5,952	1,490	840	129

There are also seven police gaols which are used as receiving stations, but the daily average number of prisoners detained therein during 1903 was only nine. The above figures show that there is accommodation in the gaols for more than twice the average number in confinement.

The following is a statement of the average number of prisoners, male and female, in detention during each of the years, 1895 to 1903, in all the gaols of the State, from which it will be seen that the decrease is very considerable, the number in 1903 being 376, or 26 per cent. less than in 1895:—

## PRISONERS IN CONFINEMENT, 1895 TO 1903.

Year.	Average Number of Prisoners in Confinement.		
	Males.	Females.	Total.
1895 ...	1,208	216	1,424
1896 ...	1,143	194	1,347
1897 ...	1,044	182	1,226
1898 ...	1,065	223	1,288
1899 ...	1,020	215	1,235
1900 ...	981	204	1,185
1901 ...	951	200	1,151
1902 ...	943	170	1,113
1903 ...	907	141	1,048

Prisoners in confinement, 1895 to 1903—decrease.

EXPENDITURE ON POLICE AND GAOLS.

In the 38½ years ended 30th June, 1903, the total amount expended in connection with the police, and penal establishments and gaols of Victoria was £10,909,178, viz., £8,674,256 on the former, and £2,234,922 on the latter. The following table shows the amounts and the amounts per head expended in connection with the police, and penal establishments and gaols of Victoria during each of the five years ended with 1902-3:—

Expenditure on police, gaols, &c.

EXPENDITURE ON POLICE AND GAOLS, 1898-9 TO 1902-3.

Year.	Amount Expended (exclusive of the Cost of Buildings) on—			Amount per Head of Population.
	Police.	Gaols and Penal Establishments.	Total.	
	£	£	£	s. d.
1898-9 ... ..	255,991	51,857	307,848	5 2
1899-1900 ... ..	261,954	50,805	312,759	5 3
1900-1 ... ..	272,444	52,138	324,582	5 5
1901-2 ... ..	271,561	51,948	323,509	5 4
1902-3 ... ..	264,422	51,919	316,341	5 3

The following are the amounts expended on police and gaols in the Australian States and New Zealand during the year ending 31st December, 1902, in Tasmania; 31st March, 1903, in New Zealand; and 30th June, 1903, in the other States:—

Expenditure on police and gaols in Australasia.

EXPENDITURE ON POLICE AND GAOLS IN AUSTRALIAN STATES AND NEW ZEALAND, 1902-3.

State.	Amount Expended (exclusive of the cost of buildings) on—			Amount per Head of Population.
	Police.	Gaols.	Total.	
	£	£	£	s. d.
Victoria ... ..	264,422	51,919	316,341	5 3
New South Wales ... ..	415,800	101,968	517,768	7 4
Queensland ... ..	170,873	26,322	197,195	7 9
South Australia ... ..	76,339	12,554	88,893	4 10
Western Australia ... ..	130,308	25,625	155,933	14 7
Tasmania ... ..	37,806	5,679	43,485	4 11
New Zealand ... ..	123,804	32,070	155,874	3 10

No execution took place in 1903, as against 2 in 1902, 1 in 1900, 1 in 1898, 1 in 1897, 1 in 1896, 2 in 1895, and 5 in 1894. Since the first settlement of Port Phillip, 167 criminals have been executed within the State, of whom only three were females.

Execution

Coroners'  
inquests.

In 1903 the number of coroners' inquests into the causes of deaths of individuals was 1,435, which was below the average number of the four preceding years. In 844 cases the death was found to be due to disease or natural causes, in 357 cases to accident, in 125 to suicide, in 102 to external causes which could not be ascertained, in 1 to homicide, in 1 to intemperance, whilst in 5 cases the cause of death was doubtful. The number of inquests during the last five years was 7,800, of which 4,529 deaths were found to be due to disease or natural causes, and 3,208 to violence. Of those due to violence, 61 per cent. were due to accidental causes, 21 per cent. to suicide, whilst in 18 per cent. of the cases the cause or motive of the violence which caused death was doubtful.

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## PRODUCTION.

## LAND SETTLEMENT, WATER SUPPLY, &amp;c.

The numerous changes which have taken place in the mode of disposing of Crown Lands in Victoria have been fully described in the issue of this work for 1889-90, Vol. II., pars. 375 to 381; in the issue for 1893, Vol. II., pars. 239 to 250; and in the issue for 1895-8, pars. 1244 to 1256a. The present system dates from the passing of the "Land Act 1884" and the "Mallee Pastoral Leases Act 1883," which, with subsequent amendments, were consolidated by the "Land Act 1890." This Act was in turn amended by the "Land Acts 1891, 1898, 1900, and 1900 (No. 2)"; and by the "Settlement on Lands Act, 1893," and the "Mallee Lands Act 1896." These Acts were all consolidated into the "Land Act 1901," which, again, has been amended by the "Land Act 1903."

The "Torrens System," whereby persons acquiring possession of land may receive a clear title, was introduced into Victoria in 1862. The system was originated previously in South Australia by the late Sir R. R. Torrens, and has been the means of simplifying procedure in connexion with the transferring of land; gives a title to the transferee free of any latent defect; and cheapens the cost of dealing in real estate by reason of the simplicity of the procedure. All land parted with by the Crown since 1862 is under the operation of the "Transfer of Land Act," and the Crown grant issues through the Titles Office; but to bring under the Act land that was parted with prior to that year, application must be made accompanied by strict proofs of the applicant's interest in the property. During 1903 there were 599 applications to bring under the Act land amounting to 119,366 acres in extent, and to £1,175,140 in value, whilst the land brought under the Act during the year by application amounted to 139,094 acres in extent, and to £1,377,863 in value. Up to the end of 1903, there had been brought under the Act 2,095,688 acres, valued at £45,604,033. In the last year the applications to bring land under the Act, though not so great as in many former years, yet covered a larger area than in any previous year. The value of the land, in regard to which applications were received last year, was higher than in any year since 1891; but from 1881 to 1891, with the exception of 1883, the values were greater than in 1903. The number of certificates of title issued in 1903, 7,952, and the fees paid thereon, £35,857, were the highest since 1892.

Assurance  
funds.

When application is made to bring land under the "Transfer of Land Act," a contribution of  $\frac{1}{3}$ d. in the £ on the value of land is levied on the applicant to assure and indemnify the Government in granting a clear title against all the world, when there may have been a latent interest of some other person in the property, whom the Government recompenses out of this fund for the loss of such interest. Since 1884-5 the assurance fund has been reduced by £75,073, which amount was advanced towards the purchase of land adjoining the Titles Office, and on which the fund receives 4 per cent. per annum from the general revenue. Since its first formation, 28 claims have been made, and sums amounting to only £6,262 (including costs) have been paid to claimants.

Private and  
Crown  
lands.

The return for 1903 received from the Lands Department shows the total area of the State to be 56,245,760 acres. Of this, 24,526,255 acres are private lands, 21,129,061 acres being alienated in fee simple, and 3,397,194 acres in process of alienation. The balance, 31,719,505 acres, comprises the following:—Roads in connexion with lands alienated and in process of alienation, 1,614,773 acres; agricultural college and water reserves, 448,393 acres; State forests and timber reserves, 4,659,275 acres; State education endowment, temporarily reserved, 1,592,400 acres; other reserves, 595,631 acres; unsold land in towns, &c., 2,834,017 acres; in occupation under grazing area leases, 3,420,534 acres; Mallee pastoral lands, 3,175,376 acres; all other leases, 498,191 acres. The land available for occupation on 31st December, 1903, was 12,880,915 acres, and is thus described by the officers of the department:—Good grazing or agricultural, 17,021 acres; agricultural and grazing combined, 112,456 acres; grazing, 1,925,956 acres; inferior grazing, 77,145 acres; pastoral (large areas), 3,513,446 acres; swamp or reclaimed, 12,772 acres; lands that may be sold by auction (not including swamp or reclaimed lands), 5,577 acres; auriferous, 938,236 acres; and Mallee lands, 6,278,306 acres.

During 1899, 694,508 acres were alienated in fee simple, including land selected in previous years; 494,752 acres in 1900; 406,145 acres in 1901; 523,574 acres in 1902; and 510,080 in 1903; the purchase money being £727,493 of that in 1899; £526,650 in 1900; £438,363 in 1901; £555,538 in 1902; and £542,011 in 1903. The Crown lands absolutely or conditionally sold during the last five years were:—74,353 acres in 1899; 232,783 in 1900; 523,464 in 1901; 306,806 acres in 1902; and 348,813 in 1903. The Crown lands under pastoral occupation on 31st December, 1903, are thus described:

Number of Licences and Leases	...	...	...	...	20,967
Area (acres)	...	...	...	...	9,469,277
Annual Rental	...	...	...	...	£45,881

## VILLAGE AND CLOSER SETTLEMENT.

Although there is at the present time very urgent need of adopting means whereby the people of the State may be settled on its lands, yet this important matter has not been altogether lost sight of in the past. Effort was made as early as 1893 to provide work for the unemployed labour of the State by means of village communities, homestead associations, and labour colonies; and again, in 1898, the Government was authorised to purchase good agricultural private lands for the purposes of closer settlement. Up to the present, five estates have been purchased. Particulars of each of these schemes are as follow:—

Chiefly with a view to providing an outlet for the unemployed labour of the colony, an Act (the "Settlement on Lands Act 1893," No. 1311) was passed on the 31st August, 1893, providing for the establishment of three descriptions of rural settlements, viz.—Village Communities, Homestead Associations, and Labour Colonies. For the Village Communities certain lands were set apart and divided into allotments of from 1 acre to 20 acres in extent, to occupy which for periods of three years permits are granted to approved applicants. An applicant must not be under the age of eighteen, nor the owner in fee simple of 2 acres or upwards, nor the lessee of a pastoral allotment or grazing area, nor a licensee under sections 42 or 49 of the "Land Act 1890," nor a lessee of a Homestead Association allotment. During the period over which the permit extends the occupant pays a rental of 3d. per acre per annum, or if he occupy Mallee land, 1d. per acre per annum, and on the expiration of that period he is granted a lease for twenty years, during the currency of which he is required to pay half-yearly, in advance, a sum equal to the fortieth part of the price set upon the allotment, which is generally £1 per acre, except in special cases when the price is considerably higher; he has also to repay, in equal yearly instalments extending over the currency of his lease, any moneys which have been advanced to him, and to pay the cost of surveying his allotment in ten half-yearly instalments extending over the first five years thereof. The lessee is bound to bring one-tenth of his land under cultivation within two years of the date of his lease, and one-fifth within four years of such date; and is, moreover, to put on the land permanent improvements to the value of £1 per acre within six years of such date. All conditions having been complied with, the lessee is entitled to receive a grant in fee of the land he occupies.

Village  
settlement

Homestead  
associa-  
tions.

The Homestead Associations are combinations of not less than six persons who desire to settle near each other. Any person over the age of eighteen, not being a married woman, nor the holder of 10 acres of land or upwards in fee simple, and not disqualified by other restrictions specified in regard to Village Communities, may become a settler in a Homestead Association. For their accommodation blocks of Crown land, each containing not more than 2,000 acres, are divided into sections not exceeding 50 acres in extent, excepting a portion, not exceeding 100 acres, which is set apart for a township, of which a division, not exceeding 40 acres, is permanently reserved for the recreation, convenience, or amusement of the members of the association. The remainder of the township portion is divided into as many allotments of 1 acre or less as may be necessary to provide one allotment for each occupant of a section. The conditions as to residence, cultivation, improvement, rent, and repayment of cost of survey and advances, are much the same as those already described in connexion with the Village Communities. After all these have been complied with, a grant in fee of his section and township allotment is given to each occupant.

An advance, not exceeding £50 in all, is made by the Government in one or more sums to any settler in a Village Community or member of a Homestead Association who may be in need of monetary assistance to enable him to build upon or otherwise improve his holding; the total of such advances made in any one year is not to exceed £20,000.

The area originally made available for Village Communities and Homestead Associations was 156,020 acres in 85 different localities in the State. A large portion of this area was, however, found to be unsuitable for Village Settlement purposes and has been withdrawn from the operation of the Act. The area now occupied is 52,613 acres, and this is divided among 2,035 settlers, giving an average of 25 acres each. At the time of the last inspection (June, 1903), there were 1,873 settlers actually residing, of whom 1,481 were married and 392 were single. In addition to these, 162 settlers were improving their holdings but were not residing on the land. Including wives and families, the total souls numbered 8,490. The area under cultivation was 19,799 acres, and the total value of improvements effected was £213,662.

The total amount of monetary aid advanced to settlers was £67,379, and up to 30th June, 1903, £11,088 were repaid. During the last four or five years, very little monetary assistance was afforded, and now it has ceased altogether.

As it was generally recognised that the area which a settler could acquire under Part I. of the "Settlement on Lands Act," viz., 20 acres, was too small, in many cases, to make a living on, it was decided to allow settlers to acquire additional area under Conditional Purchase Leases, the value of which together with original holding, should not exceed £200. This was provided for in the "Land Act 1901" (Secs. 344-346) and settlers have largely availed themselves of the privilege.

The numbers specified above do not include a considerable number of settlers who have surrendered their Village Settlement leases and obtained licences, in lieu thereof, under Section 47 of the "Land Act 1901."

A system by which the Government was enabled to purchase private lands for closer settlement from persons willing to part with them at a fair price, was introduced in 1898, by Part III. of the Land Act of that year. That part with several subsequent amendments of minor importance, is now Part IV. of the Consolidated Act of 1901. After favourable report and valuation being obtained, the Minister may enter into a provisional contract for the purchase of land, copies of which contract and report are to be laid before Parliament; and if the Legislative Assembly, by resolution, declare it expedient to acquire such land, a Bill for the purchase thereof will be introduced. The price to be paid by settlers of the land so acquired will be so fixed as to cover cost of purchase, survey, and subdivision, value of land absorbed by roads and reserves, cost of constructing roads, cost of clearing, draining, fencing, and other improvements which the Board of Land and Works may effect prior to disposal as farm allotments, and any other incidental expenses. Any person aged 21 (not holder of rural land valued at £1,250, or who would not thereby become holder of land exceeding such value) may be granted one farm allotment under conditional purchase lease. The purchase money, with interest at  $4\frac{1}{2}$  per cent., must be paid by 63, or a lesser number of, half-yearly instalments, two of which must be deposited on application. A conditional purchase lease may be for a term not exceeding  $31\frac{1}{2}$  years; will contain, so far as consistent, the usual conditions of perpetual leases, and also the following:—(a) Improvements to the value of 10s. per acre; or, if Board so determine, to value of 10 per cent. of purchase money, before end of third year; and to the same extent, in addition, before the end of the sixth year: (b) Personal residence or by wife or child over eighteen years of age for eight months during each of first six years: (c) Not to transfer, assign, mortgage, or sublet within first six years; and any other

Private  
lands—  
Purchase  
for closer  
settlement.

conditions prescribed by the regulation. The fee-simple may be acquired after the first six years, if conditions complied with, on payment of balance of principal. Forfeiture for non-payment of an instalment may be prevented by payment thereof, with a penalty of 5 per cent., within three months, or of 10 per cent. within six months. Any tenant of land acquired by the Crown from his landlord may be granted a prior right to conditional purchase of any area not exceeding £1,250 in value or £2,000 if there be a homestead. Power is given to close unused roads, and portions of the land acquired may be used for experimental farms.

Under this authority the following purchases have been made:—

- (1) The Wando Vale Estate, containing 10,446 acres, situated in the County of Dundas, was purchased on the 23rd March, 1900, for £63,984.
- (2) The Walmer Estate, 13,769 acres, in the County of Borung, on the 23rd October, 1900, for £44,750.
- (3) Brunswick Lands—91 acres, in the County of Bourke, on the 7th November, 1900, for £2,644.
- (4) The Whitfield Estate—4,246 acres, in the County of Delatite, on the 1st November, 1900, for £36,095.
- (5) The Eurack Estate—5,108 acres, in the County of Grenville, on the 13th November, 1901, for £53,640.

The total of the purchase money and the incidental expenses, amounting to £205,675, represents part of a loan of £400,000 raised under the authority of Acts No. 1602 and No. 1749 for the purposes of closer settlement. The vendors of the Whitfield and Eurack estates accepted £56,095 in Government 3 per cent. stock, and the balance in cash, the total cash payment over the five estates being £149,579. A sum of £28,846 has been repaid to the Farm Settlements Fund up to the 30th June, 1903, and of this amount, £16,607 has been transferred from that fund to revenue to meet interest due to stock holders; £6,921 has been drawn from the same fund for redemption and cancellation of stock, the balance to the credit of the fund on the 30th June, 1903, being £5,317, and the unredeemed balance, £199,362.

As all these estates have been purchased since the end of 1900, it will be of interest to see what amount of work and settlement has taken place on the lands, omitting the Brunswick Estate. The agricultural statistics of the last year

Wando Vale,  
Walmer,  
Eurack,  
and  
Whitfield  
Estates

show that the number of holdings on the four estates was 120; the hands employed, 205 men and 134 women; and the total area occupied 26,963 acres; the balance, 6,606 acres, being still available for settlement. The total amount of land under crop was 8,238 acres; in fallow and under sown grasses, 1,010 acres; whilst 17,715 acres still remained under natural grasses. The agricultural produce was—108,079 bushels of grain of various kinds; 2,962 tons of hay, &c., and 532 tons of root crops. The stock on all the holdings numbered 699 horses, 3,202 cattle, 5,546 sheep, and 758 pigs. There were 17 cream separators at work, but on only one estate—Wando Vale—has butter been made, the return being 10,722 lbs. On the same estate; 1,400 lbs. of cheese was also made; 12,247 lbs. of hams and bacon were cured on the Wando Vale and Whitfield estates. The wool produced was 21,456 lbs., and the number of animals slaughtered 1,400. In the following table full particulars are given:—

CLOSER SETTLEMENT: RETURN FOR 1903-4.

	Wando Vale Estate.	Walmer Estate.	Eurack Estate.	Whitfield Estate.
Number of holdings returned ... ..	28	20	42	30
Area occupied ... .. acres	10,446	7,347	4,924	4,246
" under crop ... .. "	2,661	3,914	749	914
" in fallow ... .. "	7	884	—	55
" under sown grass ... .. "	39	—	9	16
" under natural grass ... .. "	7,739	2,549	4,166	3,261
Hands employed—number ... ..				
" .. .. males	63	34	54	54
" .. .. females	37	21	38	38
Area under cereals ... .. acres	2,881	3,914	707	972
" root crops ... .. "	27	—	42	135
Produce of cereals—				
Grain ... .. bushels	22,920	57,082	7,363	20,714
Hay ... .. tons	996	560	1,044	362
Lucerne ... .. "	2	—	—	3
Produce of root crops—				
Mangelwurzel ... .. tons	33	—	258	40
Beet, carrots, parsnips, etc. ... .. "	—	—	75	—
Onions ... .. "	20	—	103	3
Stock returned—				
Horses and foals ... ..	265	119	138	177
Horned cattle ... ..	1,083	71	1,047	1,001
Sheep ... ..	3,536	1,421	248	341
Pigs ... ..	259	20	185	294
Number of cream separators in use ... ..	12	1	—	4
Butter made ... .. lbs	10,722	—	—	—
Cheese made ... .. "	1,400	—	—	—
Hams and bacon cured ... .. "	9,289	—	—	2,958
Wool produced ... .. "	17,142	2,684	300	1,330
Stock slaughtered ... .. number of animals	874	80	—	446

In the short time since these estates have been available, they show a satisfactory amount of settlement, and from a perusal of the figures it must be admitted that fair progress has been made in developing the properties, and that there is a considerable amount of prosperity. Assuming that each holding consists of the average household, there would probably be a population of close upon 800 persons on the estates. The figures given may be taken as an indication of what might be done under a judicious system of land purchase and the policy of closer settlement, in the case of lands which heretofore have supported but very few persons.

Brunswick  
estate.

At Brunswick, 4 miles from the City, 91 acres of land were purchased on 17th October, 1900, for £2,644, where workmen might devote their spare time and labour to create for themselves comfortable homes under healthy and cheerful conditions. After providing for roads and public reserves, it was subdivided into 56 workmen's homes allotments, and made available for application on 4th February, 1901, under certain conditions, amongst which residence is compulsory for the first six years and improvements of a stated value have to be effected. All these allotments have been disposed of and the general appearance of the district has been quite changed. There is a population of 227 on the Estate, and improvements to the amount of £8,352 have been effected by the lessees. Two bridges have been erected by the Department, and the Metropolitan Board of Works have laid down water mains along the principal streets. A public hall and also a fire brigade station have been erected on the estate.

Land  
settlement.

A very useful lesson can be drawn from a close study of the information which is contained in the following table, showing the total amount of land of one acre and over in occupation in Victoria at the census of 1901 to be 37,759,871 acres, distributed amongst 70,280 holders. Of the total quantity about 10 per cent. is cultivated, 3 per cent. has been sown down in clover and lucerne, 78 per cent. is still under natural grass, and 9 per cent. uncleared. These figures need but little comment, and, when carefully analysed, a very unsatisfactory state of affairs is seen to prevail in the various districts of the State.

At the present time, those districts which are apparently the least designed by nature for the purposes of cultivation are those which show the greatest area under tillage, whilst those districts, which, lying close to the seaboard, enjoy a fairly uniform rainfall throughout the year and which may be said to

court the acquaintance of the husbandman, are those in which comparatively little tillage has as yet taken place, but are used almost entirely for grazing stock over land still under natural pastures.

### LAND IN OCCUPATION IN EACH DISTRICT OF VICTORIA, 1901.

(Areas 1 acre and upwards.)

District.	Number of Occupiers.	ACRES OCCUPIED.					Total.
		For Agricultural Purposes.	For Pasture.		Other Purposes and Unproductive.		
			Sown Grasses, Clover, or Lucerne.	Natural Grasses.			
<b>PART I.</b>							
Central ...	16,217	259,305	178,527	2,259,070	119,423	2,816,325	
North Central ...	7,628	167,576	37,753	1,775,604	34,163	2,015,096	
Western ...	10,878	146,709	213,713	6,436,171	116,991	6,913,584	
Wimmera ...	6,830	1,036,370	15,797	4,327,673	316,150	5,695,990	
Mallee ...	2,615	776,424	3,783	3,247,893	2,734,263*	6,762,363	
Northern ...	11,932	1,081,287	38,388	4,055,168	83,551	5,258,394	
North Eastern ...	6,334	131,677	17,531	3,615,365	8,952	3,773,525	
Gippsland ...	7,846	63,911	442,670	3,829,630	188,383	4,524,594	
Total ...	70,280	3,663,259	948,162	29,546,574	3,601,876	37,759,871	
<b>PERCENTAGE OF TOTAL OCCUPIED IN EACH DISTRICT.</b>							
<b>PART II.</b>							
Central ...	...	9.21	6.34	80.21	4.24	100.00	
North Central ...	...	8.32	1.88	88.11	1.69	100.00	
Western ...	...	2.13	3.09	93.09	1.69	100.00	
Wimmera ...	...	18.19	.28	75.98	5.55	100.00	
Mallee ...	...	11.48	.06	48.03	40.43	100.00	
Northern ...	...	20.56	.73	77.12	1.59	100.00	
North Eastern ...	...	3.49	.47	95.81	.23	100.00	
Gippsland ...	...	1.41	9.78	84.64	4.17	100.00	
Total ...	...	9.70	2.51	78.25	9.54	100.00	
<b>PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE.</b>							
<b>PART III.</b>							
Central ...	23.07	7.08	18.83	7.64	3.31	7.46	
North Central ...	10.85	4.57	3.98	6.01	.95	5.34	
Western ...	15.48	4.00	22.54	21.79	3.25	18.31	
Wimmera ...	9.72	28.29	1.67	14.65	8.78	15.08	
Mallee ...	3.72	21.20	.40	11.00	75.91	17.91	
Northern ...	16.98	29.52	4.05	13.73	2.32	13.93	
North Eastern ...	9.01	3.60	1.85	12.22	.25	9.99	
Gippsland ...	11.17	1.74	46.68	12.96	5.23	11.98	
Total ...	100.00	100.00	100.00	100.00	100.00	100.00	

\* Including 2,624,037 acres of uncleared Mallee.

Reducing the matter to percentages, as is done in the second and third parts of the table, the results are more clearly seen. In the Western District, containing some of the richest agricultural land in the State, there is only 2·13 per cent. of the total land occupied now brought under cultivation, whilst no less than 93 per cent. is left in its natural condition and used solely for grazing purposes, and this notwithstanding its proximity to shipping facilities, and while it contains no less than 18·31 per cent of the total occupied land in the State, it contributes only 4 per cent. to the total cultivated land. In the comparatively arid Wimmera, Mallee, and Northern districts, the percentages of cultivated to the total land occupied are 18·19, 11·48, and 20·56 acres respectively. Although the number of holders of one acre or more in these districts form but 30·42 per cent. of the total holders of the State, no less than 79·01 per cent. of the area cultivated belongs to these three districts. The Central, North-Central, and Western Districts contain 49·40 per cent. of the holders, but only 15·65 per cent. of the cultivated area.

Generally speaking, only about one-sixth of the land privately held in the State by 70,000 owners is under cultivation and artificial grasses; the remaining five-sixths being in its natural state. There is no doubt whatever that the future prosperity of the State will mainly depend upon the cultivation of the soil, and at the present time, the question of population is therefore one of the most important matters for consideration. From 1891 up to the end of 1903, no less than 143,000 persons, mostly adults, have left the State, and the exodus is still continuing, of the very class it is most desirable to retain in, or to attract to, the country. Upon increased population will depend the revenue and security of our national debt. The government of 15 millions of people would add very little to the present cost of administration, and railway facilities, though perhaps not much in excess of present demands so far as a permanent way is concerned, would require but little extra expense to meet the wants of the larger population. With such larger population, the railways would not only pay, even at rates much lower than the present, thus enabling farmers to obtain larger returns for their produce in all markets, but would be a considerable source of income, instead of a burden, as at present. The customs revenue would be enormously increased at comparatively little extra cost of collection. All this, however, presupposes that the population is distributed throughout the State as the great agricultural and mineral resources of Victoria warrant, and not as at present, with great urban aggregations.

The sturdy yeomanry, which has been the backbone of England in every time of stress in the centuries that have gone, is likely, in an agricultural State like Victoria, to be the staple portion of our population. It is, therefore, essential that the difficulty which at present exists in obtaining suitable land for cultivation must be removed, and the anxiety of our growing rural population in this direction, met by easy methods of establishing farms, and a policy of liberal advances from the Government for stock and implements, where such are justified. A glance at the statistics of the area of the land available, and a consideration of its nature and capacity, will show that the exodus is not entirely without justification.

Public lands in suitable localities, and of a character fit for agriculture, are not now available to any great extent, and the practice which has lately been established of large land owners cutting up portions of their estates into small areas suitable for farms, is not altogether satisfactory, since the price is often beyond, and the terms unsuitable to, those requiring the land. In such transactions in land, the commercial principles of supply and demand, however equitable they may be as far as ordinary commodities are concerned, wholly fail. To retain this desirable class of yeomanry in the State, it appears to be necessary not only to aid them in obtaining settlement on private lands, but also to place easily within their reach such areas of Crown lands as may be suitable for agriculture, and will support an average family. The value of such bonâ fide settlers to the community should form an element in the consideration of the purchase money or rental. It is probable that it would soon be more profitable to the State to grant its land to such individuals in fee simple than to obtain a larger return by the sale of the land to purchasers who might possibly acquire it merely for speculative purposes. The State has expended large sums in assisting immigration, and this money will be wasted if the immigrants be not retained.

It is unfortunate that much of the State in common with the rest of the Commonwealth, is subject to recurrence of drought. Although this is almost certainly due to some meteorological law, that law is not yet known or understood, and predictions have therefore, at present, little probability of being fulfilled. Dependence upon rainfall leaves too much to chance. The average rainfall is not to be depended on, if the mean of a period be derived from a series of extremely wet and extremely dry years, as is generally the case in Australia in districts more than fifty miles from the coast. As matters now stand, however, although land might be selected and profitably used perhaps for one or a few successive seasons,

the producer becomes, on account of the almost certain return of drought conditions, unable to depend on the rainfall for the necessary watering of his land. There is, no doubt, that the prosperity of this State is largely dependent on its agricultural returns, which last year were valued at £11,174,084, and this dependence will probably be more and more pronounced as time goes on. As most of the best land in the vicinity of markets or seaports is in many cases in private hands, but unused for other purposes than grazing, the Crown lands now available lie at distances remote from markets, where there are no good roads giving ready access to railways. If entirely dependent on the rainfall, the question of receiving a certain and adequate reward for industry would be problematical since no certain forecast of the season can be made. Irrigation must, therefore, be resorted to, to render land cultivation profitable in all years. Small areas of intense cultivation, where the soil is good, as is generally the case, would then be able to yield sufficient return to support a family. With a judicious policy of irrigation, and resuming large estates for closer settlement, working hand in hand, people will be settled on land, from which they may be certain of obtaining a good living; and the wealth and commerce of the State will also be increased by the population thus attracted from other places.

## WATERWORKS.

### DOMESTIC SUPPLY.

The Victorian Waterworks are of two classes, viz., those designed chiefly for domestic supply and those intended for irrigation purposes. By an Act of the year 1890, waterworks trusts were constituted for the purpose of controlling the stock and domestic supply within the area of their respective districts. Prior to the constitution of these trusts, extensive works for the storage and supply of water for domestic and mining purposes had been constructed by the Government and by local bodies in various parts of the State. The principal of these—the Yan Yean Waterworks—has been transferred to the Melbourne and Metropolitan Board of Works. Local governing bodies are also given power to make regulations in regard to the water supply of their districts. To these municipalities and trusts advances have been made from the Government loan account for the construction of their works—the principal to be gradually repaid into a redemption fund. The Coliban and Geelong schemes remain under Government control.

CAPACITY OF RESERVOIRS AND COST OF WATERWORKS  
TO 30TH JUNE, 1903.

Waterworks Under—	Capacity.	Cost.
	Gallons.	£
Local Bodies ... ..	1,633,590,000	690,604
Trusts—Urban ... ..	820,055,000	611,090
"    Rural ... ..	*	374,266
Goldfields Reservoirs ... ..	550,263,000	56,777
Government—Coliban ... ..	8,844,000,000	1,143,402
"    Geelong ... ..	570,780,000	436,689
Metropolitan Board of Works ... ..	6,508,000,000	3,741,668
Total ... ..	18,926,688,000	7,054,496

The number of these is 103. The amount of loans advanced to 30th June, 1903, was £1,675,960, and the principal, as reduced by payments to the redemption fund and amounts written off by the Government, now stands at £1,243,097. The chief reservoirs under the control of municipalities are those at Ballarat (now under the Ballarat Commission), having an aggregate capacity of nearly 824 million gallons, the Gong Gong Reservoir alone containing 427 million gallons; the Beechworth Reservoir, at Lake Kerferd, containing 191 million gallons; the Clunes, at Newlyn, 225 million gallons; and the Talbot, at Evansford, 200 million gallons. The following return contains particulars of these waterworks:—

Waterworks under control of municipalities and trusts.

PARTICULARS OF MUNICIPAL AND OTHER WATER TRUSTS.

Under what Control.	No. of Municipalities and Trusts.	Amounts of Loans Advanced to 30th June, 1903.	Principal as Reduced by Payments to Redemption to 30th June, 1903, and Amounts Written Off.
		£	£
Municipal Corporations ...	26	690,604	478,328
Trusts—Rural Districts...	17	374,266	272,310
"    Urban Districts...	60	611,090	492,459
Total ... ..	103	1,675,960	1,243,097

There are 23 goldfields reservoirs, having an aggregate capacity of 550 million gallons—the largest, at Back Creek, Creswick, containing 135 million gallons. These cost £56,777 to the 30th June, 1903, and were originally constructed by the Government chiefly for mining purposes, though some are now used solely for domestic purposes. Full particulars respecting each reservoir appear in the following table:—

Goldfields Reservoirs.

\* Rural works consist mainly of weirs, dams, tanks, and wells with windmills.

## RETURN OF RESERVOIRS CONSTRUCTED ON GOLD-FIELDS.

Showing the names of their Controlling Bodies, Names, Storage Capacity of Reservoirs, Purposes for which provided, and Cost to the 30th June, 1903.

Under what Control.	Name of Reservoir.	Capacity.	Purpose.	Cost.
		Gallons.		£
Shire Council of Ripon ...	Beaufort ...	85,881,000	Mining	1,991
Shire Council of Ballan ...	Blackwood ...	38,000,000	Mining	1,090
Borough of Buninyong ...	Buninyong ...	10,462,000	Mining	1,047
Borough of Dunolly ...	Dunolly (old) ...	17,200,000	Mining	1,912
Borough of Daylesford ...	Hepburn ...	31,284,000	Mining	2,527
Shire of Avoca ...	Homebush ...	5,000,000	Mining	328
Shire of Avoca ...	Lamplough ...	9,000,000	Mining	...
Borough of Inglewood ...	Inglewood (old) ...	5,670,000	Mining	1,112
Borough of Inglewood ...	Inglewood (new) ...	22,000,000	Domestic	4,951
Shire of Kilmore W. Works Trust	Kilmore ...	14,466,000	Domestic	2,986
Borough of Maryborough	Maryborough ...	21,000,000	Domestic	1,839
Borough of Stawell ...	No. 1 Quartz Reef ...	5,000,000	Mining	...
Shire of Stawell ...	No. 9, Four Posts ...	3,100,000	Mining	802
Shire of Tullaroop ...	Nuggety Gully ...	25,000,000	Domestic	2,384
Borough of Ararat ...	Oliver's Gully ...	24,000,000	Domestic	5,000
Shire of Avoca ...	Redbank ...	27,100,000	Mining	2,785
Borough of St. Arnaud ...	St. Arnaud ...	40,000,000	Domestic	15,343
Borough of Tarnagulla ...	Tarnagulla ...	8,000,000	Domestic	1,430
Shire of Korong ...	Wedderburn ...	12,000,000	Domestic	2,590
Government* ...	Back Creek ...	135,000,000	Mining	4,221
Government* ...	Gapstead ...	5,700,000	Mining	1,150
Government* ...	Mafeking ...	400,000	Domestic	289
Creswick Shire*	Broomfield & Allendale	5,000,000	Domestic	1,000
	Total ...	550,263,000	...	56,777

Coliban  
Water-  
works.

The Coliban Scheme provides water to the Bendigo and Castlemaine districts for domestic and mining purposes, as well as for irrigation to a limited extent. The main reservoirs of this scheme are on the Coliban River, one about half a mile below the junction of the Little Coliban, and the other at Malmsbury, with capacities respectively of 4,100 and 3,337 million gallons. The cost of the works to the 30th June, 1903, was £1,143,402; whilst the gross revenue during the year 1902-3 was £27,451; and the expense of maintenance and supervision, £11,419. The net revenue was thus £16,032, being equivalent to 1.4 per cent. on the capital cost. The deficiency in 1902-3, after allowing interest on the capital cost at the rate of 4 per cent., was £29,704.

Geelong  
Water-  
works.

The Geelong Waterworks provide water for domestic supply to Geelong and suburbs. The storage works in this scheme, the chief of which are the Upper and Lower Stony Creek reservoirs, have a capacity of 571 million gallons. The Upper Reservoir receives supplies through a channel from the

Eastern Moorabool River to supplement the run off from the local catchment. The whole scheme has cost up to the 30th June, 1903, £436,689. The gross revenue for 1902-3 was £13,152, and the cost of maintenance, £3,928. The net revenue was thus £9,224, or 2·1 per cent. on the capital cost. After allowing interest on capital at 4 per cent., the deficiency for 1902-3 was £8,243.

The following return shows full particulars of both schemes:—

WATERWORKS UNDER GOVERNMENT CONTROL AT 30TH JUNE, 1903.

Town or District Supplied.	Reservoir or Source of Supply.		Cost, Including Expenditure on Channels and Reticulation.
	Name.	Storage Capacity in Gallons.	
	COLIBAN.		£
Taradale ... ..	Upper Coliban ... ..	4,100,000,000	} 1,143,402
	Malmsbury ... ..	3,337,000,000	
Fryerstown ... ..	Taradale ... ..	65,000	
	Crocodile Gully ... ..	5,407,000	
Maldon ... ..	Green Gully ... ..	1,500,000	
	Pumping Station Basin ... ..	350,000	
Castlemaine, Chewton and Harcourt	Upper Reservoir ... ..	4,800,000	
	Lower Reservoir ... ..	3,428,000	
	Expedition Pass ... ..	120,000,000	
	Monument Hill... ..	1,000,000	
	Slate Quarry ... ..	30,000	
	Barker's Creek ... ..	629,135,000	
	Harcourt ... ..	20,000	
	Spring Gully ... ..	150,000,000	
	Upper Grassy Flat ... ..	58,860,000	
	Lower Grassy Flat ... ..	26,800,000	
Bendigo and Eaglehawk	Solomon's Gully ... ..	1,250,000	
	High Level Pipe Head Basin ... ..	2,000,000	
	Big Hill ... ..	68,000,000	
	Big Hill Tank ... ..	300,000	
	Crusoe ... ..	320,000,000	
	New Chum Tank ... ..	23,000	
Lockwood and Marong...	Sparrowhawk ... ..	1,500,000	
	Green Gully ... ..	2,500,000	
	Marong Pipe Head ... ..	330,000	
	Lightning Hill, Blue Jacket Gully ... ..	7,000,000	
Raywood and Sebastian	Raywood ... ..	2,500,000	
	Sebastian ... ..	239,000	
	GEE LONG.		
Geelong and Suburbs ... ..	Upper Stony Creek ... ..	417,000,000	} 436,689
	Lower Stony Creek ... ..	143,000,000	
	Anakie Pipe Head Basin ... ..	1,280,000	
	Lovely Tanks ... ..	6,000,000	
	Montpellier ... ..	3,000,000	
	Newtown Tank... ..	500,000	
Total ... ..		9,414,817,000	1,580,091

Melbourne  
Water-  
works.

The waterworks for the service of Melbourne and suburbs were originally constructed by the General Government. At the present time, these works consist of nine storage reservoirs, as under:—

Situation.	Storage Capacity in Gallons.	Situation.	Storage Capacity in Gallons.
Yan Yean ...	6,400,000,000	Caulfield ...	10,000,000
Toorourrong ...	60,000,000	Kew ...	3,000,000
Preston ...	16,000,000	Surrey Hills ...	9,000,000
Essendon, No. 1 ...	1,000,000	Morang (Pipe Head)	3,000,000
„ No. 2 ...	6,000,000		
		Total ...	6,508,000,000

The transfer of these works to the control of the Melbourne and Metropolitan Board was made in 1891. The Board consists of 40 members, one of whom is a Chairman elected every four years by the other members, the retiring Chairman being eligible for re-election. Seven of the members are elected by the Melbourne City Council, four by the South Melbourne, three by the Prahran, two each by the Fitzroy, Richmond, St. Kilda, and Collingwood, and one each by the other suburban municipal councils. In 1891, the rateable property within the area to be served was valued at about £6,600,000, of which about £1,000,000 was for vacant land. The collapse of the land boom was followed by a heavy shrinkage in the value of rateable property. A partial recovery in values has taken place, and the total assessments, inclusive of vacant land, now reach £4,498,000. The main source of supply is the Yan Yean Reservoir, in which are stored the waters of the eastern branch of the Plenty River and Jack's Creek, from the southern slopes of the Great Dividing Range, and those of Wallaby and Silver Creeks, brought over the range in an aqueduct from the northern slopes. These streams are collected in the Toorourrong Reservoir, and taken thence in a pitched channel to the Yan Yean Reservoir. A second supply is brought to Melbourne by means of the Maroondah Aqueduct, which conveys water from the Maroondah River, the Graceburn, and Donnelly's Creek, but without, at present, any provision for storing the surplus winter waters thereof, except the small service reservoirs in the suburbs at Preston, Essendon, Caulfield and Kew. By means of these systems, Melbourne is provided with an ample supply of pure water at a high pressure. The total catchment areas for both systems aggregate 62,000 acres, the whole of which is under the control of the Board, and free from settlement or grazing. The Yan Yean is an artificial lake situated 22 miles from the City, 602 feet above sea level. It covers an area of 1,300 acres, or rather more than two square miles, and receives water from a catchment area of 35,000 acres. The total length of aqueduct and mains laid up to 31st December, 1903, was 263 miles, and of reticulation pipes (under 12-inch diameter) 1,214 miles, including 10½ miles of channels constructed during 1903. The

storage capacity of the main reservoir is 6,400 million gallons, and of the eight subsidiary reservoirs 108 million gallons. The population supplied with water is about 500,000, and the average daily consumption 59 gallons per head in 1903.

The total expenditure to the 30th June, 1903, on the construction of the Melbourne Waterworks was £3,741,668. The gross revenue received since the opening of the works at the end of 1857 up to 30th June, 1903, amounted to £5,175,247; whilst the expenses of maintenance and management amounted to only £867,580, and interest to £2,248,468. During 1902-3 the revenue received amounted to £169,295, as against £171,889 in the previous year; and the expenditure on maintenance and management (exclusive of repayments), to £40,257, as against £40,156 in the previous year. The net revenue in 1902-3 was thus £129,038, being equivalent to 3·45 per cent. of the mean capital cost, as compared with £131,733, or 3·53 per cent. in 1901-2. The loans raised (£2,869,336) for the construction of the works now bear an average nominal rate of only 3·88 per cent. The aggregate net profit up to the end of 1902-3, after paying all interest and expenses, has amounted to £2,059,199.

Revenue  
and expen-  
diture of  
Melbourne  
Water-  
works.

The following is a statement of receipts and expenditure during the five years 1898-9 to 1902-3, exclusive of refunds, deposits, &c., included in the above figures:—

MELBOURNE AND METROPOLITAN BOARD OF WORKS REVENUE AND EXPENDITURE: RETURN FOR FIVE YEARS.

	1898-9.	1899-1900.	1900-1.	1901-2.	1902-3.
<i>Ordinary Receipts.</i>	£	£	£	£	£
Water Supply ... ..	153,606	163,366	164,271	170,488	178,290
Sewerage ... ..	82,494	105,937	128,522	144,566	184,160
Total ... ..	236,100	269,303	292,793	315,054	362,450
<i>Ordinary Expenditure.</i>					
Management ... ..	27,335	36,959	46,171	50,253	59,542
Maintenance—					
Water Supply ... ..	16,258	17,486	19,410	20,808	21,480
Sewerage ... ..	13,282	22,587	24,582	24,336	26,555
Interest on Loans ... ..	249,127	260,047	268,196	278,174	291,302
Total ... ..	306,002	337,079	358,359	373,571	398,879
<i>Loan Receipts</i> ... ..	488,016	247,496	646,328	404,459	704,783
<i>Loan Expenditure.</i>					
Water Supply ... ..	17,260	14,814	14,294	16,042	10,771
Sewerage ... ..	430,203	292,523	322,030	325,111	324,190
Redemption of Loans ... ..	...	...	276,820	3,004	3,580
Other ... ..	5,893	1,448	3,532	2,727	19,846
Total ... ..	453,356	308,785	616,676	346,884	358,387

Area under  
control and  
value of  
property.

The district over which the Board exercises control consists of 20 cities, towns, and boroughs, and 4 shires, embracing a total area of 84,347 acres, and containing an estimated population on the 31st December, 1902, of 485,807. The annual value of rateable property in the district in 1903 was £4,497,926 (of which about £352,188 represents vacant land formerly not taxed for water supply purposes), which at 1s. in the £1, the maximum rate the Board is empowered to levy in any one year, would yield a revenue of £224,896.

Liability  
on loans.

To carry out the work, the Board is authorised to borrow £7,000,000, exclusive of loans amounting to £2,389,934, which were originally contracted by the Government, but taken over by the Board. The liability on Government loans on 30th June, 1903, was £2,082,336, and for loans raised by the Board £7,230,580. In the latter amount, provision has been made for the redemption of £503,580 Board's loans, and £233,673 Government loans, thus reducing the liability on the Board's loans to £6,727,000, and on the Government loans to £1,848,663. The Board is still empowered to borrow £814,271 before the limit of its borrowing powers is reached.

DAILY AVERAGE CONSUMPTION OF WATER IN MELBOURNE  
AND SUBURBS, 1903.

Month.	Gallons.
January ... ..	30,858,000
February ... ..	38,218,000
March ... ..	30,840,000
April ... ..	27,867,000
May ... ..	26,433,000
June ... ..	25,580,000
July ... ..	24,811,000
August ... ..	26,227,000
September ... ..	26,937,000
October ... ..	28,199,000
November ... ..	32,463,000
December ... ..	32,735,000
Mean for the year ... ..	29,264,000

Sewerage  
system.

Connected with the water service of Melbourne and suburbs, the Board also controls the sewage system of the metropolis. The particulars of the system are as follow:—The whole of the sewage of the metropolis is being gradually collected by means of two principal main sewers leading to the pumping station at Spottiswoode. On the 31st December, 1903, the sewerage system, including mains,

branches, and reticulation, had been laid over the following districts, viz:—Port Melbourne, South Melbourne, Melbourne proper, Richmond, the greater part of Prahran and St Kilda, the populated part of Malvern, a large portion of Hawthorn, Collingwood, and Fitzroy, together with nearly the whole of Footscray, Flemington, Kensington, and North Melbourne. In all, 557 miles of reticulation and 62 miles of main and branch sewers have been completed, the system being so advanced that the sewage from 68,657 houses could be collected. Of these, 60,305 have been actually connected, embracing altogether 8 public conveniences, 25 public urinals, 66,439 water closets, 125 latrines, 4,949 urinals, 728 slop-hoppers, 42,989 baths, 12,412 lavatories, 32,344 sinks, 23,142 wash-troughs, 5,058 stables, 75 dairies, 747 polluted areas, and 1,149 cellars. There are also 789 miles of house-connections laid (784 miles of vitrified stoneware pipes, and 5 miles of cast iron pipes.) The whole of the sewage when collected at Spottiswoode is raised about 125 ft. to the head of the outfall sewer, through  $2\frac{3}{4}$  miles of wrought iron rising main, whence it gravitates to the farm in a partly open and partly closed channel 11 ft. in diameter, at a grade of 2 ft. to the mile. It is then spread over properly prepared areas of land by a series of main and lateral carriers. The effluent, after filtering through the prepared areas, is discharged into Port Phillip Bay in a perfectly clear and transparent condition. The prepared blocks are laid down with prairie grass and lucerne, on 2,250 acres of which, during the last year, 40,361 sheep have been fattened and sold, while on 450 acres, cattle and horses have been placed for agistment. The profit on sheep for the financial year ending 30th June, 1903, amounted to £11,780, and on cattle, for the six months ending 30th June, 1903, came to £690. Of the whole farm area of 8,847 acres, there remain 1,582 acres, comprising land in the course of preparation, plantations, roads, and drains; and 4,565 acres, not used in connection with sewage distribution, but let on lease to farmers at an average rental of 16s. 9½d. per acre. The actual cost on sewerage construction and house connections up to 30th June, 1903, was £4,174,305, divided as follows, viz.:—For farm purchase and preparation, £392,510; for main outfall sewer and rising mains, £404,170; for pumping station building and engines, £171,135; for main and branch sewers, £1,321,945; for reticulation sewers, £1,464,642; and for house connections, £419,903. Of this last named sum, £251,886 is to be repaid to the Board.

## IRRIGATION.

The problem of irrigation is one which, notwithstanding the outlay of large sums of money, yet remains to be solved. It may seem futile to attempt an objection to a policy which, almost self-evidently, cannot be a false one; yet there are many matters which must of necessity weigh upon our deliberations upon the subject. The cost of irrigation works in Victoria, up to 30th June, 1903, was, exclusive of interest, considerably over one million pounds; and for this enormous outlay, only about 150,000 acres were irrigated in 1903, although the area capable of being irrigated is over a million and a half acres. That the farming community should be so remiss in taking advantage of this means of improving their produce-yielding lands is a matter for wonderment, especially in a State like Victoria, where the distance from the centre of the world's markets renders necessary for successful competition therein the exercise of every method of increasing the return. At Mildura, where the settlers have had to encounter many and unforeseen difficulties, and where they were placed at enormous disadvantages in the way of markets, irrigation, improved methods of culture, and increased production have overcome many of these difficulties, and the settlement is now in a fair position to be successful and prosperous, the latest accounts being of a most satisfactory character. There is no reason why all the settlers in any district, which may have the advantages of irrigation, should not have as bright and prosperous a future before them as those at Mildura. Although the efficacy of irrigation works has more than once been questioned, and doubt has been expressed as to the wisdom of incurring expense in this direction, which by some is regarded somewhat in the light of a costly experiment—yet it must be remembered that a policy of national irrigation is now by no means in an experimental stage. Its value has been too often demonstrated in various countries of the world, possessing perhaps fewer facilities than Victoria. The Honorable Alfred Deakin, who made special visits to America and other places, twenty years ago, to inquire into the most modern developments of irrigation, furnishes a wealth of information as to the extent and utility of the system. His conclusions are embodied in reports on irrigation in Western America, in Egypt, and in Italy. There can, he says, be no doubt as to its success in these countries. In the older countries of the world, where irrigation has been carried on extensively, its value has ever been perceived. Egypt is a natural desert, but irrigation transformed it into the garden of

the ancient world. The decadence, as a producing country, into which it fell, was due to the neglect of its people to conserve the water in the proper seasons. The British Government has been so fully alive to the necessity of this artificial means of watering the country, that enormous sums have been expended in providing the means whereby irrigation may be practised even much more extensively than in days long gone by. In China, the valley of the Yang-tse-Kiang, where probably the population is denser than in any other part of the world, is reticulated by a network of canals, and indeed, it would be an impossibility for these millions of people to live were it not for the intense culture which irrigation induces. In Mexico, irrigation was practised before the advent of the Spaniards. In the United States, the territory about Salt Lake City has been converted from a wilderness into a highly and intensely cultivated country. The productiveness of California has also been enormously increased; whilst other territories of the Continent have practised irrigation extensively. Much has been done in France, Italy, and Spain, particularly in the two first named countries, in artificially watering fruit, cereals, and pasture lands.

In view of the importance which irrigation must of necessity have upon the future welfare and prosperity of the State, it may be well to see what has already been done in this direction, and also to examine the cost of the works carried out.

irrigation  
Victoria.

The more important irrigation works, or those connected with the principal rivers (which form the main supply in some cases for several local schemes), are undertaken by, and are under the entire control of, the State. These are known by the name of National Works. Three of the principal works have been completed—the Goulburn, the Loddon, and the Kow Swamp.

Originally there were 31 public water trusts established throughout the State. Of these, one (Dookie) is now used solely for the supply of water to the college, and is in no sense a public trust. Two (Emu Valley and Harcourt) have been transferred to, and amalgamated with, the Coliban Scheme for domestic service. Two (Carrum and Yatchaw) are drainage trusts. Five are practically abandoned. The remaining 21 are still carrying on irrigation works, but to a very limited extent. The following table shows their general financial condition, and the very meagre results that have followed the enormous outlay:—

Financial  
position of  
irrigation  
trusts.

## COST OF IRRIGATION WORKS AND AREA OF LAND IRRIGATED.

Trust.	Total Cost of Construction to 30/6/03.	Amount Written Off.		Interest Accumulated from 30/6/99 to 30/6/03.	Land Capable of being Irrigated.	
		Capital.	Interest to 30/6/99.		Not Irrigated.	Irrigated.
	£	£	£	£	Acres.	Acres.
<b>WORKING TRUSTS.</b>						
Bacchus Marsh ...	13,906	8,906	5,486	109	750	333
Bairnsdale ...	31,439	23,439	7,739	175	...	...
Benjeroop and Murrabit	12,936	7,200	4,379	373	5,000	4,804
Boort North ...	6,977	4,867	2,335	94	9,000	653
Boort East ...	21,566	14,866	7,902	312	20,000	1,770
Campaspe ...	62,000	52,685	18,131	419	46,000	1,067
Cohuna ...	151,035	93,968	46,770	3,631	23,435	28,000
Dry Lake ...	1,939	686	567	105	1,509	8
Gunbower West ...	5,808	...	...	366	7,673	3,339
Kerang East ...	14,024	6,984	4,910	643	10,254	7,698
Koondrook and Myall	13,580	12,080	5,100	99	6,000	3,397
Leaghur and Meering	5,043	2,543	1,864	111	4,000	1,553
Macorna North ...	19,256	8,082	4,337	757	27,000	9,773
Marquis Hill ...	14,476	9,076	5,466	557	8,000	2,491
Rodney ...	221,833	149,949	52,726	1,575	200,000	37,617
South Kerang ...	396	...	...	17	2,000	938
Swan Hill ...	24,799	19,799	10,126	180	11,424	7,021
Tragowel Plains ...	177,657	124,534	80,141	2,332	160,000	28,547
Twelve Mile ...	5,050	3,250	2,343	140	5,000	1,864
Wandella ...	31,303	20,929	8,280	821	16,000	6,553
Western Wimmera ...	213,943	132,835	51,218	4,386	899,000	2,075
<b>Total Working Trusts</b>	<b>1,048,966</b>	<b>696,678</b>	<b>320,320</b>	<b>17,202</b>	<b>1,462,045</b>	<b>149,506</b>
<b>TRANSFERRED TRUSTS.</b>						
Dookie ...	630	630	171	...	...	...
Emu Valley ...	8,166	8,166	2,907	...	...	...
Harcourt ...	1,142	1,112	335	...	...	...
<b>Total Transferred Trusts</b>	<b>9,938</b>	<b>9,903</b>	<b>3,413</b>	<b>...</b>	<b>...</b>	<b>...</b>
<b>DRAINAGE TRUSTS.</b>						
Carrum ...	25,732	7,732	7,146	1,450	...	...
Yatchaw ...	6,261	1,661	514	101	...	...
<b>Total Drainage Trusts</b>	<b>31,993</b>	<b>9,393</b>	<b>7,660</b>	<b>1,551</b>	<b>...</b>	<b>...</b>
<b>ABANDONED TRUSTS.</b>						
Lerderderg ...	447	447	169	...	...	...
Millewa ...	973	...	...	...	...	...
Pine Hills ...	2,050	2,050	1,065	...	...	...
Torrumbarry North ...	12,300	6,300	4,612	1,080	...	...
Werribee ...	6,000	...	...	3,632	...	...
<b>Total Abandoned Trusts</b>	<b>21,770</b>	<b>8,797</b>	<b>5,846</b>	<b>4,712</b>	<b>...</b>	<b>...</b>
<b>Total all Trusts</b>	<b>1,112,667*</b>	<b>724,776</b>	<b>337,239</b>	<b>23,465</b>	<b>1,462,045</b>	<b>149,506</b>

\* Exclusive of £58,700 advanced to the Mildura Irrigation Trust.

From these figures it would appear that £1,112,667 has been expended in constructing irrigation works. Of this, £9,938 was advanced to trusts since transferred, £31,993 to drainage trusts, and £21,770 to trusts since abandoned, leaving the total amount invested in working trusts, £1,048,966. There has been written off the capital a total of £724,776—£9,908 from transferred trusts, £9,393 from drainage trusts, and £8,797 from abandoned trusts, and £696,678 from present working trusts. The total amount of interest written off up to 30th June, 1899, was £337,239—£3,413 being from transferred trusts, £7,660 from drainage, £5,846 from abandoned, and £320,320 from trusts now in operation. The interest accumulated to 30th June, 1903, was £23,465—£1,551 belonging to drainage, £4,712 to abandoned, and £17,202 to operating trusts. It seems desirable that the whole of the debt on the abandoned trusts should now be written off. It will be seen that out of a total cost of £1,449,906 (capital and interest) we have arrived at the result of having provided water to irrigate land which is capable of being irrigated to the extent of 1,611,551 acres, and out of this, all we have irrigated is 149,506 or 9 per cent., equivalent to a capital cost of nearly £10 per acre. It becomes a question of very considerable importance, in view of the conditions upon which these trusts were started, their present position, and the fact that people appear to make little or no use of the water they have got, whether work in connection with the trusts should be carried on unless under very different conditions.

In 1903, only 52,907 acres were irrigated for grain, 35,320 acres for fodder, 7,123 acres for vines and fruit, and 54,156 acres for pastures.

Included in the previous table are the following water-works controlled by trusts, used partly for irrigation and partly for domestic purposes:—

Trusts supplying water partly domestic, partly irrigation.

RETURN OF THE WATERWORKS IN CERTAIN URBAN DIVISIONS.

Showing the Names of Trusts and Towns Supplied, how Supplied, and Cost, to 30th June, 1903.

Trust by whom Works were carried out.	Name of Town Supplied.	How Supplied.	Cost.
Bacchus Marsh ...	Bacchus Marsh	Gravitation and Pumping	£ 6,000
Bairnsdale ...	Bairnsdale ...	Pumping ...	8,000
Western Wimmera...	Dimboola ...	Pumping ...	3,500
Western Wimmera...	Natimuk ...	Gravitation ...	4,300
		Total ...	21,800

Drainage trusts.

One of the drainage trusts is situated at Carrum, connected with the Dandenong Creek, having 10 miles of main channel and 35 miles of branches. The other work is at Yatchaw, connected with McIntyre's Creek, having 5 miles 72 chains of main drains, and 4 miles 72 chains of branches.

TRANSFERRED AND ABANDONED TRUSTS.

Name of Trust.	Source of Supply.	Cost to 30th June, 1903.	Remarks.
Dookie ... ..	Tank ... ..	£ 630	Used in connection with the Agricultural College.
Emu Valley ... ..	Coliban National Works	8,166	
Harcourt ... ..	Coliban National Works	1,142	} Now form part of Coliban Scheme.
Lerderberg ... ..	Lerderberg River ...	447	
Millewa ... ..	Murray, Goulburn, and Campaspe Rivers	973	} These Trusts are practically defunct.
Pine Hills ... ..	Kow Swamp National Works	2,050	
Torrumbarry North	Murray River ... ..	12,300	
Werribee ... ..	Werribee River ... ..	6,000	

At Lerderberg, Dookie, and Pine Hills the total cost of the works has been written off by Act No. 1625, as well as £169 at Lerderberg, £171 at Dookie, and £1,065 at Pine Hills for interest which had accumulated on 30th June, 1899. £6,300 at Torrumbarry North has been written off by the same authority, together with £4,612 accumulated interest to 30th June, 1899; but £1,080 interest has accumulated from that date to 30th June, 1903. The works at Dookie may be regarded as still valuable, as they are the means of supplying the college with water. The Emu Valley and Harcourt works have been transferred, but the money spent on the last five of the above trusts, amounting to £21,770, seems to have been entirely wasted.

Full particulars respecting the various irrigation trusts now in operation are furnished in the following statements:—

Bacchus Marsh Trust.

This supply is procured by means of a pumping plant, and supplies water required for domestic purposes as well as for irrigation. The total cost of the works (defrayed from loans) up to 30th June, 1903, was £13,906, of which £8,906 has been written off under Act 1625, £135 has been repaid, and £4,865 is still outstanding. During the year 1903, £668 has been received from water rates, and the proceeds of the sale of water were only £62. In connection with this scheme, there are 1,083 acres within the irrigable area, but only 333 were irrigated during the year.

The source of this supply is the Mitchell River, and there is connected with it a pumping plant and weir. £31,439 was spent up to the 30th June, 1903, £23,439 was written off under Act No. 1625, and £140 was repaid. The debt is now £7,860. The scheme is combined with one to supply the town with water for domestic purposes, but the irrigation part of it is not yet complete.

Bairnsdale  
Trust.

The supply is from levy works on the River Murray and Reedy Creek. £12,936 was the total expenditure up to 30th June, 1903. £7,200 was written off under Act No. 1625, and £64 has been repaid, the debt, on 30th June, 1903, being £5,672. The amount of interest due on 30th June, 1899—£4,379—was also written off. The accumulated interest from that time to 30th June, 1903, is due, and amounts to £373. Rate receipts (including arrears) during 1903 were £266, and the sale of water realized £116. Out of nearly 10,000 acres irrigable, less than one-half is being irrigated.

Benjeroop  
and Murra-  
bit Trust.

The origin of the supply is the Loddon River National Works. Its cost to 30th June, 1903, was £6,977. £4,867 was written off, and £31 paid to redemption fund, leaving a total indebtedness on the date named of £2,079, the total interest outstanding on the same date being £94. The rates collected for the twelve months ended 31st December, 1903 (including arrears) were £144, and the proceeds from sale of water, also including arrears, were £58 for the same period. The area irrigated is 653 acres; that irrigable is 10,000 acres.

Boort North  
Trust.

The source is the Loddon River National Works. The expenditure up to 30th June was £21,566. £14,866 was written off the capital account, £142 was paid to the redemption fund, leaving a total debt of £6,558 on the date named, when the amount of interest due was £312. During the year 1903, the receipts were—rates (including arrears) £118, and sale of water £115. The irrigable area is nearly 22,000 acres; that irrigated, 1,770 acres.

Boort East  
Trust.

The origin of the supply is the Campaspe River. The cost up to 30th June, 1903, was £62,000. £52,685 was written off, leaving a debt of £9,315; and interest due, £419. The area irrigated is 1,067 acres; that irrigable, 47,000 acres. The amount received from rates during 1902-3 was £706; and for the sale of water, £46.

Campaspe  
Trust.

A pumping plant on the Murray River is the means of supply. The total cost was £151,035 to 30th June, 1903. £93,968 was written off, £512 repaid, and £56,555 is now due. The rates (including a special rate) were £3,123; for sale of water (irrigation receipts) £2,362 was received during 1903. The area irrigable is 51,435 acres, of which 28,000 are irrigated.

Cohuna  
Trust.

Dry Lake  
Trust.

The supply comes, by means of a pumping plant, from the Loddon River National Works. £1,939 was the total cost of 30th June, 1903. £686 was written off under Act No. 1625, £278 was repaid, and £975 is due. In this trust no rates are fixed, nor is a collection made for sale of water, but the sum of £180 has been levied from the respective landowners within the area. Out of over 1,500 acres capable of irrigation, only 8 are irrigated.

Gunbower  
West Trust.

This supply has its origin in the Kow Swamp National Works. Up to 30th June, 1903, the total cost was £5,808, which represents the total debt on that date, when there was £290 due to revenue, and £76 towards redemption. The receipts from rates for the year 1903 were £267, and for water supplied for irrigation £501. The area irrigated is 3,339 acres, out of a total of 11,000 acres irrigable.

Kerang East  
Trust.

This supply has its origin in the Kow Swamp National Works. The cost up to 30th June, 1903, was £14,024. £6,984 was written off, and £17 repaid towards redemption. The debt on the date named was £7,023, and the amount of outstanding interest £643. During 1903, out of a total of £766 rates due, only £283 has been received. For the sale of water the receipts were £610. The area irrigated is 7,700 acres; that irrigable, 18,000 acres.

Koondrook  
and Myall  
Trust.

This supply has its origin in the River Murray, and is connected by means of a pumping plant. £13,581 was the total cost to 30th June, 1903, of which £12,080 was written off, £19 repaid, and £1,482 is still due. The general rates yielded £397 during 1903, and the sale of water £425. 9,397 acres are irrigable, and 3,397 acres irrigated.

Leaghur and  
Meering  
Trust.

The source is the Loddon River National Works. £5,043 was the cost to 30th June, 1903. £2,543 was written off under Act No. 1625; and £40 has been repaid towards redemption, leaving £2,460 now due. £71 was received from the rates during 1903, and £54 from sale of water. The irrigable area is 5,553 acres, 1553 acres being irrigated.

Macorna  
North  
Trust.

This water is supplied by means of the Kow Swamp National Works. The cost was £18,558 up to 30th June, 1903. £8,082 was written off under Act No. 1625, and there is now £10,476 due. In 1903 the rates totalled £450, and sale of water £995. 36,778 acres are irrigable, and 9,778 acres irrigated.

Marquis  
Hill Trust.

The source is the Kow Swamp National Works. On 30th June, 1903, £14,476 had been spent. £9,076 was written off, the debt was £5,400, and £558 the amount of interest due. 2,491 acres are irrigated, but 8,000 acres more are capable of

irrigation. The rates received amounted to £159, and for sale of water £377 was realised.

The source of this supply is the Goulburn National Works. The cost up to 30th June, 1903, was £221,833, of which £149,949 has been written off under Acts 1625 and 1651. £1,785 has been repaid. The total debt due on 30th June, 1903, was £70,099. The rates collected for 1901 (arrears) were £28, for 1902 (arrears) they were £2,118, and for 1903 £2,714; a total of £4,860. From the sale of water for irrigation purposes the total income was £4,712. The total area that can be irrigated is 237,617 acres, of which only 37,617 acres are irrigated.

Rodney  
Trust.

The source is the Kow Swamp National Works. The cost to 30th June, 1903, was £396, of which only £4 has been repaid, and there is thus a sum of £392 outstanding. In 1903 £15 was received from rates, and £237 from sale of water. The irrigable area is nearly 3,000 acres, but only 938 acres are irrigated.

South  
Kerang  
Trust.

By means of two pumping plants, the water is procured from the River Murray. The cost to 30th June, 1903, was £24,799. In discharge of this amount, £19,799 was written off under Act No. 1625, and £19 was repaid, the debt being £4,981 on the date named. The revenue in 1903 from water rates and the sale of water was £1,353. Of the total irrigable area of 18,445 acres, there are irrigated 7,021 acres.

Swan Hill  
Trust.

The source is the Loddon River National Works. The expenditure up to 30th June, 1903, was £177,657, of which £17,846 was transferred, the balance being £159,811. £124,534 was written off, £444 was paid to redemption, leaving a debt of £34,833 on that date. The interest due was £2,332. 28,550 acres are irrigated out of 188,000 acres irrigable. The amount of rates received during the year, including arrears, was £1,193, and £988 was realised from the sale of water.

Tragowel  
Plains  
Trust.

This supply is from the Loddon River National Works. The cost to 30th June, 1903, was £5,050. Under Act No. 1625 £3,250 was written off, and £14 repaid, leaving due £1,786. For the year 1903, revenue from rates gave £60, and sale of water £50. 6,864 acres are irrigable, of which 1,864 acres are irrigated.

Twelve Mile  
Trust.

The Loddon River National Works is the source of the Wandella supply. Up to 30th June, 1903, the works had cost £30,754, and £20,929 had been written off under Acts 1625 and 1651. Only £3 10s. had been paid towards redemption; the total debt on the date named being £9,821. In 1903, the receipts from rates, including arrears, were £175, and from the sale of water £786. The irrigable area is 22,553 acres; but only 6,553 acres are irrigated.

Wandella  
Trust.

Western  
Wimmera  
Trust.

The source of supply is the Wartook Storage, with which are connected 34 dams and 2 pumping plants. Water for domestic purposes, as well as for irrigation, is supplied. Up to 30th June, 1903, £213,943 had been expended, of which £132,835 has been written off under Act 1625, £1,814 repaid, leaving due £79,294. Rates yielded £6,574 in 1903, and sale of water £1,753. Of 901,000 acres irrigable, only 2075 acres were irrigated.

Revenue, ex-  
penditure,  
and debt of  
water sup-  
ply trusts.

The following return furnishes full particulars as to the revenue and expenditure of all these trusts:—

REVENUE, EXPENDITURE, AND INDEBTEDNESS OF IRRIGATION AND WATER SUPPLY TRUSTS ON 31ST DECEMBER, 1903.

Irrigation and Water Supply Trust.	Revenue from—				Expenditure on—					Amount of Government Loans Outstanding.
	Water Rates.	Sale of Water.	Other Sources.	Total.	Maintenance and Management.	Salaries and Wages.	Interest and Redemption.	Other Services.	Total.	
Bacchus Marsh ..	£ 668	£ 62	—	£ 730	£ 109	£ 299	£ 220	£ 59	£ 687	£ 4,865
Bairnsdale*	—	—	—	—	—	—	—	—	—	7,860
Benjeroop and Murrabit	266	116	—	382	74	126	—	7	207	5,672
Boort North ..	144	58	11	213	170	43	—	3	216	2,079
Boort East ..	118	115	—	233	50	85	211	12	358	6,558
Campaspe ..	706	46	—	752	274	68	629	8	979	9,315
Cohuna ..	3,123	2,362	12	5,497	2,462	826	500	35	3,833	56,555
Dry Lake ..	180	—	—	180	158	1	27	2	188	967
Gunbower West ..	267	501	—	768	743	74	190	8	925	5,809
Kerang East ..	283	610	—	893	1,009	113	22	42	1,186	7,023
Koondrook and Myall	297	425	6	828	258	399	77	5	739	1,482
Leaghur and Meering ..	71	54	—	125	—	71	56	—	127	2,460
Macorna North ..	450	995	10	1,455	1,514	194	44	33	1,785	10,476
Marquis Hill ..	159	377	298	834	708	120	18	7	853	5,400
Rodney ..	4,860	4,712	59	9,631	3,999	640	3,184	95	7,918	70,099
South Kerang ..	15	237	—	252	188	36	18	—	242	392
Swan Hill ..	1,353	—	—	1,353	1,004	517	112	27	1,660	4,981
Tragowel Plains ..	1,193	988	47	2,228	349	795	1,050	90	2,284	34,833
Twelve Mile ..	60	50	—	110	16	50	40	2	108	1,786
Wandella ..	175	786	—	961	726	187	350	10	1,273	9,821
Western Wimmera ..	6,574	1,753	57	8,384	4,902	620	2,607	—	8,129	79,294
Total ..	21,062	14,247	500	35,809	18,713	5,264	9,265	445	33,687	327,734

MILDURA IRRIGATION SCHEME.

HISTORY OF THE SETTLEMENT.

Inception of  
the scheme.

A Royal Commission was appointed in December, 1884, to consider the best means of conserving water in Victoria for irrigation, and for other purposes. The Hon. Alfred Deakin, then Minister of Public Works and Water Supply, was appointed President; and, in due course, he visited California and elsewhere, concerning which glowing accounts had been received as to the success achieved by intense culture on small holdings, with the aid of irrigation. Among the settlements

\* Domestic and Irrigation supply. Irrigation works not yet complete.

inspected by Mr. Deakin were those of Riverside and Ontario, the latter of which had been often cited as an example for Victoria to imitate in the establishment of irrigation colonies under private enterprise. He there met one of the Messrs. Chaffey, who had been identified with that settlement from its commencement. In September, 1885, an advance agent visited Victoria on behalf of the Messrs. Chaffey, in regard to obtaining a concession of land suitable for irrigation purposes and the establishment of irrigation colonies. In February, 1886, Mr. Geo. Chaffey arrived in Victoria, and after some months of inspection, Mildura was chosen as the site for the proposed irrigation settlement. The first proposal by Messrs. Chaffey's representative was for a grant of 500,000 acres free, and a subsidy of £200,000. This was not entertained; and an agreement was then submitted by which the promoters were to acquire 250,000 acres at Mildura under certain conditions. The agreement was placed before Parliament, and, after a long debate, in the course of which the scheme was adversely criticised by many members, it was decided to throw the concession open to competition by public tender. Tenders were invited, and as there was no other tender, the proposal of Messrs. Chaffey was accepted.

Under the terms of the indenture of 31st May, 1887, made between the Government and George Chaffey and William Benjamin Chaffey, of Toronto, in Canada, but then resident in Melbourne, it was agreed that 250,000 acres be set apart for the settlement at Mildura. Messrs. Chaffey were licensed to enter upon and occupy two blocks of about 25,000 acres each, contiguous to the River Murray, which blocks had about half of the total frontage to the river, to hold the same for 20 years, subject to the usual conditions for resumption, on payment of compensation, of any portion required for public works, and subject to usual conditions as to the entry for mining. The licensees were to be entitled to a grant in fee simple of one acre for every £5 of expenditure on the 50,000 acres in irrigation works and substantial improvements; but an expenditure of £2 per acre was to be deemed sufficient in respect of any of these lands subject to flooding. After three years, the licensees would be entitled to occupy for 20 years the remaining block of 200,000 acres, or part thereof; and grants in fee simple were to issue in respect of any of these lands, subject to an expenditure on improvements thereon to the extent of £1 per acre, and of payment to the Treasury of a further £1 per acre. Every grant in fee simple should contain a condition that the licensees should not sell or dispose of any part of the 250,000 acres, except in parcels of not more than 80 acres for fruit growing, or 160 acres for growing other products, and not more than one block to one person; and that every parcel should have a sufficient water-right to run with the title as a

Chaffey  
Brothers  
concession

perpetual easement; and it was provided that the licensees should not retain themselves more than 5,000 acres of cultivated and irrigated land out of that granted to them in fee simple. A licence to divert water from the Murray sufficient for the purposes of the settlement was granted for 25 years, renewable for successive periods of 25 years.

In consideration of the concession, and the foregoing benefits, the licensees covenanted to expend £300,000 in irrigation works, in accordance with general plans approved by the Government, within twenty years, as follows:—In the first five years, £35,000 (£10,000 in the first year); in the second five years, £140,000; in the third five years, £75,000; in the fourth five years, £50,000. Covenantants were also made by the licensees, *inter alia*, to have all engines and machinery made in Victoria, except such as may be necessary for patterns; to destroy all vermin; to provide bridges over channels; to make and maintain roads; to establish within five years works for fruit-drying, preserving, and canning, and to carry on the business during the licence; to set apart one-fifteenth of all irrigated land, in detached blocks, for an agricultural college, and to build such college as soon as 100 families should be resident. It was also provided that in the event of any breach of covenants, the Government may call on the licensees to show cause why it should be permitted, or require the breach rectified. If no sufficient cause were shown, or if the breach were not remedied, the Government might remedy same at the cost of the parties; or if the breach were deemed sufficiently serious, might determine the licence and resume the licensed lands, except such as were sold for valuable consideration, or conveyed in trust for the agricultural college.

Formation  
of com-  
pany.

On 30th September, 1887, the Chaffey Bros. Limited Company was formed, to which was assigned all the Messrs. Chaffey's interests and rights in the agreement with the Government. In December of the same year, the Mildura Irrigation Company was formed, in order to provide some expedient for securing the water right as a perpetual easement to purchasers of land, the law recognising no property in running water; this easement to be thereafter inseparable from each block sold.

Advertising  
of Scheme.

Agents were then appointed by the promoters in almost every city or town of note in the United Kingdom, and the lavish system of advertising induced many settlers to emigrate and invest their capital in Mildura. The class of settlers who were attracted to the settlement was of the very best. A large number were British, and there were also a number attracted from America, Germany, and the other Australian States; whilst there were also a considerable number of Victorians, most of whom were the sons of well-to-do citizens.

Brief official and semi-official visits were from time to time made by successive Ministers of Water Supply and officers of the department. None of these visits involved detailed examinations of the machinery employed for lifting the water from the river, or of the channels constructed for its conveyance and distribution to the lands of the settlers; but were directed rather to learning the extent and character of the settlement, the products grown, the facilities for disposing of them, and the prospects of the settlement proving permanent. About the middle of 1892, complaints began to be made by the settlers of the non-performance of the covenants of the agreement on the part of the licensees, and continued to be very persistently urged by a section of the resident land-owners, until the relations became so strained, that the most serious consequences seemed possible. The principal complaints made were:—That the pumping plant was unequal to the duty of raising water for the irrigation of 40,000 acres; that the machinery was badly designed and imperfectly constructed, and the boilers of an obsolete type; that the plant and machinery were not manufactured in the Colony, as provided by the indenture, and that payment of duty on it had been evaded; that the plant had not been legally conveyed to the Mildura Company nor to any other body representative of the settlers, and that it was liable to seizure by the creditors of Chaffey Bros. Limited; that the channels were so badly constructed that a large proportion of water was lost by leakage, thus rendering barren large areas purchased by the settlers; that the channels had been carried through considerable areas of land which contribute nothing to the rates, thus increasing the rates levied on the settlers; that the Billabong dam had been imperfectly constructed; that the agricultural college had not been established, although more than 100 families had for some time been resident; that the lands set apart for the college were inferior; that the licensees had not established fruit canneries and preserving works; that purchasers were led to believe the water rate would be no more than 6s. per acre per annum, whereas it was then 20s. per acre per annum. There were also several other matters of complaint.

Complaints  
by the  
settlers.

In compliance with a request made in March, 1893, by the Minister, Mr. Stuart Murray, the Chief Engineer of Water Supply, visited Mildura, to enquire into the complaints of the settlers, and to enquire into the state of affairs generally. In his report, dated 1st August of the same year, it is stated that the total expenditure to date exceeded the amount the licensees were required to incur under the indenture; that the licensees had obtained grants in the fee simple to the extent of 50,195 acres, of which about 10,000 acres had then been planted; that of this 50,195 acres, 15,831 acres had been sold,

Report by  
the Chief  
Engineer  
of Water  
Supply.

1,338 acres were reserved for college, 185 leased, 450 provisionally sold, 350 acres reserved by licensees, and the balance was still held by the licensees; that the existing plant when complete would be equal to a much higher duty than the supply for irrigation of 26,020 acres commanded, or even of 40,000 acres previously mentioned, and that the full normal duty of the plant was sufficient for 76,800 acres; that the channels were not maintained in good order, and the banks were overgrown with weeds extending below the waterline, so as to interfere with the flow of water and reducing the volume of discharge; that the loss of water by percolation was undoubtedly great; that the soakage renders the soil in places affected so saturated that plants cannot thrive or live; that the rates levied for water were much higher than was stated in the earlier advertisements, and were higher than would, under favourable conditions of working, be warrantable; that, in regard to the allegation that the plant has not been legally conveyed to the Mildura Company for the settlers, the only conclusion that can be arrived at is that it was still in the possession and under the control of the firm; that the lands set apart as an endowment for the college were of inferior quality; that the Billabong dam had been roughly built, but could be made a thoroughly sound work for a trifling sum, probably under £150.

Establishment of irrigation trust.

