

VICTORIAN YEAR-BOOK

FOR

1889-90.

(SEVENTEENTH YEAR OF ISSUE.)

BY

HENRY HEYLYN HAYTER, C.M.G.,

GOVERNMENT STATIST OF VICTORIA;

OFFICER OF THE FRENCH ORDER OF PUBLIC INSTRUCTION;

CHEVALIER OF THE ORDER OF THE CROWN OF ITALY;

Honorary Member of the Royal Statistical Society of London, of the Statistical and Social Inquiry Society of Ireland, of the Statistical Association of Tokio, of the Royal Society of Tasmania, and of the Intercolonial Medical Congress of Australasia; Honorary Corresponding Member of the Society for the encouragement of Arts, Manufactures, and Commerce, London, of the Statistical Society of Manchester, of the American Statistical Association (Boston), of the Commercio-Geographical Society of Berlin, of the Geographical Society of Bremen, of the Central Statistical Commission of Belgium, and of the Royal Society of South Australia; Honorary Foreign Member of the Société de Statistique of Paris; Fellow and Honorary Corresponding Secretary for Victoria of the Royal Colonial Institute; Representative Member for Victoria of the International Statistical Institute.

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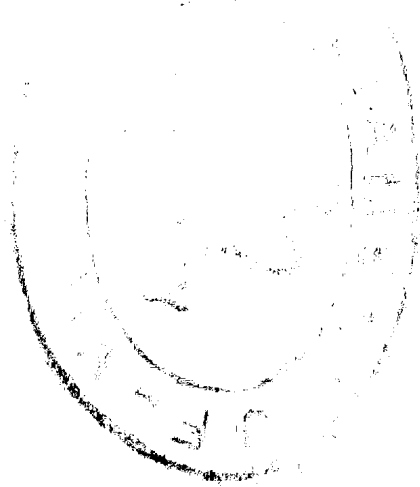
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SEMPUS
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MAP OF VICTORIA

Scale of Miles.
1 2 3 4 5 6 7 8 9 10
1890
by Saml. B. Borrey.



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ERRATA TO VOLUME I.

Page 24, paragraph 52, first line, after "New South Wales" *add* the words "and Queensland."

Page 227, paragraph 375, ninth line, after "shows the" *insert* "annual"; also tenth line, *omit* the words "during the ensuing financial year."

Page 241, table following paragraph 395, *read* price "obtained," *instead of* price "obtainable."

VICTORIAN YEAR-BOOK, 1889-90.

INTRODUCTORY REMARKS.

1. The territory embraced within the limits of the colony of Victoria was originally settled in 1834, the first place occupied being the land abutting on Portland Bay, situated near its western extremity. In the following year a settlement was established on the River Yarra where Melbourne now stands. The colony was then attached politically to New South Wales, of which it was called the Port Phillip District, but in 1851 it was separated from the mother colony, and was permitted to assume the name of Victoria after that of Her present Majesty. Colonization
of Victoria.

2. Up to this time progress had been comparatively slow, the population of the colony at the date of its severance from New South Wales being only about 80,000; but soon afterwards rich deposits of gold were discovered, and the advance was rapid. In less than two years the population had doubled, and in another year the revenue, imports, and exports had increased eightfold. After the lapse of some years the yield of gold diminished considerably, and a period of depression occurred, but as the people became settled on the land and the country was opened up by means of railways, prosperity revived, and this, with some intermissions, resulting generally from the reaction following upon periods of inflation and over speculation, has continued ever since. Subsequent
progress.

3. The following are the dates of some of the principal events connected with the discovery and history* of Victoria:— Principal
events.

1770. April 19th.—Victorian land first discovered by Capt. James Cook, R.N., in command of His Majesty's ship *Endeavour*.—"Point Hicks," believed to be the present Cape Everard in Gippsland.)

1798. June 4th.—Western Port discovered and entered by Surgeon George Bass, R.N.

„ Nov. and Dec.—The existence of a strait between Australia and Tasmania proved by Midshipman Matthew Flinders, R.N., who, accompanied by Bass, sailed round the latter island in the sloop *Norfolk*.

* A detailed statement of the Discovery and Early History of the territory now embraced within the limits of the Colony of Victoria was given in the *Victorian Year-Book*, 1884-5, page 10 *et. seq.*

1800. Dec. 4th to 9th.—Bass's Straits first sailed through from the westward by Lieutenant James Grant, R.N., in H.M.S. *Lady Nelson*, a gun brig of sixty tons burthen, bound from England to Port Jackson. On this occasion Grant discovered and gave the present names to Capes Bridgewater, Nelson, and Sir William Grant, Portland Bay, the Lawrence and Lady Julia Percy Islands, Capes Otway, Patton, Liptrap, etc.
1802. January 5th.—Port Phillip Bay discovered by Acting-Lieutenant John Murray, R.N., in the *Lady Nelson*. Heads entered by the launch on 2nd February, and by the vessel on 15th February.
1802. April 26th.—Port Phillip Bay entered and examined by Flinders, who had been promoted to the rank of Commander. He was not aware that the Bay had been previously discovered by Murray.
1803. Jan. and Feb.—Port Phillip Bay surveyed and the Yarra and Saltwater Rivers discovered by Charles Grimes, Surveyor-General of New South Wales, and party.
- „ October 7th.—Attempt to colonize Port Phillip by Colonel David Collins in charge of a party of convicts.
1804. January 27th.—Port Phillip abandoned by Collins as unfit for settlement.
1824. Decem. 16th.—Hume and Hovell arrived at Corio Bay, having travelled overland from Sydney.
1826. Attempt made early in the year to colonize Western Port, on its eastern side, near the site of the present township of Corinella, by Captain S. Wright, of H.M. 3rd Regiment, the Buffs, in charge of a party of convicts. This expedition was sent from New South Wales in consequence of a report that the French contemplated a settlement on the south coast of Australia. This apprehension having been found to be groundless, and the locality being sterile and scrubby, the establishment was withdrawn early in 1828.
1834. Novem. 19th.—Permanent settlement founded at Portland Bay by Edward Henty.
1835. May 29th.—John Batman arrived in Port Phillip and made a treaty with the natives for a grant of 600,000 acres of land. This treaty was afterwards disallowed by the Imperial Government.
- „ August 28th.—John Pascoe Fawcner's party sailed up the Yarra in the *Enterprise* and founded Melbourne on the site previously selected by Batman. (Fawcner followed shortly after, and landed on the 18th October.)
1836. April to Oct.—Major (afterwards Lieutenant-Colonel Sir) Thomas Livingstone Mitchell made extensive explorations in the Port Phillip District, the western portion of which he named Australia Felix.
- „ Septem. 29th.—Regular Government established under Captain William Lonsdale, who was sent from Sydney to act as Resident Magistrate of the Port Phillip District.
1837. March 2nd.—Governor Sir Richard Bourke arrived from Sydney and gave the name of Melbourne to the metropolis of the new settlement.
- „ June 1st.—First sale of Crown lands took place in Melbourne. Average price of half-acre town lots, £35.

1838. Septem. 12th.—First census of the colony. Population enumerated, 3,511, viz., 3,080 males and 431 females.
1839. Septem. 30th.—Mr. Charles Joseph La Trobe arrived from Sydney and took charge of the Port Phillip District under the title of Superintendent. The territory over which he exercised jurisdiction was much smaller than the present colony of Victoria, being bounded on the east and west by the 146th and 141st meridians and on the north by the 36th parallel. (For boundaries of Victoria see paragraph 5 *post.*)
1841. March 2nd.—Second census. Population enumerated, 11,738, viz., 8,274 males and 3,464 females.
1842. August 12th.—Melbourne incorporated as a Town by Act of the Legislature of New South Wales 6 Vict. No. 7.
1846. March 2nd.—Third census. Population enumerated, 32,879, viz., 20,184 males and 12,695 females.
1847. June 26th.—Royal Letters Patent erecting the Town of Melbourne into a City signed at this date; gazetted in Sydney on the 5th February, 1848.
1849. October 12th.—Geelong incorporated as a Town by Act of the Legislature of New South Wales 13 Vict. No. 40.
1851. March 2nd.—Fourth census. Population enumerated, 77,345, viz., 46,202 males and 31,143 females.
- „ July 1st.—Port Phillip separated from New South Wales and erected into an independent colony under the name of Victoria.
- „ July and Aug.—Discovery of gold in Victoria.
1853. February 8th.—Road districts (the origin of the present shires) established by Act 16 Vict No. 40.
1854. April 26th.—Fifth census. Population enumerated 236,798, viz., 155,887 males and 80,911 females.
- „ Nov. and Dec.—Riots on Ballarat gold-field. (Eureka Stockade taken on the 3rd December.)
- „ Decem. 29th.—Municipal institutions (the origin of the present cities, towns, and boroughs) established by Act 18 Vict. No. 15.
1855. Nov. 23rd.—Constitution proclaimed in Victoria.
1856. March 19th.—The ballot as a means of electing members of both Houses of Parliament prescribed by Act 19 Vict. No. 12.
1857. March 29th.—Sixth census. Population enumerated, 410,766, viz., 264,334 males and 146,432 females.
- „ August 27th.—Property qualification of members of the Legislative Assembly abolished by Act 21 Vict. No. 12.
- „ Novem. 24th.—Universal suffrage for electors of the Legislative Assembly made law by Act 21 Vict. No. 33.
1858. Decem. 17th.—Number of members of the Legislative Assembly increased to 78, to be returned for 49 Electoral Districts.
1861. April 7th.—Seventh census. Population enumerated, 540,322, viz 328,651 males and 211,671 females.
- „ October ... Conference, attended by representatives of Victoria, New South Wales, Queensland, and South Australia, met in Melbourne for the purpose of endeavouring to secure uniformity in the collection and compilation of their annual statistics.

1867. February 6th.—Customs tariff imposing import duties on a number of articles with the view of affording protection to native industry came into operation under Act 31 Vict. No. 306.
1869. January 1st.—Property qualification of members and electors of the Legislative Council reduced by Act 32 Vict. No. 334.
1871. April 2nd.—Eighth census. Population enumerated, 731,528, viz., 401,050 males and 330,478 females.
- „ May 17th.—Import duties on many articles increased under Act 35 Vict. No. 400, with the view of affording further protection to native industry.
1875. January 15th.—Conference in Hobart Town, convened for the purpose of endeavouring to secure uniformity in statistical collection and compilation, held its first meeting. Representatives of Victoria, New South Wales, South Australia, and Tasmania attended. Conference closed 26th January.
1876. Novem. 2nd.—Number of members of the Legislative Assembly increased to 86, and boundaries of Electoral Districts altered so as to increase the number to 55, by Act 40 Vict. No. 548.
1878. Decem. 28th.—The Hon. Graham Berry, Premier, and Professor C. H. Pearson, member of the Legislative Assembly of Victoria, with Mr. H. H. Hayter as secretary, started for England on a mission from the Victorian to the Imperial Government, the object being to endeavour to induce the latter to amend the *Victorian Constitution Act* in regard to certain matters (affecting chiefly the relations between the two Houses of the Legislature) in which the Constitution had been found to be unworkable. The mission, which was only partially successful, returned to Victoria about the middle of 1879.
1880. February 6th.—Fortnightly mail contract service between Victoria and England commenced.
- „ October 1st.—First Victorian International Exhibition opened in Melbourne. It was closed 30th April, 1881.
1881. April 3rd.—Ninth census of Victoria and first simultaneous census of all the Australasian Colonies. Population enumerated—in Victoria, 862,346, viz., 452,083 males and 410,263 females; in all the Australasian Colonies, 2,815,924, viz., 1,526,121 males and 1,289,803 females.
- „ Novem. 28th.—Property qualification of members and electors of the Legislative Council further reduced, number of provinces increased to 14, number of members increased to 42, and tenure of seats shortened by Act 45 Vict. No. 702.
1884. February 1st.—Victorian Railways placed under the control and management of three Commissioners, under Act 47 Vict. No. 767.
1884. Decem. 31st.—Patronage in the public service abolished with respect to appointments and promotions, and “a just and equitable system in lieu thereof, which will enable all persons who have qualified themselves in that behalf to enter the public service without favour or recommendation other than their own merits and fitness for the position,” established under Act 47 Vict. No. 773, which Statute also provided for the appointment of a Public Service Board, consisting of three members, to administer its provisions.
1885. December 9th.—Imperial Act constituting a Federal Council of Australasia brought into operation in respect to Victoria by Act 49 Vict. No. 843. First meeting of Federal Council opened in Tasmania, 25th January, 1886.

1887. April 4th.—Conference between representatives of the principal colonies of the Empire and the Imperial Government, summoned chiefly for the purpose of considering questions of defence and postal and telegraphic communication, held its first meeting in London, Victoria sending four representatives. Conference closed 9th May.
1888. January 18th.—Hundredth anniversary of the first settlement in Australia. Governors, ministers, members of Parliament, and corporation officials of all the Australasian Colonies, together with a large number of citizens, proceeded to Sydney to join in celebrating the occasion.
- „ February 1st.—Weekly mail contract service between Australia and England commenced, by means of vessels of the Peninsular and Oriental and Orient services running alternately.
- „ August 1st.—Second Victorian International Exhibition opened in Melbourne. It was closed 31st January, 1889.
- „ August 28th.—First meeting of the Australasian Association for the Advancement of Science. Held in Sydney.
- „ Decem. 22nd.—Number of members of the Legislative Council increased to 48 by Act 52 Vict. No. 995. Number of members of the Legislative Assembly increased to 95, and boundaries of Electoral Districts altered so that their number should be 84, and so that—with a few exceptions—only one member should represent each constituency, by Act 52 Vict. No. 1,008.
1890. January 7th.—Second meeting of Australasian Association for the Advancement of Science. Held in Melbourne.
- „ February 6th.—Australasian Federation Conference, at which representatives from the seven principal Australasian colonies were present, held its first meeting. It was unanimously agreed that the best interests of the Australian colonies would be promoted by their early union under one Legislative and Executive Government; and that the legislatures of the respective colonies should be invited to appoint, during the present year, delegates to a National Australasian Convention, consisting of delegates empowered to report upon a scheme for a Federal Constitution. Conference closed 14th February.
1890. March 3rd.—Conference held in Hobart, convened for the purpose of arranging for the collection and compilation of the returns of the census of 1891, upon a uniform principle, held its first meeting. Representatives of Victoria, New South Wales, South Australia, Tasmania, and New Zealand attended. Conference closed 18th March.

4. Victoria occupies the south-eastern portion of, and is the southernmost colony* on the Australian continent. 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.

Position of
Victoria.

* In consequence of its position at the extreme south of the Australian continent, Victoria is often mistaken, by English writers and others not well acquainted with Australian geography, for an adjacent colony, which has been misnamed South Australia, the truth being that only a very small part of South Australia is situated further south than even the most northern portion of Victoria.

Boundaries

5. On the north and east Victoria is bounded 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. The southern boundary is formed by the Southern Ocean, Bass's Straits, and the Pacific Ocean.

Area of Vic-toria.

6. Victoria occupies about a thirty-fourth part of the surface of the Australian continent, and contains about 87,884 square miles, or 56,245,760 acres. Great Britain, exclusive of the islands in the British seas, contains 88,006 square miles, and is therefore slightly larger than Victoria.

Areas of Austral-Asian colonies.

7. The area of the Australian continent is estimated to be somewhat under three million square miles; but that area, added to the areas of Tasmania and New Zealand, amounts to nearly three million one hundred thousand square miles. The following are the areas of the different colonies, which, except the area of New Zealand, in which case the official estimate furnished by the colony has been retained, were computed by the late Surveyor-General of Victoria, Mr. A. J. Skene, from the map of Continental Australia compiled and engraved under his direction—the calculations being based on latitude and longitude and the generally-accepted figure of the earth:—

AREAS OF AUSTRALASIAN COLONIES.

	Square Miles.					
Victoria	87,884
New South Wales	309,175
Queensland	668,224
South Australia	903,425*
Western Australia	975,920
Total Australia						2,944,628†
Tasmania	26,375
New Zealand	104,235
Total Australasia						3,075,238

* Inclusive of the Northern Territory, estimated to contain 523,620 square miles.
† Including islands and inland lakes. The area of Australia, as here given, is less by nearly 86,000 square miles, but that of Tasmania is greater by 160 square miles, than the areas derived from the returns furnished officially by the various Governments, which are as follow:—

Victoria .. ..	..	..	..	87,884	Square Miles.
New South Wales .. ..	..	..	..	310,700	..
Queensland .. ..	..	..	..	668,497	..
South Australia .. ..	..	..	..	903,425	..
Western Australia .. ..	..	..	..	1,060,000	..
Total Australia				3,030,506	..
Tasmania .. ..	..	..	..	26,215	..

8. It will be noticed that Victoria is by far the smallest colony on the Australian continent, and the smallest of the group except Tasmania. If the whole continent were to be divided into 100 equal parts, the area of Victoria would embrace 3 such parts, that of New South Wales 10, that of Queensland 23, that of South Australia 30, and that of Western Australia 34. Victoria is thus less than a third of the size of New South Wales, little more than an eighth of that of Queensland, about a tenth of that of South Australia, and less than an eleventh of that of Western Australia.

Area of
Victoria
and other
colonies.

9. It may be mentioned that the area of Australia, Tasmania, and New Zealand is less by 680,764 square miles than the area of the Continent of Europe (3,756,002 square miles), but exceeds by 47,647 square miles the area of the United States, exclusive of the Alaska territory (3,027,591 square miles).

Area of
Australasia,
Europe, and
United
States.

10. The southernmost point in Victoria, and consequently in the whole of Australia, is Wilson's Promontory, which lies in latitude 39° 8' S., longitude 146° 26' E.; the northernmost point is the place where the western boundary of the colony meets the Murray, latitude 34° 2' S., longitude 140° 58' E.; the point furthest east is Cape Howe, situated in latitude 37° 31' S., longitude 149° 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° 58' E., and extends from latitude 34° 2' S. to latitude 38° 4' S., or 242 geographical miles.

Extreme
points on
Victoria.

11. The Melbourne Observatory is a building specially erected for observatory purposes in the Government reserve, on the south side of the River Yarra. According to the latest computation, its latitude is 37° 49' 53" south, and its longitude 144° 58' 32" east.

Position of
Melbourne.

12. Subjoined is a statement of the latitudes and longitudes of the principal towns in, and most prominent points on the coast of, the colony of Victoria, according to the latest information available:—

Latitudes
and longi-
tudes.

LATITUDES AND LONGITUDES OF PLACES IN VICTORIA.

Name of Place.	Latitude S.	Longitude E.	Name of Place.	Latitude S.	Longitude E.
	° ' "	° ' "		° ' "	° ' "
Alexandra ...	37 12	145 43	Ballarat ...	37 33	143 52
Amherst ...	37 8	143 40	Beechworth ...	36 22	146 41
Ararat ...	37 17	142 57	Belfast ...	38 23	142 14
Avoca ...	37 6	143 29	Benalla ...	36 33	145 59

LATITUDES AND LONGITUDES OF PLACES IN VICTORIA—continued.

Name of Place.	Latitude S.		Longitude E.		Name of Place.	Latitude S.		Longitude E.	
	°	'	°	'		°	'	°	'
Buninyong ...	37	39	143	53	Kilmore ...	37	18	144	57
Cape Bridgewater	38	24	141	25	Lakes' Entrance ...	37	53	148	2
Cape Everard ...	37	49	149	17	Maldon ...	37	0	144	5
Cape Howe ...	37	31	149	59	Maryborough ...	37	3	143	44
Cape Liptrap ...	38	55	145	55	Melbourne ...	37	50	144	59
Cape Nelson ...	38	26	141	32	Point Lonsdale ...	38	18	144	37
Cape Otway ...	38	52	143	41	Point Nepean ...	38	18	144	40
Cape Paterson ...	38	41	145	37	Portland ...	38	21	141	37
Cape Schanck ...	38	30	144	54	Pyramid Point ...	38	32	145	14
Cape Woolamai ...	38	54	145	22	Queenscliff ...	38	16	144	40
Castlemaine ...	37	4	144	14	Sale ...	38	6	147	4
Clunes ...	37	18	143	47	Sandhurst ...	36	46	144	17
Colac ...	38	20	143	35	Seymour ...	37	2	145	6
Creswick ...	37	25	143	54	Smythesdale ...	37	39	143	41
Daylesford ...	37	21	144	8	St. Arnaud ...	36	37	143	16
Dunolly ...	36	52	143	44	Stawell ...	37	3	142	47
Echuca ...	38	8	144	46	Talbot ...	37	10	143	42
Geelong ...	38	9	144	22	Wangaratta ...	36	21	146	19
Hamilton ...	37	45	142	1	Warrnambool ...	38	23	142	30
Horsham ...	36	43	142	1	Williamstown ...	37	52	144	55
Inglewood ...	36	35	143	53	Wilson's Promontory	39	8	146	26
Jamieson ...	37	18	146	9					

Positions of
Austral-
asian
capitals.

13. According to the latest and most reliable information, the following are the latitudes and longitudes of the capital cities of the different Australasian colonies, 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 :—

LATITUDES AND LONGITUDES OF CAPITALS OF AUSTRALASIAN COLONIES.

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

General
description
of Victoria.

14. Victoria is traversed, with more or less regularity, throughout its entire length from east to west by a chain of mountains and lesser hills completely dividing it into two parts, and known as the Dividing

Range. The summit of this range runs generally at a distance of 60 or 70 miles from the coast. The streams to the north of it flow towards the River Murray, and those to the south of it towards the sea. The eastern part of the range, which divides the Gippsland district from that of the Murray, is named the Australian Alps; and that part which separates the county of Ripon from that of Borung, and extends into the county of Kara Kara, is named the Pyrenees. The higher peaks of the Dividing Range are covered with snow for several months in the year. The mountainous country is, for the most part, densely wooded to the very summits with fine timber, but the peaks above the winter snow-line are quite bare, or only partially covered with dwarfed trees or shrubs. From near Kilmore eastward, a distance of 200 miles, the mountains are generally so steep and inaccessible as to present a considerable barrier between the parts of the colony north and south of them, and they can only be traversed with great labour by the few passes that exist. From Kilmore westward the range rapidly dwindles, so that, although presenting in places points of considerable height—such as Mount William and Mount Macedon—it is easily crossed. From Mount Macedon it becomes, as it stretches away to the Western district, a chain of hills, in parts only of considerable altitude, and offering no serious obstructions to crossing in very many places. That portion of the Murray basin commencing at Wodonga on the east as a point, and extending in the form of a regular triangle to a width of 200 miles along the western boundary of Victoria, has almost a flat surface, with a very slight inclination towards the Murray. The remaining country north and south of the Dividing Range and its spurs is moderately undulating; it is in some parts destitute of timber, but closely wooded in others. Besides the main Dividing Range, there are also other ranges extending in different parts of the country, many of them being spurs of the main chain; the highest peaks, however, are found in the Dividing Range and its offshoots between St. Clair and the eastern boundary of Victoria.

15. The highest mountain in Victoria is the Bogong Range, Mountains. situated in the county of that name, 6,508 feet above the sea level; * the next highest peaks are Mount Feathertop, 6,303 feet; Mount Hotham, 6,100 feet; the Pilot Range, 6,020 feet; and Mount Cope, 6,015 feet; all situated in the same county; also the Cobberas, 6,025 feet, situated in the county of Tambo. Other lofty peaks are

* The highest mountain on the Australian continent is Mount Kosciusko, in New South Wales, one peak of which was set down by Neumayer as 7,175 feet, and by Mueller as 7,171 feet in height; a recent observer, however (Dr. Lendenfeld, of the Australian Museum, Sydney), states he found the height of this peak to be 7,256 feet.

Mount Buller, 5,934 feet; Gibbo Range, 5,764 feet; Mount Wills, 5,758 feet; Mount Howitt, 5,715 feet; Mount Buffalo, 5,645 feet; The Twins, 5,575 feet; Mount Tamboritha, 5,381 feet; Mount Wellington, 5,363 feet; Mount Cobbler, 5,342 feet; Mount Kent, 5,129 feet; and Mount Torbreck, 5,001 feet. So far as is at present known by observation, there are at least fifteen peaks between 5,000 and 6,000 feet high, and thirteen between 4,000 and 5,000 feet high; it is known, moreover, that there are many peaks rising to upwards of 4,000 feet above the level of the sea, whose actual heights have not yet been determined.*

Rivers.

16. The rivers in Victoria are, for the most part, inconsiderable; many of them are liable to be partially dried up during the summer months, so as to be reduced at that season to mere chains of pools or waterholes. With the exception of the Yarra, on the banks of which the metropolis is situated; the Goulburn, which empties itself into the Murray about eight miles to the eastward of Echuca; the La Trobe and the Mitchell, with, perhaps, a few other of the Gippsland streams; and the Murray itself, not one of them is navigable except by boats. As, however, they drain the watershed of large areas of country, some have already been, and others will ultimately be, made feeders to permanent reservoirs for the purposes of irrigation, gold washing, and manufactures. The Murray, which forms the northern boundary of the colony, is the largest river in Australia. Its total length is 1,300 miles, for 980 of which it flows along the Victorian border.† The names and lengths of the other principal Victorian rivers are as follow:—The Goulburn, 345 miles; the Snowy, 300 miles, 180 of which are in New South Wales; the Glenelg, 281 miles; the Wimmera, 228 miles; the Loddon, 225 miles; the Mitta Mitta, 175 miles; the Avoca, 163 miles; the Hopkins, 155 miles; the Campaspe, the Wannon, and the Yarra Yarra, each 150 miles; the Ovens, 140 miles; the La Trobe, 135 miles; the Tambo, 120 miles; the Mitchell, 80 miles.‡

Lakes.

17. Victoria contains numerous salt and fresh water lakes and lagoons; but many of these are nothing more than swamps during dry seasons. Some of them are craters of extinct volcanoes. Lake Corangamite, the largest inland lake in Victoria, covers 90 square miles, and is quite salt, notwithstanding it receives the flood waters of

* For a complete list of the mountains and hills in Victoria, with the approximate heights of the most important peaks, see *Victorian Year-Book, 1887-8*, paragraph 12.

† From the source of its longest tributary, the Darling, to the Murray mouth, the total length of this river is 2,345 miles.

‡ For a complete list of the rivers in Victoria, with their approximate lengths, see *Victorian Year-Book, 1887-8*, paragraph 13.

several fresh-water streams. It has no visible outlet. Lake Colac, only a few miles distant from Lake Corangamite, is a beautiful sheet of water, $10\frac{1}{2}$ square miles in extent, and quite fresh. Lake Burrumbeet is also a fine sheet of fresh water, embracing 8 square miles. The Gippsland lakes—Victoria, King, and Reeve—are situated close to the coast, and are only separated from the sea by a belt of sand through which a permanent entrance navigable for vessels has recently been made. Lake Wellington, the largest of all the Gippsland lakes, lies more inland than the others, and is united with Lake Victoria by a narrow channel, called McLellan's Straits. South-east of Geelong is Lake Connearre, connected with the sea at Point Flinders.*

18. The principal inlet on the coast of Victoria is Port Phillip Bay, ^{Bays, inlets, etc.} which is an inland sea of an extreme length of over 30 geographical miles from north to south, and of about 35 from east to west. The entrance is about two miles across, and a short distance within it are sandbanks and islands, which, whilst they act as an excellent breakwater to the shipping, do not, as there are well-buoyed channels between them, seriously obstruct the navigation. In Port Phillip Bay are two minor bays, viz., Hobson's Bay, which is the anchorage of the port of Melbourne, and the point at which the River Yarra, on which Melbourne is situated, empties itself; and Corio Bay, which is the anchorage of the port of Geelong. The next inlet in point of natural importance to Port Phillip is Western Port, in part of which there is anchorage with good shelter in all winds. Corner Inlet, and the adjacent harbour of Welshpool, situated to the north of Wilson's Promontory in Gippsland, also possess considerable capabilities. The other bays and inlets are either roadsteads affording only partial shelter, or are small in extent, or so obstructed by sandbanks as to be suitable for small vessels only. Some of the roadsteads are now being improved by the construction of breakwaters. Towards the eastern part of the coast is a sandy beach, extending for 90 miles without an inlet, except one leading into the Gippsland lakes, which was formerly liable to be closed at intervals; extensive works have, however, been carried on at this spot, and a new entrance has been formed which there is every reason to believe will be permanent.†

19. A glance at the map of Victoria will show that the coast line ^{Capes, points, etc.} projects considerably to the south in two directions, one being to the west and the other to the east of the entrance to Port Phillip Bay.

* For a complete list of the lakes in Victoria, with their approximate areas, see *Victorian Year-Book*, 1887-8, paragraph 14.

† For a complete list of the bays and inlets on the coast of Victoria, with their positions, see *Victorian Year-Book* 1887-8, paragraph 15.

The extreme point of the western projection is Cape Otway, that of the eastern one Wilson's Promontory, the latter being, as has been already stated, the southernmost point on the continent of Australia. Besides these, there is a projection of less extent to the west of Portland Bay, the southernmost point of which is Cape Nelson. Other important points are Capes Bridgewater and Sir William Grant, situated upon the same promontory as Cape Nelson; Points Lonsdale and Nepean, the first at the western, the second at the eastern, side of the entrance to Port Phillip Bay; Cape Schanck, situated between Port Phillip and Western Port; Cape Liptrap, situated between Western Port and Wilson's Promontory; Cape Everard—the Point Hicks of Captain Cook—situated midway between the mouth of the Snowy River and Cape Howe; and Cape Howe itself, being the point at which the dividing line between Victoria and New South Wales meets the sea.*

Climate.

20. From its geographical position, Victoria enjoys a climate more suitable to the European constitution than any other colony upon the continent of Australia, resembling that of the more favoured portions of Southern Europe. In the thirty-one years ended with 1889, the maximum temperature in the shade was $111\cdot2^{\circ}$ Fahr., viz., on the 14th January, 1862; the minimum was 27° , viz., on the 21st July, 1869; and the mean was $57\cdot4^{\circ}$. 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 $178\cdot5^{\circ}$, viz., on the 14th January, 1862. The mean atmospheric pressure, noted at an Observatory 91 feet above the sea-level, was, in the twenty-six years ended with 1889, $29\cdot94$ inches; the average number of days on which rain fell was 131, and the average yearly rainfall was $25\cdot56$ inches.†

* For a complete list of the capes, points, etc., along the coast of Victoria, with their positions, see *Victorian Year-Book* 1887-8, paragraph 16.

† For further information respecting the meteorological observations, not only for Melbourne, but also for other parts of the colony, see part Vital Statistics, *post*. A chapter on Meteorology and Climate was given in the *Victorian Year-Book* 1874.

PART I.—CONSTITUTION AND GOVERNMENT.

21. The *Constitution Act* of Victoria* originally provided for the establishment of two Houses of Parliament, viz., the Legislative Council or Upper House, to consist of 30 members elected for ten years, representing six districts, and a Legislative Assembly or Lower House, to consist of 60 members elected for five years, representing thirty-seven districts; a property qualification to be necessary for the members and electors of both Houses. Since the passing of the *Constitution Act* the number of members of the Council has been increased to 48, elected for six years, representing 14 provinces; and the number of members of the Assembly has been increased to 95, elected for three years (unless sooner dissolved by the Governor), representing 84 districts; the property qualification of the latter has been entirely abolished as regards both members and electors; that of the former has been reduced, and is at present as follows:—For members, the possession of freehold property of an annual value of £100; for electors, the possession of freehold property rated in some municipal district at not less than £10 per annum, or occupation of leasehold property of not less than a £25 annual rating. Graduates of universities within the British dominions, barristers and solicitors, legally qualified medical practitioners, officiating ministers of religion, certificated schoolmasters, and officers in the army and navy—when not on active service, also have votes for the Legislative Council.

Parliament
of Victoria

22. Judges, ministers of religion; persons holding any office or place of profit under the Crown, or employed in the Public Service for salary, wages, or emolument (except responsible ministers); persons who are interested in any bargain or contract entered into on behalf of Her Majesty; uncertificated bankrupts and insolvents; and persons attainted of treason, or convicted of any felony or infamous offence within any part of Her Majesty's dominions, are incapable of being elected or continuing to be members of either House of Parliament; neither can the same person be a member of the two Houses at the same time.

Persons in-
capable of
becoming
members.

23. The *Constitution Act* provides for the sum of £14,000 being set aside annually for the payment of nine responsible ministers, of whom not more than eight may be members of the Assembly, but at

Number of
and pro-
vision for
ministers.

* Imperial Act, 18 and 19 Vict., Cap. 55, Schedule I. For an account of the Victorian Constitution, see *Victorian Year-Book*, 1883-4, page 610 *et seq.*

least four must be members of either the Council or Assembly. A subsequent Act* provides for the appointment of an additional minister, at a salary of £1,500 per annum.

Members
may not
accept
offices of
profit.

24. No person who is a member of either House of Parliament or has not ceased to be one for a period of six months may accept any office or place of profit under the Crown, except the office of Responsible Minister, Judge of the Supreme Court, President or Chairman of Committees of the Legislative Council, or Speaker or Chairman of Committees of the Legislative Assembly. Should he do so he is liable to forfeit the sum of £50 for every week he may hold such office or place, together with full costs of suit to any person who may sue for the same.

Payment of
members.

25. Members of the Legislative Council receive no payment for their attendance in Parliament, but every member of the Legislative Assembly who is not in receipt of any official salary or annual payment from the State, is entitled to receive reimbursement of his expenses in relation to his attendance in the discharge of his Parliamentary duties at the rate of £300 per annum, out of the consolidated revenue.

Electors'
rights.

26. The names of ratepayers in municipal districts are placed on the rolls of the Legislative Assembly—also on those of the Legislative Council if qualified—without action on their own part, but non-ratepayers, or property holders residing in another electorate and not enrolled as ratepayers, wishing to vote for either House of Parliament must take out “electors’ rights,” for which they are required to pay the sum of sixpence. These “rights” must be renewed every three years.

Plural
voting.

27. Persons paying rates in several provinces or electoral districts may vote in all such at the same election, but no one may vote more than once in the same province or electoral district, although he may have several properties rated independently therein.

Franchise
extended
to Police.

28. By the *Police Franchise Act* 1888 (52 Vict. No. 969), assented to on the 20th November, 1888, members of the police force were for the first time allowed to vote at elections of members of either House of Parliament.

Foreigners
must be
naturalized

29. Foreigners who are not naturalized or denizen subjects of Her Majesty, and have not resided in Victoria for 12 months previous to the 1st January, or 1st July of any year, are not qualified to vote at elections of members of either House of Parliament.

* *The Officials in Parliament Act* 1883 (47 Vict. No. 780).

30. Males under 21 years of age and females of any age are not qualified to be returned as members of, or to vote at elections for, either House of Parliament. No one can be elected for the Upper House until he is of the full age of 30 years.

Males must be of age. Females not qualified.

31. By the *Legislative Council Amending Act* 1888 (52 Vict. No. 995), passed on the 22nd December, 1888, it was provided that the number of members of the Legislative Council should be increased from 42 to 48, and accordingly the election of the six new members took place, as specially provided for, in September, 1889. The number and boundaries of the provinces not being changed, 8 provinces will be represented by 3 members each, and 6 provinces will be represented by 4 members each.

Upper House — members increased in.

32. By the *Electoral Act Amendment Act* 1888 (52 Vict. No. 1008), which as to registration of electors came into operation at its passing, viz., on the 22nd December, 1888, and in all other respects at the next subsequent dissolution of the Legislative Assembly, viz., on the 11th March, 1889, the number of electoral districts was increased from 55 to 84, and the number of members from 86 to 95.

Lower House — members increased in.

33. Of the present electoral districts for the Legislative Assembly, 11 are represented by 2 members each, and 73 by 1 member each. Since the special election held in September, 1889, six of the electoral provinces for the Council have been represented by 4 members each, and eight by 3 members each.

Members to each district.

34. The number of electors on the rolls of both Houses of the Legislature in 1888-9 and 1889-90 is shown in the following table :—

Electors on the rolls.

ELECTORS ON THE ROLLS, 1889 AND 1890.

Description of Roll.	Legislative Council.		Legislative Assembly.	
	1888-9.	1889-90.	1888-9.	1889-90.
Ratepayers' Roll	137,450	150,739	207,341	218,958
General Roll	1,112	1,077	36,389	34,631
Total	138,562	151,816	243,730	253,589

35. The following table shows the names of the electoral provinces, their estimated populations, and the number of electors on the rolls of each province in 1889-90 ; also, at the date of the special election for the Legislative Council held in September, 1889, for the 6 new members, the number of electors on the rolls of the four provinces in which the election was contested, and the number and percentage of electors who recorded their votes :—

Population, electors, and voters, Legislative Council.

LEGISLATIVE COUNCIL.—POPULATION, ELECTORS, AND VOTES POLLED.

Electoral Provinces.	Estimated Population 1889.	Number of Members.	Electors on the Rolls 1889-90.	Electors in Contested Provinces at the Special Election, 1889.		
				On the Rolls.	Who Voted.	
					Number.	Percentage.
Melbourne ...	113,000	4	17,253	...	†	...
North Yarra ...	117,000	3	15,012	...	...	...
South Yarra ...	132,000	4	19,543	17,675	8,283	46·86
Southern ...	85,000	3	13,928	...	...	...
South-Western ...	57,000	3	6,848	...	...	...
Nelson... ..	51,000	3	5,204	...	...	...
Western ...	50,609	3	6,837	...	...	...
North-Western ...	80,000	4	11,703	10,728	4,350	40·55
Northern ...	68,000	4	8,810	8,501	5,881	69·18
Wellington ...	76,000	4	8,805	...	†	...
North-Central ...	52,000	3	5,439	...	...	...
North-Eastern ...	74,000	3	9,448	...	...	...
Gippsland ...	68,000	4	8,922	8,337	2,784	33·39
South-Eastern ...	68,000	3	14,064	...	...	...
Total ...	1,091,609*	48	151,816	45,241	21,298	47·07

36. At the last eleven biennial elections for the Legislative Council the proportion of electors who have recorded their votes in provinces where the election has been contested has rarely been much greater than half, and on five out of eleven occasions has been less than half. The following are the proportions at each election :—

PROPORTION OF VOTERS AT ELECTIONS FOR THE LEGISLATIVE COUNCIL, 1870 TO 1889.

Proportion of Electors of Contested Provinces who voted. Per cent.			Proportion of Electors of Contested Provinces who voted. Per cent.		
Year of Election.			Year of Election.		
1870 ...	...	46·65	1882 ...	...	55·13
1872 ...	...	54·07	1884 ...	...	56·70
1874 ...	...	45·99	1886 ...	...	48·04
1876 ...	...	51·16	1888 ...	...	51·76
1878 ...	...	45·61	1889 ...	...	47·07
1880 ...	...	57·18			

37. The general election for the Legislative Assembly held on the 28th March, 1889, was the first held under the new *Electoral Act*;† all the seats were contested except ten. Returns have been received from all the districts, and these show that nearly 67 per cent. of the electors in contested districts voted. The following table shows for each electoral district the population, number of members, total number of electors and number and proportion of electors who recorded their votes at the general election referred to :—

* This estimate refers generally to about the middle of August. The estimated total population of Victoria at that date was 1,107,800, or 16,200 more than this number. The total population includes inmates of ships, charitable institutions, gaols, etc., who are not taken into account in the municipal estimates, from which the above figures have been derived.
† Uncontested. ‡ 52 Vict. No. 1,008. See paragraph 32 ante.