In December, 1895, an Act was passed establishing the First Mildura Irrigation Trust, consisting of six Commissioners and two Auditors, to be elected by the occupiers and owners of rateable land. The land upon which the irrigation works are erected, and all approaches and works, are vested in the trust. The promoters were to put all works in a state of efficiency by 1st January, 1899, that is, to be capable of raising, conveying, and distributing the maximum quantity which they would, under the concession, be entitled to take and divert from the acreage now administered by the trust, and that not more than one-fifth of the water shall be lost in conveyance and distribution. The word "promoters" includes the successors or persons in ownership or control of the rights, privileges, and licences contained in the original indenture, either by purchase or by operation of law, but does not include any mortgagee or purchaser from a mortgagee. If the Chief Engineer reports that reasonable progress is not being made, the trust may have same done, and recover the costs and expenses from the promoters. No rates shall be struck by the trust to exceed £1 per acre, except by resolution of two-thirds of the ratepayers, voting at a general meeting. All land in the irrigation area shall carry with it a sufficient water right as a perpetual easement, and the trust is entitled to take and divert from the Murray the quantity of water the promoters

could take for the area. Any other district, forming part of the irrigation area, may be constituted under a trust. The rights of the promoters are preserved, subject to the provisions of the Act.

In May, 1896, a Royal Commission was appointed, under the presidency of the Hon. A. L. Tucker, M.L.A., to inquire into and report upon the condition and prospects of the Mildura settlement. Without any delay, the commission proceeded to Mildura, examined the machinery and apparatus, and examined 54 witnesses. The commission issued its report in September of the same year, from which it appears that foremost amongst the causes of failure were the grave errors made in laying out the settlement, and in making provision for the supply of water for irrigation. The second was the non-fulfilment of the obligations undertaken in the agreement, whereby the reasonable expectations of the settlers were disappointed; and thirdly the hopeless financial management of the company. The commission was "forced to the conclusion, after the fullest enquiry, that the Messrs. Chaffey had but little means, and indeed, the settlement may be said to have been initiated by persons who obtained the enormous concession of dealing with 500,000 acres of public territory in both colonies with capital practically amounting to nothing. We are confirmed in that opinion by the fact that the company borrowed £10,000 during the first year, that being the amount required to be expended under the indenture."

The Royal  
Commission  
in 1896.

The inefficient condition of the main channels was the principal drawback, and the evidence went to show that, on the average, fully 50 per cent. of the water pumped into the channels was lost through soakage. Other difficulties under which the settlers laboured, were the inferiority of the quality of the fruit trees supplied in the first instance, and defective means of communication with the markets. The method of conveying produce to the market was by steamer up or down the Murray to the nearest railway station, the river being closed to navigation during a portion of the summer months.

The report goes on to state that the public failed to subscribe more than the very limited sum of £44,000, and the financial struggle to carry on the company must have been very great. Various methods were resorted to for the purpose of raising money, resulting always in the payment of large interest for accommodation, and finally in the financial wreck of the whole concern. The course adopted from the start was to rely mainly upon the money received from the sale of land to the settlers. The rapid success during the first few years, so far as the sale of land was concerned, led the company to

quickly expend what resources it had, and to spread out the settlement in a very disadvantageous way, in the hope of rapidly disposing of the intervening country, which hope was not realized. One cause, which assisted in curtailing sales, was the agitation by the settlers to be supplied with water free of charge, as had been the rule up to 1890, and which they claimed to be entitled to under the terms of the indenture. The fall in prices of the produce was another serious factor.

Advances were obtained by the company from various financial institutions, which required heavy rates of interest and a wide margin of security, amounting to three or four times the face value, the security being mortgages by settlers for future instalments of purchase money. In addition to capital raised by this means, £200,000 was borrowed in London by the issue of debentures. By a decision of the Supreme Court, the debenture-holders have been adjudged as now possessing all the unpledged assets of the company, and also the original concession; and are, consequently, now the representatives of the company, and have become the owners of all that belonged to the company at the time of its liquidation.

The commission recommended that a loan be granted to the Mildura Irrigation Trust, not exceeding £30,000, with interest at 4 per cent. and a sinking fund of  $\frac{1}{2}$  per cent.; that the concession in the original indenture be cancelled to the extent of freeing 188,000 acres not disposed of, and reverting same to the Crown; that £5,000 of the loan be for the purpose of improving the pumping plant; and that a further advance of £400 per month be made to subsidize the work of distributing water. It was also urged that the Department of Agriculture should supply the want of an agricultural college by forming a small experimental station, and by appointing an expert to visit the settlement at certain periods, to afford instruction and advice as to the most advanced methods of dealing with fruit and its preservation and packing in the most attractive form for market.

To meet pressing necessities, an overdraft was guaranteed by the Treasurer, and, as recommended by the commission, a loan was authorised to the extent of £34,700 to clear off the overdraft and to improve, line, and consolidate the channels; and to add to the appliances for raising water for irrigation to improve any other portion of the works; and for doing any work which the Chief Engineer should declare to be necessary. In September, 1897, further assistance was granted by the Government, by increasing the loan by £10,000, and by providing for further annual loans not exceeding £2,000 in any one year, to make up for any deficit of expenditure over revenue

of the trust. These future advances were conditional upon the debenture-holders and holders of mortgages contributing specified sums.

In October, 1900, an Act was passed authorizing the construction of a railway, commencing at the terminus of the Birchip and Cronomby Railway, at or near Woomelang, and proceeding thence for about 124 miles north-westerly, and terminating at or near Yelta. The construction of the line was conditional on the Shire Council of Mildura entering into a bond for 10 years from the opening for traffic to pay any deficiency on the cost of working the line, and  $3\frac{1}{2}$  per cent. interest on cost of construction and rolling-stock over and above the receipts. Such contribution is limited to a sum produced by a 1s. rate on all rateable property in the shire. It is provided that the expenditure on the construction of the line should not exceed £2,000 per mile. The line has been constructed, was opened for traffic towards the close of 1903, and the settlement is now on a fair way to prosperity.

Railway to Mildura.

An Act was passed in April, 1903, extending the rating powers of the Irrigation Trust, raising the maximum rate leviable to £2 per acre, and providing for a differential maximum rate on the several classes of lands in the settlement, and for the rate and scale of charges when water is supplied by measure.

Differential rating.

In a report on the position and prospects of irrigation in Victoria, published in the issue of this work for 1892, Vol. II., Appendix D., Mr. Stuart Murray, Chief Engineer of Water Supply states:—"The crucial test of competition in the open market, upon which hangs the ultimate success or failure of the undertaking, is yet to come. . . . The Mildura fruit-growers must look further than the Victorian, or even the Australian, market for the success of their industry." The same doubt appears to have been entertained by the Royal Commission in 1896, which, in its report, stated that the expenditure of the loan recommended would place Mildura upon such a footing as to be able to prove conclusively whether the permanent and profitable continuance of the settlement may be realised; that after the local demand of Victoria was fully supplied, the remaining produce of Mildura must be exported and meet competition in the world's market; that on the prospective success of so doing, there were many and varied opinions; and that the high cost of the land and the expense of bringing it under culture is a most important factor in this connection. The commission was of opinion that, as the settlers had been attracted under the terms of the agreement between the Government and Messrs. Chaffey, which terms were not complied with by the latter, it behoved the Government to come to the aid of the settlers.

Future prospects of Mildura.

The Federation of the Australian Colonies has, however, resulted in opening up a wider protected market for home consumption, and the customs returns show that Victoria now exports to the other States, New Zealand, South Africa, and the United Kingdom a considerable quantity of canned fruits, raisins, and dried fruits, most of which are the produce of Mildura. The following were the quantity and value of these exports during 1902:—

EXPORTS DURING 1902 OF CANNED AND DRIED FRUITS PRODUCED IN VICTORIA.

Country to which Exported.	Canned Fruits.		Dried Fruits.			
	Quantity.	Value.	Raisins.		Other.	
			Quantity.	Value.	Quantity.	Value.
	Doz. Pints.	£	lbs.	£	lbs.	£
Western Australia ...	90,915	15,798	43,336	664	22,465	465
Other Australian States	58,701	10,322	979,327	19,607	975,048	18,465
New Zealand ...	548	112	228,102	3,035	39,448	700
South Africa ...	8,165	1,572	39,800	397	20,400	434
United Kingdom ...	1,077	193	50	1	11,791	318
Other Countries ...	11,225	2,226	1,054	26	5,089	137
Total ...	170,631	30,223	1,291,669	23,730	1,074,241	20,519

It will be seen from this and the following table that Victoria is building up an export trade in canned and dried fruits, and that the exports are not confined to the local protected market. The following were the exports of these articles since 1895:—

EXPORTS OF CANNED AND DRIED FRUITS PRODUCED IN VICTORIA, 1895 TO 1902.

Year.	Canned Fruits.	Dried Fruits.	
		Raisins.	Other.
	£	£	£
1895 ...	2,625	3,941	1,286
1896 ...	3,904	835	1,777
1897 ...	6,849	1,147	4,510
1898 ...	5,823	7,388	6,674
1899 ...	9,672	7,524	8,286
1900 ...	20,396	10,150	5,121
1901 ...	31,015	15,095	4,963
1902 ...	30,223	23,730	20,519

Mildura has risen superior to difficulties, which a few years ago appeared almost insurmountable—difficulties caused by adventurous speculation, bad management, fall in prices, and ignorance of methods and products most suitable for growth. The errors of the past are now being retrieved, and the latest reports are of the most sanguine description, it being stated that healthy progress is visible everywhere, and that the conditions of soil, climate, and water supply are being thoroughly mastered by practical experience. The grit, energy, and enterprise displayed have been remarkable. The products which have been found to give most payable results are raisins, currants, and dried apricots and peaches.

The following figures, showing the population of the settlement since 1891, are a fair indication of its recovery:—

POPULATION OF MILDURA, 1891 TO 1903.

1891	Census	...	2,321	1897	September	...	2,500
1891	September	...	3,000	1898	"	...	2,800
1892	"	...	3,500	1899	"	...	3,020
1893	"	...	3,000	1901	Census	...	3,325
1894	"	...	3,000	1902	September	...	3,625
1895	"	...	3,000	1903	"	...	4,050
1896	"	...	2,000				

The following is a statement of the revenue and expenditure of the Irrigation Trust during the year ended 30th June, 1903:—

Revenue and expenditure of Mildura Irrigation Trust.

REVENUE AND EXPENDITURE OF THE TRUST, 1902-3.

Revenue.		Expenditure.	
	£		£
Arrears, Horticultural Assessment	2,917	Expenditure on Pumping Stations	10,547
Current Rates, Horticultural Assessment	7,289	Expenditure on Town Supply	954
Arrears, Town Assessment	358	Distribution of Water	2,341
Current Rates, Town Assessment	485	Interest	2,301
Special Rate, 1902	2,136	Other Expenditure	1,389
Extra Rate, 1903	283		
Miscellaneous	270		
<b>Total</b>	<b>13,738</b>	<b>Total</b>	<b>17,532</b>

The deficit of £3,794 during 1902-3 is mainly attributed to the drought and the abnormally dry season, thus necessitating an increased expenditure on maintenance that year. The following were the revenue from rates, &c., and the expenditure

on pumping distribution and town service during the last five years:—

Year.	Revenue. £	Expenditure. £
1899	9,395	8,921
1900	9,801	9,647
1901	10,756	9,987
1902	11,461	11,650
1903	13,738	13,842

It is expected that, with the new powers of rating granted by the Amending Act of April, 1903, the trust will be able in normal years to provide rates sufficient to pay maintenance, interest on loans, and other expenditure.

#### RAINFALL TABLE.

The following table shows the average yearly amount of rainfall in each of the 26 basins or regions constituting the State of Victoria, from 1893 to 1902, and the rainfall during 1902 and 1903:—

Name of Basin.	Rainfall.		
	Yearly Average, 1893 to 1902.	During 1902.	During 1903.
	Inches.	Inches.	Inches.
Glenelg and Wannon Rivers	28·49	22·71	31·46
Fitzroy, Eumerella, and Merrie Rivers	31·03	26·14	33·01
Hopkins River and Mt. Emu Creek	26·65	19·98	31·63
Mt. Elephant and Lake Corangamite	25·17	18·18	28·78
Otway Forest	40·52	32·75	42·11
Moorabool and Barwon Rivers	26·80	20·16	28·82
Werribee and Saltwater Rivers	27·26	23·69	29·66
Yarra River and Dandenong Creek	34·86	32·35	39·95
Koo-wee-rup Swamp	36·28	29·21	38·03
South Gippsland	40·35	33·73	38·79
Latrobe and Thompson Rivers	38·45	33·61	35·33
Macallister and Avon Rivers	27·03	24·42	20·04
Mitchell River	30·88	32·65	25·22
Tambo and Nicholson Rivers	30·23	31·62	25·86
Snowy River	37·08	37·58	34·20
Murray River	24·94	12·86	21·76
Mitta Mitta and Kiewa Rivers	36·27	21·43	34·36
Ovens River	44·14	21·76	34·89
Goulburn River	28·02	17·01	28·93
Campaspe River	26·72	16·43	28·83
Loddon River	20·39	11·64	24·93
Avon and Richardson Rivers	17·20	9·79	22·55
Avoca River	19·40	9·88	23·45
Western Wimmera	21·91	12·83	21·64
Eastern Wimmera	24·55	13·06	27·05
Mallee Country	16·01	8·39	18·01
Weighted Averages	26·68	19·32	27·36

TABLE SHOWING AVERAGED AMOUNT OF RAINFALL  
In each of the 26 basins or regions constituting the State of Victoria, for each quarter, and for the whole year, with corresponding quarterly and yearly averages, for each basin, deduced from all available records to date:—

Name of Basin.	First Quarter.		Second Quarter.		Third Quarter.		Fourth Quarter.		Total amount for the Year 1903.	Yearly Average.
	Total for 1st Quarter.	Average for 1st Quarter.	Total for 2nd Quarter.	Average for 2nd Quarter.	Total for 3rd Quarter.	Average for 3rd Quarter.	Total for 4th Quarter.	Average for 4th Quarter.		
Glenelg and Wannon Rivers	5.78	3.38	9.08	3.68	10.60	9.97	6.00	6.46	31.46	28.49
Fitzroy, Eumerella, Merrie Rivers	7.49	3.78	9.50	9.63	9.97	10.81	6.05	6.81	33.01	31.03
Hopkins River and Mt. Emu Creek	5.15	3.71	8.97	8.08	9.62	8.00	7.89	6.77	31.63	26.65
Mt. Elephant and Lake Corangamite	4.79	3.79	7.84	7.37	8.42	7.49	7.73	6.52	28.78	25.17
Otway Forest	7.13	4.75	13.93	12.56	12.30	14.02	8.75	9.19	42.11	40.52
Moorabool and Barwon Rivers	4.64	4.15	7.56	7.76	7.66	7.81	8.96	7.08	28.82	26.80
Werribee and Saltwater Rivers	4.65	4.79	6.94	7.70	7.80	7.35	11.17	7.42	29.66	27.26
Yarra River and Dandenong Creek	8.40	5.53	12.03	9.65	8.19	9.85	11.33	9.83	39.95	34.86
Koo-wee-rup Swamp	7.93	5.16	11.71	10.56	8.01	10.91	10.38	9.65	38.79	40.85
South Gippsland	7.45	6.03	10.52	11.33	11.03	12.24	9.79	10.25	38.03	36.23
Latrobe and Thomson Rivers	7.59	6.04	9.94	10.11	8.77	10.90	9.03	11.40	35.33	38.45
Macallister and Avon Rivers	2.67	5.95	3.47	6.68	6.85	6.06	7.05	8.34	20.04	27.03
Mitchell River	2.88	6.70	4.98	7.88	8.43	7.31	8.93	8.99	25.22	30.88
Tambo and Nicholson Rivers	3.11	6.16	5.85	7.75	8.17	8.21	8.73	8.11	25.86	30.23
Snowy River	3.79	7.76	10.30	9.88	10.50	9.07	9.91	10.37	34.20	37.08
Murray River	3.38	4.50	5.71	7.65	6.52	6.33	6.15	5.96	21.76	24.94
Mitta Mitta and Kiewa Rivers	6.07	6.15	8.31	11.19	11.16	10.38	8.32	8.55	34.36	36.27
Ovens River	6.06	6.73	10.18	13.33	10.51	13.66	8.14	10.42	34.89	44.14
Goulburn River	5.30	4.21	8.30	8.58	8.07	8.20	7.26	7.02	28.93	28.02
Campaspe River	3.86	4.03	7.74	8.36	8.89	7.78	8.34	6.55	29.83	26.72
Loddon River	2.77	3.06	6.37	6.54	7.86	5.46	7.93	6.11	4.52	22.55
Avon and Richardson Rivers	1.86	2.26	6.69	5.48	7.89	4.94	6.11	5.35	24.93	20.39
Avoca River	2.07	2.32	5.89	6.46	8.19	5.22	7.30	5.40	23.45	17.20
Western Wimmera	2.75	2.22	6.64	6.86	7.80	7.39	4.45	5.44	21.64	21.91
Eastern Wimmera	2.70	2.72	7.85	7.84	9.39	7.40	6.61	6.69	27.05	24.55
Mallee country	1.86	1.92	5.03	5.19	6.43	4.48	4.69	4.42	18.01	16.61
State	4.14	4.00	7.56	7.99	8.47	7.77	7.19	6.92	27.36	26.68

RAINFALL IN REGIONS, DURING EACH QUARTER, 1902 AND 1903.

Percentage, above the average, + (plus); below the average, - (minus).

Regions.	First Quarter.		Second Quarter.		Third Quarter.		Fourth Quarter.		Year.	
	1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.	1902.	1903.
Western Districts	+5	+58	-42	+5	-36	+6	+7	+4	-22	+12
Cape Otway Forest	+72	+50	-43	+11	-34	-12	-17	-5	-20	+4
Counties surrounding Port Phillip Bay	+71	+31	-42	+4	-37	-12	-20	+23	-17	+9
South Gippsland	+66	+24	-44	-11	-30	-10	-16	-4	-17	-4
Basins of the Latrobe, Macallister, and Mitchell Rivers	+55	-30	-32	-25	-19	-1	-16	-13	-7	-16
Basins of the Tambo and Snowy Rivers	+37	-50	-25	-8	-6	+8	+1	-1	0	-10
All Northern Areas between the Ranges and the Murray, West of the Campaspe River	-9	-3	-62	*	-65	+38	-9	+17	-43	+15
All Northern Areas between the Ranges and the Murray, East of the Campaspe River	-13	-3	-57	-18	-70	-4	-19	+5	-44	-7

\* Very slightly above average.

AVERAGES AND EXTREMES OF CLIMATIC ELEMENTS FOR THE SEASONS AND FOR THE YEAR DEDUCED FROM ALL RECORDS OBTAINED IN PAST YEARS AT THE MELBOURNE OBSERVATORY.

Meteorological Elements.	Spring.	Summer.	Autumn.	Winter.	Year.	
<i>Averages—</i>						
Mean pressure of air in inches ...	29.893	29.839	30.004	30.000	29.92	
Monthly range of pressure of air } Inches.	0.892	0.803	0.804	0.978	0.86	
Mean temperature of air in shade, Fahr.	56.8	64.9	58.5	49.2	57.00	
Mean daily range of temperature of air in shade } Fahr.	18.9	21.5	17.7	14.3	18.10	
Mean percentage of humidity, Sat. = 100	70	66	73	79	72	
Mean rainfall in inches ...	7.35	5.83	6.74	5.70	25.62	
Mean number of days of rain ...	37	23	32	41	134	
Mean amount of spontaneous evaporation in inches	10.07	17.11	7.62	3.66	38.45	
Mean daily amount of cloudiness } Scale 0 to 10	6.0	5.3	5.9	6.5	5.9	
	h. m.	h. m.	h. m.	h. m.	h. m.	
Mean daily duration of sunshine ...	5 58	7 54	4 38	3 42	5 33	
Mean total of hours of sunshine ...	547	713	426	323	2010	
Percentage number of hours during which the wind blew from the various points of the compass	North	16.0	7.7	16.1	28.5	17.1
	North-West	9.4	4.1	7.6	13.0	8.5
	West	15.2	9.5	12.2	14.9	13.0
	South-West	16.8	20.4	12.6	10.8	15.2
	South	16.5	24.1	14.9	6.3	15.5
	South-East	9.8	19.2	14.1	5.0	12.0
	East	3.7	5.6	5.6	2.7	4.3
North-East	11.2	8.1	15.2	17.3	12.9	
Calm	1.4	1.3	1.7	1.5	1.5	
Mean number of days of fog ...	1.3	0.7	5.0	10.0	17.0	

*Extremes—*

Pressure of air.	Inches.	Temperature of air in shade.	Fahr.
Greatest monthly range ...	1.503	Greatest monthly range ...	69.1
Smallest " " ...	0.489	Smallest " " ...	23.4
Greatest yearly range ...	1.719	Greatest yearly range ...	82.6
Smallest " " ...	1.169	Smallest " " ...	66.0
Highest air pressure on record	30.678	Greatest mean daily range ...	27.8
Lowest " " " "	28.868	Smallest " " " "	7.7
		Highest temperature on record	111.2
		Lowest " " " "	27.0
			Fahr.
Solar radiation—highest on record ...	...	...	178.5
Terrestrial radiation—lowest on record	...	...	20.4
			Inches.
Greatest rainfall on record ...	...	...	44.25
Smallest rainfall on record ...	...	...	15.61
Horizontal motion in miles ...	...	...	92,221
Mean hourly velocity of wind	...	...	10.5

## AGRICULTURAL AND PASTORAL INDUSTRIES.

The Constitution Act provides that, after the inauguration of federation, the control of the payment of bounties shall pass to the Executive Government of the Commonwealth. A State is therefore precluded from offering bounties on the production or export of its products, and the Department of Agriculture is now only dealing with applications for bonuses to the extent for which provision had been made at the time of the establishment of the Commonwealth. Out of the provision that had been made prior to that time, the State Government, up to the end of June, 1898, had paid out of the general revenue the sum of £313,370. In 1898-9, there was a further expenditure of £27,333; in 1899-1900, of £29,750; in 1900-1, of £1,556; in 1901-2, of £1,146; and in 1902-3, of £365; making a total, up to the end of June, 1903, of £373,520.

In addition, there was a sum of £35,000 authorized under the "Treasury Bonds Act 1896," £100,000 under Act 62 Vict. No. 1566, and £100,000 under Act 59 Vict. No. 1440. Of the £35,000, the sum of £31,007 had been spent up to the 30th June, 1903, leaving a balance available on that date of £3,993. The amounts authorized out of that sum (£35,000) for green fruits exported; honey exported; raisins, currants, and figs made; assistance to wineries, for viticultural education, and for other purposes, have been practically exhausted. Of the £100,000 authorized under Act No. 1566, the expenditure up to the 30th June, 1903, amounted to £57,149, and of that under Act No. 1440 to £62,000. Particulars appear in the following table in respect to all bonuses granted under various Loan Acts:—

## BONUSES GRANTED UNDER LOAN ACTS

Subject of Bonus.	Period during which Bonus operated.	Rate of Bonus.	Amount Authorized.	Expenditure to 30.6.1902.	Expenditure to 30.6.1903.
<i>Under Treasury Bonds Act 1896.</i>					
			£	£	£
Green fruit exported	{ prior to 24.7.96 after 6.11.96	2s. per case 1s. "	{ 5,500	5,404	5,404
Honey exported ...	...	1d. per lb.	61	61	61
Raisins, currants, and figs made	prior to 9.11.95	...	...	...	...
Vegetable oil manufactured	1895	£5 per ton	2,134	2,134	2,134
Flax and hemp fibre produced	...	1s. per gall.	1,500	63	197
General vegetable products grown	...	£5 per ton	1,000	243	391
Wineries (assistance in building machinery and appliance producing 60,000 gallons of wine in three years)	1895	£2 per acre	5,000	3,318	3,558
Viticultural education	...	£2,000 each	8,000	8,900	8,000
Fruit pulp exported	...	...	8,000	7,999	7,999
	...	½d. per lb.	3,805	2,859	3,263
<b>Total</b> ...	...	...	<b>35,000</b>	<b>30,081</b>	<b>31,007</b>

BONUSES GRANTED UNDER LOAN ACTS—*Continued.*

Subject of Bonus.	Amount Authorized.	Expenditure to 30.6.1902.	Expenditure to 30.6.1903.
<i>Under Act 62 Vict. No. 1566.</i>			
District Co-operative Wineries and Viticulture Industry	20,000	£ 11,560	£ 14,943
Dairy Schools, Experimental Stations, purchase of Live Stock, Machinery, Implements and other Appliances and Technical Agricultural Education	30,000	29,006	29,988
Development of the Export trade	32,500	5,773	7,596
Bonuses for the encouragement of the Cultivation, Manufacture, and Export of Fruit, Tobacco, Flax, Hemp, Silk, and of other Rural Industries	17,500	4,622	4,622
Total ... ..	100,000	50,961	57,149
To Beet Sugar Factory under Act No. 1440 ..	100,000	62,000	62,000
Grand Total ... ..	235,000	143,042	150,156

Subsidies to agriculture.

Particulars of subsidies paid in aid of agricultural industries during each of the five financial years ended with 1902-3 are as follow:—

SUBSIDIES IN AID OF AGRICULTURE, &c.: RETURN FOR FIVE YEARS.

	1898-9.	1899-1900.	1900-1.	1901-2.	1902-3.
	£	£	£	£	£
Agricultural and Horticultural Societies, &c.	3,936	3,948	6,529	6,484	2,392
Carriage of Grain at reduced Rates—Allowance to Railway Department	...	45,000	62,000	75,000	6,521
To promote the Agricultural, Dairying, Fruit, and Wine Industries	3,572	1,047	1,607	1,146	370
Expenses in connexion with export of Dairy Produce, Fruits, Meat, Rabbits, and other produce	23,760	28,303	28,602	33,503	33,672
Eradication of Vine Diseases ...	2,424	2,954	426	50	...
"    Noxious Weeds and Insects	2,107	2,258	2,335	2,983	3,804
Scab Prevention and Stock Diseases	4,914	5,772	5,180	4,970	5,358
Rabbit and Vermin Extermination	14,753	14,801	15,817	17,250	16,489
Maffra Beet Sugar Company—Expenses in connection with Seed Advances ... ..	927	2,358	839	1,015	486
Technical Agricultural Education	10	37	23	17	110
Publishing Agricultural Reports	...	...	...	...	9,786
	...	...	...	...	3,990
Total ... ..	56,403	106,478	123,358	142,418	82,978

The expenditure on subsidies in aid of agriculture has been reduced by £59,440 during the year. The items reduced are—agricultural and horticultural societies, &c., £4,092; carriage of grain, £68,479; promotion of agricultural, dairying, &c., industries, £776; eradication of vine diseases, £50; rabbit extermination, £761; and Maffra Beet Sugar Co., £529. The increases are—Expenses in connexion with export of dairy produce, £169; eradication of noxious weeds, £821; scab prevention and stock diseases, £388; and seed advances, £93. There are two new items of expenditure—Technical and agricultural education, £9,786; and expenses of publishing the agricultural reports, £3,990.

#### AGRICULTURAL EDUCATIONAL ESTABLISHMENTS.

An Act for the establishment of Agricultural Colleges was passed towards the close of 1884. Particulars respecting this Act and the operations were given in the "Victorian Year Book" 1890-91. Since then the land intended as endowment, 142,088 acres, has been reserved and vested in the trustees, the greater part of which area so vested has been leased for agricultural and grazing purposes. The areas reserved under section 4 of Act No. 825, as sites for colleges and experimental farms, amount to 13,393 acres. At the Dookie Agricultural College the course of instruction has been supplemented with lectures on agriculture, arboriculture, and viticulture, and practical dairying, wine-making, blacksmith's and carpenter's work.

In order to carry out experiments, devised for the purpose of ascertaining the suitability of the Victorian climate and soil for various kinds of useful products and of obtaining data respecting the rotation of crops, but more especially for the instruction of students in agriculture, a block of 4,806 acres, subsequently increased by 40 acres, was reserved in 1874, at Dookie, situated in Moira, a county in the North-eastern district of Victoria, on which to found, under the direction of the Council of Agricultural Education, a State Experimental Farm. The following account of the present state of the farm has been furnished for this work by Mr. E. G. Duffus, Secretary for Agriculture:—

Experimental farm,  
Dookie.

The farm has, under the provisions of the "Agricultural Colleges Act 1884," been vested in trustees, and all moneys received from the sale of stock and produce since June, 1885, have been paid into the Agricultural College fund.

A new dairy has been erected, at a cost of £1,069, on the most scientific plans, and is fitted with a complete dairying plant of latest pattern, including a pasteurizer refrigerator, &c.

A wine cellar and fermenting house has been erected at a cost of about £1,100, and students are instructed in the art of wine-making. There are in cellar about 8,000 gallons of wine, representing vintages from 1894 to 1903, and also 230 gallons of spirit made from the by-products of the vintage; while during the same period 9,000 gallons of wine were disposed of. There are 32 acres under vines, consisting of 4 acres table grapes, planted in 1887; 5 acres Gordo, Blanco, and Zante currants, planted in 1888; 11 acres Red Hermitage, 7 acres planted in 1889, and 4 acres in 1895; 10 acres Cabernet, planted in 1894; 2 acres Baxter Sherry, planted in 1895; and 2½ acres of Red Hermitage, planted in 1903.

There are 20 acres under fruit trees of all the approved varieties.

During the year the rainfall recorded was 26·60 inches.

Considerable attention is paid to experimental work in connexion with the cereals. The rearing of new varieties of wheat, suitable for the different parts of this country has special attention paid to it.

Manurial tests are carried out each year, and the results are published for the benefit of the farmers.

There is a good and growing demand for seed-wheat, oats, and barley from the college farm; whilst, for the commercial training of the students, a good deal of grain is marketed. The threshing and the harvesting in general are carried out by the students under competent instructors. The cropping also is mainly carried out by the students, who are taught how to use the ploughs, cultivators, seed-drills, and all other farming implements.

Experiments with new fodder plants and with others of economic importance are carried out, whilst attention is also paid to the indigenous grasses.

A variety of medicinal and other plants is also grown on the farm for educational purposes.

There is a 4¾-acre plantation of fifteen-year-old olives, of six varieties.

Accommodation has been provided for 60 students, to whom the charge per head per annum is £25 for maintenance, £1 5s. for medical attendance and medicines, and £1 15s. for books and other school materials, or £28 in all. No charge is made for instruction.

Attention is being given to the breeding of draught horses and Indian remounts. Most of the horses used on the farm

have been bred on it. There are several highly-bred Clydesdale mares, and lately a first-class stallion has been purchased by the Council of Agricultural Education, to be used for stud purposes on the farm and for approved mares of the farmers from the surrounding districts.

The cattle on the farm include Ayrshires principally, also Herefords and Shorthorns. Farmers, on paying a small fee, may have the use of the stud bulls for their cows.

The breeds of sheep kept are Lincolns, Merinoes, Hampshire Downs, and South Downs. The raising of early lambs for the market occupies considerable attention.

The pigs kept are pure Berkshires. There is a good demand for them for stud purposes.

The poultry industry is fostered, and pens of the best breeds are kept. Provision has been made to carry out a laying competition, commencing 1st April, 1904, 40 pens having been erected for the purpose.

The Longerenong Agricultural College was established in March, 1889,  $7\frac{1}{2}$  miles from the town of Horsham, upon an experimental farm reserve, consisting of 2,386 acres of good agricultural land, fairly representative of the Wimmera District, as regards soil and climate. Suitable college buildings were erected on this land, and fully equipped for from 35 to 40 students. The farm was, however, closed some years ago, and has now little or no value as an educational establishment. The land is simply used for the cultivation of wheat and hay for revenue purposes.

Longere-  
nong Agri-  
cultural  
College.

The Government Tobacco Experimental Station is situated at Edi, in the North-eastern District of Victoria, containing eighteen acres of land. It is used for the purpose of conducting experiments in the culture of the better class of tobacco and their treatment; also for manuring experiments in tobacco, wheat, and forage crops, as an object lesson to farmers generally, and with a view to ascertaining the varieties of tobacco best suited to the soils and climate, and the manures best adapted for improving the quality of the leaf and producing the largest returns.

Edi Tobacco  
Farm.

Experiments show that some of the most recently improved varieties of American tobacco thrive exceedingly well. Of sixteen kinds grown, nine have succeeded admirably, six of these belonging to the manufacturing types, the remaining three being cigar types. All of these show a marked superiority to the tobacco formerly cultivated. The experiment of growing cigar leaf, under cheese cloth covering, has been attended with remarkably good results, the leaf produced

in this way being pronounced by the manufacturers to be the best yet submitted as Australian grown. Exhaustive experiments have been carried out with the object of finding a preventive or cure for the disease known as "Blue Mould," by treating the soil and plants with various mixtures, covering the beds with different materials and trying different aspects, soils, and altitudes. Though no absolute cure has been discovered, it has been demonstrated, that in a bad season for disease such as the present, it can be more or less checked, and sufficient plants obtained by choosing proper sites for beds and using careful treatment. The seed of improved types of tobacco produced has been distributed to eighty-six growers, and instruction given whenever required. The manuring experiments show that the yield can be increased by the use of selected commercial fertilisers, and tests are being made as to the effect on the tobacco leaf when manufactured.

The farm is under the control of Dr. Howell, the Chemist for Agriculture, the experiments being carried out under supervision of the tobacco expert, Mr. T. A. J. Smith.

Rutherglen  
Viticulural  
Station.

The chief work being done at the Viticultural Station is in connection with the propagation and grafting of the American and Franco-American resistant vines for the reconstitution of phylloxerated vineyards.

As is well known, the ordinary European vines rapidly succumb to the attack of phylloxera—a tiny insect that injures the vine roots and quickly destroys vineyards wherever it has obtained a footing. Phylloxera was discovered in Victoria in 1877. By its inevitable spread it soon destroyed the vines in the districts to which it had been introduced. Other districts became infected. The seriousness of these attacks led to the trials of many methods to exterminate the pest, all of which have unfortunately proved futile. French investigators had discovered that certain American vines were able to resist the deadly action of the tiny but formidable phylloxera. These are used as stocks on which to graft the desired producing kinds, as their roots were able to withstand the attacks of the insidious insect foe.

There are a number of American vines known, but all are not equally suitable for all soils, nor adapted as graft-bearers for all European varieties, hence the work undertaken at the viticultural station is to discover the most eligible kinds. To test their adaptability to the different soils, sub-stations were founded in each viticultural district of the state, and data were carefully collected regarding the growth of each variety in the very diverse soils purposely selected for these tests. Only such as are of vigorous growth are recommended.

To ascertain the grafting affinities of each kind of stock and scion, some of each of the principal wine and table varieties were grafted on each kind of resisting stock. These were then planted out permanently and the results noted. Growers can readily see by this plot which stock suits a certain variety best. The grafting of those European vines (of wine, table, and drying varieties that are in greatest demand) on suitable resistant stocks is carried out extensively during the season. This work is done both by hand and machines. A few rootlings are used as stocks, but the majority of the grafts are cuttings. A large number of the cuttings grown at the station are utilised in grafting chosen varieties for vignerons, who may not have facilities or time to carry out this operation for themselves. In addition, many thousands of American vine cuttings are supplied direct to the growers.

About 10 acres are planted out permanently at the viticultural station with "motherstocks" for the production of cuttings. These have grown so luxuriantly that fully half a million can be supplied during the ensuing season, and this number can be largely increased if necessary during the following year. There are also two nurseries of considerable area, each containing many thousands of healthy rootlings both grafted and ungrafted. To practically prove the efficacy of resistant stocks, grafted vines have been planted on the very sites of phylloxerated vines that had to be uprooted. These are growing luxuriantly, and afford striking testimony to their resistant value, as they are still surrounded by vines that are badly infected by the pest.

The principal resistant stocks grown belong to the genera *Riparia* and *Rupestris*, with their hybrids. As its name indicates, the *Riparia* in its native habitat loves moist, fertile soils along water courses. The root system is spreading and horizontal. It is a surface feeder. Placed in such conditions as it is naturally accustomed to, it grows luxuriantly, but from the character of the root system, it is susceptible to drought. The species of *Rupestris* that are cultivated are more erect in habit than the *Riparias*, which are trailing. They are generally deeper rooted plants too, and hence are better able to thrive in districts with a less generous rainfall. The Hybrids—usually designated by numbers—apparently inherit the good qualities of both parent plants, and have so far proved themselves most suitable for all conditions of soil and climate. They have also a wider range of affinity as graft bearers.

As a rule American vines do not take kindly to calcareous soils. The *Berlandieri* is one of the best for planting under such conditions, while for saline soils *Solonis* has so far proved itself most suitable.

Wine making is carried out at the station cellars, and about 5,000 gallons are being made this vintage. The treatment of wines, including pasteurisation, receives considerable attention, and growers often visit in search of advice on this topic. A small still is utilised for the manufacture of spirit for fortifying sweet wines.

An excellent laboratory has been erected, and should permit of excellent work being done in the chemical analysis and bacteriological examination of wines.

In the vineyard attached to the station, interesting and useful experiments are being conducted in methods of pruning, cultivation, manuring, &c. In addition to the purely viticultural work outlined above, some general agricultural work is done.

Experimental work is carried out with manures, cereals, grasses, fodder, and reputedly drought-resisting plants. A model orchard has been planted, and is worked under the supervision of the horticultural branch.

The viticultural station is open to inspection on all week days, and is well patronised by visitors anxious to learn.

#### AGRICULTURAL SOCIETIES.

The Royal  
Society.

In any account of the origin of the Royal Agricultural Society of Victoria, it is necessary to allude to the old Port Phillip Farmers' Society, as it was practically from the ashes of that institution that the present society arose. The Port Phillip Society, after years of useful work, gradually became disintegrated, largely through internal dissensions, and was allowed to collapse. Then, as the result of a public meeting, in November, 1870, it was resolved—in the absence of any central society, in order to promote the interests of producers—to form a new agricultural society on a wide basis, and this was accordingly done, the institution being called the National Agricultural Society of Victoria. In February, 1871, the foundation council was elected (with the Hon. W. Degraives as first president). The trustees of the old institution afterwards handed over their balance of funds and rights to a show ground site, to the new society. With some fluctuations during its progress, this society—now the Royal Agricultural Society of Victoria, having had its title altered in 1890—has grown to be the most important agricultural institution in Australasia. Its objects are to promote the development of the agricultural, pastoral, and industrial resources of the State in the manner following:—

- (1) By holding exhibitions at such places and times as the council shall appoint; and by offering and awarding prizes and premiums at all such exhibitions, if deemed desirable.

- (2) By holding meetings at such places and times as the council shall appoint, at which meetings papers may be read and discussed.
- (3) By collecting such information from agricultural publications, scientific and other works, as may be useful in promoting the objects of the society.
- (4) By corresponding with agricultural and other kindred societies at home and abroad, and collecting from such correspondence all information which, in the opinion of the council, may lead to practical benefit in the cultivation of the soil and breeding of stock, as well as in the prosecution of other important industries.
- (5) By encouraging the attention of men of science to the discovery of better methods of cultivation, to the improvement of agricultural implements and machinery, the construction of farm buildings, the application of chemistry to the general purposes of agriculture, the destruction of insects injurious to vegetable life, and the eradication or utilisation of weeds.
- (6) By promoting the discovery and introduction of new varieties of cereals, vegetables, or grasses suitable to the climate, and capable of being cultivated with profit; and also the introduction of desirable kinds and varieties of live stock.
- (7) By collecting information regarding the management of plantations, live-fences, and other subjects connected with rural improvement.
- (8) By investigating the nature of diseases in animals or plants, and taking measures for the publication, at such times and periods as the council may appoint, of the information thus collected, together with all approved original essays sent in, lectures delivered, or papers read to the society; besides making provision for the establishment of a library and reading-room for the use of members.
- (9) By remunerating any person, if thought fit—who shall ascertain by experiment how far such information may lead to useful results in practice—for any loss incurred by such experiments.

The society possesses the Crown grant of show grounds at Flemington, 30 acres in extent, together with 5 acres added by purchase, on which over £46,000 has been spent in permanent improvements.

This large sum has been derived from the general income of the society, excepting £3,000 provided by the Government as a recompense for all buildings and fencing on the site previously held on the St. Kilda Road. At the beginning of the year the society was quite out of debt, but owing to recent heavy expenditure, principally incurred in altering the conformation of the grounds, its present overdraft is about £4,000.

The annual exhibition, in the first week in September, is one of the most important public events of the year. Last year the prize money offered for competition amounted to over £2,000, and there were over 5,500 entries of exhibits of a very high standard of excellence. Every year the show is patronised by an increasingly large number of visitors, its importance being recognised and accentuated by the annual proclamation of a public holiday on the Thursday of show week, on which day, at last exhibition, there were between 45,000 and 50,000 people present on the grounds.

The society has a membership roll of 1,350 subscribers, and a general income of over £9,000, its principal sources of revenue being gate money, entry fees, subscriptions, and donations. Its expenditure is mainly incurred in providing additional accommodation at the show grounds for the annually increasing number of exhibits, in prize money, and in working expenses in carrying out the objects of the society.

The institution is governed by a council of thirty-six members. Of these, three are trustees, who hold office continuously, the remaining thirty-three being elective members, of whom eleven, or one-third, retire each year, and are eligible for re-election. The society occupies, on lease, commodious offices in the Equitable Building, Collins Street, with a reading room and a good agricultural library. The amount received from the Government for the year ended 30th June, 1903, was £215.

This society was established in 1856, but it possesses no records of earlier date than 1861. It is managed by a council of not more than seventy-five members, consisting of the president of the society, three vice-presidents, one honorary treasurer, and seventy ordinary members of council, of whom ten form a quorum. No person is eligible for election as a member of the council unless he has been a subscriber for the previous year.

The objects of the society are the improvement and advancement of agricultural and pastoral pursuits, of implements and machinery incidental thereto, and of the breed of stock.

Ballarat, being the centre of the great merino district of the State, holds a special sheep show each year, in the month of August. Since 1876, when these special shows were first inaugurated, they have been most successful, the prizes awarded up to date having reached the amount of £11,252.

The agricultural show of the society is usually held each year in the month of November. It is amongst the most important in the Western District, and always attracts a large number of entries. The prize money awarded and paid from 1861 to 1902 inclusive was £30,244.

Ploughing matches were held in the district from 1861, when prizes were awarded. These matches are, however, now discontinued, as their necessity is considered to have passed away.

In 1877, the late Sir W. J. Clarke offered prizes amongst his tenants for the best managed farms within the Ballarat Shire. The prizes are now continued by his sons, Messrs. E. E. D. and W. L. R. Clarke, who gave £70 per annum for the purpose. The money is divided in prizes of £20, £10, and £5; (1) for farms over 160 acres, and (2) for farms under 160 acres. The competitions create a large amount of interest amongst the tenants, and are partly the means of keeping their farms in deservedly high repute.

From 1879 to 1891 the society offered prizes for reaper and binder trials, but these were discontinued at the request of the makers and importers. £283 was paid in prize money as a result of these trials.

The total amount of prize money paid since 1861 is £54,859.

A sum of £12,985 has been expended in improvements and repairs to the show yards, keeping them in first class order, and providing proper accommodation for all exhibits.

On the 25th April, 1903, the society's debit bank balance covering all liabilities, was £431.

This society was founded about forty years ago. It is governed by a president and 33 members of committee, and holds a very important position amongst the kindred societies of the State. The shows are held on a portion of Rosalind Park, of which the society holds a permissive occupancy from the Bendigo City Council. The position is central, being practically in the very heart of the city. The progress of the society of late years has been most marked, and buildings of a substantial character for the accommodation of exhibits and the public have been provided. In point of attendance and number of exhibits, the society holds a very high position.

Its annual spring show is held in the second week of October, and extends over three days, the average attendance being about 15,000 persons. About £1,100 in cash and trophy prizes are disbursed. It is practically free from debt, and has valuable assets in the form of buildings and freehold land.

Kyneton  
Agricul-  
tural Asso-  
ciation.†

This association was informally established in September, 1856, by the holding of a ploughing match, when prizes amounting to £62 were offered for the best work by horses and by bullocks. A public meeting was held in October, 1856, when the society was formally inaugurated, and the rules and regulations governing the Port Phillip Farmers' Association, slightly modified, were adopted. In October, 1857, permissive occupancy was obtained of a piece of land opposite the hospital for a show ground, and here the shows were held for the next thirty years. The first grain show was held in March, 1858, and the first show for stock and implements in November of the same year. In 1886, the society had made such progress, and the entries had become so numerous, that it was necessary to procure a more suitable site for show purposes. This site was found on the racecourse reserve, where about £4,000 was spent in the erection of fencing and buildings, for the payment of £3,000 of which the committee became jointly and severally responsible, and £1,500 was raised by loan. This reserve consists of about 87 acres, and the shows have been held there each year since. The exhibits of draught horses have always been regarded as of a very high order; and notwithstanding declining grants from the Government, the committee has been able to keep the prize list up to from £450 to £500 annually. The whole of the loan is now repaid, and the society had to its credit £120 at the end of 1903.

Tatura and  
Goulburn  
Valley Agri-  
cultural  
and Horti-  
cultural  
and Pastoral  
Society.‡

This society came into existence about twenty-eight years ago. It is governed by a president and seventy-five members of committee, consisting of the leading pastoralists and agriculturists throughout the district. Its objects are to further the agricultural and pastoral industries of the State by holding shows, awarding prizes, and generally promoting the best interests of the farming, dairying, and grazing industries. Its show grounds, which are situated at Tatura, cover 25 acres, and provide comfortable and extensive accommodation for stock of all kinds. The land is valued at £650, buildings and improvements at £4,500, and represent a total asset of £5,150. The annual show, held in the third week in October, is popular, and commands up to 3,000 entries annually. Liberal and comprehensive prizes are offered, amounting to between £700 and £800 per annum. The annual revenue is about £1,400; members' subscriptions amounting to £700. The show is very

successful, situated as the grounds are, within the district controlled by the Rodney Irrigation Trust.

The first agricultural classes, inaugurated by Mr. Wallace, the Director of Agriculture, were held under the auspices of this society. For many years past the society has held a special fruit display, showing the production of the irrigation district, and prizes are offered for the best managed farm, orchard, and vineyard.

In 1877, the farming and business people of Shepparton decided to form an agricultural society, and in the following year "The Shepparton and Lower Goulburn Valley Agricultural and Pastoral Society" was inaugurated. In 1885, the Horticultural Society of Shepparton was amalgamated with the larger body, and the term "Horticultural" was added to the title. In 1892, the name was abbreviated to the "Shepparton Agricultural Society." The original committee numbered 28 members, but the governing body to-day consists of a president and 150 committeemen, an excellent influence for the prosperity of the society being obtained by the large number of office-bearers. The objects of the society are stated to be "to promote the advancement of agricultural, horticultural, pastoral, and industrial pursuits, in such manner as from time to time may seem most advisable." In October, 1878, the first show was held upon a small allotment of land about an acre in extent, in the western portion of the town, close to the Goulburn River; but after the holding of the second show, this ground was found to be too confined for the purposes of the society, and accordingly, a valuable site, 8 acres in area, was secured, at the east end of the town, and close to the railway station, and here the third show was held. Subsequent additions have brought the area covered by the society's grounds up to 18 acres, and on it are now erected extensive and durable buildings, yards, and all necessary appurtenances for the display of exhibits, at an outlay of £3,500. In the early days, ploughing matches were held. In 1886 and 1896 the grand national show was held at Shepparton. Up to 1900, one day was found sufficient, but since that time it has been necessary to extend the duration of the show to two days. In addition to conducting the show, the society gives attention to agricultural and producing measures, and in 1898 the Agricultural Society's Scholarship was founded for members' sons, the successful student gaining admission to the Dookie Agricultural College for one year. Visits of experts of the Department of Agriculture are also encouraged, and lectures on subjects appertaining to agriculture, manuring, and stock-rearing arranged. The society also undertakes annual visits to the Dookie College, accompanied by farmers of the district, and valuable knowledge of the different methods of farming

Shepparton  
Agricultural  
Society.

and the profitable culture of cereals is thus attainable by all producers. In the year 1903, a most important event took place—the holding at Shepparton, under the auspices of the Council of Agricultural Education, and under the direction of the Director of Agriculture, of short courses of instruction to farmers and their sons. This class was a splendid success. 78 students entered; the daily attendance was 50; 23 students presented themselves for examination, when 7 subjects were dealt with. The present financial position of the society is good, its overdraft being £733, amply covered by assets valued at £2,000. The receipts for the society's year, ended 31st January, 1904, were £1,418, and the expenditure £1,309.

North  
Gippsland  
Agricultural  
Society.

The North Gippsland Agricultural Society was founded in 1861, at Sale, and was the first institution of its kind in Gippsland. It is governed by a president and a committee of 40 members. The annual show is held in the last week in October, on a good ground, 13 acres in area, situated about one mile out of Sale. There are numerous entries, and the attendance is a large one. In 1902, the Grand National Show was held on these grounds.

Other Agri-  
cultural  
Societies.

There are 82 other societies receiving aid from the Government, all possessing ample and commodious show grounds, situated in or adjoining the more important towns throughout the State, and carrying out work of a similar, though not of so extensive a character. During the year ended 30th June, 1903, these societies received from the Government grants-in-aid to the extent of £1,476. The Government also issued medals, through these societies, during the year, to the value of £34.

Horticultural  
Societies.

There were 26 horticultural societies in the State which also received aid from the Government to the extent of £300 during the last financial year. The most important of these is the Royal, in Melbourne, particulars respecting which will be found in the part "Social Condition" of this work. Other societies are established in the more important centres of the State—Ballarat, Bendigo, Castlemaine, Warrnambool, Kynton, and elsewhere.

Occupations  
of persons  
settled on  
the land—  
Agricultural  
(Census).

The occupations of persons settled on the land are only collected in the census years. In 1891 the number engaged in agricultural pursuits was 82,482, and in 1901 that number had increased to 95,920. The following return gives particulars of persons mainly engaged in agricultural pursuits when the last census was taken:—

RETURN OF PERSONS ENGAGED IN AGRICULTURAL PURSUITS, 1901.

Persons Following Agricultural Pursuits.	Employers of Labour.		In Business on their own account.		Receiving Salary or Wages.		Relatives Assisting.		Not at work for more than a week prior to Census	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
	Farmer and Relative Assisting ..	13,267	1,099	15,096	1,693	—	—	16,361	13,238	—
Farm Manager, Overseer ..	—	—	—	—	359	6	—	—	3	—
Farm Servant, Agricultural Labourer	—	—	—	—	20,204	599	—	—	956	5
Market Gardener ..	859	19	1,647	32	1,518	9	576	132	22	—
Fruit Grower, Orchardist ..	493	44	868	91	700	43	465	172	14	—
Hop, Cotton, Tea, Coffee Grower	10	2	7	—	48	48	9	2	—	—
Tobacco Grower ..	10	—	25	—	24	—	1	—	—	—
Vine Grower, Vigneron ..	174	18	72	8	1,131	6	86	39	6	—
Sugar Planter ..	1	—	—	—	—	—	—	—	—	—
Horticulturist, Gardener ..	237	7	571	17	2,132	7	107	39	214	—
Agricultural Department Officer ..	—	—	—	—	41	—	—	—	—	—
Others, Threshing Machine Owners and Workers, &c.	20	1	26	—	72	2	4	3	103	—
<b>Total .. .. .</b>	<b>15,071</b>	<b>1,190</b>	<b>18,312</b>	<b>1,841</b>	<b>26,229</b>	<b>720</b>	<b>17,609</b>	<b>13,625</b>	<b>1,318</b>	<b>5</b>
Total Males .. .. .							78,539			
Total Females .. .. .							17,381			
Grand Total .. .. .							95,920			

In 1891 the number of persons engaged in pastoral and dairying pursuits was 15,296, and in 1901, 30,920. The full particulars for last census year are as follow:—

Occupations of persons settled on the land—Pastoral and dairying (Census).

RETURN OF PERSONS ENGAGED IN PASTORAL AND DAIRYING PURSUITS, 1901.

Persons Following Pastoral and Dairying Pursuits.	Employers of Labour.		In Business on their own account.		Receiving Salary or Wages.		Relatives Assisting.		Not at work for more than a week prior to Census.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
	Grazier, Pastoralist, Stock Breeder, and Relative Assisting	2,242	177	2,423	303	—	—	1,159	1,062	—
Station Manager, Overseer, Clerk	—	—	—	—	593	4	1	7	39	—
Stock Rider, Drover, Shearer, Shepherd, Pastoral Labourer	47	—	100	—	4,540	7	5	—	248	—
Dairy Farmer and Relative Assisting	2,205	276	3,007	756	—	—	3,263	4,456	—	—
Dairy Assistant, Milker ..	—	—	—	—	3,194	386	—	—	32	3
Poultry Farmer ..	19	8	132	79	17	3	16	41	1	—
Stock and Brands Department Officer	—	—	—	—	18	—	—	—	—	—
Others, including Pig Farmers ..	3	1	10	—	34	—	2	—	2	—
<b>Total .. .. .</b>	<b>4,516</b>	<b>462</b>	<b>5,671</b>	<b>1,138</b>	<b>8,396</b>	<b>400</b>	<b>4,446</b>	<b>5,566</b>	<b>322</b>	<b>3</b>
Total Males .. .. .							23,351			
Total Females .. .. .							7,569			
Grand Total .. .. .							30,920			

Occupations  
—Agricultural,  
dairying,  
pastoral,  
1903.

The total number of persons employed on land during the year 1903 was 135,883—87,322 males and 48,561 females. The number employed on agricultural farms was 55,194 males and 27,202 females; on dairy farms, 19,205 males and 16,409 females; and in connection with pastoral industries, 12,923 males and 4,950 females. The number of hands ordinarily employed on any holding includes the occupier or manager, and those members of his family who actually work on it; but persons absent from their farms for the greater portion of the year following other occupations, as well as temporary hands engaged in harvesting, &c., are not included, neither are domestic servants or cooks.

Comparing these figures with those of the census of 1901, an increase of 9,043 persons is shown as having been engaged in agricultural and pastoral pursuits in 1903. There is, however, a falling off in the number of males and an increase in the number of females employed—mostly in dairying and farming work—and this result is probably to be accounted for by the large emigration of men since 1901.

In 1903-4, for the first time, all holdings were returned by the collectors of statistics, and were distinguished as "farming principally," "dairying principally," and "pastoral pursuits principally." The total returned was 49,002, of which 32,477 were farming, 10,384 dairying, and 6,141 pastoral. In the previous four years, "cultivated" and "dairying only" holdings were returned, the numbers being as follow:—

NUMBER OF HOLDINGS, 1900-1903.

Year ended March—	Cultivated.	Dairying only.	Total.
1900 ... ..	40,160	2,050	42,210
1901 .. .. .	39,831	2,050	41,881
1902 ... .. .	41,153	2,472	43,625
1903 ... .. .	40,859	2,909	43,768

Land  
occupied.

The land in occupation in 1903 is thus described:—Private land, freehold, 16,382,752 acres; leasehold, 7,642,637 acres; Crown lands, 7,051,823 acres; a total of 31,077,212 acres. The total acres under crop were 3,389,069; in fallow, 632,521; sown down in grasses, not cut for hay or seed, 962,665; and there were 26,092,957 acres remaining under natural grasses or unproductive.

Area under  
cultivation.

The area under cultivation, exclusive of permanent and artificial grasses, increased from 50 acres sown down with wheat in 1836 to 4,021,590 acres, which were under crops of various kinds, in 1903-4. The first returns of oats, maize, potato and tobacco crops were obtained in 1838, barley and rye in 1839, hay in 1841, green forage and vines in 1842, peas and beans in 1849, mangel wurzel, carrots, parsnips, turnips,

and onions in 1855-6, garden and orchard produce in 1856-7, and chicory, grass and clover seeds, and hops in 1867-8. Returns of land sown with artificial grass were first procured in 1855-6, and since that year steady and uninterrupted progress has been made in this direction. The quantity of land in fallow has also been increasing since 1858-9.

For the ten years—1894-5—1903-4—the total area under cultivation, its proportion to the area of the State—56,245,760 acres—and the yearly increase or decrease, actual and centesimal, were:—

AREA UNDER CULTIVATION: RETURN FOR TEN YEARS.

Year.	Area under Tillage (exclusive of area under Artificial Grass).	Proportion to Area of Victoria.	Yearly Increase (+) or Decrease (-) in Area.	Percentage Increase (+) or Decrease (-) Yearly.
		Per cent.	Acres.	Per cent.
1894-5	2,779,243	4.94	...	...
1895-6	2,704,263	4.80	-74,980	-3
1896-7	2,925,416	5.20	+221,153	+8
1897-8	3,144,574	5.59	+219,158	+7
1898-9	3,727,765	6.63	+583,191	+19
1899-0	3,668,556	6.52	-59,209	-2
1900-1	3,717,002	6.61	+48,446	+1
1901-2	3,647,459	6.48	-69,543	-2
1902-3	3,738,873	6.65	+91,414	+3
1903-4	4,021,590	7.15	+282,717	+8

The land under cultivation, including land in fallow, but excluding land under artificial grasses, in 1894-5, was 2,779,243 acres, and in 1903-4, 4,021,590—an increase of 1,242,347 acres in the ten years, or about 44 per cent. The increase has been fairly and almost constantly maintained. There are, however, three years in which a slight reduction appears—due probably to accidental causes, or to the influence of bad seasons and adverse climatic conditions. The quantity of land actually under crops of various kinds in 1903-4 was 3,389,660 acres.

The average area in cultivation (exclusive of artificial grasses) to each person, in each of the Australian States and New Zealand, on 31st December, 1902, was as follows. The figures for 1903 for the other States are not yet available:—

Cultivation per head in Australasia.

Victoria	3.10 acres	Western Australia	1.06 acres
New South Wales	1.99 "	Tasmania	1.56 "
Queensland	.93 "	New Zealand	2.04 "
South Australia	8.61 "		

The principal crops grown in the State are wheat, oats, barley, potatoes, and hay.

Wheat was first grown in Victoria in 1836, and there has been a general increase in the area under cultivation up to 1899-1900, when 2,165,693 acres were sown. There has, however, been a slight decrease in each of the following years.

The quantity of land sown in 1903-4 was 1,968,599 acres, the yield from which is returned at 28,525,579 bushels, which is equal to an average of 14.49 bushels per acre.

Wheat districts.

The principal wheat-growing districts in the State are the Wimmera, comprising the counties of Lowan, Borung, and Kara Kara; the Mallee, comprising those of Weeah, Karkaroc, and Tatchera; and the northern, comprising Gunbower, Gladstone, Bendigo, Rodney, and Moira. The total area under wheat in the State in 1903-4 was 1,968,599 acres; that in the counties enumerated, 1,847,941 acres, or 94 per cent.

The following table shows the area of each of the principal wheat-growing counties, the cultivation for the years of first and largest record, and for the year 1903:—

WHEAT-GROWING COUNTIES: AREA AND PRODUCTION.

District and County.	Area of County.	First Cultivation Recorded.			Largest Cultivation Recorded.			Cultivation for 1903-4.	
		Year.	Area.	Average Yield Per Acre.	Year.	Area.	Average Yield Per Acre.	Area.	Average Yield Per Acre.
Wimmera Dist.—			Acres.	Bushels.		Acres.	Bushels.	Acres.	Bushels.
Lowan ..	3,181,440	1871-2	232	16.69	1892-3	257,685	8.58	147,188	13.47
Borung ..	2,740,480	1871-2	4,590	15.59	1903-4	414,224	13.67	424,224	13.67
Kara Kara ..	1,472,640	1871-2	7,987	14.34	1899-00	125,345	9.68	109,413	15.97
Mallee District—									
Weeah ..	2,562,560	1891-2	40	21.00	1902-3	22,592	.46	19,788	12.39
Karkaroc ..	3,797,120	1879-80	233	10.87	1902-3	371,069	.22	262,963	10.76
Tatchera ..	2,138,240	1871-2	2	12.00	1902-3	322,829	.10	245,723	11.99
Northern Dist.—									
Gunbower ..	862,720	1871-2	181	13.36	1880-1	75,114	9.29	36,687	14.54
Gladstone ..	1,153,280	1869-70	7,988	17.46	1899-00	100,312	8.95	93,021	16.63
Bendigo ..	1,247,360	1869-70	21,038	16.26	1903-4	93,575	13.54	93,575	18.54
Rodney ..	1,087,360	1855-6	63	26.66	1898-9	132,273	13.92	122,471	17.40
Moira ..	1,986,560	1871-2	14,936	15.93	1898-9	323,532	9.77	292,888	17.18

The following table shows the area of each county, and the rise and fall in the cultivation of wheat in the central and north central districts:—

TABLE SHOWING DECLINE OF WHEAT CULTIVATION IN CERTAIN COUNTIES.

District and Area.	Area of County.	First Cultivation Recorded.			Largest Cultivation Recorded.			Cultivation in 1903-4.	
		Year.	Area.	Average Yield per Acre.	Year.	Area.	Average Yield per Acre.	Area.	Average Yield per Acre.
Central Dist.—	Acres.		Acres.	Bushels.		Acres.	Bushels.	Acres.	Bushels.
Bourke ..	1,101,440	1855-6	13,606	25.03	1861-2	30,268	17.12	2,953	16.76
Grant ..	1,173,760	1855-6	12,072	25.65	1861-2	35,349	15.86	2,757	17.04
Mornington ..	1,040,000	1855-6	943	29.57	1860-1	3,153	14.03	219	8.33
Evelyn ..	750,080	1855-6	1,124	31.43	1859-60	1,789	15.43	266	21.52
N. Central Dist.—									
Anglesey ..	1,034,080	1855-6	129	28.77	1874-5	4,146	12.96	1,523	17.18
Dalhousie ..	838,400	1855-6	3,113	26.67	1869-70	25,124	21.47	6,305	13.67
Talbot ..	1,037,440	1855-6	445	33.68	1871-2	76,555	13.81	15,231	18.90

The following is a table showing the area under wheat during the last ten years, the gross produce, and the average yield per acre:—

WHEAT: RETURN FOR TEN YEARS.

Year.	Area under Crop.	Gross Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.
1894-5 ... ..	1,373,668	11,445,878	8.33
1895-6 ... ..	1,412,736	5,669,174	4.01
1896-7 ... ..	1,580,613	7,091,029	4.49
1897-8 ... ..	1,657,450	10,580,217	6.38
1898-9 ... ..	2,154,163	19,581,304	9.09
1899-00 ... ..	2,165,693	15,237,948	7.04
1900-1 ... ..	2,017,321	17,847,321	8.85
1901-2 ... ..	1,754,417	12,127,382	6.91
1902-3 ... ..	1,994,271	2,569,364	1.29
1903-4 ... ..	1,968,599	28,525,579	14.49

In 1902-3 wheat was grown on about 17,100 holdings, and in 1903-4 on 17,400 holdings. The decline in the yield and the average per acre, which is observed during the last few years, has been due to the severity of the seasons which has been experienced all over the wheat-growing districts of the State; but last year the splendid rains made the yield the highest ever recorded, although the area under crop was not so large as in the previous year, when the average yield to the acre was by far the highest ever experienced.

Estimates of the area under, and the probable yield of, wheat for the season 1903-4, were made on 2nd and 28th October respectively. The former was based on information supplied by over 16,000 farmers, and the latter on information received from over 1,000 growers distributed through the State, whose opinions had been asked regarding the prospects of the crop in their districts. The following are the results:—

Estimated wheat yield 1903-4.

Estimated area under wheat for grain ... ..	2,105,000 acres.
"    "    hay ... ..	180,000 "
Total ... ..	2,285,000 "
Estimated produce ... ..	26,522,700 bushels.
Average per acre ... ..	12.6 "

Towards the close of 1903, owing to reports of the appearance of rust, and frequent rains which interfered with farm work generally, and in view of the fact that the estimate was so much in advance of the experience of any previous year—the highest yield, 19,581,304 bushels, having

been obtained in 1898-9—it was feared that this estimate would prove to be too high. The results, however, show that, although the area of land under crop (1,968,599 acres) is not equal to the estimate, yet the yield (28,525,579 bushels) has largely exceeded the most sanguine expectations.

On the 29th March, 1904, after the compilation of three-fourths of the Agricultural Statistics of the year, when, owing to the lateness of the season in some districts of the State, the collectors were compelled to procure the best estimates obtainable where threshing had not been completed, the results of the wheat harvest were fairly well known. The figures showed 1,943,000 acres under crop for grain, and 195,640 for hay; the estimated yield being 28,356,082 bushels, or an average of 14.59 bushels per acre.

The complete returns are contained in the following statement:—

RETURN SHOWING THE WHEAT YIELDS FOR THE SEASONS  
1903-4 AND 1902-3 IN COUNTIES.

Districts and Counties.	Area.		Produce.		Average per Acre.	
	1903-4.	1902-3.	1903-4.	1902-3.	1903-4.	1902-3.
	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.
Central District—						
Bourke ... ..	2,953	1,618	49,482	30,347	16.76	18.76
Grant ... ..	2,757	2,657	46,975	50,952	17.04	19.18
Mornington ...	219	196	1,933	3,721	8.83	18.99
Evelyn ... ..	266	97	5,724	1,433	21.52	14.77
North Central Dist.—						
Anglesey ... ..	1,523	676	26,168	5,394	17.18	7.98
Dalhousie ...	6,305	4,193	86,201	70,594	13.67	16.84
Talbot ... ..	15,231	9,079	287,898	97,278	18.90	10.71
Western District —						
Grenville ... ..	809	276	14,405	4,109	17.81	14.89
Polwarth ... ..	41	9	1,123	165	27.39	18.36
Heytesbury ...	20	40	256	1,132	12.80	28.29
Hampden ... ..	377	258	5,960	3,841	15.81	14.89
Ripon ... ..	38,562	16,451	590,937	157,977	15.32	9.60
Villiers ... ..	732	334	10,176	7,199	13.90	21.55
Normanby ... ..	1,432	952	14,500	17,453	9.78	18.33
Dundas ... ..	2,501	1,674	34,903	32,458	13.96	19.39
Follett ... ..	1,162	761	12,621	17,181	10.86	22.58
Wimmera District—						
Lowan ... ..	147,188	148,153	1,982,825	476,135	13.47	3.21
Borong ... ..	424,224	361,676	5,800,568	171,767	13.67	.47
Kara Kara ...	109,413	111,255	1,747,420	153,173	15.97	1.38
Mallee District—						
Millewa ... ..	—	—	—	—	—	—
Weeah ... ..	19,788	22,592	245,206	10,465	12.39	.46
Karkaroc ... ..	262,963	371,069	2,830,194	81,824	10.76	.22
Tatchera ... ..	245,723	322,829	2,945,289	31,487	11.99	.10

RETURN SHOWING THE WHEAT YIELDS FOR THE SEASONS  
1903-4 AND 1902-3 IN COUNTIES—Continued.

Districts and Counties.	Area.		Produce.		Average per Acre.	
	1903-4.	1902-3.	1903-4.	1902-3.	1903-4.	1902-3.
	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.
Northern District—						
Gunbower ...	36,687	39,714	533,406	10,775	14.54	27
Gladstone ...	93,021	84,763	1,551,823	106,017	16.68	1.25
Bendigo ...	93,575	89,664	1,735,104	125,259	18.54	1.40
Rodney ...	122,471	95,029	2,130,836	415,652	17.40	4.37
Moira ...	292,888	280,636	5,031,670	323,800	17.18	1.15
North-Eastern Dist.—						
Delatite ...	9,070	5,748	160,335	45,785	17.68	7.96
Bogong ...	33,243	20,204	577,618	82,753	17.38	4.10
Benambra ...	1,023	646	24,441	10,168	23.89	15.74
Wonnangatta ...	17	4	363	50	21.35	12.39
Gippsland District—						
Croajingolong ...	70	35	1,202	467	17.17	13.33
Tambo ...	8	6	132	95	16.50	15.83
Dargo ...	40	145	653	2,428	16.33	16.75
Tanjil ...	2,174	773	35,931	18,717	16.53	24.21
Bulu Bulu ...	73	59	1,301	1,313	17.82	22.26
Total ...	1,968,599	1,994,271	28,525,579	2,569,364	14.49	1.29

Satisfactory as these figures undoubtedly are, yet it is much to be feared that large quantities of the grain will turn out to be so bleached and otherwise damaged by rains that its market value to the growers will be largely affected.

On 31st December, 1903, there was equivalent to 14,200 bushels of Victorian old and 72,500 of imported wheat on railways and in mills and stores, and 399,600 bushels in bonded stores, making a total of 486,300 bushels; but against this quantity, 312,592 bushels of the new season's wheat had been consumed up to that date, leaving a balance of stocks on hand, exclusive of the recent harvest, of 173,708 bushels.

Old stocks of wheat and flour.

The following table shows, for 1898 and each subsequent year, the mean population of Victoria; the stocks of old wheat and flour on hand at the beginning of each year; the quantity of wheat grown; the quantity (after deducting imports) of wheat, flour, and biscuit exported; and the breadstuffs left over and available for home consumption. In addition to the quantity required for food consumption, a stock is required for seed purposes, equal, on an average, to three-quarters of a bushel per acre:—

## POPULATION AND WHEAT RETURNS.

Year.	Mean Population.	Stocks of Old Wheat and Flour on hand (1st January).	Wheat harvested for season ended March in each year.	Wheat, Flour, and Biscuit.	
				Exported, after deducting Imports.	Available for Home Consumption.
		Bushels.	Bushels.	Bushels.	Bushels.
1898 ...	1,172,950	330,224	10,580,217	1,855,951	9,054,490
1899 ...	1,186,265	1,282,902	19,581,304	10,662,011	10,202,195
1900 ...	1,193,338	2,121,700	15,237,948	7,011,242	10,348,406
1901 ...	1,202,960	1,872,000	17,847,321	10,248,093	9,471,228
1902 ...	1,207,110	1,525,288	12,127,382	3,899,246	9,753,424
1903 ...	1,208,880	903,616	2,569,364	-4,495,403*	7,968,383
1904 ...	1,206,867 (30th March).	173,708	28,525,579	(Not Available.)	(Not Available.)

Disposal of breadstuffs.

The manner in which the breadstuffs available for home consumption have been disposed of in each of the years under review is as follows:—

## DISPOSAL OF BREADSTUFFS.

Year.	WHEAT AND FLOUR.				
	Quantity Available for Home Consumption.	How Disposed of—			
		Stocks on Hand on 31st December.	Required for Seed.	Used for Food, &c.	
				Total.	Per Head.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1898 ...	9,054,490	1,282,902	1,770,941	6,000,647	5·12
1899 ...	10,202,195	2,121,700	1,772,602	6,307,893	5·32
1900 ...	10,348,406	1,872,000	1,696,000	6,780,406	5·68
1901 ...	9,471,228	1,525,288	1,529,249	6,416,691	5·33
1902 ...	9,753,424	903,616	1,616,946	7,232,862	5·99
1903 ...	7,968,383	173,708	1,626,954	6,167,721	5·10

Population and breadstuffs.

With the exception of 1895 and 1903, the breadstuffs produced in the twenty-seven years ended 1903 have been more than enough to supply home consumption. Wheat has, therefore, been exported each year, with these two exceptions. The maximum export was 10·2·3 million bushels in 1899. Owing, however, to the almost total failure of the harvest of 1902-3, not only was there no surplus of wheat for export, but it was found necessary, in order to meet the necessities of home consumption, to import a considerable quantity. The net imports of wheat during 1903 were 3,969,760 bushels, valued at £923,977.

Oats.

In 1903-4, the land under this crop was 433,638 acres, from which a yield of 13,434,952 bushels was obtained, giving an

\* Net Import.

average of 30·98 bushels to the acre. The following return shows the harvest results for this crop since 1894-5:—

## OATS: RETURN FOR TEN YEARS.

Year.	Area Under Crop.		Gross Produce.		Average per Acre.
	Acres.	Bushels.	Bushels.	Bushels.	
1894-5	266,444	5,633,286	21·14		
1895-6	255,503	2,880,045	11·28		
1896-7	419,460	6,816,951	16·25		
1897-8	294,183	4,809,479	16·35		
1898-9	266,159	5,523,419	20·75		
1899-0	271,280	6,116,046	22·55		
1900-1	362,689	9,582,332	26·42		
1901-2	329,150	6,724,900	20·43		
1902-3	433,489	4,402,982	10·16		
1903-4	433,638	13,434,952	30·98		

The return for the last year has been the most magnificent, and the average yield the highest, ever achieved in Victoria. In no other season has a yield of 7,000,000 bushels been reached, with the exception of the year 1900-1, when it was 9,582,332 bushels.

The area under this cereal was 47,760 acres in 1903-4, Barley. 33,586 acres being under malting barley, and 14,174 acres under other barley. The greatest acreage under this crop was 97,360 acres in 1894-5; but in the previous year it was 49,105. There is thus shown a remarkable divergence in the quantity of land sown under barley, owing doubtless to the uncertainty of the seasons, the market for this product being uniformly good. The following shows the return for ten years:—

## BARLEY: RETURN FOR TEN YEARS.

Year.	Area under Crop.		Gross Produce.		Average per Acre.		
	Malting.	Other.	Malting.	Other.	Malting.	Other.	Total.
	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1894-5	85,499	11,861	1,337,643	253,820	15·64	21·82	16·40
1895-6	71,789	6,649	624,388	91,204	8·70	13·70	9·12
1896-7	53,421	8,952	641,406	174,199	12·01	19·45	13·08
1897-8	26,118	11,087	502,411	256,043	19·24	23·09	20·39
1898-9	33,584	14,275	776,785	335,782	23·13	23·52	23·25
1899-0	65,970	13,603	1,197,948	268,140	18·16	19·71	18·42
1900-1	49,723	9,130	1,003,477	212,001	20·18	23·22	20·65
1901-2	25,480	6,943	527,564	166,287	20·71	23·95	21·40
1902-3	26,436	11,280	394,877	166,267	14·94	14·74	14·88
1903-4	33,586	14,174	878,721	339,282	26·17	23·80	25·50

Although the quantity of land sown has not equalled that of many of the previous years, yet the yield has been a good one, and the average, as in the case of wheat and oats, the best achieved.

## Potatoes.

The greatest quantity of land planted with potatoes was 57,334 acres in 1891-2; the next being 56,383 acres in 1894-5; and 55,469 acres in 1899-1900. The highest yield was 204,155 tons in 1890-1, the next 200,523 tons in 1891-2. The area planted in 1903-4 was 48,930 acres, and the produce was 167,736 tons, or 3·43 tons per acre. The following table shows the potato return for ten years:—

POTATOES: RETURN FOR TEN YEARS.

Year.	Area Under Crop.		Gross Produce.		Average Per Acre.	
	Acres.		Tons.		Tons.	
1894-5	...	56,383	196,706	3·49		
1895-6	...	43,895	117,238	2·67		
1896-7	...	43,532	146,555	3·37		
1897-8	...	44,197	67,296	1·52		
1898-9	...	41,252	161,142	3·91		
1899-0	...	55,469	173,381	3·13		
1900-1	...	38,477	123,126	3·20		
1901-2	...	40,058	125,474	3·13		
1902-3	...	49,706	168,759	3·40		
1903-4	...	48,930	167,736	3·43		

## Hay.

Statistics of the hay crop were collected as far back as 1841, when 450 acres were sown, and 900 tons harvested. From that date onward, there has been in general a steady increase in the quantity of land planted. The greatest area under hay was last year, when 733,353 acres were cut; in 1901-2, 659,239 acres; and in 1902-3, 580,884 acres were sown. The highest yield attained was 1,233,063 tons in 1903-4, the next being 884,369 in 1901-2, 740,049 in 1892-3, and 723,299 in 1898-9. The following is a table of the hay crop for the last ten years:—

HAY: RETURN FOR TEN YEARS.

Year.	Area Under Crop.		Gross Produce.		Average per Acre.	
	Acres.		Tons.		Tons.	
1894-5	...	492,578	621,547	1·26		
1895-6	...	464,482	390,861	·84		
1896-7	...	416,667	449,056	1·08		
1897-8	...	580,000	659,635	1·14		
1898-9	...	565,345	723,299	1·28		
1899-0	...	450,189	596,193	1·32		
1900-1	...	502,105	677,757	1·35		
1901-2	...	659,239	884,369	1·34		
1902-3	...	580,884	601,272	1·04		
1903-4	...	733,353	1,233,063	1·68		

## The five principal crops.

The area under the five principal crops during the last five years, its proportion to the population, the production of these crops, and its proportion to the population, are exhibited in the following table. The proportion of land under wheat ranges from about 1½ to nearly 2 acres per head; that under

oats is very little more than a quarter of an acre; that under barley and potatoes is about 4 acres to 100 people; and hay from a half to nearly three-quarters of an acre per head. The produce in the same period shows great variation; the wheat ranges from 2·12 bushels per head in 1902-3 to 23·60 in 1903-4; oats from 3·63 to 11·11; barley from about half a bushel in 1902-3 to 1¼ bushels in 1899-1900, and falls back to 1 bushel in 1903-4; potatoes yielded 2 cwt. per head in 1900-1 and 1901-2, and about 3 cwt. per head in 1899-1900, 1902-3, and 1903-4. The hay yield was equal to 1 ton per head in 1903-4, the nearest average to this being three-quarters of a ton in 1901-2.

TABLE SHOWING, FOR FIVE PRINCIPAL CROPS, THE AREA AND PRODUCTION PER HEAD OF POPULATION: RETURN FOR FIVE YEARS.

Year	AREA UNDER—				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	Acres.	Acres.	Acres.	Acres.	Acres.
1899-0 ... ..	2,165,693	271,280	79,573	55,469	450,189
1900-1 ... ..	2,017,321	362,689	58,853	38,477	502,105
1901-2 ... ..	1,754,417	329,150	32,423	40,058	659,239
1902-3 ... ..	1,994,271	433,489	37,716	49,706	580,884
1903-4 ... ..	1,968,599	433,638	47,760	48,930	733,353
	PRODUCTION.				
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
1899-0 ... ..	15,237,948	6,116,046	1,466,088	173,381	596,193
1900-1 ... ..	17,847,321	9,582,332	1,215,478	123,126	677,757
1901-2 ... ..	12,127,382	6,724,900	693,851	125,474	884,369
1902-3 ... ..	2,569,364	4,402,982	561,144	168,759	601,272
1903-4 ... ..	28,525,579	13,434,952	1,218,003	167,736	1,233,063
	AREA PER HEAD OF POPULATION.				
	Acres.	Acres.	Acres.	Acres.	Acres.
1899-0 ... ..	1·82	·23	·07	·05	·38
1900-1 ... ..	1·69	·30	·05	·03	·42
1901-2 ... ..	1·45	·27	·03	·03	·54
1902-3 ... ..	1·65	·36	·03	·04	·48
1903-4 ... ..	1·62	·36	·04	·04	·61
	PRODUCTION PER HEAD OF POPULATION.				
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
1899-0 ... ..	12·81	5·14	1·23	·15	·50
1900-1 ... ..	14·91	8·00	1·02	·10	·57
1901-2 ... ..	10·01	5·56	·57	·10	·73
1902-3 ... ..	2·12	3·63	·46	·14	·50
1903-4 ... ..	23·60	11·11	1·01	·14	1·02

Yield, Australian States and New Zealand.

The following return shows the yield of the principal crops in the various Australian States and New Zealand for each of the six years ended March, 1904:—

Year Ended March.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
<i>Wheat.</i>	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1899 ...	19,581,304	9,276,216	607,012	8,778,900	870,909	2,303,512	13,073,416
1900 ...	15,237,948	13,604,166	614,414	8,453,135	966,601	1,101,303	8,581,898
1901 ...	17,847,321	16,173,771	1,194,088	11,253,148	774,653	1,110,421	6,527,154
1902 ...	12,127,382	14,808,705	1,692,222	8,012,762	956,886	963,662	4,046,589
1903 ...	2,569,364	1,585,097	6,165	6,354,912	970,571	876,971	7,457,915
1904 ...	28,525,579	27,334,141	2,436,799	13,209,465	1,855,460	767,398	7,891,654
<i>Oats.</i>	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1899 ...	5,523,419	278,007	4,047	304,002	55,854	2,271,070	16,511,388
1900 ...	6,116,046	627,904	10,712	218,331	73,556	1,148,160	16,325,832
1901 ...	9,582,332	593,548	7,855	366,229	86,433	1,406,913	19,085,837
1902 ...	6,724,900	687,179	42,208	469,254	163,653	1,702,659	15,045,233
1903 ...	4,402,982	351,758	520	620,823	161,714	1,752,745	21,766,708
1904 ...	13,434,952	1,252,156	70,713	902,936	255,300	1,621,950	15,107,237
<i>Barley.</i>	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1899 ...	1,112,567	64,694	34,865	234,135	29,295	184,225	1,677,908
1900 ...	1,466,088	132,476	118,443	188,917	56,587	142,721	1,585,145
1901 ...	1,215,478	114,228	127,144	211,102	29,188	116,911	1,027,651
1902 ...	693,851	103,361	277,037	243,362	34,723	167,483	855,993
1903 ...	561,144	18,233	3,595	317,155	45,778	201,133	1,136,232
1904 ...	1,218,003	174,147	510,557	487,920	51,487	212,459	1,160,504
<i>Potatoes.</i>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1899 ...	161,142	61,900	16,413	14,445	5,698	88,166	298,561
1900 ...	173,381	81,337	22,675	19,716	8,373	101,670	222,124
1901 ...	123,126	63,253	20,014	14,566	4,835	93,862	169,042
1902 ...	125,474	39,146	22,402	15,059	5,739	114,704	206,815
1903 ...	168,759	30,732	3,257	28,312	6,200	163,518	193,267
1904 ...	167,736	56,743	17,649	31,415	4,315	171,298	208,787
<i>Hay.</i>	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1899 ...	723,299	334,297	70,235	258,518	77,297	82,448	151,240
1900 ...	596,193	546,850	103,409	229,800	70,078	51,123	136,468
1901 ...	677,757	526,260	78,758	353,662	103,813	94,198	136,046*
1902 ...	884,369	472,621	122,039	346,467	89,729	88,125	125,968*
1903 ...	601,272	243,289	23,181	308,825	91,593	89,210	†
1904 ...	1,233,063	816,810	136,117	479,723	119,156	115,513	†

Proportion of land under each crop.

Of every 1,000 acres under cultivation during 1903-4, 490 acres were under wheat, 108 under oats, 12 under barley, 12 under potatoes, 182 under hay, and 196 under other crops and land in fallow. The proportion of the land under each crop to the total area under tillage during the last six years, was:—

\* Estimated. † Not available.

PROPORTION OF LAND UNDER CROP: RETURN FOR SIX YEARS.

Year ended March—	Proportionate Area to Total Cultivated Land under— (Exclusive of Area under artificial grass.)					
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Tillage.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1899	57.78	7.13	1.23	1.11	15.17	17.53
1900	59.05	7.39	2.17	1.51	12.27	17.61
1901	54.28	9.75	1.53	1.03	13.51	19.85
1902	48.09	9.02	.89	1.11	18.07	22.82
1903	53.34	11.59	1.01	1.33	15.54	17.19
1904	48.95	10.78	1.19	1.22	18.24	19.62

This information has been procured direct from the growers in February and March. The following is the average price for each of the last six years:—

Prices of agricultural produce.

PRICES OF PRODUCE: RETURN FOR SIX YEARS.

Year.	Average Price in February and March.						
	Wheat.	Oats.	Barley.		Hay.	Potatoes.	
			Malting.	Other.		Early Crop.	Main Crop (after March).
	Per bushel.	Per bushel.	Per bushel.	Per bushel.	Per ton.	Per ton.	Per ton.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1899	2 2	1 7 $\frac{3}{4}$	4 2 $\frac{1}{2}$	2 2 $\frac{1}{4}$	34 5	73 0	36 5
1900	2 5	2 1	3 2 $\frac{1}{2}$	2 3 $\frac{1}{4}$	40 9	41 11	26 11
1901	2 5 $\frac{3}{4}$	1 6 $\frac{1}{2}$	2 10 $\frac{3}{4}$	1 11 $\frac{1}{4}$	39 4	73 11	55 10
1902	2 10 $\frac{1}{4}$	2 4	3 9 $\frac{1}{4}$	2 9 $\frac{1}{4}$	55 5	77 7	84 4
1903	6 0	3 2 $\frac{3}{4}$	4 5 $\frac{3}{4}$	3 8	100 1	91 3	47 1
1904	2 8	1 1 $\frac{1}{2}$	2 10 $\frac{1}{2}$	1 9 $\frac{1}{2}$	27 2	52 6	26 1

Dealing with the prices of wheat ruling during the year, Messrs. Goldsbrough, Mort & Co. report as follows:—"The course of values during the past year was downward, and quotations for prime local wheat were, in consequence of the paucity of supplies, mainly nominal, the greater portion of the available supply being purchased in the early part of the year for seed. The following shows the movement in prices for prime Australian wheat during 1903:—

	Lowest Price per Bushel.	Highest Price per Bushel.
January	5s. 7d.	6s. 3d.
February	5s. 11d.	6s. 3d.
March	5s. 8d.	5s. 10 $\frac{1}{2}$ d.
April	5s. 7d.	5s. 9d.
May	5s. 5d.	5s. 8d.
June	5s.	5s. 5d.
July	4s. 11d.	5s. 3d.
August	4s. 10d.	5s. 1d.
September	4s. 9d.	5s.
October	None available	—
November (New Wheat)	3s. 7d.	3s. 11d.
December	2s. 10 $\frac{1}{2}$ d., 2s. 11d.	3s. 6d.

The following table shows the area and production under other crops, 1899-00 to 1903-4:—

OTHER CROPS: RETURN FOR FIVE YEARS.

Crop.	1899-00.		1900-1.		1901-2.	
	Area.	Production.	Area.	Production.	Area.	Production.
Maize ... ..	Acres. 11,037	Bushels. 624,844	Acres. 9,389	Bushels. 604,180	Acres. 10,020	Bushels. 615,472
Rye ... ..	1,050	13,896	823	11,989	828	14,418
Peas and Beans ...	12,243	164,414	7,812	146,357	8,297	169,971
Mangel-wurzel ...	788	9,597	636	7,670	865	9,679
Beet, Carrots, Parsnips and Turnips	584	4,710	507	4,514	561	4,140
Onions ... ..	4,436	19,905	2,815	12,766	4,151	20,859
Green Forage ...	18,574	...	18,975	...	32,795	...
Grass and Clover Seeds	2,283	Bushels. 28,022	2,235	Bushels. 35,084	1,877	Bushels. 60,144
Hops ... ..	713	Cwt. 2,884	401	Cwt. 2,741	307	Cwt. 2,249
Tobacco ... ..	155	1,365	109	311	103	345
Vines—Grapes ...	27,550	298,920	30,634	631,912	28,592	497,269
Flax ... ..	185	{ 85 fibre { 604 seed	259	{ 145 fibre { 717 seed	200	{ 268 fibre { 842 seed
Gardens and Orchards	54,573	...	57,496	...	58,807	...
Other Crops ...	2,937	...	2,596	...	2,991	...
Land in Fallow ...	509,244	...	602,870	...	681,778	...
Artificial Grasses ...	151,919	...	207,896	...	162,954	...

  

Crop.	1902-3.		1903-4.	
	Area.	Production.	Area.	Production.
Maize ... ..	Acres. 10,906	Bushels. 750,524	Acres. 11,810	Bushels. 904,239
Rye ... ..	1,487	21,179	2,021	29,586
Peas and Beans ...	8,085	141,888	8,960	213,735
Mangel-wurzel ...	1,392	Tons. 17,174	1,564	Tons. 21,305
Beet, Carrots, Parsnips, and Turnips	747	5,600	1,014	9,879
Onions ... ..	5,565	27,467	4,176	25,218
Green Forage ...	31,145	...	33,165	...
Grass and Clover Seeds ...	1,568	Bushels. 15,836	2,749	Bushels. 35,660
Hops ... ..	213	Cwt. 1,572	214	Cwt. 2,447
Tobacco ... ..	171	781	129	848
Vines—Grapes ...	28,374	444,966	28,513	654,965
Flax ... ..	233	{ 320 fibre { 990 seed	259	{ 61 fibre { 1,226 seed
Gardens and Orchards	58,415	...	59,812	...
Other Crops ...	2,201	...	2,403	...
Land in Fallow ...	492,305	...	632,521	...
Artificial Grasses ...	565,635	...	962,665	...

In the year 1899-1900 there were 11,037 acres planted with maize, from which a return of 624,844 bushels was obtained. The quantity of land under this crop was fairly constant from that year until 1903-4, when 11,810 acres were sown, and the production was 904,239 bushels. The principal maize-growing counties of the State are Tangil, Tambo, Dargo, Croajingolong, Buln Buln, and various counties in the North-Eastern District. Maize.

The area under rye has increased by 971 acres during the last five years. In 1903-4 the area was 2,021 acres and the production 29,586 bushels. Rye.

In the area planted with peas and beans there has been a falling off from 12,293 acres in 1899-1900 to 8,960 acres in 1903-4. On the other hand, the production in the same time has substantially increased, the yields being 164,414 bushels in the former, and 213,735 bushels last year—a result evidencing improved methods of cultivation, judicious manuring, a good season, and economic harvesting. Peas and beans.

A very considerable increase has been made in the area under mangel wurzel—from 788 acres in 1899-1900 to 1,564 acres in 1903-4. During the same period the production has increased from 9,597 tons to 21,305 tons. As the necessity of providing food for the stock during dry seasons becomes more apparent to the farmer, it is hoped that the cultivation of mangel wurzel, as an adjunct to the silo, will be largely extended. Mangel wurzel.

The cultivation of these crops, exclusive of those grown in market gardens, has nearly doubled in the last five years. In 1899-1900 the land sown was 584 acres, and in 1903-4, 1,014 acres. The produce in the former year was 4,710 tons, and 9,879 tons last year. Beet, carrots, parsnips, and turnips.

Onions are grown in nearly every county south of the Dividing Range. The counties yielding the largest crops are Polwarth, Mornington, Grant, Bourke, and Grenville. In the first named of these there was a yield last year of 5,618 tons from 777 acres. In both Mornington and Grant a larger area was sown, 804 acres being planted in the former, and 837 in the latter, the respective returns being 4,994 tons and 3,753 tons. In Bourke 603 acres yielded 3,647 tons, and in Grenville 2,652 tons was the produce of 383 acres; Villiers and Buln Buln also added substantially to the total yield. The total area under onions in 1903-4 was 4,176 acres, and the yield Onions.

was 25,218 tons. The following is a return for the last ten years:—

ONION PRODUCE: RETURN FOR TEN YEARS.

Year.	Area.	Produce.	Year.	Area.	Produce.
	Acres.	Tons.		Acres.	Tons.
1894-5 ...	3,178	17,377	1899-0 ...	4,436	19,905
1895-6 ...	3,780	10,759	1900-1 ...	2,815	12,766
1896-7 ...	3,735	11,256	1901-2 ...	4,151	20,859
1897-8 ...	3,751	11,217	1902-3 ...	5,565	27,467
1898-9 ...	4,472	17,308	1903-4 ...	4,176	25,218

Green forage.

This crop shows an increase during the last five years of 14,591 acres in the area sown. In 1899-1900 the quantity was 18,574 acres; in 1900-1, 18,975 acres; in 1901-2, 32,795 acres; in 1902-3, 31,145 acres; and in the year now under review, 33,165 acres.

Grass and clover seeds.

The acreage under grass and clover seeds was 2,283 acres in 1899-1900; 2,235 in 1900-1; 1,877 in 1901-2; 1,568 in 1902-3; and 2,749 acres in 1903-4; the production being—28,022, 35,084, 60,144, 15,836, and 35,660 bushels in the respective years.

Hops

The hop-growing industry attained its maximum development in 1883-4, when 1,758 acres were planted, and yielded 15,714 cwt. Delatite and Dargo were the chief counties in which hops were grown, and in Tangil, Polwarth, Evelyn, and Buln Buln smaller yields were recorded. There has, however, been a heavy falling off in the last twenty years. In 1903-4 there were only 43 growers, whose return from 214 acres was 2,447 cwt.

Flax.

In 1895-6 there were 1,969 acres under crop, but in 1898-9 the area had fallen to 72 acres. Since that year the area sown has gradually increased, the returns for last year showing 19 growers of flax, who cultivated 259 acres, and produced 1,226 cwt. of seed, 61 cwt. of made fibre, and 4,760 cwt. of straw, awaiting treatment.

Tobacco

Besides the experimental plot on the Agricultural College area at Edi, there are many plantations in the counties of Delatite and Bogong, along the banks of the King River. The number of growers in the State, the area of land cultivated, and the produce for the last ten years, were:—

## TOBACCO: RETURN FOR TEN YEARS.

Year.	Number of Growers.	Area.	Produce.
			Cwt.
1894-5 ... ..	254	Acres. 1,412	7,155 (dry)
1895-6 ... ..	303	2,029	15,223 "
1896-7 ... ..	233	1,264	7,890 "
1897-8 ... ..	77	522	3,419 "
1898-9 ... ..	31	78	190 "
1899-0 ... ..	28	155	1,365 "
1900-1 ... ..	16	109	311 "
1901-2 ... ..	17	103	345 "
1902-3 ... ..	24	171	781 "
1903-4 ... ..	25	129	848 "

The maximum quantity of tobacco grown was in 1880-1, when 17,333 cwt. of dry leaf was produced. In the years 1895-6, 1896-7, and 1897-8, the produce was respectively 15,223 cwt., 7,890 cwt., and 3,419 cwt., but since the last year quoted the industry has shrunk very considerably, until in 1900-1 the number of growers was only 16, the area cultivated 109 acres, and the produce 311 cwt. During the last three years, however, a slight improvement has taken place.

As there are large tracts in the North-Eastern and other parts of the State eminently suited for tobacco cultivation, it seems reasonable to suppose that this industry will not only entirely recover its lost ground at an early date, but also assume considerably larger dimensions. The following general remarks on the tobacco plant have been extracted from a paper prepared by F. J. Howell, Esq., Chemist for the Department of Agriculture:—

## GENERAL REMARKS ON THE TOBACCO PLANT.

Extracted from a pamphlet by F. J. HOWELL, Esq., Ph.D., Chemist for Agriculture, etc.

The ready adaptability of the tobacco plant to a wide range of soil and climatic conditions makes its growth an easy matter, but the extreme sensitiveness of the plant to the slightest variations in these conditions, as manifested in the flavour and quality of the leaf, restricts the possibility of the successful growth of any one type to exceedingly limited areas. It is only a tobacco possessing certain well-defined qualities, and meeting the specific requirements which in the present highly-specialized condition of the industry are demanded, that is worth the trouble of growing. As Whitney remarks: "A nondescript tobacco is not worth growing, and should not be grown, as it lowers the price of really good types of tobacco, to the detriment alike of the grower and consumer." As there are certain tobaccos then in demand—suited by their particular characteristics for certain specific purposes, and as these characteristics are the resultant mainly of particular

soil and climatic conditions—it appears that the two lines of activity to be taken up in investigations connected with the industry are—first, to find out what kinds of leaf are in demand, and then to investigate the existence of the climatic and soil conditions capable of producing the desired characteristics. The second line of inquiry would involve laboratory investigations in the chemical and mechanical analysis of soils, as well as the establishment of numerous and widely-distributed observation stations; or, as the term is used here, experimental plots, where tests would be carried out with different varieties.

With respect to the kinds of tobaccos in demand in different parts, an extract from a recent paper by Milton Whitney will convey an idea of the wide existing differences of opinion prevailing in different parts on the characteristics constituting desirable qualities in the product.

“The differences in the export type, known to the trade as ‘foreign,’ which are cured and manipulated according to the demands of the various foreign countries, are worthy of special consideration.

“To the general public such differences are sometimes hardly perceptible, but in the trade the slightest difference in shade, colour, thickness, shape or length of leaf, is taken into account in determining to what country or trade the tobacco is best suited. For example, Great Britain gives preference to a long, narrow olive-green leaf, which is required to be heavily fired; in fact, the stronger the odour of hard wood smoke, the more acceptable the tobacco is to the British trade. The Austrian Government prefers a long, broad, silky leaf, from medium to light brown colour. The Italian Government uses the same type, only of shorter size and darker in colour, while the French prefer a tobacco that has been made exceedingly dark by means of steaming and hard pressure while hot.”

The commercial grouping of tobacco is one of classes, types and grades. The adaptability of a tobacco for a particular use, such as cigarettes, cigar, or smoking, marks it off as belonging to a class. The possession of certain qualities, as flavour, texture, and colour, determines the type, while the grade expresses the measure of excellence of the leaves from any one type. The production of the different classes and types is the outcome principally of climatic conditions and the texture and physical properties of the soil. It will be recognized then that the production of the different classes and types cannot be successfully attempted on the same class of soil—that a soil adapted by its physical properties for the production of a large, heavy leaf of a high oil or gum content, will not produce a light tobacco. The adaptability of various

soils to different classes and types of tobacco has received great attention at the hand of Whitney, in America, with the object of determining the conditions favourable to the best development of each type. The ultimate object, as stated, has been "to give a basis for the classification of tobacco soils, and for the improvement and modification of the conditions in many soils which are not, under present methods of manuring and cultivation, well adapted to any particular type of tobacco."

Prior to similar investigations being taken up in Victoria, the introduction of new and untried varieties is necessary.

The establishment of experimental fields, covering a wide range of soils, in which various varieties might be tested, would indicate the suitability of particular areas and particular soils for the production of different types. The examination of the soils, on which certain of these types might have succeeded, would then afford data for expressing opinions on the results of analysis as to the adaptability of untried areas for the same type. Until this data resulting from field experiment is available, the chemical and physical analysis of a soil will have a limited value only. Up to very recently, one type only has been almost exclusively grown in the North-Eastern district as the general crop, and the large body of facts resulting from the experience of growers themselves, apart from the investigations of the expert, which affords so much valuable data to the investigator in America, is not available in the case of Victoria. From the experience of growers themselves in America, it has been found that certain varieties, through the yields and excellence of the product, have given a distinct character to certain districts. The work of the expert is to investigate the conditions producing these distinctive characteristics, and, by a comparative study of untried areas, to discover and suggest the possibilities of expansion beyond these restricted localities known by experience to be adapted for the production of these characteristics. In Victoria, in the absence of the growers' initiative, a wide distribution of variety tests must precede any large system of soil investigation. From the variety tests of last year, reported on by Mr. Smith, there is every evidence of the growers of the North-Eastern district being able to produce a tobacco very much superior to the one formerly placed on the market. To obtain some general idea of the character of the soil in the district, a chemical and mechanical analysis of a number of samples taken from different localities was carried out in the laboratory. This examination reveals the presence of the most important plant foods in exceptionally large quantities. The soils may be regarded as of high fertility. The mechanical analysis discloses a texture indicating no very high retentive power for water, and therefore not adapted for the production

of the heaviest types of leaf. The clay content, however, is higher than that of American soils producing the finest types of light yellow tobaccos.

As, however, the type of a tobacco is the resultant of climatic as well as soil conditions, no reliable opinions as to specific adaptability can be formed by comparing the composition of a soil on one side of the world with that on the other; in fact, the determinative influences of climate on the tobacco plant have been shown to be so subtle as to fail detection by even meteorological instruments. We must find that answer from the plant itself.

The chemical composition of the soil in relation to the tobacco plant.

No plant is so profoundly affected by soil characteristics as tobacco, but it is rather to physical character of soil than to chemical composition that we must ascribe the paramount influence exerted on the physiology of the plant. To quote Whitney again:—"It is practically true of tobacco, to a greater extent perhaps than of any other crop, that the texture and physical properties of the soil influence the physiology of the plant to such an extent as to determine and control the distribution of the widely-differing distinct types of tobacco. Soils producing a heavy shipping tobacco will not produce fine tobacco of any variety. Soils containing a large proportion of clay, or which for other reasons are very retentive of moisture, tend to produce large, heavy plants which cure to a dark brown or red. A lighter sandy soil produces a plant having a thinner and more delicate leaf, which, by proper treatment, can be cured to a bright red mahogany, or fine yellow colour. So marked is this influence of soil upon the quality of tobacco that a fine bright tobacco land may be separated by only a few feet from a heavy clay soil which will produce only a heavy manufacturing or export leaf."

Although the paramount influence of the physical composition of a soil is clearly recognized, the chemical composition also cannot escape consideration. A knowledge of this, by revealing deficiency or over abundance in a particular plant food, may suggest means by fertilization on one side or the reduction of "raging fertility" on the other, of so bringing soils under control as to exercise a decided improvement on the quality of the product.

A comparison of the average figures of the four important plant foods in the six Edi fields, with two American districts—Kentucky and North Carolina—discloses percentages in the Edi soils equally in three ingredients to the Kentucky, and considerably surpassing in all the North Carolina. It is possible that an addition of lime to some of the Edi soils might prove of advantage, but in all other respects the figures would appear to indicate that the use of fertilizers will probably prove of little effect.

The area under vines shows a steady increase from 4,284 acres in 1879-80, to 30,307 acres in 1894-5. In 1900-01, the area was 30,634 acres, but in 1903-4 the area was only 28,513 acres. The vineyards are distributed fairly all over the State. There are but few counties which do not show a certain quantity of land under vines. There are, however, districts where the principal industries are connected with vine-growing—the Shire of Rutherglen has 8,447 acres under vines; Yackandandah, 1,011 acres; and North Ovens, 677 acres. In the Goulburn Valley, wine-making is a flourishing industry. In the Wimmera district, in the County of Borung, there are many vineyards, particularly in the Stawell Shire, where 1,108 acres are planted. At Mildura, there are 5,756 acres planted, the crop being dried principally for raisins and currants. The results of ten years operations are as follow:—

VINE PRODUCE: RETURN FOR TEN YEARS.

Year.	Number of Growers.	Area.	Produce.			
			Grapes Gathered.	Wine Made.	Raisins Made.	Currants Made.
			Cwt.	Galls.	Cwt.	Cwt.
1894-5	2,930	30,307	438,570	1,909,972	18,207	239
1895-6	2,975	30,275	479,071	2,226,999	11,183	686
1896-7	2,603	27,934	601,053	2,822,263	11,276	762
1897-8	2,364	27,701	457,437	1,919,389	13,234	462
1898-9	2,453	27,568	468,887	1,882,209	17,979	1,033
1899-0	2,382	27,550	298,920	933,282	17,847	3,315
1900-1	2,486	30,634	631,912	2,578,187	29,370	3,715
1901-2	2,469	28,592	497,269	1,981,475	27,533	2,546
1902-3	2,347	28,374	444,966	1,547,188	35,534	3,722
1903-4	2,260	28,513	654,965	2,551,150	53,447	7,490

Of the total quantity of grapes gathered—654,965 cwt.—364,450 cwt. were used for making wine, 213,282 cwt. for raisins and currants, and 77,233 cwt. for table consumption and export. In the quantity of wine made—2,551,150 gallons—are included 21,000 gallons made in wineries situated in the counties of Rodney and Moira. That destructive insect affecting the vines, the phylloxera vastatrix, to which reference has been made in previous issues of the Year-Book, has not shown itself to any marked extent during the past twelve months, inasmuch as there is no record of any eradication having taken place. Attempts are now being made to effectually combat the pest by the distribution of disease-resistant stocks by the Department of Agriculture.

The area under orchards growing fruit for sale increased steadily from 5,800 acres in 1872-3, 10,048 in 1882-3, 31,370 in 1892-3, 44,502 in 1902-3, to 46,624 acres in 1903-4, which was

Vines and wine making.

Orchards growing fruit for sale.

the largest area returned up to date. Details of the produce from orchards growing fruit for sale are as follow:—

ORCHARD PRODUCE: RETURN FOR SIX YEARS.

Year.	Number of Fruitgrowers.	Area Under Gardens and Orchards.	LARGE FRUITS GATHERED.				
			Apples.	Pears.	Quinces.	Plums.	
		Acres.	Cwt.	Cwt.	Cwt.	Cwt.	
1898-9	...	4,868	37,033	199,265	47,634	25,630	49,788
1899-0	...	5,208	40,714	217,128	39,571	19,383	51,019
1900-1	...	5,400	44,688	279,193	89,780	25,574	64,675
1901-2	...	5,693	45,885	203,914	42,408	22,909	75,484
1902-3	...	5,301	44,502	282,454	88,582	32,733	57,792
1903-4	...	5,254	46,642	251,573	56,495	29,113	108,736

  

Year.	LARGE FRUITS GATHERED.—Continued.							
	Cherries.	Peaches.	Apricots.	Oranges.	Lemons.	Figs.	Others.	
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	
1898-9	...	30,096	58,992	70,433	7,796	15,456	7,267	4,032
1899-0	...	25,042	81,395	70,022	10,658	12,433	6,589	2,437
1900-1	...	35,636	54,614	77,590	12,948	19,633	7,403	3,373
1901-2	...	37,963	96,463	79,427	20,945	22,038	6,153	3,226
1902-3	...	34,781	58,837	57,118	8,082	15,421	6,519	2,734
1903-4	...	42,215	88,414	114,305	9,635	20,842	8,959	2,970

  

Year.	SMALL FRUITS GATHERED.					NUTS GATHERED.				
	Rasp-berries.	Straw-berries.	Goose-berries.	Currants. (Red, Black and White).	Others.	Al-monds.	Wal-nuts.	Fil-berts.	Chest-nuts.	
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Lbs.	Lbs.	Lbs.	Lbs.	
1898-9	...	9,892	1,889	6,541	845	1,001	67,164	17,694	2,987	4,392
1899-0	...	12,831	3,109	7,832	1,078	1,423	90,025	10,432	3,698	6,670
1900-1	...	20,396	4,246	12,431	1,794	882	66,837	25,294	6,818	6,469
1901-2	...	13,610	4,435	10,436	1,383	968	72,528	18,435	3,469	6,990
1902-3	...	20,185	3,101	11,573	1,456	1,011	41,551	19,378	3,437	8,262
1903-4	...	22,377	3,122	14,199	2,312	1,327	113,791	13,276	2,223	6,677

In addition, large quantities of melons, rhubarb, and tomatoes were produced in orchards, and the following were the quantities returned for 1903-4:—Melons, 23,109 cwt.; rhubarb, 49,259 cwt.; and tomatoes, 28,990 cwt. There were also 4,733 acres laid down in private fruit gardens. No return of the produce of this area is made, but its estimated value, at £10 per acre, is £47,330. The estimated value of all orchard and garden produce is £1,055,955.

The area under market gardens for the year 1903-4 was 8,455 acres. In view of the fact that these gardens are generally situated near large centres of population, and the producers are consequently able to dispose of the bulk of their goods with a minimum of loss from waste, &c., an average return of £25 per acre is regarded as a fair estimate. On this basis, the total value of the produce may be stated as close upon £211,000. This does not include crops of one acre and over of potatoes, onions, mangel wurzel, beet, carrots, parsnips, and turnips, grown in market gardens, such crops being tabulated under their respective heads in the returns relating to agriculture.

The quantity of dried fruit (weight after drying) was for the first time collected in 1895-6, when 179,460 lbs. were returned, and it increased to 305,857 lbs. in 1897-8. The details for the last six seasons are:—

DRIED FRUIT: RETURN FOR SIX YEARS.

Season.	Apples.	Prunes.	Peaches.	Apricots.	Figs.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1898-9 ...	6,289	8,026	59,222	275,026	39,175	387,738
1899-0 ...	11,876	12,595	133,680	290,224	101,948	550,323
1900-1 ...	28,944	35,931	97,254	411,526	62,639	636,294
1901-2 ...	42,218	33,789	90,328	328,599	66,472	561,406
1902-3 ...	27,113	28,996	70,759	110,666	69,069	306,603
1903-4 ...	25,137	58,293	114,096	184,960	17,599	400,085

Of the total quantity dried, 96 per cent. in 1898-9, 92 per cent. in 1899-00, 86 per cent. in 1900-1, 77 per cent. in 1901-2, 87 per cent. in 1902-3, and in 1903-4, 69 per cent., was dried at Mildura.

The following is a return of the minor crops harvested during the year ended 31st March, 1904. The items do not in all cases represent the whole of the respective crops grown, but only such as were taken cognizance of by the collectors:—

## MINOR CROPS, 1903-4.

Crop.	Area Sown.	Produce.
	Acres.	
Artichokes ... ..	11	900 cwt.
Chicory ... ..	477	492 tons (dry)
Flowers ... ..	126	...
Herbs—Medicinal and perfumery	11	...
„ Other ... ..	8	...
Millet—Broom ... ..	148	{ 1,024 cwt. fibre
		{ 1,193 cwt. seed
Mustard ... ..	2	20 cwt.
Opium poppies ... ..	3	50 lbs.
Pumpkins ... ..	1,569	14,185 tons.
Rape for seed ... ..	19	118 cwt.
Rice ... ..	3*	...
Seeds—Agricultural and garden	24	...
Sunflowers ... ..	2	48 bushels.
Total ... ..	2,403	

Land in fallow.

Land commenced to be fallowed in 1858-9, when 6,000 acres were treated in this way. With annual variations in acreage, but a general increase, the area in fallow reached 632,521 acres in 1903-4. The Victorian farmer, therefore, evidently recognizes the enormous advantages obtainable from this mode of treating his land; and from the experiments made by the Chemist for Agriculture on manured land, it would appear that, when fallowed in alternate years, there is a gain in grain crops of from 3 to 5 bushels per acre, and on unmanured land the gain is nearly 3 bushels per acre.

Manure.

The quantity of manure used for fertilization has, in the last five years, considerably increased. In 1898, 7,318 farmers used 143,586 tons of natural, and 16,052 tons of artificial manure, on 225,830 acres of land; in 1901, 11,439 farmers used 153,611 tons of natural, and 23,535 tons of artificial manure, on 556,777 acres; whilst in 1902, the increase was still greater, 18,537 farmers using 206,676 tons of natural, and 36,630 tons of artificial manure, on 1,099,686 acres. The year 1903 shows a still more extensive use of manure. In this year, 19,921 farmers are returned as having used 207,817 tons of natural, and 41,639 tons of artificial manure, on 1,205,443 acres of ground.

In order to ascertain the enormous value of judicious manuring, extensive information has been collected with respect to the results during the past year. For the purposes of the comparison, cases of areas manured and areas not manured in the same localities have been taken, so that the comparison would be made between areas of the same class of land. The results were spread over portions of eleven of the principal wheat-growing counties of the State, and show

\* Failure, season too cold.

that on 214,798 acres manured, the produce was 3,021,553 bushels, or an average of 14·07 bushels per acre, whilst of the unmanured portions the area sown was 165,939 acres, and the produce 1,856,332 bushels, or an average of 11·19 bushels per acre. Full particulars are given in the following table:—

## RESULTS OF WHEAT MANURING, 1903-4.

Counties in Wheat Growing Districts.	Manured.			Not Manured.		
	Area.	Produce.	Average per Acre.	Area.	Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.	Acres.	Bushels.	Bushels.
Lowan ...	7,494	86,077	11·48	4,863	44,926	9·29
Borong ...	19,494	299,313	15·36	24,640	300,692	12·20
Kara Kara ...	24,492	436,615	17·82	13,556	178,374	13·15
Weeah ...	1,180	12,225	10·36	1,420	17,193	12·11
Karkaroc ...	10,762	131,551	12·13	20,775	211,745	10·19
Tatchera ...	25,535	374,029	14·64	15,255	177,288	11·62
Gunbower ...	1,597	29,116	18·23	3,044	43,811	14·35
Gladstone ...	19,117	322,387	16·86	10,283	153,821	14·21
Bendigo ...	21,125	400,383	18·95	11,928	156,597	13·12
Rodney ...	65,898	572,480	18·42	47,323	361,693	15·95
Moira ...	18,104	357,377	19·74	12,852	210,192	16·35
Total ...	214,798	3,021,553	14·07	165,939	1,856,332	11·19

The quantity of manure imported during the year was 988,840 cwt., valued at £151,441. The quantity exported was 120,960 cwt., valued at £36,765.

## FIELD EXPERIMENTS IN MANURING, 1903-4.

Extracted from a paper by F. J. HOWELL, Esq., Ph. D., Chemist for Agriculture.

## I.—HAY MANURING EXPERIMENTS.

The co-operative manuring experiments in Southern Victoria conducted during the season 1902-3 afforded facts of great value to the Southern grower. The marked operative effect of phosphatic manures in these experiments in the production of increased yields revealed a response to applications of phosphoric acid in the bulk of Southern soils, almost as striking as earlier experiments in Northern areas had shown to be the case in that part of Victoria. A new fact brought to light in the Southern experiments, which might be accepted as contradictory of earlier Northern results, appeared to be the large contributory share in the production of increased yields which applications of nitrogenous manures might be expected to play in certain crops of Southern agriculture. With respect to potash, the effective action of additions of this ingredient in the majority of the fields of the South agreed with what appeared to be the universal experience in the North. There appeared, however, indications that on certain types of soil in the South, potash might require to enter into consideration in a system of manuring intended for the production of maximum crops.

The experiments conducted during the season of 1902-3 were, it will be remembered, carried out under climatic conditions which might be regarded as exceptional. The country is just emerging from the serious position which followed as the result of these conditions. It appeared then necessary to seek confirmation of returns obtained under such conditions by results secured under more normal circumstances. The experiments in the South were, therefore, repeated over a large area and in a more comprehensive way last year, and although the rainfall of this year inclined rather to the other extreme than the normal, the results taken together with the experience of the preceding year, may be accepted as a basis for expressing opinions generally as to manurial requirements. It is satisfactory to find that the results of two extreme seasons agree in the main points the experiments were intended to elucidate, and that the knowledge gained may be regarded as of distinct value to the agriculturist.

The system  
of experi-  
menting.

All the tests were carried out in co-operation with farmers who provided the land and gave the necessary assistance in putting in and taking off the crops. Special efforts were made in the present tests to gain regular and reliable results. Each crop was sown by a Government field officer, with a grain drill specially adapted for the continuous regular discharge of fertilizer and seed. The crops were inspected during growth by the officer, who himself applied the top dressings where necessary. Each plot was harvested with the binder, and stooked, under the supervision of the officer, and the same precautions were afterwards observed in weighing results. Prior to the sowing of the crop, the land, which had been set aside for the purpose by the farmer, was inspected, with a view to determining its suitability. In a percentage of cases there was not that regularity in the nature and treatment of the soil which is so desirable a feature in tests of this character. Depressions and rises, clay or sand patches, introducing differences in both chemical composition and mechanical character, finishing furrows and other disturbing factors not considered deserving of notice by the ordinary observer, but of supreme concern to the experimenter, were too frequently present, all helping to contribute in places to those irregularities in returns which at times appear to flatly contradict results obtained from another portion of the field. It will be recognized, however, that these are conditions which must be expected, and to an extent accepted in any system of co-operative farm experimenting. They may be met, and their disturbing effects largely obviated by the elimination of returns from portions of a field so affected; by the introduction of double checks, and by the consideration of the average returns of large numbers of fields in which individual irregularities are made to disappear, and certain broad

features, generally characteristic of the soils of a district, brought into prominence. It must be recognized, however, that, under the most favourable circumstances, the conditions for experimenting obtaining on a farm can never equal those possible at an experimental station, where continuous takes the place of intermittent observation, and where the selection of locality, the preparation of the soil, time of sowing, and time of harvesting can be suitably arranged, and the whole set of operations adjusted to the attainment of an ideal set of conditions. But, admitting disadvantages in these particulars, a wide system of co-operative field tests carries advantages in other directions, and the Victorian farmer, I think, has recognized the fact.

On each farm the area experimented on was 1 1-3 acres, and plots were selected so that the width corresponded to one sweep of a small fertilizer drill, and also adapted itself to easy harvesting by one sweep of the binder. Variations in regard to the manures used were introduced, to meet differences in climatic conditions, and make the range of tests wider.

The scope of the field of inquiry covered by the experiments is a wide one, and answers have been sought, not only as to soil deficiencies, but as to particular forms of plant food, and combinations best meeting these deficiencies, in dealing with the tests to which the various manures were subjected, effort was made to answer the following questions:—

The object sought in the experiments.

1. The effects of applications of phosphoric acid alone.
2. Of phosphoric acid and potash.
3. Of phosphoric acid and nitrogen.
4. Of phosphoric acid, nitrogen, and potash.
5. The comparative effects of sulphate of ammonia and nitrate of soda in combination with phosphoric acid alone, as well as in combination with phosphoric acid and potash.
6. The effect of light, heavy, and medium additions of a nitrogenous manure to medium dressings of superphosphate.
7. The effect of light additions of nitrogenous manure to light applications of a superphosphate.
8. The comparative effect of equal quantities of the three forms of phosphate manure, viz., superphosphate, Thomas phosphate, and bonedust.
9. The comparative effect of equal quantities of Thomas phosphate and superphosphate, both alone and in combination with the two forms of nitrogen and the two forms of potash.

10. The effect of equal quantities of sulphate of ammonia with the sulphate and chloride of potash.
11. The effect of equal quantities of the chloride of potash with nitrate of soda and sulphate of ammonia.

Results of  
the year  
experi-  
ments.

There were more than 70 fields established last year in Southern Victoria, but, owing to the loss of many crops through caterpillars and heavy and continuous rains during harvesting, results of reliability were finally available from 50 fields only, which were fertilized. The results confirm in a remarkable manner the returns obtained in the preceding year's tests, both in regard to the average returns of the unmanured plots, and in the increased yields following applications of manure—whether phosphatic manure or the combination of a phosphatic with a nitrogenous and potassic. The experiments attest the splendid effect produced by phosphatic applications on soil productivity, and the stronger operative effect of superphosphate, as compared with Thomas phosphate. Experiments with bonedust indicate the absence of any marked difference from the superphosphate, particularly in rainy seasons.

Summary<sup>1</sup>

The results of the hay manuring experiments are summarized as follow:—

1. The effect of phosphatic fertilizers on Southern soils is most pronounced.
2. In the comparative tests between the three phosphatic forms of superphosphate, Thomas phosphate, and bonedust, results point to an undoubted superiority on the part of the first manure, both in the larger yields produced where equal quantities of the three have been used, and the larger accruing money value of the increase in produce over the cost incurred.
3. Bonedust, owing to an improvement in mechanical condition and probably to its nitrogen content and the response of Southern soils to this ingredient, has, used in equal quantity with the two other forms produced, increased yields larger than Thomas phosphate, and almost equal to superphosphate. Owing, however, to its much higher price it cannot compare from the point of view of resulting profits with the second manure.
4. Thomas phosphate fails to show, in the increased yields produced by the use of equal quantities, figures equal to those of bonedust, but owing to its much lower cost the difference in resulting profits is not so great as the first consideration would appear to indicate.

5. Numerous comparative tests between equal quantities of superphosphate and Thomas phosphate, both alone and in combination with nitrogenous and potassic manures, establish firmly the greater effective power of the first fertilizer, and although the market rates for Thomas phosphate are lower than those ruling for the great bulk of superphosphates, the profits resulting from the latter are very considerably in excess of those of the former. It should, however, be noted that the analysis of last year's Thomas phosphate showed a grade of that manure below the standard formerly obtainable on the market, and much below what European analysis shows it ought to be, and it seems probable that with an improvement in quality it will compare very favourably with superphosphate.
6. Nitrogenous manures find an almost universal response on Southern soils, and have resulted generally in increased yields sufficiently large to give substantial profits.
7. In the results of the tests between the nitrate and ammonia form, there seems sufficient evidence to justify the premier position in effective power being given to sulphate of ammonia.
8. In the tests to decide the effect of light, medium, and heavy dressings of a nitrogenous manure, it appears that the progressive increase in yield following heavier applications are not sufficiently marked to justify the larger quantities used.
9. Increased yields appear to follow a light application of a phosphatic fertilizer (1 cwt. per acre) used in combination with a light application of a nitrogenous manure ( $\frac{1}{2}$  cwt. per acre)—superior to those produced by a heavy dressing of a purely phosphatic fertilizer.
10. Medium and heavy dressings of a nitrogenous fertilizer (1 cwt. and  $1\frac{1}{2}$  cwt.) in combination with medium dressings of a phosphatic manure (2 cwt.), show a considerably reduced effect, relatively, to light applications in combination with light phosphatic dressings.
11. The effect of potash generally has not been sufficiently pronounced to merit marked consideration.
12. Where the two forms of the sulphate and chloride of potash have been used, there has been a striking regularity in the operative effect shown by each, both in combination with superphosphate and

Thomas phosphate alone, as well as in combination with the addition of a nitrogenous manure to the two phosphatic forms.

13. Chloride of potash used with sulphate of ammonia—a combination in which poisonous compounds resulting under certain conditions are supposed to act injuriously to plant life—appears, with a few exceptions, to have produced results closely corresponding to those obtained from a combination of potash sulphate with the same ammonia salt.
14. The financial aspect of the results of the experiments are most satisfactory, and taking the mean of the extreme prices ruling at different periods for the crop in question as a basis for calculation, it appears that for an expenditure of from 12s. to 15s. per acre in manure, increased returns of a money value, taking a low estimate, of from 30s. to 40s., may be expected. These remarks are not, of course, intended to apply to soils of well recognized exceptionally high fertility requiring no fertilization. The productivity of his farm will indicate to each farmer the necessity or otherwise of considering in his case the questions here dealt with.

## II.—GRAIN MANURING EXPERIMENTS, NORTHERN AREAS.

The very numerous experimental manure fields established throughout the whole of the Northern wheat-growing area, during the years 1899-1902, appeared to give conclusive answers to the most important questions of fertilization concerning that portion of Victoria, and left little to be attempted in that part in the solution of manurial problems of immediate concern. It, however, appeared desirable to be in a position to anticipate possible future requirements, and to secure indications of the possible effect of the continuous exclusive use of phosphatic manures over long periods of time. With this object in view, as well as with the idea of gaining an insight into the effect produced by different systems of cultivation, a number of large experimental fields was established on various farms in the North. In only two cases out of six originally established have the experiments been continued up to the present time. Although it is yet early to make comparisons between results obtained from the different systems of cropping and cultivation, a few important facts appear evident in the returns already obtained, and it appears desirable to now give these publicity. It must be recognized that such tests, conducted on the same plots for 10 or 15 years, would afford information of incalculable value

to the Northern wheat grower. The arrangement with the farmer terminates at the end of six years, and a renewal of the term for a like period is certainly advisable.

A comparison of the yields obtained in 1903 on the plots continuously cropped, with those obtained from the plots where a year's bare fallow has intervened, reveals the increases due to the latter system, and such a comparison ought, after some years, to indicate pretty clearly the system to be adopted with advantage by the farmer.

The effects  
of fallow-  
ing.

The good effect of fallowing may be due to various causes. It may follow in the results of conservation of moisture, from the disintegration of mineral matter, from improved physical conditions, or from organic operative agencies, working in the direction of the conversion of unavailable forms of nitrogen into available forms. With the magnificent rainfall of last season, it can hardly be thought that the larger yields of the fallowed plots were in any way due to a larger soil moisture content.

The various cultivation tests are not yet in a sufficiently advanced stage to admit of discussion. The effect of sub-soiling, however, appeared sufficiently marked to justify some reference. Both in the appearance of the growing crop and the actual results obtained in weight of grain and straw, there appears evidence for concluding that a deeper cultivation in the more compact clay soils of the North will result in a considerable improvement in yields.

The effect of  
sub-soiling.

The fact of the full profits, resulting from the use of phosphatic manures, not being contained in the first year's returns, has already been demonstrated to the farmer by field tests conducted by this Branch. In these tests, the residual effects on a second year's crop have been determined and made known. It is, however, a little surprising to find that such small quantities as 10 and 20 lbs. of a superphosphate are capable of exercising so marked a residual effect after a period of four years from the first application. In the year 1900 a small field embracing 15 plots, each 1.5 of an acre in area, was put down on a farm at Wycheproof. In the following year the field was let out to grass, fallowed the next year, and then cropped the succeeding season without manure. The increased yields due to manures, both in the first and fourth years, were very evident. With the exception of one or two irregularities the effects appear consistent throughout.

The residual  
effects of  
manures.

The pronounced effect of phosphatic fertilizers is only confirmatory of the results of former experiments, but the whole of the present returns tend to show a considerably more

The  
Northern  
results sum-  
marized.

marked effect from these fertilizers, under the ample moisture supply of last year, than under the prevailing drier conditions of preceding seasons. The limits, however, of an effective application with an ample moisture supply are lower in these returns than expected, and appear to be somewhat below, rather than above, 80 lbs. of superphosphate to the acre. The natural fertility of the soils under review, judging from the returns of the unmanured plots, may, however, be considered a high one, and on soils below this standard larger quantities would probably prove effective. The wet season appears to have specially favoured the effective action of Thomas phosphate, raising it apparently in instances to an equality with that shown by the higher grades of superphosphate at present on the market. There appears, further, in the returns, evidence for concluding that Northern soils, which hitherto, with few exceptions, have remained passive to nitrogenous applications, may show, under an ample moisture supply, a response to such treatment, and indications are also present that continuous grain cropping, year after year, with phosphatic fertilizers, may, after some years, lead to soil conditions in which the application of a nitrogenous manure, in addition to a phosphatic, may also become a necessity. It is, with the data at present to hand, a little early, perhaps, to draw such conclusions, but the easy possibility of such an occurrence demands attention. Such a contingency suggests the advisableness, where the three year course of crop, grass, and bare fallow is not the practice, of occasionally intervening some leguminous winter crop, such as peas, the cost of which might be profitably covered by feeding off in Spring. Such a practice has in instances been successfully carried out in the North. The returns appear also to show that the use of small quantities of gypsum mixed with the superphosphate may prove of some slight value on certain soils of the North—deficient possibly in lime, or of a mechanical condition tending to set the soil and interfere with the development of the plant in its earlier stages of growth. The few tests carried out on different methods of applying manures favour largely the application with the drill, equal quantities of superphosphate applied broadcast as a top dressing after sowing the grain, as well as ploughing in prior to sowing, showing considerably smaller yields than those obtained from the applications made with the drill.

*Dairy farms.*

The average yield of milk per cow steadily increased from 236 gallons in 1895 to 335 gallons in 1900, but it fell to 322·3 gallons in 1901, and to 273·9 gallons in 1902—a result in

all probability due to droughts. The average was, however, during the past year, 336.24 gallons.

The following are the particulars respecting dairy farms in each of the last five years. In 1903-4 the pastoral holdings are included:—

Year.	Number of Cow-keepers.	Number of Dairy Cows (wet and dry).	Milk Yield.		Number of Cream Separators in use.
			Average per Cow (wet and dry).	Total Quantity ('000's omitted).	
1899 ... ..	31,132	465,469	Gallons. 316.6	Gallons. 147,367,	3,446
1900 ... ..	30,787	472,940	335.5	158,677,	4,131
1901 ... ..	33,070	483,650	322.3	155,880,	5,626
1902 ... ..	36,000	510,546	273.9	139,838,	7,308
1903 ... ..	41,824	515,179	336.2	173,224,	8,986

The numbers of horses, cattle, sheep, and pigs in the various Australian States and New Zealand, according to the latest returns, are:— Live stock.

LIVE STOCK RETURN FOR AUSTRALASIA.

	Horses.	Cattle.		Sheep.	Pigs.
		Milch Cows.	Other.		
Victoria ... ..	392,237	521,612	1,080,772	10,841,790	350,370
New South Wales ... ..	450,125	351,287	1,389,939	26,649,424	193,097
Queensland ... ..	401,984	2,481,717		8,392,044	117,553
South Australia ... ..	164,625	75,011	138,332	4,880,540	82,777
"    Northern Territory	14,788	627	305,193	42,122	1,014
Western Australia ... ..	82,566		480,745	2,554,920	49,580
Tasmania ... ..	33,465	43,316	135,069	1,679,518	52,092
New Zealand ... ..	298,714	468,125	1,125,422	18,954,553	226,591

It has not been the practice in Victoria to collect the numbers of the live stock, except in those years in which the census was taken; and the figures now supplied are those returned at the census of 1901. Arrangements are, however, being made to collect the information for 1904, and it is hoped that the results will be published early in 1905.

The differences, for the most part increases, in the numbers of horses, cattle, sheep, and pigs, in each census year since 1861, are shown in the following table; together with Live stock—  
Census returns,  
1861 to  
1901.

the number per head of the population at each period. The progress of the industries dependent on the breeding of stock are thus indicated:—

LIVE STOCK PER HEAD OF POPULATION: RETURN FOR FIVE  
CENSUS YEARS

Stock.	1861.		1871.		1881.		1891.		1901.	
	Population 540,322.		Population 731,528.		Population 862,946.		Population 1,140,405.		Population 1,201,341.	
	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.
Horses (including foals) .. ..	76,536	·14	209,025	·29	275,516	·32	436,469	·38	392,237	·33
Cattle—										
Milch Cows ..	197,332	·37	212,193	·29	329,193	·38	395,192	·35	521,612	·43
Other .. ..	525,000	·97	564,534	·77	957,069	1·11	1,387,689	1·22	1,680,772	·90
Sheep .. ..	5,730,896	10·70	10,477,976	14·32	10,360,285	12·01	12,692,843	11·13	10,841,790	9·03
Pigs .. ..	61,259	·11	180,109	·25	241,936	·28	282,457	·25	350,370	·29

The animals are here averaged to the number of inhabitants of Victoria, a continually changing quantity. In the next table they are averaged to a constant quantity—the number of square miles in the State. The actual percentage increases are thus shown:—

LIVE STOCK PER SQUARE MILE: RETURN FOR FIVE  
CENSUS YEARS.

Year.	Average per Square Mile (Area of Victoria, 87,884 Square Miles).				
	Horses.	Cattle.		Sheep.	Pigs.
		Milch Cows.	Other.		
1861 .. ..	·87	2·25	5·97	65·78	·70
1871 .. ..	2·38	2·41	6·42	119·22	2·05
1881 .. ..	3·14	3·75	10·89	117·88	2·75
1891 .. ..	4·97	4·50	15·79	144·43	3·21
1901 .. ..	4·46	5·94	12·30	123·36	4·00

The increase in each class was constant up to 1891, with the exception of a slight fall in the number of sheep between 1871 and 1881. Between the census of 1891 and 1901, however, there has been a reduction in the numbers of horses, cattle generally, and sheep, probably due to the many dry seasons in the intercensal period. There was also an exceptional export of horses to South Africa for some time prior to the 1901 census. The number of milch cows increased

considerably in the decade, indicating the growth of the dairy-  
ing industry, and explaining in part the largely augmented  
output of butter. The number of pigs has steadily and satis-  
factorily increased throughout the whole period. As the  
development of Victoria proceeds on agricultural and dairy-  
ing lines, reductions may be expected in the number of cattle,  
other than milch cows, and in the number of sheep depastured  
in the State.

The following return shows the proportion of live stock  
per square mile in the various States of the Commonwealth  
and New Zealand in 1901:—

State.	Horses.	Cattle.		Sheep.	Pigs.
		Milch Cows.	Other.		
Victoria ... ..	4.46	5.94	12.30	123.36	4.00
New South Wales ... ..	1.57	1.34	5.25	134.72	.86
Queensland ... ..	.69	5.64		15.00	.18
South Australia—Proper ... ..	.43	.20	.39	13.19	.23
„ Northern Territory	.02	.002	.48	.09	.002
Western Australia ... ..	.08	.40		2.61	.06
Tasmania ... ..	1.24	1.56	4.87	68.38	2.24
New Zealand ... ..	2.68	3.65	9.38	193.67	2.14

The return of the stock slaughtered for 1903 was partly furnished by the municipal authorities, and partly collected by the police. The number includes those slaughtered on farms and stations, as well as those in municipal abattoirs. Previous to 1903, the returns were furnished solely by the municipal authorities, an estimate being made of the stock slaughtered privately:—

STOCK SLAUGHTERED: RETURN FOR FIVE YEARS.

Year.	Numbers Slaughtered.		
	Sheep and Lambs.	Cattle and Calves.	Pigs.
1899 ... ..	2,557,858	249,177	193,095
1900 ... ..	2,371,415	248,797	231,752
1901 ... ..	2,469,797	251,477	261,479
1902 ... ..	2,827,938	233,206	224,431
1903 ... ..	2,652,569	235,284	164,745

The purposes for which the carcasses of the slaughtered animals were used were:—

	For Butcher and Private Use.			For Freezing.			For Preserving and Salting.			For Boiling Down.		
	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1899	2,035,706	246,534	88,254	475,579	2,418	450	26,200	..	103,831	20,373	225	560
1900	1,921,284	244,571	119,137	437,332	3,808	..	9,181	115	112,604	3,618	303	11
1901	2,106,863	249,079	134,276	431,740	980	..	10,087	937	127,145	11,107	481	58
1902	2,337,262	229,728	106,390	378,029	2,293	..	13,211	485	117,984	99,436	700	57
1903	2,348,967	231,682	52,681	283,897	1,630	4,200	11,400	1,473	107,754	8,305	499	110

Wool production—  
Victoria.

The total production of wool, being the quantity made up in manufacturing in the State, and that returned by the Customs Department as having been exported, is given for the years 1898-1903. The quantity and value of wool imported and exported, and the quantity and value of that used for home consumption, are also shown:—

Year.	Wool Imported.		Wool Exported.		Wool Used in Manufacture in the State.			Wool Production—Greasy and Scoured.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Rate per lb.	Value.	Quantity.	Value.
	lbs.	£	lbs.	£	lbs.	s. d.	£	lbs.	£
1898 ..	65,626,395	1,808,492	131,850,560	4,036,968	2,685,803	0 9	100,717	63,909,968	2,329,193
1899 ..	63,067,135	2,351,059	121,877,604	5,701,410	2,867,884	1 0	143,394	61,678,353	3,493,745
1900 ..	62,527,957	1,927,677	102,205,965	4,217,018	3,045,292	0 6	76,132	42,723,270	2,365,163
1901 ..	61,796,450	1,840,066	131,623,062	4,350,285	3,408,526	0 6	85,213	73,235,138	2,595,432
1902 ..	38,008,765	1,141,715	100,516,094	3,473,372	3,473,835	0 8	115,794	65,981,164	2,447,451
1903 ..	36,726,396	1,381,647	84,560,603	3,186,054	3,772,390	0 9	141,164	51,606,597	1,945,871

Wool production—  
Australasia

The quantity and value of wool produced in 1902 in the various Australian States and New Zealand, estimated on the same principle, were:—

	Quantity. (Greasy, Washed, and Scoured.) lbs.	Value. £
Victoria .....	65,981,164	2,447,451
New South Wales .....	188,277,477	7,341,072
Queensland .....	29,655,078	1,304,200
South Australia .....	34,566,500	1,075,395
Western Australia .....	12,932,271	458,078
Tasmania .....	9,512,564	301,051
New Zealand .....	161,113,523	3,377,713

The 1902 table has been repeated, as the information for the other States and New Zealand is not at present procurable.

The following information as to the average rates of wool per lb. obtaining for the last season has been extracted from Messrs. Goldsbrough, Mort & Co's annual review for 1903-4:—

GREASY MERINO.

Extra Super (Western District) ... ..	up to 16d.
Superior ... ..	12d. to 13½d.
Good ... ..	10½d. to 11½d.
Average ... ..	8½d. to 9½d.
Wasty and Inferior ... ..	6d. to 7d.
Extra Super Lambs ... ..	up to 15½d.
Super Lambs ... ..	12½d. to 13d.
Good Lambs .. ... ..	8½d. to 9½d.
Average Lambs ... ..	7d. to 7½d.
Inferior Lambs ... ..	5d. to 6d.

GREASY CROSSBRED.

Extra Super Comebacks ... ..	12½d. to 13½d.
Super Comebacks ... ..	11d. to 12d.
Fine Crossbred ... ..	9½d. to 10½d.
Medium Crossbred ... ..	7½d. to 8½d.
Coarse Crossbred and Lincoln ... ..	5½d. to 7d.
Superior Fine and Crossbred Lambs ... ..	10d. to 10½d.
Good Crossbred Lambs ... ..	8d. to 9d.
Coarse and Lincoln Crossbred Lambs ... ..	6d. to 7d.

SCOUREDS.

Extra Super Fleece ... ..	up to 23½d.
Super Fleece ... ..	21d. to 22d.
Good Fleece ... ..	18½d. to 19½d.
Average Fleece ... ..	17d. to 18½d.

RECORD PRICES FOR THE SEASON.

Greasy Merino Fleece ... ..	16d.
do. Comeback Fleece ... ..	13½d.
do. Merino Lambs ... ..	15½d.
do. Comeback Lambs ... ..	12d.
Scoured Fleece ... ..	23½d.

Dealing with the character of the clip, the following remarks are made:—"Broadly speaking, it cannot be said that the clip under review was a good one, although it was well grown, fairly sound, and freer from vegetable matter than has been the case for many years, yet in point of style, brightness, and general attractiveness, it left a good deal to be desired."

Of the total number of hands, 135,883, engaged in farming, dairying, and pastoral pursuits during 1903—87,322 were males and 48,561 were females. 55,194 males and 27,202 females were engaged in farming principally; 19,205 males and 16,409 females in dairying principally; and 12,923 males and 4,950 females in pastoral pursuits principally. The number of hands ordinarily employed on any holding includes the occupier or manager, and those members of his family who

Hands employed on farms, etc.

actually work on it; but persons absent from their farms for the greater portion of the year, following other occupations, as well as temporary hands engaged harvesting, &c., are not included, neither are domestic servants and cooks.

In the following return will be found particulars showing the rates of wages paid (with rations) upon farms and pastoral holdings during 1903. The information has been furnished by the occupiers of holdings.

WAGES, AGRICULTURAL AND PASTORAL, 1903.

Occupations.	Range.	Prevailing Rate.
Ploughmen ... ..	12s. to 25s. per week	20s. per week
Farm laborers ... ..	12s. 6d. to 25s. "	17s. "
Threshing machine hands ... ..	6d. to 9d. per hour	6d. per hour
Harvest hands ... ..	3s. 4d. to 7s. per day	5s. per day
Milkers ... ..	8s. to 25s. per week	15s. per week
Maize pickers (without rations) ... ..	3d. to 6d. per bag	4d. per bag
Hop pickers " " " " ... ..	2½d. to 3½d. per bushel	3d. per bushel
Married couples ... ..	15s. to 35s. per week	27s. 6d. per week
Female servants ... ..	6s. to 20s. "	10s. "
Men cooks ... ..	12s. to 30s. "	20s. "
Stockmen ... ..	£39 to £70 per annum	£52 per annum
Boundary riders ... ..	£30 to £65 "	£46 "
Shepherds ... ..	£25 to £52 "	£35 "
Hut keepers ... ..	£20 to £52 "	£35 "
Generally useful men ... ..	10s. to 25s. per week	15s. per week
Sheep washers ... ..	15s. to 35s. "	20s. "
Shearers, hand* ... ..	12s. 6d. to 20s. per 100 sheep	15s. per 100 sheep
" machine* ... ..	13s. 6d. to 16s. "	15s. "
Bush carpenters ... ..	15s. to 42s. per week	27s. 6d. per week
Gardeners, market ... ..	12s. to 22s 6d. "	20s. "
" orchard ... ..	12s. to 30s. "	20s. "
Vineyard hands ... ..	10s. to 25s. "	15s. "

Ensilage.

The importance of the preservation of forage in a green state is so great that public attention to the question is highly desirable. Not only will stock eat anything of a vegetable nature that will make useful ensilage, but ensilage-fed animals at all times present an appearance of health and vigour. It cannot be affirmed that the uncertainty of the result of the system need militate against the trial. The silo is no longer in an experimental stage. Ancient nations are known to have practised the preservation of forage and fruits in a green state in large subterranean vaults; and during the last twenty years experiments on a large scale have been carried on, particularly in America, where the almost universal testimony of farmers is to its economy in feeding cattle, and the consequent increased stock-carrying capacity of the land. As a result of these experiments, many farmers have introduced

\*It is believed that in cases of some of the highest rates rations are not found

silos upon their holdings, but it is a matter for surprise, that so little has been done in Australia. Dr. Cherry, in a paper on "The Modern Silo," published as Bulletin No. 8 of the Department of Agriculture of Victoria, points out particularly that "animals which chew the cud differ from all other classes in requiring their food comparatively juicy and bulky. Their digestive apparatus is formed to suit this kind of food. Hence the cow or bullock cannot thrive on exclusively dry food so well as the horse." In Victoria, where every season the rapid drying up of the grass under the excessive heat of the summer sun causes large areas of pasture land to be parched and grassless, and green food usually disappears from December till Autumn—an artificial method of preserving fodder should be of the utmost possible benefit, and the advantage of the luxuriance of trefoil, grasses, and self-sown crops in the Spring would not then be lost. The juicy state in which the silo preserves ensilage fulfils another of the requirements of ruminant animals, that their food should be presented in a succulent condition. A supply of such nutriment in the winter, judiciously mixed with drier protein-bearing food, or with grain, bran, oil cake, &c., means to the farmer and stock-raiser an economising of green stuffs when their luxuriance would otherwise tend to wastefulness, a steady and assured food supply for the summer, and a consequent augmentation, not only of the quantity, but also in the quality, of the milk yielded. Even in districts where fresh green fodder is available throughout the greater part of the year, the advantage of being able to secure the crop when it is in its best condition seems so evident, that the silo should soon become an indispensable adjunct on every farm.

Notwithstanding the importance of this means of preserving food for stock for use in dry seasons, the following figures for Victoria will show how little has been done in this direction up to the present:—

In 1898-9, ensilage was returned as having been made on 224 farms, using 8,764 tons of material; in 1899-1900, on 139 farms, using 9,116 tons; in 1900-1, on 131 farms, using 5,834 tons; in 1901-2, on 125 farms, using 5,065 tons; and in 1902-3, on 111 farms, using 4,703 tons. A slight improvement is shown for the past year, when ensilage was made on 290 farms, and the material used was 10,931 tons.

The returns for 1903-4 show that there were 5,609 bee-keepers, owning 19,810 frame and 20,949 box hives, and producing 600,797 and 233,171 lbs. of honey respectively, and 18,979 lbs. of beeswax. Bee-keeping.

The number of bee hives has increased from 17,729 in 1900-1, to 40,759 in 1903-4.

In 1891-2, the quantity of honey returned was 1,128,283 lbs. After a decline in the next two years, the quantity gathered in 1894-5 was 1,323,982 lbs. A further falling off is recorded from that year to 195,163 lbs. in 1897-8. A recovery has since been made, the return for 1903-4 indicating that the industry is now making fair progress.

## BEE-KEEPERS: RETURN FOR FIVE YEARS.

Season.	Number.	Bee Hives.	Honey.	Beeswax.
			lbs.	lbs.
1899-0 ... ..	2,896	17,729	670,124	14,009
1900-1 ... ..	2,293	21,412	957,020	15,269
1901-2 ... ..	3,776	22,083	572,477	13,530
1902-3 ... ..	4,402	32,126	1,199,331	23,061
1903-4 ... ..	5,609	40,759	833,968	18,979

Beekeepers are to be found in every county of the State—the largest numbers being in Buln Buln, 599; Talbot, 532; Bourke, 372; Evelyn, 298; Mornington, 294; and Rodney, 272.

State expenditure on rabbit destruction.

Active operations for the destruction of rabbits on Crown lands were first undertaken by the Government in 1880, and from that date to the middle of 1903 sums amounting to £414,181 had been expended with that object. The following are the amounts spent in each year:—

£		£	
1879-80 ... ..	1,280	1891-2 ... ..	39,535
1880-1 ... ..	2,600	1892-3 ... ..	30,595
1881-2 ... ..	12,890	1893-4 ... ..	12,514
1882-3 ... ..	9,883	1894-5 ... ..	8,909
1883-4 ... ..	10,063	1895-6 ... ..	11,831
1884-5 ... ..	22,177	1896-7 ... ..	13,425
1885-6 ... ..	24,833	1897-8 ... ..	14,303
1886-7 ... ..	21,065	1898-9 ... ..	14,753
1887-8 ... ..	20,551	1899-00 ... ..	14,480
1888-9 ... ..	17,621	1900-1 ... ..	15,300
1889-90 ... ..	24,860	1901-2 ... ..	16,800
1890-1 ... ..	37,913	1902-3 ... ..	16,000

Rabbit extermination.

The whole of the State, with the exception of portions of Gippsland, is more or less infested with rabbits and other vermin. In addition to the expenditure of £414,181, referred to above, a loan of £150,000 was allocated to shires in 1890 for the purchase of wire netting to advance to landholders, repayable in ten years, and in 1896 a loan of £50,000 was advanced on similar terms, except that 3 per cent. interest was added. The expenditure for 1902-3 was £16,000, portion of which represents the salaries and allowances paid to 31 rabbit inspectors, 11 police inspectors who were partially employed, and from 30 to 40 men who were wholly employed on Crown lands. The convictions secured under the penal clauses of the Act

were 120 in 1902 and 113 in 1903. The fines and costs awarded amounted to £338 18s. 11d. in 1902, and to £280 11s. in 1903.

The number of couples of rabbits and brace of wildfowl received at the Melbourne fish market, the number sold, and the number condemned, during the last five years, were as follow:—

Rabbits and wildfowl sent to market in Melbourne.

Year.	Number of Couples of Rabbits.			Brace of Teal and Duck.		
	Sold.	Condemned.	Total.	Sold.	Condemned.	Total.
1898-9 ... ..	324,598	4,350	328,948	39,902	490	40,392
1900 ... ..	480,519	5,727	486,246	35,610	728	36,338
1901 ... ..	596,610	2,717	599,327	59,156	930	60,086
1902 ... ..	471,964	4,472	476,436	32,756	232	32,988
1903 ... ..	316,462	3,810	320,272	13,130	80	13,210

In 1903 there were also received at the Melbourne market 1,145 brace of hares—of which 121 brace were condemned, and the others sold. In addition, the following passed through the Melbourne Council's refrigerating works during the twelve months ended 31st December, 1903, for export only:—1,801,956 pairs of rabbits, 408 brace of hares, and 210 brace of game.

FORESTRY IN VICTORIA.

By H. MACKAY, Esq.

The true aim of forestry is the preservation of the forests of a country by wise use. In practice, it embraces a knowledge of rocks and soils, the food of the plant life which covers them; of botany, the knowledge of vegetable living bodies; of chemistry, the science which reveals the nature and properties of bodies; and of silviculture, the rational treatment and working of forest areas, so as to maintain them in a timber-yielding condition. It includes also planting and sowing where Nature has clothed the surface of a country with niggard hand, or where, by the action of man or the ravages of fire or tempest, areas have been denuded of tree vegetation and rendered unprofitable. But the primary function of the forester in a newly-settled country is to maintain and increase the sylvan wealth with which Nature has clothed hill, valley, and plain, by regulating and correcting wasteful or inferior growth, while at the same time carefully restricting the yearly output of timber and other produce to such quantity as the forest can safely yield without deterioration.

Victoria, with a total area of 56,245,760 acres, has about twelve million acres of woodland. Of the latter, over 4,600,000 acres are set aside as climatic reserves and for the production of timber, but no portion is formally dedicated in perpetuity for the purpose of forest and water supply. Of the State forest domain, some 3,000,000 acres are situated on the slopes of high mountain ranges, and their protection is essential for the maintenance of creeks and springs; over half a million acres are situated in the extreme Eastern part of the State, but, owing to difficulties of transport, are not at present accessible for practical working; half a million acres, chiefly in the central district, which have been cut over, are closed for the protection of the young timber; while in the remaining area, over 600,000 acres, timber cutting is carried on in various parts. The bulk of the forest revenue (over £16,000 in 1902) is, however, derived from a total area of about 100,000 acres, the trees being taken on the selection system of treatment; while for the supply of mine-props and fuel, large blocks are allotted and worked as coppice, or coppice under standard thinnings only, light or severe as the circumstances require, being taken out in some districts.

In the early days of settlement little care was exercised to delimit and protect for the use of the community the best forest areas on the plains and lowlands. In some instances, indeed, good agricultural land bore excellent hardwood, such as red gum, and with some reason the claims of the State yielded to the pressure of settlers, whether the land was required for tillage or pasture. But in the case of the poorer lands, such as the auriferous belts of Silurian formation, bearing ironbark and grey box, which stretch from the river Goulburn westward to the Northern Pyrenees, there was seldom any valid reason for alienating inferior soil, fit only for the grazing of sheep. It bore, naturally, the best crop the soil was fit to yield, but this was speedily ringbarked and destroyed on thousands of acres in the endeavour to improve the pasture. In the same way, in Gippsland, the areas of forest red gum, a timber of exceptionally fine quality, were quickly alienated, so that, to-day, the State possesses only 300 acres of this hardwood in the whole of the Eastern division.

The early sale, in large tracts, of the fine volcanic lands of the Western district, and their long retention as a vast sheep walk, have undoubtedly had an evil effect on the proper settlement of Victoria. Not the least mischievous result has been that, as the population increased, land selectors had to endeavour to make homes for themselves in the thick virgin forests of the Otway Peninsula and Western Gippsland, thus destroying by axe and fire in a few years enormous areas

covered with valuable hardwood, as well as woods of fine grain. Despite, however, the reckless destruction of blue gum, mountain ash, messmate, blackwood, and beech, on the mesozoic sandstone ranges of the Southern district, and of ironbark and box on the central tablelands, Victoria is still the best wooded of all the Australian States. This, however, is obviously due to the extent of her mountain territory and average rainfall, and not to any protective action on the part of her people. The best forests of commercial value are now chiefly confined to the uplands and mountain slopes of the Eastern and South-Eastern districts, but along the course of the Murray there are still valuable areas covered with red gum in all stages of growth; while in the central district there are extensive tracts bearing healthy young messmate, box, and ironbark. One remarkable feature of settlement and the restriction of the destructive forest fires which used to burn for weeks without check, is the gradual encroachment of thick belts of young timber on the lower slopes and foothills of the mountain ranges. This is especially noticeable between Mount Wellington and the Snowy River, in the Otway district, and between the North-Eastern railway and the head of the Ovens River. Where open forests of large trees once stood, a close and in many cases almost impenetrable growth of spar timber and saplings has taken their place. Again, where, within the memory of men still living, the country consisted of thinly timbered or bare grassy slopes, the surface is now completely covered with stringybark, box, and white gum, and on the higher levels mountain ash. This extension of young forest is, of course, confined to districts with a regular rainfall, and, from a forester's point of view, it is not an unmixed benefit, since inferior trees of the stringybark family in many instances dominate and crowd out more valuable species.

With respect to hardwoods which have a commercial value, Victoria has some twenty, all species of the eucalyptus family. In addition, there are about forty woods of fine grain, most of them, however, being trees of small size, and confined to a limited area in the deepest recesses of the hardwood forests. At the head of the latter, for size, beauty of grain, fitness for cabinet work, and general utility, stand the blackwood and evergreen beech. Both of them are now chiefly confined to creek valleys in the Otway Peninsula, Gippsland, and Wilson's Promontory. A description of the smaller timbers of fine grain would be beyond the limits of this short paper, but steps have lately been taken by the Forest Service to make a complete collection of them (as well as of the hardwoods), and a small handbook will also be issued setting forth their characteristics and the purposes for which they can be utilised. The hardwoods of Victoria are of a class well known

in Australia and Tasmania, and have been in general use for all kinds of building and construction, as well as for railway lines, telegraphs, and harbour and bridge work, since the first settlement of the country. They may be divided into two main classes—in the first rank, for hardness, durability, toughness, and general utility, are red gum, red ironbark, white ironbark, grey box, blue gum, N.S.W. blackbutt or flintwood, yellow stringybark, and Gippsland mahogany; while in the second class may be placed spotted gum, messmate, mountain ash, the three stringybarks, woollybutt, and bloodwood. In addition to these hardwoods and woods of fine grain, we have, among many inferior species, five acacias, which yield tanning bark of good quality, the most valuable being the golden or broad-leaf, and the black feather-leaf varieties.

#### Plantations

In plantation work, and gifts of trees for shelter belts to small settlers, good progress has been made during the past few years. State plantations are established near Geelong, Maryborough, and Creswick, and the experience thus gained in the propagation and growing of Australian hardwoods, as well as exotic conifers, has been of great advantage to the community. In addition to the young trees reserved for the plantations, from eighty to a hundred thousand transplants are distributed every year, the bulk of the stock being issued to farmers in the Northern district, State schools, and municipal councils. For plantation work, Victoria may be divided roughly into three main districts, the Northern, Midland, and Southern. In the Southern district, evergreen oaks, elms, planes, Himalayan and Californian cypresses, deodars, and Mt. Atlas cedars; hardy pines, such as *pinus insignis*, *Canariensis*, *pinaster*, *laricio*, and *Austriaca*; and eucalypts, such as the sugar gum, Gippsland mahogany, yate, and swamp mahogany, flourish. The same trees thrive fairly well in the sheltered areas of the central lowlands, while on the higher levels, silver and spruce firs, the Douglas fir, Californian redwood, and the mammoth sequoia show fair growth. It is, however, one thing to grow trees in a shrubbery or park, and quite another to plant them in close lines for the production of timber. Unquestionably, no eucalypt so far has given the State such uniformly good results for the latter purpose as the sugar gum, the timber of which, in its original home (South Australia), is in high repute for railway and harbour work and telegraphs. Among conifers, the handsome *pinus insignis* easily distances all rivals in height and stem growth. Of late years it has been propagated solely for shelter-belts, as its timber, although it affords material for interior construction and case-making, cannot compare with the better class of merchantable pines, or with the redwood of its native State. Its great utility here is as a shelter tree. It exhausts the soil in its neighbourhood, and should not be

planted in or near a garden or orchard, but on the windward side of homesteads, outbuildings, or farmyards, it is a great protection. The Lambert and Lawson cypresses of California have also come into favour for shelter-belts and hedges, in Gippsland and the Southern district generally. The former thrives even in the dryer climate of the Northern plains, its range extending eastward from St. Arnaud to the Goulburn. In the Northern district, owing to the irregular rainfall, and the desiccating winds of the summer season, the choice of trees for shelter and shade is very limited. At the head of the list stand the sugar gum and pepper tree, for loamy and clay soils, while the locust or false-acacia, the silky oak, and the white cedar or *Pride-of-India*, come next. In saline soils in this region, the Aleppo pine, tamarisk, ailanthus, false-acacia, and Moreton Bay fig have given the best results. Even to the extreme Northern limit of the State, no hardwood transplant equals the sugar gum, its one drawback being that, especially when planted out towards the end of winter, it is very sensitive to frost. It has now been propagated and grown here for some sixteen years, and as it has attained in the plantations in that period a girth of 35 to 40 inches, its hardy habit, quick growth, and comparative freedom from insect or fungoid disease, have amply justified its selection as a standard eucalypt. At one time the blue gum was extensively planted, too often without any regard to the climate and soil which suit it. On the plains of the central and coast districts it has not been a success. It is peculiarly liable to the attacks of wood-boring beetles, and so far there is no demand for its timber for mine-props; while, so long as box, ironbark, and red gum are available, the general public will not use it for fuel. Undoubtedly the blue gum is one of the finest of Australian hardwoods, but, as a whole, the plantation-grown trees of this species do not equal in the quality of their timber the natural growth in the forest reserves. Worked as coppice for the production of pole timber and fuel, blue gum in the plantations will yield, in a short rotation of 15 to 20 years, from seven to ten tons of dry fuel per acre per annum. The State has still fairly large areas of this timber, in the Otway Peninsula, North-Eastern reserves, Gippsland, and Mt. Cole.

As regards grants to small settlers, it has been the aim of the State to encourage by a generous distribution of useful transplants, the growth of trees around homesteads for shelter and shade. The fact that settlers too often wantonly destroy valuable forest in preparing their land for tillage and pasture is to be deplored, but they will only be brought to recognize their error by seeing the benefit derived from planting even a few useful trees to protect their homes, as well as live stock, from stress of weather. The demand for shelter trees is greater than the State nurseries can meet, and

issues to farmers are now chiefly confined to quick-growing eucalypts, pepper trees, and hardy pines. The annual grant of trees has greatly improved the appearance of homesteads on the Northern plains and in other treeless districts, and so long as it is confined to struggling farmers who could not afford to purchase plants from private nurseries, no reasonable objection can be urged against its extension.