LEGISLATIVE ASSEMBLY.—POPULATION, MEMBERS, ELECTORS, AND VOTES POLLED.

Electoral Districts.	Estimated Population 1889.	Number of Members.	Number of Electors on the Rolls 1889-90.	Electors who voted at the General Election, 28th March, 1889.	
				Total Number.	Percentage of Number on the Rolls.
Albert Park	11,876	1	2,174	1,274	60·67
Anglesey	13,180	1	3,242	2,022	64·64
Ararat	9,432	1	1,865	1,210	66·08
Ballarat East	13,584	1	3,676	2,425	67·44
Ballarat West	24,529	2	5,725	4,558	80·19
Barwon	9,769	1	2,065	*	*
Benalla and Yarrawonga ...	11,715	1	2,827	1,885	67·49
Benambra	9,132	1	1,977	1,227	65·23
Bogong	9,031	1	1,724	1,193	67·21
Borong	10,709	1	2,217	1,629	72·43
Bourke East	10,088	1	2,451	1,603	73·36
Bourke West	9,303	1	2,216	*	*
East Bourke Boroughs ...	36,662	2	8,960	4,535	63·30
Brighton	13,767	1	3,412	1,924	66·09
Carlton	15,503	1	3,477	2,294	71·82
Carlton South	12,185	1	2,677	1,916	70·21
Castlemaine	16,620	2	3,328	2,672	77·05
Clunes and Allandale ...	10,044	1	2,284	1,960	81·63
Collingwood	29,273	2	6,259	4,108	68·87
Creswick	8,039	1	1,998	1,786	84·36
Dandenong and Berwick ...	12,667	1	3,909	1,834	54·26
Daylesford	9,492	1	2,246	*	*
Delatite	12,601	1	2,664	1,342	54·09
Donald and Swan Hill ...	11,521	1	2,212	1,338	62·12
Dundas	9,725	1	2,101	1,179	54·91
Dunolly	10,101	1	2,140	1,570	71·56
Eaglehawk	8,999	1	2,250	1,892	83·64
Eastern Suburbs	15,632	1	3,992	2,287	67·86
Emerald Hill	15,802	1	3,286	2,153	64·40
Essendon and Flemington ...	13,295	1	4,365	2,308	61·45
Evelyn	10,707	1	3,086	1,874	65·99
Fitzroy	28,419	2	5,790	3,602	64·39
Footscray	16,408	1	3,854	2,049	64·92
Geelong	20,383	2	5,193	3,405	67·82
Gippsland Central	11,678	1	2,609	1,599	60·14
Gippsland East	7,462	1	2,269	1,566	67·85
Gippsland North	8,843	1	2,249	1,241	57·94
Gippsland South	10,703	1	2,846	1,532	56·97
Gippsland West	13,551	1	3,820	1,641	45·22
Grant	7,876	1	2,082	1,361	67·61
Grenville	17,562	2	3,752	2,146	55·10
Gunbower	10,715	1	2,493	1,810	73·22
Hawthorn	16,436	1	3,499	2,144	68·54
Horsham	11,250	1	2,401	*	*
Jolimont and West Richmond	11,887	1	2,329	1,328	57·92

* No contest.

LEGISLATIVE ASSEMBLY.—POPULATION, MEMBERS, ELECTORS, AND
VOTES POLLED—*continued.*

Electoral Districts.	Estimated Population 1889.	Number of Members.	Number of Electors on the Rolls 1889-90.	Electors who Voted at the General Election, 28th March, 1889.	
				Total Number.	Percentage of Number on the Rolls.
Kara Kara ...	9,021	1	2,062	*	*
Kilmore, Dalhousie, and Lancefield ...	9,065	1	2,504	1,556	60·40
Korong	9,847	1	2,172	1,587	72·30
Kyneton ...	11,178	1	2,073	1,600	75·83
Lowan ...	10,466	1	2,464	1,649	67·31
Maldon ...	7,760	1	1,736	*	*
Mandurang ...	9,732	1	2,115	1,369	63·94
Maryborough ...	11,541	1	2,397	1,736	71·53
Melbourne ...	11,627	1	3,661	*	*
Melbourne East ...	21,992	2	5,084	4,491	88·25
Melbourne North ...	17,387	1	3,542	2,393	69·20
Melbourne South ...	14,791	1	3,180	2,071	63·47
Melbourne West ...	12,998	1	2,828	2,159	75·99
Mornington ...	14,029	1	4,038	1,327	39·75
Normanby ...	9,182	1	2,172	1,247	58·43
Numurkah and Nathalia ...	11,020	1	2,478	1,368	54·94
Ovens ...	8,032	1	1,767	1,186	67·23
Polwarth ...	9,239	1	2,805	1,606	61·51
Port Fairy ...	7,716	1	1,791	*	*
Port Melbourne ...	12,629	1	2,894	2,052	73·44
Portland ...	8,874	1	1,968	*	*
Prahran ...	14,712	1	3,255	2,194	66·04
Richmond ...	29,877	2	7,465	4,478	62·97
Ripon and Hampden ...	9,818	1	2,231	1,321	58·12
Rodney ...	19,502	2	5,116	3,371	66·70
Sandhurst ...	22,815	2	5,218	3,732	70·70
Sandhurst South ...	10,188	1	2,051	1,624	79·37
Shepparton and Euroa ...	10,104	1	2,224	1,493	65·57
South Yarra ...	16,236	1	2,936	1,785	63·77
St. Kilda ...	17,747	1	3,630	2,167	67·24
Stawell ...	8,883	1	2,431	1,671	70·87
Talbot and Avoca ...	9,432	1	1,908	1,468	73·03
Toorak ...	17,126	1	3,466	*	*
Villiers and Heytesbury ...	10,222	1	2,034	1,282	62·11
Wangaratta and Rutherglen ...	10,116	1	2,623	1,620	66·37
Warrenheip ...	7,731	1	2,095	1,044	49·98
Warrnambool ...	8,083	1	2,025	1,508	78·09
Williamstown ...	13,619	1	3,685	2,322	68·07
Windermere ...	9,066	1	1,474	1,230	81·62
Total ...	1,091,609†	95	253,589	147,129	66·58

* No contest.

† This estimate refers generally to about the middle of August. The estimated total population of Victoria at that date was 1,107,800, or 16,200 more than this number. The total population includes inmates of ships, charitable institutions, gaols, etc., who are not taken into account in the municipal estimates, from which the above figures have been derived.

38. At elections for the Legislative Assembly, close upon two-thirds of the electors have generally recorded their votes in contested districts ; whereas in elections for the Legislative Council, the proportion has been rarely much above half, as has been already shown. The following are the proportions who voted at the last ten general elections of members of the Lower House in districts in which the election has been contested :—

Electors
who voted
Legislative
Assembly.

PROPORTION OF VOTERS AT GENERAL ELECTIONS FOR THE
LEGISLATIVE ASSEMBLY, 1866 TO 1889.

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

39. The population of Victoria at the end of December, 1889, is estimated to have been 1,118,028, and there being 48 members and 151,816 electors for the Upper House, there is 1 member to every 23,292, and 1 elector to every 7·4 of the population. In like manner, there being 95 members of the Legislative Assembly, and 253,589 electors for that House, there is now 1 member to every 11,769, and 1 elector to every 4·4 of the population.

Proportion
of members
and electors
of both
Houses to
population.

40. The proportion of members to electors is 1 to every 3,163 for the Upper House, and 1 to every 2,669 for the Lower House.

Proportion
of members
to electors.

41. The estimated population of the United Kingdom about the middle of 1888 was 37,808,892, and the Upper House consisted of 560 peers. The proportion was therefore 1 peer to every 67,500 of the population. If Victoria were to be represented in the same proportion as far as the Upper House is concerned, that House would consist of no more than 17 members, instead of 48.

Proportion
of peers to
population
of United
Kingdom.

42. The United Kingdom returns 670 members to the Imperial Parliament, viz., 495 for England, 72 for Scotland, and 103 for Ireland. The proportion of members to the population of the United Kingdom was 1 to every 56,431 ; or, for England, 1 member to every 58,617 persons ; for Scotland, 1 member to every 56,626 persons ; and for Ireland, 1 member to every 45,788 persons. If Victoria were to be represented according to population in the same proportion as the United Kingdom, she would, instead of sending 95 members to the Lower House, return only about 20 ; if in the same proportion as

Proportion
of members
of Imperial
Parliament
to popula-
tion.

Representa-
tion to
population
in Victoria
and United
Kingdom.

England, she would return 19; if in the same proportion as Scotland, about 20; and if in the same proportion as Ireland, 24.*

43. With the exception of Western Australia,† all the Australasian colonies possess responsible Government, and an Upper and a Lower House of Parliament.‡ In three of these colonies the members of the Upper House are elected, and in the other three they are nominated by the Governor. The following is a statement of the number of members of that House, and the manner and term of their appointment in each colony, also the number of electors in the three colonies in which the appointment is by election:—

UPPER HOUSE IN AUSTRALASIAN COLONIES.—MEMBERS AND ELECTORS.

Colony.	Number of Members.	Manner of Appointment.	Term of Appointment.	Number of Electors.
Victoria	48	Elected	Six Years§	151,816
New South Wales ...	73	Nominated	Life||	...
Queensland	39	Nominated¶	Life	...
South Australia ...	24	Elected	Eight years§	33,741
Tasmania	18	Elected	Five years	6,135
New Zealand	44	Nominated	Life**	...

44. The following is a statement of the qualification of members of the Upper House in the various colonies. Victoria appears to be the only colony of the group in which a property qualification is necessary:—

* The population of England has been assumed to be 29,015,613, of Scotland 4,077,070, of Ireland 4,716,209.

† In Western Australia, where responsible Government does not at present exist, there is an Executive Council, presided over by the Governor, consisting of 5 official members, appointed by the Imperial Government, and 1 unofficial member. The only legislative body is the Legislative Council, consisting of 26 members, of whom 4 are official members, 5 Crown nominees, and 17 elected for five years. The qualification of an elected member is the possession of £1,000 freehold property; and that of an elector is £100 freehold or £10 household, or the lease of Crown lands to the same amount of annual rental. A Bill is now (July 1890) before the Imperial Parliament providing for the establishment of responsible Government in Western Australia.

‡ For a full account of the constitution of each colony, see *Victorian Year-Book*, 1883-4, Appendix C, and same work, 1884-5, Appendix E.

§ One-third of the members retire by rotation every two years in Victoria, and every three years in South Australia.

|| A member may resign, and he vacates his office by being absent for two successive sessions without leave; by becoming a citizen of a foreign state; by becoming bankrupt or insolvent; by becoming a public contractor or defaulter; or by being attainted of treason, or convicted of felony or any infamous crime.

¶ Four-fifths of the persons nominated must not be holders of any office of emolument under the Crown, except officers of Her Majesty's Sea and Land Forces on full or half pay, or retired officers on pension.

** If a member of this House is absent without leave for two successive sessions, or makes an acknowledgment of obedience or allegiance to any foreign state, or becomes bankrupt or insolvent, or is convicted of certain crimes, his seat thereby becomes vacant.

Upper House in Australasian colonies—Members and electors.

Upper House—Qualification of members.

UPPER HOUSE IN AUSTRALASIAN COLONIES.—QUALIFICATION OF MEMBERS.

Victoria ...	...	At least 30 years of age; a natural born or naturalized subject of Her Majesty; possessed of freehold property in Victoria of the value of £100 per annum.*
New South Wales ...	...	At least 21 years of age; a natural born or naturalized subject of Her Majesty.
Queensland ...	...	At least 21 years of age; a natural born or naturalized subject of Her Majesty.
South Australia ...	...	At least 30 years of age; resident 3 years in the colony; a natural born or naturalized subject; or legal denizen.
Tasmania ...	...	At least 30 years of age; a natural born or naturalized subject of Her Majesty; or a holder of letters of denization or certificate of naturalization.†
New Zealand ...	...	At least 21 years of age; a natural born or naturalized subject of Her Majesty.

45. A property qualification for electors of members of the Upper House exists in the three colonies in which the appointment is by election. The following is a description of the necessary qualifications :—

Upper House—
Qualifica-
tion of
electors.

UPPER HOUSE IN AUSTRALASIAN COLONIES.—QUALIFICATION OF ELECTORS.

Victoria ...	...	At least 21 years of age; possessed of freehold property rated in some municipal district at not less than £10 per annum, or occupying leasehold property of not less than a £25 annual rating; or being a graduate of some university in the British dominions, a barrister, a solicitor, a legally qualified medical practitioner, an officiating minister of religion, a certificated schoolmaster, or an officer of the Army or Navy not on active service.
South Australia ...	...	At least 21 years of age; possessed of a freehold estate of the value of £50, or a leasehold of £20 annual value, with three years to run; or occupying a dwelling-house of £25 annual value.
Tasmania ...	...	At least 21 years of age, and a natural born or naturalized subject of Her Majesty; possessed of a freehold estate of the value of £20 per annum, or a leasehold of £80 per annum; or being a graduate of some university in the British dominions, an associate of arts of Tasmania, a barrister, a solicitor, a legally qualified medical practitioner, an officiating minister of religion, an officer or a retired officer of H. M. Army or Navy not on actual service, or a retired officer of the Tasmanian Volunteer Force.

* Judges of any court in Victoria; ministers of religion; persons attainted of treason, or convicted of felony or infamous offence, and uncertificated insolvents are disqualified from being elected, or continuing to be, members of this House.

† Judges of the Supreme Court; persons holding offices of profit or emolument by the appointment of the Governor in Council (except Responsible Ministers) and contractors on account of the Public Service are not eligible as members.

Upper House and money bills.

46. The Upper House cannot initiate money bills in any of the colonies. In New South Wales it claims the right to alter such bills, but this is not admitted by the Lower House. In South Australia, by a compact between the two Houses, the Upper House can return a money bill with a memorandum of the amendments they suggest. In Tasmania the Upper House has power to reduce, but not to increase the amounts proposed in such bills. In the other colonies, the Upper House cannot alter a money bill, but must either pass or reject it as a whole.

Upper House—Payment of members.

47. In South Australia, members of the Upper House receive £200 per annum for their services; in New Zealand they receive £100 for every session attended if they live more than three miles from the Parliament Buildings, in other cases no payment. In the remaining colonies, members of this House receive no remuneration for their services.

Upper House—Dissolution by the Governor.

48. In South Australia, the Upper House can be dissolved by the Governor, but only in the event of its rejecting the same Bill passed twice by the Lower House, a general election of the latter having intervened between the first and second passings and an absolute majority of the Lower House concurring in the second passing. In the other colonies, the Governor has no power to dissolve the Upper House.

Lower House—Members and electors.

49. In all the Australasian colonies which possess responsible Government the members of the Lower House are elected. The following table shows the number of members, the term for which they are elected, and the number of electors for this House in each colony :—

LOWER HOUSE IN AUSTRALASIAN COLONIES.—MEMBERS AND ELECTORS.

Colony.	Number of Members.	Term for which Elected.	Number of Electors.
Victoria	95	Three years	253,589
New South Wales	137	Three years	285,408
Queensland	72	Five years	72,458
South Australia	54	Three years	62,434
Tasmania	36	Five years	25,312
New Zealand	95*	Three years	175,410

Lower House—Qualification of members.

50. No property qualification is necessary for members for the Lower House in any of the colonies. The following is the necessary qualification :—

* Four of these are Maoris. After the next election the total number of members is to be reduced to 74, viz., 70 European and 4 Maori members.

LOWER HOUSE IN AUSTRALASIAN COLONIES.—QUALIFICATION OF MEMBERS.

Victoria ...	...	At least 21 years of age, and resident in Victoria for the space of two years.*
New South Wales ...	...	At least 21 years of age, absolutely free, and a natural born or naturalized subject of Her Majesty.†
Queensland ...	...	At least 21 years of age, absolutely free, and qualified and registered as a voter in any electoral district.‡
South Australia ...	...	Same qualification as an elector (<i>post</i>).
Tasmania ...	...	At least 21 years of age, and a natural born or naturalized subject of Her Majesty.§
New Zealand ...	...	Same qualification as an elector (<i>post</i>).

51. To entitle a person to be an elector for members of the Lower House of Parliament, a property qualification is not essential in any of the Australasian colonies except Tasmania. A second vote in a different electoral district is, however, in most instances, acquired in respect to property. The following is a statement of the qualification of electors for this House in each of the colonies :—

Lower House—Qualification of electors.

LOWER HOUSE IN AUSTRALASIAN COLONIES.—QUALIFICATION OF ELECTORS.

Victoria ...	...	Any person at least 21 years of age, a natural born or naturalized subject of Her Majesty, not subject to any legal incapacity, and having resided in Victoria for the space of one year, may vote by virtue of being included in the lists of ratepaying electors, or by virtue of being the holder of an “elector’s right,” but no person may vote twice in the same electoral district at one election.
New South Wales ...	...	Any person at least 21 years of age, a natural born or naturalized subject of Her Majesty, is entitled to be placed on the roll of electors either in respect to residence or property.
Queensland...	...	Any person at least 21 years of age, absolutely free, a natural born or naturalized subject of Her Majesty, and being a resident in any electoral district for a period of six months, is entitled to be placed on the roll of electors either in respect to residence or property.
South Australia ...	...	Any person at least 21 years of age, a natural born or naturalized subject of Her Majesty, untainted by crime, and having been on the electoral roll of his district for six months prior to the election is entitled to vote.

* Members of the Legislative Council, judges of any court in Victoria, ministers of religion, persons attainted of treason, or convicted of felony or nefarious crime, and uncertificated insolvents are disqualified from sitting or voting in this House.
† No person can be a member of this House who is a member of the Upper House, who holds any office of profit under the Crown, during pleasure or for a term of years, or who is interested in any contract for or on account of the Public Service.
‡ Members of the Upper House, ministers of religion, holders of an office of profit under the Crown (except Responsible Ministers and two other officers to be named by the Governor in Council), Crown pensioners (except officers in the Army or Navy) are incapable of being elected for this House.
§ Judges of the Supreme Court, persons holding offices of profit or emolument under the Crown (except Responsible Ministers), and contractors on account of the Public Service are not eligible as members.

LOWER HOUSE IN AUSTRALASIAN COLONIES.—QUALIFICATION OF ELECTORS.—*continued.*

Tasmania ...	...	An elector must be at least 21 years of age, a natural born or naturalized subject of Her Majesty, and must be the owner or occupier of property of any value, as shown on the assessment roll, or must be in receipt of income, salary, or wages of not less than £60 per annum, of which £30 must be received during the six months prior to the claim to vote being sent in.
New Zealand	...	For European representation:—Any male 21 years of age (not a Maori), if resident one year in the colony, and six months in an electoral district, is entitled to be placed on the register of voters. Freehold property, £25 in value, held for six months before registration entitles an adult male to register, if not already registered, under the residential qualification. For a Maori to be placed on the register it is necessary he should be possessed of a £25 freehold under Crown title, or be on a ratepayers' roll. For Maori representation:—Every Maori may vote for the district in which he resides without registration.

NOTE.—In most, if not all the colonies, lunatics, paupers, and criminals are disqualified from voting. In Victoria the police have recently been admitted to the franchise, but it is believed this privilege is not accorded to them in the other colonies.

Lower House—
Payment of
members

52. In Victoria and New South Wales each member of the Lower House is entitled to receive £300 per annum in reimbursement of expenses incurred in the discharge of his Parliamentary duties. In South Australia each member receives £200 per annum for his services. In New Zealand each member receives £100 per session for his services; also, in consideration of necessary expenses incurred, £25 per session if he lives within three miles, or £50 if he lives beyond that distance from the Parliament buildings.

Lower House—
Dissolution
by the
Governor.

53. In all the colonies the Lower House of Parliament can be dissolved at the pleasure of the Governor. In such cases His Excellency acts generally according to the advice of Ministers, but there are instances in which their advice has been disregarded and a dissolution has been refused.

Females
cannot be
elected, or
vote at
elections.

54. Females can neither be elected as members nor vote for the election of members of either House of Parliament in any of the Australasian colonies.

Members,
electors,
etc., in Aus-
tralasian
colonies.

55. In the following table a summary is given for each Australasian colony, except Western Australia, of the number of inhabitants at the end of 1889; the number of members and electors for the Lower House of Parliament in 1890; the proportion of inhabitants to a member, of inhabitants to an elector, and of electors to a member; also the percentage of electors who voted at the last general election held in each colony:—

LOWER HOUSES OF PARLIAMENT IN AUSTRALASIAN COLONIES.—
MEMBERS, ELECTORS, AND VOTES POLLED.

Colony.	Inhabitants at end of 1889.	Lower House, 1890.					Last General Election.	
		Mem- bers.	Electors.	Inhabi- tants to a Member.	Inhabi- tants to an Elector.	Electors to a Member.	Year.	Percentage of Electors who voted.
Victoria	1,118,028	95	253,589	11,769	4·41	2,669	1889	66·58
New South Wales	1,122,200	137	...	8,191	...	...	1889	59·09*
Queensland ...	406,658	72	73,957	5,648	5·50	1,027	1888	73·92
South Australia...	324,484	54	69,811	6,009	4·64	1,293	1890	55·09
Tasmania ...	151,472	36	26,054	4,208	5·81	724	1886	70·88†
New Zealand ‡ ...	620,279	91	175,410	6,816	3·54	1,928	1887	67·20

56. In proportion to population Victoria has a smaller number of representatives in the Lower House of Parliament than any other Australasian colony, or than Greece or Servia, but a larger number than any other country. New South Wales comes next to Victoria, but is more largely represented than Greece or Servia. All the other Australasian colonies are more largely represented than any other countries. By the following table,§ in which the countries are arranged according to the proportion of representatives they respectively have, the country least represented is shown to be the United States of America, and the next least is Brazil:—

Parliamen-
tary repre-
sentation
in various
countries.

PARLIAMENTARY REPRESENTATION IN VARIOUS COUNTRIES.

Country.	Number of Inhabitants. ||	Lower House of Parliament.	
		Number of Re- presentatives.	Inhabitants to a Repre- sentative.
Tasmania	151,472	36	4,208
Queensland	406,658	72	5,648
South Australia ...	324,484	54	6,009
New Zealand ¶ ...	662,280	95	6,971
Greece	1,979,453	245	8,079
New South Wales ...	1,122,200	137	8,191
Servia	1,810,606	160	11,316
Victoria	1,118,028	95	11,768
Uruguay	632,250	53	11,929
Norway	1,806,900	114	15,850
Denmark	1,969,039	102	19,304

* Or 60·10 if informal votes be counted.

† Estimated.

‡ Exclusive of Maori inhabitants and Maori members, the former of whom number 42,000, and the latter 4.

§ This table has been compiled from official documents, many of the figures having been taken from a return prepared for the Government of Brazil, by Mr. J. P. Favilla Nunes, and published in Rio de Janeiro, 1889.

|| Some of the populations in this column differ somewhat from those given in other portions of this work.

¶ In the population of New Zealand, 42,000 Maoris, and in the number of representatives four Maoris are included. The figures, therefore, do not agree with those in the last table which are exclusive of Maoris.

PARLIAMENTARY REPRESENTATION IN VARIOUS COUNTRIES—*contd.*

Country.	Number of Inhabitants.*	Lower House of Parliament.	
		Number of Re- presentatives.	Inhabitants to a Repre- sentative.
Chile	2,526,969	126	20,055
Switzerland	2,940,602	145	20,280
Canada	4,406,640	215	20,496
Sweden	4,717,189	222	21,248
Bavaria	5,284,778	159	33,237
Hungary	16,570,146	453	36,579
Roumania	5,376,000	145	37,075
Argentine Republic	3,435,286	86	39,945
Spain	17,226,254	431	39,968
Venezuela	2,121,988	52	40,807
Belgium	5,909,975	132	44,772
Mexico	10,447,974	227	46,026
Holland	4,172,971	86	48,523
Italy	28,459,628	508	56,022
United Kingdom	37,808,892	670	56,431
Colombia	3,878,600	66	58,766
Prussia	27,279,111	432	63,146
Austria	23,070,688	353	65,356
France	38,218,903	584	65,443
Brazil	14,002,335	125	112,019
United States	56,785,456	334	170,016

Municipal
govern-
ment.

57. Municipal or local government is almost universal throughout Victoria, about eighteen-nineteenths of its whole area being divided into urban or rural municipalities. The former are called *cities, towns,* and *boroughs,* and the latter *shires.* They are regulated under the *Local Government Acts* (28 Vict. No. 506, and 47 Vict. No. 786), each municipality being a body corporate, with perpetual succession and a common seal, and capable of suing and being sued, and of purchasing, holding, and alienating land. The cities, towns, and boroughs now number 59, and the shires 130. They have power to levy rates, and are also subsidized by the State. Their peculiar functions are to make, maintain, and control all streets, roads, bridges, ferries, culverts, watercourses, and jetties within their respective boundaries; also to regulate under proper by-laws the markets, pounds, abattoirs, baths, charitable institutions, and the arrangements for sewerage, lighting, water supply, prevention of fire, and carrying on of noxious trades.

Cities,
Towns, and
Boroughs.

58. A borough must not be of a greater area than nine square miles,† and, on being constituted, must have a population of inhabitant householders of not less than three hundred. No point within its

* See footnote (II) on page 25.
† Or 5,760 acres. Notwithstanding this proviso, four boroughs have larger areas, viz., Sandhurst, with 7,900 acres; St. Arnaud, with 6,355 acres; Stawell, with 5,996 acres, and Port Fairy, with 5,902 acres.

limits must be more than six miles distant from any other point. Any borough having a gross revenue of not less than £10,000, may be declared by the Governor in Council a town, and any one having a gross revenue of not less than £20,000, may be declared by the Governor in Council a city.

59. Portions of country containing rateable property capable of Shires. yielding, upon a rate not exceeding one shilling in the pound on the annual value thereof, a sum of £500, may be proclaimed as shires.

60. The Governor in Council may divide any municipal district into any number of subdivisions not exceeding eight. Sub-division
of Districts.

61. The number of councillors in a municipality is fixed by the Governor in Council. It must by the Statute be some multiple of three, and must not be less than 6 or more than 24. The number is usually 9. If the district is subdivided, the number of councillors is 3 for each subdivision. Male persons liable to be rated in respect of property of the rateable value of £20 at least in any municipal district are qualified to hold the office of councillor. Being a contractor or the holder of any office of profit under the council, being an uncertificated or undischarged bankrupt or insolvent, or being convicted or attainted of felony, perjury, or any infamous crime, renders a person incapable of being, or continuing to be a councillor. The election of councillors takes place annually. A third part of the councillors retires each year by rotation, but retiring councillors may be re-elected. Municipal
Councillors

62. The councillors elect their own chairman, who, in the case of boroughs, is called the mayor; in the case of shires, the president. The chairman becomes a justice of the peace, by virtue of his position during the time he holds office and one year longer. Chairman of
Council.

63. Every person (male or female) 21 years of age or upwards, liable to be rated in respect of property within a municipal district, is entitled to be enrolled as a voter, provided the rates on such property have been fully paid. Municipal
electors.

64. Plurality of votes for the election of councillors is allowed upon the following scale:— Plurality of
votes.

IN BOROUGHES.

Properties rated at an annual value of £50 ...	... One vote
„ „ „ from £50 to £100 ...	... Two votes
„ „ „ over £100 ...	... Three votes

IN SHIRES.

Properties rated at an annual value of £25 ...	... One vote
„ „ „ from £25 to £75 ...	... Two votes
„ „ „ over £75 ...	... Three votes

- Ten pounds rating in-sufficient without occupation.** 65. No person is allowed to vote for property of less than £10 annual value unless he is the occupier thereof. In other cases, either the owner or occupier, but not both, may vote.
- Enrolment in sub-divisions.** 66. Where any municipal district is subdivided, the ratepayers are enrolled for the subdivision in which the property in respect of which they are enrolled is situated.
- Rateable Property.** 67. All land situated in a municipal district, except Crown land and land used for public purposes, is rateable property.
- General and separate rates.** 68. General rates are made and levied in each municipal district. They must not be more than 2s. 6d., or less than 6d. in the pound of the net annual value of such property. Separate rates in addition, not exceeding 6d. in the pound, may, by consent of one-third of the ratepayers in a particular portion of the district, be levied upon the property within such portion, for the execution of works intended for its special benefit.
- Incorporation of Melbourne and Geelong.** 69. Melbourne and Geelong, the latter of which was for many years the place 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 by Act 6 Vict. No. 7, which was assented to on the 12th August, 1842, and was afterwards ordained a city by Royal letters patent dated at Westminster on the 25th June, 1847, and gazetted in Sydney on the 5th February, 1848. Geelong was incorporated as a town on the 12th October, 1849, under Act 13 Vict. No. 40.
- Metropolitan Board of Works.** 70. A Bill is now (July 1890) before Parliament for the creation of a Metropolitan Board of Works, to consist of 38 members to be elected by the City of Melbourne and the twenty-three surrounding municipalities.
- Federal Council Act.** 71. An Act to constitute a Federal Council of Australasia* "for the purpose of dealing with such matters of common Australasian interest, in respect to which united action is desirable, as can be dealt with without unduly interfering with the management of the internal affairs of the several colonies by their respective legislatures," passed the Imperial Parliament and became law on the 14th August, 1885. This Act provides for the institution of a Council composed of representatives of such of the Australasian colonies as should pass an Act or Ordinance declaring that the Imperial Act should have

* *Federal Council of Australasia Act 1885* (48 & 49 Vict. cap. 60).

force therein; each such colony to be represented by two members, except in the case of Crown colonies, which should be represented by only one member each, power being reserved to Her Majesty, at the request of the legislatures of the colonies, from time to time to increase the number of representatives for each colony.

72. Saving Her Majesty's prerogative, and subject to the provisions of the Act, the Council was authorized thereby to have legislative authority in respect to the following matters:—

Matters on which Federal Council may legislate.

- (a) The relations of Australasia with the islands of the Pacific.
- (b) Prevention of the influx of criminals.
- (c) Fisheries in Australasian waters beyond territorial limits.
- (d) The service of civil process in the courts of any colony within Her Majesty's possessions in Australasia out of the jurisdiction of the colony in which it is issued.
- (e) The enforcement of judgments of courts of law of any colony beyond the limits of the colony.
- (f) The enforcement of criminal process beyond the limits of the colony in which it is issued, and the extradition of offenders, including deserters of wives and children, and deserters from the imperial or colonial naval or military forces.
- (g) The custody of offenders on board ships belonging to Her Majesty's Colonial Government beyond territorial limits.
- (h) Any matter which at the request of the legislatures of the colonies Her Majesty by Order in Council shall think fit to refer to the Council.
- (i) Such of the following matters as may be referred to the Council by the legislatures of any two or more colonies, that is to say—general defences, quarantine, patents of invention and discovery, copyright, bills of exchange and promissory notes, uniformity of weights and measures, recognition in other colonies of any marriage or divorce duly solemnized or decreed in any colony, naturalization of aliens, status of corporations and joint stock companies in other colonies than that in which they have been constituted, and any other matter of general Australasian interest with respect to which the legislatures of the several colonies can legislate within their own limits, and as to which it is deemed desirable that there should be a law of general application. Provided that in such cases the Acts of the Council shall extend only to the colonies by whose legislatures the matter shall have been so referred to it, and such other colonies as may afterwards adopt the same.

73. It was expressly provided that bills relating to the first three items in the list—(a), (b), and (c)—should be reserved for the signification of Her Majesty's pleasure; other bills might be assented to by the Governor of the colony in which the Federal Council was held, subject, however, to the subsequent disallowance by Her Majesty, if Her Majesty should so determine.

Assent to Bills passed by Federal Council.

74. It was further provided that the necessary expenditure connected with the business of the Council should be defrayed in the first instance by the colony wherein the expenditure was incurred, and should be ultimately contributed and paid by the several colonies in proportion to their respective populations; in case of difference, the

Expenses of Federal Council.

Governor of Tasmania being empowered to assess and apportion the amounts payable.

Colonies in which Federal Council Act should operate.

75. It was also provided that the Act was only to operate in respect to such colonies as should pass Acts or Ordinances declaring it to have force therein, it being provided, however, in the latter case, that all Acts of the Council passed while the Act was in operation should continue to be in force unless altered or repealed by the Federal Council.

Colonies represented at Federal Council.

76. An Act (49 Vict. No. 843) to bring this Act into operation was passed into law in Victoria on the 9th December, 1885, and similar Acts or Ordinances were passed in Queensland, Western Australia, Tasmania, Fiji, and subsequently in South Australia; but up to the present time the other two Australasian colonies, viz., New South Wales and New Zealand, have not joined the Federal Council.

Members of Federal Council.

77. The following are the names of and offices held by the Representatives of the various colonies present at each of the three sessions of the Federal Council, which have been held up to the present time :—

FEDERAL COUNCIL OF AUSTRALASIA.

Colony.	Name of Representative.	Office held in Colony Represented.
FIRST SESSION.		
Victoria	James Service ...	Premier and Treasurer
	Graham Berry ...	Chief Secretary
Queensland	Samuel Walker Griffith ...	Premier and Colonial Secretary .
	James Robert Dickson ...	Colonial Treasurer
Western Australia	James George Lee-Steere ...	Member of Executive and Legislative Councils
Tasmania	Adye Douglas ...	Premier and Chief Secretary
	John Stokell Dodds ...	Attorney-General
Fiji ...	William McGregor, C.M.G.	Colonial Secretary
SECOND SESSION.		
Victoria	Duncan Gillies ...	Premier and Treasurer
	Henry John Wrixon ...	Attorney-General
Queensland	Sir Samuel Walker Griffith, Q.C., K.C.M.G.	Premier and Colonial Secretary
	James Robert Dickson ...	Colonial Treasurer
Western Australia	James George Lee-Steere ...	Speaker of Legislative Council
Tasmania	Edward Nicholas Coventry Braddon	Minister of Lands and Works
	Andrew Inglis Clark ...	Attorney-General
THIRD SESSION.		
Victoria	Duncan Gillies ...	Premier and Treasurer
	Alfred Deakin ...	Chief Secretary

FEDERAL COUNCIL OF AUSTRALASIA—continued.

Colony.	Name of Representative.	Office held in Colony Represented.
Queensland	John Murtagh Macrossan ... Sir Samuel Walker Griffith, Q.C., K.C.M.G.	Secretary for Mines Member of Legislative Assembly
South Australia	Thomas Playford...	Premier and Treasurer
Western Australia	Charles Cameron Kingston...	Attorney-General
	Sir James George Lee-Steere, Knt.	Speaker of Legislative Council
Tasmania	Bolton Stafford Bird ... Andrew Inglis Clark ...	Treasurer Attorney-General

78. The first session of the Federal Council was opened on the 25th January, 1886 ; the second on the 16th January, 1888 ; and the the third on the 29th January, 1889. All the sessions were held in Hobart, and were opened by the Governor of that colony, His Excellency Sir R. G. C. Hamilton, K.C.M.G.

Dates and place of sessions of Federal Council.

79. Towards the end of 1889, at the instance of the Hon. Sir Henry Parkes, G.C.M.G., Premier of New South Wales, negotiations were opened between the various Australasian colonies, with the view of bringing about a Federal Union of the whole in “one powerful Australian nation,” the result being that a conference of representatives of the various colonies interested was held in Melbourne in the early part of 1890. The following is a statement of the names of the members of this conference, and the positions they occupied in their respective colonies :—

Australasian Federation Conference 1890.

MEMBERS OF THE AUSTRALASIAN FEDERATION CONFERENCE, 1890.

Colony.	Name of Representative.	Office held in Colony represented.
Victoria	Duncan Gillies ...	Premier (President of the Conference)
	Alfred Deakin ...	Chief Secretary
New South Wales	Sir Henry Parkes, G.C.M.G. ...	Premier
	William McMillan ...	Colonial Treasurer
Queensland	Sir Samuel Walker Griffith, K.C.M.G.	Member of the Legislative Assembly
	John Murtagh Macrossan ...	Colonial Secretary
South Australia	John Alexander Cockburn, M.D. Lond.	Premier
	Thomas Playford ...	Member of the Legislative Assembly
Western Australia...	Sir James George Lee Steere ...	Speaker of the Legislative Council, and Member of the Executive Council
Tasmania	Andrew Inglis Clark ...	Attorney-General
	Bolton Stafford Bird ...	Treasurer
New Zealand ...	Captain William Russell Russell	Colonial Secretary
	Sir John Hall, K.C.M.G. ...	Member of the House of Representatives

Resolutions
of Federa-
tion Con-
ference.

80. The Hon. Duncan Gillies, Premier of Victoria, was elected President of the conference. The first meeting was held on the 6th, and the conference closed on the 14th February, 1890. The following resolutions were unanimously agreed to:—

RESOLUTIONS OF THE AUSTRALASIAN FEDERATION CONFERENCE, 1890.

1. That, in the opinion of this Conference, the best interests and the present and future prosperity of the Australian Colonies will be promoted by an early union under the Crown, and while fully recognising the valuable services of the members of the Convention of 1883 in founding the Federal Council, it declares its opinion that the seven years which have since elapsed have developed the national life of Australia in population, in wealth, in the discovery of resources, and in self-governing capacity to an extent which justifies the higher act, at all times contemplated, of the union of these colonies under one legislative and executive government on principles just to the several colonies.
2. That to the union of the Australian Colonies contemplated by the foregoing resolution, the remoter Australasian Colonies shall be entitled to admission at such times and on such conditions as may be hereafter agreed upon.
3. That the members of the Conference should take such steps as may be necessary to induce the legislatures of their respective colonies to appoint, during the present year, delegates to a National Australasian Convention, empowered to consider and report upon an adequate scheme for a Federal Constitution.
4. That the Convention should consist of not more than seven members from each of the self-governing colonies, and not more than four members from each of the Crown colonies.

Governors.

81. Subjoined is a list of the Governors and Acting Governors of Victoria, with the dates of their assumption and retirement from office:—

GOVERNORS OF VICTORIA.

Name.	Date of Assumption of Office.	Date of Retirement from Office.
Charles Joseph La Trobe ... {	30th Sept., 1839*	
John Vesey Fitzgerald Foster (acting)	15th July, 1851 ...	5th May, 1854
Sir Charles Hotham, K.C.B. ...	8th May, 1854 ...	22nd June, 1854
Major-General Edward Macarthur (acting)	22nd June, 1854 ...	31st December, 1855†
Sir Henry Barkly, K.C.B. ...	1st January, 1856 ...	26th December, 1856
Sir Charles Henry Darling, K.C.B. ...	26th December, 1856	10th September, 1863
Brigadier-General George Jackson Carey, C.B. (acting)	11th September, 1863	7th May, 1866
The Honorable Sir John Henry Thomas Manners-Sutton, K.C.B.‡	7th May, 1866	15th August, 1866
Sir William Foster Stawell, Kt.(acting)	15th August, 1866...	2nd March, 1873
Sir George Ferguson Bowen, G.C.M.G.§	3rd March, 1873 ...	19th March, 1873
	31st March, 1873 ...	22nd February, 1879

* At the first of these dates Mr. La Trobe assumed the office of Superintendent of Port Phillip ; the second he became Lieutenant-Governor of Victoria.

† Sir Charles Hotham died at this date.

‡ Succeeded to the title of Viscount Canterbury, December, 1869.

§ Sir G. F. Bowen was absent on leave from the 31st December, 1874, to the 14th January, 1876.

GOVERNORS OF VICTORIA—*continued.*

Name.	Date of Assumption of Office.	Date of Retirement from Office.
Sir Redmond Barry, Kt. (acting) ...	3rd January, 1875 ...	10th January, 1875
Sir William Foster Stawell, Kt. (acting)	11th January, 1875	14th January, 1876
The Most Honorable George Augustus Constantine Phipps, Marquis of Normanby, G.C.M.G., P.C.	27th February, 1879	18th April, 1884
Sir William Foster Stawell, Kt. (acting)	18th April, 1884 ...	15th July, 1884
Sir Henry Brougham Loch, G.C.M.G., K.C.B.	15th July, 1884 ...	15th Nov., 1889*
Sir William Foster Stawell, K.C.M.G. (Lieutenant-Governor)	6th November, 1886†	12th March, 1889
Sir William Cleaver Francis Robinson, G.C.M.G. (acting)	{ 9th March, 1889 { 16th Nov., 1889	17th October, 1889 27th November, 1889
The Right Honourable John Adrian Louis Hope, Earl of Hopetoun, G.C.M.G.	28th November, 1889	Still in office

NOTE.—Captain William Lonsdale, formerly of the 4th Regiment, was appointed Police Magistrate of the District of Port Phillip on the 9th September, 1836, and assumed office on the 29th of the same month. In that capacity he was in charge of the District until the assumption of office as Superintendent by Mr C. J. La Trobe. Subsequently, Captain Lonsdale acted as Superintendent during the temporary absence of Mr. La Trobe, who was called on to administer the Government of Tasmania from the 13th October, 1846, to the 25th January, 1847.

82. Since Victoria has been an independent colony, the average time during which the Governors of Victoria, prior to Lord Hopetoun, not including the Acting Governors, have held office has been about four years and seven months. Duration of Governorships.

83. During the twelve days between the 19th and the 31st March, 1873, the former being the day on which Sir W. F. Stawell left the colony, and the latter that on which Sir G. F. Bowen arrived; also during the five days between the 22nd and 27th February, 1879, the former being the day on which Sir G. F. Bowen left, and the latter that on which Lord Normanby arrived, there was neither Governor nor Acting Governor in Victoria. Interregna in Victoria.

84. Since the inauguration of responsible government, twenty-three Ministries have held office in Victoria. The following are the names of the members of these ministries, and the dates of their assumption of and retirement from office:— Ministries.

* Sir H. B. Loch was absent on leave from the 9th March to the 17th October, 1889.

† Date of appointment. Sir W. F. Stawell never acted after his appointment as Lieutenant-Governor. He died on the date given in the next column. No Lieutenant-Governor has been appointed since.

MINISTRIES.

** The Representatives of the Government in the Upper House are indicated by the letters "M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
I.			
William Clark Haines ...	Chief Secretary (Premier) ...	28 Nov. 1855	11 Mar. 1857
William Foster Stawell ...	Attorney-General ...	28 Nov. 1855	25 Feb. 1857*
succeeded by			
Thos. Howard Fellows ...	Ditto ...	25 Feb. 1857	11 Mar. 1857
Charles Sladen ...	Treasurer ...	28 Nov. 1855	11 Mar. 1857
Charles Pasley ...	Commissioner of Public Works	28 Nov. 1855	11 Mar. 1857
Hugh Culling Eardley Childers	Commissioner of Trade and Customs	28 Nov. 1855	25 Feb. 1857
succeeded by			
John Goodman ...	Ditto ...	25 Feb. 1857	11 Mar. 1857
Andrew Clarke ...	Surveyor-General ...	28 Nov. 1855	11 Mar. 1857
Robert Molesworth ...	Solicitor-General ...	28 Nov. 1855	17 June 1856†
succeeded by			
Thomas Howard Fellows ...	Ditto ...	27 June 1856	25 Feb. 1857
succeeded by			
Robert Sacheverel Wilmot Sitwell	Ditto ...	25 Feb. 1857	11 Mar. 1857
William Henry Fancourt Mitchell, M.L.C.‡	(Without office) ...	28 Nov. 1855	11 Mar. 1857
II.§			
John O'Shanassy ...	Chief Secretary (Premier) ...	11 Mar. 1857	29 April, 1857
Henry Samuel Chapman|| ...	Attorney-General ...		
John Vesey Fitzgerald Foster	Treasurer ...		
Charles Gavan Duffy ...	Commissioner of Public Works		
Augustus Frederic Adolphus Greeves¶	Commissioner of Trade and Customs		
George Samuel Wegg Horne	Commissioner of Crown Lands and Survey		
John Dennistoun Wood** ...	Solicitor-General ...		
III.			
William Clark Haines ...	Chief Secretary (Premier) ...	29 Apr. 1857	10 Mar. 1858
Archibald Michie ..	Attorney-General ...		
Charles Hotson Ebdon ...	Treasurer... ..		
David Moore ...	President of the Board of Land and Works		
James McCulloch ...	Commissioner of Trade and Customs		
Thomas Howard Fellows ...	Solicitor-General ...		
William Henry Fancourt Mitchell, M.L.C.	Postmaster-General ...		
James Ford Strachan, M.L.C.††	(Without office) ...		

* Appointed Chief Justice at this date.

† Appointed Puisne Judge at this date.

‡ Sworn in as a Member of the Executive Council, 21st November, 1856.

§ This Ministry having been met by a vote of want of confidence immediately on the assembling of Parliament, no representative in the Upper House was appointed.

|| Not a Member of Parliament.

¶ Not re-elected after vacating seat in Parliament upon acceptance of office.

** Not a Member of Parliament from date of accepting office until the 20th April, 1857.

†† Sworn in as a Member of the Executive Council, 27th May, 1857.

MINISTRIES—*continued.*

* * The Representatives of the Government in the Upper House are indicated by the letters "M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
IV.			
John O'Shanassy ...	Chief Secretary (Premier) ...	10 Mar. 1858	27 Oct. 1859
Henry Samuel Chapman ...	Attorney-General ...	10 Mar. 1858	27 Oct. 1859
George Harker ...	Treasurer ...	10 Mar. 1858	27 Oct. 1859
Charles Gavan Duffy	President of the Board of Land and Works	10 Mar. 1858	22 Mar. 1859
	Commissioner of Crown Lands and Survey	21 Dec. 1858	22 Mar. 1859
	succeeded by		
George Samuel Evans ...	Ditto ...	22 Mar. 1859	27 Oct. 1859
Henry Miller ...	Commissioner of Trade and Customs	10 Mar. 1858	27 Oct. 1859
Richard Davies Ireland ...	Solicitor-General ...	10 Mar. 1858	27 Oct. 1859
George Samuel Evans ...	Postmaster-General ...	10 Mar. 1858	27 Oct. 1859
George Samuel Wegg Horne	Commissioner of Public Works	21 Dec. 1858	27 Oct. 1859
Thomas McCombie, M.L.C.* ...	(Without office) ...	10 Mar. 1858	27 Oct. 1859
V.			
William Nicholson ...	Chief Secretary (Premier) ...	27 Oct. 1859	26 Nov. 1860
John Dennistoun Wood ...	Attorney-General ...	27 Oct. 1859	26 Nov. 1860
James McCulloch ...	Treasurer ...	27 Oct. 1859	26 Nov. 1860
James Service ...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey	27 Oct. 1859	3 Sept. 1860
succeeded by			
Vincent Pyke ...	Ditto ...	3 Sept. 1860	24 Sept. 1860
succeeded by			
Augustus Frederic Adolphus Greeves ...	Ditto ...	24 Sept. 1860	26 Nov. 1860
John Charles King ...	Vice-President of the Board of Land and Works and Commissioner of Public Works	27 Oct. 1859	25 Nov. 1859
succeeded by			
James Goodall Francis ...	Ditto ...	25 Nov. 1859	3 Sept. 1860
succeeded by			
John Robinson Bailey ...	Ditto ...	3 Sept. 1860	2 Oct. 1860
succeeded by			
Vincent Pyke ...	Ditto ...	2 Oct. 1860	26 Nov. 1860
	Commissioner of Trade and Customs	27 Oct. 1859	29 Oct. 1860
	succeeded by		
John Robinson Bailey ...	Ditto ...	29 Oct. 1860	26 Nov. 1860
Travers Adamson ...	Solicitor-General ...	27 Oct. 1859	5 Mar. 1860
succeeded by			
James Frederic Martley ...	Ditto ...	5 Mar. 1860	26 Nov. 1860
John Robinson Bailey ...	Postmaster-General ...	27 Oct. 1859	29 Oct. 1860
succeeded by			
Hibbert Newton ...	Ditto ...	29 Oct. 1860	26 Nov. 1860
Thomas Howard Fellows, M.L.C.	(Without office) ...	27 Oct. 1859	26 Nov. 1860

* Sworn in as a Member of the Executive Council, 27th October, 1859.

MINISTRIES—continued.

* * The Representatives of the Government in the Upper House are indicated by the letters "M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
VI.			
Richard Heales ...	Chief Secretary (Premier) ...	26 Nov. 1860	14 Nov. 1861
Richard Davies Ireland ...	Attorney General ...	26 Nov. 1860	29 July 1861
succeeded by			
Butler Cole Aspinall ...	Ditto ...	29 July 1861	14 Nov. 1861
George Frederic Verdon ...	Treasurer ...	26 Nov. 1860	14 Nov. 1861
John Henry Brooke ...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey	26 Nov. 1860	14 Nov. 1861
James Stewart Johnston ...	Vice-President of the Board of Land and Works and Commissioner of Public Works	26 Nov. 1860	20 Feb. 1861
succeeded by			
James Macpherson Grant ...	Ditto ...	20 Feb. 1861	14 Nov. 1861
Robert Stirling Anderson ...	Commissioner of Trade and Customs	26 Nov. 1860	20 Feb. 1861
succeeded by			
George Brodie ...	Ditto ...	20 Feb. 1861	4 March 1861
succeeded by			
Thomas Loader* ...	Ditto ...	6 March 1861	21 Mar. 1861
succeeded by		21 Mar. 1861	10 June 1861
James Forrester Sullivan ...	Ditto ...	10 June 1861	14 Nov. 1861
Thomas Loader ...	Commissioner of Railways ...	26 Nov. 1860	4 Dec. 1860
succeeded by			
John Houston ...	Ditto ...	21 May 1861	14 Nov. 1861
John Basson Humffray ...	Commissioner of Mines ...	26 Nov. 1860	14 Nov. 1861
Thomas Loader ...	Postmaster-General ...	4 Dec. 1860	21 March 1861
succeeded by			
John Macadam ...	Ditto ...	26 April 1861	14 Nov. 1861
Thomas Turner a'Beckett, M.L.C.†	(Without office) ...	26 Nov. 1860	11 Nov. 1861
David Elliot Wilkie, M.L.C.‡			
VII.			
John O'Shanassy ...	Chief Secretary (Premier) ...	14 Nov. 1861	27 June 1863
William Clark Haines ...	Treasurer ...	14 Nov. 1861	
Richard Davies Ireland ...	Attorney-General ...	14 Nov. 1861	
John Dennistoun Wood ...	Minister of Justice ...	14 Nov. 1861	
Charles Gavan Duffy ...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey	14 Nov. 1861	
James Stewart Johnston ...	Vice-President of the Board of Land and Works and Commissioner of Public Works	14 Nov. 1861	
Robert Stirling Anderson ...	Commissioner of Trade and Customs	14 Nov. 1861	
George Samuel Evans ...	Postmaster-General ...	30 Dec. 1861	
William Henry Fancourt Mitchell, M.L.C. ...	Commissioner of Railways and Roads	30 Dec. 1861	
Charles MacMahon ...	(Without office) ...	14 Nov. 1861	

* Resigned office, without salary, on 21st March, 1861 ; re-appointed on the same date with salary.
† Sworn in as a member of the Executive Council, 7th January, 1861.
‡ Sworn in as a member of the Executive Council, September, 1861.

MINISTRIES—continued.

* * The Representatives of the Government in the Upper House are indicated by the letters "M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
VIII.			
James McCulloch ...	Chief Secretary (Premier) ...	27 June 1863	6 May 1868
George Higinbotham ...	Attorney-General ...	27 June 1863	6 May 1868
George Frederic Verdon ...	Treasurer ...	27 June 1863	5 May 1868
Richard Heales ...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey	27 June 1863	19 June 1864*
succeeded by			
James Macpherson Grant ...	Ditto ...	5 Sept. 1864	6 May 1868
Matthew Hervey ...	Vice-President of the Board of Land and Works and Commissioner of Public Works	27 June 1863	22 July 1865
succeeded by			
Wm. Mountford Kinsey Vale	Ditto ...	18 July 1866	6 May 1868
James Goodall Francis ...	Commissioner of Trade and Customs	27 June 1863	6 May 1868
James Forrester Sullivan ...	Minister of Mines ...	27 June 1863	18 July 1866
succeeded by			
John Macgregor ...	Ditto ...	18 July 1866	6 May 1868
James Macpherson Grant ...	Vice-President of the Board of Lands and Works and Commissioner of Railways and Roads	27 June 1863	5 Sept. 1864
succeeded by			
Henry Miller ...	Ditto ...	18 July 1866	16 Jan. 1867
succeeded by			
John Macgregor ...	Ditto ...	21 Jan. 1867	4 March 1867
succeeded by			
James Forrester Sullivan ...	Ditto ...	4 March 1867	6 May 1868
Archibald Michie ...	Minister of Justice ...	14 July 1863	18 July 1866
succeeded by			
Samuel Henry Bindon ...	Ditto ...	18 July 1866	6 May 1868
Thomas Howard Fellows ...	Postmaster-General ...	14 Oct. 1863	24 March 1864
succeeded by			
James McCulloch ...	Ditto ...	9 May 1864	6 May 1868
George Ward Cole, M.L.C.†...	(Without office) ...	27 June 1863	6 May 1868
IX.			
Charles Sladen, M.L.C. ...	Chief Secretary (Premier) ...	6 May 1868	} 11 July 1868
Thomas Howard Fellows ...	Minister of Justice ...	6 May 1868	
Morgan Augustus MacDonnell	Attorney-General ..	6 May 1868	
Edward Langton ...	Treasurer ...	6 May 1868	
Duncan Gillies† ..	President of the Board of Land and Works and Commissioner of Crown Lands and Survey	6 May 1868	
Michael O'Grady ‡	Vice-President of the Board of Land and Works and Commissioner of Public Works	6 May 1868	
William Bayles ...	Commissioner of Trade and Customs	6 May 1868	
George Briscoe Kerferd ...	Minister of Mines and Vice-President of the Board of Land and Works	8 May 1868	

* Died at this date.

† Sworn in as a Member of the Executive Council, 20th November, 1867.

‡ Not re-elected after vacating seat in Parliament upon acceptance of office.

MINISTRIES—continued.

*** The Representatives of the Government in the Upper House are indicated by the letters "M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
X.			
James McCulloch ...	Chief Secretary and Treasurer (Premier)	11 July 1868	20 Sept. 1869
James Macpherson Grant ...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey	11 July 1868	20 Sept. 1869
James Forrester Sullivan	Minister of Mines ...	11 July 1868	20 Sept. 1869
	Vice-President of the Board of Land and Works	1 Feb. 1869	20 Sept. 1869
	Commissioner of Railways and Roads	12 April 1869	2 Sept. 1869
George Higinbotham ...	Vice-President of the Board of Land and Works (without salary)	11 July 1868	1 Feb. 1869
Wm. Mountford Kinsey Vale	Commissioner of Trade and Customs	11 July 1868	25 May 1869
George Paton Smith ...	Attorney-General ...	11 July 1868	20 Sept. 1869
James Joseph Casey	Minister of Justice...	11 July 1868	20 Sept. 1869
	Solicitor-General ...	2 Sept. 1869	20 Sept. 1869
Charles Edwin Jones	Commissioner of Railways and Roads	11 July 1868	9 March 1869
	Vice-President of the Board of Land and Works	3 Aug. 1868	9 March 1869
George Verney Smith ...	Postmaster-General ...	11 July 1868	20 Sept. 1869
John McCrae, M.L.C. ...	Commissioner of Public Works	25 Jan. 1869	20 Sept. 1869
George Rolfe* ...	Commissioner of Trade and Customs	2 Sept. 1869	20 Sept. 1869
William Wilson ...	Commissioner of Railways and Roads	2 Sept. 1869	20 Sept. 1869
XI.			
John Alexander MacPherson	Chief Secretary (Premier) ...	} 20 Sept. 1869	{ 9 April 1870 21 Jan. 1870
Robert Byrne† ...	Treasurer ...		
succeeded by			
Graham Berry ...	Ditto ...	21 Jan. 1870	} 9 April 1870
Morgan Augustus MacDonnell	Attorney-General ...	} 20 Sept. 1869	
James McKean ...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey		
Isaac Godfrey Reeves† ...	Commissioner of Public Works		19 Jan. 1870
succeeded by			
William McLellan ...	Ditto ...	19 Jan. 1870	} 9 April 1870
Edward Cohen ...	Commissioner of Trade and Customs	} 20 Sept. 1869	
John Thomas Smith ...	Minister of Mines ...		
Francis Longmore ...	Commissioner of Railways and Roads		
Butler Cole Aspinall ...	Solicitor-General ...	19 Jan. 1870	} 9 April 1870
Caleb Joshua Jenner, M.L.C.‡	(Without office) ...	20 Sept. 1869	

* Not a Member of Parliament at time of appointment; but was elected for Crowlands, 9th October, 1869, after the retirement of the Ministry. † Not re-elected after vacating seat in Parliament upon acceptance of office. ‡ Sworn in as a Member of the Executive Council, 15th October, 1869.

MINISTRIES—continued.

* * The Representatives of the Government in the Upper House are indicated by the letters "M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
XII.			
James McCulloch	Chief Secretary (Premier)	9 April 1870	19 June 1871
Archibald Michie	Attorney-General		
James Goodall Francis	Treasurer		
Thomas Turner a'Beckett, M.L.C.	Commissioner of Trade and Customs		
William Wilson	Commissioner of Railways and Roads		
John Alexander MacPherson	President of the Board of Land and Works and Commissioner of Crown Lands and Survey		
Henry John Wrixon	Solicitor-General		
William Bates	Commissioner of Public Works		
Angus Mackay	Minister of Mines		
XIII.			
Charles Gavan Duffy	Chief Secretary (Premier)	19 June 1871	} 10 June 1872
James Macpherson Grant	President of the Board of Land and Works and Commissioner of Crown Lands and Survey	19 June 1871	
Graham Berry	Treasurer	19 June 1871	} 21 May 1872
Michael O'Grady	Commissioner of Public Works and Vice-President of the Board of Land and Works	19 June 1871	
Francis Longmore	Commissioner of Railways and Roads and Vice-President of the Board of Land and Works	19 June 1871	} 10 June 1872
William McLellan	Minister of Mines	19 June 1871	
Howard Spensley	Solicitor-General	19 June 1871	} 23 Nov. 1871
Graham Berry	Commissioner of Trade and Customs	19 June 1871	
succeeded by			
William Mountford Kinsey Vale	Ditto	23 Nov. 1871	} 10 June 1872
Robert Walsh	Attorney-General	5 July 1871	
William Arthur Callander a'Beckett, M.L.C.*	(Without office)	19 June 1871	
succeeded by			
Caleb Joshua Jenner, M.L.C.	Ditto ... ..	...	...

* Sworn in as a Member of the Executive Council, 31st July, 1871.

MINISTRIES—continued.

*** The Representatives of the Government in the Upper House are indicated by the letters "M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
XIV.			
James Goodall Francis ...	Chief Secretary (Premier) ...	10 June 1872	31 July 1874
Edward Langton ...	Treasurer and Postmaster-General		
James Joseph Casey ...	Commissioner of Crown Lands and Survey and President of the Board of Land and Works		
James Wilberforce Stephen	Attorney-General ...		1 May 1874*
succeeded by			
George Briscoe Kerferd ...	Ditto ...	2 May 1874	31 July 1874.
Duncan Gillies ...	Commissioner of Railways and Roads	10 June 1872	
George Briscoe Kerferd ...	Solicitor-General ...		
Edward Cohen ...	Commissioner of Trade and Customs		
Angus Mackay ...	Minister of Mines ...		
Alexander Fraser, M.L.C. {	Commissioner of Public Works	14 June 1872	4 May 1874
	Vice-President of the Board of Land and Works	17 June 1872	
succeeded by			
Robert Stirling Anderson, M.L.C.	Ditto ...	4 May 1874	31 July 1874.
James Joseph Casey ...	Minister of Agriculture ...	19 June 1872	
James Wilberforce Stephen ...	Minister of Public Instruction	2 Jan. 1873	1 May 1874*
succeeded by			
Angus Mackay ...	Ditto ...	4 May 1874	31 July 1874
Robert Ramsay ...	(Without office) ...	10 June 1872	
XV.			
George Briscoe Kerferd ...	Attorney-General (Premier)...	31 July 1874	7 August 1875.
James Joseph Casey ...	Commissioner of Crown Lands and Survey, President of the Board of Land and Works, and Minister of Agriculture		
Duncan Gillies ...	Commissioner of Railways and Roads and Vice-President of the Board of Land and Works		
Robert Stirling Anderson, M.L.C.	Commissioner of Public Works and Vice-President of the Board of Land and Works		
Edward Cohen ...	Commissioner of Trade and Customs		
Angus Mackay ...	Minister of Mines and Minister of Public Instruction		
James Service ...	Treasurer ...		
Robert Ramsay ...	Postmaster-General ...		
Townsend MacDermott ...	Solicitor-General ...		

*Appointed Puisne Judge at this date.

MINISTRIES—continued.

* * The Representatives of the Government in the Upper House are indicated by the letters " M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
XVI.			
Graham Berry	{ Premier and Treasurer ... Chief Secretary in lieu of Premier, which office he vacated (Premier)	7 Aug. 1875	{
James Munro ...		10 Aug. 1875	
Francis Longmore ...	{ Minister of Public Instruction President of the Board of Land and Works and Commissioner of Crown Lands and Survey	{ 7 Aug. 1875	
John Woods ...			
William Collard Smith	{ Minister of Agriculture ... Commissioner of Railways and Roads	23 Aug. 1875	
Peter Lalor ...		7 Aug. 1875	
James Brown Patterson	{ Vice-President of the Board of Land and Works Minister of Mines ...	23 Aug. 1875	
Robert Le Poer Trench*		{ Commissioner of Trade and Customs and Postmaster-General	
James Macpherson Grant	{ 7 Aug. 1875		
William Arthur Callander			
a'Beckett, M.L.C.	Commissioner of Public Works Vice-President of the Board of Land and Works	23 Aug. 1875	
	Attorney-General ...	{ 9 Aug. 1875	
	Minister of Justice ...		
	(Without office) ...	7 Aug. 1875	
XVII.			
Sir James McCulloch, Knt. ...	Treasurer (Premier) ...	{	{
John Alexander MacPherson	Chief Secretary ...		
George Briscoe Kerferd ...	Attorney-General ...		
Duncan Gillies ...	{ Commissioner of Crown Lands and Survey and President of the Board of Land and Works	{ 20 Oct. 1875	
Robert Ramsay ...			
Robert Stirling Anderson, M.L.C.	Minister of Agriculture ...	25 Oct. 1875	
John Madden† ...	{ Minister of Public Instruction and Postmaster-General	{ 20 Oct. 1875	
William McLellan ...			
Joseph Jones‡ ...	Commissioner of Trade and Customs		
	Minister of Justice...	{	
	Minister of Mines ...		
	Commissioner of Railways and Roads, Commissioner of Public Works, and Vice-President of the Board of Land and Works		

* Not a Member of Parliament.
† Not a Member of Parliament from date of accepting office until the 27th July, 1876.
‡ Not a Member of Parliament from date of accepting office until the 27th January, 1876.

MINISTRIES—continued.

** The Representatives of the Government in the Upper House are indicated by the letters "M. L. C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
XVIII.			
Graham Berry* ...	Chief Secretary (Premier) ...	21 May 1877	5 March 1880
succeeded as Treasurer by	Treasurer ...	21 May 1877	27 Dec. 1878
William Collard Smith ...	Ditto (without salary) ...	27 Dec. 1878	3 Nov. 1879
succeeded by			
Graham Berry ...	Ditto ...	3 Nov. 1879	5 March 1880
Francis Longmore ...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey	21 May 1877	
	Minister of Agriculture ..	28 May 1877	
William Collard Smith ...	Minister of Mines and Minister of Public Instruction	21 May 1877	
James Brown Patterson	Commissioner of Public Works ..	28 May 1877	
	Vice-President of the Board of Land and Works		
Robert Le Poer Trench ...	Attorney-General ...	22 May 1877	27 March 1878
succeeded by			
Sir Bryan O'Loughlen, Bart.*	Ditto ...	27 Mar. 1878	5 March 1880
James Macpherson Grant ...	Minister of Justice ...	22 May 1877	
Peter Lalor ...	Commissioner of Trade and Customs		
John Woods ...	Commissioner of Railways and Roads	11 June 1877	
	Vice-President of the Board of Land and Works		
Peter Lalor ...	Postmaster-General ...	22 May 1877	3 July 1877
succeeded by			
Henry Cuthbert, M.L.C. ...	Ditto ...	3 July 1877	29 July 1878
succeeded by			
James Brown Patterson ...	Ditto (without salary) ...	29 July 1878	5 March 1880
XIX.			
James Service ...	Treasurer (Premier) ...	5 Mar. 1880	3 Aug. 1880
Robert Ramsay ...	Chief Secretary ...		
George Briscoe Kerferd ...	Attorney-General ...		
John Madden ...	Minister of Justice...		
Duncan Gillies ...	Commissioner of Railways ..		
John Gavan Duffy...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey		
Thomas Bent ...	Commissioner of Public Works		
Robert Clark ...	Minister of Mines ...		
Henry Cuthbert, M.L.C. ...	Commissioner of Trade and Customs		
Robert Ramsay ...	Minister of Education (without salary)		
Henry Cuthbert, M.L.C. ...	Postmaster-General (without salary)		
James Goodall Francis	(Without office) ...	16 Mar. 1880	
Robert Stirling Anderson, M.L.C.	(Without office) ...		
Duncan Gillies ...	Vice-President of the Board of Land and Works (without salary)		
Thomas Bent ...	Vice-President of the Board of Land and Works (without salary)		
John Gavan Duffy ...	Minister of Agriculture (without salary)	19 Mar. 1880	
Robert Clark ...	Commissioner of Water Supply (without salary)	2 April 1880	

* Sir Bryan O'Loughlen was sworn in as a Member of the Executive Council, 4th March, 1878; he acted as Chief Secretary, without salary, during the absence from Victoria of the Hon. Graham Berry, from the 27th December, 1878, to the 17th June, 1879.

MINISTRIES—*continued.*

* ** The Representatives of the Government in the Upper House are indicated by the letters "M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
XX.			
Graham Berry	Chief Secretary and Treasurer (Premier)	3 Aug. 1880	9 July 1881
William Mountford Kinsey Vale	Attorney-General and Minister of Justice		
Richard Richardson ...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey		
James Brown Patterson ...	Commissioner of Railways ...		
William Collard Smith ...	Minister of Education ...		
Alfred Thomas Clark ...	Commissioner of Trade and Customs	12 Aug. 1880	
Henry Roberts Williams ...	Minister of Mines		
George David Langridge ...	Commissioner of Public Works		
Richard Richardson ..	Minister of Agriculture (without salary)		
George David Langridge ...	Vice-President of the Board of Land and Works (without salary)		
James Brown Patterson ...	Vice-President of the Board of Land and Works (without salary)	3 Aug. 1880	
Charles Henry Pearson ...	(Without office)		
Robert Dyce Reid, M.L.C. ...	(Without office)	5 Aug. 1880	
XXI.			
Sir Bryan O'Loghlen, Bart. ...	Attorney-General (Premier)...	9 July 1881	8 March 1881
James Macpherson Grant ...	Chief Secretary		
Thomas Bent	Commissioner of Railways ...		
Frank Stanley Dobson, M.L.C.	Solicitor-General		2 Aug. 1881
James Howlin Graves ...	Commissioner of Trade and Customs		
Charles Young	Minister of Water Supply and Agriculture	19 Aug. 1881	8 March 1881
Henry Bolton	Postmaster-General		
David Gaunson *	President of the Board of Land and Works and Commissioner of Crown Lands and Survey		
succeeded by		9 July 1881	19 Aug. 1881
Walter Madden	Ditto, ditto		
Sir Bryan O'Loghlen, Bart. ...	Treasurer (without salary) ...		
James Macpherson Grant ...	Minister of Public Instruction (without salary)	19 Aug. 1881	8 March 1881
Thomas Bent	Vice-President of the Board of Land and Works (without salary)		
Charles Young	Minister of Mines (without salary)		
succeeded by		19 Aug. 1881	8 March 1881
Robert Burrowes	Ditto		
Charles Young	Commissioner of Public Works and Vice-President of the Board of Land and Works (without salary)		
Louis Lawrence Smith ...	(Without office)	9 July 1881	8 March 1881
James MacBain, M.L.C. ...	(Without office)	19 Aug. 1881	

* Not re-elected after vacating seat in Parliament upon acceptance of office.

MINISTRIES—continued.

*** The Representatives of the Government in the Upper House are indicated by the letters "M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
XXII.			
James Service	Treasurer (Premier)	8 March 1883	18 Feb. 1886
Raham Berry	Chief Secretary		16 Feb. 1886 *
George Briscoe Kerferd	Attorney-General		1 Jan. 1886 †
Robert Stirling Anderson, M.L.C.	Minister of Justice... ..		26 Oct. 1883 ‡
uncan Gillies	Commissioner of Railways	8 March 1883	18 Feb. 1886
lbert Lee Tucker	President of the Board of Land and Works and Commissioner of Crown Lands and Survey		
lfred Deakin	Commissioner of Public Works		13 Nov. 1883
onas Felix Levien	Minister of Mines		18 Feb. 1886
George David Langridge	Commissioner of Trade and Customs	10 April 1884	
James Service	Minister of Public Instruction (without salary)	10 April 1884	18 Feb. 1886
succeeded by			
uncan Gillies	Ditto	10 April 1884	18 Feb. 1886
Raham Berry	Postmaster-General (without salary)	8 March 1883	10 April 1884
succeeded by			
James Campbell, M.L.C.	Ditto	10 April 1884	18 Feb. 1886
lfred Deakin	Commissioner of Water Supply (without salary)	8 March 1883	23 April 1884
onas Felix Levien	Minister of Agriculture (without salary)		18 Feb. 1886
uncan Gillies	Vice-President of the Board of Land and Works (without salary)		
	Vice-President of the Board of Land and Works (without salary)		
lfred Deakin	Solicitor-General	13 Nov. 1883		23 April 1884
	Acting Commissioner of Public Works		
Frederick Thomas Sargood, M.L.C.	Minister of Defence	23 April 1884	18 Feb. 1886
	Commissioner of Water Supply (without salary)		
lfred Deakin	Commissioner of Public Works (without salary)		
Nathaniel Thornley, M.L.C.	(Without office) ... ..			10 April 1884

* Appointed Agent-General at this date.
† Appointed Puisne Judge at this date, after which there was no actual Attorney-General until the appointment of the Hon. Henry John Wrixon on the 18th February; but the business requiring the attention of a Law Officer was attended to by the Solicitor-General, the Hon. Alfred Deakin.—See Section 6 of Act 21 Vict. No. 22.
‡ Died at this date.

MINISTRIES—continued.

* * The Representatives of the Government in the Upper House are indicated by the letters "M.L.C."

Number of Ministry and Name of Minister.	Office.	Date of Assumption of Office.	Date of Retirement from Office.
XXIII.			
Duncan Gillies ...	Treasurer (Premier) ...	18 Feb. 1886	} Still in office 6 Sept. 1889*
Alfred Deakin ...	Chief Secretary ...		
Henry John Wrixon ...	Attorney-General ...		
Henry Cuthbert, M.L.C. ...	Minister of Justice...		
Sir James Lorimer, K.C.M.G., M.L.C.	Minister of Defence ...		
succeeded by			
James Bell, M.L.C. ...	Ditto ...	16 Sept. 1889	} Still in office 21 May 1890
Charles Henry Pearson ...	Minister of Public Instruction		
John Lamont Dow || ...	President of the Board of Land and Works and Commissioner of Crown Lands and Survey		
Duncan Gillies ...	Minister of Railways (without salary)	18 Feb. 1886	} Still in office 21 May 1890 24 Aug. 1886
Alfred Deakin ...	Commissioner of Water Supply (without salary)		
John Lamont Dow || ...	Minister of Agriculture (without salary)		
John Lamont Dow † ...	Minister of Mines (without salary)		
succeeded by			
Duncan Gillies ...	Ditto ...	24 Aug. 1886	} Still in office 4 Oct. 1887†
Frederick Thomas Derham...	Postmaster-General ...	20 Feb. 1886	
Matthew Henry Davies ...	(Without office) ...	20 Feb. 1886	
succeeded by			
David Mortimer Davies ...	Ditto ...	28 Oct. 1887	} Still in office 1 June 1889
John Nimmo ...	Commissioner of Public Works	18 Feb. 1886	
succeeded by			
David Mortimer Davies ...	Ditto ...	1 June 1889	} Still in office 1 June 1889
John Nimmo ...	Vice-President of the Board of Land and Works (without salary)	23 Feb. 1886	
succeeded by			
David Mortimer Davies ...	Ditto ...	1 June 1889	} Still in office 5 March 1889
William Froggatt Walker ...	Commissioner of Trade and Customs	18 Feb. 1886	
succeeded by			
Henry Cuthbert, M.L.C. ...	Ditto (without salary) ...	5 March 1889	16 April 1889
succeeded by			
James Brown Patterson ...	Ditto (with salary) ...	16 April 1889	} Still in office 16 Sept. 1889
James Bell, M.L.C. ...	(Without office) ...	20 April 1886	

* Died at this date.

† The duties appertaining to the office of Minister of Mines were attended to by the Hon. John James from 20th February to the 6th April, 1886. Mr. James, however, was not appointed Minister of Mines, and official documents requiring the Minister's signature were signed by Mr. Dow. Mr. James failed to obtain a seat in Parliament, and resigned the Acting Office on the 6th April, 1886.

‡ Mr. M. H. Davies resigned his Ministerial office on being appointed Speaker of the Legislative Assembly.

§ At this date appointed Minister of Defence.

|| The offices of Commissioner of Crown Lands and Minister of Agriculture, vacated by Mr. Dow, are at present temporarily administered by Dr. Pearson.

Duration of
Ministries.

85. The number of days each Ministry remained in power is given in the following table :—

DURATION OF MINISTRIES.

Name of Premier.*		Duration of Office.†	Name of Premier.*		Duration of Office.†
		Days.			Days
1.	William Clark Haines	... 469	13.	Charles Gavan Duffy	... 357
2.	John O'Shanassy	... 49	14.	James Goodall Francis	... 781
3.	William Clark Haines	... 315	15.	George Briscoe Kerferd	.. 372
4.	John O'Shanassy	... 596	16.	Graham Berry	... 74
5.	William Nicholson	... 396	17.	Sir James McCulloch,	579
6.	Richard Heales	... 353		K.C.M.G.	
7.	John O'Shanassy	... 590	18.	Graham Berry	... 1,019
8.	James McCulloch	... 1,775	19.	James Service	... 151
9.	Charles Sladen	... 66	20.	Graham Berry	... 340
10.	James McCulloch	... 436	21.	Sir Bryan O'Loughlen, Bart.	607
11.	John Alexander MacPherson	201	22.	James Service	... 1,078
12.	James McCulloch	... 436	23.	Duncan Gillies	... Still in office.

Average
duration of
Ministries.

86. By means of the figures in the last column it is ascertained that the average duration of Victorian Ministries prior to the Ministry now in office has been 502 days, or about 1 year and 4½ months.

Parliaments.

87. The present is the fourteenth Parliament since the inauguration of responsible government in Victoria. The following table shows the number of sessions in each Parliament, the dates of opening and of closing or dissolution, also the duration of each session and of each Parliament :—

PARLIAMENTS.

Number of Parlia- ment.	Number of Session.	Date of Opening.	Date of Closing or of Dissolution.	Duration of Session.	Duration of Parlia- ment.
				Days.	Days.
1	1	21st November, 1856	... 24th November, 1857	368	991
	2	3rd December, 1857	... 4th June, 1858	183	
	3	7th October, 1858	... 24th February, 1859	140	
2			9th August, 1859	...	637
	1	13th October, 1859	.. 18th September, 1860	341	
	2	20th November, 1860	... 3rd July, 1861	225	
3			11th July, 1861	...	1,091
	1	30th August, 1861	... 18th June, 1862	292	
	2	7th November, 1862	... 11th September, 1863	308	
		26th January, 1864	... 2nd June, 1864	128	
	3		... 25th August, 1864	...	

* The term "Premier" is used to show that the Ministers named were respectively at the head of the Governments enumerated ; there is, however, no such office as that of Premier recognised under the Victorian Constitution. Nevertheless, the Hon. Graham Berry was appointed Premier on the 7th August, 1875, but vacated the office three days later. No other Minister has ever been appointed under that title.

† For the date of assumption of, and retirement from, office by each Ministry, see last table.