Now that the systematic working of the reserves has been taken in hand, the necessity for a controlling law is more than ever apparent. Three things are essential to the maintenance of the forest domain of this State: an Act of Parliament, conferring large powers of management and control on the executive officers; a detailed survey and delimitation of the permanent reserves; and the framing of working plans to ensure proper exploitation. A commencement has been made with these plans, but unless the reserves are protected from alienation by law, and provision is made in the Act for their strict enforcement, all the care taken in their preparation will be simply wasted labour. In this matter, Victoria is singularly backward, not only in comparison with the best-governed States of Europe, but even with Turkey, which, since the year 1870, has had a useful forest law. Many of the States of the American Union, the provinces of Canada, and the Cape Colony, have recognized the necessity of such a law, and have made provision accordingly, while Japan has not only framed and put in force such legislation, but controls her forests on the most conservative lines, and by liberal assistance and encouragement has, during recent years, secured the training of her most promising executive officers in the best schools of Germany and France.

A great responsibility rests on the Executive and Parliament of Victoria to provide the administrative powers which are absolutely necessary if the forests are to be preserved from irreparable injury. Apart from the question of timber altogether, it must never be forgotten that the forest governs the water supply. In this country, subject to extremes of drought and flood, the protection of the mountain watersheds should be a public duty of the first importance. But, while very large sums of money have been spent—and lost—by the State in subsidising irrigation trusts on the lowlands and plains, but little foresight has been exercised, or care shown, to protect from alienation lands at the head of creeks and springs, which, in Europe or North America, would be carefully retained under forest cover, since they, and they alone, feed the rivers which supply the irrigation channels.

## THE WEATHER OF THE YEAR 1903.

By P. BARACCHI, Esq., Government Astronomer.

It may be stated at the outset, that in every district of Victoria, excepting the Northern and Eastern parts of Gippsland, the meteorological conditions of the year 1903 were more favourable for agricultural and pastoral interests than they had been since 1894. For eight successive years the average annual rainfall of the State, considered as a whole, had not been reached. This great evil culminated in the year 1902, which was one of the worst on record, and forms a remarkable contrast with the year under review, which may be classed amongst the best. In other meteorological respects, the weather, after a very long period of abnormal behaviour, resumed, in 1903, those pleasant average conditions which are best adapted to ensure the welfare and prosperity of this State, and are regarded as true characteristics of the Victorian climate.

The general distribution of atmospheric pressure, and the climatic elements of the year, did not depart to any great extent from the values of average years. These values have been studied for nearly half a century, and are known to oscillate through a wide range between extremes, the severity of which has at times been felt in parts of this State, if not so intensely as in many less favoured countries, yet sufficiently to regard such extremes as an unusual affliction, whether it be in the form of heat waves or frosts, floods or bush fires, gales and storms. The year 1903 was, however, meteorologically well balanced, and its record of disastrous atmospheric events compares favourably with the majority of past years. The chronicle of such events may be briefly summarized as follows:—

There was a short period of great heat in the third week of January. Unusually strong south-westerly gales were experienced in February. The July frosts were somewhat prolonged and severe. Towards the middle of that month very heavy rains fell over the Western half of the State, and floods followed, which caused loss of sheep and cattle, and much damage to roads and bridges. The Wannon, the Hopkins, the Avoca, and the Broken Rivers were in flood, some of them for the first time in twelve years. Large tracts of country were under water, Horsham being partially inundated. In September, more heavy rains occurred, and more floods in the Wannon and Barwon basins. At the same time, bush fires were raging in several parts of Gippsland, where droughty conditions had prevailed during the first three quarters of the year. The Loddon was in flood in November,

and the Bendigo districts in December. Destructive thunderstorms and hailstorms swept over many parts of the State on 12th October, 26th November, and 20th December, during which two persons and some horses were killed, and other persons injured. Some damage was done to property and crops by the heavy rains and storms of the last month of the year.

The  
Rainfall.

A detailed tabular account of the rainfall for the year 1903 is given in a previous part of this work. In the small table following, the records from some 800 stations are grouped and summarized so as to show, in a concise form, the distribution of rain over the principal subdivisions of the State during each quarter of the year, and the percentage above or below the corresponding average, based on all available records of past years.

TABLE SHOWING DISTRIBUTION OF RAINFALL

Over the State of Victoria during each quarter of the year 1903, with the percentage above or below the corresponding average, based on available records of past years:—

(Above average + ; below average —.)

	First Quarter.		Second Quarter.		Third Quarter.		Last Quarter.		Year.	
	Amount of Rainfall recorded.	Percentage above or below average.	Amount of Rainfall recorded.	Percentage above or below average.	Amount of Rainfall recorded.	Percentage above or below average.	Amount of Rainfall recorded.	Percentage above or below average.	Amount of Rainfall recorded.	Percentage above or below average.
South Western—										
Western Districts .. ..	5·80	+58	8·85	+5	9·65	+6	6·92	+4	31·22	+12
Otway Forest .. ..	7·13	+50	13·93	+11	12·30	-12	8·75	-5	42·11	+4
Central South—										
Counties around Port Phillip Bay	6·40	+30	9·33	+5	7·91	-12	10·46	+23	34·10	+9
South Eastern—										
North and Eastern Gippsland	4·01	-39	6·91	-18	8·54	+3	8·67	-8	28·13	-14
South Gippsland .. ..	7·45	+24	10·52	-11	11·03	-10	9·79	-4	38·79	-4
Northern Country—										
Northern Districts East of the Campaspe River	4·93	-4	8·05	-18	9·03	-4	7·74	+5	29·75	-7
Northern Districts West of the Campaspe River	2·43	-3	6·69	+1	8·32	+37	6·48	+19	23·92	+16
Mallee Country .. ..	1·86	-3	5·03	-3	6·43	+43	4·69	+6	18·01	+12
The State as a whole .. ..	4·14	+3½	7·56	-5½	8·47	+9	7·19	+4	27·36	+2½

The more prominent features, as indicated by the tabular values, may be briefly described as follow:—

In the Western districts, including the basins of the Glenelg, Wannon, Fitzroy, Eumerella, Merrie, and Hopkins Rivers, Mount Emu Creek, Mount Elephant and Lake Corangamite districts, the rainfall was in excess of the average throughout the year. The heaviest rains occurred during the first quarter,

when the average was exceeded by 58 per cent. There was an excess of from 4 to 6 per cent. for the second and third quarters, and the total for the year was 12 per cent. above average. In the Otway forest, the first quarter of the year was very wet, with an excess of 50 per cent. on the average. The records for the remainder of the year differ only slightly from those of normal years, and the total for the whole year was 4 per cent. above average. In the Central Southern districts, which include the basins of the Moorabool, Barwon, Werribee, Saltwater, and Yarra Rivers, the Dandenong Creek, and Koo-wee-rup swamp, the only period of relative dryness was the month of August.

The rainfall of the first and last quarters exceeded the average to the extent of from 23 to 30 per cent. It was 5 per cent. above average in the second, and 12 per cent. below average in the third quarter. The total for the year showed an excess of 9 per cent.

In the districts north of the Dividing Ranges, east of the Campaspe River, the average was not reached in the first three quarters of the year, but was slightly exceeded in the last quarter. The deficiency in the first and third quarters was insignificant, but that of the second quarter, which was the driest in the year, amounted to 18 per cent. The rainfall of the year for these parts of the State was 7 per cent. below average. In the districts north of the Dividing Ranges, west of the Campaspe River, not including the Mallee Country, the rains of the first half-year were from 1 to 3 per cent. within the average. In the latter half of the year the average was considerably exceeded. The record of the third quarter was no less than 37 per cent., that of the last quarter 19 per cent., and that of the whole year 16 per cent. above average.

In the Mallee Country there was an insignificant deficiency of 3 per cent. in the rainfall of the first six months of the year, and an excess in the remainder of the year amounting to 43 per cent. in the third quarter, and 6 per cent. in the last quarter—the year's rainfall being 12 per cent. above average.

On looking at the figures of the last two vertical columns of the table, we observe the following characteristics in the year's rainfall, considered as a whole, apart from seasonal distribution, viz.:—

- (a) That the only serious deficiency was experienced in Gippsland.
- (b) That the whole Western half of the State, including the usually dry areas of the extreme North-west, was favoured by abundant rains considerably above the average.

- (c) That in the North-eastern districts the year's rainfall, notwithstanding that its aggregate amount was 7 per cent. below average, may be regarded as closely approaching to that of ideal years, as a large part of the deficiency occurred in the months of May and August when rain was not wanted.
- (d) That the State as a whole had a record of  $2\frac{1}{2}$  per cent. above the average annual rainfall, which is higher than that of any previous year since 1894.

In regard to rainfall distribution, upon which the success or failure of the seasons depend even more than upon the actual amount recorded, the conditions of the year 1903 were in this respect most satisfactory, as may be gathered from the tables. The surplus of  $2\frac{1}{2}$  per cent. on the year's amount for the whole of the State was largely distributed over the months of March, April, September, and November, these being the months in which plentiful rains are more urgently required in the country than at any other time of the year. The relatively dry months of the year were January, May, and August, and the remaining months did not deviate from the average to an appreciable extent. A peculiar feature of rainfall distribution is the remarkable contrast exhibited in the Southern half of the State when we compare the rainfall of the South-western quarter with that of the South-eastern quarter, or more briefly, the rainfall of the Western district with that of Gippsland. It is found in the majority of cases that to a wet year in the Western districts corresponds a relatively dry year in Gippsland, and vice versa. Also that wet and dry years in the Western districts are accompanied by a prevalence of South-westerly and South-easterly winds respectively, and that the opposite occurs in Gippsland. A similar contrast, but less marked, appears to exist in the two quarters forming the Northern half of the State, namely, that wet years in the North-west correspond to dry years in the North-east, and vice versa; and that these years are found to correspond to a prevalence of North-westerly and North-easterly winds, respectively. These relations are well illustrated by the figures of 1903.

Tempera-  
ture.

The summer months of the year 1903 were comparatively cool, owing to the prevalent cloudiness, Southerly winds, and frequent changes, which prevented long spells of great heat and served to make the climate generally more temperate than usual at this time of the year. Hot winds were less prevalent, and their duration was much shorter than in average years. The extreme temperatures on record were in no case reached, as is shown in the table below.

TABLE GIVING THE HIGHEST TEMPERATURES OF AIR IN SHADE  
For the five warmest months of the year 1903, and the extremes on record for the corresponding month:—

Region.	Highest readings in 1903.					Extremes on record.				
	Jan.	Feb.	Mar.	Nov.	Dec.	Jan.	Feb.	Mar.	Nov.	Dec.
Eastern Ranges ...	o	o	o	o	o	o	o	o	o	o
Highlands ...	95	95	92	85	88	108	107	103	101	105
Coast ...	95	98	91	89	95	109	105	105	103	105
Intermediate Dists.	106	108	100	94	97	111	110	106	106	112
Northern Plains ...	112	116	112	105	110	120	120	115	112	115

In the winter months there were some isolated occasions on which the thermometer fell to the lowest temperatures on record. Owing to the relative dryness of these months, and long spells of clear weather, the occurrence of frosts was more frequent than in normal years, and the mean temperature at night was slightly lower than the average; but the day temperatures were, on the whole, higher than the average, and the number of bright sunny days was unusually large in May, August, and first half of July, which more than compensated the excess of cold at night, and rendered the winter conditions generally healthy and pleasant. The lowest temperatures recorded over the State, and the corresponding extremes on record, are indicated in the subjoined table.

TABLE SHOWING THE LOWEST TEMPERATURE OF AIR AT NIGHT  
For the four coldest months of the year 1903, and corresponding extremes on record:—

Region.	Lowest Temperature in 1903.				Extremes on Record.			
	May.	June.	July.	August.	May.	June.	July.	August.
Eastern Ranges ...	o	o	o	o	o	o	o	o
Highlands ...	24	16	18	19	17	16	17	19
Coast ...	26	19	17	24	18	17	17	19
Intermediate Districts...	37	33	32	35	31	27	27	30
Northern Plains ...	28	28	24	27	27	24	24	27
	28	29	24	24	28	25	23	24

The temperatures of the intermediate seasons were generally in accordance with those of normal years.

The prevalent winds of the year were from the South-west Winds. and North-west quadrants. The frequency of winds from the North-east quadrant was below average, and there was a conspicuous absence of winds from the South-east quarter of the compass. To this distribution of air movements may

be ascribed, as the more immediate cause, the plentiful rains over the Western half of the State, and the drought of Gippsland.

THE MELBOURNE CLIMATE IN 1903.

The summer months.

The predominant feature of the first two months of the year was a prevalence of winds blowing from between West and South.

The distribution of air movement in the two months may be represented as follows:—

	Hours.
Duration of winds blowing from between South and West...	824
"    "    dead calms ... ..	78
"    "    winds from all other directions ... ..	514

In the last two months of the year:—

	Hours.
Duration of winds blowing from between South-east and South-west	1,045
"    "    dead calms ... ..	53
"    "    winds blowing from all other directions ... ..	366

The effect of this great prevalence of cool, moist winds was to increase cloudiness, humidity, and rainfall, and to decrease the duration of bright sunshine, spontaneous evaporation, and temperatures. All these conditions were in fact concurrent in reducing the characteristics of summer to those of the more temperate seasons of the year. Thus:—

The amount of cloudiness	was 12 per cent. above average
The humidity of the atmosphere	" 2 " " " "
The rainfall	" 9 " " " "
The duration of sunshine	" 12 " " below "
Evaporation	" 9 " " " "

The average maximum temperature of the day was 74·6°, and the average lowest temperature of the night was 55·1°.

The absolute extremes of temperature of air in shade, ground temperature at night, and solar radiation, are as follow:—

Highest thermometer reading in shade	105·0, or 6·2 below the extremes on record
Lowest " " " " "	41·9, or 5·4 above " "
Lowest ground temperature...	34·0, or 9·4 above " "
Highest reading of solar radiation	165·3, or 13·2 below " "

In the four summer months the temperature of air in shade rose above 100° on 4 days; above 90° on 9 days; above 80° on 18 days; and there were 51 days during which it did not reach 70°.

The thermometer remained above 70° during one night only, and fell below 50° on 19 nights. It oscillated between the limits of 70° and 60° on 27 nights, and between 60° and 50° on 73 nights, out of a total of 120 nights.

Such temperatures represent more nearly the ideal conditions of the autumn and spring months than those of summer.

The months of March, April, and September were characterized by an excess of cloudiness and of rainfall, and a deficiency of sunshine. The month of October was a fine bright month, closely approaching a normal October. In other respects such meteorological elements as atmospheric pressure, wind, temperature, and humidity, followed their natural course within a range of variation from their average values, which was generally more moderate than in normal years. There was no conspicuous preponderance of winds from any one particular direction, excepting in September, when Northerly winds were considerably more frequent than winds from other quarters. The average temperatures of the days and of the nights were both slightly higher than usual, and the extremes were in every case within many degrees of the extreme values on record.

The autumn  
and spring  
months.

The actual values are as follow:—

- Mean temperature of air in shade at the hottest time of the day, 69·3 deg., or 1 deg. above average.
- Mean temperature of air in shade at the coldest time of the night, 51·2 deg., or 1·5 deg. above average.
- Highest temperature of air in shade recorded in Spring and Autumn of 1903, 99·8 deg., or 5·7 deg. below the highest on record.
- Lowest temperature of air in shade recorded in Spring and Autumn of 1903, 40·8 deg., or 8·7 deg. above the lowest on record.
- Highest reading of black bulb thermometer in the sun, 155·0 deg., or 9·5 deg. below the highest on record.
- Lowest reading of ground thermometer at night, 28·2 deg., or 3·2 deg. above the lowest on record.

The thermometer rose above 90° on 4 days, above 80° on 20 days, above 70° on 24 days, above 60° on 51 days, and there were 23 days only in which the day temperature remained below 60°. In regard to the temperature at night, the thermometer fell below 40° on 4 nights, and remained above 70° on 2 nights; it oscillated between 40° and 50° on 50 nights, and between 50° and 60° on 55 nights.

The atmospheric pressure during these months followed a regime more usually appropriate to the summer, just as its regime in the previous summer had been more appropriate to the winter, thus creating a reversal of conditions, not frequently experienced in Victoria, which possesses the remarkable and beneficial property of moderating the extreme characteristics of these extreme seasons. Antarctic cyclones, or low pressure systems, which almost entirely govern the winter weather in Southern Victoria, maintained their track in the Southern Ocean, along a parallel of latitude appreciably further South from our coast than their usual Northern limit

The cold  
months,  
May, June,  
July, and  
August.

at this time of the year, in consequence of which the influence of these systems on the land became greatly reduced, and the atmosphere distributed itself at a higher level and more uniformly than the barometer readings of ordinary winters indicate. The immediate effect of this distribution was a marked prevalence of Northerly winds, which in their turn influenced all other meteorological factors of the season.

	Hours.
The duration of wind from between North-east and North-west was	1,628
Duration of calms ... ..	248
Duration of winds from all other directions ... ..	1,076

Winter  
rainfall.

In regard to rainfall, the month of May was normal, June relatively wet, July relatively dry, and August exceptionally dry. The rainfall of August was under half an inch, or 75 per cent. below average. The total rainfall for the four months was 6·91 inches, or 12 per cent. below average. There was a general impression that the Melbourne winter of 1903 was unusually severe, especially in regard to the frequency of fogs and frosts, but in reality it was not so, either in Melbourne or in the greater part of the State, as the values of the elements differ only in a slight degree from the normal values, and do not in any case reach the limits of past records. Thus, the occurrence of frosts was recorded on 15 nights, and fogs on 14 nights, these numbers being quite near the average. We have also for the four cold months:—

	Deg.
Mean temperature for the four cold months ... ..	49·0
Average highest temperature of the day for the four cold months ...	56·8
Average lowest temperature of the night " " " " ...	42·7
Average daily range from the warmest part of the day to the coldest part of the night for the four cold months	14·1

These figures are slightly below average, the greatest difference being 1·3°; but they are 2° higher than the lowest limits on record, and the daily range is 4° below that which has been experienced in some previous years. Further, the temperature of air at the coldest hour of the night fell below freezing point 3 times, and below 40° 34 times. It rose above 40° on 75 nights, and above 50° on 11 nights. The lowest temperature recorded was 28·4°, which is 1·4° higher than the lowest reading on record. The long spells of bright, sunny weather which prevailed over the greater part of the State did not always extend to Melbourne. We had here a slight deficiency, about 9 per cent., below the normal duration of sunshine, and an increase of 5 per cent. on the average amount of cloudiness. The more marked effect of this, however, was only to prevent the occurrence of abnormally warm days, and to raise the night temperatures. There were only 6 scattered days during which the thermometer failed to reach 50°, and only one day when it rose above 70°. It oscillated between

60° and 70° on 28 days, and between 50° and 60° on 88 days. Thus, it will be seen that the Melbourne winter of 1903 was free from severe extremes, relatively mild, healthy, and characteristic of normal winters in our latitude.

The table below contains the values of the principal meteorological elements for the whole year 1903, with the corresponding averages and extremes based on the

Climatic elements

OBSERVATORY RECORDS OF 48 YEARS.

Meteorological Elements.	Year 1903.	Average for 48 Years.	Extreme between which the Average Values have oscillated in 48 years.	
			Highest.	Lowest.
Mean atmospheric pressure (inches) ...	29.923	29.936	...	...
Highest " " ...	30.506	30.678	...	...
Lowest " " ...	29.277	28.868	...	...
Range ... ..	1.229	1.364	1.719	1.169
	0	0	0	0
Mean temperature of air in shade, Faht.	57.0	57.4	58.7	56.3
Mean daily maximum ...	66.9	67.3	69.0	65.8
Mean daily minimum ...	49.7	49.3	51.2	47.2
Absolute maximum ...	105.0	102.6	111.2	96.6
Absolute minimum ...	28.4	31.6	33.9	27.0
Mean daily range ...	17.2	18.0	20.3	14.6
Absolute annual range ...	76.6	74.3	82.6	66.0
Solar radiation (maximum) ...	165.3	139.3	178.5	108.6
Terrestrial radiation (minimum) ...	20.5	33.0	46.2	20.4
Rainfall (in inches) ...	28.43	25.55	44.25	15.61
Number of wet days ...	130	132	165	102
Year's amount of free evaporation (in inches)	36.078	37.5	45.65	31.59
Percentage of humidity (saturation=100)	72%	72	...	...
Cloudiness (scale 10 = overcast, 0 = clear)	6.2	5.9	...	...
Duration of sunshine (number of hours)	1,803	1,997	...	...
Number of days of fog ...	16	17	...	...

(1.) Pressure of Air.—Under this heading are given, for each month, the mean, the highest, and the lowest readings of a standard barometer, placed at an elevation of 93 feet above mean sea level, the readings being reduced to the temperature of freezing point. The daily means from which the monthly mean is computed are based on three observations made each day, at 9 a.m., 3 p.m., and 9 p.m., Melbourne Mean Time.

Explanation of Table I, *infra*.

(2.) Temperature of Air in Shade.—The eight columns under this heading give respectively:—

(a) The mean for each month, as computed from the daily means, which are based on three observations made each day, at 9 a.m., 3 p.m., and 9 p.m.

- (b) The monthly average of the highest temperature recorded every day, technically called "Mean of Daily Maxima," or more briefly, Mean Max.
- (c) The monthly average of the lowest temperature recorded each night, technically called "Mean of Daily Minima," or more briefly, Mean Min.
- (d) The average daily range, viz., the monthly mean of the daily differences between the highest and the lowest temperature of air in shade observed each day.
- (e) The highest and the lowest readings of the thermometer observed in each month, with the dates on which these extremes occurred.

(3.) Solar Radiation.—The three columns under this heading give respectively:—

- (a) The monthly mean of the highest readings, shown by a black bulb thermometer in vacuo, on each day in the corresponding month, popularly known as "the heat in the sun."
- (b) The highest reading registered by the black bulb thermometer in each month, with date on which it occurred.

These values represent the varying heating powers of the solar rays after passing through the atmosphere.

(4.) Terrestrial Radiation.—Under this heading are given:—

- (a) The monthly mean of the lowest readings shown each night in the corresponding month, by a self-registering thermometer placed horizontally near the surface of the ground on top of short grass.
- (b) The lowest reading registered in each month, with date on which it occurred.

(5.) Mean Humidity.—The values in this column show the average monthly amount of invisible water vapour which the atmosphere actually contained, expressed as a percentage of the maximum amount which it could have held, or would have required to become saturated, under the same conditions of temperature.

(6.) Spontaneous Evaporation.—In this column are given the values representing the height in inches of a layer of water which was lost in each month of the year, through evaporation, at the free surface of water contained in a cistern fully exposed in the open, slightly below the surface of the ground. These values serve to give an approximate idea of

the amount of water which passes from the free surface of rivers, lakes, ponds, &c., into the atmosphere, in the state of water vapour, under the conditions of the Melbourne climate.

(7.) Cloud.—The amount of cloud at any moment is usually expressed by a number, in the series 0 to 10, which is intended to represent the proportion of the area covered by cloud at the time of observation to the area of the whole visible sky. Thus, 0 indicates total absence of cloud, 10 an entirely overcast sky, and intermediate numbers partial cloudiness. Several observations are made daily, from which the average cloudiness of each day is computed. The monthly values given in this column are the means of the daily values in the corresponding months.

(8.) The Rainfall.—Number of wet days and of foggy days, are given in the next 3 columns, which do not require explanation.

(9.) Number of hours of sunshine.

(10.) The number of hours during which the wind blew from each of the principal 8 points of the compass, and the duration of calms.

(11.) The mean velocity of winds, in miles per hour.—The quantities given in this, the last column of the Table I., represent the velocity of a steady flow, which, if continued uniformly throughout a month, would be equivalent to the total motion of air actually registered in that month.

In this table, which is based on all available records of past years, it is only necessary to explain the process by which the three different sets of values, namely, "Average," "Highest," and "Lowest," as set down for each month and for each element, have been arrived at.

Explanation  
of Table II.  
*infra.*

We may take as an example the element, "Absolute Maximum Temperature of Air in Shade" for January. We have on the Observatory register 48 values of the highest temperature recorded in the month of January during the past 48 years; the mean of all these values is  $102\cdot6^{\circ}$ , which is the average absolute maximum temperature for January. But amongst the same 48 values we find one of  $111\cdot2^{\circ}$ , which is the greatest, and another  $94\cdot7^{\circ}$ , which is the smallest of all. Thus, we say in regard to this particular element, that the highest temperature of air in shade at Melbourne in the month of January is on an average  $102\cdot6^{\circ}$ , but there have been other years in which it has been as high as  $111\cdot2^{\circ}$ , or as low as  $94\cdot7^{\circ}$  in January. These are the three values given in the table as the Average, Highest, and Lowest for the Absolute Maximum for January. The same reasoning applies to all the elements throughout the table.

TABLE I.—MELBOURNE CLIMATE. METEOROLOGICAL MEANS AND EXTREMES FOR EACH MONTH OF THE YEAR 1903.

Month.	Pressure of Air.			Temperature of Air in Shade.								Solar Radiation.			Terrestrial Radiation.		
	Mean.	Highest	Lowest.	Mean.	Mean Max.	Mean Min.	Mean Daily Range.	Absolute Extremes.				Mean.	Highest	Date.	Mean.	Lowest.	Date.
								Highest	Date.	Lowest.	Date.						
January ...	29 893	30 245	29 365	65.2	77.3	55.5	21.8	105.0	31st	48.8	22nd	140.5	162.0	17th	48.0	40.2	25th
February ...	29 839	30 084	29 281	64.4	76.3	56.0	20.3	104.4	9th	42.7	1st	140.3	165.3	1st	46.6	36.3	7th
March ...	29 873	30 253	29 442	64.8	77.1	55.4	21.7	99.8	2nd	43.2	24th	132.8	155.0	2nd	47.4	33.1	25th
April ...	29 929	30 187	29 449	57.5	67.0	51.3	15.7	88.5	10th	44.4	16th	122.5	141.8	3rd	43.4	33.0	9th
May ...	30 105	30 443	29 535	51.4	58.9	45.6	13.3	71.2	6th	33.4	28th	106.1	129.0	6th	37.5	24.2	29th
June ...	29 971	30 506	29 529	48.0	54.6	42.8	11.8	60.1	30th	33.1	24th	98.8	115.6	5th	36.0	25.8	28th
July ...	29 939	30 315	29 347	47.1	55.6	41.3	14.3	68.2	1st	28.4	11th	104.3	121.2	13th	34.2	20.5	12th
August ...	30 044	30 348	29 640	49.4	58.2	41.1	17.1	67.8	31st	30.3	29th	114.3	127.8	31st	33.7	23.5	29th
September ...	29 829	30 169	29 447	53.3	62.7	47.5	15.2	80.2	11th	34.4	15th	121.1	141.7	26th	40.6	28.2	21st
October ...	29 944	30 295	29 512	59.0	70.2	50.8	19.4	87.7	11th	40.8	3rd	132.3	149.8	31st	43.8	31.6	3rd
November ...	29 914	30 235	29 560	62.0	72.2	53.6	18.7	93.9	25th	41.9	13th	129.5	156.1	25th	46.6	34.0	13th
December ...	29 801	30 059	29 277	62.0	72.7	55.5	17.2	95.6	26th	45.5	4th	135.0	152.2	26th	50.4	38.4	10th

Month.	Mean Humidity per cent. — Satn. = 100	Amount of—			No. of Days of—		No. of Hours of Sunshine.	Number of Hours during which the Wind blew from—								Calm.	Mean Velocity in miles per hour.
		Spontaneous Evaporation	Cloud. — Scale 0 to 10.	Rain in inches.	Rain.	Fog.		N.	N.W.	W.	S.W.	S.	S.E.	E.	N.E.		
January ..	0.63	5.797	4.7	0.94	4	0	242	30.5	44.5	101.0	149.0	189.0	111.0	33.0	41.0	45.0	8.9
February ...	0.63	4.714	5.3	1.36	8	1	187	48.0	59.0	107.5	117.0	161.0	89.5	17.5	39.0	33.5	8.6
March ...	0.67	3.671	5.8	2.93	9	1	164	130.0	55.5	139.0	83.0	74.0	86.0	59.0	58.5	59.0	7.4
April ...	0.74	2.456	7.3	3.76	16	0	107	162.5	59.5	90.5	91.5	105.5	30.0	28.5	82.0	70.0	7.7
May ...	0.83	1.232	7.1	1.94	12	5	88	92.5	66.5	121.0	119.0	75.5	64.0	37.0	84.0	84.5	6.2
June ...	0.81	1.033	7.7	3.35	16	4	71	265.5	100.5	95.5	33.5	9.0	25.0	26.0	126.0	39.0	8.0
July ...	0.80	0.891	6.7	1.14	13	2	105	190.0	84.0	74.0	67.5	16.5	20.5	41.0	173.0	77.5	6.4
August ...	0.72	1.391	5.4	0.48	8	3	130	242.0	119.0	80.0	33.5	28.0	50.0	59.0	85.0	47.5	8.5
September ...	0.70	2.450	6.6	3.18	11	0	119	178.0	93.0	65.5	94.0	89.0	68.0	35.5	65.5	31.5	10.3
October ...	0.71	3.537	5.9	2.77	14	0	200	136.5	51.0	69.0	98.5	139.0	53.0	24.0	145.0	28.0	8.0
November ...	0.70	4.181	6.2	4.28	10	0	184	79.5	34.5	33.5	96.5	163.0	151.5	50.0	86.0	25.5	8.4
December ...	0.74	4.725	6.2	2.30	9	0	206	48.5	28.5	110.0	166.0	190.0	136.5	17.5	19.5	27.5	9.2

TABLE II.—CLIMATE OF MELBOURNE. CLIMATOLOGICAL TABLE, BASED ON THE RECORDS OF THE MELBOURNE OBSERVATORY FOR THE PERIOD 1858-1903.

Meteorological Elements.	January.	February.	March.	April.	May.	June.	July.	August.	September.	October.	November.	December.	Year.
Pressure of Air—													
Mean for each month	29·883	29·885	29·964	30·034	30·025	29·995	30·023	29·983	29·920	29·884	29·875	29·820	29·936
Highest recorded in each month	30·265	30·413	30·456	30·502	30·673	30·664	30·610	30·582	30·610	30·489	30·385	30·281	30·678
Lowest recorded in each month	29·135	29·199	29·342	29·233	29·051	29·119	29·165	29·033	29·030	29·002	29·123	28·868	28·868
Range { Average ..	0·767	0·744	0·707	0·804	0·903	0·969	0·974	0·992	0·965	0·916	0·795	0·849	1·361
{ Highest ..	1·071	0·998	1·039	1·143	1·399	1·298	1·399	1·503	1·337	1·346	1·081	1·309	1·709
{ Lowest ..	0·564	0·511	0·489	0·542	0·551	0·667	0·677	0·667	0·665	0·695	0·554	0·645	1·169
Temperature of Air in Shade—													
Mean for each month	66·2	66·3	63·8	58·6	53·2	49·7	47·6	50·3	53·1	56·7	60·5	63·6	57·4
Highest ..	71·5	73·3	67·8	60·8	56·4	53·4	50·8	53·0	55·5	59·5	64·1	68·5	58·7
Lowest ..	60·6	62·7	59·8	54·6	50·9	46·4	45·3	47·1	50·3	53·5	56·8	57·9	56·3
Absolute Maximum for each month	102·6	100·1	95·5	84·7	71·7	64·0	63·1	69·2	74·6	84·5	93·4	99·1	102·6
Highest ..	111·2	109·5	105·5	94·0	82·1	68·1	68·4	77·0	81·8	96·1	105·7	110·7	111·2
Lowest ..	94·7	89·6	86·7	74·0	66·0	57·5	58·7	61·9	71·0	73·8	88·5	86·6	96·6
Absolute Minimum for each month	47·2	45·9	44·3	41·3	36·8	33·6	31·5	33·4	35·6	33·3	41·9	45·3	31·5
Highest ..	52·0	53·5	51·4	45·5	42·0	38·0	39·0	39·6	41·5	42·8	45·5	48·8	33·9
Lowest ..	42·0	40·3	37·1	34·8	31·3	28·0	27·0	28·3	32·1	32·1	36·5	40·0	27·0
Mean of daily	78·1	77·8	74·8	68·6	61·4	56·8	55·5	58·8	62·7	67·1	71·3	75·3	67·3
Highest ..	85·2	86·4	79·2	73·3	67·4	61·8	58·2	61·6	65·4	71·1	78·1	81·2	69·0
Lowest ..	73·0	72·4	69·2	62·5	58·3	52·9	52·2	56·0	59·3	63·5	66·9	70·1	65·8
Maximum of daily	56·4	56·6	54·0	50·6	46·5	43·8	41·4	43·1	45·4	48·1	51·0	53·7	49·3
Average ..	60·4	62·2	61·7	54·7	49·4	49·2	45·6	45·8	48·5	50·8	53·8	57·6	51·2
Highest ..	60·4	62·2	61·7	54·7	49·4	49·2	45·6	45·8	48·5	50·8	53·8	57·6	51·2
Lowest ..	53·2	52·5	50·3	47·4	43·4	40·7	38·3	39·7	43·1	45·4	46·6	50·4	47·2
Mean daily range in	21·7	21·2	20·2	18·0	14·9	13·0	14·1	15·7	17·3	19·0	20·4	21·5	18·0
Highest ..	26·2	26·7	24·1	24·2	20·2	17·5	17·6	19·5	20·5	23·2	27·2	27·8	20·3
Lowest ..	16·8	16·4	15·9	12·4	11·1	7·7	10·3	12·7	13·7	15·6	15·1	16·2	14·6
Monthly range { Average ..	55·4	53·2	51·2	43·6	34·9	30·3	31·6	35·8	40·5	46·2	51·5	53·7	..
{ Highest ..	63·6	68·6	62·2	58·9	47·0	37·0	39·8	45·3	47·9	59·6	64·2	69·1	..
{ Lowest ..	45·2	38·4	39·6	23·8	24·8	25·3	23·4	26·0	34·6	33·4	40·9	41·9	..

*Production.*

TABLE II.—CLIMATE OF MELBOURNE. CLIMATOLOGICAL TABLE.—Continued.

Meteorological Elements.	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.	Year.
Temperature of Air—	o	o	o	o	o	o	o	o	o	o	o	o	o
Terrestrial Average	39.6	39.3	36.6	34.7	30.6	27.7	25.5	27.4	29.5	31.4	34.9	38.1	24.7
Radiation Highest	45.6	46.2	44.2	41.0	36.0	32.7	29.3	34.2	34.4	39.2	40.6	45.0	28.4
Lowest	30.2	30.9	28.9	25.0	23.2	20.4	20.5	21.3	25.3	25.9	24.6	34.0	20.4
Solar Average	158.7	155.8	150.9	140.5	127.4	118.3	117.7	125.9	124.1	142.8	149.9	153.3	161.2
Radiation Highest	178.5	167.5	164.5	152.0	140.6	128.5	125.3	137.4	141.7	154.3	159.6	170.3	178.5
Lowest	144.6	143.0	139.9	129.7	117.5	108.6	109.0	115.5	121.1	136.8	139.7	142.3	108.6
Monthly Amount of Registered Rainfall	in. 1.83	in. 1.70	in. 2.15	in. 2.46	in. 2.13	in. 2.08	in. 1.83	in. 1.79	in. 2.34	in. 2.71	in. 2.30	in. 2.25	in. 25.61
Highest	6.83	6.78	6.36	6.71	6.94	5.22	7.02	7.62	5.87	7.61	12.13	7.18	44.25
Lowest	0.04	0.03	0.16	0.57	0.45	0.60	0.49	0.48	0.61	0.28	0.25	0.17	15.61
Number of Days of Rain Recorded in Each Month	Average 7	7	8	11	13	13	15	13	14	13	11	9	132
Highest	14	15	19	19	20	21	20	18	22	21	16	20	165
Lowest	1	1	3	5	6	7	7	7	8	7	3	4	102
Amount of Evaporation at a Free Water Surface for Each Month	in. 6.37	in. 5.00	in. 3.86	in. 2.26	in. 1.49	in. 1.11	in. 1.07	in. 1.47	in. 2.29	in. 3.29	in. 4.49	in. 5.71	in. 38.24
Highest	8.33	6.88	5.15	2.99	2.69	2.31	1.66	2.11	3.23	5.80	5.79	7.50	45.65
Lowest	4.84	3.34	2.79	1.57	0.97	0.61	0.66	1.03	1.64	2.56	3.19	3.70	31.69
Percentage of Humidity Saturation = 100	Average 0.64	0.65	0.68	0.73	0.79	0.80	0.80	0.75	0.72	0.70	0.67	0.65	0.72
Highest	0.72	0.75	0.75	0.84	0.86	0.88	0.88	0.81	0.81	0.79	0.75	0.72	0.76
Lowest	0.57	0.54	0.61	0.63	0.70	0.75	0.74	0.65	0.63	0.64	0.59	0.55	0.67
Mean Daily Amount of Cloudiness	Average 5.1	5.2	5.5	5.8	6.5	6.6	6.3	6.3	6.1	6.0	5.9	5.6	5.9
Highest	6.7	6.8	7.4	7.7	8.0	7.7	7.5	8.0	7.4	7.1	7.2	6.9	6.4
Lowest	3.9	3.2	3.7	3.1	4.7	3.2	5.1	4.7	5.0	4.8	4.7	3.8	5.4
Mean Daily Duration of Sunshine in Hours	Average h.m. 3.16	h.m. 7.36	h.m. 5.40	h.m. 4.37	h.m. 3.38	h.m. 2.57	h.m. 3.19	h.m. 4.11	h.m. 4.55	h.m. 5.43	h.m. 7.16	h.m. 7.51	h.m. 5.33
Highest	9.57	9.12	3.19	5.56	4.59	4.5	5.16	5.32	6.21	7.18	9.1	9.57	9.57
Lowest	6.33	5.32	4.18	2.13	2.18	1.14	2.3	2.34	3.35	4.13	6.6	6.5	1.14
Total Number of Hours of Sunshine in Each Month.	Average 256.25	214.6	175.16	138.0	112.52	89.12	103.43	130.15	147.40	181.37	218.14	242.36	2010.2
Highest	309	258	241	178	154	123	164	172	191	274	266	308	2335
Lowest	203	155	133	66	71	37	64	80	107	131	180	188	1738
Number of Days of Fog	Average 0.1	0.4	0.6	1.6	2.8	4.0	4.0	2.0	0.7	0.4	0.2	0.2	16.9
Highest	2	3	2	7	10	14	11	8	6	2	2	4	39
Lowest	0	0	0	0	0	0	1	0	0	0	0	0	5

## MINING.

In addition to the sums annually voted in aid of the mining industry of the State, the sum of £266,021 was authorized to be raised by way of loan, of which £264,064 was apportioned. Of this latter sum, £262,869 was expended up to 30th June last, leaving £1,195 of the apportioned money unexpended. The amount of loan money spent during 1902-3 was £33,232.

Expenditure  
in aid of  
mining  
industry.

The following table gives particulars of the expenditure from votes in aid of the mining industry during each of the five financial years ended with 1902-3:—

EXPENDITURE ON MINING: RETURN FOR FIVE YEARS.

	1898-9.	1899-1900.	1900-1.	1901-2.	1902-3.
	£	£	£	£	£
Mining Boards ... ..	3,500	3,500	3,500	3,500	3,500
Victorian Coal—Allowance to Railway Department on Carriage of Diamond Drills for Prospecting ...	13,513	15,000	13,146	9,946	5,568
Purchase of Miners' Rights and Railway Passes for Unemployed Miners	2,025	2,210	2,294	2,546	2,798
Ventilation of Mines—Testing Schemes for	1,879	1,856	1,822	...	...
Cyanide Patent—Cost of Opposing Amendment	...	833	332	...	...
	...	...	3,806	...	...
Total ... ..	20,917	23,399	24,900	15,992	11,866

The allowance to the mining boards remains the same as in previous years. A very considerable reduction (£4,378) has been made in the past year in the allowance to the Railway Department for the carriage of Victorian coal. A small increase (£252) has been made in the allowance for diamond drills and prospecting. All other allowances have disappeared from the 1903 returns.

The following table shows the quantity and value of the metals and minerals produced in Victoria up to the end of 1903:—

Mineral  
produce.

## MINERAL PRODUCE.

Mineral.	Recorded prior to 1903.		Recorded during 1903.		Total recorded to end of 1903.	
	Quantity.	Value.	Quantity.	Value	Quantity.	Value.
Gold	ozs. 65,913,912	£ 263,456,419	ozs. 822,424	£ 3,262,282	ozs. 66,736,336	£ 266,718,701
Silver	{ 27,184 1,105,751*	{ 7,446 175,699*	{ ... 40,533*	{ ... 4,898*	{ 27,184 1,146,284*	{ 7,446 180,597*
Coal, black	tons. 2,173,058	1,198,208	64,200	40,818	2,237,258	1,239,026
„ brown	42,705	16,730	5,661	2,827	48,366	19,557
Lignite	12,923	3,086	...	...	12,923	3,086
Ore—copper	17,445	206,395	25	500	17,470	206,895
„ tin	14,988	715,998	33	2,165	15,021	718,163
„ antimony	22,922	177,174	5	50	22,927	177,224
„ silverlead	793	5,760	...	...	793	5,760
„ iron	5,434	12,540	...	...	5,434	12,540
Diamonds	...	108	...	...	...	108
Sapphires, &c.	...	630	...	...	...	630
Gypsum	3,325	4,127	3,590	897	6,915	5,024
Magnesite	6	12	...	...	6	12
Kaolin	1,983	7,504	...	...	1,983	7,504
Infusorial earth	1,160	4,710	400	2,400	1,560	7,110
Clays—brick	...	224,898†	...	7,500	...	232,398†
„ pottery	...	47,945†	...	7,500	...	55,445†
Building stones, various	...	3,080,119†	...	42,649	...	3,122,768†
Total	...	269,345,508	...	3,374,486	...	272,719,994

The total quantity of gold obtained from the Victorian mines in 1903 was 822,424 ounces. Of this amount, 819,714 ounces were received at the Melbourne Mint during the year, and 2,710 ounces of unmined gold was added to that held by the banks at the end of the previous year. The value of the gold received by the Mint was £3,251,532; that added to the banks' stocks, £10,750; and the total value was £3,262,282. This value was based on the average value of the gold received at the Melbourne Mint, viz., £3 19s. 4d. per ounce. During the six months ended June, 1904, the yield amounted to 395,466 ounces, showing an increase of 14,274 ounces, compared with the corresponding period of 1903.

Gold raised,  
1871 to  
1903.

From 1871 to 1891 the quantity of gold raised gradually diminished, with little intermission, from over 1,300,000 ozs. to only 576,000 ozs., but since then there has been a steady annual increase, until 854,500 ozs. was raised in 1899, which was the largest production since 1882. However, since 1899, the production has decreased each year to 777,388 ozs., in 1902; but a substantial increase has taken place in 1903, when the yield was 822,424 ozs.

\* Extracted from gold at the Mint.\*

† From 1866 only.

In the following return will be found the yield of gold from alluvial workings and from quartz reefs during 1903, in the more important mining districts of the State, as estimated by mining registrars:—

Yields,  
alluvial  
and quartz.

GOLD DERIVED FROM ALLUVIAL WORKINGS AND QUARTZ REEFS.

Mining District.	Alluvial.	Quartz.	Total.
	oz.	oz.	oz.
Ararat and Stawell ...	19,048	12,182	31,230
Ballarat ...	58,063	116,753	174,816
Beechworth ...	76,449	40,437	116,886
Bendigo ...	9,861	214,886	224,747
Castlemaine ...	20,119	54,204	74,323
Gippsland ...	5,283	56,504	61,787
Maryborough... ..	43,336	47,093	90,429
Total ... ..	232,159	542,059	774,218

The following table shows the import and export of bullion and specie during 1903:—

IMPORT AND EXPORT OF BULLION AND SPECIE, 1903.

	Imports.	Exports.
Gold—		
Bullion ... ..	£ 1,057,803	£ 716,234
Coin ... ..	10,000	4,704,740
Silver—		
Bullion ... ..	1,656	319
Coin ... ..	17,346	7,660
Bronze—		
Coin ... ..	1,000	367
Total ... ..	1,087,805	5,429,320

At Bendigo ten mine shafts were over 3,000 feet in depth on 31st March, 1903, namely, the Victoria Quartz, 3,740 feet; the Lazarus New Chum, 3,777 feet; the New Chum Railway, 3,896 feet; the Shenandoah, 3,226 feet; the New Chum and Victoria, 3,175 feet; Lansell's 180, 3,354 feet; New Chum Consolidated, 3,099 feet; North Johnson's, 3,087 feet; Great Extended Hustler's, 3,081 feet; and the Eureka Extended, 3,060 feet.

Mining—  
deep shafts

The following is a return showing the value of machinery used in alluvial and quartz mining during the five years ended 1903:—

VALUE OF MACHINERY ON GOLDFIELDS: RETURN FOR FIVE YEARS.

Year.	Approximate Value of Machinery Employed in—		
	Alluvial Mining.	Quartz Mining.	Total.
	£	£	£
1899 ... ..	511,810	1,402,460	1,914,270
1900 ... ..	562,690	1,375,350	1,938,040
1901 ... ..	534,420	1,446,140	1,980,560
1902 ... ..	523,320	1,435,240	1,958,560
1903 ... ..	566,445	1,474,245	2,040,690

Gold miners,  
1899 to 1903.

The number of miners actually at work on the goldfields is estimated annually by the Mining Department, and the figures for the five years ended with 1903 are subjoined:—

Year.	Alluvial Miners.	Quartz Miners.	Total.
1899 ... ..	14,123	15,991	30,114
1900 ... ..	12,836	16,199	29,035
1901 ... ..	12,886	14,891	27,777
1902 ... ..	11,963	14,140	26,103
1903 ... ..	11,158	14,694	25,852

Gold raised  
in Austral-  
asia.

Since the first discovery, in 1851, of gold in Australasia, nearly 129 million ozs. have been raised in the various States, over one-half of which was got in Victoria. Prior to 1898, Victoria was almost invariably the leading gold-producing State of the group, but in 1903 its yield was about 99,000 ozs. less than in Queensland, and 1,600,000 ozs. less than in Western Australia, which has in recent years increased its production by leaps and bounds from 110,000 ozs. in 1893 to nearly two and a half million ounces in 1903. The following is a statement of the quantity recorded as having been raised in the respective States at different periods:—

#### GOLD RAISED IN AUSTRALASIA, 1851 TO 1903.

Period.	Victoria.	New South Wales.	Queens- land.	South Aus- tralia.	Western Australia.	Tasmania.	New Zealand.
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
1851-55...	10,281,303	1,920,200	...	...	...	...	...
1856-60...	13,052,960	1,360,763	4,127	...	...	...	35,845
1861-65...	8,694,194	2,233,001	52,580	...	...	...	2,288,088
1866-70...	7,582,372	1,309,911	512,803	...	...	3,504	3,218,916
1871-75...	6,036,776	1,613,049	1,319,952	24,685	...	25,296	2,412,446
1876-80...	4,119,521	640,210	1,668,819	59,910	...	154,883	1,596,899
1881-85...	3,992,077	626,931	1,327,366	88,366	...	235,973	1,237,456
1886-90...	3,111,371	546,954	2,598,254	130,218	46,967	169,017	1,028,571
1891 ...	576,399	153,583	576,439	35,533	30,311	48,769	251,996
1892 ...	654,456	158,502	615,558	30,218	59,548	45,110	238,079
1893 ...	671,126	179,288	616,940	42,905	110,891	37,230	226,811
1894 ...	716,954	324,787	679,511	42,795	207,131	58,059	221,615
1895 ...	740,086	360,165	631,682	37,054	231,513	54,964	293,491
1896 ...	805,087	296,072	640,385	31,504	281,265	62,591	263,694
1897 ...	812,766	296,416	807,928	33,900	674,994	71,131	251,645
1898 ...	837,257	328,840	920,048	31,961	1,050,184	74,233	280,175
1899 ...	854,500	459,800	946,894	23,122	1,643,877	83,992	389,558
1900 ...	807,407	309,884	963,189	24,087	1,580,950	81,175	373,616
1901 ...	789,562	213,689	835,553	36,958	1,879,390	74,835	455,561
1902 ...	777,738	190,316	860,453	28,199	2,177,442	70,996	508,045
1903 ...	822,424	295,778	921,363	30,000	2,436,311	59,891	533,314

According to the foregoing table, the total quantity of gold raised in each State, from 1851 to 1903, has been as follows:—

Gold produce of Australasia, 1851 to 1903.

SUMMARY OF GOLD RAISED IN AUSTRALASIA, 1851 TO 1903.

	ozs.
Victoria ... ..	66,736,336
Queensland ... ..	17,499,844
New Zealand ... ..	16,105,821
New South Wales ... ..	13,818,139
Western Australia ... ..	12,410,774
Tasmania ... ..	1,411,649
South Australia ... ..	731,415
Total ... ..	128,713,978

Very little work has been done in silver mining in the State. One mine was opened at St. Arnaud some years ago, but, proving unremunerative, was soon closed. Since 12th June, 1872, the date of the opening of the Melbourne branch of the Royal Mint, nearly all the silver produced in Victoria has been extracted from crude gold. Up to the end of 1903, only 27,184 ounces have been obtained from silver mining. The total quantity extracted from gold is 1,146,284 ounces.

The following return shows the quantity of black coal raised in Victoria since 1876. Probably small quantities were obtained from private lands prior to that year, but no returns for these were received:—

BLACK COAL RAISED, 1876 TO 1903.

Year.	Tons.
From 1876 to 31st December, 1890 ...	55,079
1891 ... ..	22,834
1892 ... ..	23,363
1893 ... ..	91,726
1894 ... ..	171,660
1895 ... ..	194,227
1896 ... ..	236,562
1897 ... ..	236,277
1898 ... ..	242,860
1899 ... ..	262,380
1900 ... ..	211,596
1901 ... ..	209,329
1902 ... ..	225,164
1903 ... ..	64,200
Total ... ..	2,237,257

Brown coal raised to date, 48,366 tons.

Many attempts were made to develop the coal industry of the State prior to 1889, but a great impetus was given in that year by the constitution of a Royal Commission, which was appointed to inquire into and report upon the best means

of developing the industry. Several true coal seams, situated in various localities, chiefly in Gippsland, had been discovered, and were brought under the notice of the Commission. In 1890, five diamond drills were employed, and seams were worked at Boolarra and Korumburra, and, in 1891, at Jumbunna. Coal mining at the two latter places was immediately begun, and has been actively carried on ever since. The principal companies concerned in the industry are the Outtrim-Howitt Company, the Jumbunna Company, the Coal Creek Proprietary Company, the Silkstone Company, and the Great Western Colliery.

Output of  
coal com-  
panies,  
1903.

The number of collieries working at the end of 1903 was 5, using engines of 1,531 horse-power, employing 468 hands, and owning plant, land, and buildings of £49,281 value. The particulars of the output of these companies for 1903 are as follow:—

#### OUTPUT OF COAL COMPANIES, 1903.

Company.	Tons.
<b>Black Coal—</b>	
Outtrim-Howitt ... ..	20,602
Jumbunna ... ..	18,517
Coal Creek Proprietary ... ..	20,727
Silkstone ... ..	4,354
Total ... ..	64,200
<b>Brown Coal—</b>	
Great Western Colliery ... ..	5,661

The dividends paid during 1903 were as follow:—

	£
Outtrim-Howitt ... ..	3,739
Jumbunna ... ..	2,250
Total ... ..	5,989

Coal miners,  
1899 to  
1903.

There was a large decrease in the number of men employed in coal mines in 1903, as compared with the four preceding years. This will be seen by the following figures:—

#### NUMBER OF COAL MINERS EMPLOYED: RETURN FOR FIVE YEARES.

Year.	Number of Miners at Work.
1899 ... ..	880
1900 ... ..	807
1901 ... ..	877
1902 ... ..	1,303
1903 .. ..	377

From January, 1903, up to the end of the year, the coal miners of Korumburra, Outtrim, and Jumbunna have been on strike, and the men employed at these mines have been "free labourers." The small number employed in 1903 is owing to want of knowledge on the part of the men and to the interruption of trade caused by the strike. The strike is responsible for the reduction in output from 225,164 tons in 1902 to 64,200 tons in 1903.

The following statement shows the progress of the industry since 1899, also, for comparison, the quantity and value of coal imported in the five years:—

## COAL PRODUCED AND IMPORTED.

Year.	Raised in State.		Imported.		
	Quantity.	Value.	Quantity.	Value.	
				Official.*	Actual.†
	tons	£	tons.	£	£
1899	262,880	113,522	592,676	276,137	352,898
1900	211,596	101,599	690,567	403,723	578,350
1901	209,329	147,191	710,918	446,058	595,394
1902	225,164	155,850	656,656	428,904	533,533
1903	64,200	40,818	796,407	450,781	623,852

During recent years, Victoria has been singularly immune from serious mining disasters. In the last twenty years, the average number of men employed in gold mining was 27,409, and the average yearly number of accidents, 108; 35 persons per annum being killed, and 81 injured, or 1.30 and 2.96 respectively per thousand employed. In coal mining, during the fifteen years, 1889-1903, there were 23 persons killed and 66 injured. Mining accidents.

At the present time, with the exception of South Australia, coal is raised in all the States in the Commonwealth, and in the colony of New Zealand. The following are the Coal raised in Australasia.

\* Value according to Customs Return found by adding 10 per cent. to value in New South Wales as given by importers.

† Estimated value found by adding to cost at Newcastle the actual freight, insurance, primage, &c.

quantities returned as brought to the surface in each of those States and colony of New Zealand during a series of years:—

COAL PRODUCED IN AUSTRALASIA, 1876 TO 1903.

Year.	Tons of Coal raised in—					
	New South Wales.	Queensland.	Western Australia.	Tasmania.	Victoria.	New Zealand.
1876	1,319,918	50,627	...	6,100	1,095	...
1877	1,444,271	60,918	...	9,470	2,420	...
1878	1,575,497	52,580	...	12,311	Nil	162,218
1879	1,583,881	55,012	...	9,514	Nil	231,218
1880	1,466,180	58,052	...	12,219	3	299,923
1881	1,769,597	65,612	...	11,163	Nil	337,262
1882	2,109,282	74,436	...	8,803	10	378,272
1883	2,521,457	104,269	...	8,872	428	421,764
1884	2,749,109	129,980	...	7,194	3,280	480,831
1885	2,878,863	209,698	...	5,334	800	511,063
1886	2,830,175	228,656	...	10,391	86	534,353
1887	2,922,497	238,813	...	27,763	3,357	558,620
1888	3,203,444	311,412	...	41,577	8,573	613,895
1889	3,655,632	265,507	...	40,300	14,596	586,445
1890	3,060,576	338,344	...	53,812	14,601	637,397
1891	4,037,922	271,603	...	45,524	22,334	668,794
1892	3,780,968	257,803	...	35,669	23,363	673,315
1893	3,278,328	264,403	...	34,042	91,726	691,548
1894	3,672,076	270,705	...	30,922	171,660	719,546
1895	3,738,589	323,068	...	33,349	194,227	740,827
1896	3,909,517	371,390	...	43,548	226,562	792,851
1897	4,383,591	358,407	...	42,530	236,277	840,713
1898	4,706,251	407,934	3,250	49,116	242,860	907,033
1899	4,597,028	494,009	54,336	43,113	262,380	975,234
1900	5,507,497	497,132	118,410	50,811	211,596	1,093,990
1901	5,968,426	539,472	117,836	49,176	209,329	1,227,638
1902	5,942,111	501,531	140,884	49,898	225,164	1,362,702
1903	6,354,846	507,801	*	51,805	64,200	1,420,193

VALUE OF AGRICULTURAL DAIRYING AND MINING INDUSTRIES,  
1902-3 AND 1903-4.

In the following return a comparison in the value of agricultural, dairying, and mining industries is made, between the years 1902-3 and 1903-4. In 1902-3, the value of the agricultural produce was returned as £6,953,145; in 1903-4, the value was £8,512,125. The dairying produce was £2,406,373 in the former, and £2,651,959 in the latter of the two years. The mining produce was £3,300,479 in 1902-3, and £3,374,486 in 1903-4. The total value of these industries was thus £12,660,431 in 1902-3, and £14,548,570 in 1903-4.

\* Not available.

VALUE OF AGRICULTURAL, DAIRY, AND MINING PRODUCE.

	Produce.		Value.	
	1902-3.	1903-4.	1902-3.	1903-4.
<i>Agricultural.</i>				
Wheat ... .. bush.	2,569,364	28,525,579	£ 770,809	£ 3,803,411
Oats ... .. "	4,402,982	13,434,952	710,898	752,716
Barley, Malting ... .. "	394,877	878,721	88,436	126,316
" Other ... .. "	166,267	339,282	30,482	30,394
Maize ... .. "	750,524	904,239	193,104	82,889
Other Cereals ... .. "	163,067	243,321	32,613	36,649
Grass and Clover Seed ... .. "	15,837	35,661	3,167	7,130
Potatoes ... .. tons	168,759	167,736	453,539	246,713
Onions ... .. "	27,467	25,218	82,401	49,175
Other Root Crops ... .. "	23,022	35,062	37,546	44,802
Hay ... .. "	601,272	1,233,063	3,008,865	1,674,911
Green Forage* ... .. acres	31,145	33,165	70,076	74,621
Tobacco ... .. cwt.	781	848	1,367	1,484
Grapes, not made into wine, &c. .. "	86,542	77,233	43,271	34,433
Raisins ... .. lbs.	3,979,798	5,986,060	66,330	83,567
Currants ... .. "	416,890	838,955	7,382	12,517
Wine ... .. galls.	1,547,188	2,551,150	90,253	148,817
Brandy ... .. "	62,736	...	15,684	...
Hops ... .. cwt.	1,572	2,447	8,803	15,905
Other Crops ... .. acres	2,094	2,185	17,693	18,345
Orchards and Gardens (bearing) .. "	38,507	40,345	962,675	1,008,625
" " Private .. "	5,976	4,733	59,760	47,330
Market Gardens ... .. "	7,937	8,455	198,425	211,375
Total... .. "	...	...	6,953,145	8,512,125
<i>Dairying.</i>				
Milk consumed in natural state galls.	27,627,580	27,577,575	633,132	631,986
Butter made ... .. lbs.	39,227,754	46,685,727	1,634,489	1,847,976
Cheese " ... .. "	3,849,561	5,681,515	96,239	142,038
Cream " (not for butter) ... galls.	23,739	17,882	5,933	4,469
Concentrated Milk ... .. "	243,904	236,581	36,580	35,490
Total... .. "	...	...	2,406,373	2,661,959
<i>Mining.</i>				
Gold ... .. oz.	777,738	822,424	3,067,204	3,262,282
Coal ... .. tons	225,164	69,861	155,850	43,645
Building Stones ... .. "	...	...	53,395	42,649
Other Metals and Minerals ... .. "	...	...	24,030	25,910
Total ... .. "	...	...	3,300,479	3,374,486
Grand Total ... .. "	...	...	12,660,431	14,548,570

The value of the pastoral produce is not returned, inasmuch as difficulties have been met with in the collection of

\* Exclusive of area under sown grasses.

the statistics relating to stock. Arrangements have, however, been made, by which it is hoped the collection for the current year will be satisfactory and complete.

## MANUFACTORIES.

Definition of a factory.

The definition of a factory, according to an agreement which was arrived at by the statisticians of the several States, in a conference held at Hobart in 1902, is as follows:—"All establishments employing on the average four hands or upwards, also those with less than four hands where machinery is worked by power other than manual, making or repairing for the trade (wholesale or retail) or for export." It was further agreed that where two or more industries were carried on by one proprietor in one building, each industry, where possible, should be treated as a separate establishment. All the information on this subject which has been tabulated for the year 1903 has been prepared on this basis.

The manufacturing industry, 1890 and 1900.

The figures in the following table were published in the "Government Gazette," of 21st May, 1902. They have not appeared in the Statistical Register, and they now appear for the first time in a Year-Book. This publication, though somewhat late, is necessary, however, in order to record the figures. The information is only collected once in every ten years, and it is compiled from returns supplied direct by the manufacturers.

VALUES OF MATERIALS USED AND ARTICLES PRODUCED IN THE MANUFACTORIES, WORKS, &C., OF VICTORIA, 1900.

Nature of Industry.	Number of—		Approximate Value of—		
	Factories, &c.	Hands Employed (average).	Materials Used.*	Articles Produced.†	Machinery, Land, and Buildings.
<i>Class A.—Partial or Crude Treatment of Raw Material.</i>			£	£	£
<i>Order 1.—Foods.</i>					
Malt ... ..	17	126	118,722	155,380	127,550
<i>Order 4.—Building.</i>					
Lime ... ..	9	98	8,000	17,040	13,480
<i>Order 6.—Animal Matters (not otherwise classed).</i>					
Bone milling, manure ... ..	17	134	13,161	29,568	87,190
Tanning, fellmongering, wool-washing...	98	1,831	989,715	1,233,980	260,740

\* Actual cost of materials used in the manufacture, exclusive of fuel, light, rent, wages, or any working or incidental expenses.

† Value on leaving the factory, less trade discounts and excise duty (if any). The only articles affected by excise duties are spirits, beer, and tobacco.

VALUES OF MATERIALS USED AND ARTICLES PRODUCED IN THE MANUFACTORIES, WORKS, &c., OF VICTORIA, 1900—Continued.

Nature of Industry.	Number of—		Approximate Value of—		
	Factories, &c.	Hands Employed (average).	Materials Used.*	Articles Produced.†	Machinery, Land, and Buildings.
<i>Order 7.—Wood and other Vegetable Substances (not otherwise classed).</i>			£	£	£
Bark Milling ... ..	5	33	8,620	10,510	3,800
Chaff cutting, corn crushing ... ..	169	919	443,793	551,138	154,335
Saw-milling—forest, including one timber seasoning	108	1,493	...	128,741	139,370
<i>Order 8.—Oils and Fats (Animal and Vegetable).</i>					
Boiling-down, tallow-rendering ... ..	17	71	48,190	61,950	16,210
<i>Order 9.—Metals and Minerals.</i>					
Metallurgical ... ..	3	34	12,510	15,825	9,500
Total Class A. ‡ ... ..	443	4,739	1,642,711	2,204,132	812,175
<i>Class B.—Finished Articles of Consumption.</i>					
<i>Order 1.—Foods.</i>					
<i>(a) Animal—</i>					
Bacon-curing ... ..	27	248	217,096	268,380	56,090
Butter and cheese ... ..	212	1,000	1,662,743	1,996,829	362,745
Butterine ... ..	1	...			
Creameries ... ..	(399)	460			
Meat freezing, meat preserving ... ..	12	523	32,890	450,174	147,230
<i>(b) Vegetable—</i>					
Oatmeal, maizena, starch, arrowroot ... ..	7	397	83,210	137,640	194,760
Macaroni ... ..	1	...			
Biscuit ... ..	4	791	171,710	257,323	81,510
Confectionery ... ..	16	731	139,480	229,500	50,600
Flour ... ..	73	767	1,127,944	1,336,064	556,792
Jam, pickle, sauce, vinegar ... ..	23	1,521	288,920	415,990	97,655
Sugar, treacle—refining ... ..	2	301	765,000	1,038,902	137,500
<i>(c) Mineral—Salt ... ..</i>	5	76	...	7,190	24,300
<i>(d) Drinks and Narcotics—</i>					
Aerated waters, gingerbeer, liqueur, &c.	127	1,073	89,267	223,810	218,894
Brewing ... ..	50	1,096	339,720	797,930	704,780
Distilling ... ..	9	143	44,470	61,560	146,450
Coffee, chicory, cocoa, chocolate, mustard, spice, &c.	11	240	99,840	129,661	71,280
Ice ... ..	10	63	1,740	9,320	61,710
Tobacco, cigar, snuff ... ..	14	1,176	183,525	304,330	175,080

\* See footnote (\*) on page 440 ante.

† See footnote (†) on page 440 ante.

‡ Estimate for Factories not supplying information.—

	Materials Used.	Articles Produced
	£	£
Pyrites, 33 hands (based on metallurgical) ... ..	12,000	15,360
Docks, &c., 112 hands (based on ships) ... ..	6,700	17,670
Saw Moulding, 1,913 hands (based on cabinet) ... ..	262,300	499,970
Hydraulic Works, 16 hands ... ..	...	...
	281,000	533,000

VALUES OF MATERIALS USED AND ARTICLES PRODUCED IN THE  
MANUFACTORIES, WORKS, &C., OF VICTORIA, 1900—Continued.

Nature of Industry.	Number of—		Approximate Value of—		
	Factories, &c.	Hands Employed (average).	Materials Used.*	Articles Produced.†	Machinery, Land, and Buildings.
<i>Order 2.—Textiles and Dress.</i>					
(a) Textiles—					
Woollen ... ..	9	1,013	92,970	186,300	263,310
Rope, twine, mat, bag, sack	9	475	105,178	162,550	83,130
Sail, tent, tarpaulin ... ..	6	43	8,750	12,270	9,230
(b) Dress—					
Clothing, tailoring ... ..	213	} 6,291	504,507	1,004,722	319,210
Corset ... ..	1				
Dressmaking, millinery ... ..	180	4,398	220,802	390,790	213,413
Underclothing, shirt ... ..	53	2,220	133,780	242,990	76,235
Hat, cap ... ..	25	974	60,908	135,056	62,600
Hosiery ... ..	5	146	9,080	14,520	10,100
Waterproof, oilskin, clothing	7	265	26,720	43,860	18,675
Boot, shoe ... ..	108	4,812	500,578	867,460	204,080
Fur ... ..	4	52	5,275	9,635	6,370
Umbrella, parasol ... ..	6	246	45,660	72,400	16,090
Dyeing ... ..	2	59	1,220	9,570	8,800
<i>Order 3.—Furniture.</i>					
Upholstery, bedding, flock ... ..	23	} 407	82,927	126,730	62,880
Bedstead ... ..	1				
Cabinet, including billiard-table	59	942	92,974	178,804	115,592
Looking-glass, &c. ... ..	9	89	16,020	25,370	14,080
Picture frame ... ..	8	59	7,930	12,370	9,730
Venetian blind ... ..	5	46	3,570	6,850	7,780
Curled hair ... ..	2	18	3,500	6,400	1,070
Brush, broom ... ..	11	} 226	27,220	43,623	24,500
Earth-closet ... ..	1				
<i>Order 4.—Building.</i>					
Cement ... ..	2	156	11,160	37,125	23,500
Brick, pottery ... ..	98	1,321	10,720	203,020	228,427
Stone and marble sawing, polishing, monumental	28	} 351	41,190	78,060	46,820
Filter (stone) ... ..	1				
Modelling in plaster, cement, &c.	2	17	450	1,800	1,450
<i>Order 5.—Apparatus for Transportation.</i>					
(a) By road—					
Coach, carriage, waggon, &c. ... ..	186	2,006	124,770	274,937	200,774
Lamp (carriage, &c.) ... ..	2	12	700	2,100	2,340
Cycle ... ..	5	} 203	65,860	92,800	23,180
Cycle tire ... ..	3				
Perambulator ... ..	2	15	1,050	2,170	3,570
Saddle, harness ... ..	48	467	45,229	84,254	62,150
Whip ... ..	2	12	590	1,430	1,160
Saddle-tree, saddlers' ironmongery, &c.	3	30	4,700	9,800	2,370
(b) By rail—Railway workshops	8	1,577	171,000	336,000	406,530
(c) By water—Ship, boat ... ..	3	14	838	2,209	2,740

\* See footnote (\*) on page 440 ante.

† See footnote (†) on page 440 ante.

VALUES OF MATERIALS USED AND ARTICLES PRODUCED IN THE MANUFACTORIES, WORKS, &c., OF VICTORIA, 1900—Continued.

Nature of Industry.	Number of—		Approximate Value of—		
	Factories, &c.	Hands Employed (average).	Materials Used.*	Articles Produced.†	Machinery, Land, and Buildings.
<i>Order 6.—Animal Matters (not otherwise classed).</i>					
Leather belting (machinery) ..	3	26	19,280	24,060	5,790
Fancy leather ..	5	92	15,100	22,500	7,920
Portmanteau, trunk ..	5	45	5,380	10,380	5,870
<i>Order 7.—Wood and other Vegetable Substances (not otherwise classed).</i>					
Mantelpiece ..	2	40	4,035	8,174	3,140
Wood carving, turnery ..	19	102	5,235	13,180	14,402
Cork-cutting ..	1	120	11,392	21,835	16,810
Cooperage ..	21	31	1,750	4,203	1,460
Basket, wicker ..	2	190	19,590	53,800	127,000
Paper, strawboard ..	3	251	13,160	28,043	17,080
Fancy box, hat box ..	8	82	13,400	20,425	10,550
Dairy, domestic implement ..	4	20	2,200	3,100	5,020
Bellows ..	2				
<i>Order 8.—Oils and Fats (Animal and Vegetable).</i>					
Soap, candle ..	22	424	188,567	260,519	195,838
Essential oil ..	9	77	5,130	11,968	8,310
Printing ink ..	3	17	2,070	4,859	3,932
Oil, glue ..	3	41	5,610	11,131	8,250
<i>Order 9.—Metals and Minerals.</i>					
<i>(a) Machine, tools, and implements—</i>					
Agricultural implements ..	55	1,151	107,997	244,544	127,073
Engine, machine, iron foundry ..	172	5,034	603,371	1,245,960	714,217
Cutlery, tool ..	8	39	2,340	6,955	6,825
Nail ..	5	103	31,114	50,338	28,758
Iron safe, door ..	2	23	577	3,850	2,540
<i>(b) Other articles—</i>					
Sheet iron, tin ..	41	712	86,307	142,953	93,095
Japanning ..	1	131	14,102	26,400	15,580
Oven, range ..	9	15	1,210	2,780	1,910
Pattern ..	3	74	5,700	13,400	7,200
Meter ..	1	2			
Spring ..	2	504	32,794	90,543	57,080
Brass, copper, including gasolier, &c. ....	30	38	24,289	36,002	29,564
Lead, shot, pewter, zinc ..	5	77	9,750	16,100	11,275
Wire-work ..	7				
<i>Order 10.—Gold, Silver, and Precious Stones.</i>					
Goldsmithing, jewellery, gold beating, electroplating	46	551	68,536	127,745	79,040

\* See footnote (\*) on page 440 ante.

† See footnote (†) on page 440 ante.

VALUES OF MATERIALS USED AND ARTICLES PRODUCED IN THE  
MANUFACTORIES, WORKS, &C., OF VICTORIA, 1900—Continued.

Nature of Industry.	Number of—		Approximate Value of—		
	Factories, &c.	Hands Employed (average)	Materials Used.*	Articles Produced.†	Machinery, Land, and Buildings.
<i>Order 11.—Ceramics (not otherwise classed).</i>					
Glass ... ..	8	} 569	29,831	77,019	52,935
Asbestos ... ..	1				
<i>Order 12.—Production of Heat, Light, and Energy.</i>					
Electric apparatus ... ..	5	47	5,450	10,975	7,700
Electric light ... ..	10	176	29,720	88,640	199,340
Gas, coke ... ..	46	632	113,780	363,501	1,198,280
Match ... ..	1	} 82	15,600	21,120	5,800
Ironfounder's charcoal dust ... ..	1				
<i>Order 13.—Explosives, Ammunition, &amp;c.</i>					
Blasting powder, &c. ... ..	1	} 253	24,670	48,500	114,300
Ammunition ... ..	1				
Fireworks ... ..	1				
Fuse ... ..	1				
<i>Order 14.—Art, Science, and Letters.</i>					
Organ ... ..	3	28	240	730	4,840
Die-sinking, engraving, medal, trademark	7	86	3,510	12,840	16,810
Philosophical instrument ... ..	4	18	190	700	2,755
Surgical instrument, truss ... ..	2	12	300	1,680	1,730
Printing, lithographic printing, including paper bag	201	} 4,202	336,094	805,328	921,191
Photo-lithographic ... ..	1				
Account-book, stationery, including india-rubber stamp	13	1,117	69,006	176,390	172,110
<i>Order 15.—Miscellaneous.</i>					
Chemical ... ..	21	} 324	113,675	191,220	102,710
Gum refining ... ..	1				
Blacking, blue, washing-powder, &c. ... ..	10	229	44,820	73,120	30,010
Paint, varnish, white lead ... ..	5	41	11,830	21,560	20,030
Total Class B ... ..	2,587	57,394	10,124,163	16,741,648	10,272,072
Total for Factories supplying information	3,030	62,133	11,766,874	18,945,780	11,084,247
Total for Factories not supplying information	67	2,074	‡281,000	‡533,000	810,702
Grand Total ... ..	3,097	64,207	12,047,874	19,478,780	11,894,949

\* See footnote (\*) on page 440 ante.

† See footnote (†) on page 440 ante.

‡ See footnote (‡) on page 441 ante.

The information collected for the purposes of this return was not so complete as could be desired, inasmuch as many small establishments were omitted. A comparison of the manufacturing results of 1890 with those of 1900 is not quite satisfactory, as the industries of the State were in the latter year by no means in a normal condition. The year 1890 was a good year, when trade and business generally were in a prosperous and flourishing condition; whilst the year 1900 was one following many years of depression, the result of over-speculation in land, culminating in the collapse of many of our well-known and best-established financial institutions. No doubt the succession of dry seasons in the latter part of the decennial period in some measure contributed to this result; but the reaction consequent upon the failure of the transactions in land, the closing of banks and building societies, and the diminished business of many other financial institutions, had a specially injurious effect upon all branches of industry, more especially the building trade and all those industries dependent upon it. Further, it must be remembered that during the ten years a loss was suffered by emigration to the extent of 111,000 persons, mostly adult men and women, who, owing to the economic conditions of the State, and the attractions presented in Western Australia, South Africa, and elsewhere, left Victoria, and this enormous exodus of population, consisting mainly of the breadwinners and producers of the State, could not fail to have a largely prejudicial effect upon the prosperity of our manufacturing industries generally.

The industries of the State are published this year, 1903, under an entirely new classification—that adopted by the Conference of Statists, held at Hobart in 1902.

Classifica-  
tion of  
factories,  
1903.

The table shows the number of factories in each class of industry, the power used, the number of persons employed, the salaries and wages paid to such persons (excluding working proprietors), and the value of the machinery, plant, land, buildings, and improvements for the year 1903:—

CLASSIFICATION ACCORDING TO INDUSTRY, 1903.

Nature of Industry.	Number of Manufactories.	Number using Machinery Worked by—					Actual Horse-power of Engines used.	Average Number of Persons Employed.				Number of Months in operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.	Approximate Value of—	
		Steam.	Gas.	Electric.	Oil.	Water, Wind, Horse.		Males.		Females.				Machinery and Plant in Use.	Lands, Buildings, and Improvements. *
								Working Proprietors.	Employés.	Working Proprietors.	Employés.				
<i>Class I.—Treating Raw Material, the Product of Pastoral Pursuits, or Vegetable Products, not otherwise Classed.</i>													£	£	£
<i>1. Animal Products.</i>															
Boiling down, tallow rendering ...	16	15	...	...	1	...	199	9	74	1	...	11.6	7,445	7,430	13,270
Bone milling ...	19	1	...	...	1	...	867	10	102	1	...	9.8	7,411	23,258	19,535
Catgut, sausage skins ...	6	2	...	...	...	...	12	6	94	...	...	10.5	6,200	741	3,519
Tanning, fellmongering, woolwashing ...	94	60	1	2	3	6	1,179	96	1,542	...	2	9.9	116,658	110,796	160,748
<i>2. Vegetable Products.</i>															
Bark milling ...	3	3	...	...	...	...	30	3	22	...	...	4.3	742	1,650	3,610
Chaff cutting, corn crushing ...	186	111	41	1	3	3	1,488	202	797	6	9	8.6	53,117	52,752	131,671
<i>Class II.—Oils and Fats, Animal and Vegetable.</i>															
Oil, grease, glue ...	4	3	...	...	...	...	31	1	41	...	...	12.0	2,682	4,350	7,080
Soap, candle ...	20	13	1	...	...	...	277	15	463	...	...	7.12.0	40,134	103,411	106,642

*Class III.—Process relating to Stone, Clay,  
Glass, &c.*

Brick, pottery, earthenware ... ..	110	34	1	...	4	65	1,354	126	1,421	1	33	8.7	122,153	92,673	154,498
Cement, including cement pipes ... ..	3	2	...	...	...	...	373	...	115	...	...	10.0	9,237	20,127	6,184
Lime ... ..	11	2	...	...	3	5	40	12	72	1	1	10.9	6,092	3,963	8,615
Asbestos ... ..	2											8.0			
Glass (including bottles) ... ..	8	1	2	...	...	...	54	11	668	1	6	9.8	32,361	24,165	34,105
Glass bevelling ... ..	15	5	3	1	...	...	62	14	148	1	1	12.0	12,133	4,189	19,440
Marble, stone dressing ... ..	36	8	5	4	1	...	144	41	332	...	1	11.7	32,590	13,675	38,088
Filter, stone ... ..	2	1	1	...	...	...	12	6	64	...		12.0	4,971	1,260	5,700
Modelling in plaster, cement, &c. ... ..	4											11.7			

*Class IV.—Working in Wood.*

Cooperage ... ..	12	3	2	...	...	...	18	17	70	...		10.6	5,715	1,970	11,682
Cork-cutting ... ..	2											12.0			
Dairy, domestic implements ... ..	4	3	1	2	...	...	57	5	100	...		12.0	7,955	4,942	6,612
Bellows ... ..	2											12.0			
Saw-milling, forest ... ..	125	120	...	...	...	4	1,846	170	1,304	2	...	7.3	77,945	80,039	12,292
Saw-milling—moulding, joinery, &c. ... ..	90	41	30	5	3	...	1,886	94	1,696	1	7	11.1	169,422	89,056	176,147
Mantelpiece ... ..	3	1	...	...	...	...	14	3	90	...		12.0	8,566	825	2,750
Woodcarving, turnery ... ..	30	8	17	3	2	...	113	33	120	...	1	10.2	7,230	6,070	17,187

*Class V.—Metal Works, Machinery, &c.*

Agricultural implement ... ..	52	37	2	...	6	...	535	58	1,049	...	7	10.4	78,211	62,791	66,902
Engineering, boilermaking, iron foundry ... ..	231	119	87	6	8	2	2,596	301	4,296	1	16	11.2	387,533	449,460	341,175
Railway workshop ... ..	15	9	2	...	...	...	472	...	1,772	...	5	11.9	202,578	158,311	253,662
Cutlery, tool ... ..	12	1	9	1	...	...	48	12	44	...	1	11.9	3,382	5,345	5,665
Nail ... ..	6	5	2	...	...	...	200	8	186	...	4	11.0	12,794	33,834	12,450
Iron safe, door ... ..	2											10.5			
Sheet iron, tin (including japanning) ... ..	53	5	13	2	...	1	143	50	732	...	6	11.5	51,322	38,281	76,128
Oven, range ... ..	11	...	4	1	...	...	33	9	168	...	1	11.0	12,239	3,640	24,438
Pattern ... ..	5	...	4	1	...	...	12	6	14	...	...	11.6	1,060	740	2,998

\* The figures in this column refer to purchased land only. One hundred and eighty-five establishments (including eleven creameries and sixty-three cyanide works) were carried on upon Crown lands; in these cases, no valuation of the land has been given.