PARLIAMENTS—*continued.*

Number of Parlia- ment.	Number of Session.	Date of Opening.	Date of Closing or of Dissolution.	Duration of Session.	Duration of Parlia- ment.
				Days.	Days.
4	1	28th November, 1864	28th November, 1865	366	
			11th December, 1865	...	378
5	1	12th February, 1866 ...	5th April, 1866 ...	52	
	2	11th April, 1866 ...	1st June, 1866 ...	51	
	3	17th January, 1867 ...	10th September, 1867	236	
	4	18th September, 1867	8th November, 1867 ...	51	
	5	25th November, 1867...	25th November, 1867	1	
			30th December, 1867	...	686
6	1	13th March, 1868 ...	29th September, 1868	200	
	2	11th February, 1869 ...	29th December, 1869...	321	
	3	15th February, 1870 ...	15th July, 1870 ...	150	
	4	27th October, 1870 ...	29th December, 1870...	63	
			25th January, 1871 ...	...	1,048
7	1	25th April, 1871 ...	23rd November, 1871...	212	
	2	30th April, 1872 ...	17th December, 1872	231	
	3	13th May, 1873 ...	25th November, 1873...	196	
			9th March, 1874 ...	...	1,049
8	1	19th May, 1874 ...	24th December, 1874...	219	
	2	25th May, 1875 ...	7th April, 1876 ...	317	
	3	11th July, 1876 ...	22nd December, 1876...	164	
			25th April, 1877 ...	...	1,072
9	1	22nd May, 1877 ...	9th April, 1878 ...	322	
	2	9th July, 1878 ...	6th December, 1878 ...	150	
	3	8th July, 1879 ...	5th February, 1880 ...	212	
			9th February, 1880 ...	...	993
10	1	11th May, 1880 ...	26th June, 1880 ...	46	
			29th June, 1880 ...	...	49
11	1	22nd July, 1880 ...	2nd August, 1881 ...	376	
	2	4th August, 1881 ...	24th December, 1881...	142	
	3	25th April, 1882 ...	3rd February, 1883 ...	284	926
12	1	27th February, 1883 ...	19th April, 1883 ...	51	
	2	3rd July, 1883 ...	3rd November, 1883 ...	123	
	3	10th June, 1884 ...	12th December, 1884...	185	
	4	17th June, 1885 ...	18th December, 1885...	184	
			19th February, 1886 ...	...	1,088
13	1	16th March, 1886 ...	16th December, 1886...	275	
	2	7th June, 1887 ...	17th December, 1887 ..	193	
	3	19th June, 1888 ...	21st December, 1888...	185	
			11th March, 1889 ...	...	1,091
14	1	9th April, 1889 ...	29th November, 1889...	235	
	2	21st May, 1890 ...			

88. Parliaments in Victoria have existed, on the average, for 854 days, or about 2 years and 4 months. Sessions have lasted, on the average, for 199 days, or 6½ months.

89. With the view of showing the number of persons of different grades in the service of the Victorian Government, and their emoluments, the Departments, in the following table, have been placed in classified arrangement, the number of persons employed and the

Duration of
Parliaments

Persons
employed
by Govern-
ment.

total amount of salaries and wages paid annually being also shown. Persons temporarily employed, or any whose services are not wholly retained by the State, are not included:—

PERSONS EMPLOYED BY THE VICTORIAN GOVERNMENT.—NUMBERS AND SALARIES OR WAGES.

(Exclusive of Persons temporarily or only partially employed.)

Office.	Number of Persons.	Annual Payment.
		£
Executive—		
His Excellency the Governor	1	10,000
Ministers of the Crown	10	15,500
Executive Council, Officers of	2	1,320
Total	13	26,820
Legislature—		
Legislative Council, Officers of	16	6,028
Legislative Assembly, Officers of	28	9,963
Parliament Library	6	1,965
Parliament Refreshment Rooms and Gardens	4	541
<i>Victorian Hansard</i>	4	2,175
Total	58	20,672
Administrative—		
Public Service Board	15	6,300
Premier's Office	9	2,471
Chief Secretary's Office	21	7,304
Government Shorthand Writer	6	2,092
Treasury*	110	29,605
Audit Office	40	11,749
Agent-General	8	4,482
Total	209	64,003
Judicial and Legal—		
Their Honors the Judges	6†	18,500
Supreme Court	8	5,766
Law Officers of the Crown	21	10,914
Crown Solicitor	26	6,533
Prothonotary	7	2,413
Master in Equity and Lunacy	12	4,887
Registrar-General	51	9,460
Registrar of Titles	141	31,688
Registrar of Friendly Societies	1	400
Sheriffs	41	8,831
County Courts, Courts of Mines, Insolvency, General and Petty Sessions	10	9,878
Police Magistrates and Wardens	22	14,527
Clerks of Courts	111	21,952
Curator of Estates of Deceased Persons	7	1,606
Total	464	147,355

* Including two Inspectors of Officers in charge of Stores, and Paymaster of Imperial Pensions.

† A seventh Judge has recently been temporarily appointed.

PERSONS EMPLOYED BY THE VICTORIAN GOVERNMENT.—NUMBERS
AND SALARIES OR WAGES—*continued.*

(Exclusive of Persons temporarily or only partially employed.)

Office.	Number of Persons.	Annual Payment.
Police and Gaols—		£
Police	1,511	216,234
Penal Establishments and Gaols...	245	41,324
Total	1,756	257,558
Defences—		
Defence Department—Civil Staff	34	6,568
Naval Forces—Permanent	238*	28,818
Land Forces—Permanent	350†	38,209
Total	622	73,595
Collection of Taxes—		
Customs	329	59,627
Distilleries and Excise	48	10,878
Land Tax	2	900
Total	379	71,405
Education, Science, Health, etc.—		
Education Department—		
Officers, Inspectors, etc.	147	38,438
Teachers	4,600‡	543,812
Melbourne University§	51	20,078
Public Library, Museums and Gallery	59	10,142
Government Statist	19	4,283
Government Astronomer	11	3,589
Government Botanist	6	1,772
Public Health Department	18	4,829
Hospitals for the Insane	569	57,600
Public Parks, Gardens, and Reserves	6	972
Botanical and Domain Reserves	54	7,140
Industrial and Reformatory Schools	47	7,770
Inspector of Reformatory Schools	3	1,120
Inebriate Asylum	15	600
Aborigines	7	1,308
Total	5,612	703,453
Commercial—		
Victorian Railways—		
Administrative Officers	1,600	287,416
Employed in working lines open	9,573	1,039,984
Employed in construction	671	112,578

* Embracing 39 officers, 53 non-commissioned officers, and 146 men.

† Including Head Quarters' Staff, 8; Victorian Artillery, 256; Submarine Mining Company, 31; Drill Instructors, 32; and officers and non-commissioned officers of Mounted Rifles, Victorian Rangers and Cadet Corps, 23.

‡ Of these about 4,280 are classified, and the remainder unclassified.

§ The University and Mint are not under the direct control of the Victorian Government although the former is largely and the latter entirely maintained by Government grants.

PERSONS EMPLOYED BY THE VICTORIAN GOVERNMENT.—NUMBERS
AND SALARIES OR WAGES—*continued*.
(Exclusive of Persons temporarily or only partially employed.)

Office.	Number of Persons.	Annual.
		£
Commercial—		
Melbourne Water Supply	91	17,131
Country Water Supply	58	12,530
Post and Telegraph Offices	2,710	308,484
Survey, Sale, and Management of Crown Lands ...	205	46,943
Marine Board	8	2,050
Ports and Harbours	108	17,152
Mercantile Marine	6	1,124
Powder Magazine and Dynamite Hulk	8	1,224
Total	15,038	1,846,616
Industrial—		
Public Works	183	43,453
Government Printer	194	33,638
Royal Mint*	54	10,838
Inspector of Factories and Shops	8	2,141
Total	439	90,070
Agricultural, Pastoral, Mining, etc.—		
Agriculture, Forests, and Industries	10	2,921
State Forests and Nurseries	26	4,628
Scab Prevention and Diseases of Stock	22	6,805
Mines Department	167	20,571
Fisheries Department	1	420
Total	226	35,345
Grand Total	24,816	3,336,892

90. According to this table the persons regularly employed in the service of the Government of Victoria number 24,816, and the amount paid to them annually is £3,336,892, or an average of £134 per head. Comparing these figures with the estimated population at the end of 1889, viz., 1,118,028, it appears that, exclusive of persons casually or not wholly employed, one person in every 45 is in Government employment, at a cost of £2 19s. 8d. per head of population. It will be observed however, that over 15,000 persons, or about 60 per cent. of the whole, at a cost of about 1¼ million, or 55 per cent. of the whole are engaged upon the construction and working of the railways or in other commercial departments of the Government—services which, in many other countries, are wholly or partially performed by private enterprise.

* See footnote (§) on page 49.

91. Of the whole number of persons referred to in the last table, about 10,000 are under the Public Service Board, 11,800 under the Railway Commissioners, and the bulk of the remainder are in the Police and Defence Forces, as is shown by the following figures :—

Persons under Public Service, Railways, and Police Acts.

Under <i>Public Service Act</i> —				Under <i>Railway Commissioners Act</i>			
Public Service Board	...	...	3	...	...	...	11,844
First Division	...	...	11	Police	...	...	1,501
Professional Division	...	...	165	Defence Forces	...	...	588
Clerical Division	...	...	2,033	Residue	...	...	788
Non-clerical Division	...	...	3,283				
Teachers	...	...	4,600				
				Grand Total...	...	...	24,816
Total	...	...	10,095				

92. Under the Public Service and Railway Commissioners Acts persons may be temporarily employed from time to time to meet the exigences of the service for any period not exceeding three* months in the Public Service proper, and six months in the Railway Department. The following are the numbers of such persons in 1889, together with the annual rate of salaries or wages payable. The information respecting the General Public Service has been taken from a return† to an order of the Legislative Assembly, dated 3rd September, 1889:—

Super-numeraries in Public Service.

PERSONS TEMPORARILY EMPLOYED IN THE PUBLIC SERVICE AND RAILWAYS, 1889.

Department.	Number Employed.	Rate of Annual Payment.
		£
Parliament	3	120
Chief Secretary	39	4,761
Minister of Public Instruction	40	3,030
Attorney-General	73	4,969
Minister of Justice	148	1,430
Treasurer	274	21,965
Commissioner of Lands, etc.	165	19,028
Minister of Agriculture	14	1,247
Commissioner of Public Works	283‡	36,419
Commissioner of Trade and Customs	111	7,339
Postmaster General	371	11,014
Minister of Mines	119	5,965
Water Supply Works	434§	54,750
Victorian Railways||—		
Working Lines Open	1,941	207,885
Engaged in Construction	1,784	221,821
Total	5,799	601,743

* Recently extended to nine months as a maximum in special cases.

† Parliamentary paper C, No. 9, Session 1889.

‡ Increased to 442 in May, 1890.

§ Including 73 men in the Melbourne and 361 in the Country Water Supply Department. The latter had increased to 508 in May, 1890.

|| On the 31st December, 1889. Information supplied by the Secretary for Railways

Persons in
State em-
ployment
in Victoria
and New
South
Wales.

93. The following is a comparative statement of the number and salaries of persons in the permanent employment of the State in Victoria and New South Wales. The information for the latter colony has been taken from a return prepared in the office of the Civil Service Board of New South Wales* :—

PERSONS EMPLOYED BY THE STATE IN VICTORIA AND NEW SOUTH WALES, 1889.

Branches in the Public Service.	No. of Persons.		Annual Payment.	
	Victoria.	N.S. Wales	Victoria.	N.S. Wales.
			£	£
Police and Gaols—				
Police	1,511	1,585	216,234	288,452
Penal Establishments and Gaols ...	245	457	41,324	64,799
Total	1,756	2,042	257,558	353,251
Defences (exclusive of Militia, etc.) ...	622	641	73,595	73,755
Customs and Excise	377	200	70,505	49,541
State Education—				
Education Department	4,747	4,042	582,250	490,342
University	51	77	20,078	17,242
Total	4,798	4,119	602,328	507,584
Charitable Institutions—				
Hospitals for the Insane	569	358	57,600	34,439
Industrial and Reformatory Schools ...	50	28	8,890	3,503
Total	619	386	66,490	37,942
Commercial and Revenue-yielding Depart- ments—				
Railways	11,844	11,091	1,439,978	1,483,000
Water Supply and Sewerage... ..	149	198	29,661	32,000
Post and Telegraph Offices	2,710	2,138	308,484	287,712
Crown Lands, Sale, Survey, etc. ...	205	818	46,943	162,465
Marine Board	8	221	2,050	36,975
Ports and Harbours	122†	287	19,500	50,660
Total	15,038	14,753	1,846,616	2,052,812
Royal Mint	54	43	10,838	9,711
All other Departments, including execu- tive, legislative, administrative and legal departments, public works, etc., etc.	1,552	1,325	408,962	380,309
Grand Total	24,816	23,509	3,336,892	3,464,905

* A copy of the return referred to was kindly furnished by Mr. J. T. Wilshire, M.P. for Canterbury, N.S.W.
† Including mercantile marine, and powder magazines.

94. Whilst the Government of Victoria employs about 1,300 more persons than the Government of New South Wales, the latter pays £128,000 more than the former in salaries and wages. The payment per person employed is £134 in Victoria, and £147, or £13 more, in New South Wales.

Payments in
Victoria
and New
South
Wales.

95. The following are the names of the present Governors of the various British Possessions, and the dates of their assumption of office:—

Governors
British
Dominion

GOVERNORS OF BRITISH DOMINIONS.

Colony.	Name.	Date of Assumption of Office.
AUSTRALASIA.		
Victoria	The Right Honorable John Adrian Louis Hope, Earl of Hopetoun, G.C.M.G.	28 Nov., 1889
New South Wales and Norfolk Island	The Right Honorable Charles Robert Carington, Baron Carrington, G.C.M.G.	12 Dec., 1885
" " "	Sir Alfred Stephen, G.C.M.G., C.B., (Lieutenant-Governor)	25 Nov., 1875*
Queensland	General Sir Henry Wylie Norman, G.C.B., G.C.M.G., C.I.E.	1 May, 1889
South Australia	The Right Honorable Algernon Hawkins Thomond Keith-Falconer, Earl of Kintore, G.C.M.G.	8 April, 1889
Western Australia	Sir William Cleaver Francis Robinson, G.C.M.G.	1890
Tasmania	Sir Robert George Crookshank Hamilton, K.C.B.	11 Mar., 1887
New Zealand	The Right Honorable William Hillier Onslow, Earl of Onslow, G.C.M.G.	2 May, 1889
Fiji	Sir John Bates Thurston, K.C.M.G. ...	Feb., 1888
New Guinea (British)	Sir William MacGregor, K.C.M.G. (Administrator)	4 Sept., 1888
EUROPE.		
Gibraltar	General The Honorable Sir Arthur Edward Hardinge, K.C.B., C.I.E.	3 Nov., 1886
Malta	Lieutenant-General Henry Augustus Smyth, R.A., C.M.G.	1890
Cyprus	Sir Henry Ernest Gascoigne Bulwer, G.C.M.G. (High Commissioner)	9 Mar., 1886
Heligoland†	Arthur Cecil Stuart Barkly, C.M.G. ...	26 Dec., 1888
ASIA.		
British India	The Most Honorable Henry Charles Keith Petty Fitzmaurice, Marquis of Lansdowne, G.C.M.G. (Governor-General)	11 Dec., 1888
Ceylon	Sir Arthur Elibank Havelock, K.C.M.G.	12 Mar., 1890 *
Hong Kong	Sir George William Des Vœux, K.C.M.G.	6 Oct., 1887
Mauritius	Sir Charles Cameron Lees, K.C.M.G. ...	Dec., 1889
Straits Settlements	Sir Cecil Clementi Smith, K.C.M.G. ...	20 Oct., 1887
Labuan	Charles Vandeleur Creagh ...	1 Jan., 1890
British North Borneo }		Mar., 1888

* Where asterisks occur the date is that of appointment instead of that of assumption of office.
† Whilst these pages were passing through the press, Heligoland was ceded to Germany

GOVERNORS OF BRITISH DOMINIONS—*continued.*

Colony.	Name.	Date of Assumption of Office.
AFRICA.		
Cape of Good Hope, and British Bechuanaland	Sir Henry Brougham Loch, G.C.M.G., K.C.B.; also High Commissioner for South Africa	13 Dec., 1889
British Bechuanaland ...	Sir Sidney Godolphin Alexander Ship- pard, K.C.M.G. (Administrator)	1 Oct., 1885
Basutoland ...	Sir Marshall James Clarke, late R.A., K.C.M.G. (Resident Commissioner)	8 April, 1884
Natal and Zululand ...	Sir Chas. Bullen Hugh Mitchell, K.C.M.G.	1 Dec., 1889
Zululand ...	Melmoth Osborn, C.M.G. (Resident Commissioner)	21 June, 1887
St. Helena ...	William Grey-Wilson (Acting) ...	4 Oct., 1887
Sierra Leone ...	Sir James Shaw Hay, K.C.M.G. ...	24 Oct., 1888
Gambia ...	Gilbert T. Carter (Administrator) ...	6 June, 1888
Gold Coast ...	Sir William Brandford Griffith, K.C.M.G.	27 April, 1885
Lagos ...	Sir Cornelius Alfred Moloney, K.C.M.G.	8 Jan., 1886
AMERICA.		
Canada ...	The Right Honorable Frederick Arthur Stanley, Baron Stanley of Preston, G.C.B. (Governor-General)	11 June, 1888
Ontario ...	Sir Alexander Campbell, K.C.M.G. (Lieutenant-Governor)	8 Feb., 1887*
Quebec ...	A. R. Angers, Q.C. (Lieutenant-Governor)	24 Oct., 1887*
Nova Scotia ...	A. W. McLelan (Lieutenant-Governor)	9 July, 1888*
New Brunswick ...	Sir Samuel Leonard Tilley, K.C.M.G., C.B. (Lieutenant-Governor)	31 Oct., 1885*
Manitoba ...	John C. Shultz (Lieutenant-Governor)	1 July, 1888*
N. W. Territories ...	Joseph Royal (Lieutenant-Governor) ...	1 July, 1888*
British Columbia ...	Hugh Nelson (Lieutenant-Governor) ...	8 Feb., 1887*
Prince Edward Island	J. S. Carvell (Lieutenant-Governor) ...	2 Sept., 1889*
Newfoundland ...	Sir J. Terence N. O'Brien, K.C.M.G. ...	18 Jan., 1889
Jamaica ...	Sir Henry Arthur Blake, K.C.M.G. ...	9 March, 1889
British Honduras ...	Sir Roger Tuckfield Goldsworthy, K.C.M.G.	17 July, 1884
Turks and Caicos Islands	Henry M. Jackson (Chief Commissioner)	Nov. 1885
British Guiana ...	The Right Honorable Jenico William Joseph Preston, Viscount Gormanston, K.C.M.G.	13 Jan., 1888
"	Sir Charles Bruce, K.C.M.G. (Lieut.- Governor)	2 Nov., 1885*
Bahamas ...	Sir Ambrose Shea, K.C.M.G. ...	1 Nov., 1887
Trinidad ...	Sir William Robinson, K.C.M.G. ...	9 Oct., 1885
Barbados ...	Sir Walter Joseph Sendall, K.C.M.G. ...	2 Nov., 1889
St. Vincent ...	Irwin Charles Maling (Administrator)	11 July, 1889
Windward Islands and Grenada	The Honorable Sir Walter Francis Hely- Hutchinson, K.C.M.G.	28 Nov., 1889
Tobago ...	Loraine G. Hay (Commissioner) ...	20 Dec., 1888
St. Lucia ...	Robert Baxter Llewelyn, C.M.G. (Ad- ministrator)	4 April, 1889
Leeward Islands and Antigua	Sir William Frederick Haynes Smith, K.C.M.G.	13 Jan., 1888
Montserrat ...	Edward Baynes (Commissioner) ...	Feb., 1889*

* Where asterisks occur the date is that of appointment instead of that of assumption of office.

GOVERNORS OF BRITISH DOMINIONS—*continued.*

Colony.	Name.	Date of Assumption of Office.
<i>AMERICA—continued.</i>		
St. Christopher and Nevis	John Spencer Churchill (Commissioner)	1888
Virgin Islands ...	Edward J. Cameron (Commissioner) ...	Feb., 1887
Dominica ...	George Ruthven Le Hunte (Commissioner)	
Bermuda ...	Lieutenant-General E. Newdigate-Newdegate, C.B.	29 Oct., 1888
Falkland Islands ...	Thomas Kerr, C.M.G. ...	24 Nov., 1880

96. Both Victoria and Canada pay their Governor £10,000 per annum, which is the highest amount paid by any British colony. The Cape of Good Hope comes next with £9,000, then New South Wales with £7,000. The lowest salaries paid to Governors are in Virgin Islands (£300) and St. Helena, Montserrat, and Turks Island (£500 each). In the following statement the salaries of Governors or other rulers are arranged in order, the highest being placed first and the rest in succession:—

SALARIES OF GOVERNORS OF BRITISH COLONIES.

Colony.	Salary of Governor.	Colony.	Salary of Governor.
	£		£
Victoria ...	10,000	Western Australia ...	3,000
Canada (Governor-General) ...	10,000	Barbados ...	3,000
Cape of Good Hope ...	9,000*	Leeward Islands ...	3,000
Straits Settlements ...	7,040†	Bermudas ...	2,946
New South Wales ...	7,000	Newfoundland ...	2,500
Ceylon ...	6,666	Windward Islands ...	2,500
Jamaica ...	6,000	Sierra Leone ...	2,500
Hong Kong ...	6,000†	Fiji ...	2,000
Queensland ...	5,000	Quebec ...	2,000
South Australia ...	5,000	Ontario ...	2,000
Tasmania... ..	5,000	Manitoba ...	2,000
New Zealand ...	5,000	Bahamas ...	2,000
Mauritius ...	5,000	Lagos ...	1,950
Gibraltar... ..	5,000	British Honduras... ..	1,800
Malta ...	5,000	Nova Scotia ...	1,800
British Guiana ...	5,000	New Brunswick ...	1,800
Trinidad ...	5,000	British Columbia... ..	1,800
Natal ...	4,000‡	British Bechuanaland ...	1,800
Cyprus ...	4,000	Labuan and British North Borneo	1,800
Gold Coast ...	3,500		.

* Including £1,000 as High Commissioner of South Africa, and £1,000 personal allowance from Imperial funds.

† Including allowances.

‡ Including £1,000 as Governor of Zululand.

SALARIES OF GOVERNORS OF BRITISH COLONIES—continued.

Colony.	Salary of Governor.	Colony.	Salary of Governor
	£		£
British New Guinea ...	1,700	Seychelles ...	833
Basutoland ...	1,500	Heligoland* ...	800
Prince Edward Island ...	1,400	St. Vincent ...	800
N. W. Territories of Canada (Lieutenant-Governor)	1,400	St. Lucia ...	800
British Guiana (Lieutenant-Governor)	1,350	Dominica ...	600
Zululand (Resident Commissioner)	1,200	St. Christopher and Nevis ...	600
Falkland Islands ...	1,200	Tobago ...	600
Gambia ...	1,100	Turks and Caicos Islands ...	500
		Montserrat ...	500
		St. Helena ...	500
		Virgin Islands ...	300

NOTE.—The salaries of the Governors of Newfoundland, Hong Kong, Straits Settlements and Labuan are paid in dollars; and the salaries of the Governors of Ceylon, Mauritius, and Seychelles are paid in rupees. The former have been reduced to pounds sterling upon the assumption that a dollar is worth 4s. 2d., and the latter have been similarly reduced under the assumption that a rupee is worth 1s. 8d.

Reigning
sovereigns.

97. The names of the reigning sovereigns or other rulers of the principal countries in the world, together with the years of birth and of succession to or assumption of office, are as follow:—

REIGNING SOVEREIGNS, ETC.

Country.	Name.	Year of Birth.	OFFICE.	
			Title.	Year of Assump-tion of.
Great Britain and Ireland	Victoria I. ...	1819	Queen of Great Britain and Ireland	1837
"	"	"	Empress of India ...	1877
Argentine Republic ..	M. J. Celman ...	...	President of the Republic	1886
Austria-Hungary ...	Franz Josef I. ...	1830	Emperor of Austria ...	1843
"	"	"	King of Hungary ...	1867
Belgium ...	Leopold II. ...	1835	King of the Belgians ..	1865
Bolivia ...	A. Arce ...	...	President of the Republic	1888
Brazil ...	T. Fonseca ...	...	President of the Republic	1889
Bulgaria ...	Ferdinand I. ...	1861	Prince of Bulgaria ...	1887
Chile ...	J. M. Balmaceda ...	...	President of the Republic	1886
China ...	Tsait'ien ...	1871	Hwangti of China ...	1875
Colombia ...	R. Nuñez ...	...	President of the Republic	1886
Congo Free State ...	C. Janssen ...	...	Governor-General ...	...
Corea ...	Li H'ung ...	...	King of Corea ...	1864
Costa Rica ...	B. Soto ...	...	President of the Republic	1885
Denmark ...	Christian IX. ...	1818	King of Denmark ...	1863
Ecuador ...	A. Flores ...	...	President of the Republic	1888
Egypt ...	Mohamed Tewfik ...	1852	Khedive of Egypt ...	1879
France ...	M.F.Sadi-Carnot ...	1837	President of the Republic	1887

* Ceded to Germany whilst these pages were passing through the press.

REIGNING SOVEREIGNS, ETC.—*continued.*

Country.	Name.	Year of Birth.	OFFICE.	
			Title.	Year of Assumption of.
Germany ...	Wilhelm II. ...	1859	Emperor of Germany and King of Prussia	1888
Alsace-Lorraine ...	Prince Schilling-fürst	1819	Statthalter of Alsace-Lorraine	1885
Anhalt ...	Friedrich ...	1831	Duke of Anhalt ...	1871
Baden ...	Friedrich I. ...	1826	Grand Duke of Baden ...	1852
Bavaria ...	Otto I. ...	1848	King of Bavaria ...	1886
Brunswick ...	Albrecht ...	1837	Regent of Brunswick ...	1885
Hesse ...	Ludwig IV. ...	1837	Grand Duke of Hesse ...	1877
Lippe ...	Woldemar ...	1824	Prince of Lippe ...	1875
Mechlenburg-Schwerin	Friedrich Franz III.	1851	Grand Duke of Mechlenburg-Schwerin ...	1883
Mechlenburg-Strelitz	Friedrich Wilhelm I.	1819	Grand Duke of Mechlenburg-Strelitz	1860
Oldenburg ...	Peter I. ...	1827	Grand Duke of Oldenburg	1853
Reuss (Elder Branch)	Heinrich XXII.	1846	Prince of Reuss (Elder Branch)	1859
Reuss (Younger Branch) ...	Heinrich XIV.	1832	Prince of Reuss (Younger Branch)	1867
Saxe-Altenburg ...	Ernst ...	1826	Duke of Saxe-Altenburg	1853
Saxe-Coburg-Gotha	Ernst II. ...	1818	Duke of Saxe-Coburg-Gotha	1844
Saxe-Meiningen ...	Georg II. ...	1826	Duke of Saxe-Meiningen	1866
Saxe-Weimar ...	Karl Alexander	1818	Grand Duke of Saxe-Weimar	1853
Saxony ...	Albert I. ...	1828	King of Saxony ...	1873
Schaumburg-Lippe	Adolf ...	1817	Prince of Schaumburg-Lippe	1860
Schwarzburg-Rudolstadt	Georg ...	1838	Prince of Schwarzburg-Rudolstadt	1869
Schwarzburg-Sondershausen ...	Karl II. ...	1830	Prince of Schwarzburg-Sondershausen	1880
Waldeck ...	Georg Victor ...	1831	Prince of Waldeck ...	1845
Württemberg ...	Karl I. ...	1823	King of Württemberg...	1864
Greece ...	Georgios I. ...	1845	King of the Hellenes ...	1863
Guatemala ...	M. Barillas ...	...	President of the Republic	1886
Haiti ...	General Légitime	...	President of the Republic	1888
Hawaii ...	Kalakaua I. ...	1836	King of Hawaii ...	1874
Holland ...	Willem III. ...	1817	King of the Netherlands	1849
Honduras ...	L. Bogran ...	...	President of the Republic	1883
Italy ...	Umberto I. ...	1844	King of Italy...	1878
" ...	Leone XIII. (Giacchino Pecci)	1810	Supreme Pontiff ...	1878
Japan ...	Mutsu Hito ...	1852	Mikado of Japan ...	1867
Liberia ...	H.R.W. Johnson	...	President of Liberia ...	1884
Madagascar...	Ranavalona III.	1862	Queen of Madagascar ...	1882
Mexico ...	P. Diaz ...	...	President of the Republic	1884
Montenegro ...	Nicholas I. ...	1841	Hospodar of Montenegro	1860
Morocco ...	Muley-Hassan	1831	Sultan of Morocco ...	1873
Nicaragua ...	R. Sacaza ...	...	President of the Republic	1890
Orange Free State ...	Judge Reitz ...	...	President of the Republic	1889

REIGNING SOVEREIGNS, ETC.—*continued.*

Country.	Name.	Year of Birth.	OFFICE.	
			Title.	Year of Assump- tion of.
Paraguay ...	P. Escobar ...	...	President of the Republic	1886
Persia ...	Nâsr-ed-Dîn ...	1829	Shah of Persia ...	1848
Peru ...	A. A. Caceres ...	...	President of the Republic	1886
Portugal ...	Luis I. ...	1838	King of Portugal ...	1861
Roumania ...	Carol I. ...	1839	Domnul of Roumania ...	1866
" ...	" ...	"	King "	1881
Russia ...	Alexander III ...	1845	Czar of Russia ...	1881
Salvador ...	F. Menendez ...	...	President of the Republic	1885
San Domingo ...	U. Heureaux ...	...	President of the Republic	1886
Servia ...	Alexander I. ...	1876	King of Servia ...	1889
Siam ...	Chulalonkorn I. ...	1853	King of Siam... ...	1868
South African Republic	S. J. P. Krüger ...	...	President of the Republic	1883
Spain ...	Alfonso XIII. ...	1886	King of Spain *	1886
Sweden and Norway ...	Oscar II. ...	1829	King of Sweden and Norway	1872
Switzerland... ...	B. Hammer ...	...	President of the Republic	1889
Tunis ...	Sidi Ali ...	1817	Bey of Tunis ...	1882
Turkey ...	Abdul-Hamid II. ...	1842	Sultan of Turkey ...	1876
United States ...	Benjamin Har- rison	1833	President of the United States	1889
Uruguay ...	M. Tages ...	...	President of the Republic	1886
Venezuela ...	P. R. Paúl ...	...	President of the Republic	1888
Zanzibar ...	Khalifa bin Säid	1846	Seyyid of Zanzibar ...	1888

Oldest and
longest
reigning
sovereigns.

98. It will be observed that, omitting the Supreme Pontiff, the only European sovereigns older than the Queen of Great Britain and Ireland are Willem III. of Holland, and Adolf of Schaumburg-Lippe, both born in 1817; and Christian IX. of Denmark, Ernst II. of Saxe-Coburg-Gotha, and Karl Alexander of Saxe-Weimar, all born in 1818; also that Her Majesty has reigned longer than any other monarch.

* The King's mother, Maria Christina, born in 1858, who succeeded in 1885 on the death of her husband, Alphonso XII., acts as Regent during her son's minority.

PART II.—POPULATION.

99. The usual decennial census will be taken in Victoria about the end of the first quarter of 1891; and an enumeration of the population will also be made in the other Australasian Colonies, the United Kingdom, and most of the other dominions of the British Empire at the same date. Census of 1891.

100. The estimated population of Victoria at the end of 1889* was as follows:— Population, 1889.

ESTIMATED POPULATION, 31ST DECEMBER, 1889.						
Males ...	...	...	...	...	...	593,798
Females	...	...	...	...	...	524,230
Total ...						<u>1,118,028</u>

101. This estimate shows an increase of 27,159, viz., 12,465 males and 14,694 females, upon that for the end of 1888, published in the last issue of this work. The figures have, as usual, been derived from the numbers returned at the last census, with the addition of those expressing the excess of births over deaths and of arrivals over departures since the census was taken. The official records of births, deaths, and arrivals have been taken as they stand, but the record of departures being known to be defective, an allowance has been made for those unrecorded, which are estimated to have amounted to 5,972, viz., 4,668 males and 1,304 females, in 1889, or to 47,229, viz., 37,560 males and 9,669 females, during the whole period since the census was taken. These numbers have accordingly been deducted from the totals. Had no such deductions been made, the apparent population at the end of 1889 would have been 1,165,257, viz., 631,358 males and 533,899 females. Mode of computing population estimate.

102. A partial check upon the periodical estimates of population is afforded by means of returns obtained from the municipal authorities, who at the time of making their valuations ought to ascertain the number of persons living upon each property rated. This is not always done correctly; and, besides, in some municipalities the properties are not visited each year for the purpose of rating, in which case the numbers are not counted, but estimates, more or less wide of the truth, are made by the municipal authorities. The aggregate population obtained by means of the municipal returns is thus not so accurate as it might be were due care exercised in every municipality. Municipal estimate of population.

* The estimated population of Victoria at the end of each year will be found in the Statistical Summary of Victoria (first folding sheet) published at the beginning of the second volume.

The sum of the returns for 1889 was 1,096,450,* which, with an allowance to bring it on to the end of the year and for districts not situated within the limits of any municipality, would give a total of 1,109,350, or 55,907 less than the apparent population,† but only 8,678 less than the reduced estimate adopted. It may be remarked that, when the census of 1881 was taken, the population according to the municipal estimate was found to differ by several thousands from the number then returned, although the difference was not nearly so great as that shown by the apparent population brought on throughout the ten years which had intervened between it and the previous census, which, it will be remembered, was found to exceed the truth by 67,000.

Mean popu-
lation, 1889.

103. Supposing the apparent population had been correct, the mean or average population during 1889 would have been 1,148,690, viz., 525,900 males and 622,790 females; but, calculating upon the basis of the reduced estimate, the mean population of the year may be set down as follows:—

ESTIMATED MEAN POPULATION, 1889.

Males ...	...	...	...	...	...	587,550
Females	...	...	...	...	...	516,750
						<hr/>
Total ...	...	...	...	...	...	1,104,300
						<hr/>

Increase of
population,
1889.

104. According to the records of births and deaths, and of immigrants and emigrants, the apparent increase of population in 1889 was 33,131, viz., 17,133 males and 15,998 females. Of this increase, 16,967, consisting of 7,649 males and 9,318 females, resulted from excess of births over deaths; and the remainder, viz., 16,164, consisting of 9,484 males and 6,680 females, was due to excess of arrivals over departures.

Increase of
population,
1871 to 1889.

105. The figures showing the apparent increase of population are useful for comparing the results of one year with those of another, but are not to be relied upon for individual years, they being usually higher than the actual numbers, as was made abundantly manifest by the results of the last census. The reason of this is that a large number of persons leave the colony by sea without being recorded by the Immigration Office. This causes a constant loss in the account of population, unrecognised at the time, which can only be counter-balanced by a surplus of arrivals over departures overland, a circumstance, which, it is believed, has of late years not occurred to any great extent. In 1889, the apparent increase of population was less by 26,888 than in 1888, by 5,933 than in 1887, and by 8,043 than in

* The returns are usually made up to about the middle of August.

† Or that obtained from the records, without allowance for defective returns.

1886; it was, however, much larger than in any other year since 1870. The exceptionally high increase in 1888 was mainly due to the opening of the Melbourne Centennial International Exhibition in that year, to the large amount of British capital sent to Victoria for investment, which led to extensive building operations being undertaken, chiefly in Melbourne, and to the excitement which prevailed in consequence of the large fortunes which were apparently being made by the purchase and sale of land. Fourteen years ago (1875), according to the figures, the increase of population was at a minimum; but since then a marked improvement has taken place from year to year, especially since 1883. The following are the figures for the last nineteen years:—

APPARENT INCREASE OF POPULATION.*

1871	...	...	25,846	1881	...	...	22,165
1872	...	...	18,282	1882	...	...	23,993
1873	...	...	19,765	1883	...	...	25,565
1874	...	...	17,945	1884	...	...	29,486
1875	...	...	14,835	1885	...	...	30,593
1876	...	...	17,028	1886	...	...	41,174
1877	...	...	20,487	1887	...	...	39,064
1878	...	...	18,655	1888	...	...	60,019
1879	...	...	19,891	1889	...	...	33,131
1880	...	...	26,157				

106. As practically all the deaths are registered, but some of the births escape registration, the apparent increase by the surplus of the latter over the former is always somewhat below the truth. As, however, it is probable that the proportion of unregistered births is tolerably constant from year to year, and is not very large in any year, the figures are useful. The apparent excess of births over deaths in 1889 was not so great as in 1888 by 1,249, or as in 1887 by 71, but was greater than in any other year since 1871. The following are the numbers in the last nineteen years:—

APPARENT INCREASE BY EXCESS OF BIRTHS OVER DEATHS.†

1871	...	...	17,464	1881	...	...	14,843
1872	...	...	16,530	1882	...	...	13,113
1873	...	...	16,599	1883	...	...	14,535
1874	...	...	14,578	1884	...	...	15,345
1875	...	...	11,433	1885	...	...	15,611
1876	...	...	13,208	1886	...	...	15,872
1877	...	...	13,234	1887	...	...	17,038
1878	...	...	13,879	1888	...	...	18,216
1879	...	...	14,719	1889	...	...	16,967
1880	...	...	14,496				

* The estimated *actual*, as distinguished from the *apparent*, increase of population in any year may be obtained by taking the difference between the figures of population at the end of the year in question and the one preceding it, as given in the first folding sheet published in the second volume.

† The number of births and deaths in each year will be found in the Statistical Summary of Victoria (first folding sheet) at the beginning of the second volume.

Increase by
immigra-
gration.

107. Leaving out of the question the arrivals and departures over-land, of which no attempt to take an account is made, the main source of error in the estimates of population is doubtless to be found in the returns of emigration by the seaboard. The arrivals by sea are, it is believed, noted with much accuracy, as also are the departures for distant countries; but, in consequence of many persons travelling from Victoria to the neighbouring colonies without taking their passage beforehand, their names do not appear in the lists supplied by the shipping agents to the immigration authorities, and hence, although they have quitted this colony, they are still supposed to form part of its population, for which reason the real increase by excess of arrivals over departures is always less than the figures show. This subject has often been referred to in previous issues of this work,* and has been the occasion of some correspondence between the Government Statist and the Immigration Agent in Melbourne. There is reason to believe that the records now are more accurate than they used to be, but there is no doubt that each year many persons still leave the colony unrecorded. Attempts have been made to rectify the figures by procuring a statement of the recorded arrivals from Victoria in the neighbouring colonies, and this was for some years tolerably successful; but since the steamers of the Peninsular and Oriental Company have gone on to Sydney, and the Orient, Messageries, and Imperial German mail lines of steamers—which, like the first-named, call at Adelaide, Melbourne, and Sydney—have been established, the plan has entirely failed; the reason being that the Melbourne passengers are not always distinguished in the returns, the authorities in Sydney frequently setting them down as coming from Colombo or England, and the authorities in Adelaide entering them as coming from Sydney. The desirability of the immigration authorities of the different colonies meeting in conference for the purpose of making arrangements for keeping their accounts of immigration and emigration upon a correct and uniform principle has been urged upon the Victorian Government by the Government Statist,† but this recommendation has not yet been adopted. In the meantime the figures, which are as follow for the last nineteen years—and which, it will be observed, show a considerable decrease for 1889 as compared with the numbers for the three previous years, but an increase as compared with those given for any

* See *Victorian Year-Book*, 1877-8, paragraph 40; ditto, 1878-9, paragraph 36; ditto, 1879-80, paragraph 42, etc.

† See paragraph 11 of the Government Statist's Report, dated 22nd November, 1884, on the Australasian Statistics 1883, Parliamentary Paper 77, Session 1884.

other year of the period—must be taken only for what they may be worth :—

APPARENT INCREASE BY EXCESS OF ARRIVALS OVER DEPARTURES.*

1871	...	...	8,382	1881	...	...	7,322
1872	...	...	1,752	1882	...	...	10,880
1873	...	...	3,166	1883	...	...	11,030
1874	...	...	3,367	1884	...	...	14,141
1875	...	...	3,402	1885	...	...	14,982
1876	...	...	3,820	1886	...	...	25,302
1877	...	...	7,253	1887	...	...	22,026
1878	...	...	4,776	1888	...	...	41,803
1879	...	...	5,172	1889	...	...	16,164
1880	...	...	11,661				

108. The following table shows the estimated population of each Australasian colony at the end of 1888 and 1889, and the increase of each during the twelve months ended with the latter :—

Population
of Austral-
asian
colonies.

ESTIMATED POPULATION OF AUSTRALASIAN COLONIES, 1888 & 1889.†

Colony.	Estimated Population at end of—		Increase.
	1888.	1889.	
Victoria ...	1,090,869	1,118,028	27,159
New South Wales ...	1,085,740	1,122,200	36,460
Queensland ...	387,463	406,658	19,195
South Australia‡	318,308	324,484	6,176
Western Australia ...	42,137	43,698	1,561
Total ...	2,924,517	3,015,068	90,551
Tasmania ...	146,149	151,472	5,323
New Zealand ...	607,380	620,279	12,899
Grand Total ...	3,678,046	3,786,819	108,773

NOTE.—The *apparent* population of Victoria was 1,132,126 at the end of 1888, and 1,165,257 at the end of 1889 : that of New South Wales was 1,127,245 and 1,169,924 at the end of the same two years. The *apparent* increase of population in 1889 was 33,131 in the case of Victoria, and 42,679 in the case of New South Wales. The population in this table is exclusive of Aborigines, except a few in Victoria and New South Wales.

109. Both Victoria and New South Wales have reduced their estimates of population to allow for unrecorded departures which have taken place since the census of 1881 was taken, the former by 47,229 and the latter by 44,699. Moreover, Queensland and New Zealand took censuses in 1886, which led to a reduction on previous estimates of 11,427 persons in the case of the former, and 7,194 in that of the latter. It appears, however, that these two colonies have

Colonies
which have
amended
their popu-
lation esti-
mates.

* The number of arrivals and departures recorded in each year will be found in the Statistical Summary of Victoria (first folding sheet) published in the second volume.

† The estimated population of each Australasian colony for 1873 and each subsequent year will be found in the Summary of Australasian Statistics (third folding sheet) published in the second volume.

‡ Inclusive of the Northern Territory, which at the end of 1889 was estimated to contain 5,318 inhabitants.

not reduced their population estimates since 1886, whilst the other three colonies have probably not done so since 1881, and as the record of persons departing is more or less incomplete in all of them there is little doubt that the figures given, especially in the case of the last three colonies, overstate the truth.

Order of colonies in respect to increase of population.

110. The subjoined figures show the estimated percentage of increase of the population of each colony during the year 1889, the colonies being arranged in order according to the rate of increase in each :—

ORDER OF COLONIES IN REFERENCE TO PROPORTIONATE INCREASE OF POPULATION, 1889.

	Per cent.		Per cent.
1. Queensland...	4.95	5. Victoria ...	2.49
2. Western Australia...	3.70	6. New Zealand ...	2.12
3. Tasmania ...	3.64	7. South Australia ...	1.94
4. New South Wales ...	3.36		

Increase in Australia and Australasia, 1889.

111. By the totals in the last table it may be ascertained that, in 1889, the population of Continental Australia increased by 3.10 per cent., and the population of Continental and Insular Australasia combined increased by 2.96 per cent.

Population of Australasian colonies, 1861 to 1889.

112. The populations of the Australasian colonies in 1881,* at the two previous decennial census periods, also the estimated population in 1889, are shown in the following table :—

POPULATION OF AUSTRALASIAN COLONIES, 1861, 1871, 1881, AND 1889.†

Colony.	Population at end of First Quarter of—			Estimated Population, 31st December, 1889.
	1861.	1871.	1881.	
Victoria ...	540,322	731,528	862,346	1,118,028
New South Wales ...	350,860	503,981	751,468	1,122,200
Queensland ...	30,059	117,960†	213,525	406,658
South Australia ...	126,830	185,626	279,865	324,484
Western Australia ...	15,100‡	25,270‡	29,708	43,698
Total Australia ...	1,063,171	1,564,365	2,136,912	3,015,068
Tasmania ...	89,977	101,020†	115,705	151,472
New Zealand ...	84,536†	257,810†	489,933	620,279
Total Australasia ...	1,237,684	1,923,195	2,742,550	3,786,819

* Including enumerated Aborigines, the population of the Australian continent at the census of 1881 was 2,166,189, and the population of that continent, with the addition of Tasmania and New Zealand, was 2,815,924.

† Exclusive of Aborigines, except a few in Victoria and New South Wales.

‡ In these cases, where the census was not taken near the end of the first quarter, the figures have been estimated on the basis of the nearest census.

113. From this table it appears that, during the $8\frac{3}{4}$ years which have elapsed since the census of 1881, the population of the Australasian colonies as a whole is estimated to have increased by about 1,040,000, as compared with not quite 820,000 during the 10 years 1871 to 1881, and with less than 700,000 during the 10 years 1861 to 1871. In the last $8\frac{3}{4}$ years the increase of New South Wales was about 370,000, or over a third of the whole; Victoria 250,000, or nearly a fourth; Queensland 190,000, or nearly a fifth; and New Zealand 130,000, or about an eighth.

114. The following table shows the annual rate of increase of the population of each colony between 1881 and 1889, and in the two previous decennial periods:—

ANNUAL INCREASE OF POPULATION, 1861 TO 1889.

Colony.	Annual Rate of Increase per cent. between—		
	1861 and 1871.	1871 and 1881.	1881 and 1889. (Estimated).
Victoria	3·07	1·66	3·01
New South Wales	3·69	4·08	4·69
Queensland	14·65	6·11	7·64
South Australia	3·88	4·19	1·70
Western Australia	5·28	1·63	4·51
Total Australia	3·94	3·17	4·01
Tasmania	1·14	1·37	3·12
New Zealand	11·80	6·63	2·73
Total Australasia	4·51	3·61	3·76

115. Except in very small communities, an annual increase to the population of 3 per cent. may be regarded as a high rate, and even that could not under ordinary conditions be maintained except by the aid of immigration. For it rarely happens that over a series of years the rate of natural increase (*i.e.* by excess of births over deaths) exceeds 2 per cent. Indeed, in almost every country it is below $1\frac{1}{2}$ per cent.*; although exceptional instances occur, as in the case of some of the Australasian Colonies, where the rates have over a series of years considerably exceeded even 2 per cent.—notably New Zealand, where the rate has averaged as high as 2·8 per cent.* Such high rates, however, are unusual, and are generally due to the presence of an abnormally large proportion of the population being at the reproductive ages, consequent on a considerable influx of immigrants.

* See *Victorian Year-Book*, 1888-9, Vol. II., page 59.

A glance at the last table will show that, assuming the estimates for 1889 to be correct, which can only be verified when a census is taken, an increase of over 3 per cent. per annum had taken place in the populations of all the colonies except South Australia and New Zealand. Whilst the annual rates of increase in Victoria and Tasmania only slightly exceeded that proportion, those in New South Wales and Western Australia were over $4\frac{1}{2}$ per cent., and the rate of increase in Queensland was as high as $7\frac{2}{3}$ per cent. The last-named colony, however, has little more than a third of the population of either Victoria or New South Wales.

Rates of
increase at
three
periods
compared.

116. On comparing the rates of increase at the three periods, it will be observed that the population of Victoria apparently increased nearly twice as fast at the last as at the second period, but not quite so fast as at the first period; also that the population of New South Wales has apparently increased much faster at the last than at either of the former periods. Queensland and New Zealand appear to have had by far the highest rates of increase at the first and second periods, but, whilst Queensland still appears to maintain its high position, New Zealand at the last period is shown to have had the lowest rate of any colony except South Australia.

Probable
Austral-
asian popu-
lations,
1891.

117. In view of the increases shown in the table, it may fairly be estimated that when the next simultaneous census of the colonies is taken, viz., in 1891, the inhabitants of the Australian continent will be found to number at least 3,150,000, and those of that continent with the addition of Tasmania and New Zealand will be found to number close upon 4,000,000.

Probable
rate of
increase,
1881-1891.

118. In the ten years ended with the date of the census of 1881, the rate of increase of the population of the Australian continent was about 36 per cent., and of the continent, combined with Tasmania and New Zealand, about 42 per cent. Judging from the increase which is estimated to have taken place in the $8\frac{3}{4}$ years intervening between the date of the census and the end of 1889, it appears probable that both these increases, especially the first-named, will be much exceeded in the ten years ending with the next census (1891), and that the rate of increase of the population of Continental Australia will be found to have been about 47 per cent., and that of Continental and Insular Australasia combined, about 44 per cent.

Time Vic-
torian
population
will double.

119. Between the censuses of 1871 and 1881, the increase of the Victorian population was only 18 per cent. At this rate, the population of this colony would double itself in 42 years. There is reason

to believe, however, that since the last census the population has been increasing at a much faster rate, and that it may be expected to double itself in a considerably shorter period.

120. In the following table giving an estimate of the birthplaces and allegiance of the people of this colony at the middle of 1889, the number of Victorian born has been found by adding the estimated net increase since the last census, which has been obtained by deducting from the births an estimated allowance for deaths and emigration.* Those born in “Other Australasian Colonies” have been increased in the same ratio as Victorians; the number of Chinese has been brought on from the census by means of the returns of arrivals, departures, and deaths of Chinese which have occurred since the census was taken, and the remainder of the population has been distributed amongst the other nationalities according to the census proportions†:—

BIRTHPLACES OF THE PEOPLE OF VICTORIA ABOUT THE MIDDLE OF 1889 (ESTIMATED).

Birthplaces.	Mean Population, 1888-9.		
	Males.	Females.	Total.
Victoria	320,377	329,988	650,365
Other Australasian Colonies ...	24,770	27,230	52,000
England and Wales	111,627	71,837	183,464
Scotland	34,276	25,397	59,673
Ireland	53,886	52,646	106,532
Other British Possessions ...	7,926	4,706	12,632
Germany	8,096	2,808	10,904
The United States	2,182	814	2,996
China	11,590	89	11,679‡
Other Foreign Countries ...	12,820	1,235	14,055
Total	587,550	516,750	1,104,300
ALLEGIANCE.			
British Subjects (by birth) ...	552,862	511,804	1,064,666
Foreign Subjects (by birth) ...	34,688	4,946	39,634

121. The following table contains a statement of the birthplaces of the people of each Australasian colony, according to the returns of the census of 1881; also the number of males and females in each birthplace:—

* Between 1871 and 1881 the actual loss amongst Victorian born due to death and emigration was equivalent to 78·65 per cent. for males, and 83·69 per cent. for females, of the total deaths and departures of persons of the same sexes amongst all nationalities. Since 1831 slightly higher ratios have been assumed, viz., 80 per cent. for males, and 85 per cent. for females.
† This mode of computation necessarily causes the relative proportions of males and females in the various nationalities to differ from those of the census.
‡ This does not include half-castes, of which there are probably not less than 400 in Victoria.

BIRTHPLACES OF THE PEOPLE IN THE AUSTRALASIAN COLONIES, 1881.

Birthplace.	Numbers of each birthplace enumerated in—						
	Victoria.	New South Wales.	Queensland.	South Australia	Western Australia	Tasmania	New Zealand.
MALES.							
The Colony* ...	247,528	234,453	54,281	85,228	10,528	39,894	136,772
Other Australasian Colonies	19,051	24,665	8,640	5,236	400	2,059	8,788
England and Wales	85,426	70,787	22,608	33,833	4,980	11,383	70,704
Scotland ...	26,224	15,828	6,070	6,028	575	1,931	31,005
Ireland ...	41,226	36,494	14,842	9,060	1,519	3,401	27,666
Other British Possessions	2,348	2,674	884	903	23	364	2,429
France ...	1,042	1,205	261	213	21	28	614
Germany ...	6,144	5,367	6,891	5,234	61	464	3,188
The United States ...	1,645	1,947	261	†	68	96	637
China ...	11,743	10,141	11,224	4,146	145	842	5,017
Other Foreign Countries	5,888	6,038	9,339	2,390	305	303	5,885
Residue‡ ...	3,818	1,550	743	737	77	397	1,268
Total ...	452,083	411,149	136,044	153,008	18,702	61,162	293,973
FEMALES.							
The Colony* ...	251,671	232,749	52,540	84,625	9,591	40,097	130,729
Other Australasian Colonies	20,715	19,849	6,025	4,330	260	1,928	8,489
England and Wales	62,027	39,887	14,782	25,318	1,780	5,924	50,483
Scotland ...	21,929	9,251	3,859	4,609	157	1,813	21,748
Ireland ...	45,507	32,698	13,453	9,186	1,456	3,791	21,697
Other British Possessions	1,311	1,087	278	445	12	301	1,585
France ...	292	292	79	80	9	31	234
Germany ...	2,427	2,154	4,747	3,567	10	318	1,631
The United States ...	698	571	83	†	19	45	204
China ...	56	64	29	5	...	2	16
Other Foreign Countries	795	740	1,755	476	9	94	2,351
Residue‡ ...	2,835	977	436	562	49	199	890
Total ...	410,263	340,319	98,066	133,203	13,352	54,543	240,057

Chinese
in Australia-
lasian
colonies.

122. It is estimated that in 1859 there were about 43,000 Chinese in the Australasian colonies, of whom 42,000 were in Victoria, chiefly upon the gold-fields. A year later a number of Chinese left Victoria, mainly for New South Wales, whilst some returned to their native country, with the effect that when a census was taken in 1861 the number was found to have become reduced in Victoria to 24,732, and in all the Australasian colonies to 38,300. At the census taken ten years later, viz., in 1871, the number had become still further reduced in Victoria to 17,935, and in Australasia to 31,100. Ten years still

* Including enumerated Aborigines.

† In South Australia those born in the United States were not separated from natives of "Other Foreign Countries."

‡ Comprising those born at sea and those of whom the birthplace was not returned.

later, viz., at the census of 1881, the number of Chinese had fallen to 12,128 in Victoria; but in all Australasia it had increased to 43,706, that being, however, only 1,700 in excess of the estimated number resident in Victoria alone in 1859, or 22 years previously. The following table shows the number of Chinese of either sex in each colony as returned at the census of 1881:—

CHINESE IN THE AUSTRALASIAN COLONIES, 1881.

Colony.	Males.	Females.	Total.
Victoria ...	11,869	259	12,128
New South Wales ...	10,141	64	10,205
Queensland ...	11,206	23	11,229
South Australia... ..	4,146	5	4,151
Western Australia ...	145	...	145
Total ...	37,507	351	37,858
Tasmania ...	842	2	844
New Zealand ...	4,995	9	5,004
Grand Total ...	43,344	362	43,706

123. It will be noticed that the numbers in this table differ in some instances from the numbers set down in a previous table* as born in China, the reason being that some persons of the Chinese race were returned at the census as born elsewhere than in that country, and, on the other hand, some persons of European extraction were returned as born in China. The differences in all cases are only slight.

Not all
Chinese
born in
China.

124. According to information brought down to the beginning of 1890, the total number of Chinese in the Australasian colonies was then 47,433, the increase since the census of 1881 having been 3,727. The following are the numbers in each colony compared with the numbers returned at the census of 1881:—

Chinese
in Aus-
tralasian
colonies,
1890.

CHINESE IN AUSTRALASIAN COLONIES, 1881 AND 1890.

Colony.	Number of Chinese.		
	1881. (Enumerated).	1890. (Estimated).	Increase (+). Decrease (-).
Victoria ...	12,128	11,290	- 838
New South Wales ...	10,205	15,581	+ 5,376
Queensland ...	11,229	7,691	- 3,538
South Australia†... ..	4,151	6,660	+ 2,509
Western Australia ...	145	626	+ 481
Total ...	37,858	41,848	+ 3,990‡
Tasmania ...	844	1,000	+ 156
New Zealand ...	5,004	4,585	- 419
Grand Total ...	43,706	47,433	+ 3,727‡

* See table following paragraph 121 *ante*. † Chiefly in the Northern Territory. ‡ Net figures.

125. At the first colonization of the district now called Victoria, the Aborigines were officially estimated to number about 5,000; but according to other and apparently more reliable estimates they numbered at that time not less than 15,000.* When the colony was separated from New South Wales the number was officially stated to be 2,693. According to the census of 1881, the number returned was 780, viz., 460 males and 320 females; all, however, were not enumerated at that time, and there are now believed to be about 800 in the colony, of whom 570 are pure blacks and the remainder half-castes. The existence of the few of the Aboriginal race that still remain alive has no political or social significance whatever, and it will probably become extinct in the course of a few years.

126. Aboriginal stations, under the Board for the Protection of the Aborigines, have been founded at Coranderrk, near the junction of the Yarra and Watts Rivers; at Framlingham and Lake Condah, in the Western District; at Lakes Wellington and Tyers, in Gippsland; and at Lake Hindmarsh, in the Wimmera District. There are, moreover, twelve depôts, where Aborigines who object to live on stations can obtain supplies. The following are the areas of the reserves at the stations, the average number of Aborigines living on each reserve, also the average number who from time to time receive supplies at the depôts or occasionally visit the stations:—

ABORIGINES, 1890.

Name of Station.	Area of Reserve.	Number of Aborigines. (including half-castes), May, 1890.
	Acres.	
Coranderrk	6,000	96
Framlingham	3,500	25
Lake Condah	4,000	90
Lake Wellington	2,363	62
Lake Tyers	5,000	90
Lake Hindmarsh	3,000	35
Occasional visitors to stations and depôts ...	...	250
Total	23,863	648

127. An Act came into operation on the 1st January, 1887,† in which provision was made for the gradual separation of the half-castes from the pure blacks, and the absorption of the former into

* Mr. E. M. Curr, in his work entitled *Recollections of Squatting in Victoria*, page 236 (George Robertson, Melbourne, 1883), states that he believes he has seen all the published estimates of our black population which have been made from time to time since 1843, and, with larger information than they were based on, feels convinced that the Aboriginal inhabitants of Port Phillip (now Victoria) could not have numbered less than fifteen thousand when our occupancy of the colony began in 1835.

† *The Aborigines Protection Act 1886* (50 Vict. No. 912).

the general population. Half-castes of either sex over 34 years of age habitually living and associating with the Aborigines, female half-castes married to Aborigines, children unable to earn their own living, and other half-castes receiving licences from the Board to reside on an Aboriginal station, are excluded from the operation of the Act. Other half-castes, who prior to the passing of the Act had been maintained either wholly or in part by moneys granted by Parliament for the benefit of the Aborigines, might at the discretion of the Board, if in necessitous circumstances, be supplied with rations or their equivalent in money for three years, with clothing for five years, and with blankets for seven years after the coming into operation of the Act.

128. In their report for 1888-9, dated the 4th November, 1889, the Board for the Protection of the Aborigines in the colony of Victoria wrote as follows:—

Report on
Aborigines
1889.

“The number of half-castes who, under the operation of the new Act for the merging of half-castes among the general population of the colony, are earning their living with some assistance from the Board is 113. Rations and clothing are still supplied to those of the half-castes who, according to the *Amended Act*, satisfy the Board of their necessitous circumstances. The Board are drawing up regulations for apprenticing boys and girls to trades and other useful occupations. The *Amended Act* makes provision that all able-bodied half-castes, who were under 34 years when the Act came into operation, will have to leave the stations by the last day of the present year. As the number of pure blacks is very small, the Board unanimously adhere to their general policy with regard to the amalgamation of stations, with the twofold object of first and primarily improving the condition and comfort of the full blacks themselves, and in the second place of reducing the annual expenditure. There are still some full blacks who have not settled down on any station. These are supplied with clothing and rations at depôts in different parts of the colony, and are regularly visited by the general inspector. The number of these depôts can soon be considerably reduced without any hardship to the Aborigines.”

129. According to the same report, the total amount expended on the Aboriginal stations in the year ended 30th June, 1889, was £9,206, from which if the income be deducted, amounting to £1,829, the net cost of the stations will be reduced to £7,377.

Expenditure
on Abori-
gines.

130. In all the colonies on the Australasian continent the enumeration of the Aborigines obtained at the census of 1881 was incomplete. This is of little importance, so far as this colony is concerned, the numbers here being so small. In New South Wales, only the “civilized” Aborigines were returned, which probably represented only a small portion of the whole; in Queensland, only a few Aborigines were returned in the first instance, but an estimate was subsequently made by officers of the Police Department, and the census figures were supplemented by the numbers so obtained. The figures for South Australia do not include the Aborigines in the Northern Territory; and those for Western Australia only relate to

Aborigines
in Austral-
asian
colonies.

the Aborigines in service. No Aborigines remain on the island of Tasmania.* In New Zealand, an enumeration of the Maoris was made by the officers of the Native Department, and this is believed to have been tolerably correct. The following are the returns obtained in the different colonies in 1881, either by enumeration or estimate. Since then no attempt has been made to number the Aboriginal population :—

ABORIGINES IN THE AUSTRALASIAN COLONIES, 1881.

Colony.	Males.	Females.	Total.
Victoria ...	460	320	780
New South Wales†	938	705	1,643
Queensland‡	10,719	9,866	20,585
South Australia §	3,478	2,868	6,346
Western Australia ||	1,640	706	2,346
Total ...	17,235	14,465	31,700
New Zealand ¶	24,368	19,729	44,097
Grand Total ...	41,603	34,194	75,797

131. The next table contains a statement of the estimated number of persons of different religions in Victoria about the middle of 1889, the proportions which those of each religion bear to the total population being identical with those obtaining at the last census ; except in

* Mr. R. M. Johnston, Government Statistician of Tasmania, writes :—“The last male of the Tasmanian Aborigines died on the 3rd March, 1869, and the last of the race (*Trucaninni*, a female) died at Hobart on the 8th May, 1876. On the islands of Bass’s Straits (Barren and Badger) there are a few families of half-castes, who live in a miserable sort of way ; catching mutton birds and boiling them down for oil seems to be their principal occupation. Although the men are strong and vigorous, and excelling as boatmen, they are extremely improvident and lazy. So far as I can learn, these half-castes are mixed, and are quite as much related to the natives of continental Australia as they are to the Aborigines of Tasmania.”

† Returns were obtained of the “civilized” Aborigines only.

‡ In Queensland the numbers were partly derived from estimates. Mr. Henry Jordan, who in 1881 was Registrar-General of that colony, considered the estimates too low. He wrote as follows in his report on the census :—“In the northern parts of the colony the Aborigines are comparatively numerous, and some persons resident in the Cook and Palmer districts have supposed there may be 70,000 in Queensland. This, however, is a very crude estimate, and may be far wide of the truth.”

§ The Aborigines in the Northern Territory of South Australia are not included. In the whole colony there are probably quite as many Aborigines as in Queensland.

|| The Aborigines returned at the census of Western Australia are only those in the employment of the colonists. Large portions of that immense territory have not yet been explored, and in some places Aborigines are very numerous.

¶ In his report upon the census, Mr. W. R. E. Brown, Registrar-General of New Zealand, writes as follows respecting this enumeration :—“An attempt was made in 1881 to obtain a correct enumeration of the native population, but although the officers of the Native Department who had the charge of the enumeration do not think that there are any material errors in the results obtained, yet they agree in stating that the numbers given are not correct, and in many instances only estimates. In some parts no access was permitted to those desirous of obtaining information. In parts the natives showed a suspicion of the enumerators, and a growing disinclination to have their numbers known, and information relating thereto was refused. Difficulty was also experienced on account of the nomadic habits of portions of the tribes ; and in some instances the natives who were at a distance from their tribes were enumerated *in loco*, and given again by another officer among the number of their tribe. . . . The total number is greater by 502 than that returned at the census of 1878 ; but as the reports of the native officers generally point to a perceptible decrease in the Maori population, this apparent increase may be attributable to a better enumeration on the present occasion.”

Religions,
1889.

the case of the Buddhists, Confucians, etc., which, as at the census, have been considered to be in the proportion of 92 per cent. to the number of Chinese:—

RELIGIONS OF THE PEOPLE ABOUT THE MIDDLE OF 1889 (ESTIMATED).

Religious Denominations.	Mean Population.		
	Males.	Females.	Total.
Church of England*	213,868	184,893	398,761
Presbyterians	89,308	80,406	169,714
Methodists†	70,330	68,418	138,748
Independents	12,809	12,609	25,418
Baptists	12,632	13,436	26,068
Other Protestants	19,154	13,952	33,106
Roman Catholics‡	130,906	129,498	260,404
Jews	3,114	2,428	5,542
Buddhists, Confucians, etc.	10,660	50	10,710
Residue	24,769	11,060	35,829
Total	587,550	516,750	1,104,300

132. The following table shows the principal religious denominations in each Australasian colony on the 3rd April, 1881, except Tasmania, in which the religions of the people were not ascertained; also the number of males and females adhering to each denomination:—

Religions in
Austral-
asian
colonies.

RELIGIONS OF THE PEOPLE IN THE AUSTRALASIAN COLONIES, § 1881.

Religions.	Number of Persons|| of each Denomination enumerated in—					
	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	New Zealand.
MALES.						
Church of England	164,520	187,055	42,359	40,991	9,573	111,653
Presbyterians	68,753	40,162	12,687	9,531	633	61,543
Methodists	54,097¶	32,965	7,479	26,506	1,096	23,646
Independents	9,859	7,126	2,470	5,047	656	3,449
Baptists	9,698	3,833	2,818	6,680	...	5,785
Other Protestants	14,765	9,984	10,315	24,830	...	7,588
Roman Catholics	100,644	108,533	28,528	21,871	4,537	36,963
Jews	2,396	1,858	278	412	..	844
Buddhists, Confucians, etc.	11,122	9,285	16,486**	4,146††	...	4,931
Residue‡‡	16,229	10,348	1,905	9,516	567	13,203
Total	452,083	411,149	125,325	149,530	17,062	269,605

* Including also Free Church of England and Protestants not otherwise defined.
† Including also Bible Christians. ‡ Including also Catholics not otherwise defined.
§ Except Tasmania, in which no census of religion was taken.
|| Not including Aborigines, except the few enumerated in Victoria and New South Wales.
¶ Not including Bible Christians, who are combined with " Other Protestants."
** The Mahometans were combined with the Buddhists, Confucians, etc., in Queensland.
†† The Buddhists, Confucians, etc., in South Australia, not having been distinguished in the census returns, have been assumed to be equal to the number of Chinese.
‡‡ Including those of other religions than those named, those objecting to state their religion, those returning themselves of no denomination or no religion, and the unspecified.

RELIGIONS OF THE PEOPLE IN THE AUSTRALASIAN COLONIES,* 1881
—continued.

Religions.	Numbers of Persons† of each Denomination enumerated in—					
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	New Zealand.
FEMALES.						
Church of England ...	146,771	155,304	31,561	34,821	6,690	91,680
Presbyterians ...	63,838	32,383	9,922	8,386	371	51,565
Methodists ...	54,296‡	31,387	6,872	26,282	988	22,636
Independents ...	10,019	7,202	2,294	4,861	606	3,250
Baptists ...	10,675	3,474	2,765	7,299	...	5,691
Other Protestants ...	11,101	5,637	7,838	21,392	...	5,485
Roman Catholics ...	102,836	99,073	25,848	20,757	3,876	32,021
Jews ...	1,934	1,408	179	350	...	692
Buddhists, Confucians, etc.	37	60	385§	5||	...	5
Residue¶ ...	8,756	4,391	536	6,182	115	7,303
Total ...	410,263	340,319	88,200	130,335	12,646	220,328

Religions in various countries.

133. The following table contains a statement of the number of persons nominally adhering to different religious bodies in most of the countries of the world; the information has, for the most part, been obtained from an excellent American publication, *McCarthy's Annual Statistician*,** where it is mentioned that the particulars have been got principally by direct correspondence:—

RELIGIONS OF THE PEOPLE IN VARIOUS COUNTRIES.

Countries.	CHRISTIANS.			Jews.	Mahometans.	Pagans.	Buddhists, Confucians, Hindoos, etc.	Residue.	Total.††
	Protes- tants.	Catholics.							
		Roman.	Greek, Arme- nian, etc.						
Algeria ..	15,402	408,479	..	35,665	2,850,866	..	..	..	3,310,412
Annam ..	113,000	420,000	..	120	232,000	4,000,000	1,234,880	..	6,000,000
Argentine Republic	27,300	2,621,094	3,200	3,000	448	3,406	2,552	281,000	2,942,000
Australasia††	2,745,000	846,000	..	16,000	..	..	67,000	113,000	3,787,000
Austria-Hun- gary	3,759,586	26,528,762	7,210,294	1,676,951	9,417	..	232	59,660	39,244,902
Belgium ..	15,000	5,835,278	..	3,000	..	..	..	..	5,853,278
Bolivia ..	..	1,251,900	..	189	..	700,000	..	..	1,952,089
Bosnia and Herzegovina	509	265,738	571,250	5,805	492,710	..	..	29	1,336,091
Brazil ..	72,311	10,702,771	..	21,059	..	2,019,350	..	106,884	12,922,375
Bulgaria ..	11,520	2,965	1,411,010	20,212	562,212	..	..	..	2,007,919
Canada ..	2,422,285	1,791,982	378	2,393	..	4,478	2,922	100,372	4,324,810
Chile ..	26,898	2,412,280	..	359	..	..	..	..	2,439,537
China ..	100,000	1,392,800	3,700	3,500	15,500,000	..	395,000,000	..	412,000,000

* See footnote (§) to preceding page.

† See footnote (¶) to preceding page.

|| See footnote (††) to preceding page.

** Edition 1890, pages 430 and 431: San Francisco.

†† The populations in this column (taken from the *Annual Statistician*) sometimes differ considerably from those given in subsequent tables prepared in the office of the Government Statist, Melbourne, and derived generally from official documents.

‡‡ Estimated in the office of the Government Statist, Melbourne.

† See footnote (||) to preceding page.

§ See footnote (§§) to preceding page.

¶ See footnote (††) to preceding page.

RELIGIONS OF THE PEOPLE IN VARIOUS COUNTRIES—*continued.*

Countries.	CHRISTIANS.			Jews.	Mahometans.	Pagans.	Buddhists, Confucians, Hindoos, etc.	Residue.	Total.*
	Protes- tants.	Catholics.							
		Roman.	Greek, Arme- nian, etc.						
Corea ..	777	3,500	12	125	350,600	..	10,163,923	..	10,518,937
Denmark ..	1,959,031	2,985	96	3,946	8	..	..	2,973	1,969,039
Egypt ..	5,979	27,800	35,699	8,524	15,739,263	2,000,000	..	..	17,817,265
France ..	692,800	29,572,557	3,174	53,436	1,494	57	510	7,348,020	37,672,048
Germany ..	29,339,515	16,810,808	12,601	581,681	222	429	367	106,827	46,852,450
Great Britain and Ireland	28,961,927	6,023,015	3,861	70,763	1,835	1,054	1,250	2,000,347	37,064,052
Greece ..	7,877	10,094	1,902,386	5,792	25,672	740	..	27,000	1,979,561
Guiana ..	33,345	7,517	..	1,114	1,429	24,457	4,198	473	72,533
Haiti ..	5,674	542,890	..	386	..	1,050	..	..	550,000
Hawaii ..	33,261	20,072	..	84	..	9,000	18,055	106	80,578
Holland ..	2,503,011	1,458,377	..	82,847	..	..	..	291,777	4,336,012
India ..	899,576	963,058	2,142	12,009	50,121,585	10,589,047	191,356,034	773,974	254,717,425
Italy ..	64,927	27,977,393	79,997	38,474	1,004	..	..	1,537,990	29,699,785
Japan ..	11,678	32,382	11,275	630	242,407	16,419	37,554,206	..	37,868,997
Java and Madura	32,824	3,764	..	378	16,366,097	4,012,632	214,407	..	20,630,102
Liberia ..	13,000	5,000	..	..	..	1,050,000	..	..	1,068,000
Luxemburg	1,167	211,077	21	866	..	..	..	152	213,283
Madagascar	350,000	55,000	..	1,000	..	5,094,000	..	..	5,500,000
Mexico ..	20,000	9,000,000	..	10,000	..	..	..	1,430,703	10,460,703
Montenegro	..	26,000	207,380	2,000	10,000	..	..	..	245,380
Morocco ..	500	700	300	340,000	5,798,500	..	..	..	6,140,000
Nepaul ..	..	..	..	..	..	1,000,000	2,000,000	..	3,000,000
Orange Free State	53,833	340	..	67	..	72,496	..	6,782	133,518
Persia ..	4,500	3,500	66,000	19,000	6,860,000	700,000	600	..	7,653,600
Peru ..	5,087	2,644,055	2,544	498	43	282,165	37,532	..	2,971,924
Portugal ..	500	4,301,554	..	..	..	..	..	4,500	4,306,554
Roumania ..	15,072	115,435	4,803,351	401,051	18,493	22,593	..	..	5,376,000
Roumelia (Eastern)	4,320	1,114	735,974	6,993	200,498	27,201	..	..	976,100
Russia ..	3,476,925	14,182,077	71,343,279	3,574,627	10,407,240	497,049	106,327	325,148	103,912,672
Samos ..	2	26	40,062	1	..	422	..	..	40,513
Servia ..	465	4,178	1,880,072	3,492	15,143	..	..	..	1,903,350
Siam ..	..	..	..	..	..	750,000	5,000,000	..	5,750,000
Sokoto ..	..	..	..	..	11,000,000	1,600,000	..	..	12,600,000
Spain ..	8,352	16,927,263	428	402	271	516	213	24,297	16,961,742
Sweden and Norway	6,587,105	1,482	193	3,393	..	..	..	3,596	6,595,769
Switzerland	1,703,331	1,185,954	369	7,902	..	..	..	9,196	2,906,752
Transvaal ..	52,693	1,900	..	407	..	745,000	..	..	800,000
Tripoli ..	5,000	35,000	..	35,000	935,000	..	..	..	1,010,000
Tunis ..	100	35,000	400	45,000	1,419,500	..	..	..	1,500,000
Turkey ..	2,000,000	500,000	3,500,000	100,000	14,701,000	..	..	..	20,801,000
United States	18,986,874	7,712,875	43,936	82,390	1,205	275,000	106,980	29,576,196	56,785,456
Other coun- tries	5,850,161	12,114,159	1,124,616	717,469	133,838	14,501,434	1,127,812	174,868,998	210,438,487
The World ..	113,000,000	207,000,000	95,000,000	8,000,000	154,000,000	50,000,000	644,000,000	219,000,000	1,490,000,000

134. In the following table the numbers of either sex have been Ages, 1889.
carefully brought on in quinquennial periods of age from the census
of 1881 by means of a calculation based upon the age at which the
survivors of those then returned and born since must have arrived
about the middle of 1889, the number being supplemented by the
excess of arrivals over departures, as recorded by the immigration

* See footnote (††) on preceding page.

authorities, the ages of those composing such excess having been estimated :—

AGES OF THE PEOPLE ABOUT THE MIDDLE OF 1889
(ESTIMATED).

Ages.	Mean Population.		
	Males.	Females.	Total.
Under 5 years	70,602	67,639	138,241
5 to 10	60,100	57,962	118,062
10 to 15	59,442	57,168	116,610
15 to 20	60,729	58,260	118,989
20 to 25	67,274	59,347	126,621
25 to 30	63,202	54,555	117,757
30 to 35	42,552	37,602	80,154
35 to 40	26,610	23,161	49,771
40 to 45	22,968	20,756	43,724
45 to 50	24,162	20,455	44,617
50 to 55	25,015	19,376	44,391
55 to 60	25,444	16,524	41,968
60 to 65	18,922	10,913	29,835
65 to 70	10,190	6,272	16,462
70 to 75	6,675	4,061	10,736
75 to 80	2,336	1,673	4,009
80 years and upwards	1,327	1,026	2,353
Total	587,550	516,750	1,104,300

135. It is evident that a population which, relatively to the total number of units of which it is composed, contains a great many children and very old people, is not so physically effective as one which has a larger proportion of persons at the middle period of life. Speaking generally, it may be said that persons between 15 and 65 years of age are able to contribute largely to their own maintenance, and generally to support themselves altogether, whilst those under 15 and over 65 are supported by others. According to the estimated ages of the population of Victoria at the middle of 1889, as shown in the last table, a large accession to the population (amounting to 78 per cent. of the whole increase) at the stronger period of life, and a comparatively small one at the weaker periods, has taken place since the census ; in consequence of this, the numbers in every 10,000 living capable of aiding, protecting, and supporting the others rose in $8\frac{1}{4}$ years from 5,908 to 6,319, whilst those to be aided, protected, and supported became reduced from 4,092 to 3,681. This is made plain by the figures in the following table :—

Relative
effective-
ness of
population,
1881 and
1889

**TOTAL POPULATION OF VICTORIA AT SUPPORTING AND DEPENDENT
AGES, 1881 AND 1889.**

Ages.	Numbers.			Numbers in every 10,000 Persons Living.	
	1881 (3rd April).	1889 (30th June).	Increase in 8½ years.	1881 (3rd April).	1889 (30th June).
Under 15 years... ..	331,762	372,913	41,151	3,847	3,377
15 to 65 years	509,479	697,827	188,348	5,908	6,319
65 years and upwards ...	21,105	33,560	12,455	245	304
Total	862,346	1,104,300	241,954	10,000	10,000

136. In the same 8½ years the increase of males at the supporting ages amounted to 77 per cent. of the whole male increase; per 10,000 males living, the proportion at the stronger period of life thus rose from 6,024 to 6,415, whilst the proportion at the weaker periods fell from 3,976 to 3,585. The following are the numbers and proportions, as derived from the census returns and the estimate brought on to the middle of 1889:—

Relative
effective-
ness, 1881
and 1889—
Males.

**MALE POPULATION OF VICTORIA AT SUPPORTING AND DEPENDENT
AGES, 1881 AND 1889.**

Ages.	Number of Males.			Numbers in every 10,000 Males Living.	
	1881 (3rd April).	1889 (30th June).	Increase in 8½ Years.	1881 (3rd April).	1889 (30th June).
Under 15 years	167,019	190,144	23,125	3,695	3,236
15 to 65 years	272,341	376,878	104,537	6,024	6,415
65 years and upwards ...	12,723	20,528	7,805	281	349
Total	452,083	587,550	135,467	10,000	10,000

137. From 20 to 40, being the age at which the first call upon the male inhabitants of a country would be made in order to repel an invasion, is designated “the soldier’s age.” The returns of the census of 1881 showed that the Australasian colonies as a whole could then have raised an army of over 450,000 such males, of which the contingent available from Victoria would have numbered 114,142, or 1,324 per 10,000 of her total population of both sexes. The table of estimated ages at the middle of 1889 shows that up to that time the males at the soldier’s age in Victoria had increased to 199,638, or to 1,808 per 10,000 of the population.