Production.



2. Vegetable Food, including Products not Foods, but usually associated with the Manufacture of Foods.

Biscuit	4	4	...	...	...	115	6	565	...	198	10-2	44,325	35,250	46,000
Confectionery	19	9	4	1	...	134	24	474	...	434	10-5	45,140	22,619	43,499
Flour	63	63	...	...	...	3,750	41	609	1	10	8-5	58,627	261,530	235,786
Jam, pickle, sauce, vinegar	30	23	...	...	2	274	21	996	...	486	10-3	80,147	35,196	85,103
Oatmeal, maizena, arrowroot, starch	15	3	8	1	...	583	19	226	1	133	10-0	20,349	68,116	124,460
Macaroni	2	2	...	...	...	...	...	...	...	...	12-0	...	...	...
Sugar, treacle, refining	2	2	...	...	...	474	...	328	...	16	12-0	33,842	83,500	86,500

3. Drinks and Stimulants.

Aerated water, cordial, &c.	132	77	40	1	9	3	420	121	894	7	7	9-4	63,514	83,703	134,848
Malt	19	3	12	...	2	...	139	12	164	...	...	9-4	17,178	16,115	121,980
Brewing	44	44	...	...	...	...	980	43	1,017	...	3	11-4	119,729	209,492	507,348
Distilling	6	6	...	...	...	...	73	3	31	...	...	5-5	1,127	8,179	14,120
Coffee, chicory, cocoa, chocolate, mustard spice, &c.	9	4	5	...	...	...	427	8	152	...	85	11-3	16,605	21,167	59,346
Ice	16	15	...	...	1	...	643	9	112	...	1	9-1	9,737	43,083	67,039
Salt	3	1	...	...	2	...	38	1	60	2	...	9-3	4,693	4,300	26,425

4. Narcotics.

Tobacco, cigars, snuff	12	2	2	3	...	...	182	18	593	...	657	11-5	71,876	62,026	118,975
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Class VII.—Clothing and Textile Fabrics, and Fibrous Material.

1. Textile.

Woollen mill	9	8	1	...	...	...	1,626	4	598	...	536	12-0	59,161	204,036	88,365
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2. Dress.

Clothing, tailoring	305	...	21	12	...	...	139	249	1,408	12	5,029	11-0	321,218	29,960	371,556
Corset...	4	...	...	...	...	...	...	...	167	...	200	...	...	...	...
									3	26	11-5	1,126	72	3,690	

\* See footnote (\*) on page 447 ante.

† Creameries are not counted as separate establishments, but are regarded merely as branches of butter factories. The number of hands employed were 325 males and 1 female.

‡ Factory workers, working at their own homes.

CLASSIFICATION ACCORDING TO INDUSTRY, 1903—Continued.

Nature of Industry.	Number of Manufactories.	Number using Machinery Worked by—					Actual Horse-power of Engines used.	Average Number of Persons Employed.				Number of Months in Operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.			Approximate Value of—	
		Steam.	Gas.	Electric.	Oil.	Water, Wind, Horse.		Males.		Females.			£	£	£	Machinery and Plant in Use.	Lands, Buildings, and Improvements.*
								Working Proprietors.	Employés.	Working Proprietors.	Employés.						
<b>2. Dress—Continued.</b>																	
Dressmaking, millinery ... ..	442	...	8	15	...	...	80	22	83	391	6,581	10.5	180,381	21,574	293,382		
Underclothing, shirt ... ..	115	3	12	15	...	...	162	38	{ 102	83	2,405	10.2	91,233	24,067	106,359		
Hat, cap ... ..	33	6	4	7	...	...	217	27	{ 43	453	3	630	10.1	51,941	20,588	47,697	
Hosiery ... ..	17	1	2	2	...	...	50	12	18	6	290	9.8	8,799	8,910	16,123		
Oilskin, waterproof clothing ... ..	8	...	2	3	...	...	10	7	46	1	153	8.1	7,427	2,344	19,371		
Boot, shoe ... ..	136	4	52	6	...	...	493	172	3,409	{	1,629	10.5	299,176	82,594	146,802		
Fur ... ..	7	1	1	...	...	...	5	5	17	5	35	10.8	2,912	320	4,035		
Umbrella ... ..	7	...	1	2	...	...	3	5	46	1	113	11.5	8,358	900	15,580		
Dyeing ... ..	3	2	...	...	...	...	14	2	54	1	{ 92	12.0	5,751	4,301	9,965		
Feather Dressing ... ..	1	...	...	...	...	...	...	...	...	...	{ 12.0	12.0	...	...	...		
<b>3. Fibrous Materials and Textiles, n.e.i.</b>																	
Rope, twine, mat, bag, and sack ... ..	11	4	2	(1)	...	...	477	14	316	...	149	10.5	22,579	42,884	45,016		
Tent, sail, tarpaulin ... ..	10	...	1	2	...	...	5	9	42	1	12	12.0	4,281	507	11,116		

*Class VIII.—Books, Paper, Printing, Engraving, &c.*

Printing (including newspapers, paper-bag, lithographic, electrotyping, stereotyping)	242	9	158	34	9	3	1,254	278	3,767	6	613	11-8	449,064	495,200	521,653
Photo lithography	3	...	1	1	...	...	5	5	35	...	2	9-6	4,315	4,550	3,590
Account-book, stationery, including rubber stamp	21	2	6	1	1	...	161	16	546	...	585	10-8	59,581	67,103	115,103
Ink, printing ink	6	...	3	...	...	...	25	5	48	...	2	11-8	3,807	2,025	8,500
Paper, strawboard, millboard	3	3	...	...	...	...	575	...	132	...	22	11-3	11,661	79,500	52,500
Fancy box, &c.	12	2	3	4	...	...	63	6	93	1	261	11-0	12,417	7,981	25,775
Die-sinking, engraving, medals, &c.	10	...	5	3	1	...	32	9	92	...	1	11-6	8,123	6,850	16,612

*Class IX.—Musical Instruments.*

Organ...	2	...	1	1	...	...	2	3	22	...	...	12-0	1,911	1,200	3,340
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*Class X.—Arms and Explosives.*

Ammunition	1	}	2	...	...	...	65	...	93	...	195	}	12-0	12-0	15,723	45,098	28,329
Blasting powder	1																
Dynamite, lithofracteur, &c.	...																
Fireworks	1																
Fuse	2																

*Class XI.—Vehicles and Fittings, Saddlery Harness, &c.*

Coach carriage, waggon	239	}	23	11	3	3	...	236	314	1,887	1	8	}	11-6	130,372	41,227	203,167
Carriage lamp	2																
Cycle	41	1	20	5	...	...	54	35	318	...	5	11-9	21,280	7,993	50,555		
Perambulator	4	...	...	...	...	...	...	5	28	...	1	10-8	2,266	200	3,580		
Saddle, harness	44	...	...	...	...	...	...	46	280	...	22	11-5	22,341	2,672	56,563		
Saddle-tree, saddlers' ironmongery, &c.	3	}	2	...	...	...	9	5	17	...	1	}	11-7	1,449	950	3,050	
Whip	1																

\* See footnote (\*) on page 447 ante.

† Factory workers, working at their own homes.

Production.

CLASSIFICATION ACCORDING TO INDUSTRY, 1903—Continued

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Victorian Year-Book, 1903.

Nature of Industry	Number of Manufactories.	Number using Machinery Worked by—					Actual Horse-power of Engines used.	Average Number of Persons Employed.				Number of Months in Operation during Year.	Salaries and Wages paid during the Year, excluding Working Proprietors.	Approximate Value of—	
		Steam.	Gas.	Electric.	Oil.	Water, Wind, Horse.		Males.		Females.				Machinery and Plant in Use.	Lands, Buildings, and Improvements.*
								Working Proprietors.	Employés.	Working Proprietors.	Employés.				
<i>Class XII.—Shipbuilding, Fittings, &amp;c.</i>													£	£	£
Ship, boat ... ..	2	7	...	...	...	210	6	92	...	...	12-0	10,693	47,880	359,820	
Docks, slips ... ..	6	...	...	...	...	...	...	...	...	9-7	...	...	...	...	
<i>Class XIII.—Furniture, Bedding, &amp;c.</i>													£	£	£
Upholstery, bedding, flock ... ..	33	5	5	...	...	222	21	279	2	175	10-9	31,482	14,613	52,428	
Bedstead ... ..	1	...	...	...	...	...	...	...	...	12-0	...	...	...	...	
Curled hair ... ..	3	2	1	...	...	20	3	29	...	...	12-0	1,440	1,068	2,650	
Cabinet, including billiard table ... ..	125	10	20	2	3	267	161	1,115	1	19	10-4	89,257	18,845	158,267	
Picture frame ... ..	18	...	4	6	...	15	16	76	2	26	10-7	5,979	1,543	19,916	
Venetian blind ... ..	7	2	...	1	...	13	11	42	...	...	11-1	2,169	1,583	7,510	
<i>Class XIV.—Drugs, Chemicals, and By-products.</i>													£	£	£
Blacking, blue, washing powder, &c. ... ..	10	4	3	2	1	78	11	165	4	118	12-0	12,036	8,507	48,500	
Chemical ... ..	29	12	5	2	...	521	21	403	1	89	11-4	41,818	71,832	121,897	
Essential oil ... ..	15	11	...	...	...	52	12	100	1	2	8-5	4,417	3,255	6,836	
Paint, varnish, white-lead ... ..	8	5	1	1	1	68	5	53	...	2	8-1	4,182	7,500	18,490	

<i>Class XV.—Surgical and Scientific Appliances.</i>															
Philosophical instrument ... ..	5	...	1	3	...	...	3	2	13	...	2	12-0	815	628	4,983
Surgical instrument ... ..	4	...	2	1	...	...	2	1	14	...	3	10-6	1,606	520	2,360
<i>Class XVI.—Timepieces, Jewellery, and Platedware.</i>															
Goldsmithing, jewellery, gold-beating, electro-plating	52	1	12	11	...	1	71	56	513	...	25	11-6	49,301	14,474	78,558
<i>Class XVII.—Heat, Light and Energy.</i>															
Electric apparatus ... ..	8	...	2	4	...	...	42	7	61	...	...	10-8	5,752	3,915	9,890
Electric light ... ..	7	7	...	...	...	...	4,955	1	148	...	...	12-0	18,785	198,751	86,483
Gas†, coke ... ..	47	7	2	...	...	...	572	3	676	...	...	12-0	81,928	454,002	710,318
Match ... ..	1	...	...	...	...	...	...	...	...	...	...	10-0	...	...	...
Fire kindlers ... ..	1	3	...	...	...	...	63	4	25	...	48	12-0	3,014	2,530	4,257
Ironfounders' charcoal dust ... ..	2	...	...	...	...	...	...	...	...	...	...	12-0	...	...	...
Hydraulic power ... ..	2	2	...	...	...	...	1,100	...	15	...	...	12-0	2,261	42,456	30,589
<i>Class XVIII.—Leatherware (except Saddlery and Harness).</i>															
Fancy leather ... ..	11	5	3	...	...	...	72	16	109	...	48	9-5	9,152	3,280	8,925
Leather belting... ..	4	...	2	1	...	...	17	5	38	...	...	12-0	2,979	3,250	8,496
Portmanteau, trunk ... ..	6	...	...	2	...	...	3	10	46	2	9	11-8	3,155	850	6,345
<i>Class XIX.—Wares, not elsewhere included.</i>															
Basket, wicker ... ..	7	...	1	...	...	...	2	6	38	...	...	11-7	2,632	494	6,340
Bellows (see Class IV.) ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Brush, broom ... ..	14	...	5	3	...	...	18	15	150	...	53	10-8	12,500	3,187	19,419
Cork-cutting (see Class IV.) ... ..	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Rubber goods (including tires) ... ..	4	2	1	...	...	...	667	1	425	...	167	12-0	35,502	41,354	23,180
Total ... ..	4,151	1,316	724	195	123	119	42,750	3,627	45,697	563	22,387	...	4,573,795	5,010,896	7,967,945
								†110			†845				

NOTE.—Where the number of Factories is braced the information has been combined in order to conceal the contents of individual schedules.

\* See footnote (\*) on page 447 ante.

† Including one Pintsch gas-works.

‡ Factory workers, working at their own homes.

Of the total hands employed (73,229), 49,434 were males and 23,795 females. The increase on the previous year was 166—a decrease of 224 males and an increase of 390 females.

Of the hands employed, 3,627 are male and 563 female, working proprietors; 2,173 male and 347 female, managers and overseers; 1,942 male and 271 female, accountants and clerks; 1,441 engine drivers (male); 36,211 male and 21,510 female workers in factories; 110 males and 845 females are described as factory workers, working in their own homes; 2,778 are carters and messengers (male); all others number 1,152 males and 259 females.

The classification of factories according to the number of hands employed was:—

Classifica-  
tion  
according  
to hands  
employed.

Under 4 hands	...	587 factories	1,714 hands
4 hands	...	487 "	1,948 "
5 to 10 hands	...	1,631 "	11,293 "
11 to 20 "	...	722 "	10,509 "
21 to 50 "	...	471 "	14,520 "
51 to 100 "	...	135 "	9,109 "
101 and upwards	...	118 "	24,136 "
Total	...	4,151 "	73,229 "

Of those employed in factories with under 4 hands, 326 were employed in connexion with creameries. Of the 4,151 establishments, 2,482 used steam or other power, and employed 57,107 hands; and 1,669 used manual labour only, and employed 16,122 hands.

Factories,  
metro-  
politan and  
country.

In the following return will be found particulars for the years 1902 and 1903, of all factories in operation in the metropolitan and country districts. In the latter year the manufactories of the State were returned as 4,151 in number—an increase of 148 over the year 1902. Of these, 2,293 were established in the metropolitan, and 1,858 in the country districts—an increase of 82 in the metropolitan, and 66 in the country districts. The additional factories established in the metropolitan district were principally those connected with the treatment of raw material the product of pastoral pursuits (5); working in wood (5); metal works, machinery, &c. (10); clothing and textile fabrics (49); books, paper, &c. (5); furniture and bedding (17). In the country there were increases in factories working in wood (4); metal works, machinery, &c. (23); clothing and textile fabrics (26); books, paper, &c. (8); vehicles, saddlery, harness, &c. (11); furniture

and bedding (5). In certain other industries the number of factories has been slightly reduced.

NUMBER OF FACTORIES AND HANDS EMPLOYED, 1902 AND 1903.

Nature of Industry.	1902.			1903.		
	No. of Manu- factories.	Average No- of Persons Employed.		No. of Manu- factories.	Average No. of Persons Employed.	
		Males.	Females		Males.	Females
<i>Metropolitan Area.</i>						
1. Treating raw material, the product of pastoral pursuits, &c.	92	1,534	13	97	1,570	6
2. Oils and fats, animal and vegetable ...	12	446	9	12	439	8
3. Processes relating to stone, clay, glass, &c.	79	2,034	13	79	2,214	14
4. Working in wood ...	102	2,067	5	107	1,929	6
5. Metal works, machinery, &c. ...	294	7,094	38	304	7,365	37
6. Connected with food and drink, &c. ...	169	5,679	2,086	160	5,392	1,928
7. Clothing and textile fabrics, &c. ...	778	5,900	15,661	827	5,918	16,154
8. Books, paper, printing, engraving, &c.	188	4,020	1,410	193	4,019	1,406
9. Musical instruments ...	1	23		2	25	...
10. Arms and explosives ...	4	119	132	2	54	183
11. Vehicles, &c., saddlery, harness	167	1,630	29	164	1,557	30
12. Shipbuildings, fittings, &c. ...	8	167	...	6	87	...
13. Furniture, bedding, &c. ...	152	1,635	186	169	1,662	221
14. Drugs, chemicals, and by-products ...	43	629	173	45	645	214
15. Surgical and scientific appliances ...	9	39	5	9	30	5
16. Timepieces, jewellery, and plated ware	44	565	30	47	554	25
17. Heat, light, and energy ...	23	836	47	25	749	48
18. Leatherware, except saddlery and harness	18	211	58	20	221	59
19. Wares (not elsewhere included) ...	28	619	314	25	635	220
Total ...	2,211	35,247	20,209	2,293	35,065	20,564
<i>Country Districts.</i>						
1. Treating raw material, the product of pastoral pursuits, &c.	237	1,492	20	227	1,387	13
2. Oils and fats, animal and vegetable ...	14	88	...	12	81	...
3. Processes relating to stone, clay, glass, &c.	113	858	29	112	816	32
4. Working in wood ...	157	1,722	3	161	1,773	5
5. Metal works, machinery, &c. ...	218	2,727	13	241	2,936	12
6. Connected with food and drink, &c. ...	463	3,333	176	461	3,137	145
7. Clothing and textile fabrics, &c. ...	255	1,368	2,832	281	1,350	2,879
8. Books, paper, printing, engraving, &c.	96	1,007	91	104	1,013	87
9. Musical instruments ...	...	...	...	...	...	...
10. Arms and explosives ...	1	14	19	3	62	43
11. Vehicles, &c., saddlery, harness	159	1,427	5	170	1,378	8
12. Shipbuilding, fittings, &c. ...	2	7	...	2	11	...
13. Furniture, bedding, &c. ...	13	76	3	18	91	4
14. Drugs, chemicals, and by-products ...	15	80	5	17	125	3
15. Surgical and scientific appliances ...	...	...	...	...	...	...
16. Timepieces, jewellery, and plated ware	6	21	...	5	15	...
17. Heat, light, and energy ...	42	184	...	43	191	...
18. Leatherware, except saddlery and harness	1	7	...	1	3	...
19. Wares (not elsewhere included) ...	...	...	...	...	...	...
Total ...	1,792	14,411	3,196	1,858	14,369	3,231

## NUMBER OF FACTORIES AND HANDS EMPLOYED—Continued.

Nature of Industry.	1902.			1903.		
	No. of Manufac-tories.	Average No. of Persons Employed.		No. of Manufac-tories.	Average No. of Persons Employed.	
		Males.	Females		Males.	Females
<i>State.</i>						
1. Treating raw material, the product of pastoral pursuits, &c.	329	3,026	33	324	2,957	19
2. Oils and fats, animal and vegetable ...	26	534	9	24	520	8
3. Processes relating to stone, clay, glass, &c.	192	2,892	42	191	3,030	46
4. Working in wood ..	259	3,789	8	268	3,702	11
5. Metal works, machinery, &c. ...	512	9,821	51	545	10,301	49
6. Connected with food and drink, &c. ...	632	9,012	2,262	621	8,529	2,073
7. Clothing and textile fabrics, &c. ...	1,033	7,268	18,493	1,108	7,268	19,033
8. Books, paper, printing, engraving, &c.	284	5,027	1,501	297	5,032	1,493
9. Musical instruments ...	1	23	...	2	25	...
10. Arms and explosives ...	5	133	151	5	116	226
11. Vehicles, &c, saddlery, harness	326	3,057	34	334	2,935	38
12. Shipbuilding, fittings, &c. ...	10	174	...	8	98	...
13. Furniture, bedding, &c. ...	165	1,711	189	187	1,753	225
14. Drugs, chemicals, and by-products ...	58	709	178	62	770	217
15. Surgical and scientific appliances ...	9	39	5	9	30	5
16. Timepieces, jewellery, and plated ware	50	586	30	52	569	25
17. Heat, light, and energy ...	65	1,020	47	68	940	48
18. Leatherware, except saddlery and harness	19	218	58	21	224	59
19. Wares (not elsewhere included) ...	28	619	314	25	635	220
Total ...	4,003	49,658	23,405	4,151	49,434	23,795

Return of factories and works for five years.

The following is a summary, showing the power used, of the manufactories and works, as returned for each of the years, 1899 to 1903:—

## SUMMARY OF MANUFACTORIES AND WORKS: RETURN FOR FIVE YEARS.

Year.	Number of Factories.	Power Employed.				Actual Horse-Power of Engines Used.
		Steam.	Gas.	Electric, Oil, Water, Wind, or Horse.	Manual.	
1899	3,027	1,267	603	135	1,022	33,046
1900	3,097	1,260	637	137	1,063	33,410
1901	3,249	1,282	689	160	1,118	34,543
1902	4,003	1,328	755	330	1,590	43,821
1903	4,151	1,316	724	437	1,674	42,750

  

Year.	Hands employed.			Approximate Value of—		
	Males.	Females.	Total.	Machinery and Plant.	Land.	Buildings and Improvements.
				£	£	£
1899	44,041	16,029	60,070	4,632,629	2,867,413	4,471,698
1900	45,794	18,413	64,207	4,710,334	2,591,653	4,592,462
1901	47,059	19,470	66,529	4,847,130	2,711,990	4,739,380
1902	49,658	23,405	73,063	5,082,023	3,045,291	5,125,969
1903	49,434	23,795	73,229	5,010,896	2,855,174	5,112,771

The total value of machinery, plant, land, buildings and improvements for 1903 shows a decline of £274,442, when compared with the previous year. The large increase in the number of factories in 1902 (754) is due to a more thorough system of collection, which was made by the police for the first time that year, and to the inclusion, also for the first time, of cyanide works and establishments where repairing was the nature of the principal work done. There was a further increase of 148 in the number of factories during 1903. The list of the manufacturers as returned was compared with and supplemented from the list of the Chief Inspector of Factories.

The manufacturers were asked last year to furnish particulars of the actual wages paid. The amount returned was £4,573,795—representing only £66 per head per annum for 69,039 hands employed, working proprietors being excluded. This average is very much below the rate of wages, which has also been ascertained; and the explanation of the apparent discrepancy is that, in many instances, the hands were not continuously employed, and the sum simply represents the average of wages received by them over the whole of the twelve months. For instance, in glassworks the average received was only about 23s. per week, whereas the rate of wages ranged from 50s. to 80s. per week. In marble stone works, the average was 38s., the range from £2 per week for labourers, to £4 10s. for building carvers. In modelling in plaster, the average was 31s. per week, the range from 42s. to 70s. The weekly average in cooperage works was 35s., the range 56s. to 62s. In saw milling, moulding, and joinery works, a range of 45s. to 64s. per week gave an average of 41s. In wood carving establishments, a range of 48s. to 54s. yielded a weekly average of 27s. In agricultural implement factories, the weekly average was 33s., the range 36s. to 60s. In engineering and boiler-making establishments, the average per week was about 37s., whilst the range was 42s. to 72s. In tinsmithing, japanning, and sheet iron works, there was an average wage of 28s. per week, as the outcome of a range of from 30s. to 60s. In oven and range making establishments, a range of 48s. to 60s. weekly produced an average of only 30s. In brass and copper smithing, the range was 48s. to 72s. per week, the average wage earned only 32s. In meat freezing works, the average was 39s., the wages ranging as high as 70s. per week. In many other industries similar differences also appear. In the light of these facts, it will be seen that it is useless to base the estimate of the total wages paid upon the rates obtaining in the various trades under the determinations of the wages boards, which rates are doubtless paid, but do not aid in ascertaining the total income of the employees. Further, all the factories were

not in operation during the whole of the year. Three were open only for a period of from 4 to 5 months; 6 from 5 to 6 months; 125 from 7 to 8 months; 498 from 8 to 9 months; 330 from 9 to 10 months; 1,386 from 10 to 11 months; 1,619 from 11 to 12 months; and only 184 were working for the whole twelve months. In the following return will be found a statement of the rates of wages obtaining in the various industries of the State during 1903:—

### WAGES IN MELBOURNE, 1903.

A.—Rates of Wages ruling for Adult Workers in classified manufacturing industries in Melbourne during 1903.

\* \* This Statement has been compiled from information collected direct from Employers.

Industries.	Occupations.	Wages.		
		Range.	General Rate.	
<i>Class I.—Treating Raw Material the product of pastoral pursuits or vegetable products not otherwise classed.</i>				
<i>Order 1.—Animal products.</i>				
Boiling down ...	} Foreman ...	7s. to 8s. per day ..	7s. 6d. day	
Bone mill ...		Tallowmen ...	7s. to 7s. 6d. ,, ...	7s. ,,
		Laborers ...	6s. to 7s. ,, ...	6s. 6d. ,,
		Carters ...	7s. to 8s. ,, ...	7s. ,,
Sausage casing ...	Sausage skin cleaners	...	40s. per week	
Tanning, fellmongery, wool-washing, scouring	Curriers ...	40s. to 60s. per week	48s. ,,	
	Tanners ...	34s to 45s. ,,	40s. ,,	
	Beamsmen ...	40s. to 50s. ,,	45s. ,,	
	Shedsmen ...	34s. to 45s. ,,	36s. ,,	
	Fellmongers ...	30s. to 45s. ,,	36s. ,,	
	Woolscourers ...	36s. to. 42s. ,,	36s. ,,	
<i>Order 2.—Vegetable products.</i>				
Bark mill ...	Laborers ...	36s. to 42s. ,,	36s. ,,	
Chaff-cutting ...	„ ...	36s. to 39s. ,,	36s. ,,	
<i>Class II.—Oils and Fats, Animal and Vegetable.</i>				
Oil, grease, glue ...	Laborers ...	7s. to 7s. 6d. per day	7s. per day	
Soap, candle (not procurable) ...				
<i>Class III.—Processes relating to Stone, Clay, Glass, &amp;c.</i>				
Asbestos ...	Machinists ...	36s. to 42s. per week	40s. per week	
Asphalt ...	Asphalters and tarpavers	7s. to 9s. per day ...	8s. per day	
Brick, pottery, earthenware ...	Clayhole men ...	...	10½d. per hour	
	Setters ...	...	11½d. ,,	
	Burners ...	10½d. to 1s. per hour	...	
	Drawers ...	...	1s. 1d. ,,	
	Potters ...	7s. to 10s. per day	7s. 6d. per day	

## WAGES IN MELBOURNE, 1903—Continued.

Industries.	Occupations.	Wages.		
		Range.	General Rate.	
<i>Class III.—Continued.</i>				
Glass (including bottles) ...	Bottlemakers ...	50s. to 80s. per week	70s. per week	
	Lampware blowers ...	50s. to 55s. "	52s. "	
Glass bevelling, &c. ...	" finishers ...	50s. to 60s. "	60s. "	
	Bevellers ...	42s. to 60s. "	45s. "	
	Silvers ...	42s. to 48s. "	45s. "	
	Cutters ...	42s. to 48s. "	45s. "	
	Laborers ...	6s. to 7s. per day	...	
Lime, cement, cement pipes ...	Building carvers ...	...	1s. 10½d. hour	
Marble, stone-dressing ...	Carvers and letter cutters ...	...	1s. 4½d. "	
	Granite cutters ...	...	1s. 3d. "	
	Blue-tone, marble cutters ...	...	1s. 2d. "	
	Polishers ...	...	10½d., 11d. "	
	Laborers ...	...	10d. "	
	Modelling ...	Modellers ...	...	70s. per week
		Shophands ...	...	60s. "
		Pressers ...	...	42s. "
	Stonefilter ...	Filtermakers ...	...	35s. "
	<i>Class IV.—Working in Wood.</i>			
Cooperage ...	Coopers ...	56s. to 62s. per week	56s. "	
Dairy implement (churn, &c.) ...	Box and case makers ...	...	45s. "	
	Carpenters ...	...	54s. "	
Mantelpiece ...	Mantelpiece makers ...	52s. to 60s. "	52s. "	
	Polishers, enamellers ...	50s. to 55s. "	50s. "	
Saw-milling, moulding, joinery, sash, door, box, &c.	Sawyers ...	45s. to 57s. "	48s. "	
	Carpenters and joiners ...	48s. to 60s. "	54s. "	
	Machinists ...	45s. to 64s. "	52s. "	
	Woodturners ...	...	54s. "	
	Boxmakers ...	...	45s. "	
	Painters and glaziers ...	...	50s. "	
	Polishers ...	...	50s. "	
	Enginedrivers ...	45s. to 60s. "	54s. "	
	Draymen and laborers ...	39s. to 45s. "	42s. "	
Wood-carving, turning ...	Carvers ...	48s. to 54s. "	50s. "	
	Turners ...	48s. to 54s. "	48s. "	
<i>Class V.—Metal Works, Machinery, &amp;c.</i>				
Agricultural implement ...	Blacksmiths ...	54s. to 60s. "	60s. "	
	Fitters and turners ...	54s. to 60s. "	54s. "	
	Carpenters ...	48s. to 60s. "	54s. "	
	Painters ...	42s. to 48s. "	42s. "	
	Laborers ...	36s. to 42s. "	36s. "	
	Brass, copper smithing ...	Brass moulders, finishers ...	48s. to 60s. "	54s. "
Brasspolishers ...		...	42s. "	
Cutlery ...	Coppersmiths ...	60s. to 72s. "	60s. "	
	Curlers ...	60s. to 80s. "	60s. "	
	Knifsmiths ...	50s. to 55s. "	50s. "	
	Sawmakers ...	40s. to 60s. "	5 s. "	
	Saw and tool grinders ...	30s. to 55s. "	45s. "	

## WAGES IN MELBOURNE, 1903—Continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class V.—Continued.</i>			
Engineering, boiler making, iron foundry	Blacksmiths ...	54s. to 72s. per week	60s. per week
	Strikers ...	39s. to 45s. "	42s. "
	Fitters and turners ...	54s. to 66s. "	60s. "
	Boilermakers and platers	60s. to 72s. "	66s. "
	Riveters ...	60s. to 72s. "	66s. "
	Moulders—Heavy ...	60s. to 72s. "	60s. "
	" Light ...	42s. to 60s. "	48s. "
	Furnacemen, engine- drivers	48s. to 60s. "	54s. "
Bedstead, fender ...	Blacksmiths ...	42s. to 54s. "	48s. "
	Fitters ...	45s. to 54s. "	48s. "
	Chill fitters ...	48s. to 60s. "	54s. "
	Chippers ...	36s. to 42s. "	36s. "
	Modellers ...	56s. to 70s. "	60s. "
	Moulders ...	42s. to 60s. "	48s. "
	Grinders and polishers	42s. to 56s. "	50s. "
	Japanners ...	36s. to 60s. "	40s. "
Iron safe, door ...	Electroplaters ...	56s. to 70s. "	56s. "
	Fireproof safe, &c., makers	...	48s. "
Lead, shot, pewter, zinc ...	Laborers in lead and shot factories	36s. to 42s. "	36s. "
	Zincworkers ...	48s. to 72s. "	60s. "
Meter ...	Instrument fitters ...	48s. to 60s. "	54s. "
Nail, barbed wire ...	Nail makers ...	40s. to 80s. "	65s. "
	Machine feeders (under 21)	20s. to 35s. "	30s. "
	Laborers ...	30s. to 35s. "	30s. "
Pattern making ...	Barbed wire workers	32s. 6d. to 37s. 6d. per week	35s. "
	Pattern makers ...	...	66s. "
Smelting, chlorination, cyanide, pyrites	Metallurgists ...	£8 to £12 per week	...
	Assayers ...	...	£4 "
	Cyaniders ...	36s. to 40s. "	...
	Chlorinators ...	40s. to 55s. "	...
	Smelters ...	45s. to 70s. "	...
	Roasters ...	36s. to 42s. "	...
	Furnacemen ...	42s. to 60s. "	...
Spring ...	Spring fitters ...	45s. to 60s. "	48s. "
	Spring smiths ...	...	48s. "
Stove, range, oven ...	Stove fitters ...	48s. to 60s. "	48s. "
	Oven fitters. ...	...	42s. "
Tinsmithing, galvanized iron, sheet iron, japanning	Tinsmiths ...	30s. to 50s. "	40s. "
	Galvanizers ...	45s. to 60s. "	50s. "
	Japanners ...	40s. to 60s. "	50s. "
Wire working ...	Wire workers ...	35s. to 48s. "	35s. "
Wire mattress ...	Weavers, frame makers &c.	...	48s. "

WAGES IN MELBOURNE, 1903—Continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class VI.—Connected with Food and Drink, or the preparation thereof.</i>			
<i>Order 1.—Animal Food.</i>			
Bacon-curing ... ..	Slaughtermen, cutters up, &c.	40s. to 55s. per week	48s. per week
Butter, cheese, concentrated milk	Factory managers ...	50s. to 90s. "	70s. "
	Butter makers, and churners	36s. to 50s. "	42s. "
Butterine, margarine... ..	Cheese makers ...	45s. to 70s. "	50s. "
	Laborers, packers ...	30s. to 36s. "	...
Condensed milk ... ..	Laborers ...	30s. to 42s. "	36s. "
	Condensers ...	50s. to 80s. "	60s. "
Meat, fish preserving, freezing	Slaughtermen ...	...	20s. per 100 sheep
	Kitchen hands, tallowmen	30s. to 42s. "	36s. per week
	Boners ... ..	42s. to 48s. "	...
	Preservers ... ..	36s. to 65s. "	50s. "
	Tinsmiths... ..	50s. to 70s. "	...
		(piece work)	
	Laborers, packers ...	30s. to 48s. per week	36s. "
	Chambermen, &c. ...	42s. to 48s. "	...
<i>Order 2.—Vegetable Food, including products not foods but usually associated with the manufacture of foods.</i>			
Biscuits ... ..	Factory foremen ...	38s. to 80s. "	50s. "
	Forewomen ... ..	20s. to 32s. 6d. "	20s. "
	Biscuit makers ...	35s. to 37s. 6d. "	35s. "
	Cake makers ... ..	40s. to 54s. "	40s. "
	Machine hands ...	30s. to 40s. "	35s. "
	Packers—male ... ..	32s. to 37s. 6d. "	32s. "
	Packers—female ...	...	14s. "
Confectionery ... ..	Confectioners ... ..	50s. to 100s. "	50s. "
	Storemen ... ..	45s. to 60s. "	45s. "
	Laborers... ..	40s. to 50s. "	40s. "
	Chocolate dippers—female	17s. to 27s. 6d. "	20s. "
Flour mill ... ..	Foremen ... ..	...	60s. "
	Smuttermen ... ..	40s. to 44s. "	40s. "
	Wheat shooters ...	...	40s. "
	Flour and bran packers	30s. to 38s. "	30s. "
	Engine drivers, firemen	50s. to 70s. "	60s. "
	Jam, fruit preserving, pickle, sauce, vinegar	Foremen ... ..	35s. to 60s. "
	Tinsmiths... ..	56s. to 60s. "	55s. "
		(piece work)	(piece work)
	Coopers ... ..	56s. to 60s. per week	56s. per week
	Engine drivers ...	48s. to 44s. "	50s. "
	General hands—male	30s. to 35s. "	30s. "
	" " female	14s. to 21s. "	14s. "

## WAGES IN MELBOURNE, 1903—Continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class VI.—Order 2—Contd.</i>			
Macaroni ...	} (Not procurable)		
Oatmeal, maizena, starch, arrowroot			
Sugar, treacle refining ...		Vacuum hands and others	33s. to 115s. per week
<i>Order 3.—Drinks and Stimulants.</i>			
Aerated waters, cordials ...	Cordial makers ...	...	60s. per week
	Bottlers ...	...	40s. "
	Wires ...	...	33s. "
	Washers ...	...	30s. "
Brewing ...	Brewers ...	30s. to 33s. "	"
	Topmen ...	£10 to £12 "	"
	Cellarmen ...	44s. to 50s. "	44s. "
	Cask washers ...	44s. to 60s. "	44s. "
	Storemen ...	44s. to 48s. "	44s. "
	Coopers ...	44s. to 50s. "	44s. "
	Farriers ...	56s. to 62s. "	56s. "
	Carters, stablemen ...	44s. to 72s. "	44s. "
		44s. to 47s. 6d. "	47s. 6d. "
Condiments, coffee, chicory, cocoa, chocolate, spice, &c. (not procurable)			
Ice, refrigerating ...	Storemen ...	40s. to 60s. "	40s. "
	Chambermen ...	40s. to 45s. "	40s. "
	Ice pullers ...	36s. to 42s. "	39s. "
	Engine drivers, firemen	42s. to 60s. "	48s. "
	Carters ...	42s. to 52s. "	45s. "
Malt ...	Maltsters ...	45s. to 70s. "	45s. "
<i>Order 4.—Narcotics.</i>			
Tobacco, cigar, cigarette ...	Tobacco (plug) makers	30s. to 80s. "	50s. "
	" " wrappers	20s. to 30s. "	25s. "
	—female		
	Cigar makers ...	35s. to 60s. "	45s. "
	Cigarette makers (machine)—female	17s. 6d. to 22s. 6d. per week	20s. "
	Cigarette makers (hand)—female	20s. to 40s. per week	25s. "
<i>Class VII.—Clothing and Textile Fabrics and Fibrous Materials.</i>			
<i>Order 1.—Textile.</i>			
Woollen cloth, blanket, rug ...	Foremen ...	50s. to 60s. "	60s. "
	Pattern weavers, tuners	...	40s. "
	Power-loom weavers	...	22s. 6d. "
	Fettlers, yarnmen, spinners	...	36s. "
	Wool scourers ...	30s. to 40s. "	35s. "

WAGES IN MELBOURNE, 1903—Continued.

Industries.	Occupations.	Wages.		
		Range.	General Rate.	
<i>Class VII.—Order 1—Contd.</i>				
Woollen cloth, blanket, rug ...	Dye house labourers	30s. to 40s. per week	36s. per week	
	Wool dryers, warpers	...	30s. "	
	Wiley house labourers	...	36s. "	
	Warpers—female ...	...	25s. "	
	Mule minders ...	20s. to 30s. "	30s. "	
<i>Order 2.—Dress.</i>				
Boot, shoe ...	Makers, finishers, clickers, stuff-cutters, &c.	45s. to 60s. "	45s. "	
	Machine operators ...	50s. to 60s. "	50s. "	
	Assistant stuff-cutters, lining cutters, and all others	40s. to 50s. "	40s. "	
Clothing, tailoring ...	Machinists—female...	20s. to 30s. "	20s. "	
	Cutters—order ...	60s. to 140s. "	80s. "	
	" stock ...	50s. to 80s. "	60s. "	
	Tailors ...	45s. to 60s. "	50s. "	
	Tailoresses ...	20s. to 35s. "	25s. "	
	Pressers ...	45s. to 55s. "	50s. "	
	" —female ...	...	30s. "	
Corset ...	Machinists—female...	20s. to 30s. "	25s. "	
	Corset makers—female	17s. 6d. to 25s. "	17s. 6d. "	
Dressmaking, millinery	Dressmakers—female	40s. to 120s. "	60s. "	
	Dressmakers' assistants—female	15s. to 35s. "	18s. "	
	Mantlemakers—female	40s. to 80s. "	40s. "	
	Mantlemakers' assistants—female	15s. to 35s. "	18s. "	
	Milliners—female ...	40s. to 80s. "	40s. "	
	Milliners' assistants—female	15s. to 35s. "	18s. "	
	Pressers—female ...	16s. to 30s. "	20s. "	
	Machinists—female...	16s. to 25s. "	20s. "	
	Laundry ironers, &c.—female	15s. to 20s. "	16s. 6d. "	
	Dye works ...	Dyers ...	50s. to 100s. "	50s. "
		Pressers ...	45s. to 50s. "	45s. "
		Pressers—female ...	16s. to 30s. "	20s. "
	Furrier ...	Cleaners ...	40s. to 50s. "	40s. "
Cutters ...		40s. to 80s. "	50s. "	
Hat, cap ...	Machinists, &c—female	16s. to 25s. "	18s. "	
	Body makers, silk hats	50s. to 70s. "	60s. "	
	Finishers "	60s. to 80s. "	70s. "	
	Shapers "	80s. to 100s. "	80s. "	
	Crown sewers, silk hats—female	25s. to 30s. "	25s. "	
	Trimmers, silk hats—female	25s. to 30s. "	25s. "	
	Bodymakers, felt hats	...	65s. "	
	Blockers "	60s. to 65s. "	65s. "	
	Finishers "	60s. to 65s. "	65s. "	
	Shapers "	...	65s. "	

## WAGES IN MELBOURNE, 1903—Continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class VII.—Order 2—Contd.</i>			
Hat, Cap ... ..	Binders, felt hats—female	15s. to 30s. per week	20s. per week
	Trimmers, felt hats—female	15s. to 30s. „	20s. „
	Machinists, straw hats—female	16s. to 30s. „	25s. „
	Trimmers, straw hats—female	16s. to 20s. „	16s. „
	Blockers, pressers, women's hats	...	40s. „
	Machinists, women's hats—female	25s. to 35s. „	25s. „
	Machinists, caps—female	15s. to 25s. „	18s. „
	Hosiery ... ..	Machinists, knitting—female	12s. to 25s. „
Machinists, sewing—female		15s. to 25s. „	20s. „
Linkers—female ...		18s. to 24s. „	21s. „
Pressers ..		48s. to 52s. „	50s. „
Winders, menders, &c.—female		12s. to 18s. „	16s. „
Oilskin, waterproof clothing ...		Oilskin workers ...	45s. to 65s. „
	Machinists, female ...	20s. to 30s. „	25s. „
	Waterproof cutters .	50s. to 60s. „	50s. „
	Machinists, &c—female	20s. to 30s. „	25s. „
Ostrich feather ... ..	Feather dyers ...	50s. to 63s. „	50s. „
	„ „ female	...	35s. „
	„ curlers „	15s. to 35s. „	25s. „
Shirtmaking, underclothing ...	Shirt makers	16s. to 30s. „	17s. 6d., „
	Underclothing makers—female	16s. to 25s. „	16s. „
	Umbrella, parasol ... ..	Frame makers ...	40s. to 45s. „
Cutters ...		40s. to 55s. „	40s. „
Machinists—female...		15s. to 25s. „	20s. „
Tipplers		15s. to 20s. „	16s. „
<i>Order 3.—Fibrous Materials and Textiles not elsewhere included.</i>			
Bag, sack (including calico bag)	} Not procurable		
Flax milling			
Mat, matting			
Rope, twine ... ..			
Tarpaulin, tent, sail ... ..	Undefined... ..	30s. to 60s. „	36s. „
	Tarpaulin, tent, sail makers	...	48s. „
<i>Class VIII.—Books, Paper, Printing, Engraving.</i>			
Die sinking, engraving ...	Die sinkers ...	52s. to 60s. „	55s. „
	Engravers ...	50s. to 80s. „	55s. „
Ink, printing ink ... ..	Ink makers ...	50s. to 70s. „	60s. „
Paper bag, box, &c. ... ..	Box cutters ...	35s. to 52s. „	40s. „
	Makers-up—female ...	15s. to 20s. „	17s. 6d., „

## WAGES IN MELBOURNE, 1903—Continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class VIII.—Continued.</i>			
Paper, millboard, strawboard ...	Paper, &c., makers ...	...	60s. per week
	Beatermen ...	...	60s. "
	Breakermen ...	...	42s. "
	General hands ...	36s. to 42s. per week	36s. "
	Engine drivers ...	...	54s. "
Printing (including lithographic printing, electrotyping, stereotyping)	Printers—Compositors ...	52s. to 80s. "	52s. "
	" machinists ...	52s. to 60s. "	52s. "
	Printers—linotype-operators ...	70s. to 80s. "	80s. "
	Lithographers ...	52s. to 60s. "	52s. "
	Stereotypers—casters ...	...	40s. "
	" moulders ...	...	60s. "
	" finishers ...	...	55s. "
Bookbinding, account book making, stationery, &c.	Bookbinders ...	52s. to 80s. "	52s. "
	Pagers—female ...	16s. to 17s. 6d. "	16s. "
	Sewers and folders—female ...	20s. to 30s. "	20s. "
	Paper rulers ...	52s. to 70s. "	52s. "
<i>Class IX.—Musical Instruments</i>			
Organ, pianoforte ...	Organ builders, expert ...	...	84s. "
	" " ordinary ...	60s. to 72s. "	60s. "
	Tuners and voicers ...	...	78s. "
	Case makers ...	...	60s. "
	Nickel pipe makers ...	...	60s. "
<i>Class X.—Arms and Explosives</i>			
Ammunition ...	Cartridge operators—female ...	12s. to 20s. "	16s. "
	Mechanics (fitters, &c) ...	55s. to 66s. "	...
	Labourers ...	36s. to 42s. "	...
Explosive ...	Nitro-glycerine workers ...	42s. to 55s. "	48s. "
	Acid workers ...	...	45s. "
	Labourers and carters ...	36s. to 42s. "	36s. "
Firework, fuse ...	Fireworks makers ...	33s. to 45s. "	...
<i>Class XI.—Vehicles, Fittings, Saddlery, Harness, &amp;c.</i>			
Carriage lamp ...	Lamp makers ...	40s. to 60s. "	50s. "
Coach, waggon, tramcar, spoke and felloe, wheelwright	Body makers ...	40s. to 55s. "	45s. "
	Wheelers ...	40s. to 50s. "	45s. "
	Smiths ...	40s. to 60s. "	48s. "
	Trimmers ...	40s. to 60s. "	45s. "
	Painters ...	40s. to 54s. "	48s. "
	Vicemen ...	25s. to 35s. "	30s. "
Cycle ...	Cycle builders ...	35s. to 40s. "	35s. "
	Motor builders ...	...	50s. "
	Turners ...	...	42s. "
	Filers ...	40s. to 45s. "	40s. "
	Platers ...	45s. to 50s. "	45s. "
	Polishers ...	...	42s. "
	Smiths ...	...	48s. "

## WAGES IN MELBOURNE, 1903—Continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class XI.—Continued.</i>			
Perambulator ... ..	Wickerworkers ... ..	...	48s. per week
	Fitters up... ..	30s. to 50s. per week	30s. "
Saddlery, harness ... ..	Saddle makers ... ..	48s. to 55s. "	48s. "
	Collar makers ... ..	48s. to 55s. "	48s. "
Saddle tree, saddlers' ironmongery, &c. ... ..	Harness makers ... ..	48s. to 55s. "	48s. "
	Saddle tree makers ... ..	35s. to 50s. "	40s. "
Whip ... ..	Thong makers ... ..	40s. to 50s. "	40s. "
Horse shoeing, &c. ... ..	Farriers ... ..	35s. to 45s. "	40s. "
<i>Class XII.—Ship Building, Fittings, &amp;c.</i>			
Dock, ship ... ..	Shipwrights ... ..	...	12s. per day
	Foundry and shipsmiths ... ..	...	11s. "
	Labourers and painters ... ..	...	8s. "
	Stevedores—men and lumpers ... ..	...	1s. 3d. per hr.
	Wharf labourers ... ..	...	1s. "
Boat building .. ..	Boat builders ... ..	48s. to 60s. "	48s. per week
<i>Class XIII.—Furniture, Bedding, &amp;c.</i>			
Bedding, flock, upholstery ... ..	Bedding and mattress makers ... ..	46s. to 50s. "	46s. "
	Machinists—female... ..	20s. to 22s. 6d. "	20s. "
	Machine feeders ... ..	...	25s. "
	Sorters, &c.—female ... ..	...	15s. "
	Upholsterers ... ..	48s. to 70s. "	48s. "
Curled hair ... ..	Curled hair, horsehair workers ... ..	35s. to 50s. "	40s. "
	Cabinet makers ... ..	48s. to 70s. "	48s. "
Furniture, cabinet making, chair, billiard table ... ..	Carvers ... ..	48s. to 54s. "	48s. "
	Turners ... ..	48s. to 54s. "	48s. "
	Polishers ... ..	48s. to 54s. "	48s. "
	Billiard table makers ... ..	54s. to 60s. "	54s. "
	Cushion makers, machinists ... ..	...	60s. "
Picture frame ... ..	Slate rubbers ... ..	...	42s. "
	Frame makers ... ..	50s. to 55s. "	50s. "
	Mount cutters ... ..	35s. to 50s. "	40s. "
Venetian blind, window blind... ..	Fitters-up—female ... ..	20s. to 27s. 6d. "	20s. "
	Venetian blind makers ... ..	36s. to 48s. "	36s. "
<i>Class XIV.—Drugs, Chemicals, By-products.</i>			
Baking powder (not procurable) Blacking, blue, washing powder, soda ... ..	Skilled, undefined .. ..	40s. to 100s. per week	...
	Unskilled ,, ... ..	25s. to 37s. 6d. per week	...
	Wrappers—female ... ..	12s. 6d. to 20s. per week	...

WAGES IN MELBOURNE, 1903—Continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class XIV.—Continued.</i>			
Chemical, drug, horse and cattle medicine	Makers of pharmaceutical preparations	50s. to 75s. per week	60s. per week
	Others working in drugs, &c.	35s. to 45s. "	40s. "
Essential oil	Disinfectant makers	35s. to 45s. "	40s. "
Fertilizer	Essence blending	35s. to 55s. "	40s. "
	Chemical manure workers	25s. to 40s. "	36s. "
Paint, varnish, white-lead	Paint makers	...	55s. "
<i>Class XV.—Surgical and Scientific Appliances.</i>			
Optical, philosophical instrument, &c.	Opticians, &c.	35s. to 60s. "	45s.
Surgical appliance, instrument	Surgical instrument makers	40s. to 80s. "	50s. "
<i>Class XVI.—Timepiece, Jewellery, Platedware.</i>			
Electroplating	Electroplaters and silversmiths	40s. to 80s. "	65s. "
	Metal polishers	35s. to 48s. "	35s. "
	Lacquerers — female	15s. to 30s. "	20s. "
Goldsmithing, jewellery, gold-beating	Goldsmiths, jewellers	50s. to 90s. "	55s. "
Watchmaking, &c.	Setters	80s. to 150s. "	100s. "
	Watchmakers	45s. to 70s. "	55s. "
<i>Class XVII.—Heat, Light, and Energy.</i>			
Electric apparatus	Engine drivers	...	60s. "
	Dynamo attendants	...	54s. "
Electric light	Winders	48s. to 60s. "	54s. "
	Engine drivers	10s. to 10s. 6d. per day	10s. 6d. per day
	Firemen	8s. 6d. to 10s. per day	8s. 6d. per day
	Electrical fitters	...	9s. "
	Switchboard attendants	...	9s. "
	Linemen	7s. to 9s. per day	8s. "
	Carboners	...	7s. "
	Patrolmen	...	7s. "
	Writers	8s. to 9s. "	8s. "
	Greasers	...	7s. "
Gas and coke	Stokers	...	7s. 9d. "
	Enginemmen	...	7s. 10d. "
	Purifiers	6s. 4d. to 7s. 9d. per day	...
	Sulphate workers	...	7s. 10d. per day

## WAGES IN MELBOURNE, 1903—Continued.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
<i>Class XVII.—Continued.</i>			
Gas and coke ... ..	Stove repairers and fitters	8s. to 10s. per day	...
	Service layers	7s. 10d. to 8s. 2d. per day	...
	Main layers	8s. 6d. to 9s. 6d. per day	...
	Inspectors	8s. 9d. to 11s. 6d. per day	...
	Labourers	6s. 6d. to 6s. 10d. per day	...
Hydraulic power ... ..	Enginemmen	...	8s. per day
	Firemen	...	7s. 6d. "
	Fitters	...	9s. "
	Main layers	...	9s. "
	Special labourers	...	8s. "
	Ordinary "	...	7s. "
Ironfounders' dust, charcoal dust	Labourers...	39s. to 45s. per week	39s. per week
Match ... ..	Vesta makers—female	12s. 6d. to 24s. "	16s. "
	Box makers "	12s. to 21s. "	14s. "
<i>Class XVIII.—Leatherware (excluding Saddlery and Harness).</i>			
Leather belting ... ..	Belt makers	48s. to 60s. "	48s. "
	Machinists, putters-up	...	48s. "
Portmanteau, gladstone bag ...	Leather bag makers	45s. to 60s. "	45s. "
	Portmanteau makers	35s. to 45s. "	35s. "
<i>Class XIX.—Wares not elsewhere included.</i>			
Basket, wickerware ... ..	Wicker workers (piece work)	40s. to 50s. "	40s. "
	Pith cane, bamboo workers (piece work)	30s. to 50s. "	40s. "
Bellows ... ..	Bellows makers	30s. to 45s. "	40s. "
Broom, brushware ... ..	Millet broom makers	35s. to 50s. "	40s. "
	Hair broom, brush "	40s. to 55s. "	45s. "
Cork cutting ... ..	Cork cutters	30s. to 40s. "	35s. "
Rubber goods (including cycle tyres)	Rubber workers, expert	60s. to 90s. "	70s. "
	" ordinary	35s. to 50s. "	37s. 6d. "
	Trimmers, finishers, and small rubber goods makers—female	15s. to 25s. "	20s. "
Quarry ... ..	Quarrymen	36s. to 54s. "	45s. "
	Stonebreakers	2s. to 2s. 6d. per c. yd. (2½ in.)	...
	Labourers	36s. to 42s. per week	42s. "

WAGES IN MELBOURNE, 1903.

B.—Rates of Wages ruling in Melbourne during 1903 for Servants and Adult Workers in Unclassified Trades and Industries.

\*\* This Statement has been compiled from information collected direct from Employers or their agents.

Industry or Service.	Occupations.	Wages.	
		Range.	General Rate.
Domestic servants*—males ...	Coachmen, Footmen, Grooms, Gardeners	15s. to 30s. per week	20s. per week
	Butlers ...	20s. to 40s. "	25s. "
	Cooks ...	15s. to 30s. "	20s. "
	Laundresses ...	14s. to 20s. "	15s. "
	Housemaids ...	10s. to 15s. "	14s. "
	Nursemaids ...	7s. 6d. to 15s. "	12s. "
	General servants ...	10s. to 15s. "	12s. "
Hotel servants*—males ...	Girls ...	5s. to 8s. "	7s. "
	Barmen ...	20s. to 30s. "	25s. "
	Waiters ...	20s. to 30s. "	25s. "
	Boots ...	12s. 6d. to 25s. "	15s. "
	Ostlers ...	12s. 6d. to 25s. "	18s. "
	Cooks ...	20s. to 65s. "	25s. "
	Barmaids ...	15s. to 25s. "	20s. "
" " females ...	Waitresses ...	10s. to 15s. "	12s. 6d. "
	Housemaids ...	10s. to 15s. "	12s. 6d. "
	Cooks ...	15s. to 30s. "	20s. "
	Bricklayers ...	60s. to 66s. "	60s. "
	Carpenters ...	48s. to 60s. "	54s. "
	Joiners ...	...	60s. "
	Labourers... ..	36s. to 48s. "	42s. "
Building, &c. ...	Masons ...	56s. to 60s. "	56s. "
	Painters and glaziers	42s. to 48s. "	42s. "
	Paperhangers ...	48s. to 60s. "	48s. "
	Plasterers ...	48s. to 60s. "	54s. "
	Plumbers ...	48s. to 60s. "	54s. "
	" licensed sanitary	60s. to 75s. "	66s. "
	Signwriters ...	48s. to 60s. "	48s. "
	Slaters ...	48s. to 60s. "	60s. "
	Bakers, bread	48s. to 52s. "	50s. "
	" " (foremen)	70s. to 80s. "	80s. "
	" pastry (1st class)	52s. to 70s. "	52s. "
	" " (2nd " )	4 s. 4d. to 50s. "	43s. 4d. "
	Butchering ...	Slaughtermen ...	50s. to 70s. "
Shopmen ...		55s. to 80s. "	55s. "
General butchers		...	45s. "
Small goods men ...		55s. to 80s. "	55s. "
Laundry ...	Drivers ...	35s. to 45s. "	35s. "
	Laundresses—female	20s. to 24s. "	20s. "
Photography ...	Photographers ...	60s. to 120s. "	...
	Printers ...	30s. to 60s. "	50s. "
	Retouchers—female	20s. to 35s. "	20s. "
	Finishers ...	15s. to 30s. "	20s. "
	Makers of photo- graphic materials	36s. to 80s. "	45s. "
	Finishers, packers— female	17s. 6d. to 25s. "	17s. 6d. "

\* With Board and Lodging.

The following particulars are furnished respecting the more important industries of the State:—

Tanneries,  
fell-  
mongeries,  
and wool-  
washing  
establish-  
ments.

The number of tanneries, &c., decreased by one during 1903, when 94 were in operation. The hands employed, however, increased from 1,635 to 1,640. The wages paid last year to the hands (excluding working proprietors) amounted to £116,658. The approximate values of the machinery, plant, land, buildings and improvements during the same period were:—

VALUE OF TANNERIES: RETURN FOR FIVE YEARS.

Year.	Approximate Value of—		
	Machinery and Plant in Use.	Land.	Buildings and Improvements.
	£	£	£
1899 ... ..	87,120	43,040	111,160
1900 ... ..	91,530	51,250	117,960
1901 ... ..	99,710	47,750	98,950
1902 ... ..	103,329	54,179	104,114
1903 ... ..	110,796	48,341	112,407

Tannery operations during the past year were carried on in 2,919 pits, where 9,257 tons of bark were used. The output was:—

OUTPUT OF TANNERIES: RETURN FOR FIVE YEARS.

Year.	Number Tanned of—			Sheepskins Stripped.	Wool Washed (weight after washing.)
	Hides.	Calf Skins.	Sheep and Other Skins.		
	No.	No.	No.	No.	lbs.
1899 ... ..	430,809	197,514	1,280,722	1,395,626	6,918,572
1900 ... ..	500,549	165,802	1,395,600	1,431,811	6,866,383
1901 ... ..	406,260	181,522	676,936	615,614	8,511,171
1902 ... ..	424,786	189,886	313,166	453,660	5,279,916
1903 ... ..	397,367	179,425	629,465	925,263	6,197,723

The columns "Hides" and "Calf Skins" include the number of skins dealt with in small tanneries; but these are not included in the regular lists. The work done in these small tanneries was the tanning of 4,501 hides, 13,695 calf skins, and 4,911 sheep and other skins.

The value of the leather imported into Victoria in 1903 was £141,505; of that exported, £264,914. The export of Victorian leather was valued at £225,858.

There were 20 soap and candle works in operation in 1903 Soap and candle works.—two less than in the previous year. The hands employed numbered 485 (of whom 7 were females), including 15 working proprietors and 12 managers. The value of the machinery, plant, land, and buildings and improvements was £188,144 in 1902, and £210,053 in 1903—an increase of £21,909. The returns for the last five years are:—

SOAP AND CANDLE WORKS—VALUE AND PRODUCTS: RETURN FOR FIVE YEARS.

Year.	Approximate Value of—			Products Made.	
	Machinery and Plant in Use.	Land.	Buildings and Improvements.	Soap. (Including that made in small factories.)	Candles.
	£	£	£	Cwt.	Cwt.
1899 ...	105,145	48,950	67,590	136,424	45,848.
1900 ...	95,114	42,675	58,049	133,678	46,624.
1901 ...	97,260	42,870	60,940	143,140	47,313.
1902 ...	91,325	39,967	56,852	165,188	49,406.
1903 ...	103,411	42,288	64,354	151,414	45,052.

The amount of wages paid to the hands employed was £40,134.

The quantity of soap, perfumed and other, imported during 1093 was 885,319 lbs., valued at £27,348; the quantity exported was 3,544,636 lbs., of which 3,369,754 lbs. was Victorian made. The former was valued at £44,744, and the latter at £33,949. The quantity of candles imported was 1,383,488 lbs., valued at £28,083; and the exports 988,559 lbs., valued at £21,805, including 767,506 lbs. of Victorian-made candles, valued at £16,843.

The brickyards during the year increased from 107 to 110, Brickyards: potteries, earthen-ware, &c. and the number of hands from 1,451 to 1,581. The latter number (of whom 34 were females) included 127 working proprietors (of whom 1 was a female) and 29 managers and overseers. The sum of £122,153 was paid to the employees; and the value of land, plant, buildings, &c., was £247,171.

The number of bricks made, and the value of pottery and of pipes and tiles manufactured during the last five years, were returned as follow:—

## POTTERY, PIPES AND TILES: RETURN FOR FIVE YEARS.

Year.	Number of Bricks Made.	Value of—	
		Pipes and Tiles.	Pottery.
		£	£
1899 ...	82,751,200	51,538	27,515
1900 ...	85,387,275	55,751	19,870
1901 ...	86,769,000	73,060	23,695
1902 ..	92,503,080	71,074	27,289
1903 ...	79,105,831	81,732	34,572

NOTE.—The number of bricks includes those made in small brick-yards.

Forest saw-mills.

Forest saw-mills were established for the purpose of cutting native timber at or near the place where it is grown. The number of these mills during the last year was 125, or 1 more than in 1902. The number of hands employed in 1903 was 1,476, of whom 170 were male and 2 were female working proprietors, and 46 were managers and overseers. The wages paid amounted to £77,945. The approximate value of machinery, plant, land, buildings, improvements, together with the quantity and value of timber sawn during the last five years appears in the following statement:—

Year.	Approximate Value of—			Timber Sawn.	
	Machinery and Plant in use.	Land.	Buildings and Improvements.	Quantity.	Value.
	£	£	£	Super ft.	£
1899 ...	101,880	7,510	27,670	40,716,500	107,938
1900 ...	104,500	7,520	27,350	44,782,330	125,121
1901 ...	91,810	6,170	13,500	46,495,885	134,310
1902 ...	81,898	6,380	11,854	40,494,660	128,430
1903 ...	80,039	1,495*	10,797	38,841,322	116,845

The other factories working in wood number 143, comprising—cooperage and cork-cutting works (14), employing 87 males, and paying £5,715 in wages; dairy and domestic implements and bellows (6), employing 105 males, and paying £7,955 in wages; saw-milling, moulding, and joinery works (90), employing 1,790 males and 8 females, and paying £169,422 in wages; mantelpiece (3), employing 93 males, and paying £8,566 in wages; and wood carving and turnery (30), employing 153

\* Value of land occupied by saw-mills only.

males and 1 female, and paying £7,230 in wages. The total amount paid in wages to workers in wood, other than those employed in forest saw-mills, was £198,888; and the approximate value of land, buildings, machinery, &c., in use in the works, was £317,241.

The facilities heretofore granted to saw-millers to enter upon Crown lands, cut down timber, and establish mills, must of necessity be extensively curtailed in the future in the interests of forest conservation, and the preservation of a large selection of indigenous trees, shrubs, and plants which otherwise may possibly be eradicated.

Forest con-  
servation.

The area of the forest reserves is becoming so curtailed year after year by alienation, that it will not be possible to continue to grant licences for timber cutting, except under the most stringent conditions, and then only to a limited extent.

A greater danger than even the saw-mill industry is that which has been brought about in the past by the entrance of splitters upon the reserves. These men cut down the trees in ruthless fashion, and were altogether regardless of any precautions that might have been taken, and heedless of any safeguards that might have been effective in saving the forests. The danger from fire is also very great. Large areas of valuable timber are destroyed or damaged by the spread of extensive fires in the hot season. Many of these are unquestionably due to the carelessness of settlers in clearing their land, and of timber-getters in leaving their camp fires unextinguished. The danger will only be completely met when the punishment meted out to those who use fire carelessly is adequate to administer an effective check. In regard to the splitters, an important advance has been made during the past year in the working of the more valuable forests by the abolition of timber-cutters' licences and the substitution of personal permits for a fixed quantity of timber, and a specific class of tree. Stringent conditions are embodied in these permits, which are in the form of an agreement between the Crown and the holder, and can be revoked or suspended at the pleasure of the Conservator for any serious breach of the forest regulations.

It must be remembered that the climatic conditions which aid the increase and development of population are also most favourable to the growth of trees. Yet, with the advent of man into a new country, it must perforce lose its forests. The wood is necessary for fuel, for commercial purposes, for building and fencing, and for mining and railway development; whilst the land is required for cities, markets, manufactories, and the roads thereto, and for the cultivation of agricultural produce.

The use of forest timber in new countries is, therefore, a necessity of the situation; but the removal of the trees should be so carried out as to ensure not only the economical harvesting of the forest produce, but also the other advantages that follow therefrom.

Forests—  
influence  
on rainfall

There is little doubt as to the advantages in regard to climate of the presence of forests. Their influence on rainfall has been disputed, because it is asserted that the conditions upon which the amount of rain depends are not changed by the existence of forests. These conditions are the presence of oceans and seas, the degree of heat, and the rapidity with which the air moves over the surface of the waters. Air currents blowing landwards are year by year charged with the same amount of moisture, which precipitates as soon as the air is cooled below the point of saturation. It is argued that if the forests cause the precipitation, the regions behind are deprived of rain, because the air-currents which reach them are dry and unable to yield a further supply of water.

But this argument does not take into account the re-  
evaporation of moisture which the rain precipitates on the land, and which is very great from lakes and streams, as well as from the soil, and from the crowns of trees. Many instances can be given, not only of the baneful effects of the destruction of forests, but also of the benefits of re-*afforestation*. There is abundant historical evidence that in past centuries the destruction of the forests in many of the countries bordering the Mediterranean, such as Palestine, Asia Minor, Greece, Dalmatia, Italy, Sicily, Spain, and Northern Africa, was followed by marked changes in the climate, by periods of drought and flood, and by the desiccation and erosion of the soil, accompanied by loss or diminution of fertility. In Victoria the difference of rainfall in open, treeless districts, and that in thickly-clad forest regions, has been considerable, the average in the latter districts being much higher than in the former. In 1898 the Royal Commission on State Forests and Timber Reserves, from whose reports the principal facts here given are abridged, made enquiries from the various municipalities as to the effect upon the water supply in their districts, of forest clearing by settlers. In general, the answers showed that there had been a considerable diminution in the volume of water in the rivers and creeks, only a small number of districts being unaffected.

For, that one direct result of the destruction of forests is the drying up of water courses, there is no difference of opinion. The deep absorbent mould of a forest area, protected

by the branches and leaves of the trees from the direct action of the sun, is a splendid receptacle for the rain-water, which it gives out again in small streams and springs. The supply for the lowlands is thus regulated by the tree-clad area, and the waste of water by its outpouring in torrents and freshets is prevented, and alternations of drought and flood checked. The presence of forests also regulates the temperature, preventing sudden changes, and the occurrence of severe frosts and hail storms consequent upon them.

The past history and present position of forestry in Victoria are as follow:—The area of Victoria is 56,245,760 acres, of which the forest area is about 11,797,000 acres, consisting of inaccessible mountain country and of proposed or existing reserves. The area of existing State forest reserves is only 4,327,142 acres, that of timber reserves only 332,133 acres, the two together making a total of 4,659,275 acres available for State forestry purposes. The difference between this total and the 11,797,000 acres of forest being the area of practically inaccessible mountain ranges, where economic forestry is rendered difficult.

State forests

From 1876 efforts at forest legislation have been made, but the necessities of the situation have not yet been met. In the year named, a short Forest Act provided for the creation of local forest boards. In 1879, 1881, 1887, and 1892, Bills were introduced to deal with the subject, but not one of them became law. The only forest legislation is that contained in the "Land Act 1901," which, after empowering the Governor-in-Council to set aside and withdraw from settlement temporarily or permanently reserves of timber for sawing or splitting purposes, and reserves for the growth and preservation of timber, and to except lands or any portion thereof from occupation for business or residential or mining purposes, forbids the alienation of State forests or timber reserves, but permits the latter reserves when denuded of timber to be added to other classes of land which may be alienated or occupied for settlement. But another section gives the Governor-in-Council power to increase or diminish the area of land under these headings, and thereby nullifies the protective effect of the sections which forbid the alienation. The maintenance of all such areas, except those proclaimed as permanent reserves, is thus endangered.

Forest legislation.

Considering the unsatisfactory position occupied by forestry in Victoria, where the only protection is that afforded by a department whose policy in general is to open all lands

to settlers as quickly and as freely as possible, it must be observed that the issue of every licence to cut timber in the State reserves is, more or less, a menace to forest preservation. In many districts the supply for fuel is totally insufficient to meet the home consumption. Extensive areas of the best natural forest country, such as the slopes of the Dividing Range, have long since passed from the Crown. In 1888 a Conservator of Forests was appointed, but little attention was paid to his oft-repeated warnings. Supervision has, however, been exercised by his officers, who have striven to preserve intact those limited areas which the utter neglect of forestry has now left to the State.

Forest con-  
servation—  
Royal Com-  
mission's  
Bill.

After a thorough investigation of the whole subject, the Royal Commission came to the conclusion that a high standard of forestry could not be successfully established until the reserves were declared inalienable by Act of Parliament, and the control and administration of the forests removed from political interference and vested in an independent Conservancy Board. In order that there might be no undue delay in carrying out this great reform they drafted, in 1901, a comprehensive Forests Bill providing for the delimitation and permanent tenure of all reserves, the protection under tree cover of all mountain watersheds and lake and river frontages, the proper regulation of timber cutting on unreserved Crown lands, the encouragement of tree planting on denuded areas, the granting of larger protective powers to the Conservator and his staff, and the institution of reasonable penalties for grave breaches of the law. Provision was also made for the establishment of an effective system of fire protection. The Bill has been highly commended as essential to the foundation of an intelligent forestry policy by competent authorities in Victoria and the neighbouring States to whom it has been submitted, but owing to a press of other new legislation it has not yet been dealt with by Parliament.

Forestry in  
various  
countries

The Governments of the principal nations of Europe and of the United States and Canada in America, have not only seen the necessity of forest conservation, but have extended the areas reserved for forestry purposes, by making considerable additions by re-forestation. Precise information respecting the proportion of woodland to the total area is not available, those given in some cases excluding sheets of water, others including all lakes, rivers, &c., in the country. The following figures, extracted from an article by Professor Robertson in the *Encyclopædia Britannica*, however, are quite

near enough to afford a good general idea of the state of forestry in the countries named:—

AREA AND ACREAGE UNDER FORESTS IN VARIOUS COUNTRIES.

Country.	Woods and Forests.	Proportion of Woodland.
	Acres.	Per cent.
Great Britain (1877) ...	2,187,078	3·92
Russia in Europe (1872) ...	527,426,510	42·38
Sweden (1875) ...	40,636,883	40·43
Norway (1870) ...	17,290,000	22·30
Prussia (1876) ...	20,047,014	23·35
Baden (1876) ...	1,337,767	35·90
Württemberg (1876) ...	1,494,147	31·22
France (1874) ...	20,641,953	15·79
Austria Proper (1875) ...	23,284,174	31·39
Hungary (1875) ...	19,425,600	28·24
Victoria (1903) ...	11,797,000	20·97

It is an undoubted fact, verified by centuries of experience, that the existence of forests is essential to the development of a community, whether in regard to its industrial, its agricultural, or its pastoral resources. Besides the climatic influence, the hygienic advantages which the preservation of forests causes to accrue is also worthy of remark. The denudation of forests has also effected considerable changes in the physical aspect of a country. Professor Robertson remarks that many countries have suffered greatly from the reckless and wholesale destruction of the woods which covered the mountain slopes, and many springs which formerly existed under the shelter of the forest have now wholly disappeared. One of the causes of the terrible famines in India and China is the unwise denudation of the mountain slopes, where the forests formerly absorbed a large proportion of the rainfall, which now quickly runs off to the sea. The salubrious and fertilizing effect of forest clothing has, in India, been affirmed and demonstrated in reports from many districts of our great Eastern Empire; and in the principal European countries conservation and re-forestation have now for many years been practised. But for the general purposes of forestry the Government of Victoria has done very little.

Something less than a thousand acres were enclosed along the lower slopes of the You Yangs, and planted with eucalypts and conifers for timber, and with wattles for bark. Minor plantations exist at Sawpit Gully (Dividing Range), Havelock, Majorca, and Macedon. There are also two forest nurseries situated at Macedon and Creswick, which have lately been extended.

The timber plantations at You Yangs, Creswick, and Majorca have also been extended, and new plantations of the best varieties of wattle for the production of bark for tanning purposes have been formed. No forest produce yields such a good return to the State as wattle. As a rule, the bark is fit for a first stripping in the sixth year after the trees are planted, but the main yield is obtained in the seventh and eighth years.

The evils of destruction, to which reference has been made, might have been to some extent mitigated by planting trees in areas where cereals do not thrive, because of poor or thin soil or excessive rainfall. There are many such areas in the neighbourhood of towns and cities, and even in agricultural districts, where trees might have been advantageously planted, and forests reserved. Unfortunately, even these areas have passed from the Crown, but doubtless suitable arrangements are possible whereby the present owners can be induced to establish plantations. There are still, however, in many parts of Victoria, unappropriated areas, on the tops and slopes of hills and mountains, and on the steep sides of river banks, which may be reserved for forests, and planted with tree-stocks.

A lively sense of the irreparable injuries that result from the despoliation of forest areas should induce extreme caution in the further alienation of these lands.

Bacon and  
ham curing.

The establishments connected with this industry increased from 24 in 1897 to 28 in 1902, but fell again to 24 in 1903. The number of hands employed increased from 204 in 1897 to 285 in 1902; these, however, were reduced to 256 in 1903. The approximate value of machinery and plant in use was £26,810; of land, £5,721; and of buildings and improvements, £23,415; and the wages paid to employees amounted to £22,153.

The following gives details of the industry for the five years ended 1903:—

BACON CURING : RETURN FOR FIVE YEARS.

Year.	Approximate Value of—			Pigs Slaughtered for Curing.	Weight of Bacon and Hams Cured.
	Machinery and Plant.	Land.	Buildings and Improvements		
	£	£	£	No.	lbs.
1899 ...	24,265	6,870	22,205	83,661	8,805,122
1900 ...	23,210	7,680	25,200	109,619	10,267,778
1901 ...	27,900	8,690	27,670	112,428	11,696,710
1902 ...	29,611	9,231	30,625	114,539	11,702,322
1903 ...	26,810	5,721	23,415	90,979	9,814,951

Nors.—The columns, "Pigs Slaughtered" and "Weight of Bacon and Ham Cured," include the number and quantity dealt with in small factories. These are not included in the regular list.

In addition, the following quantities of bacon and hams were returned as having been cured on farms, viz:—2,081,192 lbs. in 1899, 2,936,769 lbs. in 1900, 3,314,906 lbs. in 1901, 2,736,048 lbs. in 1902, and 2,689,900 lbs. in 1903. The total for the State in 1903 was thus 12,504,851 lbs.

The import of bacon and hams in 1903 was 108,137 lbs., valued at £4,394; and 3,239,186 lbs., valued at £138,822, were exported, including 3,220,472 lbs., valued at £137,971, cured in Victoria. Import and export of bacon and hams.

The number of butter and cheese factories (including 1 butterine factory), exclusive of creameries, was 207 in 1903. Butter and cheese factories. The great majority of these employed steam power. There was a decrease of 5 from the previous year, but an increase of fifty-four per cent. during the last ten years. Of the factories in operation in 1903, 164 made butter, 15 made butter and cheese, 27 made cheese only, and 1 made butterine. In 1903 there were 281 creameries, the maximum number being 399 in 1900. From 1899 to 1903 the horse-power of the engines used in factories and creameries increased from 3,120 to 3,329, the number of hands employed decreased from 1,392 to 1,319, the approximate value of machinery, plant, land, buildings and improvements increased from £486,709 to £524,448. The quantity of milk received at the factories and creameries increased from 77,520,000 gallons in 1895—the first year in which a record was kept—to 97,049,529 gallons in 1903. In 1900, the return was 116,220,239 gallons—the maximum quantity received.

The output from butter and cheese factories during the last five years was:—

BUTTER AND CHEESE FACTORIES: RETURN FOR FIVE YEARS.

Year.	Butter.	Cream Sold.	Cheese.	Concentrated Milk Made.
	lbs.	gallons.	lbs.	gallons.
1899	45,878,459	62,493	2,373,178	205,888
1900	48,839,996	38,274	2,508,843	263,138
1901	40,824,928	50,092	2,073,940	266,083
1902	32,927,546	23,739	2,128,835	243,904
1903	40,707,377	17,882	3,602,988	236,581

In addition to the quantity of butter and cheese made in the factories, the following quantities were returned as having been made on farms, viz:—Butter, 7,449,126 lbs. in 1899, 6,764,122 lbs. in 1900, 6,032,644 lbs. in 1901, 6,300,208 lbs. in Butter and cheese made on farms.

1902, and 5,978,350 lbs. in 1903; cheese, 2,139,528 lbs. in 1899, 1,775,327 lbs. in 1900, 1,900,728 lbs. in 1901, 1,720,726 lbs. in 1902, and 2,078,527 lbs. in 1903.

Butter and cheese made in factories and on farms.

Taking the returns of butter from all sources, the largest quantity, 55,604,118 lbs., was made in 1900. The largest quantity of cheese returned was 5,681,515 lbs. in 1903. Previously, the largest return was 5,052,782 lbs. in 1895.

Import and export of butter.

The import of butter was 1,294,198 lbs., valued at £59,489; and the export 31,253,151 lbs., valued at £1,301,132; 30,169,299 lbs. of the latter, valued at £1,252,649, being Victorian butter. Besides the latter, 1,083,852 lbs. of butter other than Victorian, valued at £48,283, was exported.