Men at
“soldier’s
age.”

138. From 15 to 45 years of age may be called the fruitful or reproductive period of female life. At the last census the number of women between those ages in Victoria was found to be 186,277, and

Women at
reproduc-
tive period
1881 and
1889

their proportion to every 10,000 of the whole female population was found to be 4,540. At the middle of 1889 the number of women at the fruitful period had increased to 253,681, and their proportion per 10,000 of the female population had increased to 4,908.

Ages in Aus-
tralasian
colonies.

139. The ages of the people in the various Australasian colonies were as follow when the census of 1881 was taken :—

AGES OF THE PEOPLE* IN AUSTRALASIAN COLONIES, 1881.

Ages.	Victoria.	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.	New Zealand.
MALES.							
Under 5 years	57,846	56,169	16,178	21,028	2,070	8,127	41,636
5 to 10 „	54,843	49,877	13,637	17,407	1,878	7,274	34,305
10 to 15 „	54,330	45,071	11,704	16,207	1,802	6,997	28,875
15 to 20 „	49,445	38,169	9,357	14,801	1,505	6,701	21,060
20 to 25 „	40,593	40,056	12,228	16,907	1,386	6,001	22,078
25 to 30 „	27,482	35,050	12,811	15,032	1,102	4,195	23,916
30 to 35 „	22,633	29,361	10,882	10,965	830	3,168	20,202
35 to 40 „	23,434	27,338	10,506	9,625	1,036	2,565	20,318
40 to 45 „	25,948	24,242	9,600	7,344	1,155	2,577	20,099
45 to 50 „	28,354	19,426	6,214	5,672	1,232	2,435	13,972
50 to 55 „	26,439	15,649	4,181	4,897	1,114	2,677	9,553
55 to 60 „	15,967	9,086	2,168	3,336	698	2,180	4,855
60 to 65 „	12,046	8,350	1,615	2,770	595	2,375	3,809
65 to 70 „	6,156	5,134	810	1,607	262	1,553	1,879
70 to 75 „	3,686	3,461	449	1,102	182	1,246	1,175
75 to 80 „	1,782	1,645	189	537	75	638	581
80 and upwards	1,099	1,277	113	293	40	453	322
Unspecified† ...	...	1,788	2,683	...	100	...	970
Total ...	452,083	411,149	125,325	149,530	17,062	61,162	269,605
FEMALES.							
Under 5 years	56,359	54,954	15,756	20,656	2,071	8,065	40,653
5 to 10 „	54,461	49,141	13,410	17,357	1,847	6,968	33,610
10 to 15 „	53,923	43,408	11,200	16,068	1,744	6,663	28,747
15 to 20 „	51,191	37,565	8,703	14,991	1,547	6,665	21,549
20 to 25 „	43,324	34,481	8,679	13,844	1,222	5,938	19,287
25 to 30 „	26,992	25,488	6,678	10,195	849	3,811	16,670
30 to 35 „	21,954	21,278	5,631	7,689	685	2,776	14,393
35 to 40 „	21,571	19,067	5,542	6,670	648	2,561	13,244
40 to 45 „	21,245	15,293	4,405	6,045	616	2,483	11,001
45 to 50 „	19,439	11,896	2,943	4,949	494	2,264	7,369
50 to 55 „	15,296	8,835	1,996	3,871	323	1,926	5,010
55 to 60 „	9,118	5,923	1,215	2,691	216	1,389	2,965
60 to 65 „	7,008	5,528	896	2,250	187	1,290	2,530
65 to 70 „	3,801	3,148	476	1,406	94	772	1,353
70 to 75 „	2,524	2,057	266	904	59	514	912
75 to 80 „	1,215	992	132	447	25	269	411
80 and upwards	842	637	81	302	14	189	262
Unspecified† ...	...	628	191	...	5	...	362
Total ...	410,263	340,319	88,200	130,335	12,646	54,543	220,328

* Not including Aborigines, except the few enumerated in Victoria, and New South Wales.
† In Victoria, South Australia, and Tasmania, the "Unspecified" have been distributed by proportion amongst the other numbers.

140. Comparing the total populations of the Australasian colonies with those of England, Scotland, Ireland, France, and the United States, the following are the proportions at the supporting and the dependent periods of life, the figures being all for 1881, except those of the United States, which are for 1880 :—

Relative
effective-
ness of
populations
of various
countries.

TOTAL POPULATION OF VARIOUS COUNTRIES AT SUPPORTING AND DEPENDENT AGES.

Country.	Numbers in every 10,000 Persons living—		
	At Supporting Ages (15 to 65 Years).	At Dependent Ages.	
		Under 15 Years.	65 Years and Upwards.
France	6,530	2,660	810
Queensland	5,993	3,888	119
United States	5,940	3,710	350
Victoria	5,908	3,847	245
England and Wales	5,897	3,645	458
Western Australia... ..	5,891	3,855	254
South Australia	5,879	3,885	236
Ireland	5,860	3,500	640
Scotland... ..	5,840	3,660	500
New South Wales	5,768	3,987	245
Tasmania	5,692	3,821	487
New Zealand	5,604	4,254	142

141. France, it will be observed, is at the head of the list, the proportion at the supporting period being 537 per 10,000 above that in Queensland, which heads the Australasian colonies, and 926 per 10,000 above that in New Zealand, which stands last of those colonies. In France, however, in consequence of the low birth rate prevailing, the proportion of children under 15 is very much smaller, whilst that of old persons over 65 is very much larger than in any of the other countries. The absence of a youthful population to take the place of those who pass on to old age must materially weaken the population of France in the course of a few years. Queensland stands next to France, after which follows the United States, which is only slightly above Victoria, England and Wales being next below this colony, whilst Ireland and Scotland stand also below Western Australia and South Australia, but above New South Wales, Tasmania, and New Zealand.

Countries
compared.

142. The occupations of the people of Victoria have been brought on by proportion to about the middle of 1889, in the same manner as the religions, the only exception being the miners, an estimate of

Occupations,
1889.

the number of which has been obtained from the Department of Mines :—

OCCUPATIONS OF THE PEOPLE ABOUT THE MIDDLE OF 1889
(ESTIMATED).

Occupations of the People.	Mean Population.		
	Males.	Females.	Total.
Ministering to Government	6,169	310	6,479
„ religion	1,410	258	1,668
„ health	2,526	2,015	4,541
„ law	1,645	...	1,645
„ education	3,466	5,270	8,736
„ art, science, and literature ...	3,408	1,344	4,752
Traders	18,802	2,480	21,282
Assisting in exchange of money or commodities ...	8,696	827	9,523
Ministering to entertaining and clothing... ..	19,272	34,157	53,429
Domestic servants	3,819	27,543	31,362
Contractors, artizans, and mechanics	60,283	1,344	61,627
Miners*	24,400	...	*24,400
Engaged in pursuits subsidiary to mining ...	600	...	600
„ pastoral pursuits and agriculture ...	101,235	52,243	153,478
„ pursuits subsidiary to grazing and agriculture	4,348	1,292	5,640
„ land carriage	18,919	413	19,332
„ sea navigation	4,289	52	4,341
Dealing in food	18,214	2,222	20,436
Labourers	31,258	...	31,258
Engaged in miscellaneous pursuits	1,234	103	1,337
Of independent means	3,114	1,447	4,561
Wives, widows, children, relatives, scholars ...	218,216	378,779	596,995
Public burthen	8,226	4,599	12,825
Of no occupation	1,586	52	1,638
Occupation unknown*	22,415	...	22,415
Total	587,550	516,750	1,104,300

Caution
necessary
in accepting
figures.

143. In the absence of accurate information of a recent date, this table, like the table of birthplaces and religions in 1889, has, except in the case of the miners, necessarily been for the most part constructed according to the proportions prevailing at the census ; but there is no doubt that important changes have taken place since then, consequently the figures in the table must be taken only for what they may be worth.

Occupations
in Austral-
asian
colonies.—
Sub-orders.

144. The following, grouped in sub-orders, are the numbers in the various Australasian colonies, except New South Wales, following different occupations when the census was taken :—

* According to the census proportions the number of persons engaged in mining pursuits should be 46,815, but the officers of the Department of Mines state the number does not exceed 24,400. The difference (22,415) has been set down as “unknown” near the foot of the table.

OCCUPATIONS IN AUSTRALASIAN COLONIES, 1881.—SUB-ORDERS.

Order.	Sub-order.	Occupations.	Victoria.	Queens-land.	South Aus-tralia.	Western Aus-tralia.	Tas-mania.	New Zealand.
1	1	Officers of general government..	3,477	1,283	1,965	289	593	1,972
„	2	„ local government ...	518	118	142	14	34	261
„	3	Engaged in defence ...	499	25	22	180	34	730
2	1	Clergymen, ministers, and church officers	1,237	374	469	119	203	747
„	2	Law court officers, lawyers, and their immediate subordinates	1,243	285	268	25	205	844
„	3	Physicians, surgeons, druggists, etc.	1,595	406	765	46	170	810
„	4	Authors, literary persons, etc. ...	197	39	97	4	16	121
„	5	Scientific persons ...	300	84	204	19	26	270
„	6	Teachers ...	6,795	1,365	1,661	250	860	3,437
„	7	Artists ...	734	104	143	4	55	331
„	8	Musicians, music teachers, etc....	1,289	138	224	15	91	447
„	9	Actors, etc. ...	560	104	64	...	33	256
3	1	Wives and widows of no specified occupation	101,035	24,782	43,743	10,318	16,621	70,347
„	2	Sons, daughters, relatives, visitors (not otherwise described)	179,922	10,091	77,675		25,849	120,607
„	3	Scholars (so described) ...	184,655	76,912	42,141		21,215	105,658
4	1	Engaged in boarding and lodging	7,475	1,597	2,089	127	790	3,196
„	2	„ in attendance ...	31,234	9,056	9,388	1,018	4,487	16,742
5	1	Mercantile persons ...	11,332	2,027	3,795	242	723	6,770
„	2	Other general dealers ...	6,284	1,809	1,774	230	832	2,907
6	1	Carriers on railways (not railway construction)	3,098	668	808	55	263	1,157
„	2	Carriers on roads ...	8,291	3,115	3,466	503	700	3,574
„	3	„ seas and rivers ...	3,363	1,911	2,530	431	969	4,518
„	4	Engaged in storage ...	1,257	342	621	33	131	1,006
„	5	Messengers and porters ...	1,559	870	294	7	266	1,118
„		Engaged—						
7	1	In agricultural pursuits ...	108,919	22,004	30,330	3,336	17,748	42,722
„	2	„ pastoral pursuits ...	10,608	8,333	3,686	1,288	860	5,541
„	3	On land (not cultivating or grazing)	1,377	1,478	738	42	293	3,924
„	4	About animals ...	3,298	1,452	66	97	507	2,260
8	1	In books ...	3,492	805	831	67	281	2,031
„	2	„ musical instruments ...	139	16	25	..	10	63
„	3	„ prints and pictures ...	200	21	31	2	7	58
„	4	„ carving and figures ...	162	18	33	...	4	32
„	5	„ tackle for sports and games	26	4	...	...	...	5
„	6	„ designs, medals, and dies...	87	12	104	3	...	7
„	7	„ watches and philosophical instruments	570	100	148	13	58	338
„	8	„ surgical instruments ...	21	4	5	...	...	3
„	9	„ arms ...	71	25	16	3	7	35
„	10	„ machines and tools ...	994	327	537	6	69	750
„	11	„ carriages, harness, and im-plements	3,556	971	1,545	159	368	1,521
„	12	„ ships and boats...	608	212	254	53	188	752
„	13	„ houses and buildings ...	16,162	3,458	6,834	516	1,892	11,947
„	14	„ furniture ...	1,748	358	531	34	209	1,079
„	15	„ chemicals ...	229	12	16	1	6	71

OCCUPATIONS IN AUSTRALASIAN COLONIES, 1881.—SUB-ORDERS—continued.

Order.	Sub-order.	Occupation.	Victoria.	Queens-land.	South Aus-tralia.	Western Aus-tralia.	Tas-mania.	New Zealand.
		Engaged—						
9	1	In textile fabrics ...	4,642	645	988	11	390	2,026
	2	„ dress ...	29,599	3,485	5,875	515	2,941	9,653
	3	„ fibrous materials ...	307	44	31	3	4	251
10	1	„ animal food ...	6,693	1,875	1,873	118	586	3,043
	2	„ vegetable food ..	4,309	837	1,405	102	695	2,305
	3	„ drinks and stimulants ...	4,275	776	1,065	35	355	1,715
11	1	„ animal matters...	1,950	260	320	153	274	746
	2	„ vegetable matters ...	6,322	2,906	1,027	370	1,276	4,126
12	1	„ mining ...	36,066	11,439	2,196	102	3,090	14,273
	2	„ coal ...	444	339	46	12	59	294
	3	„ stone, clay, earthenware, and glass	3,499	2,063	4,706	88	754	4,181
	4	„ water... ..	124	388	64	1	15	56
	5	„ gold, silver, and precious stones	648	83	86	7	24	157
	6	„ metals other than gold and silver	7,724	1,634	2,941	233	922	3,749
13	1	Labourers (branch undefined) ...	22,033	4,609	8,660	1,003	3,970	14,904
	2	Other indefinite occupations ...	3,703	924	3,491	108	514	1,807
14	...	Persons of property or rank not returned under any office or occupation	1,979	116	729	96	559	399
15	1	Persons supported from voluntary sources and public revenue	7,924	1,739	1,397	494	516	2,719
	2	Criminal classes ...	1,977	412	526	285	105	751
...	...	Occupation not stated ...	7,912	1,836	2,361	96	983	1,813
		Total population ...	862,346	213,525	279,865	29,708	115,705	489,933
		Population of specified occupations	854,434	211,689	277,504	29,612	114,722	488,120

Occupations in Australasian colonies.—Orders.

145. For the purpose of making convenient comparisons between the industries carried on in the different colonies, it is desirable to combine the occupations in orders. This is done in the following table, the percentage of each order to the specified total being as shown:—

OCCUPATIONS IN AUSTRALASIAN COLONIES, 1881.—ORDERS.

Order.	Occupations.	Victoria.	Queens-land.	South Aus-tralia.	Western Aus-tralia.	Tas-mania.	New Zealand.
	NUMBERS.						
1	Government and defence ...	4,494	1,426	2,129	483	661	2,963
2	Learned professions, literature, science, and art	13,950	2,899	3,895	482	1,659	7,263
3	Domestic duties and scholars ...	465,612	111,785	163,559	16,645	63,685	296,612
4	Engaged in boarding, lodging, and attendance	38,709	10,653	11,477	1,145	5,27	19,938

OCCUPATIONS IN AUSTRALASIAN COLONIES, 1881.—ORDERS—*continued*.

Order.	Occupations.	Victoria.	Queens-land.	South Aus-tralia.	Western Aus-tralia.	Tas-mania.	New Zealand
NUMBERS— <i>continued</i> .							
5	Traders	17,616	3,836	5,569	472	1,555	9,677
6	Carriers by land and sea	17,568	6,906	7,719	1,029	2,329	11,375
	Engaged in—						
7	Agricultural and pastoral pursuits ...	124,202	33,267	34,820	4,763	19,408	54,447
8	Art and mechanic productions	28,065	6,343	10,910	857	3,099	18,692
9	Textile fabrics, dress, and fibrous materials	34,548	4,174	6,894	529	3,335	11,930
10	Food and drinks	15,277	3,488	4,343	255	1,636	7,063
11	Animal and vegetable substances ...	8,272	3,166	1,347	523	1,550	4,872
12	Minerals and metals	48,505	15,946	10,039	443	4,864	22,710
13	Labourers and others (branch of labour undefined)	25,736	5,533	12,151	1,111	4,484	16,711
14	Persons of property or rank	1,979	116	729	96	559	399
15	Supported by the community	9,901	2,151	1,923	779	621	3,470
	Population of specified occupations	854,434	211,689	277,504	29,612	114,722	488,120
PROPORTIONS PER CENT.							
1	Government and defence	·53	·67	·77	1·63	·57	·61
2	Learned professions, literature, science, and art	1·63	1·37	1·40	1·63	1·45	1·49
3	Domestic duties and scholars	54·49	52·81	58·94	56·21	55·51	60·77
4	Engaged in boarding, lodging and attendance	4·53	5·03	4·13	3·87	4·60	4·09
5	Traders	2·06	1·81	2·01	1·59	1·36	1·98
6	Carriers by land and sea	2·06	3·26	2·78	3·48	2·03	2·33
	Engaged in—						
7	Agricultural and pastoral pursuits ...	14·54	15·72	12·55	16·09	16·91	11·15
8	Art and mechanic productions	3·28	3·00	3·93	2·89	2·70	3·83
9	Textile fabrics, dress, and fibrous materials	4·04	1·97	2·48	1·79	2·91	2·44
10	Food and drinks	1·79	1·65	1·57	·86	1·43	1·45
11	Animal and vegetable substances ...	·97	1·50	·49	1·77	1·35	1·00
12	Minerals and metals	5·68	7·53	3·62	1·49	4·24	4·65
13	Labourers and others (branch of labour undefined)	3·01	2·61	4·38	3·75	3·91	3·42
14	Persons of property or rank	·23	·05	·26	·32	·49	·08
15	Supported by the community	1·16	1·02	·69	2·63	·54	·71
	Total	100·00	100·00	100·00	100·00	100·00	100·00

146. It will be observed that of traders, workers and dealers in textile fabrics, dress and fibrous materials, and workers and dealers in food and drinks, Victoria had a larger proportion than any of the other colonies; that of persons engaged in the learned professions, literature, science and art, the proportion in Victoria was identical with that in Western Australia, and above that in any of the other colonies; but that of persons engaged in government and defence the proportion in Victoria was smaller than that in any of the other colonies.

Occupations
in Victoria
and
New South
Wales.

147. In consequence of the occupations in New South Wales having been classified on a different principle, it has been found impossible to make any regular comparison between them and the occupations pursued in the other colonies. The following, however, are a few of the groups which it appears probable, although not certain, are comparable with those of Victoria, and in which, therefore, the numbers and proportions in the two colonies are shown :—

OCCUPATIONS IN VICTORIA AND NEW SOUTH WALES, 1881.

Occupations.	Victoria.		New South Wales.	
	Numbers.	Proportions per Cent.	Numbers.	Proportions per Cent.
Government and municipal officers ...	3,995	·47	5,486	·75
Engaged in defence ...	499	·06	1,310	·18
Clergy and others engaged in religion ...	1,237	·14	725	·10
Lawyers, law court officers, etc. ...	1,243	·15	920	·12
Physicians, surgeons, druggists, etc. ...	1,595	·19	1,049	·14
Authors, scientific persons, artists, etc. ...	3,080	·36	1,764	·24
Domestic duties (chiefly women and children)	280,957	32·88	238,109*	32·36
Scholars under tuition ...	184,655	21·61	154,885	21·05
Engaged in—				
Boarding and lodging ...	7,475	·87	4,111	·56
Attendance ...	31,234	3·66	33,913	4·61
Mercantile pursuits ...	18,873†	2·21	22,901	3·11
Maritime pursuits (not Royal Navy) ...	3,363	·39	4,492	·61
Agricultural pursuits and on land ...	110,296	12·91	89,682*	12·18
Pastoral pursuits and about animals ...	13,906	1·63	23,110*	3·14
Mining ...	36,066	4·22	17,709	2·41
Other occupations, which cannot be compared	155,960	18·25	135,709	18·44
Occupation not stated ...	7,912	...	15,593‡	...
Total population ...	862,346	...	751,468	...
Total of specified occupations ...	854,434	100·00	735,875	100·00

Occupations
in Victoria
and
New South
Wales com-
pared.

148. If the occupations in New South Wales, so far as they are named in the table, are correctly compared with those of Victoria—of which, as has been already stated, there is some doubt, the comparison being only given for what it may be worth—there were, when the census was taken, more Government officers, more persons employed in defence, more servants, more merchants and shopkeepers,

* As in New South Wales the wives and daughters of farmers and squatters assisting on the farm or station were originally tabulated under the head of "Domestic Duties," in which respect the practice differed from that obtaining in Victoria, 36,000 have been deducted therefrom and added to those engaged in agricultural and pastoral pursuits, viz., 30,000 to the former, and 6,000 to the latter.

† Including those engaged in storage.

‡ Including 9,813 unemployed.

more officers and sailors of the mercantile marine, and more persons engaged in pastoral pursuits, in New South Wales than in Victoria. The number of wives and widows engaged in domestic duties, and of young children, was higher in Victoria than in New South Wales; the proportion of such persons to the total population was, however, about the same in the two colonies.

149. It will be noticed that the persons of unstated occupations were nearly twice as numerous in New South Wales as in Victoria, which has arisen from the fact that, in the former, the occupations of persons out of work, who numbered 9,813, were not distinguished in the returns, whereas in this colony the unemployed, who numbered only 4,478, were classified under their proper occupations in the general tables, after which they were separated, and their respective callings were given in another table.

Unemployed
in Victoria
and
New South
Wales.

150. In the following table the area of Victoria is divided into three districts, the first being the metropolitan (Greater Melbourne), extending in all directions for a distance of ten miles from the centre of the city; * the second, viz., the extra metropolitan towns, including the total space embraced in cities, towns and boroughs (present or former) outside the limits of Greater Melbourne; and the third, viz., the extra-urban or rural, including the remaining portions of the colony. In each of these districts the population is shown at the end of 1889, as well as the average population during that year; also the ratio of the population of each district to that of the whole colony, and the number of persons to the square mile :—

Urban and
rural
population.

URBAN AND RURAL POPULATION, 1889.

Districts.	Estimated Area in Square Miles.	Population at end of 1889.			Mean Population, 1889.
		Total.	Proportions per Cent.	Persons to the Sq. Mile.	
Towns { Metropolitan ...	256	458,470	41·01	1,791	445,220
	Extra-Metropolitan†	376	196,110	17·54	522	196,400
Total Urban ...	632	654,580	58·55	1,036	641,620
Extra-Urban or Rural ...	87,252	463,448	41·45	5·3	462,680
Total of Victoria ...	87,884	1,118,028	100·00	12 7	1,104,300

* Exclusive of water, which covers about 58 square miles of the area named.
† In addition to the present extra-metropolitan cities, towns, and boroughs, certain towns, which were at one time independent municipalities but have since become portions of shires, are included in this line. These, with their estimated populations in 1888, are as follow :—Avoca, 1000; Beechworth, 2,300; Chiltern (1881), 1,243; Gisborne, 600; Graytown, 120; Guildford (1881), 765; Jamieson, 300; Kilmore (1881), 1,092; Kyneton, 3,800; Maldon, 2,650; South Barwon (1881), 1,474; Steiglitz (1881), 275; Taradale, 300; Walhalla, 2,000; Woodend, 800. The populations of the present cities, towns, and boroughs, also those of the shires, are given in a subsequent table.

Increasing proportion of metropolitan population.

151. In 1889 the population of the metropolis was equal to over two-fifths of that of the whole colony. This proportion is fast increasing, as will be observed by the following figures :—

PROPORTION OF POPULATION OF GREATER MELBOURNE TO
TOTAL POPULATION OF VICTORIA.

			Per Cent.				Per Cent.
1861	...	...	25·89	|	1881	...	32·81
1871	...	...	28·87	|	1889	...	41·01

Area and population of metropolitan sub-districts.

152. The following table shows the estimated area in acres, the estimated population and the number of persons to the acre at the end of 1889, also the estimated mean population during that year, in each of the cities, towns, and boroughs comprised in Greater Melbourne :—

SUB-DISTRICTS OF GREATER MELBOURNE.—AREA AND
POPULATION, 1889.

Sub-Districts.	Estimated Area in Acres.*	At end of 1889.		Mean Population 1889.
		Estimated Population.	Persons to the Acre.	
Melbourne City	5,020	74,985	14·9	74,985
North Melbourne Town	565	22,305†	39·5	22,155
Fitzroy City	923	31,930	34·6	31,780
Collingwood City	1,139	34,820	30·6	33,790
Richmond City	1,430	37,070	25·9	36,610
Brunswick Town	2,722	19,585	7·2	17,915
Northcote Borough	2,850	6,380	2·2	5,880
Prahran City	2,320	36,100	15·6	35,600
South Melbourne City	2,311	42,960	18·6	41,980
Port Melbourne Borough	2,366	12,735	5·4	12,480
St. Kilda Borough	1,886	18,490	9·8	18,187
Brighton Town	3,288	8,966	2·7	8,596
Essendon Borough‡	4,000	10,960	2·7	10,215
Flemington and Kensington Borough	1,088	9,129	8·4	8,664
Hawthorn Town... ..	2,389	16,436	6·9	15,440
Kew Borough	3,553	6,730	1·9	6,630
Footscray Town... ..	3,075	15,736	5·1	14,940
Williamstown Town	2,775	13,840	5·0	13,620
Remainder of District	120,242	37,835	·31	34,275
Total	163,942	456,992	2·8	443,742
Shipping in Hobson's Bay and River§	...	1,478	...	1,478
Total Population including shipping	...	458,470	...	445,220

* Exclusive of water, which covers an area of 37,120 acres.
† Including the Benevolent Asylum.
‡ Essendon was proclaimed a town on the 7th January, 1890.
§ Census figures.

153. It will be observed that Melbourne within its corporate limits is estimated to contain 75,000* inhabitants, or about 32,000 more than South Melbourne, which has a larger population than any other of the suburban municipalities. The most populous suburbs are—South Melbourne, with 43,000 inhabitants; Richmond, with 37,000; Prahran, with 36,000; Collingwood, with 35,000; and Fitzroy, with 32,000. Northcote, with 6,400 inhabitants, is the least populous of the suburban boroughs; the next one being Kew, with 6,700.

Populations
of suburban
municipi-
palities.

154. The density of the population of each of the component parts of Greater Melbourne is shown in the fourth column of the table. It will be noticed that the most thickly peopled municipality is North Melbourne with nearly 40 persons to the acre; then Fitzroy, with 35; Collingwood, with 31; Richmond, with 26; South Melbourne, with 19; Prahran City, with 16; and Melbourne City, with 15 persons to the acre. In explanation of the fact that some of the suburbs are more densely populated than the city, it will be remembered that large numbers of people who come to business spend their days in the latter, but have their residences, and would therefore be enumerated, in the former. It should also be borne in mind that, in some of the municipalities, extensive parks, gardens and other public reserves exist, so that the population is really living in closer proximity than the figures indicate. Melbourne City contains 1,723 acres of such reserves; Kew, 634 acres; South Melbourne, 474 acres; Williamstown, 446 acres; Flemington and Kensington, 307 acres; St. Kilda, 250 acres; Richmond, 190½ acres; Brighton, 166½ acres; Port Melbourne, 80¼ acres; Essendon, 54 acres; Fitzroy, 41 acres; Collingwood, 39 acres; Footscray, 36 acres; and smaller reserves in some of the other municipalities.† If the reserves be excluded, the persons to the acre in the places named would be as follow:—Fitzroy, 36·2; Collingwood, 31·6; Richmond, 29·9; South Melbourne, 23·4; Melbourne City, 22·7; Flemington and Kensington, 11·7; Williamstown, 5·9; Port Melbourne, 5·6; Footscray, 5·2; Brighton, 2·9; Kew, 2·3; and Essendon, 2·8.

Density of
metropoli-
tan popula-
tion.

155. According to the following figures, which show the density of the population in 21 towns situated in various parts of the world, North Melbourne is about as thickly peopled as Antwerp and Dresden, and Fitzroy rather less than Lille and Buenos Aires; the density of the population in Collingwood is about the same as that in Bordeaux, whilst the density in Richmond is greater than that in Ghent and less than that in Liège; and the density in South Melbourne, Prahran,

Density of
population
in various
towns.

* This represents only the number who pass the night in the city.

† For a complete list of reserves in Melbourne and suburbs, see Part "Social Condition," in the second volume.

and Melbourne City is less than that in any of the towns named except Marseille:—

DENSITY OF THE POPULATIONS IN VARIOUS TOWNS.*

Persons to the Acre.			Persons to the Acre.		
Buda-Pesth ...	...	775·3	Dresden ...	...	39·3
Paris ...	...	121·8	Lyon ...	...	37·7
Hamburg ...	...	108·1	Lille ...	...	36·0
Glasgow ...	...	85·4	Buenos Aires ...	...	36·0
Berlin ...	...	83·8	Bordeaux ...	...	28·7
Brussels ...	...	76·5	Liège ...	...	28·3
Dublin ...	...	65·6	Ghent ...	...	23·9
London ...	...	53·4	Munich ...	...	22·7
Edinburgh ...	...	43·3	Hanover ...	...	22·7
Breslau ...	...	40·1	Marseille ...	...	6·5
Antwerp ...	...	39·7			

Estimate of metropolitan population not altered.

156. It may be remarked that whilst the last census revealed the fact that the estimate of the total population of Victoria was much too high, the estimate for Melbourne and suburbs, made then as now, by the municipal authorities, was not very wide of the truth. For this reason, whilst it has been deemed advisable to reduce the present estimate for the whole colony,† it has not been thought necessary to alter that of Melbourne and suburbs.

Metropolitan populations of Australasian colonies, 1881.

157. The following is a statement of the population of the metropolis or principal city of each of the Australasian colonies according to the census of 1881. The figures in all cases denote the number of inhabitants living in the suburbs as well as those resident within the corporate limits:—

METROPOLITAN POPULATIONS OF THE AUSTRALASIAN COLONIES, 1881.

Name of City.		Males.	Females.	Total.
Melbourne ...	...	139,006	143,941	282,947
Sydney ...	...	113,928	110,283	224,211
Adelaide ...	...	51,716	52,148	103,864
Brisbane ...	...	15,296	15,813	31,109
Hobart ...	...	13,162	14,086	27,248
Wellington ...	...	10,226	10,337	20,563
Perth ...	...	2,981	2,841	5,822

Proportions of the sexes in Australasian capitals.

158. In Hobart, Melbourne, Brisbane, Wellington, and Adelaide, when the census of 1881 was taken, females were more numerous than males, but in the other chief cities named the latter were slightly in

*The figures have been derived from a report on the census of Buenos Aires, dated 1880, there given in hectares, which have been turned into acres upon the assumption that a hectare is the equivalent of 2·47 acres.
†See paragraph 101 ante.

excess. The following are the proportions of the sexes according to the returns of that census :—

PROPORTIONS OF THE SEXES IN CAPITALS OF AUSTRALASIAN COLONIES, 1881.

	Females per 100 Males.		Females per 100 Males.
Hobart ...	107·02	Adelaide ...	100·84
Melbourne ...	103·55	Sydney ...	96·80
Brisbane ...	103·38	Perth ...	95·30
Wellington ...	101·09		

159. Estimates, without distinction of sexes, of the population of all these cities have been made for the middle of the year 1889, and in the following table the figures representing these are placed side by side with the figures derived from the returns of the census of 1881 ; the numerical and centesimal increases in the $8\frac{1}{4}$ years since the census was taken being also shown :—

Metropoli-
tan popula-
tions, 1881
and 1889.

METROPOLITAN POPULATION OF THE AUSTRALIAN COLONIES,*
1881 AND 1889.

Name of City.	Population.		Increase in $8\frac{1}{4}$ years.	
	1881 (End of First Quarter, enumerated).	1889 (Middle of the Year, estimated).	Numerical.	Centesimal.
Melbourne ..	282,947	445,220	162,273	57·35
Sydney ...	224,211	374,207	149,996	66·90
Adelaide ...	103,864	120,600	16,736	16·11
Brisbane ...	31,109	91,300	60,191†	193·48†
Hobart ...	27,248	35,043	7,795	28·61
Wellington ...	20,563	32,050‡	11,487	55·86
Perth ...	5,822	9,000	3,178	54·59

160. According to the figures, the numerical increase of the Melbourne population has been greater than that of any of the other metropolitan cities of Australasia. In point of centesimal increase, Brisbane and Sydney appear to have outstripped Melbourne, but it is doubtful whether the boundaries within which the population was calculated as at the middle of 1889, do not extend further than those

Increases
of metro-
politan
populations
compared.

* The population of Suva, the capital of Fiji, is stated to be about 700.
† As regards Brisbane it is thought probable that the population given for 1889 has been estimated over a larger suburban area than that given for 1881. If this is the case, the numerical and centesimal increases shown would obviously be too high.
‡ According to the census of New Zealand, 1886, the population of Wellington was then 27,833. Three New Zealand towns had larger populations, viz., Christchurch with 44,688, Dunedin with 45,518, and Auckland with 57,048 inhabitants. In all these cases the suburbs are included.

within which that population was made up when the returns of the census of 1881 were compiled.

Proportions
of metro-
politan to
total popu-
lations.

161. When the census of 1881 was taken, the metropolitan population formed a larger proportion of the total population in South Australia than it did in any other of the Australasian colonies; in the middle of 1889, however, that position was occupied by Melbourne, Adelaide having fallen to the second place. The following were the proportions in each colony at that time:—

PROPORTION OF METROPOLITAN TO TOTAL POPULATIONS IN AUSTRALASIAN COLONIES, 1889.

Per Cent.			Per Cent.		
Melbourne	...	40·32	Brisbane	...	22·99
Adelaide	...	37·52	Perth	...	20·97
Sydney	...	33·90	Wellington	...	5·22
Hobart	...	23·55			

Population
of chief
extra-
metropoli-
tan towns.

162. Next to the municipalities embraced under the head of Greater Melbourne, the most important towns in Victoria are—Ballarat, comprising three municipalities; Sandhurst, comprising two; Geelong, comprising three; and Castlemaine, comprising two municipalities. The estimated populations of these, with their immediate suburbs, in 1889, were as follow:—

POPULATION OF FOUR EXTRA-METROPOLITAN TOWNS, 1889.

Town.		Population.	Town.		Population.
Ballarat	...	42,547	Geelong	...	21,380
Sandhurst	...	36,630	Castlemaine	...	9,220

Population
of principal
towns of
the world.

163. There is often considerable difficulty in obtaining a true statement of the populations of towns, as, in some instances, the population within the limits of the city or municipality only is returned, whilst in others the population of the suburbs is also included; for these reasons, the populations of the different towns given in the published lists are rarely comparable with one another. The populations of the Australasian towns given in this work include their immediate suburbs, but it is not by any means certain that the same rule applies to all the towns in the following statement, which, however, has been compiled from the latest and best authorities, and will be found to embrace nearly all towns having as many as 100,000 inhabitants* :—

* Some towns in China, and a few in Japan, not included in the list, are stated to have more than 100,000 inhabitants, but the populations of these are not known with accuracy, and little is heard of them outside their respective countries; they have, therefore, been omitted. All towns in China and Japan having important commercial relations with Europeans, if stated to contain as many as 100,000 inhabitants, have, it is believed, been included in the list.

POPULATIONS OF PRINCIPAL TOWNS OF THE WORLD.

Town.	Country.	Year of Enumeration or Estimate.	Population.
London	England	1881	4,766,661*
Paris	France	1886	2,344,550
New York	United States	1889	1,775,000†
Canton	China	1859	1,600,000
Pekin	China ... ..	...	1,600,000
Berlin	Prussia	1889	1,454,000
Vienna (with suburbs)	Austria	1887	1,270,000
Philadelphia	United States	1889	1,200,000
Tokio	Japan	1886	1,121,883
Chicago	United States	1889	1,100,000
Tientsin	China ... ..	...	950,000
Constantinople (with suburbs)	Turkey	1885	873,565
Calcutta (with suburbs)	India	1881	871,504
St. Petersburg	Russia	1888	842,883‡
Brooklyn	United States	1889	840,000
Hankow	China ... ..	...	800,000
Bombay	India	1881	773,196
Moscow	Russia	1884	753,469
Glasgow	Scotland	1881	674,095
Foo-chow	China ... ..	...	630,000
Bangkok	Siam ... ..	...	600,000
Liverpool	England	1888	599,738§
Naples	Italy	1888	512,000
St. Louis	United States	1889	500,000
Nankin	China ... ..	...	500,000
Madrid	Spain	1889	480,000
Baltimore	United States	1889	480,000
Brussels (with suburbs)	Belgium	1889	471,606
Buenos Aires (with suburbs)	Argentine Republic	1888	466,267||
Melbourne (with suburbs)	Victoria	1889	458,470
Warsaw	Russian Poland	1885	454,298
Buda-Pesth... ..	Hungary	1888	452,907
Birmingham	England	1888	447,912
Boston	United States	1889	416,000
Rio de Janeiro (with suburbs)	Brazil	1888	409,000
Milan	Italy	1885	407,000
Madras	India	1881	405,848
Lyon	France	1886	401,930
Rome	Italy	1888	401,000
Amsterdam... ..	Holland	1888	399,424
Sydney (with suburbs)	New South Wales	1889	381,730
Manchester... ..	England	1888	378,164¶
Marseille	France	1886	376,143

* This was the population of Greater London, as returned at the census of 1881. The population of Inner London (Registration District) at the same time was 3,816,483. It is estimated that by the middle of 1888 the population of Greater London had increased to 5,500,000, and that of Inner London to 4,282,921.

† New York, combined with Brooklyn, from which it is separated by the East River, and Jersey City and Hoboken, from which it is separated by the North River, contained 2,885,000 inhabitants. This combination, if allowed, would show New York to be the most populous city in the world except London.

‡ This is the summer population ; it is said to be much larger in winter.

§ Liverpool, with Birkenhead, contained 699,831 inhabitants. This combination would place Liverpool above Glasgow.

|| Without suburbs, 404,173.

¶ Manchester, with Salford, contained 604,500 inhabitants.

POPULATION OF PRINCIPAL TOWNS OF THE WORLD—*continued.*

Town.	Country.	Year of Enumeration or Estimate.	Population.
Cairo	Egypt	1882	374,838
Osaka	Japan	1886	361,694
Shanghai	China ... ..	...	355,000
Hyderabad	India	1881	354,692
Leeds	England	1888	351,210
Dublin (with suburbs)	Ireland	1881	349,648
Mexico	Mexico	1888	329,535
Cincinnati	United States	1889	325,000
Sheffield	England	1888	321,711
San Francisco	United States	1889	320,000
Hamburg (with suburbs)	Germany	1885	305,690
Turin	Italy	1888	305,000
Prague (with suburbs)	Bohemia	1889	304,356
Breslau	Prussia	1885	299,640
Copenhagen (with suburbs)	Denmark	1887	286,900
Munich	Bavaria	1885	285,000
Odessa	Russia	1887	270,643
Detroit	United States	1889	270,500
Cleveland	United States	1889	270,000
Buffalo	United States	1889	265,000
Palermo	Sicily	1888	265,000
Dresden	Saxony	1888	264,196
Edinburgh	Scotland	1888	262,733
Lucknow	India	1881	261,303
Cologne (Köln)	Prussia	1885	261,000
New Orleans	United States	1889	255,000
Kioto	Japan	1886	245,675
King Ki-Tao	Corea ... ..	...	250,000
Lisbon	Portugal	1878	246,343
Pittsburg	United States	1889	245,000
Barcelona	Spain	1887	241,962
Bordeaux	France	1886	240,582
Ningpo	China ... ..	...	240,000
Alexandria	Egypt	1882	231,396
Nottingham	England	1888	230,921
Minneapolis	United States	1889	230,000
Bradford	England	1888	229,721
Washington	United States	1889	229,000
Stockholm	Sweden	1887	227,964
Bristol	England	1888	226,510
Salford	England	1888	226,336
Antwerp	Belgium	1889	225,000
Bucharest	Roumania	1876	221,805
Leipzig	Saxony	1888	213,000
Teheran	Persia ... ..	...	210,000
St. Paul	United States	1889	210,000
Milwaukee	United States	1889	209,000
Belfast	Ireland	1881	208,122
Genoa	Italy	1888	206,000
Hull	England	1888	202,359
Benares	India	1881	200,000
Santiago	Chile	1885	200,000
Gwalior	India	1881	200,000

POPULATION OF PRINCIPAL TOWNS OF THE WORLD—*continued.*

Town.	Country.	Year of Enumeration or Estimate.	Population.
Montreal	Canada	1888	200,000
Louisville	United States	1889	200,000
Victoria	Hong Kong	1889	200,000
Havana	Cuba ... ..	...	199,000
Rotterdam	Holland	1888	197,722
Kansas City	United States	1889	195,000
Jersey City	United States	1889	190,000
Lille	France	1886	188,272
Manila	Philippine Islands ... ..	...	182,242
Florence	Italy	1885	180,000
Riga	Russia	1885	175,332
Newark	United States	1889	175,000
Delhi	India	1881	173,393
Kharkoff	Russia	1885	171,416
Patna	India	1881	170,654
Kieff	Russia	1887	170,216
Toronto	Canada	1888	166,809
Bremen	Germany	1885	165,255
Tabriz	Persia ... ..	...	165,000
Trieste	Austria-Hungary	1889	161,000
Agra	India	1881	160,208
Newcastle	England	1888	159,003
Königsburg	Prussia	1889	158,000
Bangalore	India	1881	155,857
Frankfort	Prussia	1885	154,513
The Hague	Holland	1888	153,440
Amritsar	India	1881	151,896
Cawnpore	India	1881	151,444
Allahabad	India	1881	150,378
Fez	Morocco ... ..	...	150,000
Venice	Italy	1888	150,000
Hanoi	Tonquin ... ..	...	150,000
Smyrna	Asiatic Turkey ... ..	...	150,000
Damascus	Syria ... ..	...	150,000
Lahore	India	1881	149,369
Ghent	Belgium	1888	147,912
Toulouse	France	1886	147,617
Leicester	England	1888	146,790
Jeypore	India	1881	142,578
Valencia	Spain	1887	141,842
Kazan	Russia	1883	140,726
Liege	Belgium	1888	140,261
Dundee	Scotland	1881	140,239
Bahia	Brazil	1883	140,000
Hanover	Prussia	1885	139,731
Portsmouth	England	1888	139,575
Oldham	England	1888	138,220
Portland	England	1887	137,917
Bologna	Italy	1888	137,000
Christiania	Norway	1888	135,615
Rangoon	India	1881	134,176
Montevideo (with suburbs)	Uruguay	1887	134,000
Nagoya	Japan	1886	131,492
Seville	Spain	1887	131,048

POPULATION OF PRINCIPAL TOWNS OF THE WORLD—*continued.*

Town.	Country.	Year of Enumeration or Estimate.	Population.
Indianapolis	United States ...	1889	130,000
Providence	United States ...	1889	130,000
Pernambuco	Brazil	1883	130,000
Poonah	India	1881	129,751
Sunderland	England	1887	129,684
Dusseldorff	Prussia	1885	129,000
Ahmedabad	India	1881	127,621
Nantes	France	1886	127,482
Nuremberg	Bavaria	1885	126,000
Stuttgart	Wurttemberg ...	1885	125,906
Tunis	Tunis ... ..	...	125,000
Saratoff	Russia	1885	122,829
Chemnitz	Saxony	1888	122,000
Adelaide (with suburbs)	South Australia ...	1889	121,735
Soerabaya	Java ... ..	...	121,637
Kishineff	Russia	1885	120,074
Leon	Mexico	1882	120,000
Yarkand	Turkestan	1886	120,000
Brighton	England	1888	119,983
Blackburn	England	1888	119,039
St. Etienne	France	1886	117,875
Altona	Schleswig-Holstein ...	1885	115,000
Danzig	Prussia	1885	114,822
Magdeburg	Prussia	1885	114,291
Bolton	England	1888	113,506
Surat	India	1881	113,417
Lodz	Russia	1885	113,413
Havre	France	1886	112,074
Strasburg	Alsace-Lorraine ...	1885	111,987
Colombo	Ceylon	1881	111,942
Malaga	Spain	1887	110,575
Lemberg	Galicia	1884	110,250
Bareilly	India	1881	109,844
Valparaiso	Chile	1885	109,584
Cardiff	Wales	1888	108,570
Barmen	Prussia	1888	108,000
Rouen	France	1886	107,163
Elberfeld	Prussia	1885	106,492
Catania	Italy	1885	106,000
Oporto	Portugal	1878	105,838
Howrah	India	1881	105,206
Aberdeen	Scotland	1881	105,189
Tiflis	Asiatic Russia ...	1883	104,024
Preston	England	1888	103,234
Aachen	Prussia	1888	103,000
Vilna	Russia	1885	102,845
Stettin	Pomerania	1885	102,000
Baroda	India	1881	101,818
Lima	Peru	1876	101,488
Krefeld	Prussia	1888	101,000
Roubaix	France	1886	100,299
Birkenhead	England	1888	100,093
Bogota	Colombia	1881	100,000
Bagdad	Asiatic Turkey ...	...	100,000

164. According to the figures in the table, Melbourne is now more populous than any other town in the Southern Hemisphere except Buenos Aires; than any town in the United Kingdom except London, Glasgow, Liverpool, and Manchester (with Salford); than any town on the continent of Europe except Paris, Berlin, Vienna, Constantinople, St. Petersburg, Moscow, Naples, Madrid, and Brussels; or than any town in the United States except New York, Philadelphia, Chicago, Brooklyn, St. Louis, and Baltimore. It should, however, be remembered that the population of the suburbs is included in the case of Melbourne, but it may not be so in the case of some of the towns which appear by the table to have smaller populations.

Population
of Mel-
bourne and
other cities
compared.

165. Between the censuses of Victoria taken in 1871 and 1881, the number of gold miners decreased from 52,425 to 35,189; and the population on the gold-fields from 270,428 to 230,944, notwithstanding an increase of 131,000 in the total population. At the end of 1889 the Mining Department estimated the gold miners to number 24,047, or 1,095 less than the estimate of the previous year, and 11,142 less than the number returned at the census. These were divided as follow:—

Mining
population.

ESTIMATED NUMBER OF GOLD MINERS, 1889.

Alluvial miners	...	...	11,686	European miners	...	...	20,668
Quartz miners	...	...	12,361	Chinese miners	...	...	3,379
Total	...	...	<u>24,047</u>	Total	...	...	<u>24,047</u>

166. According to the same estimate, the Europeans engaged in quartz mining at the end of 1889 exceeded those engaged in alluvial mining by 3,758, the numbers being 12,213 and 8,455 respectively. The Chinese seldom practice quartz mining; the numbers returned as engaged in that industry being only 148, as against 3,231 engaged in alluvial mining.

European
and Chinese
miners.

167. The estimated population, together with the proportions of the sexes, and the number of persons to the square mile,* in each of the Australasian colonies during the year of the last census (1881) and the eight following years are shown in the following table:—

Populations
of Austral-
asian
colonies.

* For areas of the Australasian colonies, see paragraph 7 *ante*.

POPULATIONS* OF AUSTRALASIAN COLONIES.

Colony.	Year.	Estimated Population on 31st December.			Females to 100 Males.	Persons to the Square Mile.
		Males.	Females.	Total.		
Victoria† ...	1881	462,491	417,727	880,218	90·32	10·015
	1882	472,770	427,452	900,222	90·41	10·243
	1883	484,961	436,782	921,743	90·06	10·486
	1884	498,479	447,566	946,045	89·79	10·765
	1885	512,953	458,192	971,145	89·32	11·050
	1886	531,452	471,591	1,003,043	88·74	11·413
	1887	550,044	486,075	1,036,119	88·37	11·790
	1888	581,333	509,536	1,090,869	87·65†	12·413†
	1889	593,798	524,230	1,118,028	88·28	12·722
New South Wales...	1881	426,944	351,746	778,690	82·39	2·519
	1882	443,314	367,519	810,833	82·90	2·623
	1883	470,009	387,735	857,744	82·50	2·774
	1884	495,581	408,377	903,958	82·40	2·924
	1885	527,533	430,381	957,914	81·58	3·098
	1886	551,343	450,623	1,001,966	81·73	3·241
	1887	574,012	468,907	1,042,919	81·69	3·373
	1888†	599,107	486,633	1,085,740	81·23	3·512
	1889	618,300	503,900	1,122,200	81·50	3·630
Queensland ...	1881	132,904	94,064	226,968	70·78	·340
	1882	145,592	102,663	248,255	70·51	·372
	1883	169,990	117,485	287,475	69·11	·430
	1884	178,530	123,560	302,090	69·21	·452
	1885	185,735	129,754	315,489	69·86	·472
	1886	201,024	141,590	342,614	70·43	·513
	1887	214,531	152,409	366,940	71·04	·549
	1888	225,516	161,947	387,463	71·81	·580
	1889	235,607	171,051	406,658	72·60	·609
South Australia§ ...	1881	152,318	134,006	286,324	88·00	·317
	1882	155,335	138,174	293,509	88·95	·325
	1883	160,589	143,926	304,515	89·62	·337
	1884	164,877	147,904	312,781	89·70	·346
	1885	163,641	149,782	313,423	91·53	·347
	1886	162,980	149,778	312,758	91·89	·346
	1887	165,199	152,247	317,446	92·16	·351
	1888†	164,121	154,187	318,308	93·95	·352
	1889	167,441	157,043	324,484	93·79	·359
Western Australia...	1881	17,216	12,797	30,013	74·33	·031
	1882	17,551	13,215	30,766	75·29	·032
	1883	18,005	13,695	31,700	76·06	·032
	1884	18,623	14,335	32,958	76·97	·034
	1885	19,989	15,197	35,186	76·03	·036

* The figures for Victoria and New South Wales contain a few Aborigines. In other cases the Aborigines are omitted. For populations in each year since 1872, see Summary of Australasian Statistics (third folding sheet in the second volume).

† On the 31st March, 1890, the estimated population of Victoria was 1,125,193.

‡ Figures revised and amended since last publication.

§ The population of South Australia, as here given, is inclusive of that contained in the Northern Territory, of which the small portion inhabited contained, when the census of 1881 was taken, 4,521 persons, of whom 3,804 were Chinese; and in 1889, about 5,320 inhabitants.

POPULATIONS* OF AUSTRALASIAN COLONIES—continued.

Colony.	Year.	Estimated Population on 31st December.			Females to 100 Males.	Persons to the Square Mile.
		Males.	Females.	Total.		
Western Australia— <i>continued.</i>	1886	23,044	16,540	39,584	71·78	·041
	1887	24,807	17,681	42,488	71·27	·044
	1888	24,275	17,862	42,137	73·58	·043
	1889	25,066	18,632	43,698	74·33	·045
Tasmania ...	1881	63,234	55,689	118,923	88·07	4·509
	1882	65,131	57,348	122,479	88·05	4·644
	1883	66,972	59,248	126,220	88·47	4·786
	1884	69,140	61,401	130,541	88·81	4·949
	1885	71,081	62,710	133,791	88·22	5·073
	1886	73,323	63,888	137,211	87·13	5·202
	1887	76,245	66,233	142,478	86·87	5·402
	1888	78,029	68,120	146,149	87·30	5·541
New Zealand† ...	1889	80,811	70,661	151,472	87·44	5·743
	1881	274,986	225,924	500,910	82·16	4·806
	1882	283,303	234,404	517,707	82·74	4·967
	1883	294,665	246,212	540,877	83·56	5·189
	1884	301,374	255,736	557,110	84·86	5·345
	1885	310,732	264,494	575,226	85·12	5·519
	1886	317,632	271,734	589,366	85·55	5·654
	1887	324,558	278,803	603,361	85·90	5·788
	1888	324,948	282,432	607,380	86·92	5·827
	1889	331,771	288,508	620,279	86·96	5·951

168. Victoria is by far the most densely populated colony of the group; but in South Australia there exists a nearer approach to equality in the numbers of the sexes than in Victoria. The following is the order in which the colonies stand in respect of these two matters:—

Order of colonies in respect to population and sex.

ORDER OF COLONIES IN REFERENCE TO DENSITY OF POPULATION, 1889.

- | | |
|---------------------|-----------------------|
| 1. Victoria. | 5. Queensland. |
| 2. New Zealand. | 6. South Australia. |
| 3. Tasmania. | 7. Western Australia. |
| 4. New South Wales. | |

ORDER OF COLONIES IN REFERENCE TO EQUALITY OF SEXES, 1889.

- | | |
|---------------------|-----------------------|
| 1. South Australia. | 5. New South Wales. |
| 2. Victoria. | 6. Western Australia. |
| 3. Tasmania. | 7. Queensland. |
| 4. New Zealand. | |

169. It will be noticed that in the last five years the male population of New South Wales has been more numerous than that of Victoria; but, until 1887, the effect of this upon the numbers of the total population was neutralized by the large excess of females in the

More persons now in New South Wales than in Victoria.

* See footnote (*) on preceding page.
 † The population of New Zealand is exclusive of Maoris, estimated to number about 42,000.

latter. In 1887, however, for the only time since 1853, the total population of New South Wales exceeded that of Victoria, the excess in favour of the mother colony being 6,800; and, although Victoria temporarily regained her position in 1888 as the most populous colony of the Australasian group, she was again overtaken by New South Wales by the end of 1889, when the excess of her population over that of Victoria amounted to 4,172.

Sexes
diverging
from
equality in
some
colonies.

170. If reference be made to the last column but one of the table, it will be observed that in Victoria, New South Wales, and Tasmania the proportion of males preponderates over that of females in a higher degree now than it did in 1881; but in Queensland, South Australia and New Zealand the tendency since the census has been for the sexes to approach nearer to equality.

Increase of
population
in all the
colonies.

171. In 1889, as compared with 1888, a substantial increase, it will be noticed, took place in the populations of all the Australasian colonies.

Population
of Australia
and Aus-
tralasia.

172. At the end of 1889 there were on the Continent of Australia over three million inhabitants; and in Australasia, including not only the continental colonies but also Tasmania and New Zealand, there were close on three million seven hundred and eighty-seven thousand. The estimated numbers, as well as the proportions of the sexes and the density of population in each of the nine years ended with 1889, were as follow:—

POPULATION OF AUSTRALASIA, 1881 TO 1889.

—	Year.	Estimated Population on the 31st December.			Females to 100 Males.	Persons to the Square Mile.
		Males.	Females.	Total.		
Continent of Australia	1881	1,191,873	1,010,340	2,202,213	84·77	·748
	1882	1,234,562	1,049,023	2,283,585	84·97	·775
	1883	1,303,554	1,099,623	2,403,177	84·36	·816
	1884	1,356,090	1,141,742	2,497,832	84·19	·848
	1885	1,409,851	1,183,306	2,593,157	83·93	·881
	1886	1,469,843	1,230,122	2,699,965	83·70	·917
	1887	1,528,593	1,277,319	2,805,912	83·56	·953
	1888*	1,594,352	1,330,165	2,924,517	83·43	·993
	1889	1,640,212	1,374,856	3,015,068	83·82	1·024
Ditto with Tasmania and New Zealand	1881	1,530,093	1,291,953	2,822,046	84·44	·918
	1882	1,582,996	1,340,775	2,923,771	84·70	·951
	1883	1,665,191	1,405,083	3,070,274	84·39	·999
	1884	1,726,604	1,458,879	3,185,483	84·50	1·036
	1885	1,791,664	1,510,510	3,302,174	84·30	1·074
	1886	1,860,812	1,565,750	3,426,562	84·14	1·114
	1887	1,929,396	1,622,355	3,551,751	84·09	1·155
	1888*	1,997,329	1,680,717	3,678,046	84·15	1·196
	1889	2,052,794	1,734,025	3,786,819	84·47	1·231

* Figures for 1888 revised and altered since last publication.

173. According to the experience of the nine years named, the proportionate excess of males over females shows a tendency to increase rather than to diminish on the Australian continent, but this is not the case in Australasia as a whole. Sexes diverging from equality.

174. A comparison of the figures in the last two tables will show that considerably more than one-third of the inhabitants of Australia, and more than two-sevenths of the inhabitants of the Australasian group, are living in Victoria. Proportion of Victorians in Australasia.

175. The following table shows the area and the population of the United Kingdom and its various colonies and dependencies. It has been compiled in the office of the Government Statist, Melbourne, principally from official documents, and embodies the latest available information upon the subject:— Area and population of British dominions

BRITISH DOMINIONS.—AREA AND POPULATION.

Country and Colony.	Estimated Area in Square Miles.	Year of Census (c) or Estimate	Ascertained or Estimated Population.	Persons to the Square Mile.
EUROPE.				
England and Wales * ...	58,489	1889	29,015,613	496
Scotland ...	29,820	„	4,077,070	137
Ireland ...	32,531	„	4,716,209	145
British soldiers and sailors abroad	...	(c) 1881	215,974	...
Total United Kingdom ...	120,840	1889	38,024,866	315
Gibraltar† ...	2	1888	18,464	9,232
Malta† ...	119	„	162,423	1,365
Heligoland‡ ...	1	1887	2,200	2,200
Total ...	120,962	1888	38,207,953	316
ASIA.				
British India § ...	868,314	1887	210,754,578	243
Upper Burmah ...	190,500	...	3,000,000	16
Ceylon ...	24,702	1887	3,000,000	121
Straits Settlements ...	1,472	1888	552,000	375
Protected Malay States ...	15,664	„	450,000	29
British North Borneo ...	31,100	„	220,000	...
Sarawak ...	41,000	„	300,000	...
Labuan and smaller islands† ...	30	„	6,000	200
Hong Kong ...	32	„	215,800	6,744
Aden... }	71	(c) 1881	34,860	491
Perim ... }	3,584	1888	200,000	56
Cyprus ...				
Total ...	1,176,469	...	218,733,238	186

* Including Isle of Man and Channel Islands, with an area of 303 square miles, and a population in 1881 of 141,260. † Exclusive of the military.

‡ Ceded to Germany when these pages were passing through the press.

§ Inclusive of Assam and Lower Burmah, but exclusive of the Feudatory Native States, which in 1887 covered an estimated area of 509,730 square miles, and contained a population of over 55 millions.

BRITISH DOMINIONS.—AREA AND POPULATION—*continued.*

Country and Colony.	Estimated Area in Square Miles.	Year of Census(c) or Estimate	Ascertained or Estimated Population.	Persons to the Square Mile.
AFRICA.				
Mauritius and dependencies* ...	881	1888	385,323	437
Natal	18,750	„	481,361	26
Zululand	8,900	„	119,000	13
Cape Colony and dependencies † ...	213,917	„	1,428,729	7
Basutoland	10,293	„	176,000	17
British Bechuanaland	162,000	„	44,000	·3
St. Helena	47	1887	5,100	109
Ascension	34	1888	300	9
Lagos	1,071	„	100,000	93
Gold Coast (including Protectorate)	29,401	„	1,500,000	51
Sierra Leone	3,000	„	75,000	25
Gambia	69	„	16,000	232
Total	448,363	...	4,330,813	10
AMERICA.				
Canada	3,470,257	1888	4,972,101	1·4
Newfoundland... ..	162,000	„	200,000	1·2
Bermuda	19	„	15,534	818
Honduras	7,562	„	30,000	4
British Guiana	109,000	„	278,477	2·6
West Indies—				
Bahamas	4,466	„	49,062	11
Turks Island	169	„	5,200	31
Jamaica	4,282	„	617,446	144
St. Lucia	238	„	42,504	179
St. Vincent	133	„	46,872	352
Barbados	166	„	181,000	1,090
Grenada	133	„	49,337	371
Tobago	115	„	20,679	180
Virgin Islands	58	„	5,000	86
St. Christopher	} 153	„	44,101	288
Nevis				
Antigua				
Montserrat	47	„	11,000	234
Dominica	291	„	29,000	100
Trinidad	1,754	„	189,566	108
Total	3,761,013	1888	6,821,879	1·8
AUSTRALASIA AND SOUTH SEAS.				
Australia, Tasmania, and New Zealand	3,075,238§	1889	3,781,550||	1·23
Fiji ‡	7,500	1888	125,441	17
Falkland Islands	7,500	„	1,890	·3
Total	3,090,238	1888-89	3,908,881	1·3
Grand Total British Dominions ...	8,597,045	...	272,002,764	31·6

* Exclusive of the military.

† Including not only Cape Colony proper (including British Kaffraria), but also Griqualand and the Transkeian territories.

‡ The area includes inhabited islands only, which number from 70 to 80 ; inclusive of uninhabited islands, the area is estimated to be 7,740 square miles. Of the population, in 1881, 115,635 were Fijians ; 2,193 Europeans ; 5,637 Polynesians ; and 588 Asiatics (chiefly natives of British India).

§ For areas of the various colonies, see paragraph 7 ante.

|| Exclusive of Aborigines.

176. The Australasian colonies occupy less than three-eighths, and Victoria nearly a ninetieth, of the whole area of the British dominions. The Australasian colonies contain nearly a seventieth, and Victoria contains nearly a two hundred and fortieth, of the population of the whole British Empire. The area of Australasia is somewhat smaller than that of Canada, which is the largest British possession; and the population of Canada exceeds that of Australasia by not quite a million and a quarter. The population of Victoria is exceeded by that of no British dependency except India, Canada, Burmah, Ceylon, the Cape of Good Hope and the Gold Coast.

177. The next table gives the area and population of foreign countries, including all which are of importance. The information has been drawn from authentic sources, and is brought down to the latest reliable dates:—

FOREIGN COUNTRIES.—AREA AND POPULATION *

Countries, with Dependencies.	Estimated Area in Square Miles.	Year of Census(c) or Estimate.	Ascertained or Estimated Population.	Persons to the Square Mile.
EUROPEAN.				
Austria-Hungary† ...	264,443	1887-8	40,727,418	154
Belgium ...	11,370	1888	6,030,043	530
Denmark ...	14,784	1886	2,096,780	142
„ colonies of ...	75,107	(c)1880	127,428‡	2
Total Danish dominions ...	89,891	1880-6	2,224,208	25
France ...	204,092	1886	38,218,903	187
„ colonies of, Algeria ...	257,420	„	3,817,465§	15
„ „ others ...	432,739	1882-4	12,642,530	29
„ protectorates of, Tunis ...	44,910	1882-6	2,000,000	45
„ „ others ...	139,864	„	7,553,000	54
Total French dominions ...	1,079,025	1882-6	64,231,898	60
Germany ...	208,640	(c)1885	46,855,704	224
Greece|| ...	24,970	(c) 1879-81	1,979,561	79
Holland ...	12,648	1888	4,505,932	356
„ colonies of, Java and Madura ...	50,848	1886	21,997,560	433
„ other colonies ...	713,500	1887	8,520,095	12
Total Dutch dominions ...	776,996	1886-8	35,023,587	45

* The figures of population in this table have been taken principally from *L'Almanach de Gotha*, 1889.

† Including the formally annexed provinces of Bosnia, Herzegovina, and Novi-bazar, which contain an area of 23,262 square miles, with a population in 1879 of 1,504,091.

‡ Including Farøe islands.

§ Excluding wandering Arab tribes, estimated to embrace 2,440,000 persons.

|| Including the portions of Thessaly and Epirus acquired by the convention of the 24th May, 1881, which contain an estimated area of 5,160 square miles, with a population of 299,953.

FOREIGN COUNTRIES.—AREA AND POPULATION*—*continued.*

Countries, with Dependencies.	Estimated Area in Square Miles.	Year of Census(c) or Estimate.	Ascertained or Estimated Population.	Persons to the Square Mile.
<i>EUROPEAN—continued.</i>				
Italy	114,410	1888	30,565,253	267
Luxemburg	998	1885	213,283	214
Montenegro	3,486	(c)1880	236,000	68
Portugal	34,595	1881	4,306,554	124
„ possessions of, Azores ...	1,005	„	269,401	268
„ „ Madeira ...	505	„	132,223	262
„ „ others ...	704,546	1872-85	4,987,900	7
Total Portuguese dominions	740,651	1872-85	9,696,078	13
Roumania	48,307	1888	5,376,000	111
Russia in Europe :—				
Russia (proper)	1,887,043	(c)1885	81,725,185	43
Poland	49,142	„	7,960,304	162
Finland	144,210	1886	2,232,378	15
Total	2,080,395	1885-86	91,917,867	44
Russia in Asia :—				
Caucasus and Trans-Caspian territory	395,453	1885	7,284,547	18
Siberia	4,823,112	„	4,313,680	9
Central Asia	1,170,744	„	5,327,098	5
Total	6,389,309	„	16,925,325	3
Total Russian Empire ...	8,469,704	„	108,843,192	13
Servia	18,756	1887	2,010,612	107
Spain (including Balearic and Canary Islands)	197,667	1887	17,545,160	89
Spain, colonies of	163,876	1877-83	9,996,058	61
Total Spanish dominions ...	361,543	...	27,541,218	76
Sweden and Norway	295,327	1885-8	6,707,257	22
Switzerland	15,892	1888	2,934,057	185
Turkey †	1,192,088	...	21,964,056	19
Eastern Roumelia	13,858	1885	975,030	70
Bulgaria	24,369	(c)1881	2,007,919	82
Total Turkish Empire ...	1,230,315	...	24,947,005	20

* See footnote (*) on page 101.

† Turkey in Europe is estimated to contain 63,850 square miles, and 4,790,000 inhabitants; the portion in Asia (inclusive of the tributary principality of Samos), 729,380 square miles, and 16,174,056 inhabitants; and the portion in Africa (exclusive of the Protectorate of Egypt), 398,873 square miles, and 1,000,000 inhabitants.

FOREIGN COUNTRIES.—AREA AND POPULATION*—*continued.*

Countries, with Dependencies.	Estimated Area in Square Miles.	Year of Census(c) or Estimate.	Ascertained or Estimated Population.	Persons to the Square Mile
ASIATIC.				
China (proper)	1,553,530	1879-85	381,555,000	246
„ dependencies of	2,914,170	...	21,180,000	7
Total Chinese Empire † ...	4,467,700	...	402,735,000	90
Corea	84,222	1886	12,000,000	142
Japan ‡	147,589	1888	39,069,007	265
Persia	636,203	1881	7,653,600 §	12
Siam	280,560	...	5,750,000	20
AFRICAN.				
Egypt (proper)	12,826 ||	(c) 1882	6,806,381	531
Liberia	14,300	...	1,068,000	75
Madagascar	228,500	...	3,500,000	15
Morocco ¶	219,000	...	6,000,000	27
South African Republic ...	112,600	1887	360,000	3
AMERICAN.				
Argentine Confederation ** ...	1,125,086	1888	3,807,530	3
Bolivia	500,740	1884	3,303,000	7
Brazil	3,204,654	1888	14,002,335 ††	4
Chile ‡‡	293,970	1889	3,115,000	11
Colombia	504,773	1881	4,000,000 §§	8
Costa Rica	23,000	1886	213,785	9
Ecuador	248,370	(c) 1885	1,004,651 |||	4
Guatemala	46,800	1888	1,417,116	30
Haiti	10,204	1887	960,000 ¶¶	94
Honduras	46,400	„	331,917	7
Mexico	751,268	1888	11,487,210	15
Nicaragua	51,647	1886	262,372	5
Paraguay	91,980	1887	239,774 ***	3
Peru ‡‡	413,983	1884	2,994,675	7
San Domingo	10,045	1887	504,000	50
San Salvador	7,226	1887	664,513	92

* See footnote (*) on page 101.

† The figures relating to China (Proper) are principally for the year 1885, and are mainly derived from an official report published by the Minister of Finance. The dependencies referred to are Manchuria, Mongolia, Tibet, Jungaria, and East Turkestan, but not Corea.

‡ For a Statistical Account of the Empire of Japan, see *Victorian Year-Book*, 1881-2, page 517.

§ Including 1,910,000 nomads.

|| Authorities differ considerably as to the area of Egypt. Thus the State-Major-General of Egypt estimates the total area (not including the territories of the Soudan still occupied) as 394,240 square miles. *L'Almanach de Gotha* gives the area as 27,687 square kilometres (or about 10,690 square miles). The area above given is that published by the Imperial Board of Trade.

¶¶ The estimates of population of Morocco, according to *L'Almanach de Gotha*, vary from six to ten millions.

** Including Patagonia.

†† The wandering Aboriginal population is estimated to amount to 600,000.

‡‡ The populations given for Peru and Chile include wild Indians, estimated to number 350,000 in the former, and about 50,000 in the latter.

§§ Including wild Indians, estimated at 220,000.

||| Exclusive of wild Indians, of the number of which no estimate has been made.

¶¶¶ Of these nine-tenths are negroes, and the rest principally mulattoes.

*** Exclusive of about 60,000 semi-civilized and 70,000 wild Indians.

FOREIGN COUNTRIES.—AREA AND POPULATION*—*continued.*

Countries, with Dependencies.	Estimated Area in Square Miles.	Year of Census (c) or Estimate.	Ascertained or Estimated Population.	Persons to the Square Mile.
AMERICAN— <i>continued.</i>				
United States †	3,557,000	1884	55,554,000	16
Uruguay	72,151	1887	614,257	9
Venezuela	429,855 ‡	1886	2,198,320	5
OCEANIC.				
Hawaiian Islands	6,541	1888	86,647 §	13
Samoa	1,076	1874	35,570	33
Tonga	385	1884	22,937	60
Grand total of countries named	31,355,378	...	1,007,903,971	32
Grand total of British Dominions	8,597,045	1887-9	272,002,764	31·6
Grand total of British and Foreign Countries	39,952,423	...	1,279,906,735	32

178. According to this table, the British Empire covers an area somewhat larger than European and Asiatic Russia combined, more than four times as large as Russia in Europe, nearly twice as large as the Chinese Empire, and nearly two and a half times as large as the United States; while its population is equal to more than two-thirds of that of the Chinese Empire, is two and a half times as large as that of the Russian Empire, is four and a quarter times as large as that of France and its possessions, is nearly five times as large as that of the United States, and nearly six times that of Germany. Moreover, the area of the British dominions is about seventy times, and the population thereof more than seven times, as large as the area and population respectively of the United Kingdom itself.

179. The most densely populated independent country in the world appears to be Belgium, and the next England and Wales—the former containing over five hundred and thirty, and the latter four hundred and ninety-six, persons to the square mile. Holland comes next, with three hundred and fifty-six; next Italy, with two hundred and sixty-seven; Japan with two hundred and sixty-five; and then China, which, according to the latest estimate, contains, even without its dependencies, over a fourth of the total population of the world,

* See footnote (*) on page 101.
† Including Alaska Territory, which contains an area of 531,409 square miles, and a population of 33,426. Indians to the number of 179,232, are also included.
‡ Exclusive of disputed territory, which, if included, would bring the total area up to 632,695 square miles.
§ Of this number 40,000 are Aborigines, 18,000 Chinese, and 17,300 whites—principally Portuguese

British dominions, compared with foreign countries.

Density of population in various countries.

with two hundred and forty-six persons to the square mile; followed in close succession by Germany, Luxemburg, France, Switzerland, and Austria-Hungary. Ireland is less densely populated than any of these, and Scotland is not only less so than Ireland, but than Denmark.

180. In most European countries, females are more numerous than males, the only exceptions in the following list being Russia, Italy, Servia, Greece, Roumania, and Bosnia. The Asiatic portion of the Russian Empire and the United States also contain more males than females:—

Proportions
of sexes in
various
countries.

PROPORTIONS OF THE SEXES IN VARIOUS COUNTRIES.*

	Females to 100 Males.		Females to 100 Males.
Portugal (1878) ...	108·4	Holland (1888) ...	101·9
Scotland ...	107·6	Hungary (1880) ...	101·8
Norway and Sweden (1875-87)	106·1	European Russia (1885) ...	101·4
Switzerland (1888) ...	105·6	France (1881) ...	100·8
England and Wales ...	105·5	Belgium (1886) ...	100·3
United Kingdom (1881) ...	104·7	Croatia and Slavonia ...	100·1
Austria (1887) ...	104·7	Russian Empire ...	99·7†
Spain (1877) ...	104·5	Italy (1881) ...	99·5
Finland ...	104·4	Servia (1887) ...	95·5
Germany (1885) ...	104·3	Greece (1881) ...	90·6
Ireland ...	104·3	United States (1880) ...	96·5
Denmark (1880) ...	103·6	Roumania ...	94·4
Prussia (1885) ...	103·8	Bosnia (1885) ...	89·5
Finland (1886) ...	103·5		

181. The following is an estimate of the area and population of the world and its various continents. The scanty population of Australasia and Polynesia will be at once noticed. It will also be observed that by far the greater proportion, or about five-ninths, of the total population of the earth is distributed throughout Asia, but that the density of population there, is little more than half that of Europe:—

Area and
population
of the
world.

THE WORLD.—AREA AND POPULATION.‡

Continents.	Area in English Square Miles.	Estimated Population.	Persons to the Square Mile.
Europe ...	3,713,340	349,873,000	94·2
Asia ...	17,150,210	830,599,000	48·4
Africa ...	11,514,770	203,321,000	17·7
America ...	15,311,400	121,335,000	7·9
Australasia and Polynesia ...	3,455,760	5,071,000	1·47
Polarland ...	1,728,640	82,000	·05
Total ...	52,874,120	1,510,281,000	28·6

* Some of the figures in this list have been derived from Hübner's *Geographisch-Statistische Tabellen aller Länder der Erde* for 1889: Wilhelm Rommel, Frankfurt.

† No regular census of the Russian Empire has ever been taken, but an estimate was made by the Government in 1885, which gave the number of males as 54,063,353, and the number of females as 53,883,042; and there were besides 835,840 individuals in Central Asia, of whom the sex was unknown.

‡ The areas and populations in this table have been taken from Otto Hübner's tables for 1889. The areas are given in that work in square kilometers, but these have been reduced to English square miles, upon the assumption that one square kilometer is ·386 of a square mile.

Proportion
of countries
named to
world.

182. Comparing the totals in this table with those in the lowest line of the table following paragraph 177 *ante*, it appears that more than three-fourths of the earth's surface, and more than five-sixths of its population, are included in the countries named.

Proportion
of British
dominions,
etc., to
world.

183. It appears, moreover, that British dominions cover nearly a sixth of the earth's surface, and contain between a fifth and a sixth of its population; that the Australasian colonies cover nearly a seventeenth of its surface, but contain only about a four-hundredth of its population; and that Victoria does not cover much more than a six-hundredth part of its surface, and contains less than a fourteen-hundredth of its population.

Overland
migration
not
recorded.

184. In the following paragraphs the immigration and emigration referred to is by sea only; the results given would probably be greatly modified if the overland traffic, of which no record exists, were to be taken into account, more especially since the facilities for overland intercourse with the neighbouring colonies have been increased by the extension of railways. For many years past two lines have extended from Melbourne to the River Murray, and complete railway communication has for some time existed between the capitals of Victoria and New South Wales, and this has now been extended on to the capital of Queensland. Similar communication has also existed since the 19th January, 1887, between the capitals of this colony and South Australia, by means of a railway running westward in Victoria to the South Australian border, where it is connected with the lines of that colony. With such facilities as these, it is natural to suppose that many persons about to come to Victoria from, or leave it for, one of the adjacent colonies, would find it more convenient, as well as more expeditious, to take the land route rather than that by the seaboard. As time advances, there is little doubt that the records kept by the Immigration Department will less and less account for the actual immigration and emigration of the colony. The insufficiency of the present returns of immigration and emigration to supply material for supplementing the returns of births and deaths, for the purpose of forming estimates of population between the census periods, has more than once been brought under the notice of the Government by the Government Statist, who has suggested that steps should be taken to obtain a record of the arrivals and departures overland; but it seems that difficulties, at present supposed to be insuperable, stand in the way of taking note of such persons, and therefore there is no alternative but to leave them out of account altogether. It is evident that, supposing the returns of those who come and go by the seaboard

are correct, and the births and deaths are all registered, the population estimates must always understate or overstate the truth, according as the arrivals or the departures overland are the greater.

185. In consequence of the system pursued in keeping the records of immigration and emigration—the practice being to set down all who pass through Victorian ports on their way to other colonies and countries as both arriving in and departing from this colony—Victoria, being situated between South Australia and Western Australia on the one hand and New South Wales and Queensland on the other, seems always to have an unduly large number of persons coming in and leaving, whereby an impression is created that great numbers come to Victoria, but, being dissatisfied with their prospects in this colony, betake themselves elsewhere. If all are recorded accurately, the result showing those who remain would be correct; still it is to be regretted that some means could not be found of keeping the account without including a number of persons who have had no connexion whatever with the colony, and perhaps may have never so much as even landed on its shores.

Returns of arrivals and departures unduly swelled.

186. The arrivals and departures by sea* recorded during 1889, also the excess of the former over the latter, were as follow:—

Immigration and emigration, 1889.

IMMIGRATION AND EMIGRATION, 1889.

—	Males.	Females.	Total.
Arrivals by sea	56,163	28,419	84,582
Departures by sea	46,679	21,739	68,418
Excess of arrivals	9,484	6,680	16,164

187. Whilst the records of arrivals show smaller numbers for 1889 than for 1888 by 17,450, the records of departures show larger numbers by 8,189, the apparent net gain by excess of immigration over emigration was therefore less in the year under review than the previous one by 25,639. In reference to this large falling off in the net immigration it should be explained that the immigration in 1888 was much swelled by the large number of persons who were attracted by the opening of the Melbourne International Exhibition in that year,

Gain by immigration, 1888 and 1889 compared.

* All the figures relating to arrivals in the colony, and departures therefrom, contain statements of those who come and go by sea only. No attempt is made to keep an account of those who cross the frontier from and to the adjacent colonies. It has already been mentioned that the number of persons departing by sea is habitually understated. The number of immigrants and emigrants recorded in each year will be found in the Statistical Summary of Victoria (first folding sheet) published in the second volume.

whilst the emigration in 1889 was swelled by these persons who left the colony about the time of the closing of the Exhibition in that year.

Adults and children arriving and departing.