Import and export of cheese.

The total quantity of cheese made in factories and on farms was 5,681,515 lbs.; 217,601 lbs., valued at £7,310, was imported from abroad; and 1,852,448 lbs., valued at £50,029, was exported, including 1,809,963 lbs. of Victorian cheese, valued at £50,773.

Meat freezing and preserving works.

The number of works for freezing and preserving meat increased from 6 in 1895 to 14 in 1903, the horse-power from 529 to 1,150, and the number of hands from 238 to 439. The approximate value of machinery, plant, land, buildings, and improvements in 1903 was £199,341. The output was:—

MEAT FREEZING AND PRESERVING: RETURN FOR FIVE YEARS.

Year.	Frozen.			
	Sheep.	Cattle.	Rabbits.	Poultry.
	No.	Qrs.	No.	No.
1899 ... ..	475,579	9,608	4,477,866	5,405
1900 ... ..	437,242	16,096	4,840,128	44,050
1901 ... ..	417,721	6,395	3,990,460	71,490
1902 ... ..	375,178	1,338	6,218,422	34,228
1903 ... ..	294,906	1,424	5,861,741	41,460
Year.	Preserved.			
	Beef.	Mutton.	Rabbits.	Fish.
	Cwt.	Cwt.	Cwt.	Cwt.
1899 ... ..	608	4,277	34,144	6
1900 ... ..	5,593	2,198	24,874	831
1901 ... ..	3,304	2,417	26,303	1,140
1902 ... ..	7,705	14,913	16,537	2,134
1903 ... ..	8,796	7,237	12,796	4,492

The following is a statement showing the imports and exports of frozen and preserved meats during 1903:—

Imports and exports of frozen and preserved meats.

	Imports (including transfers from other States).		Exports.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Frozen—				
Mutton ... ..	158,526 lbs.	2,438	13,151,784 lbs.	191,647
Beef ... ..	137,382 lbs.	1,546	1,582,017 lbs.	24,724
Pork ... ..	418,082 lbs.	12,423	145,717 lbs.	3,662
Rabbits and Hares ... ..	...	...	3,501,511 pairs	167,914
Poultry ... ..	29,538 lbs.	1,051	*45,415 pairs	10,947
Game ... ..	...	...	4,043 lbs.	228
Other meats' ... ..	45,890 lbs.	981	...	5,395
Preserved by cold process—Beef	137,382 lbs.	1,546	...	...
Meats—Fresh and smoked ...	24,939 lbs.	418	45,380 lbs.	749
„ Potted and concentrated ...	...	9,094	...	861
„ Preserved in tins ... ..	310,387 lbs.	12,831	3,047,067 lbs.	54,026
„ Not elsewhere included ...	1,055 cwt.	1,844	2,340 cwt.	7,100
Rabbits and hares ... ..	4,940 lbs.	40	...	...
Total value ... ..	...	44,212	...	467,253

These mills decreased in number by 13 and the number of hands by 102 since 1899, whilst an increase of 470 took place in the horse-power of the engines. The approximate values of machinery, plant, land, buildings and improvements, the wheat operated on for flour, and the quantity of flour made during the last five years, were as follow:—

FLOUR MILLS: RETURN FOR FIVE YEARS.

Year.	Approximate Value of—			Wheat Operated on for Flour.	Flour Made.
	Machinery and Plant.	Land.	Buildings and Improvements.		
	£	£	£	Bushels.	Tons.
1899	304,365	62,885	186,070	9,139,289	184,835
1900	297,880	74,442	184,470	8,387,323	169,739
1901	280,130	70,530	175,520	9,482,175	190,845
1902	256,980	76,121	171,125	8,491,224	170,696
1903	261,530	68,917	166,869	5,762,849	115,368

During the year, 2,179,843 lbs. of Victorian biscuits, valued at £49,213, and 12,867,900 lbs. of Victorian flour, valued at £74,479, were exported; as well as 8,864 lbs. of biscuits, valued at £582, and 3,077,200 lbs. of flour, valued at £15,311, received from outside the State. The imports were 259,924 lbs. of biscuits, valued at £8,920, and 38,670,300 lbs. of flour,

Import and export of bread-stuffs.

\* Including 375 pairs from other States, valued at £94.

valued at £195,150. The quantity of wheat operated upon shows a great falling off, as also does the flour made; but this deficiency was largely met by a net import of 22,725,200 lbs. of flour.

Sugar  
refineries.

The two sugar refineries working in 1903 employed engines of 474 horse-power and 344 hands, treated 1,087,005 cwt. of raw (cane) sugar, and produced 1,025,583 cwt. of refined sugar, and 51,109 cwt. of refined treacle. Full particulars will be found in the following table:—

SUGAR REFINERIES: RETURN FOR FIVE YEARS.

Year.	Sugar Refineries.		Actual Horse-Power of Engines Used.	Average Number of Hands Employed.	Approximate Value of—			Cane Sugar Treated (Raw).	Refined Sugar Made	Refined Treacle Made.
	Total Number.	Using Steam Engines.			Machinery and Plant.	Lands.	Buildings.			
					£	£	£	cwt.	cwt.	cwt.
1899	2	2	413	307	71,500	7,000	51,680	890,558	838,490	34,480
1900	2	2	424	301	74,500	7,000	56,000	1,004,913	944,049	34,080
1901	2	2	424	324	74,500	7,000	56,000	1,129,586	1,052,742	40,320
1902	2	2	424	346	82,000	10,000	76,500	952,801	879,521	51,052
1903	2	2	474	344	83,500	10,000	76,500	1,087,005	1,025,583	51,109

Breweries.

The number of breweries in 1903, 44, was eight less than in 1899, and the number of hands employed decreased from 1,143 to 1,063. The approximate value of the machinery, plant, land, buildings and improvements, the quantities of materials used, and the beer made during the last five years, were:—

BREWERIES: RETURN FOR FIVE YEARS.

Year.	Approximate Value of—			Materials Used—			Beer Made.
	Machinery and Plant.	Land.	Buildings and Improvements.	Sugar.	Malt.	Hops.	
	£	£	£	cwt.	bushels.	lbs.	gallons.
1899	189,590	447,885	281,265	109,881	595,149	676,959	15,326,289
1900	204,840	230,530	269,410	111,863	598,094	648,648	16,162,550
1901	212,280	236,310	271,600	113,686	608,445	650,214	16,563,068
1902	211,036	228,990	273,325	115,258	625,441	677,262	17,162,680
1903	209,492	229,965	277,383	102,651	552,042	569,981	15,423,149

NOTE.—The columns under "Materials Used" and "Beer Made" include those of small breweries, not included in the regular list.

Distilleries

The distilleries decreased from 9 in 1899 to 6 in 1903, the hands from 134 to 34, the estimated value of machinery, plant, land, buildings and improvements from £145,390 to £22,299, and the horse-power of the engines from 163 to 73.

The materials used in the manufacture, and the quantity of spirits distilled, were:—

DISTILLERIES: RETURN FOR FIVE YEARS.

Year.	Materials Used.							Spirits Distilled.
	Wine.	Malt.	Wheat.	Maize.	Other Grain.	Sugar and Molasses.	Beer.	
	Gal.	Bush.	Bush.	Bush.	Bush.	lbs.	Gal.	
1899	160,798	84,558	3,129	...	112	5,344,640	...	Proof gal. 448,680
1900	160,301	91,223	2,353	3,692	26	4,652,480	...	439,117
1901	148,584	123,394	1,541	16,000	2,464	2,853,760	2,265	490,550
1902	128,272	16,744	87	11,880	2,507	1,780,016	...	190,644
1903	207,621	...	...	...	...	...	1,187	41,083

Spirits made by vine-growers for fortifying wine are not included in the previous table. The following quantities were distilled during the last five years in vineyards for that purpose:—42,625 gallons in 1899, 30,554 gallons in 1900, 38,058 gallons in 1901, 49,867 gallons in 1902, and 56,851 gallons in 1903. The following are the quantities of Victorian spirits consumed (i.e. duty paid) in the years named:—204,637 gallons in 1899, 194,345 gallons in 1900, 297,486 gallons in 1901, 234,986 gallons in 1902, and 189,068 gallons in 1903.

In some of the leading distilleries no spirit has been distilled since the imposition of the new duties. To the reduction of the differential duty, from 4s. to 1s. per gallon, the distillers have ascribed the great falling off in this industry.

These decreased from 15 in 1899 to 12 in 1903, but there was an increase in the horse-power of the engines from 118 to 182, in the number of hands employed from 1,041 to 1,268, and in the value of machinery, plant, land, buildings and improvements from £164,395 to £181,000. The quantity of material used and the output from 1899 to 1903 were:—

Tobacco, & manufactories.

TOBACCO FACTORIES: RETURN FOR FIVE YEARS.

Year.	Unmanufactured Leaf.			Quantity Manufactured of—			
	Imported Duty Paid.	Operated on.		Tobacco.	Snuff.	Cigars.	Cigarettes.
		Imported.	Colonial.				
	lbs.	lbs.	lbs.	lbs.	lbs.	No.	No.
1899	1,246,582	1,309,067	306,728	1,191,327	782	9,639,992	85,055,431
1900	1,743,280	1,661,632	276,407	1,722,236	794	11,584,442	111,010,705
1901	2,742,653	2,542,580	230,113	2,365,831	1,133	13,025,840	125,693,600
1902	969,602	1,379,905	205,434	1,630,510	550	11,936,455	100,817,104
1903	1,910,553	2,052,100	304,049	2,390,976	813	9,336,975	58,928,535

NOTE.—The figures in the above table include the imported leaf operated upon. The quantity manufactured, in small factories (£5 licenses) is also included, but does not appear in the regular list.

The total production and consumption of tobacco, duty paid, for the same period were:—

Year.	Total (Tobacco, Cigars, Cigarettes and Snuff) Made in State, Excise Duty Paid.	Imported Manufactured Tobacco, Duty Paid.	Total Consumption.	
			Quantity.	Average per Head.
	lbs.	lbs.	lbs.	lbs.
1899 ...	1,456,102	1,036,777	2,492,879	2.10
1900 ...	1,803,550	878,473	2,682,023	2.25
1901 ...	2,658,899	931,296	3,590,195	2.98
1902 ...	1,653,170	552,611	2,205,781	1.83
1903 ...	2,447,556	555,450	3,003,006	2.48

In anticipation of the increased duty which operated in the latter part of 1901, a large quantity of tobacco was withdrawn from bond, and the amount of excise paid was consequently much larger than in previous years. Hence the consumption per head that year appears to be higher than the real average.

Woollen mills.

These mills increased from 8 in 1899 to 9 in 1903; the horse-power of the engines from 1,150 to 1,626, the number of hands from 917 to 1,138, and the approximate value of the machinery, plant, land, buildings and improvements from £231,910 to £292,401, during the same period. The quantities of wool and cotton used, and of goods manufactured, were:—

#### WOOLLEN MILLS: RETURN FOR FIVE YEARS.

Year.	Quantity of Scoured Wool Used.	Quantity of Cotton Used.	Goods Manufactured —			
			Tweed and Cloth.	Flannel.	Blankets.	Shawls and Rugs.
	lbs.	lbs.	yards.	yards.	No. of pairs.	No.
1899 ...	1,634,680	154,338	1,051,832	1,108,183	33,427	3,200
1900 ...	1,831,000	178,332	971,267	1,596,120	56,340	3,500
1901 ...	2,023,509	250,184	818,975	2,229,617	49,302	4,600
1902 ...	2,149,897	273,335	708,749	2,612,343	67,609	5,718
1903 ...	2,130,100	368,749	662,381	3,201,275	77,601	6,565

Boot factories

These factories increased from 105 in 1899 to 136 in 1903, the horse-power of the engines from 290 to 493, the number of hands from 4,288 to 5,267, and the approximate value of machinery, plant, land, buildings and improvements from £193,630 to £229,396. The following are the quantities of goods manufactured each year from 1899 to 1903:—

## BOOT FACTORIES: RETURN FOR FIVE YEARS.

Year.	Goods Manufactured—*		
	Boots and Shoes.	Boot and Shoe Uppers for other than Factory use.	Slippers.
	No. of pairs.	No. of pairs.	No. of pairs.
1899 ...	2,929,011	50,673	96,976
1900 ...	3,446,809	18,639	66,740
1901 ...	3,125,799	66,057	92,174
1902 ...	3,613,487	72,391	216,483
1903 ...	3,574,761	99,222	150,012

NOTE.—The number of slippers returned for 1902 and 1903 includes canvas shoes and house-boots, which were not returned previous to these years.

The value of boots and shoes imported into the State during 1903 was £79,704; the value of the exports was £251,664, including £237,127 worth of Victorian manufacture, the main portion of which was to the adjoining States.

The number of electric light works decreased from 10 in 1899 to 7 in 1903 (due to amalgamation of works in the city of Melbourne); the horse-power of the engines increased from 4,555 to 4,955, and the number of hands employed from 147 to 149. The approximate value of machinery, plant, land, buildings and improvements, also the quantity of electricity supplied, are set forth in the following table for the period under review:—

## ELECTRIC LIGHT WORKS: RETURN FOR FIVE YEARS.

Year.	Approximate Value of—			Electricity Supplied.
	Machinery and Plant.	Land.	Buildings and Improvements.	
	£	£	£	British Units.
1899 ...	152,780	16,200	37,720	4,505,351
1900 ...	145,580	16,060	37,700	6,100,519
1901 ...	220,690	15,240	86,730	6,680,214
1902 ...	204,922	10,000	67,661	6,450,560
1903 ...	198,751	9,750	76,733	5,626,568

Forty-seven gasworks were in operation in 1903, and 46 in 1899. An increase from 345 to 572 took place in the horse-power of engines in use, and a decrease from 686 to 679 in the number of hands employed. In the value of machinery, plant, and buildings and improvements, a reduction from £1,228,347 to £1,164,320 is reported for the same period.

\* Including output of small factories not included in regular list.

The quantities of coal used, of gas made, and of coke produced, during the period under review, are shown hereunder:—

GAS WORKS: RETURN FOR FIVE YEARS.

Year.		Coal Used.	Gas Made.	Coke Produced.
		Tons.	Cubic Feet.	Tons.
1899	...	149,733	1,477,450,400	75,603
1900	...	153,455	1,516,531,100	77,255
1901	...	159,374	1,567,649,380	84,546
1902	...	169,356	1,642,652,799	92,308
1903	...	166,018	1,628,889,400	94,947

In addition to the coal used, 108,531 gallons of oil in 1902, and 105,651 in 1903, were also consumed.

Stone  
quarries.

The number of stone quarries (including stone crushing works) increased from 67 in 1899 to 82 in 1903, the horse-power of the engines from 182 to 325, the number of hands employed from 415 to 538, and the approximate value of machinery, plant, land, buildings and improvements from £36,750 to £48,348 during the same period. The quantity and value of stone raised for the years 1898 to 1903 are set forth in the following table:—

STONE QUARRIES: RETURN FOR FIVE YEARS.

Year.	Quantity of Stone Operated on—			Approximate Total Value of Stone Raised.
	Bluestone.	Sandstone, Freestone, Slate, &c.	Granite.	
	c. yds.	c. yds.	c. yds.	£
1899	209,960	930	650	30,401
1900	252,870	1,263	400	44,513
1901	270,126	2,400	1,500	45,447
1902	323,485	3,964	3,099	53,395
1903	259,012	300	940	42,649

Stone breaking and tar paving works being carried on in connection with quarries, it is found impossible to separate them from the quarries, and the hands, machinery, &c., employed in these industries are, therefore, included with those of quarries. Some of the quarries returned are upon Crown lands, and in these cases no valuation of the land is given.

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APPENDIX.

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AUSTRALASIAN STATISTICS,

1903.

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# AUSTRALASIAN STATISTICS.

## I.—AUSTRALIA—SUMMARIES.

AUSTRALIA

### POPULATION, MARRIAGES, BIRTHS AND DEATHS.

Period.	Population at end of Year.		Marriages.*		Births.*		Deaths.*	
	Total.	Per Square Mile.	Number.	Rate per 1,000.	Number.	Rate per 1,000.	Number.	Rate per 1,000.
1830 ...	62,190	·02	643	10·34	1,395	22·43	998	16·05
1840 ...	180,626	·06	2,778	15·38	6,649	36·82	3,548	19·64
1850 ...	405,660	·14	5,099	10·58	16,532	34·31	6,823	14·16
1860 ...	1,141,563	·39	9,949	8·71	49,335	43·20	21,453	18·79
1870 ...	1,650,172	·55	11,711	7·10	63,279	38·35	23,307	14·12
1880 ...	2,245,448	·75	17,331	7·72	79,460	35·24	34,263	15·26
1890 ...	3,165,066	1·06	23,209	7·27	109,619	34·26	44,705	14·01
1900 ...	3,769,707	1·27	27,590	7·32	102,648	27·23	46,155	12·24
1901 ...	3,826,287	1·29	27,753	7·29	102,945	27·05	46,330	12·17
1902 ...	3,883,089	1·31	27,926	7·24	102,776	26·66	48,078	12·47
1903 ...	3,927,543	1·32	25,977	6·65	98,443	25·21	47,293	12·11

\* Annual average of three years at each period, from 1830 to 1900 inclusive.

### INCREASE OF POPULATION—BY DECADES.

Period. (Census to Census).	Total Increase.		Natural Increase.	Net Immigration.	Assisted Immigration.
	Number.	Rate per cent. per Annum.			
1831-41 ...	118,436	11·25	8,116	110,320	*
1841-51 ...	225,034	8·43	68,063	156,971	*
1851-61 ...	720,221	10·92	168,660	551,561	225,153
1861-71 ...	512,237	3·75	335,357	176,880	82,005
1871-81 ...	587,232	3·13	391,987	195,245	107,520
1881-91 ...	923,983	3·50	537,083	386,900	151,802
1891-1901 ...	595,978	1·73	588,585	7,393	8,402

\* No record.

## AUSTRALIA:

## STATE REVENUES AND FUNDED DEBTS.

Year.	Aggregate State Revenues.	State Revenues derived from—				Funded State Debts at end of Year.
		Taxation.	Customs and Excise Duties.*	Land.	Posts and Telegraphs.	
TOTAL AMOUNT.						
	£	£	£	£	£	£
1850 ...	966,393	530,500	410,894	379,432	32,541	...
1860 ...	5,342,239	3,041,207	2,387,404	1,354,425	230,828	9,820,180
1870 ...	7,133,474	3,202,437	2,906,301	1,451,599	366,900	28,328,480
1880 ...	13,787,997	4,639,401	4,015,638	3,633,970	790,390	61,327,018
1890 ...	25,008,273	9,300,149	7,324,960	3,833,711	1,661,030	143,662,094
1900 ...	28,789,803	10,189,880	7,708,661	3,521,397	2,274,105	192,659,283
1901 ...	29,097,957	6,437,110	3,767,795	3,429,845	1,525,318	199,558,581
1902 ...	23,272,613	2,790,760	...	3,412,740	...	208,211,198
1903 ...	29,031,789	3,281,382	...	3,260,480	...	216,474,676
PER HEAD OF POPULATION.						
	£	£	£	£	£	£
1850 ...	2.45	1.34	1.04	1.96	.08	...
1860 ...	4.72	2.69	2.11	1.20	.20	8.61
1870 ...	4.39	1.97	1.79	.89	.23	17.17
1880 ...	6.18	2.07	1.80	1.46	.35	27.31
1890 ...	8.06	3.00	2.37	1.23	.53	45.34
1900 ...	7.75	2.74	2.07	.95	.61	51.13
1901 ...	7.72	1.71	1.00	.91	.41	52.94
1902 ...	7.38	.73	...	.89	...	53.94
1903 ...	7.48	.85	...	.84	...	55.40

\* Included under the head of taxation.

## IMPORTS, EXPORTS, AND SHIPPING.

Year.	Aggregate.		Inter-State.		Extra Australian.		Shipping Inwards and Outwards.
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.	
TOTAL AMOUNT (000's omitted.)							
	£	£	£	£	£	£	Tons.
1860 ...	26,469,	22,643,	*	*	*	*	2,686,
1870 ...	25,353,	26,303,	7,172,	8,256,	18,181,	18,047,	3,702,
1880 ...	38,899,	42,513,	15,958,	15,246,	22,941,	27,268,	7,733,
1890 ...	61,785,	55,008,	26,433,	23,679,	35,352,	31,329,	14,083,
1900 ...	69,257,	72,823,	27,869,	26,865,	41,388,	45,958,	23,704,
1901 ...	68,129,	75,027,	25,695,	25,341,	42,434,	49,686,	26,199,
1902 ...	67,439,	71,112,	26,761,	27,196,	40,678,	43,916,	26,791,
1903 ...	67,468,	77,618,	29,657,	29,452,	37,811,	48,166,	27,153,
PER HEAD OF POPULATION.							
	£	£	£	£	£	£	
1860 ...	23.19	19.83	...	...	...	...	...
1870 ...	15.37	15.94	4.35	5.00	11.02	10.94	...
1880 ...	17.32	18.94	7.10	6.79	10.22	12.15	...
1890 ...	19.84	17.66	8.49	7.60	11.35	10.06	...
1900 ...	18.51	19.46	7.45	7.18	11.06	12.28	...
1901 ...	17.90	19.72	6.75	6.66	11.15	13.06	...
1902 ...	17.47	18.42	6.93	7.05	10.54	11.38	...
1903 ...	17.27	19.87	7.59	7.54	9.68	12.33	...

\* No record.

LAND IN CULTIVATION.

AUSTRALIA.

Year.	Total Area under Cultivation	Wheat.	Oats.	Barley.	Maize.	Potatoes.	Hay.	Vines.
ACRES.								
1860-61...	1,355,367	643,983	125,961	26,982	54,769	*	*	4,621
1870-71...	2,731,991	1,123,839	197,248	55,416	124,232	*	423,605	16,516
1880-81...	5,832,986	3,052,020	177,656	105,754	171,589	87,537	715,865	15,516
1890-91...	7,679,525	3,235,631	270,710	117,442	300,990	109,487	1,033,114	41,299
1900-01...	11,416,030	5,666,614	470,308	98,211	343,505	110,435	1,517,963	64,577
1901-2 ...	11,081,768	5,115,964	461,430	74,511	295,429	109,685	1,688,402	63,677
1902-3 ...	10,637,261	5,156,049	592,247	76,422	303,375	118,368	1,590,488	63,943
1903-4 ...	11,621,830	5,566,340	620,856	121,088	371,906	116,112	1,853,864	65,463

  

PRODUCE.								
	Bushels.	Bushels.	Bushels.	Bushels.	Tons.	Tons.	Gals. of Wine.	
1860-61 ...	*	*	*	*	*	*	*	*
1870-71 ...	*	*	*	*	*	*	*	*
1880-81 ...	23,429,543	3,235,223	1,696,459	5,942,811	247,742	818,803	1,672,445	
1890-91 ...	27,115,895	5,838,268	2,028,893	8,662,114	384,532	1,219,570	3,997,605	
1900-01 ...	48,353,402	12,043,310	1,814,051	9,354,971	319,657	1,834,448	5,121,090	
1901-2 ...	38,561,617	9,789,853	1,522,817	7,034,786	322,451	2,003,350	5,259,447	
1902-3 ...	12,378,068	7,296,710	1,147,515	4,835,232	408,231	1,359,874	4,758,558	
1903-4 ...	74,149,634	17,541,210	2,656,313	9,667,089	449,383	2,903,160	...	

\* Figures not available.

LIVE STOCK, WOOL AND GOLD PRODUCTION, RAILWAYS AND TELEGRAPHS.

Year.	Number of Live Stock.			Production of--				Miles open of--	
	Horses.	Cattle.	Sheep.	Wool (000's omitted).		Gold (000's omitted).		Railways.	Telegraphs (poles).
				Quantity.	Value.	Quantity.	Value.		
186 )	431,521	3,957,915	19,852,743	lbs.	£	ozs.	£	361	*
1870	716,772	4,276,326	41,593,608	*	*	*	*	953	12,889†
1880	1,061,078	7,523,000	62,162,923	241,031	15,115	1,323	5,292	3,623	23,932
1890	1,521,598	10,299,816	97,881,221	399,951	16,387	1,402	5,230	9,543	37,781
1900	1,609,654	8,640,225	70,602,995	344,458	13,837	3,221	13,663	13,365	47,073
1901	1,625,380	8,470,530	72,208,736	459,858	15,584	3,346	14,194	13,617	47,565
1902	1,534,520	7,021,765	54,012,259	340,917	12,954	3,493	14,817	13,895	44,962
1903	1,562,934	7,184,814	57,438,279	329,025	14,263	3,837	16,297	14,506	45,140

\* Information not available.

† Miles of wire.

‡ Fine ounces.

STATES OF  
AUSTRALIA.

## II.—STATES OF AUSTRALIA—SUMMARIES.

## POPULATION AND IMMIGRATION.

Period.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
POPULATION (ON 31ST DECEMBER).						
1850 ...	76,162	189,341	*	63,700	5,886	70,571
1860 ...	537,847	348,546	28,056	124,112	15,227	87,775
1870 ...	726,599	498,659	115,567	183,797	24,785	100,765
1880 ...	860,067	747,950	226,077	267,573	29,019	114,762
1890 ...	1,133,266	1,121,860	399,215	319,145	46,290	145,290
1900 ...	1,197,206	1,364,590	494,375	361,451	179,708	172,377
1901 ...	1,210,882	1,375,242	505,944	365,733	194,109	174,377
1902 ...	1,211,450	1,403,334	510,853	366,660	213,327	177,465
1903 ...	1,208,854	1,427,342	515,530	369,376	226,954	179,487
POPULATION PER SQUARE MILE.						
1850 ...	·86	·61	...	·07	·01	2·68
1860 ...	6·12	1·13	·04	·14	·02	3·33
1870 ...	8·27	1·61	·17	·20	·03	3·81
1880 ...	9·79	2·42	·34	·30	·03	4·35
1890 ...	12·89	3·63	·60	·35	·05	5·50
1900 ...	13·62	4·39	·74	·40	·18	6·57
1901 ...	13·78	4·43	·76	·40	·20	6·65
1902 ...	13·79	4·52	·76	·41	·22	6·77
1903 ...	13·76	4·59	·77	·41	·23	6·85
INCREASE OF POPULATION (BY DECADES).†						
1851-61 ...	462,977	163,617	*	63,130	9,707	20,790
1861-71 ...	191,206	153,121	87,901	58,796	10,170	11,043
1871-81 ...	130,818	247,487	95,565	94,239	4,438	14,685
1881-91 ...	278,059	374,129	180,193	40,566	20,074	30,962
1891-1901	60,982	227,709	104,411	42,726	134,342	25,808
ANNUAL RATE OF INCREASE PER CENT. (BY DECADES).						
1851-61 ...	21·06	5·40	...	6·89	10·19	2·20
1861-71 ...	3·07	3·69	14·66	3·88	5·28	1·14
1871-81 ...	1·65	4·07	6·11	4·19	1·63	1·37
1881-91 ...	2·83	4·25	6·31	1·36	5·30	2·40
1891-1901	0·52	1·86	2·38	1·26	13·97	1·63

## POPULATION AND IMMIGRATION—Continued.

STATES OF  
AUSTRALIA.

Period.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
NATURAL INCREASE OF POPULATION (BY DECADES). †						
1851-61 ...	62,932	63,506	*	27,380	2,704	12,138
1861-71 ...	149,417	104,874	19,320	41,736	3,784	16,226
1871-81 ...	146,140	139,951	36,661	49,207	4,573	15,455
1881-91 ...	161,109	209,705	65,358	68,841	7,101	24,969
1891-1901	172,513	226,717	87,718	58,316	15,832	27,489
NET INCREASE BY IMMIGRATION (BY DECADES). †						
1851-61 ...	400,045	100,111	*	35,750	7,003	8,652
1861-71 ...	41,789	48,247	68,581	17,060	6,386	-5,183
1871-81 ...	-15,322	107,536	58,904	45,032	-135	-770
1881-91 ...	116,950	164,424	114,835	-28,275	12,973	5,993
1891-1901	-111,531	992	16,693	-15,590	118,510	-1,681

\* Included with New South Wales.

† These figures relate to intercensal periods.

## STATE-ASSISTED IMMIGRATION.

Period.	Victoria.	New South Wales.*	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
1851-60 ...	87,963	71,649	...	48,905	...	16,636	225,153
1861-70 ...	46,594	18,212	1,617	13,730	...	1,852	82,005
1871-80 ...	5,545	24,412	50,782	25,415	889	477	107,520
1881-90 ...	2	34,079	103,140	7,295	4,552	2,734	151,802
1891-1900 ...	...	659	6,177	...	1,566	...	8,402
1901 ...	...	...	831	...	125	...	956
1902 ...	...	...	487	...	16	...	647
1903 ...	...	...	335	...	196	...	531
Total ...	140,104	149,011	163,369	95,345	7,488	21,699	577,016

\* In New South Wales, prior to the period embraced in the table, there were 62,961 assisted immigrants between 1832 and 1850.

STATES OF  
AUSTRALIA.

## BIRTHS, DEATHS, AND MARRIAGES.

Period. (Yearly Average.)	Victoria.		New South Wales.		Queensland.		South Australia.		Western Australia.		Tasmania.	
	Number.	Mean Rate per 1,000.	Number.	Mean Rate per 1,000.	Number.	Mean Rate per 1,000.	Number.	Mean Rate per 1,000.	Number.	Mean Rate per 1,000.	Number.	Mean Rate per 1,000.
<b>BIRTHS AND BIRTH RATES.</b>												
1850-52...	3,159	40·84	8,526	45·55	...	...	2,553	40·08	221	33·47	2,073	29·37
1860-62 ..	23,571	43·62	14,782	42·14	1,453	48·33	5,731	46·02	600	38·48	3,198	36·43
1870-72 ..	27,298	37·32	20,013	39·71	5,125	41·33	7,069	38·46	734	29·61	3,040	30·17
1880-82 ..	26,680	31·02	28,952	38·52	8,314	38·94	10,605	37·90	1,009	33·96	3,900	33·71
1890-92 ..	37,971	33·30	39,486	34·82	15,008	38·09	10,507	32·83	1,731	34·73	4,916	33·53
1900-02 ..	30,749	25·60	37,619	27·77	14,440	28·99	9,078	25·00	5,802	31·51	4,960	28·76
1903 ...	29,569	24·46	35,966	25·35	12,621	24·62	8,508	23·21	6,699	30·27	5,080	28·61
<b>DEATHS AND DEATH RATES.</b>												
1850-52...	1,350	17·45	3,194	17·06	...	...	1,019	16·00	52	7·87	1,208	17·11
1860-62...	10,887	20·15	6,143	17·51	591	19·66	2,072	16·69	231	14·81	1,529	17·42
1870-72...	10,389	14·20	6,811	13·52	1,788	14·42	2,606	14·18	323	13·03	1,390	13·79
1880-82 ..	12,529	14·57	11,861	15·78	3,537	16·57	4,105	14·67	408	13·73	1,823	15·76
1890-92 ..	17,498	15·35	14,971	13·20	5,358	13·60	3,958	12·37	780	15·65	2,140	14·59
1900-02 ..	15,765	13·13	15,928	11·76	5,986	12·02	4,072	11·21	2,527	13·72	1,877	10·88
1903 ...	15,595	12·90	16,497	11·63	6,346	12·38	3,951	10·78	2,788	12·60	2,116	11·92
<b>MARRIAGES AND MARRIAGE RATES.</b>												
1850-52...	1,316	17·01	2,305	12·31	...	...	382	6·00	53	8·02	1,043	14·78
1860-62...	4,436	8·25	3,164	9·02	389	12·94	1,126	9·07	154	9·88	680	7·74
1870-72...	4,738	6·47	3,908	7·75	991	7·99	1,290	7·02	151	6·01	633	6·28
1880-82...	5,830	6·78	6,268	8·38	1,761	8·24	2,376	8·49	208	7·00	888	7·67
1890-92...	8,563	7·51	8,118	7·16	2,958	7·51	2,224	6·97	337	7·36	979	6·67
1900-02...	8,397	6·99	10,340	7·63	3,318	6·66	2,335	6·43	1,874	10·18	1,326	7·69
1903 ...	7,605	6·29	9,759	6·88	2,933	5·72	2,272	6·20	2,064	9·33	1,344	7·57

STATE REVENUES.

STATES OF AUSTRALIA.

Year.	Victoria.		New South Wales.		Queensland.		South Australia.		Western Australia.		Tasmania.	
	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.	Amount.	Per Head.
	£	£	£	£	£	£	£	£	£	£	£	£
<b>TOTAL STATE REVENUE.</b>												
1850 ..	259,433	3.64	374,670	2.03	...	...	238,983	3.75	19,138	3.44	74,560	1.06
1860 ..	3,082,461	5.77	1,308,925	3.82	178,589	6.37	438,827	3.54	69,863	4.65	263,574	3.02
1870 ..	3,261,883	4.49	2,102,697	4.26	743,058	6.59	657,576	3.58	98,132	3.96	270,128	2.72
1880 ..	4,621,282	5.50	4,904,230	6.80	1,612,314	7.40	2,027,963	7.65	180,950	6.24	442,158	3.89
1890 ..	8,519,159	7.72	9,498,620	8.62	3,260,308	7.45	2,557,772	8.21	414,314	8.64	758,100	5.27
1900 ..	7,460,855	6.27	9,957,036	7.41	4,588,207	9.45	2,853,329	8.00	2,875,396	17.05	1,054,980	6.14
1901 ..	7,712,099	6.44	10,612,422	7.77	4,096,298	8.28	2,886,354	7.99	2,964,121	16.65	826,163	4.76
1902 ..	6,997,792	5.79	11,178,214	8.10	3,535,061	6.92	2,477,432	6.79	3,349,450	17.19	734,663	4.22
1903 ..	6,954,619	5.74	11,532,231	8.22	3,526,465	6.90	2,530,568	6.90	3,630,238	17.01	857,668	4.83
<b>STATE REVENUE RAISED BY TAXATION.*</b>												
1880 ..	1,690,923	2.00	1,417,294	1.97	600,236	2.75	529,450	2.00	101,257	3.51	300,241	2.64
1890 ..	3,630,814	3.29	2,743,339	2.49	1,471,983	3.32	790,177	2.50	204,405	4.26	454,431	3.16
1900 ..	3,264,592	2.51	2,618,066	1.95	1,984,713	4.09	902,362	2.53	1,055,637	6.26	644,510	3.75
1901 ..	1,964,629	1.64	1,980,885	1.45	1,117,472	2.26	621,761	1.72	644,948	3.62	107,415	.62
1902 ..	818,274	.72	1,148,942	.83	276,771	.54	267,790	.73	173,582	.89	105,401	.59
1903 ..	950,183	.78	1,145,232	.82	415,688	.81	398,941	1.09	221,247	1.04	150,091	.85
<b>LAND REVENUE.</b>												
1850 ..	136,261	1.91	122,265	.66	...	...	90,386	1.42	2,076	.37	28,444	.40
1860 ..	663,238	1.24	312,869	.91	101,573	3.62	180,616	1.45	17,343	1.15	78,786	.90
1870 ..	463,821	.65	478,070	.97	293,692	2.60	152,862	.84	20,103	.81	43,051	.43
1880 ..	844,064	1.00	1,646,436	2.37	449,561	2.03	6,744,244	2.31	35,752	1.24	58,413	.47
1890 ..	579,776	.52	2,243,039	2.04	576,868	1.50	246,427	.77	107,636	2.24	79,965	.56
1890 ..	388,255	.32	2,116,076	1.57	618,743	1.27	157,116	.44	171,082	1.01	70,124	.41
1901 ..	244,457	.29	2,066,545	1.51	585,229	1.18	162,346	.45	197,298	1.10	73,970	.43
1902 ..	367,145	.30	2,053,126	1.49	575,297	1.14	156,913	.43	188,489	.97	71,770	.41
1903 ..	356,262	.29	1,870,691	1.33	610,280	1.19	159,550	.44	190,900	.90	72,497	.41

\* Exclusive of Customs and Excise from 1st January, 1901.

STATE FUNDED DEBTS.

At end of Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
<b>TOTAL AMOUNTS.</b>						
1860 ...	£ 5,118,100	£ 3,830,230	...	£ 870,100	£ 1,750	...
1870 ...	11,924,800	9,681,130	3,509,250	1,944,600	NIL.	1,268,700
1880 ...	22,060,749	14,903,919	12,192,150	9,865,500	361,000	1,943,700
1890 ...	41,443,216	46,051,450	28,105,684	20,401,500	1,367,444	6,292,800
1899-1900	48,774,885	63,299,859	34,348,414	26,131,780	11,674,640	8,429,705
1900-1 ...	49,546,275	65,478,012	36,849,314	26,423,805	12,709,430	8,551,745
1901-2 ...	50,408,957	69,109,208	38,318,627	26,423,045	14,942,310	9,009,051
1902-3 ...	51,097,900	75,465,361	38,318,627	26,754,420	15,627,298	9,211,070
<b>PER HEAD OF POPULATION.</b>						
1860 ...	£ s. d. 9 10 4	£ s. d. 10 19 9	...	£ s. d. 7 0 2	£ s. d. 2 4	...
1870 ...	16 8 3	19 8 1	30 7 4	10 11 7	...	12 11 10
1880 ...	25 13 0	20 3 2	53 18 7	36 17 5	12 8 9	16 18 9
1890 ...	36 11 5	41 0 11	71 17 4	63 19 0	27 15 10	43 6 3
1899-1900	40 17 4	46 14 9	70 2 2	72 15 3	67 6 9	48 19 2
1900-1 ...	41 3 0	48 2 11	71 19 5	72 13 1	66 5 9	49 11 6
1901-2 ...	41 15 5	49 10 5	74 13 4	72 14 3	71 14 6	52 4 1
1902-3 ...	42 5 11	53 6 1	74 14 7	73 5 11	70 7 11	51 6 5

STATES OF  
AUSTRALIA.

## GROSS IMPORTS, VALUE.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
TOTAL.						
	£	£	£	£	£	£
1850 ...	744,925	1,333,413	...	845,572	52,351	658,540
1860 ...	15,093,730	7,755,859	742,023	1,639,591	169,075	1,068,411
1870 ...	12,455,758	8,284,378	1,577,339	2,029,794	213,259	792,916
1880 ...	14,556,894	13,950,075	3,087,296	5,581,497	353,669	1,369,223
1890 ...	22,954,015	22,615,004	5,066,700	8,376,808	874,447	1,897,512
1900 ...	18,301,811	27,561,071	7,184,112	8,174,218	5,962,178	2,073,657
1901 ...	18,927,340	26,928,218	6,376,239	7,478,288	6,454,171	1,965,199
1902 ...	18,270,245	25,974,210	7,352,538	6,181,000	7,218,352	2,442,745
1903 ...	17,859,171	26,770,169	6,731,207	6,743,872	6,769,922	2,593,810
PER HEAD OF POPULATION.						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1850 ...	10 9 3	7 4 4	...	13 5 6	9 7 11	9 7 8
1860 ...	28 5 3	22 5 2	26 9 0	13 4 2	11 4 10	12 5 0
1870 ...	17 9 3	16 15 3	13 19 10	11 2 6	8 12 1	7 19 8
1880 ...	17 2 4	19 6 10	13 18 2	21 3 7	12 5 3	12 1 0
1890 ...	20 10 5	20 10 6	13 2 8	26 9 6	18 4 9	13 4 0
1900 ...	15 6 8	20 7 0	14 13 3	22 15 2	34 7 9	12 0 10
1901 ...	15 14 8	19 12 6	12 12 2	20 13 0	34 4 5	11 6 5
1902 ...	15 2 8	18 13 0	14 6 4	16 19 10	34 16 11	13 18 2
1903 ...	14 15 6	18 17 5	13 2 7	18 7 11	30 11 11	14 12 2

## GROSS EXPORTS, VALUE.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
TOTAL.						
	£	£	£	£	£	£
1850 ...	1,041,796	1,357,784	...	579,817	22,135	613,850
1860 ...	12,962,704	6,311,351	523,477	1,783,716	89,247	962,170
1870 ...	12,470,014	8,030,578	2,533,732	2,419,488	200,985	648,709
1880 ...	15,954,559	15,525,138	3,448,160	5,574,505	499,183	1,511,931
1890 ...	13,266,222	22,045,937	8,554,512	8,982,386	671,813	1,486,992
1900 ...	17,422,552	28,164,516	9,581,562	8,191,376	6,852,054	2,610,617
1901 ...	18,646,097	27,351,124	9,249,366	8,318,820	8,515,623	2,945,757
1902 ...	18,210,523	23,544,051	9,171,023	7,890,072	9,051,358	3,244,508
1903 ...	19,707,068	26,738,111	9,514,974	8,490,359	10,324,732	2,843,108
PER HEAD OF POPULATION.						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1850 ...	14 12 8	7 7 0	...	8 19 3	3 19 5	8 15 0
1860 ...	24 5 5	18 8 7	18 13 2	14 7 5	5 18 9	11 0 8
1870 ...	17 9 8	16 5 1	22 9 6	13 5 2	8 2 2	6 10 8
1880 ...	18 15 3	21 10 6	15 10 8	21 3 1	17 6 1	13 6 2
1890 ...	11 17 3	20 0 2	22 3 6	28 7 9	14 0 3	10 6 11
1900 ...	14 12 0	20 15 11	19 11 1	22 16 2	39 10 5	15 3 3
1901 ...	15 10 0	19 18 8	18 5 10	22 19 4	45 3 0	16 19 4
1902 ...	15 1 9	16 18 2	17 17 1	21 13 10	43 13 11	18 9 4
1903 ...	16 6 0	18 17 0	18 11 2	23 3 2	46 13 2	16 0 3

## INTER-STATE IMPORTS AND EXPORTS—VALUE.

STATES OF  
AUSTRALIA

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
	£	£	£	£	£	£
IMPORTS.						
1860 ...	2,371,425	1,842,682	684,711	526,365	...	225,017
1870 ...	1,847,491	3,045,808	1,140,053	626,031	68,911	444,358
1880 ...	5,522,358	5,259,065	2,061,342	1,936,199	179,127	1,000,031
1890 ...	7,860,240	10,049,648	2,231,933	4,826,725	363,255	1,100,921
1900 ...	6,364,167	10,164,080	3,067,278	4,225,870	2,675,156	1,372,552
1901 ...	6,240,460	9,368,011	2,860,572	3,513,543	2,559,020	1,154,001
1902 ...	5,412,520	10,949,675	3,618,326	3,023,500	2,046,701	1,710,129
1903 ...	5,519,556	12,792,252	3,481,817	3,520,463	2,541,368	1,802,105
EXPORTS.						
1860 ...	957,429	3,444,317	523,166	910,744	...	190,490
1870 ...	1,233,714	3,618,381	1,865,710	1,158,436	11,637	368,324
1880 ...	3,802,761	6,698,334	2,527,434	1,362,760	126,161	728,327
1890 ...	3,728,091	10,990,627	4,123,650	3,631,050	114,743	1,091,006
1900 ...	5,257,188	9,979,214	5,412,881	4,018,678	1,125,031	1,071,829
1901 ...	5,570,838	9,140,497	4,915,520	3,856,851	574,622	1,282,950
1902 ...	7,841,188	7,568,922	5,062,754	4,123,866	798,750	1,800,833
1903 ...	8,522,056	7,876,898	5,787,999	4,851,988	866,607	1,546,438

## EXTRA-AUSTRALIAN IMPORTS AND EXPORTS—VALUE.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
	£	£	£	£	£	£
IMPORTS.						
1860 ...	12,722,305	5,913,177	57,312	1,113,226	...	843,394
1870 ...	10,608,267	5,238,570	437,286	1,403,763	144,348	348,558
1880 ...	9,034,536	8,691,010	1,025,954	3,645,298	174,542	369,192
1890 ...	15,093,775	12,565,356	2,834,767	3,550,083	511,192	796,591
1900 ...	11,937,644	17,396,991	4,116,834	3,948,348	3,287,022	701,105
1901 ...	12,686,880	17,560,207	3,515,667	3,964,745	3,895,151	811,198
1902 ...	12,857,725	15,024,535	3,734,212	3,157,500	5,171,651	732,616
1903 ...	12,339,615	13,977,917	3,249,390	3,223,409	4,228,554	791,705
EXPORTS.						
1860 ...	12,005,275	2,870,034	311	872,972	...	771,680
1870 ...	11,236,300	4,412,197	668,022	1,261,052	189,348	280,385
1880 ...	12,151,798	8,826,804	920,726	4,211,745	373,022	783,604
1890 ...	9,538,131	11,055,310	4,430,862	5,351,336	557,070	395,986
1900 ...	12,165,364	18,185,302	4,168,681	4,172,698	5,727,023	1,538,788
1901 ...	13,075,259	18,210,627	4,333,846	4,461,969	7,941,001	1,662,807
1902 ...	10,369,335	15,975,129	4,108,269	3,766,206	8,252,608	1,443,675
1903 ...	11,185,012	18,861,213	3,726,975	3,638,371	9,458,125	1,296,670

STATES OF  
AUSTRALIA.

## LAND UNDER PRINCIPAL CROPS.—ACRES.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
WHEAT.						
1860-61 ...	161,252	128,829	196	273,672	13,584	66,450
1870-71 ...	284,167	147,997	2,892	604,761	26,640	57,382
1880-81 ...	977,285	252,540	10,944	1,733,542	27,687	50,022
1890-91 ...	1,145,163	333,233	10,390	1,673,573	33,820	39,452
1900-01 ...	2,017,321	1,530,609	79,304	1,913,247	74,308	51,825
1902-3 ...	1,994,271	1,279,760	1,880	1,746,812	92,398	40,898
1903-4 ...	1,968,599	1,561,111	138,096	1,711,174	137,946	49,414
OATS.						
1860-61 ...	86,337	6,535	6	2,273	507	30,303
1870-71 ...	149,309	10,683	122	6,188	(?)	30,946
1880-81 ...	134,089	17,923	116	4,355	1,320	19,853
1890-91 ...	221,048	14,102	411	12,475	1,934	20,740
1900-01 ...	362,689	29,383	385	27,988	4,790	45,073
1902-3 ...	433,489	42,992	78	50,296	10,334	55,058
1903-4 ...	433,638	51,621	2,808	57,558	14,568	60,663
BARLEY.						
1860-61 ...	4,123	2,860	13	11,336	2,412	6,238
1870-71 ...	19,646	4,650	591	22,912	(?)	7,617
1880-81 ...	68,630	7,890	1,499	13,074	6,364	8,297
1890-91 ...	87,751	4,937	584	14,472	5,322	4,376
1900-01 ...	58,853	9,435	7,533	15,352	2,536	4,502
1902-3 ...	37,716	4,557	430	21,493	3,733	8,281
1903-4 ...	47,760	10,057	22,881	28,697	3,609	8,084
MAIZE.						
1860-61 ...	1,650	51,488	1,525	32	74	...
1870-71 ...	1,014	107,178	16,040	...	...	...
1880-81 ...	1,769	125,679	44,109	...	32	...
1890-91 ...	10,357	191,152	99,400	...	81	...
1900-01 ...	9,389	206,051	127,974	...	91	...
1902-3 ...	10,906	202,437	89,923	...	109	...
1903-4 ...	11,810	226,834	133,099	...	163	...
POTATOES.						
1860-61 ...	24,842	9,229	333	2,348	*	7,621
1870-71 ...	39,026	13,927	2,627	3,376	*	9,290
1880-81 ...	45,951	18,996	6,111	5,587	471	10,421
1890-91 ...	53,818	19,406	8,994	6,626	510	20,133
1900-01 ...	38,477	29,408	11,060	6,628	1,794	23,068
1902-3 ...	49,716	19,444	4,746	7,763	2,084	34,625
1903-4 ...	48,930	20,851	6,732	8,616	1,823	29,160
HAY.						
1860-61 ...	90,921	31,929	*	55,818	6,626	31,837
1870-71 ...	163,181	64,403	3,670	140,316	17,173	34,862
1880-81 ...	249,656	130,443	12,021	272,567	19,563	31,615
1890-91 ...	413,052	175,242	31,106	345,150	23,183	45,381
1900-01 ...	502,105	466,236	42,497	341,330	104,254	61,541
1902-3 ...	580,884	491,918	20,068	325,789	105,791	66,038
1903-4 ...	733,353	496,017	78,393	370,152	109,002	66,947
VINES.						
1860-61 ...	1,138	303	...	3,180	...	...
1870-71 ...	5,466	4,504	415	6,131	...	...
1880-81 ...	4,980	4,800	739	4,337	660	...
1890-91 ...	20,686	8,044	1,981	9,535	1,023	30
1900-01 ...	30,634	8,441	2,019	20,158	3,325	...
1902-3 ...	28,374	8,790	1,559	21,692	3,528	...
1903-4 ...	28,513	8,940	2,069	22,617	3,324	...

\* No record.

## PRODUCE OF PRINCIPAL CROPS.

STATES OF  
AUSTRALIA.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
WHEAT (Bushels).						
1860-61 ...	3,459,914	1,581,598	*	3,576,593	*	1,415,896
1870-71 ...	2,870,409	999,595	15,524	6,961,164	*	896,881
1880-81 ...	9,727,369	3,708,737	223,243	8,606,510	413,644	750,040
1890-91 ...	12,751,295	3,649,216	207,990	9,399,389	465,025	642,980
1900-01 ...	17,847,321	16,173,771	1,194,088	11,253,148	774,653	1,110,421
1902-3 ...	2,569,364	1,585,097	6,165	6,354,912	985,559	876,971
1903-4 ...	28,525,579	27,334,141	2,436,799	13,209,465	1,876,252	767,398
OATS (Bushels).						
1860-61 ...	2,633,693	98,814	*	52,989	*	926,418
1870-71 ...	2,237,010	119,365	*	*	*	691,250
1880-81 ...	2,362,425	356,121	2,081	50,070	25,080	439,446
1890-91 ...	4,919,325	256,659	8,967	116,229	37,693	519,395
1900-01 ...	9,582,332	593,548	7,855	366,229	86,433	1,406,913
1902-3 ...	4,402,982	351,758	520	620,823	167,882	1,752,745
1903-4 ...	13,434,952	1,252,156	70,713	902,936	258,503	1,621,950
BARLEY (Bushels).						
1860-61 ...	83,854	39,802	*	189,163	*	126,605
1870-71 ...	240,825	47,701	*	337,792	*	161,729
1880-81 ...	1,068,830	160,602	31,433	151,886	114,552	169,156
1890-91 ...	1,571,599	81,383	12,673	175,583	87,813	99,842
1900-01 ...	1,215,478	114,228	127,144	211,102	29,188	116,911
1902-3 ...	561,144	18,233	3,595	317,155	46,255	201,133
1903-4 ...	1,218,003	174,147	510,557	487,920	53,227	212,459
MAIZE (Bushels).						
1860-61 ...	25,045	1,484,468	*	241	*	...
1870-71 ...	20,028	2,340,654	*	...	...	...
1880-81 ...	49,299	4,483,457	1,409,607	...	448	...
1890-91 ...	574,883	5,713,205	2,373,803	...	1,023	...
1900-01 ...	604,180	6,292,745	2,456,647	...	1,399	...
1902-3 ...	750,524	3,049,269	1,033,329	...	2,110	...
1903-4 ...	904,239	6,836,740	1,923,623	...	2,487	...
POTATOES (Tons).						
1860-61 ...	77,258	28,128	*	7,112	*	33,589
1870-71 ...	127,579	34,118	*	9,563	*	34,211
1880-81 ...	129,262	51,936	16,177	16,170	1,649	32,548
1890-91 ...	204,155	52,791	28,810	23,963	1,655	73,158
1900-01 ...	123,126	63,253	20,014	14,566	4,836	93,862
1902-3 ...	168,759	30,732	10,422	28,312	6,488	163,518
1903-4 ...	167,736	56,743	17,649	31,415	4,542	171,298
HAY (Tons).						
1860-61 ...	144,211	50,927	*	71,241	*	62,318
1870-71 ...	183,708	69,582	140,316	197,419	*	42,706
1880-81 ...	300,581	173,074	23,440	261,371	24,454	35,883
1890-91 ...	567,779	213,034	50,116	310,125	26,495	52,021
1900-01 ...	677,757	526,260	78,758	353,662	103,813	94,198
1902-3 ...	601,272	243,379	23,181	308,825	94,007	89,210
1903-4 ...	1,233,063	816,810	136,117	479,723	121,934	115,513
WINE (GALLONS).						
1860-61 ...	12,129	6,420	...	182,087	...	...
1870-71 ...	629,219	342,674	*	801,694	...	...
1880-81 ...	484,028	602,007	85,455	500,955	*	...
1890-91 ...	2,008,493	842,181	189,274	762,776	194,881	...
1900-01 ...	2,578,187	891,190	132,489	1,388,847	130,377	...
1902-3 ...	1,547,188	806,140	100,852	2,145,525	158,853	...
1903-4 ...	2,551,150	1,086,820	38,558	2,345,270	...	...

\* No record.

STATES OF  
AUSTRALIA.

## SHIPPING.

Year.	Victoria.		New South Wales.		Queensland.		South Australia.		Western Australia.		Tasmania.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
INWARDS.*												
1850 ..	555	108,030	976	234,215	..	..	284	86,583	64	15,988	674	104,017
1860 ..	1,814	581,642	1,424	427,835	210	45,736	324	100,681	109	54,564	806	116,172
1870 ..	2,093	663,764	1,858	689,820	476	133,292	445	140,081	127	65,716	613	105,647
1880 ..	2,076	1,078,885	2,108	1,242,458	1,225	633,673	1,045	590,085	165	123,985	654	205,217
1890 ..	2,474	2,178,551	2,889	2,413,247	616	468,607	1,041	1,075,133	281	484,534	746	475,618
1900 ..	2,101	2,929,389	3,626	4,094,088	713	835,355	1,065	1,851,803	769	1,625,696	741	618,963
1901 ..	2,418	3,392,226	3,452	4,196,498	684	853,515	1,128	2,049,240	884	1,342,236	816	706,044
1902 ..	2,278	3,366,485	3,164	4,390,086	780	1,035,492	1,060	2,031,082	763	1,671,169	964	887,485
1903 ..	2,204	3,409,288	3,379	4,501,731	727	902,670	1,112	2,157,961	708	1,673,154	928	938,371
OUTWARDS.*												
1850 ..	508	87,087	1,014	263,849	..	..	275	87,372	67	14,748	702	108,848
1860 ..	1,841	599,137	1,438	431,484	183	39,503	338	108,355	126	62,615	818	118,243
1870 ..	2,187	681,098	2,066	771,942	456	127,992	471	147,908	131	67,730	611	107,263
1880 ..	2,115	1,101,014	2,043	1,190,321	1,221	621,903	1,111	610,819	168	126,444	655	208,086
1890 ..	2,459	2,184,790	2,777	2,348,625	606	442,172	1,081	1,115,309	267	420,327	763	475,629
1900 ..	2,194	2,944,192	3,406	3,920,801	716	819,662	1,057	1,843,968	747	1,606,332	743	618,955
1901 ..	2,347	3,323,265	3,375	4,324,826	675	832,305	1,139	2,080,126	901	1,872,027	820	726,681
1902 ..	2,286	3,372,555	3,002	4,338,058	769	1,032,119	1,103	2,100,194	765	1,686,905	944	879,730
1903 ..	2,263	3,448,566	3,396	4,503,670	726	895,785	1,085	2,122,929	703	1,662,741	927	935,802

\* Including inter-state shipping.

## WOOL PRODUCTION—(000's omitted).

Year.	Victoria.		New South Wales.		Queensland.		South Australia.		Western Australia.		Tasmania.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lbs.	£	lbs.	£	lbs.	£	lbs.	£	lbs.	£	lbs.	£
1880	51,763	3,440	151,540	7,918	24,361	1,387	...	1,557	4,342	271	9,025	542
1890	55,559	2,862	236,686	9,002	55,714	2,534	35,870	1,298	6,970	261	9,152	430
1900	42,723	2,404	204,748	7,687	49,284	2,202	31,359	993	9,095	271	7,249	280
1901	73,235	2,638	273,993	9,090	52,506	2,138	36,966	1,036	13,579	378	9,579	303
1902	65,981	2,447	188,268	7,353	29,860	1,313	34,932	1,100	12,932	458	8,944	283
1903	51,607	1,946	187,968	8,548	34,978	1,877	35,767	1,240	12,907	443	5,798	209

GOLD PRODUCTION—(000's omitted).

STATES OF AUSTRALIA.

Year.	Victoria.		New South Wales.		Queensland.		South Australia.		Western Australia.		Tasmania.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
1880	oz.	£	oz.	£	oz.	£	oz.	£	oz.	£	oz.	£
1880	829,	3,316,	117,	435,	*270,	1,080,	17,	68,	...	...	47,	201,
1890	588,	2,354,	127,	458,	610,	2,137,	30,	106,	23,	87,	23,	87,
1900†	752,	3,190,	282,	1,195,	677,	2,872,	19,	82,	1,416,	6,008,	75,	316,
1901†	732,	3,107,	217,	921,	599,	2,542,	22,	93,	1,705,	7,236,	70,	295,
1902†	723,	3,067,	162,	685,	641,	2,721,	22,	95,	1,874,	7,948,	71,	301,
1903†	767,	3,262,	255,	1,080,	670,	2,840,	21,	90,	2,065,	8,771,	60,	254,

\* Figures for 1881.

† Quantities for these years given in fine ounces.

LIVE STOCK.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
HORSES.						
1860-61 ...	76,536	251,497	23,500	49,399	9,555	21,034
1870-71 ...	167,220	337,597	83,358	83,744	22,174	22,679
1880-81 ...	275,516	395,984	179,152	150,591	34,568	25,267
1890-91 ...	436,469	444,163	365,812	199,605	44,384	31,165
1900-01 ...	392,237	481,417	456,788	179,352	68,253	31,607
1901-2 ...	392,237	486,716	462,119	178,199	73,710	32,399
1902-3 ...	392,237	450,125	399,122	179,413	80,158	33,465
1903-4 ...	392,237	458,014	401,984	192,411	82,747	35,541
CATTLE.						
1860-61 ...	722,332	2,408,586	432,890	278,265	32,476	83,366
1870-71 ...	721,096	2,195,096	1,076,630	136,832	45,213	101,459
1880-81 ...	1,286,267	2,580,040	3,162,752	303,035	63,719	127,187
1890-91 ...	1,782,881	2,091,229	5,558,264	574,032	130,970	162,440
1900-01 ...	1,602,384	1,983,116	4,078,191	472,428	338,590	165,516
1901-2 ...	1,602,384	2,047,454	3,772,707	480,777	398,547	168,661
1902-3 ...	1,602,384	1,741,226	2,543,471	519,163	437,136	178,385
1903-4 ...	1,602,384	1,880,578	2,481,717	536,580	497,617	185,938
SHEEP.						
1860-61 ...	5,780,896	6,119,163	3,166,802	2,824,811	260,136	1,700,935
1870-71 ...	10,761,887	16,308,585	8,163,818	4,400,655	608,892	1,349,771
1880-81 ...	10,360,285	35,398,121	6,935,967	6,453,222	1,231,717	1,783,611
1890-91 ...	12,692,843	55,986,431	18,007,234	7,050,544	2,524,913	1,619,256
1900-01 ...	10,841,790	40,020,506	10,339,185	5,283,247	2,434,311	1,683,956
1901-2 ...	10,841,790	41,857,099	10,030,971	5,060,540	2,625,855	1,792,481
1902-3 ...	10,841,790	26,649,424	7,213,985	4,922,662	2,704,880	1,679,518
1903-4 ...	10,841,790	28,656,501	8,392,044	5,350,258	2,600,633	1,597,053

STATES OF  
AUSTRALIA.

## RAILWAYS—MILES OPEN.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
1860 ...	214	70	21*	56	...	...
1870 ...	274	340	206	133	...	...
1880 ...	1,199	850	633	667	102	172
1890 ...	2,471	2,263	2,112	1,774	524	399
1900 ...	3,202	2,895	2,801	1,902	1,978	587
1901 ...	3,238	2,928	2,947	1,902	1,984	618
1902 ...	3,303	3,107	2,974	1,902	1,989	620
1903 ...	3,376	3,220	3,263	1,882	2,145	620

NOTE.—The figures for Tasmania relate to the calendar year, for the other States to the year ended 30th June. \* In 1865.

## TELEGRAPH LINES.—MILES OPEN, 31ST DECEMBER—POLES.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.
1860 ...	*	1,616	169	*	...	...
1870 ...	3,371†	5,579†	2,221†	1,718†	...	...
1880 ...	3,155	7,955	5,768	4,754	1,555	745
1890 ...	6,628	11,231	9,830	5,526	2,921	1,645
1900 ...	6,445	16,756	10,221	5,508	6,052	2,091
1901 ...	6,468	16,963	10,246	5,528	6,173	2,187
1902 ...	6,589	14,526	10,247	5,301	6,112	2,187
1903 ...	6,596	14,395	10,180	6,038	6,079	1,852

\* Not available. † Miles of wire.

## III.—NEW ZEALAND—SUMMARIES.

## POPULATION, MARRIAGES, BIRTHS, AND DEATHS.

Year.	Population (exclusive of Maoris) at end of Year.		Marriages.*		Births.*		Deaths.*	
	Total.	Per Square Mile.	Number.	Rate per 1,000.	Number.	Rate per 1,000.	Number.	Rate per 1,000.
1860 ...	79,711	·76	886	11.12	3,530	44.54	1,144	14.35
1870 ...	248,400	2.38	1,862	7.50	10,555	41.15	2,845	11.45
1880 ...	484,864	4.64	3,354	6.92	19,027	39.24	5,543	11.43
1890 ...	625,508	5.99	3,868	6.18	18,142	29.00	6,323	10.11
1900 ...	769,321	7.36	5,805	7.53	19,624	25.46	7,505	9.74
1901 ...	787,657	7.54	6,095	7.81	20,491	26.34	7,634	9.81
1902 ...	807,929	7.73	6,388	8.01	20,655	25.89	8,375	10.50
1903 ...	832,505	7.95	6,748	8.23	21,829	26.61	8,528	10.40

\* Annual average of three years at each period, from 1860 to 1900 inclusive.

## INCREASE OF POPULATION (BY DECADES).

Period.*	Total Increase.		Natural Increase.	Net Immigration.	Assisted Immigration.
	Number.	Rate per cent.			
1861-71 ...	173,274	11.80	50,052	123,222	(?)
1871-81 ...	232,123	6.63	103,490	128,633	100,920
1881-91 ...	136,725	2.49	131,733	4,992	14,614
1891-01 ...	146,061	2.12	117,867	28,194	44

\* The periods referred to are from Census to Census.

REVENUE AND FUNDED DEBT.

NEW ZEALAND.

Year ended 31st March.	Revenue.		Revenue derived from—								Funded Debt at end of Year.			
			Taxation.		Customs and Excise Duty.*		Land.		Posts and Telegraphs.					
	Amount	Per Head.	Amount.	Per Head.	Amount	Per Head.	Amount	Per Head.	Amount	Per Head.	Amount.	Per Head.		
													£	£
1850	..	..	..	..	43,662	1.98	8,559	3.89	..	..	..	..	..	..
1860	464,739	5.83	..	..	189,168	2.37	215,760	2.35	..	..	1850,000	7	8	1
1870	1,384,639	5.57	..	..	765,930	3.08	327,589	1.35	53,202	3.5	7,841,891	32	5	10
1880	3,283,396	7.08	1,535,700	3.31	1,258,114	2.71	389,014	1.84	249,540	5.4	28,583,231	61	12	10
1890	4,298,029	6.83	2,173,985	3.63	1,541,395	2.50	364,166	5.9	340,564	5.5	38,832,350	63	0	10
1900	5,690,618	7.55	2,891,126	3.83	2,187,859	2.90	262,229	3.5	488,246	6.5	47,873,732	62	19	1
1901	5,906,916	7.68	3,042,890	3.96	2,266,082	2.95	270,103	3.5	503,836	6.5	49,590,815	63	17	8
1902	6,152,839	7.81	3,113,079	3.95	2,291,349	2.91	249,619	3.2	488,573	6.2	52,966,447	67	5	0
1903	6,447,435	7.98	3,277,964	4.06	2,426,043	3.00	252,278	3.1	525,099	6.5	55,899,019	68	5	4

\* Included under the head of Taxation.

† Figures for 1862.

IMPORTS, EXPORTS, AND SHIPPING.

Year.	Imports.		Exports.		Shipping, Inwards and Outwards.
	Amount.	Per Head.	Amount.	Per Head.	
1860	£ 1,548,333	£ s. d. 20 9 3	£ 588,953	£ s. d. 7 15 8	Tens. 280,569
1870	4,639,015	19 2 1	4,822,756	19 17 3	538,558
1880	6,162,011	12 19 10	6,352,692	13 7 10	819,716
1890	6,260,525	10 1 8	9,811,720	15 6 1	1,312,474
1900	10,646,096	13 19 4	13,246,161	17 7 6	1,679,907
1901	11,817,915	15 3 10	12,881,424	16 11 2	2,139,180
1902	11,326,723	14 3 11	13,644,977	17 2 1	2,137,949
1903	12,788,675	15 11 10	15,010,378	18 6 0	2,215,229

LAND IN CULTIVATION—AREA AND PRODUCE.

Year.	Total Area.	Wheat.	Oats.	Barley.	Maize.	Potatoes.	Hay.	Vines.
ACRES.								
1880-81	1,029,764	324,933	215,007	46,877	2,321	22,530	54,028	..
1890-91	1,636,179	301,460	346,224	32,740	5,759	32,691	44,045	..
1900-01	1,710,619	206,465	449,534	30,831	14,232	28,524	68,023	522
1901-2	1,664,187	163,462	405,924	26,514	12,503	31,259	62,984	513
1902-3	1,773,203	194,355	483,659	27,921	12,038	31,408	69,342	705
1903-4	1,786,095	230,346	391,640	34,681	11,156	31,778	77,167	749
PRODUCE.								
1880-81	..	Bushels. 8,147,705	Bushels. 6,891,251	Bushels. 1,221,241	Bushels. ..	Tons. 111,329	Tons. 68,710	..
1890-91	..	5,723,610	9,947,036	758,833	238,864	178,121	62,901	..
1900-01	..	6,527,154	19,085,837	1,027,651	502,697	169,042	136,046*	..
1901-2	..	4,046,589	15,045,233	855,993	571,834	206,815	125,968*	..
1902-3	..	7,457,915	21,766,708	1,136,232	607,609	193,267	138,684*	..
1903-4	..	7,891,634	15,107,237	1,160,504	530,291	208,787	154,334*	..

\* Estimated.

NEW  
ZEALAND.LIVE STOCK, WOOL AND GOLD PRODUCTION, RAILWAYS AND  
TELEGRAPHS.

Year.	Number of Live Stock.			Production of—				Miles open—	
	Horses.	Cattle.	Sheep.	Wool (000's omitted).		Gold (000's omitted).		Railways.	Telegraphs (poles).
				Lbs.	Value.	Ozs.	Value.		
1860 ...	28,275	193,285	2,761,383	6,666,*	£ 444,	4,*	£ 17,	...	...
1870 ...	81,028	436,592	9,700,629	37,040,*	1,704,	545,*	2,158,	...	1,887
1880 ...	161,736	698,637	12,985,085	66,860,*	3,169,	303,*	1,212,	1,258	3,706
1890 ...	211,040	831,831	18,128,186	105,762,	4,348,	193,	773,	1,956	5,060
1900 ...	266,245	1,256,680	20,186,784	144,977,	4,909,	339,†	1,440,	2,300	7,249
1901 ...	279,672	1,361,784	20,233,099	150,299,	3,843,	413,†	1,754,	2,323	7,469
1902 ...	286,955	1,460,663	20,342,727	163,578,	3,513,	460,†	1,951,	2,404	7,749
1903 ...	298,714	1,593,547	18,954,553	159,569,	4,210,	480,†	2,038,	2,441	7,779

\* Quantity exported.

† Fine ounces.

## IV.—GENERAL TABLES.

## I.—AREA AND POPULATION, 1903.

GENERAL  
TABLES.

State.	Area in Square Miles.	Estimated Population, 31st December, 1903.			Number of—		Estimated Mean Population 1903.
		Males.	Females.	Total.	Females to 100 Males.	Persons to the Sq. Mile.	
Victoria ...	87,884	605,361	603,493	1,208,854	99.7	13.76	1,208,880
New South Wales...	310,700	752,181	675,161	1,427,342	89.8	4.59	1,418,516
Queensland ...	668,497	285,297	230,233	515,530	80.7	.77	512,690
South Australia—							
Proper ...	380,070	183,776	181,281	365,057	98.6	.96	362,090
Northern Territory	523,620	3,656	663	4,319	18.1	.01	4,498
Western Australia...	975,920	135,961	90,993	226,954	66.9	.23	221,278
Tasmania ...	26,215	93,078	86,409	179,487	92.8	6.85	177,547
Australia ...	2,972,906	2,059,310	1,868,233	3,927,543	90.7	1.32	3,905,499
New Zealand ...	104,751	439,674	392,831	832,505	89.3	7.95	820,217

## 2.—MIGRATION BY SEA, 1903.

GENERAL  
TABLES.

State.	Arrivals. (As recorded.)			Departures. (As recorded.)		
	Males.	Females.	Total.	Males.	Females.	Total.
Victoria ... ..	33,275	19,481	52,756	40,803	25,356	66,159
New South Wales ... ..	46,121	24,449	70,570	39,529	24,097	63,626
Queensland ... ..	11,337	5,095	16,432	12,510	6,292	18,802
South Australia—						
Proper ... ..	22,131	12,697	34,828	20,552	13,014	33,566
Northern Territory ... ..	329	90	419	605	85	690
Western Australia ... ..	19,294	11,649	30,943	13,641	6,575	20,216
Tasmania ... ..	15,505	9,658	25,163	14,309	8,896	23,205
<b>Australia ... ..</b>	<b>147,992</b>	<b>83,119</b>	<b>231,111</b>	<b>141,949</b>	<b>84,315</b>	<b>226,264</b>
New Zealand ... ..	20,479	10,404	30,883	12,983	6,625	19,608

## 3. MIGRATION BY LAND, 1903.

State.	Arrivals. (As recorded.)			Departures. (As recorded.)		
	Males.	Females.	Total.	Males.	Females.	Total.
Victoria ... ..	11,463	6,645	18,108	9,611	5,959	15,570
New South Wales ... ..	49,382	24,967	74,349	50,913	25,623	76,536
Queensland ... ..	12,952	4,945	17,897	11,090	4,394	15,484
South Australia—Proper ... ..	19,738	15,899	35,637	20,677	15,872	36,549

## 4.—BIRTHS, DEATHS, AND MARRIAGES, 1903.

GENERAL  
TABLES.

State.	Births.		Deaths.	Marriages.	Per 1,000 of Mean Population.		
	Total.	Illegitimate.			Births.	Deaths.	Marriages.
Victoria ...	29,569	1,695	15,595	7,605	24·46	12·90	6·29
New South Wales ...	35,966	2,413	16,497	9,759	25·35	11·63	6·88
Queensland ...	12,621	857	6,346	2,933	24·62	12·38	5·72
South Australia—							
Proper ...	8,475	354	3,873	2,260	23·41	10·70	6·24
Northern Territory	33	...	78	12	7·34	17·34	2·67
Western Australia ...	6,699	314	2,788	2,064	30·27	12·60	9·33
Tasmania ...	5,080	285	2,116	1,344	28·61	11·92	7·57
Australia ...	98,443	5,918	47,293	25,977	25·21	12·11	6·65
New Zealand ...	21,829	994	8,528	6,748	26·61	10·40	8·23

  

State.	Excess of Births over Deaths.		Males to 100 Females.		Deaths of Infants Under 1 Year.		Percentage of Illegitimate to Total Births.
	Number.	Per cent.	Born.	Died.	Total.	Per 100 Births.	
Victoria ...	13,974	89·61	104·57	123·77	3,146	10·64	5·73
New South Wales ...	19,469	118·01	104·48	133·37	3,969	11·04	6·71
Queensland ...	6,275	98·88	103·76	164·97	1,513	11·99	6·79
South Australia—							
Proper ...	4,602	118·82	111·29	127·55	820	9·68	4·18
Northern Territory	—45	—57·69	153·85	1,014·29	6	18·18	...
Western Australia ...	3,911	140·28	105·11	190·72	946	14·12	4·69
Tasmania ...	2,964	140·08	102·39	115·92	563	11·08	5·61
Australia ...	51,150	108·16	104·93	135·51	10,963	11·14	6·01
New Zealand ...	13,301	155·97	105·70	138·15	1,770	8·11	4·55

5.—DEATHS IN AGE GROUPS, 1903.

GENERAL TABLES.

State.	Age Groups.					
	Under 1 Year.	1 to 5 Years.	5 to 65 Years.	65 Years and Over.	Unspecified.	Total.
MALES.						
Victoria ... ..	1,694	494	3,516	2,921	1	8,626
New South Wales ...	2,170	720	4,181	2,343	14	9,428
Queensland ... ..	817	292	2,118	711	13	3,951
South Australia—Proper	470	1,701				2,171
„ Northern Territory	3	68				71
Western Australia ...	550	118	972	181	8	1,829
Tasmania ... ..	299	835			2	1,136
Australia ... ..	6,003	21,209				27,212
New Zealand ... ..	977	305	3,682		33	4,917
FEMALES.						
Victoria ... ..	1,452	488	2,990	20,39	...	6,969
New South Wales ...	1,799	697	3,102	1 470	1	7,069
Queensland ... ..	696	276	1,076	347	...	2,395
South Australia—Proper	350	1,352				1,702
„ Northern Territory	3	4				7
Western Australia ...	396	98	375	90	...	959
Tasmania ... ..	264	715			1	980
Australia ... ..	4,960	15,121				20,081
New Zealand ... ..	793	271	2,511		6	3,581

## 6.—DEATHS IN CAPITAL CITIES, 1903.

GENERAL  
TABLES.

Capital City.	Age Groups.					Total.
	Under 1 Year.	1 to 5 Years.	5 to 65 Years.	65 Years and Over.	Unspeci- fied.	
<b>MALES.</b>						
Melbourne ... ..	793	223	1,705	1,051	...	3,772
Sydney ... ..	806	251	1,491	573	3	3,124
Brisbane ... ..	228	109	404	135	...	876
Adelaide ... ..	236	960			...	1,196
Perth ... ..	173	23	229	68	...	493
Hobart ... ..	84	221		...	...	305
Wellington ... ..	85	19	213		...	317
<b>FEMALES.</b>						
Melbourne ... ..	700	223	1,595	927	...	3,445
Sydney ... ..	677	224	1,301	587	...	2,789
Brisbane ... ..	210	83	345	96	...	734
Adelaide ... ..	185	733			...	918
Perth ... ..	128	34	114	36	...	312
Hobart ... ..	60	216		...	...	276
Wellington ... ..	56	7	200		...	263

## 7.—METEOROLOGY IN CAPITAL CITIES, 1903.

Capital City.	Mean Barometric Pressure.	Temperature in Shade.			Rainfall.	
		Maximum.	Minimum.	Mean.	Number of Days.	Amount.
	Inches.	°	°	°		Inches.
Melbourne ...	29.92	105.0	28.4	57.0	130	28.43
Sydney ...	30.08	98.1	38.4	63.0	169	38.62
Brisbane ...	29.99	101.3	39.1	69.2	136	49.27
Adelaide ...	30.04	105.6	32.2	62.3	134	25.47
Perth ...	30.04	106.0	40.1	63.7	140	35.69
Hobart ...	29.85	97.0	28.8	55.1	151	21.85
Wellington	30.03	79.5	31.0	54.6	161	53.8

8.—COMMONWEALTH REVENUE AND EXPENDITURE, 1902-3.

Heads of Revenue and Expenditure.	Transactions on Account of Each State.						Total Commonwealth.
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	
Revenue—	£	£	£	£	£	£	£
Customs and Excise ... ..	2,499,014	3,478,742	1,260,934	689,755	1,396,002	360,607	9,685,054
Posts and Telegraphs ... ..	622,700	906,798	300,737	255,214	225,244	94,037	2,404,730
Defence ... ..	3,738	3,258	427	1,173	324	409	9,329
Miscellaneous ... ..	203	517	1,073	120	131	69	2,113
New Revenue (proportion of) ... ..	1,465	1,704	620	445	262	215	4,711
Total ... ..	3,127,120	4,391,019	1,563,791	946,707	1,621,963	455,337	12,105,937
Expenditure—							
Customs and Excise ... ..	64,770	70,438	66,198	25,832	34,740	10,644	272,622
Posts and Telegraphs ... ..	597,008	890,203	437,268	254,755	280,304	104,079	2,563,617
Defence ... ..	258,851	268,146	107,673	54,009	32,471	25,376	746,526
New Expenditure ... ..	98,172	114,131	41,519	29,795	17,524	14,423	315,564
Balance paid to State ... ..	2,105,450	3,053,133	905,235	578,929	1,255,731	301,978	8,200,456
Miscellaneous ... ..	28	10	5	3,000	...	...	3,043
Total ... ..	3,124,279	4,396,061	1,557,898	946,320	1,620,770	456,500	12,101,828
Per Head of Population—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Revenue ... ..	2 11 8	3 2 6	3 0 9	2 11 8	7 10 9	2 11 5	3 2 4
Expenditure (excluding Refunds to State) ... ..	16 10	19 1	1 5 4	1 0 1	1 13 11	17 5	1 0 1

GENERAL  
TABLES.

## 9.—NET REVENUE COLLECTED BY CUSTOMS DEPARTMENT, 1903.

State.	From Import Duties.	From Excise Duties.	From Other Sources.	Total.
	£	£	£	£
Victoria ... ..	2,301,955	429,237	19,902	2,751,094
New South Wales ... ..	2,761,757	622,701	16,206	3,400,664
Queensland ... ..	856,937	191,537	11,142	1,059,616
South Australia—Proper ...	540,318	94,420	5,357	640,095
„ „ Northern Territory	23,670	268	481	24,419
Western Australia ... ..	1,159,829	73,566	9,398	1,242,793
Tasmania ... ..	310,085	49,611	...	359,696
Australia ... ..	7,954,551	1,461,340	62,486	9,478,377
New Zealand ... ..	2,507,478	94,440	135,875	2,737,793

10.—STATE REVENUE UNDER LEADING HEADS, 1902-3.

Heads of Revenue.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania. (31/12/03.)	Australia.	New Zealand. (31/3/03.)
	£	£	£	£	£	£	£	£
Federal Government ... ..	2,105,450	3,053,133	905,235	578,929	1,255,731	304,857	8,203,335	...
Taxation ... ..	950,183	1,145,232	415,688	398,941	221,247	150,091	3,281,382	3,277,964
Crown Lands ... ..	356,262	1,870,691	610,280	159,850	190,900	72,497	3,260,480	252,278
Railways and Tramways ... ..	3,033,596	4,197,789	1,245,914	1,086,758	1,598,023	248,024	11,410,104	1,982,551
Other Sources ... ..	509,128	1,265,386	349,348	306,090	364,337	82,199	2,876,488	934,642
<b>Total ... ..</b>	<b>6,954,619</b>	<b>11,532,231</b>	<b>3,526,465</b>	<b>2,530,568</b>	<b>3,630,238</b>	<b>857,668</b>	<b>29,031,789</b>	<b>6,447,435</b>
<b>Per Head of Population ... ..</b>	<b>£ s. d.</b> 5 14 10	<b>£ s. d.</b> 8 4 4	<b>£ s. d.</b> 6 18 1	<b>£ s. d.</b> 6 18 0	<b>£ s. d.</b> 17 0 4	<b>£ s. d.</b> 4 16 8	<b>£ s. d.</b> 7 9 6	<b>£ s. d.</b> 7 19 7
<b>PROPORTIONS PER CENT.</b>								
Federal Government ... ..	30.28	26.48	25.67	22.88	34.59	35.55	28.26	...
Taxation ... ..	13.66	9.93	11.79	15.76	6.09	17.50	11.30	50.84
Crown Lands ... ..	5.12	16.22	17.30	6.32	5.26	8.45	11.23	3.91
Railways and Tramways ... ..	43.62	36.40	35.33	42.95	44.02	28.92	39.30	30.75
Other Sources ... ..	7.32	10.97	9.91	12.09	10.04	9.58	9.91	14.50

NOTE.—The figures for Tasmania relate to the calendar year 1903; those for New Zealand to the year ended 31st March, 1903; and for all the other States to the year ended 30th June, 1903.



12.--STATE EXPENDITURE (EXCLUSIVE OF LOAN) UNDER LEADING HEADS, 1902-3.

Heads of Expenditure.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania. (31/12/03.)	Australia.	New Zealand. (31/3/03.)
	£	£	£	£	£	£	£	£
Railways and Tramways ... ..	1,849,989	2,949,654	861,749	643,871	1,275,565	166,351	7,747,179	1,357,385
Education ... ..	660,774	899,918	317,366	178,059	120,305	70,073	2,246,495	566,568
Interest on Public Debt ... ..	1,907,656	2,619,766	1,509,183	1,009,918	512,252	340,094	7,898,869	1,850,515
All other services ... ..	2,341,541	5,234,059	1,029,508	809,941	1,613,641	302,838	11,331,528	2,639,551
Total ... ..	6,759,960	11,703,397	3,717,806	2,641,789	3,521,763	879,356	29,224,071	6,414,019
Per Head of Population ... ..	£ s. d. 5 11 7	£ s. d. 8 6 9	£ s. d. 7 5 6	£ s. d. 7 4 1	£ s. d. 16 10 2	£ s. d. 4 19 1	£ s. d. 7 10 6	£ s. d. 7 18 9
	PROPORTIONS PER CENT.							
Railways and Tramways ... ..	27·37	25·21	23·18	24·37	36·22	18·92	26·51	21·16
Education ... ..	9·77	7·69	8·54	6·74	3·42	7·97	7·69	8·83
Interest on Public Debt ... ..	28·22	22·38	40·59	38·23	14·54	38·67	27·03	28·85
All other services ... ..	34·64	44·72	27·69	30·66	45·82	34·44	38·77	41·16

## 13.—STATE EXPENDITURE—EXCLUSIVE OF LOAN—1902-3.

Heads of Expenditure.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania. (31/12/03).	Australia.
	£	£	£	£	£	£	£
Interest on Public Debt ...	1,907,656	2,619,766	1,509,183	1,009,918	512,252	340,094	7,898,869
Railways and Tramways ...	1,849,989	2,949,654	861,749	643,871	1,275,565	166,351	7,747,179
Public Works ... ..	209,146	887,485	25,176	107,743	428,051	16,299	1,673,900
Mines ... ..	53,961	70,676	27,493	21,672	119,962	6,288	300,052
Police ... ..	264,422	415,999	172,913	84,109	130,308	36,134	1,103,885
Harbours, &c. ... ..	34,058	208,898	44,167	20,407	26,969	...	334,499
Water Supply and Sewerage ...	25,467	126,432	1,855	33,309	*	...	187,063
Education ... ..	660,774	899,918	317,366	178,059	120,305	70,073	2,246,495
Charitable Institutions ... ..	318,111	503,900	138,377	107,243	118,827	48,343	1,234,801
All Other Expenditure ... ..	1,436,376	3,020,669	619,527	435,458	789,524	195,774	6,497,328
Total ... ..	6,759,960	11,703,397	3,717,806	2,641,789	3,521,763	879,356	29,224,071

\* Included under "Public Works."

14.—STATE BALANCES AT THE END OF 1902-3.

GENERAL TABLES.

State.	Surplus.	Accumulated Deficiency.		
		Covered by—		Total.
		Treasury Bills.	Cash Overdraft.	
	£	£	£	£
Victoria ... ..	...	100,000	2,061,460	2,161,460
New South Wales ... ..	...	2,227,626	484,356	2,711,982
Queensland ... ..	...	1,130,000	23,281	1,153,281
South Australia ... ..	...	1,088,950	225,260	1,314,210
Western Australia ... ..	231,660	...	...	...
Tasmania (31/12/03) ... ..	...	...	234,545	234,545
Australia ... ..	231,660	4,546,576	3,028,902	7,575,478
New Zealand (31/3/03) ... ..	303,906	...	...	...

15.—STATE AND FEDERAL REVENUE AND EXPENDITURE, 1902-3.

State.	Amount of—			Average per head.			
	Revenue.		Expenditure.	Revenue.		Expenditure.	
	Total.	Raised by Taxation.		Total.	Raised by Taxation.		
	£	£	£	£ s. d.	£ s. d.	£ s. d.	
Victoria ... ..	7,976,289	3,449,197	7,778,789	6 11 8	2 16 11	6 8 5	
New South Wales ... ..	12,870,117	4,623,974	13,046,325	9 3 5	3 5 11	9 5 11	
Queensland ... ..	4,185,021	1,676,622	4,370,469	8 3 10	3 5 8	8 11 1	
South Australia ... ..	2,898,346	1,088,696	3,009,180	7 18 1	2 19 5	8 4 2	
Western Australia ... ..	3,996,470	1,617,249	3,886,802	18 14 8	7 11 7	18 4 5	
Tasmania* ... ..	1,008,148	510,698	1,033,878	5 13 7	2 17 7	5 16 6	
Australia ... ..	32,934,391	12,966,436	33,125,443	8 9 8	3 6 9	8 10 7	

\* State items relate to the Calendar Year 1903

16.—STATE EXPENDITURE FROM LOANS, 1902-3.

Heads of Expenditure.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania. (31(12/03.))	Australia.
	£	£	£	£	£	£	£
Railways and Tramways ... ..	354,916	1,683,755	695,631	141,335	1,059,418	37,450	3,972,505
Roads and Bridges ... ..	...	75,679	*	200	...	39,037	114,916
Harbours, Rivers, and Lighthouses ...	...	2,014,565	1,532	27,640	138,422	31,614	2,213,773
Public Buildings ... ..	...	204,442	62,041	10,119	...	25,698	302,300
Water Supply ... ..	115,405	365,813	*	169,931	} 413,435	...	1,259,330
Sewerage ... ..	...	188,768	...	5,978			
Immigration ... ..	...	..	10,901	...	928	...	11,829
Other Public Works or Purposes ...	259,082	8,746	252,300	110,352	53,698	33,324	717,502
Total ... ..	729,403	4,541,768	1,022,405	465,555	1,665,901	167,123	8,592,155

\* Included under "Other Public Works or purposes."

17.—AGGREGATE EXPENDITURE FROM LOANS TO END OF YEAR 1902-3.  
(Approximate only.)

Heads of Expenditure.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania. (To 31/12/03.)	Australia.
	£	£	£	£	£	£	£
Railways and Tramways ... ..	38,253,206	47,098,238	23,130,490	13,592,828	8,607,368	4,085,358	134,767,488
Telegraphs and Telephones ... ..	...	1,294,882	1,048,510	992,214	269,308	142,410	3,747,324
Roads and Bridges ... ..	106,259	1,608,807	†	1,464,658	142,538	2,215,608	5,537,870
Harbours, Rivers, and Lighthouses ...	611,059	9,313,740	2,597,385	1,371,752	1,973,633	472,471	16,340,040
Public Buildings ... ..	752,218	4,198,689	1,418,934	839,769	63,876	830,828	8,104,314
Water Supply ... ..	8,685,435	6,284,914	†	4,297,931	} 2,742,799	...	27,261,308
Sewerage ... ..	...	4,634,705	...	615,474			
Defence Works ... ..	149,324	1,421,976	377,097	289,290	...	128,179	2,365,866
Immigration ... ..	...	194,430	2,943,963	...	28,625	235,000	3,402,018
Other Public Works or Purposes ...	2,369,301*	771,150	5,836,756	2,796,386	1,269,709	884,051	13,927,353
Total ... ..	50,926,802	76,821,531	37,353,135	26,260,352	15,097,856	8,993,905	215,453,581

\* Including £1,141,152 expenditure on School Buildings.

† Included under "Other public works or purposes."

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TABLES.18.—SOURCES OF MUNICIPAL REVENUE, 1901-2  
(EXCLUSIVE OF LOANS.)

State.	From Government.	Raised by Local Taxation.	From other Sources.	Total.
	£	£	£	£
Victoria ... ..	99,304	964,240	236,990	1,300,534
New South Wales ... ..	84,866	567,789	157,954	810,609
Queensland ... ..	59,850	321,831	122,075	503,756
South Australia ... ..	24,959	150,610	101,261	276,830
Western Australia ... ..	102,872	86,314	37,562	226,748
Tasmania ... ..	93,063	18,744	33,412	145,219
Australia ... ..	464,914	2,109,528	689,254	3,263,696
New Zealand ... ..	161,010	726,009	386,787	1,273,806*

NOTE.—The figures in this table have been previously published, and are repeated, as those for a later date, with the exception of Victorian figures, are not available.

\* Exclusive of £592,616 other receipts (not revenue), consisting of loans, and special grants from Government, &c.

19.—STATE FUNDED DEBT, 30TH JUNE, 1903.

State.	Loans Repayable in—								Total Funded Debt.		Treasury Bills in aid of Revenue.	Accumulated Sinking Fund.
	London.				Australasia.				Amount.	Per Head of Population.		
	Debentures.	Inscribed Stock.	Treasury Bills in aid of Public Works.	Total.	Debentures.	Inscribed Stock.	Treasury Bills in aid of Public Works.	Total.				
£	£	£	£	£	£	£	£	£	£	£	£	
Victoria .. ..	6,584,000	38,508,471	..	45,092,471	2,108,495	3,196,934	700,000	6,005,429	51,097,900	42-29	350,000	313,295
New South Wales ..	8,137,950	51,512,500	2,801,500	62,451,950	230,000	10,605,911	2,177,500	13,013,411	75,465,361	53-30	2,227,626	775,208
Queensland .. ..	9,821,100	24,838,247	..	34,659,347	3,659,280	..	..	3,659,280	38,318,627	74-73	1,130,000	..
South Australia ..	9,169,800	13,741,550	..	22,911,350	104,500	3,370,795	367,775	3,843,070	26,754,420	73-29	1,088,950	117,338
Western Australia ..	221,500	13,349,353	..	13,570,853	..	2,056,445	..	2,056,445	15,627,298	70-39	..	655,069
Tasmania (31.12.03) ..	2,923,750	4,906,500	..	7,830,250	122,870	1,257,950	..	1,380,820	9,211,070	51-32	107,330	180,257
<b>Australia,)</b> ..	<b>36,858,100</b>	<b>146,856,621</b>	<b>2,801,500</b>	<b>136,516,221</b>	<b>6,225,145</b>	<b>20,488,035</b>	<b>3,245,275</b>	<b>29,958,455</b>	<b>216,474,676</b>	<b>55-40</b>	<b>4,908,906</b>	<b>2,041,167</b>
New Zealand (31.3.03)	3,067,900	44,824,466	..	47,892,366	7,534,097	472,556	..	8,006,653	55,899,019	68-27	..	2,313,239

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## 20.—DUE DATES OF STATE LOANS ON 30TH JUNE, 1903.

When Repay-able.	Victoria.	New South Wales.	Queens-land.	South Australia.	Western Australia.	Tasmania, 31.12.3.	New Zealand, 31.3.1903.
	£	£	£	£	£	£	£
Overdue	1,000	5,650	..	..	..	..	..
1903 ..	..	1,003,700	..	..	..	..	480,000
1904 ..	5,457,000	58,000	..	424,000	..	24,840	1,698,950
1905 ..	..	2,903,800	..	78,775	17,600	179,986	1,640,100
1906 ..	..	1,224,900	..	37,500	460,280 (4)	236,511	1,799,766
1907 ..	4,700,000	1,875,000	..	1,037,500	..	469,367	1,811,800
1908 ..	2,000,000	2,965,500	..	1,951,100	..	122,885	562,333
1909 ..	..	384,000	..	3,122,700	..	67,701	801,000
1910 ..	..	2,863,700	..	60,300	1,112,850	1,024,061	497,556
1911 ..	2,107,000 (15)	..	..	68,300	1,876,000 (20)	2,125	2,843
1912 ..	63,000 (10)	9,350,351	..	85,000	..	..	..
1913 ..	14,746,795	..	1,466,500	46,800	483,215 (10)	547,650	496,300
1914 ..	..	..	..	35,000	..	800,000	331,800
1915 ..	..	..	11,728,800	..	4,500,100 (20)	..	3,000
1916 ..	..	..	..	18,646,545	1,100,000 (20)	100	12,700
1917 ..	3,196,934 <sup>∞</sup>	..	..	18,546,200	..	..	..
1918 ..	..	12,826,200	..	1,474,400	..	100	..
1919 ..	4,000,000	365,050	..	26,000	..	..	..
1920 ..	6,000,000	..	..	336,300	2,380,000 (15)	300,000	..
1921 ..	{ 1,000,000 (9) } { 5,000,000 (5) }	..	..	..	..	270,164	500,000
1922 ..	..	..	..	..	..	8,252	..
1923 ..	7,297,700*	..	..	..	..	..	..
1924 ..	..	16,698,065	12,973,834	1,651,300	..	..	..
1925 ..	..	222,255	..	..	..	5,050	..
1926 ..	..	..	..	839,500	..	67,600	..
1927 ..	..	..	..	..	2,500,000	..	..
1929 ..	5,528,471 (20)	..	..	200,000	..	..	29,150,302
1930 ..	..	..	3,704,800	..	..	..	..
1933 ..	..	9,686,300	..	..	..	..	..
1934 ..	..	..	..	..	993,353	..	..
1935 ..	..	12,500,000	..	..	..	..	..
1936 ..	..	..	..	332,900	..	..	..
1939 ..	..	..	..	2,719,800	..	..	..
1940 ..	..	..	..	..	..	4,906,500	6,161,167
1945 ..	..	..	2,000,000	..	..	..	9,512,997
1947 ..	..	..	4,498,693	..	..	..	..
1950 ..	..	..	946,000	..	..	..	..
1951 ..	..	..	1,000,000	..	..	..	..
Annual Drawings	..	..	..	..	203,900	..	236,400
Indefinite	..	532,890	..	..	..	..	..
Short dated Debentures.	..	..	..	..	..	..	200,000
<b>Total Debt</b>	<b>51,097,900</b>	<b>75,465,361</b>	<b>38,318,627</b>	<b>26,754,420</b>	<b>15,627,298</b>	<b>9,211,070</b>	<b>55,899,019</b>

NOTE.—The earliest date of repayment is given in all cases. When it is optional to continue the loan for a further term of years, without redemption, such period is shown in brackets after the amount. When the term is indefinite the sign <sup>∞</sup> appears.

\* Including £297,700 (9).

† Including £746,795 (10).

‡ Including £1,560,400 (19), and £5,122,845<sup>∞</sup>.

§ Including £2,182,400 (19).

21.—RATES OF INTEREST ON OUTSTANDING LOANS, 30TH JUNE, 1903.

State.	Nominal Amount of Loans bearing Interest at—							Total.
	6 per cent.	5 per cent.	4½ per cent.	4 per cent.	3½ per cent.	3 per cent.	Other Rates.	
	£	£	£	£	£	£	£	£
Victoria ... ..	...	...	5,000,000	23,310,795	12,700,000	10,086,105	1,000*	51,097,900
New South Wales ...	2,300	60,700	3,700	24,040,440	32,567,499	17,285,072	1,500,000(3¼) 5,650*	75,465,361
Queensland ... ..	...	...	...	21,384,300	11,535,634	5,398,693	...	38,318,627
South Australia ...	468,900	290,000	...	16,302,400	3,730,775	5,962,345	...	26,754,420
Western Australia ...	...	17,600	71,400	3,485,068	4,703,230	7,350,000	...	15,627,298
Tasmania (31/12/03) ...	...	100	...	4,045,820	4,200,335	934,115	30,700(3¼)	9,211,070
Australia ... ..	471,200	368,400	5,075,100	92,568,823	69,437,473	47,016,330	1,537,350	216,474,676
New Zealand (31/3/03) ...	55,200	557,400	52,900	34,504,352	10,367,170	9,512,997	349,000 (3¼) 500,000†	55,899,019

\* Overdue, not bearing interest.

† No interest.

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TABLES.22.—HIGHEST OFFICIAL PRICES OF CERTAIN STOCKS RECORDED IN  
LONDON DURING THE YEAR 1903.

State.	Nominal Interest.	Due Date of Loan.	Highest Prices Quoted		Interest per cent. yielded to Investor.
			Gross.	Less Accrued Interest.	
Victoria ...	4	1920	£ 107 $\frac{5}{8}$	£ 105 $\frac{5}{8}$	£ s. d. 3 11 2
	3 $\frac{1}{2}$	1921-6	101 $\frac{1}{2}$	100	3 10 0
	3	1929-49	93	91 $\frac{1}{2}$	3 10 3
New South Wales ...	4	1933	110 $\frac{1}{2}$	108 $\frac{1}{2}$	3 10 10
	3 $\frac{1}{2}$	1924	103 $\frac{5}{8}$	101 $\frac{7}{8}$	3 7 6
	3 $\frac{1}{2}$	1913	102 $\frac{1}{2}$	100 $\frac{3}{4}$	3 8 8
	3	1935	93 $\frac{1}{4}$	91 $\frac{3}{4}$	3 8 8
Queensland ...	4	1915	105	103	3 13 10
	4	1924	108 $\frac{5}{8}$	106 $\frac{7}{8}$	3 10 8
	3 $\frac{1}{2}$	1921-24-30	102	100 $\frac{1}{4}$	3 9 8
	3	1922-47	94 $\frac{1}{2}$	92 $\frac{5}{8}$	3 10 11
South Australia ...	4	1916-17-36	105	103	3 14 2
	3 $\frac{1}{2}$	1939	104 $\frac{3}{4}$	103	3 7 2
	3	1916-26	94 $\frac{1}{2}$	92 $\frac{5}{8}$	3 14 10
Western Australia ...	4	1934	111 $\frac{3}{4}$	109 $\frac{3}{4}$	3 9 10
	3 $\frac{1}{2}$	1915-35	101 $\frac{3}{4}$	99 $\frac{5}{8}$	3 10 9
	3 $\frac{1}{2}$	1920-35	101 $\frac{1}{2}$	99 $\frac{1}{2}$	3 10 5
	3	1927	92 $\frac{1}{2}$	91 $\frac{1}{4}$	3 11 1
Tasmania ...	4	1920-40	110	108	3 7 8
	3 $\frac{1}{2}$	1920-40	104 $\frac{1}{2}$	103	3 5 5
	3	1920-40	94	92 $\frac{1}{2}$	3 12 1

## 23.—TOTAL INDEBTEDNESS ON THE 30TH JUNE, 1903.

State.	State Debts.		Municipal and Corporation Debts (exclusive of Loans from Government).	Grand Total.	
	Funded.	Unfunded.		Amount.	Per Head of Population.
	£	£	£	£	£ s. d.
Victoria ...	51,097,900	2,741,663	11,783,699	65,623,262	54 6 5
New South Wales	75,465,361	5,556,604	2,882,140	83,904,105	59 5 3
Queensland ...	38,318,627	2,712,620	685,967	41,717,214	81 7 2
South Australia...	26,754,420	1,088,950	106,310	27,949,680	76 11 5
Western Australia	15,627,298	...	413,050	16,040,348	72 5 2
Tasmania (31.12.03.)	9,211,070	341,875	537,086	10,090,031	56 4 4
Australia ...	216,474,676	12,441,712	16,408,252	245,324,640	62 15 8

24.—NET BURDEN OF STATE FUNDED DEBTS, 30TH JUNE, 1903.

State.	Total State Funded Debt.		Debts covered by—		Net Burden.	
	Amount.	Per Head of Population.	Earnings of Reproductive Works (1902-3)	Accumulated Sinking Funds.	Amount.	Per Head of Population.
	£	£ s. d.	£	£	£	£ s. d.
Victoria ... ..	51,097,900	42 5 11	33,873,683	313,295	16,910,922	13 19 9
New South Wales ... ..	75,465,361	53 6 1	43,490,137	775,208	31,200,016	21 19 11
Queensland ... ..	38,318,627	74 14 7	13,972,109	...	24,346,518	47 9 9
South Australia ... ..	26,754,420	73 5 11	17,100,244	117,338	9,536,838	26 0 4
Western Australia ... ..	15,627,298	70 7 11	10,034,623	655,069	4,937,606	22 6 3
Tasmania (31.12.03) ... ..	9,211,070	51 6 5	1,968,485	180,257	7,062,328	39 6 11
Australia ... ..	216,474,676	55 8 7	120,439,281	2,041,167	93,994,228	24 1 4
New Zealand (31.3.03) ... ..	55,899,019	68 5 4	26,541,866	2,313,239	27,043,914	32 19 5

NOTE.—The Unfunded Debt, which is not taken into account in this table—being wholly of an unproductive character—would, if added, show a corresponding increase in the net burden.

25—POSTAL RETURNS, 1903.

State.	Number of Post Offices, on 31st December.	Letters and Post Cards Despatched and Received.					Newspapers and Parcels Despatched and Received.				
		Inland.	Inter-state.	Inter-national.	Total.	Per Head of Population.	Inland.	Inter-state.	Inter-national.	Total.	Per Head of Population.
		(000's omitted).					(000's omitted).				
Victoria ... ..	1,646	91,983,	10,786,	3,153,	105,922,	88	37,206,	12,791,	5,187,	55,184,	46
New South Wales ... ..	1,708	77,315,	10,079,	4,845,	92,239,	65	40,688,	9,304,	4,264,	54,206,	38
Queensland ... ..	1,325	17,792,	6,452,		24,244,	47	14,560,	7,392,		21,952,	43
South Australia Proper ... ..	688	17,642,	3,781,	650,	22,073,	61	4,445,	2,990,	875,	8,310,	23
„ „ Northern Territory	18	81,	30,	12,	123,	27	22,	20,	7,	49,	11
Western Australia ... ..	218	10,345,	4,345,	1,097,	15,787,	71	6,848,	5,204,	1,602,	13,654,	62
Tasmania ... ..	370	6,384,	2,845,	683,	9,912,	56	6,479,	3,119,	623,	10,221,	58
Australia ... ..	5,973	221,542,	48,758,		270,300,	69	110,198,	53,378,		163,576,	42
New Zealand ... ..	1,844	55,990,	2,798,	4,353,	63,141,	76	29,224,	3,087,	7,281,	39,592,	48

26.—TELEGRAPHS AND TELEPHONES, 1903.

State.	TELEGRAPHS.								TELEPHONES.			
	Number of Stations at end of Year.	Line (Miles).	Wire (Miles).	Cables (Miles).	Number of Telegrams.				Number of Public Exchanges.	Wire (Miles).	Number of Connections at end of Year.	
					Inland (counted once).	Inter-State Received and Despatched.	Cablegrams Received and Despatched.	Total.				
Victoria ...	878	6,596	15,883	...	1,706,497	1,013,126	100,715	2,820,338	20	22,995	7,610	
New South Wales ...	987	14,395	62,356	...	2,215,823	1,026,722	152,814	3,395,359	57	*	16,155	
Queensland ...	481	10,180	20,759	60	1,487,802		12,749	1,500,551	15	5,613	3,749	
South Australia (including Northern Territory)	290	6,038	14,846	69	638,803	475,040	21,823	1,135,666	10	4,572	1,974	
Western Australia ...	172	6,079	9,369	20	1,072,774	480,744	34,216	1,587,734	13	5,431	3,332	
Tasmania ...	321	1,852	3,356	432	282,832	165,515		448,347	16	1,300	1,236	
Australia ...	3,129	45,140	126,569	581	10,887,995				10,887,995	131	...	34,056
New Zealand (31.3.4) ...	1,153	7,779	22,920	326	4,965,197	...	174,186	5,139,383	81	9,834	12,105	

\* Included with telegraph wire.

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TABLES.27.—REVENUE AND EXPENDITURE OF POST AND TELEGRAPH  
DEPARTMENT, 1903.

State.	Revenue.				Expenditure.
	Postal Branch.	Telegraph Branch.	Telephone Branch.	Total.	
Victoria ... ..	£ 448,486	£ 106,839	£ 86,600	£ 641,925	£ 582,520
New South Wales ... ..	652,761	154,839	105,002	912,602	884,963
Queensland ... ..	191,931	83,266	27,321	302,518	425,568
South Australia—Proper ... ..	238,479		23,153	261,632	215,184
„ Northern Territory ... ..	2,761		56	2,817	25,803
Western Australia ... ..	122,862	68,137	30,324	221,323	277,021
Tasmania ... ..	75,412	17,289	8,910	101,611	100,232
Australia ... ..	2,163,062		281,366	2,444,428	2,511,291
New Zealand (31/3/04) ... ..	343,207	166,536	71,028	580,771	526,747

## 28.—MONEY ORDERS AND POSTAL NOTES, 1903.

State.	Money Orders.				Postal Notes.			
	Number.		Amount.		Number.		Amount.	
	Issued.	Paid.	Issued.	Paid.	Issued.	Paid.	Issued.	Paid.
Victoria ... ..	215,694	318,766	£ 721,017	£ 1,121,807	1,475,853	1,552,775	£ 558,976	£ 591,805
N. S. Wales ... ..	541,392	553,283	1,772,186	1,835,295	1,571,612	1,566,508	581,604	580,774
Queensland ... ..	137,048	115,927	501,375	431,091	346,375	298,688	130,651	113,434
South Australia Proper ... ..	69,745	82,338	237,811	305,141	319,180	322,028	...	117,891
N. Territory ... ..	2,188	592	13,844	4,917	1,560	313	...	112
Westn. Australia ... ..	197,407	100,155	839,073	451,774	186,263	186,238	90,939	90,078
Tasmania ... ..	97,186	73,379	260,705	191,949	121,653	54,894	41,930	22,989
Australia ... ..	1,260,660	1,244,440	4,346,011	4,341,974	4,022,496	3,981,444	...	1,517,083
New Zealand... ..	396,312	304,106	1,416,225	1,224,843	707,044	704,031	220,070	219,312

29.—EDUCATION, 1903.

State.	At the end of 1903.				Number of Scholars.			
	Number of Schools.	Number of Teachers.			Net Enrolment.			Average Attendance.
		Males.	Females.	Total.	Males.	Females.	Total.	
STATE PRIMARY SCHOOLS.								
Victoria ... ..	1,988	1,990	3,047	5,037	114,779	109,399	224,178	150,268
New South Wales ...	2,862	3,068	2,472	5,540	129,023	114,493	243,516	152,830
Queensland ... ..	1,023	1,136	1,241	2,377	46,952	43,073	90,025	69,759
South Australia ...	717	403	919	1,322	...	...	62,036	42,782
Western Australia ...	270	271	468	739	12,885	11,647	24,532	20,283
Tasmania* ... ..	349	232	446	678	10,458	9,095	19,553	14,541
Australia ... ..	7,209	7,100	8,593	15,693	...	...	663,840	450,463
New Zealand ... ..	1,741	1,417	2,278	3,695	70,205	64,543	134,748	113,711*
PRIVATE SCHOOLS, &c.								
Victoria ... ..	798	407	1,962	2,369	20,067	22,628	42,695	34,150
New South Wales ...	856	621	2,820	3,441	26,468	33,005	59,473	48,197
Queensland ... ..	181	133	608	741	6,647	9,074	15,721†	13,359
South Australia ...	205	175	479	654	4,436	4,894	9,330	...
Western Australia ...	92	37	309	346	2,810	3,947	6,757	5,618
Tasmania* ... ..	197	...	...	...	4,428	5,535	9,963†	...
Australia ... ..	2,329	...	...	...	64,856	79,083	143,939	...
New Zealand ... ..	313	...	...	1,013	8,354*	10,342*	18,696*	16,866

\* Figures for 1902, later information not being available. † Gross enrolment.

GENERAL  
TABLES.30.—COST OF INSTRUCTION.—STATE PRIMARY SCHOOLS, 1903.  
(EXCLUDING EXPENDITURE UPON SCHOOL PREMISES.)

State.	Contributed by—		Total.	Per Head of Population.	Per Head of Scholars in Average Attendance.
	State.	Parents, etc., in Fees.			
	£	£	£	s: d	£ s. d.
Victoria ...	674,076	6,277	674,076*	11 2	4 9 9
New South Wales† ...	760,589	82,906	843,495	12 0	5 10 5
Queensland...	256,325	...	256,325	10 0	3 13 6
South Australia	145,425	...	145,425	8 0	3 8 0
Western Australia ...	125,853	...	125,853	11 5	6 4 1
Tasmania† ...	57,948	12,411	70,359	8 0	4 16 9
Australia ...	2,020,216	101,594	2,115,533	10 10	4 13 11
New Zealand ...	441,178	...	441,178	10 9	3 17 7

\* Excluding fees paid by parents for extra subjects which are used to supplement the incomes of the teachers, and are not placed to the credit of general revenue.

† Inclusive of State High Schools.

‡ Figures for 1902, later information not being available.

## 31.—RAILWAYS, 1902-3.

State.	Length in Miles at End of Year.	Miles Being Constructed.	Train Miles Run.	Rolling Stock.	
				Locomotives.	Vehicles of All Kinds.
GOVERNMENT RAILWAYS.					
Victoria ...	3,376	48	10,286,272	553	11,446
New South Wales ...	3,139	312	11,548,338	559	13,614
Queensland ...	2,997	90	4,605,735	345	7,819
S. Australia—Proper...	1,736	4	3,770,351	346	6,456
„ Northern Territory	146	...	30,422	6	141
Western Australia ...	1,516	40	4,611,315	316	5,958
Tasmania ...	462	...	931,716	75	1,783
Australia ...	13,372	494	35,784,149	2,200	47,217
New Zealand ...	2,291	194	5,443,333	372	13,743
PRIVATE RAILWAYS.					
New South Wales ...	81	...	191,296	19	614
Queensland...	266	...	...	...	...
Western Australia*	629	...	477,818	43	959
Tasmania ..	158	...	129,064	15	220
Australia ...	1,134	...	...	...	...
New Zealand ...	{ 84 29	...	...	16	346

\* Figures for 1901.

## 32.—RAILWAYS—CAPITAL COST, REVENUE AND WORKING EXPENSES, GENERAL TABLES, 1902-3.

State.	Capital Cost of Lines Open and Equipment at End of Year.	Gross Receipts.	Working Expenses.	Net Receipts.	Percentage of Net Revenue to Capital Cost.
GOVERNMENT RAILWAYS.					
	£	£	£	£	
Victoria ... ..	40,965,849	3,046,858	2,032,087	1,014,771	2·48
New South Wales ...	41,654,977	3,314,893	2,266,299	1,048,594	2·52
Queensland ... ..	21,214,072	1,256,027	832,440	423,587	2·00
South Australia—					
Proper ... ..	13,400,796	1,076,612	624,511	452,101	3·37
Northern Territory ...	1,175,056	11,298	12,812	-1,514	-0·13
Western Australia ...	8,141,782	1,553,485	1,247,873	305,612	3·75
Tasmania ... ..	3,883,729	247,683	166,355	81,328	2·09
Australia ... ..	130,436,261	10,506,856	7,182,377	3,324,479	2·55
New Zealand ... ..	19,081,735	1,974,038	1,343,415	630,623	3·30
PRIVATE RAILWAYS.					
	£	£	£	£	
New South Wales ...	550,325	120,351	56,983	63,368	11·51
Queensland ... ..	737,735	...	...	...	...
Western Australia* ...	2,467,076	...	...	...	...
Tasmania ... ..	1,097,834	59,786	33,682	26,104	2·38
New Zealand† ... ..	793,575	111,398	60,129	51,269	6·46

\* Figures for 1901.

† This information relates to the Wellington and Manawatu Company's line (84 miles).

GENERAL  
TABLES.

## 33.—COMMERCE, 1903.

State.	Countries Imported from or Exported to—				Total Value.	Value per Head.
	Other States of Australia.	The United Kingdom.	Other British Possessions (including New Zealand)	Foreign Countries.		
<b>IMPORTS.</b>						
	£	£	£	£	£	£ s. d.
Victoria ...	5,519,556	5,977,947	2,150,241	4,211,427	17,859,171	14 15 6
New South Wales ...	12,792,252	6,651,820	1,875,633	5,450,464	26,770,169	18 17 5
Queensland ...	3,481,817	2,061,685	312,680	875,025	6,731,207	13 2 7
South Australia—						
Proper ...	3,448,883	1,929,879	278,632	966,233	6,618,627	18 5 7
N. Territory ...	76,580	28,118	19,994	553	125,245	27 16 11
Western Australia ...	2,541,368	2,599,142	315,351	1,314,061	6,769,922	30 11 11
Tasmania ...	1,802,105	597,540	29,286	164,879	2,593,810	14 12 2
Australia ...	29,657,561	19,846,131	4,981,817	12,982,642	67,468,151	17 5 6
New Zealand ...	2,154,966	7,512,668	980,508	2,140,533	12,788,675	15 11 10
<b>EXPORTS.</b>						
	£	£	£	£	£	£ s. d.
Victoria ...	8,522,056	3,280,134	5,436,873	2,468,005	19,707,068	16 6 0
New South Wales ...	7,876,898	7,559,759	3,306,379	7,995,075	26,738,111	18 17 0
Queensland ...	5,787,999	2,627,383	741,751	357,841	9,514,974	18 11 2
South Australia—						
Proper ...	4,707,691	1,786,396	831,222	975,136	8,300,445	22 18 6
N. Territory ...	144,297	30,225	13,140	2,252	189,914	42 4 5
Western Australia ...	866,607	4,071,968	5,107,800	278,357	10,324,732	46 13 2
Tasmania ...	1,546,438	606,888	51,300	638,482	2,843,108	16 0 3
Australia ...	29,451,986	19,962,753	15,488,465	12,715,148	77,618,352	19 17 7
New Zealand ...	2,233,996	11,345,075	587,612	843,695	15,010,378	18 6 0
<b>EXPORTS OF DOMESTIC PRODUCE.</b>						
	£	£	£	£	£	£ s. d.
Victoria ...	6,093,933	2,298,484	5,155,696	1,391,911	14,940,024	12 7 2
New South Wales ...	6,011,160	5,866,257	1,106,610	5,681,777	18,665,804	13 3 2
Queensland ...	5,399,313	2,615,846	721,243	351,472	9,087,874	17 14 6
South Australia—						
Proper ...	2,803,946	1,565,909	199,411	588,253	5,157,519	14 4 10
N. Territory ...	138,749	30,225	8,311	2,250	179,535	39 18 3
Western Australia ...	812,825	4,061,346	5,101,571	217,707	10,193,449	46 1 4
Tasmania ...	1,508,743	606,234	50,926	638,477	2,804,380	15 15 11
Australia ...	22,768,669	17,044,301	12,343,768	8,871,847	61,028,585	15 12 6
New Zealand ...	2,166,821	11,321,262	567,018	783,091	14,838,192	18 1 10

34.—IMPORTS AND EXPORTS OF WOOL, 1903.

State.	Quantity.			Value.		
	Washed or Scoured.	Greasy.	Total.	Washed or Scoured.	Greasy.	Total.
<b>IMPORTS.</b>						
	lbs.	lbs.	lbs.	£	£	£
Victoria ...	3,392,849	33,333,547	36,726,396	217,572	1,164,075	1,381,647
New South Wales	3,385,198	8,308,009	11,693,207	259,758	318,797	578,555
Queensland ...	117,732	132,760	250,492	9,477	6,623	16,100
South Australia—						
Proper ...	1,511,637	5,661,780	7,173,417	65,492	149,710	215,202
N. Territory ...	...	...	...	...	...	...
Westrn. Australia	...	...	...	...	...	...
Tasmania ...	...	33,828	33,828	...	867	867
Australia ...	8,407,416	47,469,924	55,877,340	552,299	1,640,072	2,192,371
New Zealand ...	9,983	119,552	129,535	561	2,274	2,835
<b>EXPORTS.</b>						
	lbs.	lbs.	lbs.	£	£	£
Victoria ...	6,830,911	77,729,692	84,560,603	405,107	2,780,947	3,186,054
New South Wales	42,956,858	156,044,134	199,000,992	3,196,396	5,905,158	9,101,554
Queensland ...	19,133,581	15,845,495	34,979,076	1,317,828	565,924	1,883,752
South Australia—						
Proper ...	3,256,361	39,667,720	42,924,081	184,768	1,269,724	1,454,492
N. Territory ...	...	16,329	16,329	...	454	454
Westrn. Australia	405,261	12,501,804	12,907,065	27,017	416,726	443,743
Tasmania ...	72,128	4,809,355	4,881,483	2,389	171,700	174,089
Australia ...	72,655,100	306,614,529	379,269,629	5,133,505	11,110,633	16,244,138
New Zealand ...	36,496,250	118,702,204	155,198,454	1,161,997	2,882,226	4,044,223
<b>EXPORTS OF DOMESTIC WOOL.</b>						
	lbs.	lbs.	lbs.	£	£	£
Victoria ...	3,779,162	44,519,805	48,298,967	226,368	1,622,557	1,848,925
New South Wales	39,641,996	148,012,404	187,654,400	2,944,035	5,600,100	8,544,135
Queensland ...	19,016,088	15,712,735	34,728,823	1,308,373	559,301	1,867,674
South Australia—						
Proper ...	2,540,153	36,741,451	39,281,604	147,223	1,179,013	1,326,236
N. Territory ...	...	16,329	16,329	...	454	454
Westrn. Australia	405,261	12,501,804	12,907,065	27,017	416,726	443,743
Tasmania ...	72,128	4,809,355	4,881,483	2,389	171,700	174,089
Australia ...	65,454,788	262,313,883	327,768,671	4,655,405	9,549,851	14,205,256
New Zealand ...	36,496,250	118,632,131	155,128,381	1,161,997	2,879,277	4,041,274

## 35.—EXPORTS OF HOME PRODUCE, 1903.

GENERAL  
TABLES.

State.	Exports of Home Produce.		
	Value.	Value per Head.	Percentage of Total Exports.
	£	£ s. d.	
Victoria ... ..	14,940,024	12 7 2	75·81
New South Wales ... ..	18,665,804	13 3 2	69·81
Queensland ... ..	9,087,874	17 14 6	95·51
South Australia ... ..	5,337,054	14 11 2	62·86
Western Australia ... ..	10,193,449	46 1 4	98·73
Tasmania ... ..	2,804,380	15 15 11	98·64
Australia ... ..	61,028,585	15 12 6	78·63
New Zealand ... ..	14,888,192	18 1 10	98·85

## 36.—IMPORTS AND EXPORTS OF BULLION AND SPECIE, 1903.

State.	Gold.		Silver.		Bronze.	Total.
	Bullion.	Coin.	Bullion.	Coin.	Coin.	
<b>IMPORTS.</b>						
	£	£	£	£	£	£
Victoria ... ..	1,057,803	10,000	1,656	17,346	1,000	1,087,805
New South Wales ... ..	2,737,543	615,092	751	17,553	4,732	3,375,671
Queensland ... ..	31,349	88,000	84	4,021	355	123,809
South Australia—						
Proper ... ..	10	270,000	72	4,250	100	274,432
N. Territory ... ..	...	19,200	...	...	...	19,200
Western Australia ... ..	...	...	12	...	80	92
Tasmania ... ..	...	31,125	...	6,180	255	37,560
Australia ... ..	3,826,705	1,033,417	2,575	49,350	6,522	4,918,569
New Zealand ... ..	...	613,270	86	95,096	4,350	712,802
<b>EXPORTS.</b>						
	£	£	£	£	£	£
Victoria ... ..	716,234	4,704,740	319	7,660	367	5,429,320
New South Wales ... ..	1,295,137	3,618,341	21,048	13,833	733	4,949,092
Queensland ... ..	2,887,476	120,270	286	2,600	8	3,010,640
South Australia—						
Proper ... ..	38,535	208,950	568,837	4,900	40	821,262
N. Territory ... ..	61,331	3,481	...	...	...	64,862
Western Australia ... ..	4,061,767	4,556,192	23,701	933	...	8,642,593
Tasmania ... ..	125,825	...	...	...	...	125,825
Australia ... ..	9,186,355	13,211,974	614,191	29,926	1,148	23,043,594
New Zealand ... ..	2,038,075	36 375	91,497	2,072	5	2,168,024

NOTE.—Not including Silver-lead, of which large quantities were produced in New South Wales and Tasmania. See Table 51 *post*.

## 37.—SHIPPING FROM VARIOUS COUNTRIES, 1903.

GENERAL  
TABLES.

State.	From United Kingdom.	From other Australian States.	From other British Possessions (including New Zealand).	From Foreign Countries.	Total.
NUMBER OF VESSELS.					
Victoria ... ..	173	1,661	173	197	2,204
New South Wales ... ..	174	2,237	535	433	3,379
Queensland ... ..	49	475	118	85	727
South Australia—					
Proper ... ..	142	749	50	106	1,047
Northern Territory ... ..	2	31	29	3	65
Western Australia ... ..	95	338	135	140	708
Tasmania ... ..	43	802	61	22	928
Australia ... ..	678	6,293	1,101	986	9,058
New Zealand ... ..	89	417	51	60	617
TONNAGE OF VESSELS.					
Victoria ... ..	570,783	2,080,716	293,827	463,962	3,409,288
New South Wales ... ..	572,121	2,295,689	821,079	812,842	4,501,731
Queensland ... ..	114,962	553,798	74,633	159,277	902,670
South Australia—					
Proper ... ..	463,511	1,234,188	82,508	280,340	2,060,547
Northern Territory ... ..	3,520	43,352	50,383	159	97,414
Western Australia ... ..	339,286	806,876	203,739	323,253	1,673,154
Tasmania ... ..	170,496	627,500	106,780	33,595	938,371
Australia ... ..	2,234,679	7,642,119	1,632,949	2,073,428	13,583,175
New Zealand ... ..	296,599	592,433	73,414	139,618	1,102,064

GENERAL  
TABLES.

## 38.—SHIPPING TO VARIOUS COUNTRIES, 1903.

State.	To United Kingdom.	To Other Australian States.	To Other British Possessions (including New Zealand)	To Foreign Countries.	Total.
NUMBER OF VESSELS.					
Victoria ... ..	151	1,886	155	71	2,263
New South Wales ...	151	2,019	496	730	3,396
Queensland ... ..	30	478	145	73	726
South Australia—					
Proper ... ..	103	839	22	59	1,023
Northern Territory...	...	33	25	4	62
Western Australia ...	102	360	141	100	703
Tasmania ... ..	24	788	96	19	927
Australia ... ..	561	6,403	1,080	1,056	9,100
New Zealand ... ..	96	402	60	50	608
TONNAGE OF VESSELS.					
Victoria ... ..	499,495	2,443,065	303,326	202,680	3,448,566
New South Wales ...	538,826	1,961,383	761,491	1,241,970	4,503,670
Queensland ... ..	91,094	546,690	148,069	109,932	895,785
South Australia—					
Proper ... ..	345,581	1,472,752	24,324	182,950	2,025,607
Northern Territory...	...	50,693	44,610	2,019	97,322
Western Australia ...	312,543	884,845	260,308	205,045	1,662,741
Tasmania ... ..	88,007	560,871	254,377	32,547	935,802
Australia ... ..	1,875,546	7,920,299	1,796,505	1,977,143	13,569,493
New Zealand ... ..	338,764	551,428	120,013	102,960	1,113,165

## 39.—SHIPPING (EXCLUSIVE OF COASTAL TRADE), 1903.

GENERAL  
TABLES.

State.	Steam Vessels.		Sailing Vessels.		Total.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
INWARDS.						
Victoria ... ..	1,980	3,184,511	224	224,777	2,204	3,409,288
New South Wales ...	2,692	3,721,225	687	780,506	3,379	4,501,731
Queensland ... ..	621	866,377	106	36,293	727	902,670
South Australia—						
Proper ... ..	884	1,907,948	163	152,599	1,047	2,060,547
Northern Territory	62	97,320	3	94	65	97,414
Western Australia ...	533	1,503,441	175	169,713	708	1,673,154
Tasmania ... ..	796	861,370	132	77,001	928	938,371
<b>Australia ... ..</b>	<b>7,568</b>	<b>12,142,192</b>	<b>1,490</b>	<b>1,440,983</b>	<b>9,058</b>	<b>13,583,175</b>
New Zealand ... ..	402	990,339	215	111,725	617	1,102,064
OUTWARDS.						
Victoria ... ..	2,050	3,230,656	213	217,910	2,263	3,448,566
New South Wales ...	2,657	3,686,354	739	817,316	3,396	4,503,670
Queensland ... ..	618	862,500	108	33,285	726	895,785
South Australia—						
Proper ... ..	868	1,882,734	155	142,873	1,023	2,025,607
Northern Territory	62	97,322	...	...	62	97,322
Western Australia ...	540	1,501,174	163	161,567	703	1,662,741
Tasmania ... ..	802	860,965	125	74,837	927	935,802
<b>Australia ... ..</b>	<b>7,597</b>	<b>12,121,705</b>	<b>1,503</b>	<b>1,447,788</b>	<b>9,100</b>	<b>13,569,493</b>
New Zealand ... ..	396	1,000,084	212	113,081	608	1,113,165

GENERAL  
TABLES.

## 40.—SHIPPING AND COMMERCE AT PRINCIPAL PORTS, 1903.

Ports.	Shipping.		Commerce.	
	Entered.	Cleared.	Imports.	Exports.
<b>In Victoria—</b>	<b>Tons.</b>	<b>Tons.</b>	<b>£</b>	<b>£</b>
Melbourne .. .. .	3,252,702	3,234,588	15,543,854	17,040,928
Geelong .. .. .	113,506	164,952	209,327	369,212
Border Towns .. .. .	19,407	26,001	2,079,124	2,190,818
Other Ports .. .. .	23,673	23,025	26,866	106,110
<b>Total .. .. .</b>	<b>3,409,288</b>	<b>3,443,566</b>	<b>17,859,171</b>	<b>19,707,068</b>
<b>In New South Wales—</b>				
Sydney .. .. .	3,348,966	2,585,445	20,394,541	21,212,722
Newcastle .. .. .	1,034,440	1,639,165	1,423,012	1,765,774
Other Ports .. .. .	118,325	279,060	4,947,616	3,759,615
<b>Total .. .. .</b>	<b>4,501,731</b>	<b>4,503,670</b>	<b>26,770,169</b>	<b>26,738,111</b>
<b>In Queensland—</b>				
Brisbane .. .. .	712,937	695,857	3,947,945	1,914,300
Rockhampton .. .. .	4,215	10,305	411,794	1,315,057
Townsville .. .. .	41,653	56,658	808,548	2,370,351
Other Ports, &c. .. .. .	143,865	132,965	1,562,920	3,915,266
<b>Total .. .. .</b>	<b>902,670</b>	<b>895,785</b>	<b>6,731,207</b>	<b>9,514,974</b>
<b>In South Australia—</b>				
Port Adelaide .. .. .	1,801,557	1,762,430	4,569,887	5,033,724
Port Pirie .. .. .	94,705	147,864	206,093	1,383,012
Walleroo .. .. .	76,016	36,315	66,748	337,610
Other Ports .. .. .	88,269	78,998	1,775,899	1,546,099
Port Darwin (Northern Territory)	97,414	97,322	125,245	189,914
<b>Total .. .. .</b>	<b>2,157,961</b>	<b>2,122,929</b>	<b>6,743,872</b>	<b>8,490,350</b>
<b>In Western Australia—</b>				
Fremantle .. .. .	1,044,000	1,073,454	4,686,613	8,411,584
Albany .. .. .	465,175	412,049	159,336	793,791
Bunbury .. .. .	115,804	120,154	63,621	448,510
Geraldton .. .. .	602	5,546	138,068	109,993
Broome .. .. .	22,909	18,133	55,696	196,245
Other Ports, &c. .. .. .	24,664	33,403	1,665,938	364,609
<b>Total .. .. .</b>	<b>1,673,154</b>	<b>1,662,741</b>	<b>6,769,922</b>	<b>10,324,732</b>
<b>In Tasmania—</b>				
Hobart .. .. .	572,992	569,764	1,066,918	794,177
Launceston .. .. .	141,870	96,531	1,037,784	722,769
Other Ports .. .. .	223,509	269,507	489,108	1,326,162
<b>Total .. .. .</b>	<b>938,371</b>	<b>935,802</b>	<b>2,593,810</b>	<b>2,843,108</b>
<b>Total Australia .. .. .</b>	<b>13,583,175</b>	<b>13,569,493</b>	<b>67,468,151</b>	<b>77,618,352</b>
<b>In New Zealand—</b>				
Auckland .. .. .	471,403	333,937	3,167,185	2,501,605
Wellington .. .. .	293,725	421,392	3,966,891	2,737,762
Lyttelton .. .. .	45,748	70,654	2,025,427	2,670,513
Dunedin .. .. .	69,275	43,266	2,049,194	1,441,085
Bluff .. .. .	131,683	142,841	292,683	314,654
Other Ports .. .. .	80,230	101,075	1,287,295	4,844,759
<b>Total .. .. .</b>	<b>1,102,064</b>	<b>1,113,165</b>	<b>12,788,675</b>	<b>15,010,378</b>

41.—FRIENDLY SOCIETIES.

GENERAL TABLES.

State.	Year.	Number of Branches.	Members.		Funds.	
			Number.	Per 100 of Population.	Amount.	Average per Member.
					£	£ s. d.
Victoria ...	1902	1,146	102,364	8.49	1,415,525	13 16 7
New South Wales ...	1900	790	75,027	5.50	693,366	9 4 10
Queensland ...	1902	400	31,709	6.21	290,919	9 3 4
South Australia ...	1899	470	42,976	11.59	532,270	12 7 8
Western Australia ...	1902	169	11,746	5.51	59,209	5 0 10
Tasmania ...	1901	149	14,716	8.45	114,309	7 15 4
Australia ...	...	3,124	278,538	7.17	3,105,598	11 3 0
New Zealand ...	1901	445	41,236	5.23	804,753	19 10 4

42.—DEPOSITS IN BANKS, 1903.

State.	In Banks of Issue.	In Savings Banks.	Total.	Per Head of Population.
	£	£	£	£ s. d.
Victoria ...	30,429,303	10,341,857	40,771,160	33 14 7
New South Wales ...	33,059,882	12,425,464	45,485,346	31 17 4
Queensland ...	12,645,361	3,772,686	16,418,047	31 16 11
South Australia ...	5,926,113	3,996,192	9,922,305	26 17 3
Western Australia ...	4,810,041	1,988,625	6,798,666	29 19 1
Tasmania ...	3,582,956	1,249,400	4,832,356	26 18 6
Australia ...	90,453,656	33,774,224	124,227,880	31 12 7
New Zealand ...	18,788,871	8,432,958	27,221,829	32 14 0

43.—CAPITAL AND ANNUAL VALUE OF RATEABLE PROPERTY.

State.	Year.	Value of Rateable Property.	
		Capital.	Annual.
		£	£
Victoria ...	1903	203,902,919	11,188,932
New South Wales*	1903	130,019,800	8,080,160
Queensland ...	1903	43,203,146	2,700,200†
South Australia ...	1903	52,580,540	2,629,027
Tasmania ...	1903	21,832,477	1,091,623
New Zealand ...	1903	168,849,381	9,932,300†

\* In Municipal Districts only, not for whole State.

† Estimated from capital value.

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## 44.—LIFE INSURANCE POLICIES IN FORCE.

State.	Year.	Policies.		Amount Assured.	
		Number.	Per 100 of Population.	Total.	Average per Policy.
Victoria ...	1903	214,512	17·7	£ 30,201,106	£ 172·4
New South Wales ...	1901	177,033	12·8	27,999,828	158·2
Queensland ...	1901	60,713	11·9	10,109,762	166·5
South Australia ...	1901	69,354	19·0	8,300,774	119·7
Western Australia ...	1902	23,756	11·0	4,597,750	193·5
Tasmania ...	1902	20,385	11·4	3,544,213	173·9
Australia ...		565,753	14·6	84,753,433	150·0
New Zealand*	1902	127,326	15·8	25,330,185	199·0

NOTE.—In Victoria there were also 385 annuities for £18,821; in New South Wales, 335 for £21,070; in Queensland, 52 for £2,737; in South Australia, 98 for £5,510; in Western Australia, 3 for £273; in Tasmania, 77 for £4,580; and in New Zealand, (?) for £45,668.

\* Including 42,406 policies for £9,896,572 in the Government Insurance Department.

## 45.—PROBATE AND LETTERS OF ADMINISTRATION, 1903.

State.	Number of Estates.	Sworn Value of Property.
Victoria ...	3,884	£ 6,074,077
New South Wales ...	2,767	7,179,882
Queensland ...	710	2,617,348
South Australia ...	919	2,464,011
Western Australia ...	399	703,071
Tasmania (1902) ...	230	299,408
Australia ...	8,909	19,337,797
New Zealand... ..	1,385	3,091,340

## 46.—INSOLVENCIES, 1903.

State.	Number of Petitions.			Total Liabilities.	Total Assets.
	Compulsory.	Voluntary.	Total.		
Victoria ...	29	475	504	£ 184,957	£ 71,887
New South Wales ...	117	366	483	230,429	123,037
Queensland ...	22	352	374	70,916	14,817
South Australia ...	4	20	24	15,221	14,633
Western Australia ...	18	61	79	34,952	10,631
Tasmania (1902) ...	5	55	60	44,213	29,562
Australia ...	195	1,329	1,524	580,688	264,567
New Zealand ...	40	164	204	96,866	46,767

47.—AREA AND PRODUCE OF PRINCIPAL CROPS, 1903.

State.	Wheat.	Oats.	Barley.	Maize.	Other Cereals.	Potatoes.	Hay.	Vines.	Green Forage.	Land in Fallow.	Other Tillage.	Total.
AREA IN ACRES.												
Victoria ...	1,968,599	433,638	47,760	11,810	10,981	48,930	733,353	28,513	33,165	632,521	72,320	4,021,590
New South Wales ...	1,561,111	51,621	10,057	226,834	7,918	20,851	496,017	8,940	77,093	500,965	85,498	3,046,905
Queensland ...	138,096	2,808	22,881	133,099	364	6,732	78,393	2,069	26,576	55,104	155,571	621,693
South Australia ...	1,711,174	57,558	28,697	...	6,461	8,616	370,152	22,617	19,241	1,010,141	32,308	3,266,965
Western Australia ...	137,946	14,568	3,609	163	1,038	1,823	109,002	3,324	672	83,047	11,607	366,799
Tasmania ...	49,414	60,663	8,084	...	12,745	20,160	66,947	...	3,100	38,267	29,498	297,878
Australia ...	5,566,340	620,856	121,088	371,906	39,507	116,112	1,853,864	65,463	159,847	2,320,045	386,802	11,621,830
New Zealand ...	230,346	391,640	34,681	11,156	14,150	31,778	77,167	749	211,408	61,069	721,951	1,786,095

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47.—AREA AND PRODUCE OF PRINCIPAL CROPS, 1903—Continued.

State.	Wheat.	Oats.	Barley.	Maize.	Other Cereals.	Potatoes.	Hay.	Wine.
PRODUCE.								
	bushels.	bushels.	bushels.	bushels.	bushels.	tons.	tons.	gallons.
Victoria ... ..	28,525,579	13,434,952	1,218,003	904,239	243,321	167,736	1,233,063	2,551,150
New South Wales ... ..	27,334,141	1,252,156	174,147	6,836,740	149,389	56,743	816,810	1,086,820
Queensland ... ..	2,436,799	70,713	510,557	1,923,623	7,804	17,649	136,117	38,558
South Australia ... ..	13,209,465	902,936	487,920	...	121,580	31,415	479,723	2,345,270
Western Australia ... ..	1,876,252	258,503	53,227	2,487	11,312	4,542	121,934	...
Tasmania ... ..	767,398	1,621,950	212,459	...	267,894	171,298	115,513	...
Australia ... ..	74,149,634	17,541,210	2,656,313	9,667,089	801,300	449,383	2,903,160	...
New Zealand ... ..	7,891,654	15,107,237	1,160,504	530,291	409,825	208,787	154,334*	...
AVERAGE PER ACRE.								
	bushels.	bushels.	bushels.	bushels.	bushels.	tons.	tons.	gallons.
Victoria ... ..	14.49	30.98	25.50	76.57	22.16	3.43	1.68	89.47
New South Wales ... ..	17.51	24.26	17.32	30.14	18.87	2.72	1.64	121.57
Queensland ... ..	17.65	25.18	22.31	14.45	21.44	2.62	1.74	18.64
South Australia ... ..	7.72	15.69	17.00	...	18.82	3.65	1.30	103.70
Western Australia ... ..	13.60	17.74	14.75	15.26	10.90	2.49	1.12	†
Tasmania ... ..	15.53	26.74	26.28	...	21.02	5.87	1.73	...
Australia ... ..	13.32	28.25	21.94	26.00	20.28	3.87	1.57	...
New Zealand ... ..	34.26	38.57	33.46	47.53	28.96	6.57	2.00	...

\* Estimated.

† Particulars not available.

## 48.—DAIRY PRODUCTS.

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State.	Year.	Butter.	Cheese.	Bacon and Ham.
		lbs.	lbs.	lbs.
Victoria ...	1903	46,685,727	5,681,515	12,504,851
New South Wales ...	1903	38,727,107	4,748,176	7,864,771
Queensland ...	1903	7,717,325	1,479,651	4,145,900
South Australia ...	1903	5,995,756	940,584	872,418*
Western Australia ...	1903	351,885	8,039	178,557
Tasmania ...	1902	699,526	349,614	414,340
Australia ...	...	100,177,326	13,207,579	25,980,837
New Zealand ...	1901	29,758,310	15,644,944	6,267,168

\* Figures for 1902.

## 49.—LIVE STOCK, 1903.

State.	Horses.	Cattle.		Sheep.	Pigs.
		Dairy Cows.	All Cattle.		
Victoria* ...	392,237	521,612	1,602,384	10,841,790	350,370
New South Wales ...	458,014	480,108	1,880,578	28,656,501	221,592
Queensland ...	401,984	...	2,481,717	8,392,044	117,553
South Australia—					
Proper ...	176,648	83,348	244,610	5,298,720	88,246
Northern Territory	15,763	902	291,970	51,538	1,085
Western Australia ...	82,747	27,232	497,617	2,600,633	50,209
Tasmania ...	35,541	45,018	185,938	1,597,053	56,538
Australia ...	1,562,934	...	7,184,814	57,438,279	885,593
New Zealand ...	298,714	468,125	1,593,547	18,954,553	226,591

\* In the case of Victoria the figures relate to 1901.

50.—WOOL PRODUCTION, 1903.

State.	Wool Imported.		Wool Exported.		Wool used in Manufactures in the State.		Wool Production.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lbs.	£	lbs.	£	lbs.	£	lbs.	£
Victoria ...	36,726,396	1,381,647	84,560,603	3,186,054	3,772,390	141,465	51,606,597	1,945,872
New South Wales ...	11,693,207	578,555	199,000,992	9,101,554	660,002	24,750	187,967,787	8,547,749
Queensland ...	250,492	16,100	34,979,076	1,883,752	250,000*	9,375	34,978,584	1,877,027
South Australia ...	7,173,417	215,202	42,940,410	1,454,946	...	...	35,766,993	1,239,744
Western Australia ...	...	...	12,907,065	443,743	...	...	12,907,065	443,743
Tasmania ...	33,828	867	4,881,483	174,089	950,000*	35,625	5,797,655	208,847
Australia ...	55,877,340	2,192,371	379,269,629	16,244,138	5,632,392	211,215	329,024,681	14,262,982
New Zealand ...	129,535	2,835	155,198,454	4,044,223	4,500,000*	168,750	159,568,919	4,210,138

\* Approximate.

### 51.—MINERAL PRODUCTION, 1903.

State.	Gold.		Silver.		Silver-lead.		Copper.		Tin.		Coal.		Other Minerals	Total.
	Quantity. (Fine ozs.)	Value	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Value.	Value.
	Oz.	£	Oz.	£	Tons.	£	Tons.	£	Tons.	£	Tons.	£	£	£
Victoria .. .. .	767,351	3,262,282	40,533	4,598	..	..	25	500	33	2,165	69,861	43,645	60,993	3,374,486
New South Wales .. .. .	254,624	1,080,629	1,099,373	113,755	349,064	1,387,648	..	523,945	..	150,208	6,354,846	2,319,660	409,511	5,984,756
Queensland .. .. .	669,505	2,839,813	642,125	65,538	..	..	4,916	285,122	3,708	243,149	507,801	164,798	87,676	3,686,096
South Australia—Proper .. .. .	6,755	28,650	7,026	804	..	1,267	6,490	417,037	..	..	..	..	63,806	511,564
"    Northern Territory	14,471	61,381	..	..	..	..	3	55	171	10,772	..	..	154	72,362
Western Australia .. .. .	2,064,801	8,770,720	82,293*	9,199*	36*	277*	2,262*	8,030*	620*	39,783*	140,884*	86,183*	3,380*	8,917,637*
Tasmania .. .. .	59,821	254,403	†	†	388,042	887,933	†	†	3,476	238,883	51,505	20,916	24,553	1,436,688
Australia .. .. .	3,857,398	16,297,278	..	..	..	..	..	..	8,008	684,960	7,125,197	2,635,207	660,076	23,983,589
New Zealand .. .. .	480,452	2,037,831	911,914	91,497	..	..	6	123	2	180	1,420,193	762,858	638,165	3,530,654

\* Figures for 1902, later information not being available.    † Included with silver-lead.

52.—CONDITION OF CROWN LANDS, 1903.

State.	Area in Acres.	During the Year 1903.						At the End of 1903.		
		Sold by Auction, Private Contract, &c.			Selected under System of Deferred Payments.	Granted Without Purchase.	Total Extent Wholly or Conditionally Alienated.	Total Granted, Sold, or in Process of Alienation.	Total Leased or Licensed.	Total Unoccupied or Reserved for Public Purposes.
		Area.	Amount of Purchase Money.	Average Price per Acre.						
		acres.	£	£ s. d.	acres.	acres.	acres.	acres.	acres.	
Victoria .. .. .	56,245,760	13,223	52,792	3 19 10	334,590	2,153	349,966	21,526,255	9,516,372	22,203,133
New South Wales .. .	198,848,000	41,209	117,879	2 17 3	429,612	513	471,334	48,851,524	127,901,840	22,094,626
Queensland .. .	427,838,080	153,049	92,412	0 12 1	229,319	448	332,816	16,991,127	277,569,326	133,277,557
South Australia—Proper .. .	243,244,800	140,426	144,943	1 0 8	5, '92	17	146,035	13,674,486	84,894,574	144,675,740
"    Northern Territory	335,116,800	..	..	..	180	..	180	474,685	104,637,381	230,004,734
Western Australia.. .	624 5 8,800	*	*	*	*	*	*	10,54,057	135,678,028	478,32,715
Tasmania .. .	16,778,000	88,650	108,290	1 4 5	..	..	88,650	5,940,413	1,581,937	10,155,650
Australia .. .	1,902,660,240	..	..	..	..	..	..	120,103,547	741,779,528	1 040,774,165
New Zealand .. .	66,861,440	22,439	25,882	1 3 0	..	43,391	65,880	23,857,633	16,642,650	26,355,157

\* Information not available.

53.—CRIME, 1903

State.	Number of Offences brought before Magistrates on Arrest or Summons.					Result of Disposal by Magistrates.			In Superior Courts. Number—			Number of Prisoners in Gaols on 31st December.
	Against the Person.	Against Property.	Drunkenness.	Other Offences.	Total.	Summarily Convicted.		Committed for trial.	Tried.	Convicted.	Acquitted.	
						Drunkenness.	Other Offences.					
Victoria ... ..	1,936	3,968	12,630	29,941	48,475	8,494	28,752	770	696	475	221	978
New South Wales ...	3,614	6,219	21,837	29,664	61,394	21,732	29,647	1,419	1,432	895	537	1,824
Queensland ... ..	1,504	2,206	7,190	8,112	19,012	7,130	8,665	503	483	269	88	508
South Australia ...	338	664	2,340	3,088	6,430	2,296	2,830	193	130	100	30	299
Western Australia ...	797	2,146	3,572	10,690	17,205	2,348	10,213	317	320	197	123	730†
Tasmania* ... ..	248	618	636	4,669	6,171	602	4,347	75	40	28	12	96
Australia ... ..	8,467	13,851	48,205	86,164	158,687	42,602	84,454	3,282	3,101	1,964	1,011	4,435
New Zealand‡ ...	1,114*	3,083*	8,311*	15,568*	28,076*	8,244*	13,881*	765*	525	364	113	739

\* Figures for 1902, later information not being available.

† Excluding 218 Aborigines and 13 others not under sentence.

‡ Excluding Maoris, of whom 451 were brought before magistrates—320 being summarily convicted, and 37 committed for trial.

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V.—SUMMARY FOR THIRTY-ONE YEARS.

VICTORIA AND NEW SOUTH WALES.

State.	Year.	Population on the 31st December.	Births.	Deaths.	Marriages.	Immigrants by Sea.	Emigrants by Sea.	Public Revenue.		Public Expenditure.	Public Debt at end of the year.	Imports.	Exports.	Shipping Inwards and Outwards.		Miles open at the end of each year.		Agriculture.		
								Total.	Portion raised by Taxation.					Vessels.	Tons.	Railway.	Telegraph line (poles).	Total Cultivation. †		
																		Acres.	Acres.	Bushels.
VICTORIA.	1871	772,039	28,100	11,571	4,974	29,460	26,294	£ 3,444,135	£ 1,784,056	3,504,953	12,445,722	16,533,856	15,302,454	4,413	1,519,015	458	2,295	964,096	349,076	4,752,229
	1874	783,274	26,800	12,222	4,925	30,732	27,365	4,106,790	1,896,842	4,177,338	13,990,553	16,953,985	15,441,109	4,222	1,569,619	605	2,467	1,011,776	332,936	4,550,165
	1875	791,399	26,720	15,287	4,985	32,744	29,342	4,236,423	1,724,822	4,318,121	13,995,093	16,638,874	14,766,974	4,394	1,673,885	617	2,629	1,126,831	321,401	4,978,914
	1876	801,717	26,764	13,561	4,949	35,797	31,977	4,395,166	1,780,392	4,572,844	17,011,382	15,705,354	14,196,487	4,236	1,667,088	719	2,743	1,231,105	401,417	5,279,730
	1877	815,494	26,610	12,776	5,103	41,196	33,943	4,728,877	1,770,685	4,358,096	17,018,913	16,362,304	15,157,687	4,411	1,874,985	950	2,885	1,420,502	554,564	7,018,257
	1878	827,439	26,581	12,702	5,092	42,268	37,492	4,504,413	1,712,563	4,634,349	17,022,065	16,161,880	14,925,707	4,292	1,913,427	1,052	2,970	1,609,278	691,622	6,090,737
	1879	840,620	26,539	12,120	4,986	44,384	39,212	4,621,520	1,730,088	4,833,379	20,076,753	15,035,538	12,454,170	4,167	1,940,227	1,123	3,155	1,682,275	707,188	9,398,858
	1880	860,067	26,148	11,652	5,286	56,955	45,294	4,621,282	1,690,923	4,875,029	22,060,749	14,556,894	15,954,559	4,191	2,179,899	1,199	*	1,997,943	977,285	9,727,369
	1881	879,886	27,145	12,302	5,896	59,066	51,744	5,180,011	2,037,704	5,118,642	22,426,502	16,718,521	16,252,103	4,248	2,411,902	1,247	*	1,821,719	926,729	8,714,377
	1882	899,567	26,747	13,631	6,309	59,404	48,524	5,692,362	2,317,706	5,145,764	22,103,203	18,748,081	16,193,579	4,168	2,690,884	1,355	*	2,040,916	969,362	8,751,454
	1883	920,694	27,541	13,006	6,771	66,592	55,662	5,611,253	2,334,255	5,651,885	24,308,175	17,743,846	16,398,863	4,087	2,964,331	1,562	*	2,215,923	1,104,392	15,570,245
	1884	944,564	28,850	13,505	7,218	72,202	58,061	5,934,687	2,385,200	5,715,293	27,526,667	19,201,633	16,050,465	3,975	3,151,587	1,633	*	2,323,493	1,096,354	10,333,146
	1885	969,202	29,975	14,364	7,995	76,976	61,994	6,290,361	2,548,171	6,140,366	28,028,588	18,044,604	15,551,758	4,278	3,260,158	1,676	*	2,405,157	1,020,082	9,170,538
	1886	1,000,510	30,824	14,952	7,737	93,144	68,102	6,481,021	2,634,560	6,513,540	30,114,203	18,530,575	11,795,321	4,631	3,735,377	1,743	*	2,417,582	1,052,685	12,100,036
	1887	1,032,903	33,043	16,005	7,768	99,147	68,121	6,733,826	2,739,635	6,561,251	33,127,382	19,022,151	11,351,145	4,853	3,858,243	1,850	*	2,576,405	1,232,943	13,328,765
	1888	1,076,964	34,508	16,287	8,194	102,032	60,229	7,607,598	3,071,003	7,287,151	34,627,382	23,972,134	13,853,763	5,354	4,307,883	2,018	*	2,564,742	1,217,191	14,647,709
	1889	1,103,723	34,359	19,392	9,916	84,582	68,418	8,675,990	3,749,670	7,919,902	37,367,027	24,402,700	12,734,734	5,741	4,599,178	2,199	3,967	2,627,262	1,178,735	11,495,720
	1890	1,133,266	37,578	18,012	9,180	79,777	63,820	8,519,159	3,630,818	9,645,737	41,443,827	22,954,015	13,266,222	4,933	4,363,341	2,471	6,628	2,652,768	1,145,163	12,751,295
	1891	1,167,678	33,505	18,631	8,787	62,448	53,172	8,343,583	3,252,614	9,128,699	43,638,897	21,711,608	16,006,743	5,091	4,715,102	2,764	8,240	2,687,576	1,332,683	13,679,298
	1892	1,168,601	37,831	19,581	7,723	62,951	69,214	7,799,573	3,149,310	8,482,917	46,174,125	17,174,545	14,214,546	4,521	4,456,254	2,904	6,762	2,970,115	1,342,504	14,814,645
	1893	1,182,290	34,258	15,430	7,254	74,047	60,480	6,959,229	2,522,779	7,989,577	46,064,004	13,283,514	13,308,551	3,776	4,029,738	2,958	6,755	3,619,009	1,469,369	15,255,200
	1894	1,176,460	36,552	16,508	7,229	81,261	60,110	6,716,814	2,497,567	7,310,246	46,804,382	12,470,599	14,026,546	4,128	4,291,459	3,003	6,773	2,980,290	1,373,668	15,445,878
	1895	1,182,290	34,258	15,430	7,254	81,190	68,836	6,712,152	2,711,313	6,760,439	46,828,517	12,472,334	14,547,732	3,837	4,348,688	3,104	6,731	2,884,514	1,412,786	15,669,175
	1896	1,183,950	35,706	15,636	7,181	84,872	69,419	6,458,682	2,691,009	6,540,182	46,854,311	14,554,837	14,198,518	3,782	4,566,230	3,106	6,447	3,097,995	1,580,613	17,091,029
	1897	1,180,833	34,178	15,714	7,225	90,844	67,301	6,390,217	2,645,187	6,565,932	46,925,321	15,454,432	16,739,670	3,770	4,865,372	3,118	6,418	3,200,312	1,657,450	15,580,217
	1898	1,182,710	31,310	15,126	7,563	94,844	67,301	6,898,240	2,910,237	6,692,444	47,058,088	16,763,904	15,872,246	4,051	4,956,787	3,113	6,431	3,877,922	1,564,163	19,581,304
	1899	1,183,000	30,172	15,695	7,620	94,436	68,225	6,898,240	2,910,237	7,114,706	48,354,277	17,959,894	18,567,780	4,055	5,341,455	3,127	6,579	3,820,505	1,665,938	20,237,948
	1890	1,189,470	31,008	16,578	8,145	95,384	69,947	7,396,944	3,035,875	7,293,136	48,774,835	18,301,811	17,422,552	4,235	5,873,581	3,202	6,445	3,924,898	2,017,321	17,847,321
	1900	1,197,206	30,779	15,215	8,308	92,157	63,684	7,460,855	2,984,592	7,672,780	49,548,275	18,927,340	18,646,097	4,765	6,175,491	3,283	6,468	3,810,413	1,754,417	12,127,382
	1901	1,208,705	31,008	15,904	8,406	93,107	60,126	7,712,099	1,964,629	7,395,832	50,408,967	18,270,245	18,210,523	4,564	6,739,040	3,303	6,589	3,788,873	1,994,271	2,569,364
	1902	1,211,450	30,461	16,177	8,477	87,557	67,933	6,997,792	2,818,274	6,759,900	51,097,900	17,859,171	17,107,068	4,467	6,857,854	3,376	6,506	4,021,690	1,968,509	28,525,579
1903	1,208,854	29,569	15,595	7,605	82,766	60,159	6,951,619	2,810,133	6,759,900	51,097,900	17,859,171	17,107,068	4,467	6,857,854	3,376	6,506	4,021,690	1,968,509	28,525,579	

Victorian Year-Book, 1903.

NEW SOUTH WALES.

1873	553,833	21,444	7,611	4,384	24,022	16,770	3,324,713	1,382,752	2,333,166	10,842,415	11,088,988	11,815,829	4,373	1,762,478	397	*	456,825	166,647	2,238,414
1874	574,943	22,178	8,652	4,343	29,756	19,279	3,509,966	1,217,401	2,989,227	10,516,371	11,293,789	12,345,603	4,385	1,990,894	401	*	464,957	166,932	2,148,394
1875	591,297	23,528	10,771	4,605	30,967	20,350	4,121,996	1,188,901	3,341,324	11,470,637	13,490,200	13,671,580	4,670	2,168,187	437	*	451,139	133,610	1,958,640
1876	614,181	23,295	11,193	4,630	32,942	21,923	5,033,824	1,161,406	4,749,418	11,759,519	13,672,776	13,003,941	4,578	2,127,725	554	*	513,840	145,609	2,391,979
1877	643,707	23,851	9,869	4,994	38,628	20,174	5,748,245	1,235,021	4,527,979	11,724,419	14,666,594	13,125,819	4,662	2,237,681	643	6,000	546,556	176,087	2,445,507
1878	671,888	25,328	10,763	5,317	49,879	22,913	4,983,894	1,309,717	5,130,973	11,688,119	14,768,873	12,965,570	4,566	2,459,504	733	7,778	613,642	233,253	3,439,326
1879	709,459	26,933	10,200	5,391	44,501	20,695	4,475,059	1,272,721	5,839,150	14,937,419	14,198,847	13,086,819	4,787	2,540,724	736	7,517	635,641	233,368	3,613,266
1880	747,950	28,162	11,231	5,572	46,870	26,559	4,994,230	1,417,293	5,685,078	14,905,919	13,950,975	15,525,138	4,151	2,432,779	849	7,955	706,498	252,540	3,708,737
1881	782,080	8,993	11,536	6,281	50,097	29,354	6,714,327	1,770,848	5,890,580	16,924,019	17,400,326	16,049,503	4,357	2,786,500	1,041	8,515	645,068	221,888	3,405,966
1882	815,000	29,702	12,816	6,948	46,113	28,925	7,410,737	1,903,413	6,449,418	18,721,219	21,381,130	16,716,961	4,777	3,296,665	1,313	9,613	733,583	247,361	4,032,395
1883	861,310	31,281	12,249	7,405	65,837	36,724	6,470,341	1,891,708	7,787,081	21,632,459	20,296,137	18,015,137	5,361	4,006,237	1,365	9,815	789,082	289,757	4,345,437
1884	904,950	33,916	14,420	7,482	71,336	44,633	7,115,592	2,152,857	8,412,609	30,101,909	22,826,985	18,251,506	5,945	4,600,958	1,665	9,755	852,017	275,250	4,203,394
1885	949,570	35,043	15,282	7,618	75,736	48,601	7,584,593	2,252,651	9,078,509	41,034,249	20,973,548	15,556,213	5,439	4,258,604	1,935	10,351	863,093	264,867	2,733,133
1 86	939,340	36,284	14,587	7,811	71,996	50,913	7,194,301	2,611,835	9,078,509	41,034,249	20,973,548	15,556,213	5,439	4,258,604	1,935	10,816	971,664	337,730	5,868,844
1887	1,020,330	37,236	13,448	7,599	67,854	56,993	8,582,811	2,664,548	9,098,460	40,995,350	18,806,236	18,496,917	5,721	4,322,778	2,081	10,721	1,048,305	389,590	4,695,849
1888	1,051,080	38,525	14,408	7,344	62,361	56,941	8,889,360	2,681,883	8,778,851	44,100,149	20,885,557	20,859,715	5,927	4,765,419	2,206	10,690	990,204	304,803	1,450,503
1889	1,021,820	37,295	14,796	7,530	61,151	51,762	9,063,397	2,677,169	9,250,271	46,646,449	22,863,065	23,294,934	6,483	5,321,179	2,252	10,782	1,164,475	319,785	1,650,335
1890	1,021,860	38,960	14,218	7,876	67,799	54,807	9,408,629	2,748,339	9,403,562	46,061,450	22,615,004	22,045,937	6,666	4,761,872	2,263	11,231	1,241,419	333,233	3,649,216
1891	1,162,190	39,458	10,286	8,457	69,919	52,073	10,036,186	2,916,344	10,328,673	48,771,549	25,388,397	25,944,020	6,121	5,694,236	2,263	13,879	1,179,621	356,666	3,963,668
1892	1,191,790	40,041	14,410	8,022	62,197	52,687	10,501,104	3,449,787	9,377,949	51,967,049	20,776,526	21,972,247	6,027	5,647,184	2,669	14,090	1,327,007	452,921	6,817,457
1893	1,214,550	40,342	10,022	7,749	66,909	58,850	9,499,814	2,782,264	9,332,102	56,176,149	18,107,035	22,921,223	5,830	5,193,328	2,435	14,282	1,509,404	593,510	6,502,715
1894	1,239,250	38,952	15,218	7,666	75,588	65,976	9,300,711	2,686,920	9,178,706	56,451,369	15,801,941	20,577,673	6,563	5,788,554	2,585	14,727	1,688,542	647,483	7,101,378
1895	1,262,270	38,775	14,914	8,300	76,051	66,334	9,235,156	2,662,867	9,633,303	57,075,519	15,992,415	21,934,785	6,211	5,866,038	2,615	14,847	1,649,462	596,684	5,945,312
1896	1,278,970	36,600	15,839	8,483	62,633	62,516	9,062,850	2,496,838	9,124,785	57,493,539	20,561,510	23,010,349	6,432	6,189,760	2,615	15,058	2,043,733	866,112	8,853,445
1897	1,301,780	37,247	14,264	8,813	67,016	60,410	9,107,208	2,396,512	9,540,550	58,588,264	21,744,350	23,751,072	6,465	6,744,431	2,794	15,469	2,198,231	993,350	10,560,111
1898	1,323,130	36,222	16,661	8,858	75,526	65,732	9,304,253	2,511,298	9,069,940	60,777,186	24,453,560	27,648,117	6,579	6,919,928	2,775	15,933	2,555,329	1,319,503	9,286,216
1899	1,344,080	36,461	15,901	9,275	77,634	65,817	9,572,912	2,514,488	9,403,237	61,572,831	25,594,315	28,445,466	6,418	6,995,551	2,791	16,354	2,818,491	1,426,166	13,604,166
1900	1,364,590	37,146	15,118	9,996	68,783	61,757	9,957,036	2,618,065	9,731,922	63,299,859	27,561,071	28,164,516	6,682	8,014,889	2,995	16,756	2,888,305	1,530,609	16,173,771
1901	1,379,700	37,875	16,021	10,538	68,189	61,160	10,612,422	1,980,885	10,729,741	65,478,012	26,928,218	27,351,124	6,827	8,521,234	2,828	16,963	2,746,209	1,392,070	14,803,282
1902	1,405,450	37,835	16,646	10,486	81,190	58,249	11,178,214	1,148,942	11,190,963	69,109,208	25,974,210	23,544,051	6,166	8,728,144	3,107	14,626	2,802,371	1,270,760	1,585,097
1903	1,427,342	35,966	16,497	9,759	70,570	63,626	11,582,231	1,145,232	11,708,397	75,465,361	26,770,169	26,738,111	6,775	9,005,401	3,220	14,395	3,046,905	1,561,111	27,334,141

Australasian Statistics.

VICTORIA AND NEW SOUTH WALES—Continued.

State.	Year.	Agriculture.														Live Stock.					
		Oats.		Barley.		Maize.		Other Cereals.		Potatoes.		Hay.		Vines.		Green Forage.	Other Tillage.	Horses.	Cattle.	Sheep.	Pigs.
		Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Tons.	Acres.	Tons.	Acres.	Wine Gallons.	Acres.	Acres.				
VICTORIA.	1873	110,991	1,741,451	25,333	502,601	1,959	40,347	14,951	207,020	38,349	109,822	115,672	147,398	5,222	562,713	213,069	89,474	180,342	883,763	11,323,080	160,336
	1874	114,492	2,121,612	29,505	619,896	1,523	24,263	17,266	333,002	35,183	124,310	119,631	157,261	4,937	577,493	254,320	102,145	180,254	958,658	11,221,036	137,941
	1875	124,160	2,719,795	31,548	700,665	2,346	37,177	20,146	470,804	36,901	124,377	155,274	266,613	5,081	755,000	308,405	121,609	196,184	1,054,593	11,749,532	140,765
	1876	115,209	2,294,225	25,034	530,323	1,609	25,909	22,388	359,134	40,450	134,682	147,408	150,560	4,765	481,588	262,554	110,271	134,768	1,128,255	11,278,893	175,578
	1877	105,234	2,040,486	19,116	378,706	1,215	22,050	18,361	250,859	37,107	115,419	176,951	208,151	4,419	457,535	390,330	103,205	203,150	1,169,576	10,117,867	183,391
	1878	134,428	2,366,026	22,871	417,157	1,939	40,754	16,932	269,252	36,527	98,958	172,739	209,028	4,434	410,333	401,427	126,299	210,105	1,184,843	9,379,276	177,373
	1879	167,015	4,023,271	43,182	1,065,430	2,447	61,887	22,698	593,361	41,600	167,943	201,451	292,407	4,284	574,143	305,760	192,020	216,710	1,139,358	8,651,775	144,793
	1880	134,089	2,362,425	68,030	1,068,830	1,769	49,299	24,947	417,269	45,951	129,262	249,656	300,581	4,950	484,028	264,611	226,025	275,516	1,286,261	10,369,285	241,936
	1881	146,995	3,612,111	48,652	927,566	1,783	81,007	26,909	634,321	39,129	134,290	212,150	238,796	4,923	539,191	241,947	172,562	273,195	1,169,576	10,347,265	239,926
	1882	169,892	4,446,027	43,721	758,477	2,702	131,620	27,969	131,620	27,969	2,702	131,620	27,969	327,355	576,763	290,438	187,451	280,874	1,287,088	10,174,246	237,911
	1883	118,161	4,717,624	46,832	1,069,863	2,570	117,294	31,703	807,820	40,195	161,088	302,957	323,143	7,326	723,560	286,866	201,921	286,779	1,297,546	10,739,021	233,525
	1884	187,710	4,392,695	62,273	1,082,430	3,854	176,388	36,227	862,364	38,763	161,119	339,725	371,046	9,042	760,752	332,859	216,636	293,846	1,287,945	10,637,412	234,347
	1885	215,994	4,692,303	74,112	1,302,854	4,530	181,240	36,114	769,629	42,602	163,202	421,036	442,118	9,775	1,063,827	334,399	246,513	304,698	1,290,700	10,681,837	239,837
	1886	185,765	4,256,079	37,031	827,852	4,901	231,447	29,434	594,555	49,974	170,661	445,150	483,049	10,310	986,041	284,186	318,146	308,553	1,393,205	10,700,433	240,957
	1887	199,036	4,562,530	40,983	956,476	6,031	318,551	27,761	746,960	48,263	198,225	441,312	624,122	11,195	1,167,874	164,457	403,924	315,000	1,333,873	10,623,985	243,461
	1888	197,518	4,256,079	37,031	827,852	5,789	267,155	32,331	372,468	43,074	131,401	332	808,117	12,750	1,206,442	192,540	368,734	293,846	1,287,945	10,637,412	234,347
	1889	236,496	5,044,867	90,724	1,831,132	8,447	357,047	23,873	544,781	47,139	157,104	451,546	666,385	15,662	1,578,590	155,596	419,044	329,335	1,394,209	10,882,231	249,673
	1890	221,048	4,919,325	87,751	1,571,599	10,357	574,083	26,940	756,893	53,188	204,155	413,052	567,779	20,686	2,098,493	245,332	418,621	323,115	1,370,660	10,818,575	245,818
	1891	190,157	4,455,551	45,221	844,198	8,230	461,957	31,614	776,691	57,334	260,523	369,498	514,403	24,438	1,554,130	184,184	444,371	449,696	1,812,104	12,923,148	236,750
	1892	177,645	4,574,816	37,533	774,207	6,667	373,183	32,971	989,508	40,974	142,623	512,648	740,049	28,052	1,694,745	249,719	541,782	439,596	1,824,774	12,965,306	290,339
	1893	218,904	4,951,371	49,105	1,033,861	6,485	180,442	42,872	1,059,087	40,909	144,708	412,223	503,355	30,275	1,490,184	240,835	508,042	433,903	1,877,291	13,098,725	228,162
	1894	266,444	5,223,415	57,360	1,596,463	5,675	294,555	38,252	734,571	56,383	196,706	492,578	621,547	30,307	1,909,972	217,847	401,785	431,547	1,833,900	13,180,943	337,588
	1895	255,503	2,880,545	78,438	715,592	7,186	351,891	33,713	295,724	43,895	117,238	461,482	390,861	30,365	2,236,999	206,190	352,006	*	*	*	*
	1896	419,460	6,816,951	102,373	815,605	9,752	566,027	22,643	163,848	34,532	146,555	416,667	449,056	27,934	2,822,268	195,625	319,399	*	*	*	*
	1897	294,153	4,809,479	27,205	758,454	10,847	515,025	13,818	161,327	44,197	67,296	589,000	659,635	27,701	1,919,389	138,425	456,486	*	*	*	*
	1898	266,159	5,523,419	47,859	1,112,567	10,647	587,084	13,246	237,361	41,252	161,142	568,345	723,299	27,568	1,882,209	169,962	581,721	*	*	*	*
	1899	271,280	6,116,046	79,573	1,466,878	11,037	624,844	13,293	178,310	55,469	173,381	450,150	596,193	27,550	933,282	170,523	575,898	*	*	*	*
	1900	362,689	9,582,332	58,863	2,115,478	9,889	604,180	8,635	158,946	38,477	123,126	502,105	677,757	30,634	2,578,187	226,871	669,924	392,237	1,602,384	10,841,790	350,370
	1901	329,150	6,724,900	22,232	693,551	10,020	615,472	9,125	184,389	40,058	125,401	659,239	884,369	28,592	1,981,475	195,749	751,640	*	*	*	*
	1902	433,489	4,402,982	37,716	561,144	10,906	750,524	9,572	163,067	49,706	168,759	580,884	601,272	28,374	1,547,188	30,720	563,235	*	*	*	*
	1903	433,638	13,434,952	47,760	1,218,003	11,810	904,239	10,981	243,321	48,930	167,736	733,353	1,233,063	28,513	2,551,150	33,165	701,541	*	*	*	*

1873	16,173	302,600	3,559	66,225	116,141	4,120,112	1,607	25,191	14,212	42,231	70,701	108,945	4,526	575,985	36,390	26,800	834,462	2,704,327	18,590,595	210,680
1874	17,973	293,135	3,984	69,065	118,437	3,618,436	1,351	20,997	13,604	38,564	64,088	93,440	4,308	684,268	40,589	29,711	346,691	2,856,699	22,797,416	219,908
1875	18,866	352,996	4,817	98,576	117,582	3,410,517	1,091	14,349	13,806	41,208	77,125	88,968	4,459	831,749	50,634	29,159	357,696	3,134,086	25,353,924	199,960
1876	21,828	461,916	5,662	134,158	116,365	3,879,537	1,571	29,567	14,171	42,939	111,946	159,661	4,457	799,709	61,516	30,715	366,703	3,131,613	25,269,755	173,604
1877	18,581	358,853	5,055	93,485	105,510	3,551,806	1,465	33,309	13,892	34,958	125,778	154,076	4,184	708,431	65,073	30,360	328,150	2,746,385	21,521,662	191,677
1878	22,129	447,912	6,152	132,072	130,582	4,420,580	1,604	27,621	16,705	53,590	104,096	172,497	4,237	684,733	60,249	34,615	330,468	2,771,583	25,479,484	220,320
1879	23,883	516,937	6,130	131,541	135,034	4,761,856	1,128	18,728	19,271	62,228	112,414	162,763	4,266	733,576	64,644	35,503	363,038	2,914,210	30,062,910	250,026
1880	17,923	356,121	7,890	160,602	125,679	4,483,457	1,345	22,290	18,996	51,936	130,443	173,074	4,800	6,200	102,301	44,561	395,981	2,580,040	35,298,121	308,205
1881	16,348	356,566	6,427	133,218	117,478	4,930,956	1,119	17,298	15,944	41,323	148,610	198,532	4,028	513,638	75,825	39,401	398,577	2,597,348	36,591,946	213,916
1882	24,818	617,465	6,474	133,050	118,180	4,057,635	1,232	20,447	14,462	43,401	179,567	242,921	4,448	543,966	92,606	44,035	328,026	1,859,985	36,114,814	154,815
1883	17,810	376,635	5,081	106,496	123,634	4,538,604	1,425	20,353	14,954	36,977	178,504	229,242	2,630	889,604	107,994	47,263	326,964	1,640,763	37,915,510	184,050
1884	19,472	425,920	7,036	148,869	115,600	2,989,585	1,270	18,932	12,418	31,335	126,646	250,312	4,584	441,612	140,329	49,212	337,172	1,425,130	31,660,311	211,656
1885	14,117	279,107	5,298	85,606	132,709	4,316,163	932	14,531	15,166	38,695	219,886	191,372	5,247	555,470	156,710	53,161	344,697	1,317,315	37,820,906	208,997
1886	23,947	600,892	6,079	132,940	146,957	3,825,146	1,522	22,533	17,322	45,803	223,470	349,888	5,840	601,897	165,820	48,977	361,663	1,367,844	39,160,304	209,576
1887	19,393	394,762	4,492	84,533	171,662	4,953,125	1,291	24,036	20,915	61,455	170,324	230,597	6,715	666,382	212,721	51,402	399,669	1,575,487	46,965,162	261,111
1888	7,984	109,931	3,318	37,760	166,101	4,910,404	985	12,899	15,419	36,839	209,531	184,911	7,072	805,813	228,808	55,183	411,368	1,622,907	46,503,469	248,583
1889	22,358	543,330	5,440	113,109	173,836	5,354,827	1,573	28,057	17,551	50,096	212,106	366,229	7,867	688,685	245,319	68,667	430,777	1,741,592	50,106,768	238,455
1890	14,102	266,659	4,937	81,383	191,152	5,713,205	923	11,546	19,406	52,791	175,242	213,034	8,014	842,181	426,188	68,192	444,163	2,091,229	55,986,431	284,453
1891	12,958	276,259	4,459	93,416	174,577	5,721,706	1,017	16,419	22,660	61,328	163,738	209,322	8,231	913,107	365,501	69,864	469,647	2,128,838	61,831,416	253,189
1892	20,890	466,603	4,618	91,701	167,549	5,037,256	2,258	39,977	18,602	52,105	214,468	302,134	8,204	931,542	405,704	76,823	484,309	2,221,469	58,080,114	249,522
1893	34,148	701,804	6,113	114,272	205,855	7,011,526	2,322	43,778	26,559	83,888	205,424	235,562	7,375	748,940	315,918	81,590	493,241	2,269,852	56,980,688	40,860
1894	30,636	562,725	10,396	179,348	208,308	5,625,533	3,694	46,670	30,689	86,170	245,243	281,873	7,577	731,683	415,697	90,509	518,181	2,465,611	56,977,770	278,349
1895	23,750	374,196	7,590	96,119	211,104	5,687,030	2,275	35,150	24,722	56,179	319,206	229,671	7,519	885,673	367,695	88,827	487,943	2,150,057	46,508,363	221,597
1896	39,590	894,633	6,453	110,340	211,382	5,754,217	2,315	34,087	31,170	84,214	327,209	334,902	8,081	794,256	458,483	93,013	510,636	2,226,163	48,318,790	214,581
1897	28,605	543,946	5,151	99,509	209,588	6,713,060	3,181	46,401	23,816	55,332	401,073	405,853	8,083	864,511	433,203	87,181	498,034	2,035,096	43,952,897	207,788
1898	19,874	278,007	4,459	64,094	193,258	6,034,842	3,379	56,599	27,978	61,903	461,784	334,287	8,078	845,232	429,136	87,852	491,553	2,029,516	41,241,004	266,061
1899	29,125	627,904	7,154	132,476	214,697	5,976,022	5,613	89,374	34,968	81,337	554,048	546,550	8,278	789,668	454,370	84,072	482,209	1,967,081	36,134,514	279,973
1900	29,383	593,548	9,435	114,228	206,051	6,292,745	4,481	67,950	29,403	64,253	466,236	526,260	8,441	891,147	520,885	83,376	481,417	1,983,116	40,020,506	256,577
1901	32,245	687,179	6,023	106,361	167,333	3,544,993	6,862	81,488	26,158	29,146	442,163	472,621	8,606	868,479	580,899	81,880	486,176	2,047,464	41,867,099	265,730
1902	42,992	851,768	4,557	18,233	262,437	3,049,269	6,049	73,321	19,444	30,732	491,918	243,379	8,790	806,140	109,146	637,778	450,125	1,741,226	26,649,424	193,097
1903	51,621	1,252,156	10,057	174,147	226,834	6,836,740	7,918	149,389	20,851	56,743	496,017	816,810	8,940	1,086,820	77,098	586,463	458,014	1,850,578	28,656,501	221,592

*Anstraliatum Statistics.*

QUEENSLAND AND SOUTH AUSTRALIA.

State.	Year.	Population on the 31st December.	Births.	Deaths.	Marriages.	Immigrants by Sea.	Emigrants by Sea.	Public Revenue.			Public Expenditure.	Public Debt at end of the Year.	Imports.	Exports.	Shipping Inwards and Outwards.		Miles open at the end of each year.		Agriculture.		
								Total.	Portion raised by Taxation.	Public Expenditure.					Vessels.	Tons.	Railway.	Telegraph line (poles).	Total Cultivation †	Wheat.	
																				Acres.	Acres.
QUEENSLAND.	1873	146,690	5,720	2,200	1,354	15,141	5,474	1,120,034	546,732	956,335	4,782,870	2,885,499	3,542,513	1,151	352,524	218	3,059	64,213	3,554	82,381	
	1874	163,617	6,383	2,704	1,310	20,951	7,718	1,160,947	552,758	1,121,710	5,249,350	2,962,439	4,106,462	1,370	572,750	249	3,616	70,331	3,592	80,000	
	1875	181,288	6,706	4,104	1,487	24,809	9,640	1,261,464	562,227	1,404,198	6,435,250	3,328,009	3,857,576	1,699	74,182	265	3,956	77,347	4,478	85,569	
	1876	187,100	6,903	3,467	1,304	21,831	9,695	1,268,268	568,776	1,283,520	6,35,250	3,126,559	3,875,811	1,849	874,342	298	4,063	85,569	5,700	92,941	
	1877	203,054	7,169	3,373	1,477	22,596	17,408	1,436,582	609,861	1,382,806	7,685,850	4,068,682	4,861,275	2,104	956,844	357	5,033	105,049	8,744	99,618	
	1878	210,510	7,397	4,220	1,444	16,139	11,890	1,559,111	694,092	1,543,820	8,935,350	4,336,077	3,190,419	2,228	1,066,768	428	5,410	117,489	9,618	130,452	
	1879	217,851	7,870	3,207	1,547	13,828	11,150	1,461,824	631,289	1,678,641	10,192,150	3,080,889	3,434,034	2,512	1,254,394	503	5,871	106,864	3,607	29,259	
	1880	226,077	1,196	3,017	1,547	10,396	10,349	1,612,314	600,236	1,678,695	12,192,150	3,087,296	3,448,160	2,446	1,255,576	633	5,768	120,881	10,944	223,243	
	1881	226,968	8,220	3,320	1,703	16,223	9,359	2,928,663	657,753	1,757,654	13,245,150	4,063,625	3,540,366	2,663	1,538,808	800	6,280	128,075	4,708	39,612	
	1882	248,255	8,518	4,204	2,034	27,000	9,937	2,102,095	867,119	1,904,201	13,125,350	4,638,351	3,534,452	2,959	1,880,591	867	6,844	158,686	10,494	115,752	
	1883	287,475	9,890	5,041	2,392	46,330	11,959	2,583,444	929,430	2,242,971	14,907,850	6,233,351	5,276,608	1,893	882,491	1,038	6,654	167,476	9,879	42,842	
	1884	302,090	10,679	6,861	2,661	56,833	18,263	2,673,544	1,090,445	2,751,851	16,419,850	6,381,976	4,673,864	2,103	1,152,112	1,207	6,979	199,550	12,105	195,727	
	1885	315,489	11,672	6,235	2,849	34,334	22,768	2,840,960	1,200,111	2,875,609	19,330,850	6,422,430	5,243,404	1,887	1,029,181	1,434	7,533	509,130	10,093	51,598	
	1886	338,580	12,582	5,575	2,785	34,101	20,911	2,810,147	1,196,651	3,202,030	20,820,850	6,163,227	4,933,970	1,895	1,120,479	1,555	8,225	221,843	6,787	21,221	
	1887	354,510	13,513	5,160	2,914	32,991	16,414	3,032,463	1,388,838	3,350,049	23,820,850	6,646,733	6,453,945	1,717	924,332	1,763	9,167	214,002	9,305	8,263	
	1888	367,950	14,247	5,29	3,254	30,392	18,030	3,463,097	1,577,671	3,368,465	25,840,950	6,646,733	6,126,372	1,864	996,229	1,931	9,456	247,073	8,459	13,335	
	1889	380,530	14,461	6,132	3,123	27,634	16,778	3,440,249	1,574,667	3,591,626	25,840,950	6,652,562	7,736,309	1,533	1,001,009	2,064	9,793	339,618	10,390	207,990	
	1890	99,215	15,07	5,638	3,195	24,464	18,817	3,260,408	1,471,983	3,745,372	28,105,684	5,066,700	8,554,512	1,222	910,719	2,112	9,830	239,618	10,390	207,990	
	1891	401,094	14,715	5,170	2,963	18,769	16,892	3,400,987	1,502,304	3,675,329	29,457,134	5,079,004	8,305,387	1,170	997,118	2,195	9,973	258,094	10,390	207,990	
	1892	410,205	14,903	5,266	2,774	14,616	13,566	3,533,806	1,403,883	3,580,984	29,457,134	4,382,567	9,170,408	1,098	972,428	2,320	9,996	260,828	31,742	462,583	
	1893	419,025	15,494	5,695	2,524	15,351	13,623	3,337,758	1,395,554	3,521,806	30,639,534	4,332,753	9,632,662	1,214	944,623	2,373	10,004	252,073	23,993	413,094	
	1894	429,843	13,977	5,298	2,622	13,900	14,992	3,343,069	1,346,787	3,511,636	30,639,534	4,387,400	8,795,569	1,278	928,025	2,379	9,986	284,562	28,997	545,185	
	1895	442,290	14,874	5,152	2,821	23,991	18,653	3,413,171	1,417,491	3,305,434	31,873,934	5,349,007	8,987,600	1,218	971,905	2,379	9,979	279,027	27,060	123,630	
	1896	452,216	14,017	5,645	2,823	19,541	16,093	3,641,583	1,566,933	3,567,947	31,873,934	5,433,271	9,163,726	1,294	1,094,048	2,430	10,026	348,735	35,871	601,254	
	1897	463,127	14,818	5,473	2,894	19,615	15,760	3,613,150	1,500,344	3,604,264	33,498,414	5,429,191	9,091,557	1,293	1,128,900	2,515	10,146	401,902	59,875	1,009,293	
	1898	474,296	13,933	6,243	2,972	23,713	18,083	3,778,152	1,559,645	3,747,428	33,598,414	6,007,266	10,856,127	1,213	1,198,319	2,636	10,116	421,830	46,219	607,612	
	1899	485,498	13,899	6,144	3,449	27,217	21,271	4,174,086	1,750,410	4,024,170	33,598,414	6,764,097	11,942,858	1,292	1,464,063	2,746	10,202	474,849	52,527	614,414	
	1900	494,575	14,301	5,747	3,371	22,033	19,949	4,588,207	1,984,713	4,540,418	34,348,414	7,184,112	9,581,562	1,429	1,655,017	2,801	10,221	505,200	79,304	1,194,088	
	1901	510,315	14,803	6,007	3,341	22,202	19,807	4,096,298	1,117,472	4,624,479	36,849,314	6,376,239	9,249,366	1,359	1,685,820	2,947	10,216	541,906	87,232	1,692,222	
	1902	514,851	14,216	6,204	3,243	17,762	20,837	5,535,062	276,771	3,967,001	38,318,627	7,352,538	9,171,023	1,549	2,037,611	2,974	10,247	478,121	1,880	6,165	
	1903	515,630	12,621	6,346	2,933	16,432	18,802	8,526,465	415,688	3,717,806	38,318,627	6,731,207	9,514,974	1,453	1,798,455	3,263	10,280	621,693	138,096	2,436,790	

Victorian Year-Book, 1903.

1873	196,075	7,107	2,631	1,562	4,548	3,172	937,648	362,246	839,152	2,174,900	3,841,100	4,587,859	1,531	515,640	202	3,004	1,225,073	784,784	6,178,816			
1874	204,623	7,096	3,434	1,611	5,557	3,271	1,003,820	370,440	1,051,622	2,939,750	3,983,290	4,402,355	1,440	534,550	234	3,065	1,330,484	839,635	9,862,693			
1875	210,442	7,408	4,036	1,663	6,566	4,019	1,143,312	339,103	1,176,412	3,320,600	4,203,892	4,805,051	1,634	611,331	274	3,069	1,444,536	898,823	10,739,334			
1876	225,677	8,224	3,550	1,852	13,841	4,995	1,320,204	445,548	1,323,337	3,837,100	4,576,183	4,816,170	1,771	732,330	328	3,470	1,514,916	1,083,732	5,857,569			
1877	236,864	8,640	3,235	2,002	14,081	8,367	1,441,401	499,856	1,443,653	4,737,200	4,925,511	4,628,531	1,707	672,776	328	4,061	1,828,115	1,163,646	9,034,692			
1878	243,795	9,232	3,7-9	2,299	14,572	8,174	1,592,634	519,254	1,620,310	5,329,600	5,719,611	5,355,021	2,061	806,273	454	4,217	2,011,319	1,305,851	9,332,049			
1879	259,480	9,902	3,580	2,238	13, -80	9,137	1,662,498	526,366	1,847,256	6,605,750	5,014,150	4,762,727	2,131	932,891	559	4,393	2,271,058	1,458,096	14,260,964			
1880	267,573	10,262	3,912	2,291	14,765	13,002	2,027,963	529,450	1,923,605	9,865,500	6,581,497	5,574,503	2,156	1,200,904	667	4,754	2,574,489	1,733,542	8,606,510			
1881	286,324	10,708	4,012	2,308	19,552	16,800	2,17, -988	557,188	2,054,235	11,196,300	5,244,064	4,407,757	2,153	1,269,491	832	4,946	2,613,903	1,763,781	8,087,032			
1882	293,509	10,844	4,393	2,530	14,370	14,136	2,087,076	653,864	2,146,590	12,472,600	6,707,788	5,359,890	2,212	1,337,218	945	5,092	2,370,980	1,746,531	7,356,117			
1883	304,515	11,173	4,435	2,539	19,330	15,562	2,060,140	637,751	2,330,070	13,891,900	6,310,055	4,833,461	2,136	1,504,765	988	5,161	2,754,560	1,846,151	14,619,230			
1884	312,781	11,847	4,789	2,555	17,290	16,082	2,024,928	563,841	2,398,191	15,473,800	5,749,353	6,623,704	2,231	1,834,532	1,059	5,278	2,785,490	1,942,453	14,621,755			
1885	313,423	12,046	3,937	2,447	14,500	20,596	2,309,592	749,447	2,454,308	13,340,200	4,852,750	4,489,008	1,737	1,558,476	1,332	5,459	*	*	*			
1886	309,036	11,177	4,234	1,976	17,623	25,281	1,975,260	585,123	2,234,395	19,163,500	5,096,293	5,330,780	1,812	1,677,883	1,420	5,486	*	1,950,000†	19,012,500†			
1887	313,015	10,831	3,944	1,977	15,468	17,667	2,014,102	648,645	2,234,395	13,340,200	5,413,638	6,984,098	1,938	1,973,651	1,518	5,509	*	1,605,000†	6,187,000†			
1888	311,491	10,510	3,759	2,034	12,637	12,750	2,494,556	739,353	2,376,399	19,147,700	6,804,451	7,259,365	2,032	1,959,342	1,774	5,511	2,864,377	1,642,961	14,577,358			
1889	316,012	10,318	3,501	2,062	9,230	8,736	2,270,433	711,248	2,355,927	20,435,500	8,376,808	8,982,386	2,122	2,190,442	1,774	5,526	2,649,098	1,673,573	9,399,389			
1890	329,145	10,364	3,923	2,235	9,904	7,114	2,557,772	790,177	2,579,258	20,401,500	10,075,992	10,656,446	2,270	2,576,546	1,330	5,640	2,533,291	1,552,423	6,436,488			
1891	327,963	10,737	4,211	2,315	16,684	12,807	2,829,453	829,748	2,668,353	21,633,300	7,32,362	7,207,775	21,230,700	7,517,447	7,998,718	2,170	2,545,076	1,824	5,493	2,625,741	1,520,580	9,240,103
1892	336,994	10,570	3,741	2,123	17,906	15,005	2,638,995	769,706	2,806,929	21,697,000	8,050,739	8,635,995	2,052	2,550,581	1,324	5,546	2,753,304	1,732,711	13,618,062			
1893	341,988	10,706	4,559	2,114	13,986	19,261	2,576,820	794,162	2,650,262	23,306,500	6,325,635	7,523,733	2,355	2,911,585	1,326	5,580	*	1,576,950†	7,781,223†			
1894	344,440	10,499	4,041	2,099	34,662	36,993	2,591,271	798,347	2,681,934	22,556,025	5,680,880	7,352,742	2,357	3,150,741	1,334	5,620	2,753,304	1,846,151	5,929,300†			
1895	345,556	10,537	3,963	2,053	37,193	40,838	2,497,648	833,766	2,640,683	23,367,200	7,233,522	7,743,063	2,716	3,494,966	1,334	5,670	2,584,395	1,599,860	2,304,493			
1896	345,994	10,043	4,083	2,184	56,933	59,359	2,698,759	941,075	2,779,110	23,914,000	7,277,036	7,070,750	2,525	3,747,685	1,336	5,862	2,604,122	1,522,668	4,014,352			
1897	347,990	9,862	4,014	1,953	53,473	54,636	2,633,727	891,324	2,750,959	24,309,035	6,298,765	6,978,370	2,297	3,667,521	1,330	5,793	2,967,370	1,738,770	8,773,900			
1898	330,576	9,370	4,732	2,221	55,465	54,636	2,633,727	942,922	2,777,614	24,916,310	6,126,238	8,547,046	2,190	3,619,251	1,330	5,691	3,081,846	1,821,137	8,453,133			
1899	356,840	9,422	4,478	2,276	34,095	31,363	2,731,208	902,392	2,776,619	26,131,780	8,174,213	8,191,376	2,122	3,695,771	1,902	5,503	3,279,408	1,913,247	11,253,143			
1900	361,451	9,177	3,837	2,313	31,460	30,809	2,353,329	921,392	2,776,619	26,131,780	7,478,238	8,318,820	2,267	4,129,366	1,902	5,523	3,122,800	1,743,452	8,012,762			
1901	364,795	9,111	4,065	2,309	34,954	36,566	2,886,554	621,761	3,007,034	26,423,805	6,181,000	7,890,072	2,163	4,131,276	1,902	5,301	3,113,539	1,746,842	6,854,912			
1902	365,791	8,947	4,314	2,332	37,162	40,469	2,477,432	267,790	2,823,578	26,423,805	6,181,000	7,890,072	2,163	4,131,276	1,902	6,038	3,266,965	1,711,174	13,209,465			
1903	369,376	8,508	3,951	2,272	35,247	34,256	2,530,568	393,941	2,641,789	26,754,420	6,743,372	8,490,359	2,197	4,280,390	1,332	6,038	3,266,965	1,711,174	13,209,465			

QUEENSLAND AND SOUTH AUSTRALIA—Continued.

State.	Year.	Agriculture.												Live Stock.							
		Oats.		Barley.		Maize.		Other Cereals.		Potatoes.		Hay.		Vines.		Green Forage.	Other Tillage.	Horses.	Cattle.	Sheep.	Pigs.
		Acres.	Bshls.	Acres.	Bshls.	Acres.	Bushels.	Acres.	Bshls.	Acres.	Tons.	Acres.	Tons.	Acres.	Wine Gallons.	Acres.	Acres.				
QUEENSLAND.	1873	353	7,060	588	11,760	21,140	845,600	178	3,560	3,069	6,138	5,772	11,544	364	41,479	1,894	27,306	99,243	1,343,093	7,268,946	42,884
	184	178	*	361	*	30,998	*	387	*	3,316	*	5,554	*	413	70,425	3,359	22,173	107,507	1,601,005	7,180,792	44,517
	1875	114	*	613	*	38,711	*	251	*	3,056	*	8,531	*	376	77,404	2,863	18,354	121,497	1,812,576	7,227,774	46,447
	1876	162	*	688	*	41,705	*	270	*	3,928	*	9,423	*	523	93,841	4,321	18,349	133,625	2,079,979	7,315,074	53,455
	1877	74	748	638	10,758	44,718	1,262,013	419	*	4,603	8,778	9,914	12,919	655	87,051	10,771	24,513	140,174	2,299,582	6,272,766	52,371
	1878	132	1,274	1,065	16,904	53,799	1,539,610	548	*	3,882	9,063	13,904	18,553	605	64,407	6,875	27,061	148,226	2,469,555	5,631,634	50,391
	1879	175	4,380	1,739	44,160	48,365	1,511,000	259	*	4,761	14,404	11,645	22,354	743	104,674	7,585	27,935	163,342	2,805,984	6,083,034	64,636
	1880	116	2,081	1,499	31,433	44,109	1,409,607	313	*	6,111	16,177	12,021	23,440	739	85,455	10,315	34,214	179,152	3,162,752	6,935,967	66,248
	1881	68	1,121	256	8,207	46,450	1,313,655	272	*	5,086	11,984	16,926	19,640	890	72,121	11,634	41,735	194,217	3,168,513	8,292,583	56,438
	1882	225	3,730	504	8,932	53,323	1,422,648	300	*	5,133	14,861	22,001	36,690	1,092	88,476	10,561	55,053	229,124	4,089,715	12,043,893	50,097
	1883	125	1,112	241	8,190	56,463	1,619,140	*	*	5,468	14,236	17,727	24,627	1,198	119,295	13,233	63,142	236,154	4,246,141	11,507,475	51,009
	1884	143	2,170	686	16,964	61,064	1,312,939	*	*	5,424	15,855	25,807	35,483	492	95,358	13,352	76,007	253,116	4,266,172	9,308,911	51,736
	1885	208	1,006	406	9,826	17,741	1,574,294	*	*	6,735	18,939	28,881	39,660	1,483	133,298	13,629	75,964	260,207	4,162,652	8,994,322	55,343
	1886	138	1,438	768	18,433	75,566	1,709,673	887	24,876	7,202	26,967	39,280	75,371	1,517	147,410	11,168	72,515	278,694	4,071,563	9,690,445	61,861
	1887	560	13,343	1,165	31,494	73,139	1,631,390	515	18,856	8,717	30,679	25,734	51,896	1,658	118,672	10,053	75,955	305,865	5,592,216	12,926,158	73,663
	1888	642	3,626	324	7,432	35,966	2,181,681	497	17,507	7,903	20,711	20,878	32,291	1,703	144,239	11,281	76,003	324,326	4,654,932	13,444,005	68,994
	1889	750	14,561	1,254	26,630	97,698	1,743,051	249	4,121	7,185	25,889	45,617	88,172	1,763	164,626	10,190	73,978	352,364	5,158,264	14,470,095	80,730
	1890	411	8,967	584	12,673	99,400	2,373,303	469	13,226	3,994	28,810	31,109	50,116	1,981	189,274	9,546	76,787	365,312	6,592,268	18,007,234	96,336
	1891	716	16,669	739	21,302	101,598	3,077,915	995	33,895	9,173	25,018	30,055	58,542	1,988	188,526	10,760	82,075	399,364	5,598,759	20,239,633	122,672
	1892	591	12,965	385	6,969	92,172	2,333,553	1,473	41,381	8,493	20,498	25,665	53,933	1,908	199,337	14,690	83,790	429,769	6,991,416	21,708,310	116,930
	1893	606	12,095	495	8,396	93,556	1,324,108	1,285	41,522	8,306	17,165	22,606	42,353	2,000	101,523	13,386	80,993	429,734	6,593,200	18,697,015	68,036
	1894	1,477	30,463	1,413	37,324	103,671	2,684,925	933	30,117	10,523	23,185	28,028	55,696	1,987	176,497	12,029	95,489	444,109	7,012,997	19,587,691	89,677
	1895	922	10,837	721	7,756	100,431	2,391,378	913	23,414	9,240	19,027	23,609	50,965	2,021	238,208	19,552	109,724	468,743	6,822,401	19,356,959	100,747
	1896	1,881	32,131	1,122	19,340	115,715	3,065,333	945	27,977	7,672	18,451	35,764	69,695	2,020	170,733	31,469	116,316	452,207	6,507,377	19,593,696	97,434
	1897	1,334	31,496	2,077	49,840	109,721	2,803,172	915	21,319	8,197	18,520	43,220	94,339	2,167	207,945	35,546	133,365	479,280	6,089,013	17,797,833	110,855
	1898	271	4,047	2,944	34,865	102,835	2,252,481	1,162	42,007	7,961	16,413	35,263	70,235	2,020	134,334	39,523	183,632	480,469	5,571,292	17,552,608	127,031
	1899	714	10,712	7,474	118,443	110,489	1,965,598	517	11,666	10,766	22,675	58,939	103,409	2,003	131,045	54,718	176,702	479,127	5,053,886	15,226,479	139,113
	1900	385	7,355	7,533	127,144	127,974	2,456,647	486	15,495	11,060	20,014	42,497	72,758	2,019	132,489	66,343	167,069	456,788	4,078,191	10,339,185	122,137
	1901	1,535	42,203	11,776	277,037	116,933	2,569,118	589	20,956	9,943	22,402	63,055	122,039	1,990	145,335	74,472	174,417	462,119	3,772,707	10,030,971	121,641
	1902	78	520	430	3,595	39,923	1,033,329	144	7,418	2,899	10,422	20,068	23,181	1,559	100,352	51,279	309,361	399,122	2,543,471	7,213,985	77,202
	1903	2,308	70,713	22,381	510,557	133,099	1,923,633	364	7,304	6,732	17,649	78,393	136,117	2,069	33,553	26,576	210,675	401,984	2,481,717	8,392,044	117,553

Victorian Year-Book, 1903.



## WESTERN AUSTRALIA AND TASMANIA.

State.	Year.	Population on the 31st December.	Births.	Deaths.	Marriages.	Immigrants by Sea.	Emigrants by Sea.	Public Revenue.		Public Expenditure.	Public Debt at end of the Year.	Imports.	Exports.	Shipping Inwards and Outwards.		Miles open at the end of each year.		Agriculture.		
								Total.	Portion raised by Taxation.					Vessels.	Tons.	Railway.	Telegraph line (poles).	Wheat.		
																		Acres.	Acres.	Bushels.
WESTERN AUSTRALIA.	1873	25,761	809	418	161	255	639	£ 134,832	£ 71,625	£ 114,270	£ 35,000	£ 297,328	£ 265,217	287	140,237	30	750	51,724	25,697	345,868
	1874	26,209	876	487	151	660	601	148,073	82,275	143,266	119,000	364,263	423,837	297	132,827	38	763	45,292	23,427	231,124
	1875	26,709	760	473	192	733	520	157,775	80,645	169,230	135,000	349,840	391,217	305	134,161	38	766	47,571	21,561	237,171
	1876	27,321	918	433	191	409	650	162,189	85,177	179,434	135,000	386,037	397,293	330	154,126	38	1,159	45,933	18,769	225,168
	1877	27,888	912	483	176	613	575	165,413	81,288	182,959	161,000	362,707	373,352	290	151,133	65	1,567	50,591	22,334	251,174
	1878	28,166	871	394	182	322	471	163,344	75,849	198,243	184,556	379,050	423,491	316	162,763	68	1,569	51,065	23,008	229,342
	1879	28,608	977	411	215	214	278	196,315	88,329	195,812	361,000	407,299	494,834	324	170,937	102	1,569	65,492	25,762	334,813
	1880	29,619	933	382	214	577	777	180,050	101,257	204,338	511,000	353,669	490,183	333	250,429	102	1,555	63,903	27,687	413,644
	1881	30,613	1,005	412	197	757	690	254,313	109,199	187,336	511,000	404,755	509,770	368	285,046	122	1,585	68,933	21,951	458,557
	1882	30,766	1,039	430	215	932	838	290,372	134,658	205,451	611,000	508,785	583,956	403	344,247	122	1,585	56,691	22,718	249,898
	1883	31,700	1,058	560	217	1,507	1,071	284,364	126,131	249,506	611,000	516,347	447,010	431	329,102	122	1,585	61,449	23,768	373,984
	1884	32,958	1,094	707	230	2,434	1,563	290,319	127,338	291,307	765,000	521,167	405,693	442	442,836	143	1,388	79,669	29,416	352,400
	1885	35,186	1,200	600	256	3,047	1,419	323,213	145,535	308,849	1,288,100	650,391	446,692	401	468,035	192	2,254	76,929	29,511	382,400
	1886	39,584	1,466	806	297	5,615	1,877	388,564	184,999	394,675	1,286,000	758,013	446,692	542	497,508	219	2,388	86,248	24,043	288,516
	1887	42,488	1,557	707	316	4,450	2,400	377,903	188,911	456,897	1,280,700	666,344	604,655	440	464,637	239	2,548	105,599	29,491	269,611
	1888	42,137	1,513	673	304	1,698	2,794	357,003	179,944	388,129	1,275,200	736,250	680,344	529	312,393	272	2,961	100,915	30,739	322,739
	1889	43,699	1,594	611	300	2,850	2,272	382,213	194,248	386,000	1,371,981	818,127	761,392	694	1,004,818	497	2,961	117,833	35,517	497,238
	1890	46,260	1,561	540	278	3,567	1,996	414,314	204,405	401,751	1,367,444	874,447	671,813	543	904,361	524	2,921	122,032	33,820	445,025
	1891	53,279	1,786	809	413	6,346	2,661	497,670	264,055	435,623	1,613,594	1,280,093	799,466	598	1,045,555	656	2,921	131,900	36,066	295,526
	1892	58,658	1,848	939	412	7,440	2,968	543,589	304,760	556,615	2,125,000	1,391,109	882,148	676	1,124,565	651	3,238	161,466	35,061	429,497
	1893	65,037	2,112	945	392	8,928	3,705	570,651	293,336	640,301	2,373,098	1,494,438	918,147	581	1,071,418	827	3,578	124,520	42,672	520,198
	1894	82,014	2,123	1,081	432	25,858	9,892	680,195	354,620	649,362	3,417,330	2,114,414	1,251,406	721	1,329,078	1,142	4,403	145,877	21,433	170,401
	1895	101,143	2,373	1,604	633	29,523	11,229	1,125,941	549,243	936,400	3,990,112	3,774,951	1,332,554	918	1,578,553	1,145	4,577	153,112	23,241	188,076
	1896	137,796	2,782	2,020	1,077	55,215	19,266	1,858,695	853,965	1,323,863	4,734,573	6,493,557	1,650,226	1,451	2,136,378	1,160	5,430	183,343	31,488	243,927
	1897	161,994	4,021	2,643	1,659	49,387	26,787	2,842,751	1,185,002	2,339,453	7,310,815	6,418,565	3,940,098	1,428	2,377,332	1,361	5,958	176,397	38,705	408,599
	1898	167,810	4,968	2,716	1,674	32,709	28,756	2,764,747	1,114,326	2,256,912	9,203,738	5,241,965	4,960,060	1,264	2,389,626	1,487	5,886	215,960	75,032	870,900
	1899	170,651	5,174	2,324	1,671	20,278	20,225	2,478,811	932,967	2,539,358	10,488,863	4,473,532	6,985,642	1,353	2,638,648	1,850	5,941	237,744	84,462	966,601
	1900	179,268	5,454	2,240	1,781	24,921	19,021	1,055,637	2,615,675	11,674,640	4,962,178	6,852,054	1,516	3,232,028	1,978	6,052	256,685	74,308	774,653	
1901	194,889	5,718	2,519	1,821	32,762	20,780	2,964,121	644,948	3,051,331	12,709,430	6,464,171	8,515,623	1,785	3,714,263	1,984	6,173	286,666	94,709	956,886	
1902	215,140	6,232	2,823	2,024	37,860	21,001	3,349,450	173,582	3,151,427	14,942,310	7,218,352	9,051,358	1,523	3,358,074	1,989	6,112	300,717	92,398	985,559	
1903	226,954	6,699	2,788	2,064	30,943	20,216	3,630,238	221,247	3,521,768	15,627,298	6,769,922	10,324,732	1,411	3,335,895	2,145	6,079	366,799	137,946	1,376,252	

## TASMANIA.

1873	104,217	3,048	1,504	659	6,787	7,039	324,257	192,229	303,947	1,477,600	1,107,167	893,556	1,342	238,112	45	291	167,931	58,610	947,813
1874	104,176	3,097	1,689	712	6,265	7,714	333,732	207,311	325,195	1,476,700	1,257,785	925,325	1,227	239,507	45	291	326,456	57,633	1,066,861
1875	103,663	3,105	2,078	689	6,535	8,075	342,606	207,851	338,090	1,489,400	1,185,942	1,085,976	1,295	262,209	150	396	332,824	42,745	700,092
1876	105,484	3,149	1,730	746	8,571	8,169	327,017	210,611	341,889	1,520,500	1,133,003	1,130,983	1,255	277,484	172	513	332,558	38,977	752,070
1877	107,104	3,211	2,038	828	9,717	9,270	306,118	230,652	352,461	1,589,705	1,308,671	1,416,975	1,353	319,517	172	553	348,841	46,719	846,420
1878	109,947	3,502	1,700	864	9,568	8,483	385,936	241,732	379,232	1,747,400	1,324,512	1,315,695	1,381	315,854	172	692	355,408	48,392	778,977
1879	112,469	3,564	1,688	804	10,578	9,932	375,570	232,360	481,216	1,786,800	1,267,475	1,301,097	1,423	381,895	172	731	366,407	45,215	1,049,778
1880	114,762	3,739	1,832	839	10,411	10,025	442,158	300,241	415,196	1,943,700	1,369,223	1,511,931	1,309	413,303	172	745	373,299	50,022	750,040
1881	118,113	3,913	1,733	856	12,579	11,163	505,006	344,723	463,684	2,003,000	1,431,144	1,555,576	1,383	388,762	172	795	374,374	51,757	977,365
1882	120,834	4,043	1,906	969	12,822	11,403	550,006	370,856	500,801	2,050,600	1,670,872	1,587,389	1,451	417,418	167	915	377,486	46,721	946,889
1883	123,650	4,259	2,122	1,120	14,240	12,636	562,063	388,406	533,330	2,385,600	1,832,637	1,731,599	1,905	471,722	167	960	393,593	41,301	732,718
1884	127,054	4,578	1,990	1,003	14,257	12,524	549,741	344,192	577,876	3,202,300	1,656,118	1,475,357	1,340	614,198	215	1,000	425,845	34,091	654,638
1885	129,267	4,637	2,036	1,054	14,822	14,173	571,412	366,118	586,598	3,357,000	1,757,486	1,313,693	1,358	677,806	257	1,143	417,777	30,266	524,353
1886	131,616	4,627	1,976	985	15,399	14,630	568,924	371,544	584,756	4,026,720	1,756,567	1,331,540	1,405	692,429	303	1,230	446,391	35,322	632,573
1887	135,988	4,736	2,161	939	14,980	12,288	594,976	375,501	668,759	4,109,370	1,596,817	1,449,371	1,391	735,299	318	1,324	457,436	40,498	675,069
1888	138,346	4,777	2,036	951	18,866	17,936	640,068	405,807	709,486	4,499,470	1,610,664	1,333,865	1,565	776,278	327	1,403	481,533	40,657	819,497
1889	142,177	4,757	2,098	967	23,443	20,771	678,909	422,644	681,674	5,019,050	1,611,035	1,459,857	1,661	912,246	374	1,487	488,354	49,055	756,639
1890	145,290	4,813	2,118	954	29,517	27,070	758,100	454,431	722,746	6,292,800	1,897,512	1,486,992	1,509	951,247	399	1,645	517,174	39,452	642,980
1891	151,719	4,971	2,234	988	27,315	21,233	833,198	502,139	851,559	7,110,290	2,051,964	1,440,818	1,578	1,014,606	425	1,711	516,930	47,584	937,680
1892	156,631	4,965	2,069	995	23,744	24,407	787,764	438,136	919,802	7,156,070	1,497,161	1,346,965	1,645	1,137,140	475	1,856	535,433	58,897	1,018,553
1893	159,698	5,216	2,071	848	18,059	18,649	706,972	399,700	836,417	7,340,804	1,057,683	1,352,184	1,383	934,439	475	1,821	550,865	55,312	833,771
1894	152,708	4,852	1,938	847	17,009	15,786	696,795	418,870	789,905	7,414,345	979,676	1,489,041	1,423	898,367	475	1,789	575,286	52,028	872,000
1895	154,987	4,790	1,811	847	18,767	17,168	761,971	464,379	748,946	7,782,770	1,094,457	1,373,063	1,453	937,526	475	1,789	458,914	64,652	1,164,855
1896	159,286	4,603	1,901	964	19,076	15,419	797,976	467,054	750,244	7,782,470	1,192,410	1,496,576	1,339	890,761	475	1,813	455,514	74,516	1,286,330
1897	163,839	4,683	1,947	1,052	20,735	16,693	845,020	496,472	785,028	7,782,170	1,367,608	1,744,461	1,416	1,084,108	495	1,884	499,535	85,905	1,668,341
1898	168,194	4,580	2,359	1,097	24,074	19,322	908,223	540,503	830,168	7,776,320	1,650,318	1,803,369	1,625	1,158,993	509	1,927	532,267	85,287	2,303,512
1899	171,990	4,674	2,260	1,147	24,959	20,805	943,970	547,528	871,454	7,721,220	1,769,024	2,577,475	1,554	1,318,703	540	2,000	543,568	64,328	1,101,303
1900	172,377	4,864	1,902	1,332	23,058	22,574	1,054,980	614,510	923,371	8,429,705	2,073,557	2,610,617	1,484	1,232,918	557	2,091	560,151	51,825	1,110,421
1901	174,233	4,950	1,814	1,338	23,564	23,751	826,163	107,415	970,472	8,651,745	1,965,159	2,945,757	1,636	1,432,735	618	2,187	573,634	44,084	963,662
1902	177,077	5,085	1,914	1,313	27,550	24,572	734,663	105,401	850,684	9,009,051	2,442,745	3,244,508	1,908	1,767,215	620	2,187	276,239	40,898	876,971
1903	179,487	5,080	2,116	1,344	25,163	23,205	857,668	150,091	879,356	9,211,070	2,593,310	2,843,108	1,356	1,874,173	620	1,352	297,378	49,414	767,398

Australasian Statistics.

## WESTERN AUSTRALIA AND TASMANIA—Continued.

State.	Year.	Agriculture.																Live Stock.			
		Oats.		Barley.		Maize.		Other Cereals.		Potatoes.		Hay.		Vines.		Green Forage	Other Tillage	Horses	Cattle.	Sheep.	Pigs.
		Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.	Acres.	Tons.	Acres.	Tons.	Acres.	Wine, Gallons.	Acres.	Acres.				
1873	1,474	28,330	5,083	87,529	113	2,110	1,475	18,243	478	1,263	15,941	31,882	775	*	*	693	26,290	47,640	748,536	20,948	
1874	1,067	17,072	4,702	75,232	88	1,320	1,022	10,220	329	957	13,366	20,049	779	*	*	512	26,636	46,748	777,861	13,290	
1875	1,256	19,840	5,014	70,196	60	1,200	1,293	8,880	393	1,179	17,319	17,319	675	*	*	*	29,379	50,416	881,861	14,400	
1876	1,461	21,915	6,245	93,675	70	1,470	1,378	8,041	370	1,110	16,856	16,856	784	*	*	*	33,502	54,058	893,494	18,108	
1877	1,290	18,060	5,948	77,324	46	920	799	8,789	354	708	18,013	18,013	713	*	*	594	20,691	52,057	797,156	18,942	
1878	1,568	28,249	5,927	72,498	40	296	817	8,919	341	859	18,750	18,750	614	*	*	*	32,801	56,158	869,325	16,762	
1879	1,734	32,946	7,228	130,284	35	490	890	11,888	262	1,269	19,085	23,856	718	*	*	9,068	32,411	60,617	1,109,860	20,397	
1880	1,320	25,080	6,364	114,552	32	448	864	11,556	471	1,649	19,563	24,454	660	*	*	6,942	34,568	63,719	1,231,717	24,232	
1881	827	8,270	3,679	36,790	26	432	640	5,120	278	556	24,445	18,334	527	*	*	970	31,755	63,009	1,247,912	22,530	
1882	1,025	15,375	4,766	68,724	25	585	585	5,265	267	667	25,959	25,959	607	*	*	739	31,325	65,478	1,259,797	16,898	
1883	1,395	23,715	5,547	88,768	18	812	530	5,830	310	930	20,235	20,235	725	*	*	3,851	32,884	64,588	1,315,155	18,512	
1884	1,526	26,140	5,616	92,660	74	1,250	786	11,000	500	1,500	24,054	24,050	687	81,750	208	16,876	37,111	71,102	1,547,061	20,039	
1885	1,586	23,142	6,178	89,581	156	1,950	675	*	434	1,085	19,677	19,677	624	59,488	191	17,887	34,892	70,408	1,702,719	24,280	
1886	1,766	28,512	5,185	82,316	171	3,933	628	*	356	1,071	25,718	25,718	649	98,300	1,075	26,657	38,360	88,254	1,809,071	24,655	
1887	1,089	25,424	5,935	69,710	144	1,762	1,270	25,000	474	1,130	25,807	24,157	672	124,200	856	39,234	41,100	93,544	1,909,940	23,627	
1888	1,787	41,852	5,099	73,630	61	1,769	720	14,000	481	1,974	23,014	23,014	894	135,888	268	42,142	41,390	93,822	2,112,398	25,083	
1889	2,075	41,500	5,475	93,075	80	1,200	649	12,980	402	1,386	25,694	26,494	1,088	205,632	329	46,464	42,808	119,571	2,366,681	27,079	
1890	1,914	37,693	5,322	87,813	81	1,023	501	10,620	510	1,655	23,183	26,495	1,023	194,881	161	55,497	44,384	130,970	2,524,913	28,985	
1891	1,801	18,214	3,738	48,594	23	483	400	8,000	531	1,595	28,594	28,594	1,004	166,694	238	69,265	40,812	133,600	1,962,212	25,930	
1892	1,694	29,645	3,666	56,823	33	775	454	9,080	529	1,586	35,121	43,904	1,218	160,776	214	83,473	44,973	162,886	1,685,500	24,417	
1893	2,571	47,597	3,603	48,330	37	573	563	11,360	630	2,309	29,589	33,089	1,643	17,484	359	42,848	45,747	173,747	2,220,642	26,233	
1894	1,634	20,246	1,948	14,675	54	756	532	10,640	703	2,545	49,896	38,435	1,864	75,814	254	67,559	50,001	187,214	2,132,311	28,896	
1895	1,880	19,326	1,932	18,691	23	596	327	6,540	668	2,290	63,094	53,737	2,217	79,550	430	58,590	58,506	200,091	2,295,332	27,915	
1896	1,753	18,871	1,903	12,816	30	504	340	2,483	720	2,088	69,436	60,600	2,294	75,693	4,858	25,521	57,527	99,793	2,248,976	31,154	
1897	1,678	29,266	1,694	23,423	243	4,826	428	4,733	1,361	4,270	80,938	75,464	2,664	89,099	4,278	44,418	62,223	244,971	2,210,742	31,509	
1898	3,073	55,854	2,186	29,295	110	1,365	700	7,726	1,675	5,498	79,223	77,297	2,951	118,799	3,154	47,846	62,442	245,907	2,214,880	39,284	
1899	3,940	73,556	3,885	56,587	133	2,263	921	9,490	2,837	8,373	78,893	70,078	3,245	86,802	2,997	56,431	65,926	297,075	2,282,306	55,953	
1900	4,790	86,433	2,586	29,188	91	1,399	844	7,658	1,794	4,836	104,254	103,813	3,325	130,377	12,154	52,489	68,253	338,590	2,434,311	67,740	
1901	9,751	163,654	2,669	34,723	513	5,203	718	6,838	1,829	5,739	92,654	89,729	3,629	188,735	13,274	66,920	73,710	398,547	2,625,856	61,052	
1902	10,334	167,882	3,733	46,255	109	2,110	868	9,976	2,084	6,488	105,791	94,007	3,528	158,853	636	81,186	80,158	437,136	2,704,880	52,883	
1903	14,568	258,603	3,609	53,227	163	2,487	1,038	11,312	1,823	4,542	109,002	121,934	3,324	..	672	94,654	82,747	497,617	2,600,639	50,209	

TASMANIA

1873	26,750	561,247	6,440	124,459	*	*	7,910	24,070	26,406	28,430	*	*	1,565	40,250	22,612	106,308	1,490,746	59,628
1874	32,704	877,243	5,129	125,469	*	*	6,978	26,169	30,486	41,144	*	*	94,234	93,608	23,208	110,450	1,724,953	51,464
1875	32,556	827,043	5,939	165,357	*	*	6,585	137,050	6,906	24,455	34,758	*	103,167	100,168	23,473	118,694	1,731,723	47,664
1876	23,609	471,485	6,258	147,537	*	*	7,263	150,832	7,954	27,290	29,664	*	114,978	103,855	23,622	124,459	1,768,785	60,681
1877	21,883	588,350	4,283	86,840	*	*	5,854	90,104	8,336	27,105	29,440	*	120,376	111,950	22,195	126,882	1,818,125	55,652
1878	28,802	714,987	4,040	97,845	*	*	5,060	92,403	8,079	27,257	33,953	*	118,478	103,580	24,107	126,276	1,838,831	39,595
1879	37,216	1,064,966	6,491	181,178	*	*	6,323	141,063	9,743	30,956	35,538	*	118,690	107,201	24,593	129,317	1,835,970	38,610
1880	19,855	439,446	8,297	109,156	*	*	6,432	106,396	10,421	32,548	31,615	*	134,656	112,003	25,267	127,187	1,783,611	48,029
1881	27,535	783,129	4,597	102,475	*	*	5,906	113,862	9,670	33,565	34,790	*	137,681	102,438	27,505	130,526	1,847,179	49,660
1882	28,849	788,713	3,229	89,739	*	*	5,301	108,603	9,681	37,526	38,043	*	149,571	96,091	25,837	122,504	1,843,455	47,827
1883	23,160	634,354	3,205	81,962	*	*	6,103	115,238	9,601	34,509	41,414	*	153,382	115,827	26,840	130,525	1,831,069	55,774
1884	28,956	829,611	5,646	167,036	*	*	6,827	145,323	9,057	39,503	44,735	*	189,376	107,177	27,188	128,834	1,720,027	57,303
1885	29,247	784,325	6,833	176,466	*	*	7,774	171,600	11,073	33,521	41,693	*	185,434	105,457	28,610	138,642	1,648,127	67,395
1886	21,607	560,622	2,749	61,585	*	*	9,385	164,649	16,084	75,773	47,269	*	198,935	115,040	29,684	148,665	1,609,046	73,118
1887	21,169	385,195	3,766	52,240	*	*	7,546	96,150	16,394	42,526	44,512	*	185,899	137,602	29,523	147,092	1,547,212	52,403
1888	33,834	946,354	4,670	109,979	*	*	7,476	124,954	13,653	66,721	52,521	*	180,350	148,335	29,228	142,019	1,450,065	43,227
1889	40,169	1,148,935	4,446	105,574	*	*	8,055	165,742	17,015	72,275	50,913	37	192,919	125,752	29,778	150,004	1,551,429	68,632
1890	20,740	519,395	4,376	99,842	*	*	10,142	183,171	20,133	73,158	45,381	30	202,557	174,363	31,165	162,440	1,619,256	81,716
1891	28,360	876,573	2,650	71,636	*	*	10,220	240,656	16,393	63,000	45,445	29	209,697	156,552	31,312	167,788	1,661,118	73,520
1892	22,976	631,746	3,929	80,205	*	*	10,893	196,653	16,535	60,245	46,070	30	228,786	147,342	31,976	170,085	1,623,338	59,267
1893	33,755	837,720	4,876	110,174	*	*	10,713	202,767	19,068	76,769	47,500	32	218,726	160,883	31,587	169,141	1,535,047	51,592
1894	34,385	927,875	8,167	202,625	*	*	13,225	225,867	23,415	90,810	61,373	30	222,117	160,576	34,835	177,093	1,727,200	65,620
1895	32,699	906,934	6,178	138,833	*	*	13,649	245,611	19,247	81,423	54,748	30	214,586	133,125	31,580	162,801	1,523,846	70,142
1896	44,768	971,996	3,988	74,790	158	*	13,853	249,354	21,651	72,241	47,798	*	203,306	45,476	29,547	11,730	1,650,567	55,301
1897	35,166	1,102,285	4,037	69,992	68	*	10,378	152,126	22,355	49,124	57,828	*	223,041	52,695	29,898	157,486	1,588,611	43,529
1898	59,509	2,271,070	5,693	184,225	*	*	11,120	237,666	20,241	88,166	49,277	*	240,771	60,369	29,797	148,558	1,499,638	45,274
1899	45,110	1,148,160	7,606	142,721	*	*	13,963	234,411	26,951	101,870	42,492	*	291,868	51,250	31,189	100,204	1,672,088	74,451
1900	45,073	1,406,913	4,602	116,911	*	*	10,553	244,585	23,038	93,862	61,541	*	309,929	53,669	31,07	165,516	1,683,956	68,291
1901	54,089	1,702,659	6,104	167,483	180	*	11,503	280,028	25,444	118,704	61,495	*	318,504	51,881	32,329	168,661	1,792,491	58,716
1902	55,058	1,752,745	8,281	201,133	*	*	12,098	235,165	34,625	163,518	60,038	*	3,355	55,886	33,465	173,385	1,679,518	52,092
1903	60,663	1,621,950	8,084	212,459	*	*	12,745	267,394	29,160	171,298	66,947	*	3,100	67,765	35,541	185,938	1,597,053	56,538

Australasian Statistics.

NEW ZEALAND.

State.	Year.	Population on the 31st December.	Births.	Deaths.	Marriages.	Immigrants by Sea.	Emigrants by Sea.	Public Revenue.		Public Expenditure.	Public Debt at end of the year.	Imports.		Exports.		Shipping Inwards and Outwards.		Miles open at the end of each year.		Agriculture.		
								Total.	Portion raised by Taxation.			Vessels.	Tons.	Railway.	Telegraph line (poles).	Total Cultivation. †		Wheat.				
																Acres.	Acres.	Bushels.				
																			£	£	£	£
NEW ZEALAND.	1873	295,946	11,222	3,647	2,276	13,572	4,761	2,776,388	1,055,296	2,119,524	10,913,936	6,464,687	5,610,371	1,443	571,144	145	2,389	376,156	132,428	3,391,634		
	1874	341,860	12,844	4,161	2,323	43,965	5,859	3,063,811	1,294,276	3,035,711	13,366,936	8,121,812	5,251,294	1,678	734,829	209	2,632	549,844	105,674	2,974,339		
	1875	375,856	14,438	5,712	3,209	31,737	6,467	2,813,928	1,350,996	3,431,973	17,400,031	8,029,172	5,838,627	1,866	834,547	542	3,166	607,138	90,804	2,363,619		
	1876	399,075	16,108	4,904	3,196	18,414	6,450	3,580,294	1,359,023	3,353,337	18,678,111	6,905,171	5,673,465	1,744	786,514	718	3,170	787,824	141,614	4,054,377		
	1877	417,672	16,856	4,685	3,115	12,987	6,611	3,916,023	1,343,943	3,222,426	20,691,111	6,973,418	6,327,472	1,660	789,177	954	3,307	959,523	243,408	3,636,369		
	1878	432,519	17,770	4,642	3,385	16,263	5,761	4,167,889	1,533,393	4,365,275	22,098,311	8,755,663	6,015,525	1,812	884,933	1,070	3,494	1,134,185	264,572	6,070,599		
	1879	463,729	18,070	5,583	3,404	23,927	5,234	3,134,905	1,441,898	3,845,036	23,958,311	8,374,555	5,743,126	1,802	949,692	1,171	3,605	1,237,501	270,198	7,610,715		
	1880	484,864	19,841	5,437	3,181	15,154	7,923	3,283,396	1,535,700	4,019,850	28,583,231	6,162,011	6,352,692	1,516	819,716	1,258	3,766	1,029,764	324,933	8,147,705		
	1881	500,910	18,732	5,461	3,281	9,638	8,072	3,757,493	1,851,024	3,675,797	29,659,111	7,457,045	6,060,866	1,527	893,621	1,287	3,824	1,319,460	365,711	8,297,590		
	1882	517,707	19,099	5,701	3,602	10,945	7,456	3,917,160	1,999,000	3,324,735	30,235,711	8,609,270	6,653,008	1,564	899,836	1,465	3,974	1,389,747	390,818	10,270,591		
	1883	540,877	19,202	6,061	3,612	19,215	9,186	3,859,966	1,995,012	4,282,901	35,790,422	7,974,038	7,095,999	1,656	1,002,491	1,480	4,074	1,412,300	377,706	9,827,136		
	1884	557,110	19,116	5,740	3,800	20,021	10,700	3,707,488	1,869,496	4,101,318	37,587,776	7,663,888	7,091,667	1,724	1,063,430	1,570	4,264	1,348,235	370,443	8,666,777		
	1885	575,226	19,693	6,081	3,813	16,199	11,695	3,688,016	1,962,162	4,310,875	37,587,776	6,759,013	6,672,791	1,432	990,903	1,809	4,625	1,372,219	253,025	6,297,638		
	1886	589,386	19,299	6,137	3,569	16,101	15,037	3,463,495	1,876,233	3,954,290	38,225,537	7,479,922	6,819,939	1,566	1,032,700	1,654	4,463	1,265,975	173,891	4,242,285		
	1887	603,361	19,135	6,137	3,569	13,689	12,712	4,169,315	1,931,658	3,962,912	38,325,560	5,941,900	7,767,325	1,384	1,057,913	1,865	4,992	1,465,319	362,153	8,770,246		
	1888	607,380	18,902	5,708	3,617	13,606	22,781	3,991,919	1,886,081	3,981,721	38,433,250	6,297,097	9,339,265	1,543	1,155,886	1,912	4,874	1,560,605	335,861	8,448,506		
	1889	616,052	18,457	5,772	3,632	15,392	15,178	4,208,029	1,773,985	4,081,566	38,325,560	6,260,525	9,311,720	1,489	1,312,474	1,956	5,060	1,638,179	301,460	5,723,610		
	1890	625,508	18,273	5,994	3,797	15,028	16,810	4,146,231	1,719,134	4,135,544	38,713,068	6,503,319	9,566,397	1,481	1,244,322	2,011	5,349	1,565,231	202,273	10,257,738		
	1891	634,058	18,273	5,518	3,805	14,431	17,629	4,389,251	2,392,796	4,044,690	39,257,340	6,943,056	9,534,351	1,375	1,331,323	2,036	5,479	1,543,359	381,245	8,378,217		
	1892	650,433	17,876	6,459	4,002	18,122	13,164	4,407,963	2,353,250	4,170,616	39,826,815	6,911,515	9,555,364	1,252	1,258,070	2,108	5,513	1,455,954	242,787	8,991,695		
1893	672,265	18,187	6,767	4,115	26,135	15,723	4,288,716	2,296,785	4,398,930	40,386,964	6,788,020	9,231,047	1,223	1,262,350	2,168	6,049	1,366,687	148,575	3,613,037			
1894	686,126	18,528	6,918	4,173	25,237	22,984	4,453,139	2,393,195	4,408,349	43,050,780	6,400,129	8,550,224	1,208	1,321,897	2,190	6,245	1,547,568	245,441	6,843,768			
1895	698,706	18,546	6,863	4,110	21,862	20,967	4,725,799	2,521,910	4,633,981	44,362,118	7,137,320	9,321,105	1,181	1,241,756	2,185	6,510	1,656,912	258,608	5,926,523			
1896	712,801	18,612	6,432	4,243	17,236	15,764	4,987,630	2,678,576	4,842,772	44,963,424	8,055,223	10,016,993	1,187	1,362,232	2,222	6,726	1,634,443	315,801	5,970,017			
1897	727,695	18,737	6,595	4,228	18,592	15,840	5,258,228	2,707,099	5,283,511	46,987,606	8,230,600	10,517,955	1,242	1,531,048	2,251	7,485	2,015,186	399,034	13,073,416			
1898	742,102	18,965	7,244	5,091	18,855	16,159	5,609,618	2,891,126	5,590,127	47,873,732	8,739,633	11,938,335	1,213	1,619,049	2,192	7,417	1,811,053	269,749	8,581,898			
1899	755,144	18,835	7,680	5,461	18,506	16,619	5,906,916	3,042,890	5,979,703	49,590,815	11,817,915	12,881,424	1,379	2,139,180	2,323	7,469	1,664,187	163,462	6,062,589			
1900	769,321	19,546	7,200	5,860	18,074	16,243	6,152,839	3,113,079	5,895,915	52,966,447	11,326,723	13,644,977	1,249	2,137,949	2,404	7,749	1,773,203	194,355	7,457,915			
1901	787,657	20,491	7,634	6,095	25,086	18,564	6,447,433	3,277,964	6,414,019	55,899,019	12,788,675	15,010,373	1,225	2,215,229	2,441	7,779	1,786,095	230,346	7,891,654			
1902	807,929	20,655	8,375	6,388	30,293	22,301																
1903	832,505	21,829	8,528	6,748	30,883	19,608																

Victorian Year-Book, 1903.

NEW ZEALAND—Continued.

State.	Year.	Agriculture.													Live Stock.						
		Oats.		Barley.		Maize.		Other Cereals.		Potatoes.		Hay.		Vines.		Green Forage†	Other Tillage.	Horses.	Cattle.	Sheep.	Pigs.
		Acres.	Bushels.	Acres.	Bushels.	Acres.	Bshls.	Acres.	Bsh's.	Acres.	Tons.	Acres.	Tons.	Acres.	Wine, Gallons.	Acres.	Acres.				
NEW ZEALAND.	1873	110,472	3,232,807	22,134	60,1492	1,253	18,795	5,000	75,000	11,617	51,758	48,616	62,187	*	*	25,515	24,131	*	*	*	*
	1874	157,545	5,548,729	16,236	477,162	*	*	*	*	12,154	69,685	62,216	52,202	*	*	196,019	196,019	99,859	494,917	11,704,853	123,921
	1875	168,252	6,357,431	27,656	993,219	*	*	*	*	14,055	71,599	49,537	72,184	*	*	30,883	225,351	*	*	*	*
	1876	150,717	4,707,831	27,079	801,379	*	*	*	*	16,204	86,922	49,760	65,000	*	*	32,459	369,391	*	*	*	*
	1877	190,314	6,029,962	27,713	576,823	*	*	*	*	17,564	91,478	45,090	58,071	*	*	*	440,411	*	*	*	*
	1878	277,547	8,357,50	28,646	709,465	*	*	*	*	17,299	86,186	53,022	64,520	*	*	49,187	443,907	137,768	578,430	13,069,338	207,337
	1879	330,308	12,062,607	57,484	1,751,432	*	*	*	*	22,540	121,800	68,423	89,081	*	*	48,584	437,856	*	*	*	*
	1880	213,007	6,891,251	46,877	1,221,241	2,321	*	*	*	22,530	111,329	54,028	68,710	*	*	51,154	312,914	161,736	698,637	12,985,085	200,083
	1881	243,387	6,924,848	29,808	661,093	*	*	*	*	22,540	121,800	68,423	89,081	*	*	61,431	528,156	*	*	*	*
	1882	319,858	10,570,428	28,146	737,163	*	*	*	*	20,488	104,581	61,054	75,764	*	*	65,496	503,917	*	*	*	*
	1883	262,954	9,231,339	32,907	961,450	4,435	*	*	*	21,102	113,198	73,997	102,649	*	*	83,020	556,179	*	*	13,334,075	*
	1884	354,794	12,360,449	39,793	1,205,906	2,393	*	*	819	21,348	123,504	56,670	79,868	*	*	424,190	177,275	*	*	14,056,266	*
	1885	329,488	8,603,702	34,603	896,816	3,236	*	*	1,507	24,823	113,753	40,304	45,818	*	*	399,692	258,381	187,382	805,461	16,677,445	369,992
	1886	387,225	11,973,295	21,595	558,606	4,720	*	*	10,217	27,683	134,065	57,928	79,013	*	*	416,682	193,191	*	*	*	*
	1887	3 6 474	10,512,119	27,912	760,874	5,732	223,270	11,126	*	25,338	138,060	67,425	100,507	*	*	421,719	186,970	*	*	15,122,133	*
	18 8	367,225	10,977,065	45,027	1,432,537	4,768	207,275	11,693	357,061	26,331	133,682	50,656	71,296	*	*	419,555	174,911	*	*	15,503,233	*
	1889	426,971	13,673,584	42,402	1,342,823	6,253	270,282	15,918	427,160	30,577	159,729	45,889	65,476	*	*	474,204	183,430	*	*	18,117,186	*
	18 9	316,224	9,917,036	32,740	758,835	5,759	238,864	17,146	330,092	32,691	178,121	44,045	62,901	*	*	607,695	248,419	211,400	831,831	18,128,186	308,812
	1891	426,508	11,009,020	24,268	638,685	5,447	238,746	14,282	337,181	27,266	162,046	46,652	67,331	*	*	542,517	179,018	*	*	18,570,52	*
	1892	326,511	9,873,989	24,906	654,231	4,491	171,061	15,918	384,517	18,338	104,173	61,811	83,293	*	*	513,636	196,483	*	851,351	19,380,369	*
	1893	376,646	12,153,038	28,857	724,656	5,116	244,839	16,494	444,136	21,121	126,540	60,740	86,198	*	*	517,747	186,496	*	885,305	20,230,829	*
	1894	351,852	10,221,393	36,519	1,000,612	5,525	232,890	17,708	451,350	25,339	139,869	194,765	78,489	*	*	417,378	188,976	*	964,034	19,826,604	*
	1895	344,788	12,263,540	33,358	1,035,767	13,834	611,200	15,429	446,040	31,997	207,011	257,301	140,934	*	*	467,252	116,168	237,418	1,047,901	19,138,493	239,778
	1896	372,597	11,232,803	29,813	821,506	12,534	503,652	17,352	359,444	29,990	157,529	297,813	161,000	381	*	493,744	144,100	249,732	1,138,572	19,657,954	209,853
	1897	351,819	9,738,391	29,920	709,874	14,837	541,550	11,661	188,998	36,402	121,947	268,896	403,344	264	*	438,864	212,979	252,834	1,209,165	19,673,725	186,027
	1898	417,320	16,511,388	45,671	1,677,906	18,539	813,379	11,904	340,993	38,604	298,561	75,620	151,210†	357	*	431,917	676,220	258,115	1,203,024	19,348,506	193,512
	1899	313,243	16,325,832	48,003	1,585,141	17,429	669,896	12,261	408,792	36,942	232,124	68,294	136,468†	445	*	608,914	550,791	261,931	1,210,439	19,347,346	249,751
	1900	449,534	19,085,837	30,831	1,027,651	14,232	502,697	10,203	345,344	28,524	169,042	68,023	186,046†	522	*	595,840	306,445	266,245	1,256,680	20,186,784	250,975
	1901	405,924	15,045,233	6,514	855,993	12,503	671,834	11,836	280,867	31,259	206,815	62,984	125,968†	543	*	621,867	327,295	279,672	1,361,784	20,233,099	224,024
	1892	483,659	21,766,708	27,921	1,136,232	12,038	607,609	12,916	429,391	31,408	193,267	69,342	138,684†	705	*	205,357	735,502	286,955	1,460,663	20,342,727	193,740
	1893	391,600	15,107,237	34,681	1,160,504	11,156	630,291	14,150	409,825	31,778	208,787	77,167	154,334†	749	*	211,408	783,020	208,714	1,593,547	18,954,553	226,591

Australasian Statistics.

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SUMMARY.

\* record.

† Estimated, the statistics not having been collected.

‡ Not including artificial grass since 1911.

§ Including fallow land for the first time.

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MELBOURNE :

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1904.

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