188. The immigration authorities do not note the exact ages of the persons arriving and departing, but classify them as adults, or those from 12 years of age upwards; as children, or those between 1 year of age and 12 years; and as infants, or those under 1 year. The following are the numbers under each of those heads who came and went during 1889 :—

ARRIVALS AND DEPARTURES OF ADULTS, CHILDREN AND INFANTS, 1889.

—	Adults.	Children.	Infants.	Total.
Arrivals	75,421	8,104	1,057	84,582
Departures	61,859	5,630	929	68,418
Immigration in excess	13,562	2,474	128	16,164

Arrivals from and departures for different countries.

189. In consequence of the practice which exists of recording the ports of original departure and final destination of the ships as being also those of all the passengers, instead of noting the ports at which the respective passengers joined the vessel and those at which they stated their intention of leaving it, much doubt must exist as to the accuracy of the records showing the countries from which persons who arrived in the colony came, and to which those who left it went. The returns, however, as furnished by the immigration authorities, are given for what they may be worth :—

ARRIVALS FROM AND DEPARTURES FOR DIFFERENT COUNTRIES, 1889.

Countries.	Arrivals therefrom.	Departures thereto.	Excess of Immigration.
New South Wales and Queensland ...	30,142	30,401	259
South and Western Australia	6,625	6,118	507
Tasmania	18,436	13,177	5,259
New Zealand	5,288	4,927	361
The United Kingdom	19,282	8,995	10,287
Foreign Countries	4,809	4,800	9
Total	84,582	68,418	16,164

Net immigration from various countries.

190. It appears from the records that in each of the six years ended with 1886 persons passing from Victoria to New South Wales and Queensland by sea greatly outnumbered those coming in an opposite direction, but in the two subsequent years the reverse was the case, the balance of sea migration between those colonies and Victoria being against the former by 939 persons in 1887, and by 10,517 in 1888. In 1889, however, the excess was again slightly in

favour of New South Wales and Queensland. From all the other Australasian colonies, as well as from the United Kingdom and foreign countries, Victoria gained considerably in population in most of the years; the gain in 1889, however, from South and Western Australia, New Zealand, and foreign countries having been considerably below the average. On the other hand, the gain from the United Kingdom was only exceeded in 1886, and that from Tasmania was fully up to the average. The following table shows the recorded balance of immigration over emigration, or the contrary, from or to each country in the last nine years. The figures must be accepted subject to the caution given in the paragraph immediately preceding the last table:—

NET IMMIGRATION FROM DIFFERENT COUNTRIES, 1881 TO 1889.

Year.	Immigration from in Excess of Emigration to—						Emigration to, in Excess of Immigration from New South Wales and Queensland.	Net Immigration.
	New South Wales and Queensland.	South and Western Australia.	Tasmania.	New Zealand	The United Kingdom.	Foreign Countries.		
1881	192	2,868	1,272	3,960	954	1,924	7,322
1882	2,929	3,455	165	6,702	607	2,978	10,880
1883	2,362	4,500	407	10,276	926	7,441	11,030
1884	768	5,332	796	9,863	1,029	3,647	14,141
1885	6,136	5,076	1,628	8,875	759	7,492	14,982
1886	7,248	5,556	2,694	11,722	2,561	4,479	25,302
1887 ...	939	3,991	3,106	1,538	8,813	3,639	...	22,026
1888 ...	10,517	3,402	8,649	8,475	9,894	866	...	41,803
1889	507	5,259	361	10,287	9	259	16,164
Total	27,535	43,801	17,336	80,392	11,350	16,764*	163,650

191. It appears from the table that, in the nine years ended with 1889, Victoria lost 16,764 persons to New South Wales and Queensland, but gained 88,672 from the other colonies of the group. The net gain from her neighbours during the period was thus 71,908.

Net immigration from neighbouring colonies.

192. In the twelve years 1871 to 1882, 5,547 immigrants from the United Kingdom had free or partially free passages granted them to Victoria. Of these, 3,212, or 58 per cent., arrived in the first year, and 5,168, or 93 per cent., in the first three years of the period alluded to. The number then declined rapidly from year to year, and since 1873 only 379 such immigrants have arrived. Of these, only 5, all females, came in 1880, not one in 1881, and only 2 in 1882. Since 1882 no free or assisted immigrants have been introduced by the State.

State-assisted immigration.

* Net figures.

Legislation
respecting
Chinese.

193. Chinese first began to arrive in Victoria in 1853; and, at the census of 1854, 2,000 were enumerated. In 1855 an Act* was passed limiting the number of Chinese males a ship might bring to Victoria to one to every 10 tons, and making it compulsory that the sum of £10 should be paid in respect to each of such immigrants. But, notwithstanding the stringent provisions of this Statute, which, however, were largely evaded by Chinese being landed in the adjacent colonies and coming overland to Victoria, the Chinese had in 1857, when the next census was taken, increased to 25,424; and at the end of 1859 it was estimated that they numbered no less than 42,000. Soon after this an exodus of Chinese took place, chiefly to New South Wales, it being estimated that, besides those who departed by sea, as many as 11,000 went over the frontier to work at the Lambing Flat diggings in that colony. In consequence of this, the census of 1861 showed the number of Chinese remaining in Victoria to be only 24,732, or 692 less than in 1857. In 1865 the Act which imposed restrictions on Chinese immigration was repealed†; but, notwithstanding this, the number of Chinese in the colony had decreased, by the time the census of 1871 was taken, to 17,935, or by 6,797 as compared with 1861; which number at the census of 1881 had been still further reduced to 12,128, or by 5,807 more. Since the census, two Acts imposing restrictions of Chinese immigration have been passed, the first being the *Chinese Act* 1881, 45 Vict. No. 723 (1st April, 1882), which limited the number of Chinese immigrants a ship might bring to Victoria to one to every 100 tons, and imposed on each of such immigrants a tax of £10, to be paid before he left the vessel. These provisions were repealed by the *Chinese Immigration Restriction Act* 1888, 52 Vict. No. 1005 (22nd December, 1888), which was introduced in accordance with resolutions passed at a meeting of representatives of Australasian Governments held at Sydney in June, 1888, each colony engaging to introduce a similar measure. The Victorian Act provided that no vessel should enter any port in this colony having on board more than one Chinese to every 500 tons of her burden, and that, in the event of any vessel bringing more than this proportion, her owner, master, or charterer should be liable to a penalty of £500 for every Chinese by which it should be exceeded; also that any Chinese who should enter Victoria by land should obtain a permit in writing from an officer duly appointed to grant it, and, failing to do so, should be liable to a penalty ranging from £5 to £20, and in addition to or substitution for such penalty, to be

* Act 18 Vic. No. 39 (12th June, 1855).

† By the *Chinese Immigrants Statute* 1865, 28 Vict. No. 259 (May, 1865).

deported to the colony whence he came; the Governor in Council, however, being at liberty to hold this provision in abeyance should he see fit to do so. Chinese duly accredited or sent on a special mission to an Australasian Government by any other Government; Chinese forming portion of the crews of vessels, and Chinese naturalized in Victoria are exempted from the provisions of this Act. The result of this Act will be virtually to put a stop to Chinese immigration in the future.

194. The Chinese immigrants included in the returns of 1889 numbered 124, all males, or 248 less than in 1888, and 1,925 less than in 1887. The number of Chinese emigrants during 1889 was 655, viz., 646 males and 9 females, as compared with 575 males and 7 females in 1888. In addition to the Chinese immigrants and emigrants referred to, 51 Chinese arrived during 1889 from Tasmania, but were transhipped to Hong Kong without landing.

Chinese im-
migration
1889.

195. Of the Chinese who arrived 2 came from New South Wales and Queensland, 107 from Tasmania, 9 from New Zealand, and 6 from Hong Kong. Of those who left 147 went to New South Wales, and 508 returned to Hong Kong.

Chinese,
where from
and where to.

196. Until 1882 the official records of the departures of Chinese by sea were of little value, as no complete account was kept of those who went to the adjacent colonies, but the arrivals by sea have been regularly recorded since 1860, and were as follow:—

Arrivals of
Chinese,
1861 to 1889.

ARRIVALS OF CHINESE BY SEA, 1861 TO 1889.

1861	...	...	154	1876	...	...	377
1862	...	...	175	1877	...	...	449
1863	...	...	80	1878	...	...	819
1864	...	...	978	1879	...	...	875
1865	...	...	1,085	1880	...	...	947
1866	...	...	974	1881	...	...	1,348
1867	...	...	317	1882	...	...	327
1868	...	...	300	1883	...	...	433
1869	...	...	1,121	1884	...	...	557
1870	...	...	584	1885	...	...	670
1871	...	...	704	1886	...	...	1,108
1872	...	...	385	1887	...	...	2,049
1873	...	...	269	1888	...	...	372
1874	...	...	386	1889	...	...	124
1875	...	...	521				

197. The whole number of Chinese who arrived in the 29 years was 18,438, or an average of 638 per annum. It will be observed that only 124 Chinese arrived in 1889, and that only in five years of the period did the number arriving exceed 1,000.

Average
number of
Chinese
immigrants

Arrivals and
departures
of Chinese,
1882 to 1889.

198. If the arrivals of Chinese by sea be considered in connexion with the departures, it will be found that in the last eight years, during which period an approximately correct account has been taken of the departures as well as the arrivals of Chinese by vessels—the Chinese population increased by 536. In the first three years and in the last two of that period there was a loss by the departures of Chinese being in excess of the arrivals, which, however, was more than counterbalanced by the reverse process during the three years prior to 1888, as will be seen by the following figures:—

ARRIVALS AND DEPARTURES OF CHINESE BY SEA, 1882 TO 1889.

Year.			Arrivals of Chinese.	Departures of Chinese.	Excess of Arrivals (+). Excess of Departures (-).
1882	...	...	327	699	- 372
1883	...	...	433	568	- 135
1884	...	...	557	627	- 70
1885	...	...	670	579	+ 91
1886	...	...	1,108	492	+ 616
1887	...	...	2,049	902	+ 1,147
1888	...	...	372	582	- 210
1889	...	...	124	655	- 531
Total	...	...	5,640	5,104	+ 536

Immigration
and emigra-
tion in Aus-
tralasian
colonies,
1889.

199. The following table shows the recorded arrivals in and departures from each Australasian colony by sea, and the excess of the former over the latter during the year 1889; the sexes of those who came and who went away being also distinguished:—

IMMIGRATION AND EMIGRATION RETURNS OF THE AUSTRALASIAN COLONIES, 1889.

Colony.	Immigrants.			Emigrants.*			Excess of Immigrants over Emigrants.†		
	Males.	Females	Total.	Males.	Females	Total.	Males.	Females	Total.
Victoria ..	56,163	28,419	84,582	46,679	21,739	68,418	9,484	6,680	16,164
New South Wales	44,348	19,849	64,197	29,789	13,768	43,557	14,559	6,081	20,640
Queensland ..	24,713	10,893	35,606	18,141	6,539	24,680	6,572	4,354	10,926
South Australia	6,608	2,622	9,230	5,866	2,870	8,736	742	- 248	494†
Western Australia	2,086	764	2,850	1,708	564	2,272	378	200	578
Total ...	133,918	62,547	196,465	102,183	45,480	147,663	31,735	17,067†	48,802†
Tasmania ..	15,249	8,194	23,443	13,699	7,072	20,771	1,550	1,122	2,672
New Zealand ..	10,158	5,234	15,392	9,493	5,685	15,178	665	- 451	214
Grand Total ..	159,325	75,975	235,300	125,375	58,237	183,612	33,950	17,738†	51,688†

NOTE.—The figures in this table refer to immigration and emigration by sea only.

* The figures in these columns understate the truth. Many persons leave all the colonies by sea without their departure being noted.

† Where the minus sign (-) appears, the departures exceeded the arrivals by the number against which it is placed.

‡ Net figures.

200. The figures in the table indicate the persons going from colony to colony, as well as those arriving from, and departing for, distant countries. The figures in the total and grand total lines of the last three columns, however, ought to show the net gain to the population of Australia and Australasia by immigration. By the last of these columns it is seen that, in 1889, the Australian continent apparently gained 48,802, and the continent, with the addition of Tasmania and New Zealand, apparently gained 51,688 inhabitants. The corresponding figures for 1888 were 73,844 and 65,599; those for 1887 were 61,372 and 65,041; and those for 1886 were 63,144 and 64,947. Many persons, however, leave all the colonies by sea without their departure being noted; therefore the actual gain from without is always less than the records indicate.

Net gain by immigration to Australia and Australasia.

201. It will be noticed that the net immigration during the year was very much larger to Victoria than to any other colony of the group, except New South Wales; also that whilst South Australia gained 742 males, she lost 248 females, the net gain being 494; and that New Zealand lost 451 females, but gained 665 males, the net gain during the year being 214. It will also be noticed that to New South Wales the net immigration was greater than to Victoria in the case of males only, that of females having been less by 599.

Male and female immigration to colonies.

202. The following, according to the table, is the order in which the colonies stood during 1889, in reference to the net increase of their populations from external sources:—

Order of colonies in respect to gain by immigration.

ORDER OF THE COLONIES IN REFERENCE TO EXCESS OF IMMIGRANTS OVER EMIGRANTS, 1889.

1. New South Wales	5. Western Australia
2. Victoria	6. South Australia
3. Queensland	7. New Zealand
4. Tasmania	

203. The arrivals in and departures from each Australasian colony by sea, and their difference, were as follow in the ten years ended with 1889, the arrivals of persons whose passages were paid, either wholly or partly, by the Colonial Governments,* being distinguished from those who made their way to the colonies without State assistance:—

Immigration and emigration in Australasian colonies, 1880-89.

* It has not been possible to give the returns of assisted and free immigrants for Queensland, Western Australia, and New Zealand later than 1888; the figures for 1889 will be published in an Appendix.

IMMIGRATION AND EMIGRATION RETURNS OF THE AUSTRALASIAN
COLONIES, 1880 TO 1889.

Colony.	Year.	Immigrants by Sea.			Emigrants by Sea.*	Excess of Immigrants over Emigrants.†
		Unassisted.	Assisted and Free.	Total.		
Victoria ...	1880	56,950	5	56,955	45,294	11,661
	1881	59,066	...	59,066	51,744	7,322
	1882	59,402	2	59,404	48,524	10,880
	1883	66,592	...	66,592	55,562	11,030
	1884	72,202	...	72,202	58,061	14,141
	1885	76,976	...	76,976	61,994	14,982
	1886	93,404	...	93,404	68,102	25,302
	1887	90,147	...	90,147	68,121	22,026
	1888	102,032	...	102,032	60,229	41,803
	1889	84,582	...	84,582	68,418	16,164
New South Wales ...	1880	42,736	3,134	45,870	26,559	19,311
	1881	45,146	2,577	47,723	24,825	22,898
	1882	44,056	3,233	47,289	27,972	19,317
	1883	58,837	8,369	67,206	34,396	32,810
	1884	64,918	7,568	72,486	40,254	32,232
	1885	72,584	5,554	78,138	38,455	39,683
	1886	66,307	4,081	70,388	41,896	28,492
	1887	66,243	1,362	67,605	44,089	23,516
	1888	64,698	528	65,226	43,681	21,545
	1889	63,766	431	64,197	43,557	20,640
Queensland ...	1880	10,246	3,150	13,396	10,349	3,047
	1881	12,282	3,941	16,223	9,209	7,014
	1882	16,705	10,295	27,000	9,957	17,043
	1883	21,085	25,245	46,330	11,959	34,371
	1884	22,164	14,719	36,883	18,263	18,620
	1885	24,718	9,616	34,334	22,768	11,566
	1886	23,650	10,451	34,101	20,911	13,190
	1887	22,993	9,400	32,393	16,414	15,979
	1888	26,515	8,349	34,864	23,059	11,805
	1889	...	...	35,606	24,680	10,926
South Australia ...	1880	13,957	808	14,765	13,002	1,763
	1881	18,769	783	19,552	16,800	2,752
	1882	13,748	1,122	14,870	14,136	734
	1883	15,701	4,129	19,830	15,562	4,268
	1884	16,322	968	17,290	16,082	1,208
	1885	14,207	293	14,500	21,917	-7,417
	1886	17,623	...	17,623	25,231	-7,608
	1887	15,468	...	15,468	17,667	-2,199
	1888	12,637	...	12,637	12,750	-113
	1889	9,230	...	9,230	8,736	494

* These figures understate the truth. Many persons leave all the colonies by sea without their departure being noted.

† In consequence of the Emigration returns being defective, as stated by the previous footnote, these figures are too high, except where the minus sign appears, and then they are too low.

IMMIGRATION AND EMIGRATION RETURNS OF THE AUSTRALASIAN
COLONIES, 1880 TO 1889—*continued*.

Colony.	Year.	Immigrants by Sea.			Emigrants by Sea.*	Excess of Immigrants over Emigrants.†
		Unassisted.	Assisted and Free.	Total.		
Western Australia ...	1880	577	...	577	777	— 200
	1881	611	146	757	690	67
	1882	...	...	932‡	838	94
	1883	1,211	296	1,507	1,071	436
	1884	2,083	351	2,434	1,563	871
	1885	2,666	381	3,047	1,419	1,628
	1886	4,059	1,556	5,615	1,877	3,738
	1887	2,921	1,529	4,450	2,400	2,050
	1888	1,548	50	1,598	2,794	— 1,196
	1889	...	...	2,850	2,272	578
Tasmania ...	1880	10,359	52	10,411	10,025	386
	1881	12,520	59	12,579	11,163	1,416
	1882	12,681	141	12,822	11,403	1,419
	1883	13,642	598	14,240	12,636	1,604
	1884	13,308	949	14,257	12,524	1,733
	1885	14,240	582	14,822	14,173	649
	1886	15,231	168	15,399	14,630	769
	1887	14,797	183	14,980	12,288	2,692
	1888	18,834	32	18,866	17,936	930
	1889	23,424	19	23,443	20,771	2,672
New Zealand ...	1880	12,465	2,689	15,154	7,923	7,231
	1881	9,585	103	9,688	8,072	1,616
	1882	10,219	726	10,945	7,456	3,489
	1883	13,313	5,902	19,215	9,186	10,029
	1884	16,133	3,888	20,021	10,700	9,321
	1885	15,127	1,072	16,199	11,695	4,504
	1886	15,559	542	16,101	15,037	1,064
	1887	12,403	1,286	13,689	12,712	977
	1888	13,121	485	13,606	22,781	— 9,175
	1889	...	...	15,392	15,178	214

NOTE.—The minus sign (—) indicates that the emigrants exceeded the immigrants by the number to which it is prefixed.

204. The returns show that more persons have in all the years departed from Victoria than from any of the other colonies; but it has been already explained§ that many of these only pass through the ports of the colony on their way to other places. In the three years ended with 1885, the arrivals in New South Wales were more numerous than those in Victoria, but in all the other years the arrivals in Victoria exceeded those in any other colony. In 1888, the net immigration to Victoria was much larger than that to New South Wales, but the reverse was the case in all the other years named.

Immigration
and
emigration
in different
years.

* See footnote (*) on page 114.

† See footnote (†) on page 114.

‡ The numbers assisted and unassisted were not distinguished.

§ See paragraph 185, *ante*.

Order of colonies in respect to gain by unassisted immigration.

205. In 1888 immigration received little or no State assistance in Victoria, South Australia, Western Australia or Tasmania ; but it was still largely subsidized in Queensland, and to a less extent in New South Wales and New Zealand. The following are the differences between the number of persons who arrived in the various colonies entirely at their own expense and those who left them in that year ; the colonies being placed in order :—

ORDER OF THE COLONIES IN REFERENCE TO EXCESS OF UNASSISTED IMMIGRANTS OVER EMIGRANTS, OR THE CONTRARY,* 1888.

	Excess.†		Excess.†
1. Victoria	41,803	5. South Australia ...	— 113
2. New South Wales ...	21,017	6. Western Australia ...	— 1,246
3. Queensland	3,456	7. New Zealand ...	— 9,660
4. Tasmania	898		

Imperial emigration returns.

206. According to returns received from the Imperial Board of Trade,‡ the emigrants from the United Kingdom in 1889 numbered 342,641, and of these 28,834, or about 8½ per cent., went to the Australasian colonies. The whole number shows a decrease of nearly 56,000, and the number to Australasia a decrease of nearly 2,900, as compared with the previous year. The following table shows the number of emigrants from the United Kingdom to Australasia during the last seventeen years ; also, taken from colonial returns, the number of assisted emigrants and those unassisted, as represented by the balance, during the same period :—

EMIGRANTS FROM THE UNITED KINGDOM TO AUSTRALASIA, 1873 TO 1889.

Year.				From the United Kingdom to the Australasian Colonies.		
				Total Emigrants.	Assisted Emigrants.	Unassisted Emigrants (Balance).
1873 to 1880				285,003	195,143	89,860
1881				24,093	7,609	16,484
1882				38,604	15,519	23,085
1883				73,017	44,539	28,478
1884				45,944	28,443	17,501
1885				40,689	17,498	23,191
1886				44,055	16,798	27,257
1887				35,198	13,760	21,438
1888				31,725	9,444	22,281
1889				28,834	6,976	21,858
Total in 17 years ...				647,162	355,729	291,433

* Indicated by the minus sign (—).

† See footnote (†) on page 114.

‡ See Statistical Tables relating to Emigration and Immigration, 1889, and Mr. Robert Giffen's report thereon, ordered by the House of Commons to be printed, 21st March, 1890.

207. In the eight years, 1873 to 1880, 17 per cent. of the whole emigration from the United Kingdom was to Australasia. The proportion fell to little over 6 per cent. in 1881, but again suddenly rose to over 18 per cent. in 1883. Since then it has been gradually falling off, the proportion in 1888 and 1889 being only about 8 per cent. The following figures express the emigration to the countries named during the seventeen years referred to:—

Destination
of emi-
grants from
the United
Kingdom.

DESTINATION OF EMIGRANTS FROM THE UNITED KINGDOM,
1873 TO 1889.

Period.	Total Number of Emigrants.	Destination of Emigrants.			
		Australasia.	British North America.	United States.	Other Countries.
NUMBERS.					
1873 to 1880 ...	1,680,748	285,003	167,337	1,099,261	129,147
1881 ...	392,514	24,093	34,561	307,973	25,887
1882 ...	413,288	38,604	53,475	295,539	25,670
1883 ...	397,157	73,017	53,566	252,226	18,348
1884 ...	303,901	45,944	37,043	203,519	17,395
1885 ...	264,385	40,689	22,928	184,470	16,298
1886 ...	330,801	44,055	30,121	238,386	18,239
1887 ...	396,494	35,198	44,406	296,901	19,989
1888 ...	398,494	31,725	49,107	293,087	24,575
1889 ...	342,641	28,834	38,056	240,395	35,356
Total in 17 Years ..	4,920,423	647,162	530,600	3,411,757	330,904
PROPORTIONS PER CENT.					
1873 to 1880 ...	100·00	16·96	9·96	65·40	7·68
1881 ...	100·00	6·14	8·80	78·46	6·60
1882 ...	100·00	9·34	12·94	71·51	6·21
1883 ..	100·00	18·38	13·49	63·51	4·62
1884 ...	100·00	15·12	12·19	66·97	5·72
1885 ...	100·00	15·39	8·67	69·77	6·17
1886 ...	100·00	13·32	9·11	72·06	5·51
1887 ...	100·00	8·88	11·20	74·88	5·04
1888 ...	100·00	7·96	12·32	73·55	6·17
1889 ...	100·00	8·41	11·11	70·16	10·32
Total in 17 Years ...	100·00	13·15	10·78	69·34	6·73

208. The emigration from Great Britain to the United States, which had considerably fallen off between 1881 and 1885, but had been gradually reviving since the latter year, again fell off in 1889, when it was lower than in any of the previous years shown except 1884, 1885, and 1886. It is noteworthy that the number of emigrants to that country during the last seventeen years is greater by nearly 400,000 than the whole population of Continental Australia (3,015,000) at the end of 1889.

Emigration
to the
United
States.

Emigration
to British
North
America.

209. The emigration from the United Kingdom to British North America has also undergone similar fluctuations to that to the United States. The emigration to the former became greatly diminished in the three years ended with 1886; in 1887 and 1888 they were more numerous than in any year since 1883; but in 1889 they again fell off, and were fewer than in any previous year except 1881, 1884, 1885, and 1886.

Conjugal
condition
and occu-
pations of
emigrants
from
Britain to
Australasia.

210. Included in the 28,834 persons who emigrated from the United Kingdom to Australasia in 1889 were 24,404 so-called adults (*i.e.*, persons over twelve years), viz., 14,602 males and 9,802 females. Of the former, 3,162, or 22 per cent., and of the latter, 4,119, or 42 per cent., were married. Of the adult males, the following are the occupations:—Farmers and graziers, 948; agricultural labourers, gardeners, carters, etc., 2,536; miners, quarrymen, 303; builders, 33; bricklayers, plasterers, etc., 122; brick and tile makers, etc., 13; iron and brass founders, moulders, etc., 10; blacksmiths, braziers, tinsmiths, etc., 47; engineers, 130; engine-drivers, stokers, 19; cabinetmakers, 16; carpenters and joiners, 225; turners (wood), 8; coachmakers, wheelwrights, millwrights, etc., 18; printers, 76; coopers, 5; tanners and curriers, 7; spinners and weavers, 54; shipwrights, 2; clock and watch makers, 31; saddlers, 10; painters, plumbers, etc., 126; railway servants, 29; bootmakers, 54; tailors, 55; other artisans and mechanics, 175; shopkeepers, etc., 322; butchers, etc., 73; bakers, etc., 173; millers and maltsters, 15; seamen, 38; domestic servants, 79; general labourers, 1,724; sawyers, 5; clerks and agents, 599; army and navy officers and men, 50; gentlemen, professional men, etc., 1,747; other trades and professions, etc., 269; not stated, 4,456. Of the 9,802 adult females, 2,304 were domestic and farm servants, nurses, etc.; 44 gentlewomen and governesses; 82 milliners, etc.; 10 shopwomen; 2 spinners or weavers; 53 of other occupations; and 7,307 unspecified.

Net emigra-
tion from
Britain to
Australasia.

211. The arrivals in the United Kingdom from the Australasian colonies numbered 10,632 in 1888, and 10,637 in 1889. The balance of emigration in favour of these colonies was 21,093 in the former and 18,197 in the latter year.

Cities,
towns, and
boroughs,
1889.

212. The following is a list of the cities, towns, and boroughs, together with a statement of the estimated area, the population, and number of dwellings, the total and annual value of rateable property, and the total revenue of each city, town, or borough during the year 1889* :—

* For an account of the system of Municipal Government in Victoria, see paragraph 57 *et seq. ante*.

CITIES, TOWNS, AND BOROUGHES, 1889.*

Name.	Estimated Area in Acres.	Estimated Population †	Estimated Number of Dwellings.	Estimated Value of Rateable Property.		Total Revenue.
				Total.	Annual.	
				£	£	£
Ararat ...	3,840	3,500	530	160,000	16,000	2,312
Ballarat, City ...	4,090	21,321	5,222	2,340,636	162,544	29,335
Ballarat East, Town	4,331	16,000	3,500	688,900	68,890	11,773
Brighton, Town ...	3,288	8,319	1,839	2,797,740	139,887	13,732
Browns & Scarsdale...	5,760	857	205	11,210	2,242	404
Brunswick, Town ...	2,722	18,472	3,908	1,843,790	184,379	26,590
Buninyong ...	3,424	1,440	305	64,055	6,405	917
Carisbrook ...	5,395	1,550	288	58,000	5,580	1,122
Castlemaine ...	5,760	6,500	1,500	210,350	30,050	4,553
Chewton ...	5,760	1,522	450	34,250	6,850	1,291
Clunes ...	5,760	3,574	862	131,550	13,155	2,561
Collingwood, City ...	1,139	34,395	8,100	3,288,000	273,961	29,230
Creswick ...	4,760	3,170	773	90,512	11,314	2,189
Daylesford ...	4,062	3,897	866	166,080	16,608	4,238
Dunolly ...	5,760	1,380	410	68,000	8,573	1,654
Eaglehawk ...	3,640	7,562	1,750	316,010	31,601	4,682
Echuca ...	4,308	4,850	1,076	391,530	32,627	4,140
Essendon, Town ...	4,000	9,226	2,014	2,165,984	180,732	19,220
Fitzroy, City ...	923	31,783	5,453	3,897,984	324,832	51,458
Flemington & Kensington }	1,088	9,069	1,750	1,760,115	83,815	12,586
Footscray, Town ...	3,075	15,506	3,530	3,112,960	155,648	21,135
Geelong, Town ...	3,012	10,281	2,520	879,060	87,906	12,988
Geelong West ...	859	4,840	1,400	283,344	23,612	2,872
Hamilton ...	5,100	2,999	668	189,670	18,960	3,292
Hawthorn, Town ...	2,389	16,436	3,449	2,028,740	202,874	39,301
Heathcote ...	3,594	1,052	262	28,350	5,655	1,043
Horsham ...	5,760	3,000	630	205,384	25,673	2,967
Inglewood ...	2,560	1,355	404	44,704	8,128	1,380
Kew ...	3,553	6,700	1,179	1,821,180	121,412	11,686
Koroit ...	5,599	1,720	281	183,432	15,286	1,922
Majorca ...	5,005	2,000	314	36,160	4,520	900
Malmsbury ...	4,214	1,500	260	60,000	7,031	1,054
Maryborough ...	5,760	4,800	1,010	255,570	25,570	4,152
Melbourne, City ...	5,020	76,536	15,535	17,161,660	1,716,166	215,867
Newtown & Chilwell	1,422	4,714	1,000	420,180	28,012	4,098
Northcote ...	2,850	6,300	1,141	1,768,040	88,402	12,483
North Melbourne, Town }	565	21,600	4,320	1,167,757	167,757	22,041
Port Fairy ...	5,902	1,857	330	158,295	13,191	3,525
Portland ...	2,860	1,950	560	123,670	12,367	4,296
Port Melbourne ...	2,366	12,629	2,815	1,215,477	101,289	12,474
Prahran, City ...	2,320	36,066	8,237	7,488,544	534,896	50,685
Queenscliff ...	2,173	2,000	335	145,740	12,145	2,082
Raywood ...	5,760	519	110	21,825	2,172	359
Richmond, City ...	1,430	36,996	8,652	4,503,300	300,220	35,958
Rutherglen ...	1,280	560	130	39,630	3,963	716
Sale ...	5,442	5,000	775	353,000	28,227	6,661

* The financial year of Melbourne and Geelong ends on the 31st August, that of all other municipalities on the 30th September.

† The population of cities, towns, and boroughs are given for various dates, the average period being about the end of August.

CITIES, TOWNS, AND BOROUGHs, 1889—continued.

Name.	Estimated Area in Acres.	Estimated Population	Estimated Number of Dwellings.	Estimated Value of Rateable Property.		Total Revenue.
				Total.	Annual.	
				£	£	£
Sandhurst, City ...	7,900	26,627	6,330	1,649,870	164,987	23,900
Sebastopol ...	1,880	2,300	520	71,050	7,105	1,034
Smythesdale ...	1,440	399	125	20,755	2,075	274
South Melbourne, } City ... }	2,311	42,469	8,725	13,404,300	674,215	69,128
St. Arnaud ...	6,355	2,974	656	167,850	16,785	3,016
St. Kilda ...	2,046	18,435	3,967	3,586,044	298,837	31,141
Stawell ...	5,996	4,785	1,219	120,000	18,000	3,095
Talbot ...	5,578	1,700	443	34,765	6,953	1,209
Tarnagulla ...	5,133	772	270	40,000	5,283	857
Wangaratta ...	3,932	2,000	350	129,310	12,931	2,254
Warrnambool ...	3,450	5,839	1,180	786,320	39,316	11,584
Williamstown, Town	2,775	13,619	3,000	1,010,000	100,300	13,864
Wood's Point ...	2,560	263	90	10,926	1,821	140
Total ...	221,036 or 345 sq. mls.	589,485	127,523	85,211,558	6,659,735	861,420

NOTE.—Besides the cities, towns, and boroughs, there are several large towns in Victoria which form portions of shires. These, with their populations at the latest dates, were as follow :—Kyneton, 3,800 ; Bairnsdale, 3,000 ; Maldon, 2,650 ; Benalla, 2,455 ; Beechworth, 2,300 ; Shepparton, Walhalla, Colac, about 2,000 each ; Camperdown, 1,434 ; Avoca, 1,000.

Shires, 1889. 213. The next table gives a list of the shires, together with a statement of the estimated area, the population, and number of dwellings, and the total and annual value of rateable property, and total revenue of each shire, during the year 1889 :—

SHIRES, 1889.*

Name.	Esti- mated Area.	Estimated Popula- tion.†	Estimated Number of Dwellings.	Estimated Value of Rateable Property.		Total Revenue.
				Total.	Annual.	
	Sq. miles.			£	£	£
Alberton ...	1,737	7,750	1,530	629,040	52,420	✓10,460
Alexandra...	745	2,648	740	250,000	30,069	6,405
Arapiles ‡...	780	3,000	605	716,380	35,819	3,182
Ararat ...	1,461	5,500	1,200	1,635,540	81,777	8,612
Avoca ...	437	4,018	1,000	248,422	24,842	3,099
Avon ...	620	2,500	480	506,190§	33,937	3,931
Bacchus Marsh ...	227	2,500	580	328,900	25,300	3,568
Bairnsdale ...	1,150	5,479	2,090	1,033,001	67,055	15,180
Ballan ...	347	5,688	1,300	373,780	37,378	5,237
Ballarat ...	182	7,560	800	845,210	42,260	5,437

* The financial year of the shires ends on the 30th September.
† The populations of shires are given for various dates, the average period being about the beginning of August.
‡ The Shire of Arapiles was created on the 22nd May, 1888, being severed from the Shire of Wimmera.
§ Estimated from the annual value.

SHIRES, 1889—continued.

Name.	Esti- mated Area.	Estimated Population	Estimated Number of Dwellings.	Estimated Value of Rateable Property.		Total Revenue.
				Total.	Annual.	
	Sq. miles.			£	£	£
Bannockburn ...	139	2,050	331	265,000	18,286	2,288
Barrabool ...	191	2,050	408	313,430	24,110	2,749
Beechworth ...	308	7,985	1,800	368,850	36,885	5,808
Belfast ...	200	3,070	522	1,011,700	40,468	4,653
Bellarine ...	124	4,278	956	513,168	42,764	4,274
Benalla ...	1,150	9,195	2,400	875,180	87,518	8,702
Berwick* ...	387	4,730	1,100	1,305,900	65,297	9,368
Bet Bet ...	345	5,000	1,100	200,000	22,740	2,463
Boroondara ...	12	4,416	1,049	3,013,540	150,677	17,457
Braybrook ...	89	1,441	299	701,420	35,071	4,031
Bright ...	1,320	3,654	1,000	230,300	23,030	3,714
Broadford ...	223	1,196	300	202,960	10,148	1,040
Broadmeadows ...	69	1,300	312	502,570	50,257	3,371
Bulla ...	105	2,030	235	760,000	37,832	2,393
Bulleen ...	33	1,680	300	879,040	43,952	3,382
Buln Buln ...	630	7,380	1,200	1,205,240	60,262	10,028
Bungaree ...	89	5,000	1,060	503,226	27,957	5,795
Buninyong ...	290	9,591	1,610	499,430	49,943	5,938
Caulfield ...	9	6,406	1,600	3,835,674	213,093	21,139
Chiltern ...	89	2,300	584	48,585	9,717	1,321
Coburg ...	7	4,268	1,050	931,940	93,194	10,567
Colac ...	1,091	6,337	1,300	1,617,015	107,801	12,007
Corio ...	230	2,083	500	300,000	29,150	3,175
Cranbourne ...	228	1,359	270	704,460	35,223	4,234
Creswick ...	202	8,199	1,690	1,262,340	63,117	7,309
Dandenong ...	58	2,008	470	525,792	43,816	4,905
Darebin ...	79	1,072	170	248,279	16,553	2,025
Dimboola ...	4,700	4,232	1,100	719,787†	41,221	4,122
Dundas ...	1,364	3,309	500	1,796,650	89,832	9,198
Dunmunkle ...	545	5,035	940	862,400	54,953	6,028
East Loddon ...	455	2,100	400	317,033	31,703	4,257
Echuca ...	1,304	7,585	1,900	1,887,740	94,387	10,776
Eltham ...	208	2,049	560	630,000	31,553	3,163
Euroa ...	887	6,379	1,250	756,408	63,034	7,133
Fern Tree Gully* ...	113	1,373	259	682,560	34,128	...
Flinders & Kangerong	176	1,700	440	487,600	24,380	3,151
Gisborne ...	100	1,677	376	234,290	23,429	2,865
Glenelg ...	1,311	4,060	842	921,000	92,100	10,671
Glenlyon ...	127	2,611	500	170,250	17,025	2,331
Gordon ...	845	3,907	700	1,132,520	56,626	5,211
Goulburn ...	290	2,393	511	216,800	27,100	3,166
Grenville ...	320	4,560	1,192	272,750	33,010	4,165
Hampden ..	1,738	6,825	1,380	2,650,460	132,523	14,917
Healesville ...	230	1,225	200	250,000	12,851	3,772
Heidelberg ...	41	4,000	400	1,224,000	61,200	7,050
Howqua ...	842	2,390	500	27,755	5,551	1,366
Huntly ...	327	4,000	720	360,018	30,019	3,896
Kara Kara ...	915	4,389	1,400	436,827	43,682	4,865
Keilor ...	53	670	133	48,390	9,677	1,185

* The Shire of Berwick was reduced on the 21st May, 1889, by the creation of the Shire of Fern Tree Gully.

† Estimated from the annual value.

SHIRES, 1889—continued.

Name.	Esti- mated Area.	Estimated Population	Estimated Number of Dwellings.	Estimated Value of Rateable Property.		Total Revenue.
				Total.	Annual.	
	Sq. miles.			£	£	£
Kilmore ...	86	2,186	650	209,785	20,978	2,346
Korong ...	1,113	9,626	2,600	1,207,583	72,455	7,755
Kowree ...	1,448	4,310	1,163	1,106,480	55,324	6,936
Kyneton ...	253	10,000	1,870	129,551	64,775	10,792
Leigh ...	379	1,560	500	378,540	37,845	4,777
Lexton ...	297	2,700	550	423,950	26,435	3,145
Lilydale ...	166	3,542	790	734,000	48,935	6,598
Lowan ...	4,670	7,840	2,100	1,598,505	93,465	9,638
Maffra ...	985	3,500	600	893,080	44,654	5,435
Maldon ...	215	5,000	1,380	360,000	28,420	4,292
Malvern ...	6	6,405	1,500	4,060,000	203,000	20,841
Mansfield ...	836	4,500	700	610,000	34,577	3,839
Marong ...	560	7,473	1,784	622,810	62,281	9,364
Melton ...	104	1,000	200	360,000	18,067	2,478
Meredith ...	171	1,299	255	137,405	13,740	1,867
Merriang ...	123	1,095	183	323,940	16,469	1,579
Metcalfe ...	204	3,824	780	129,865	25,973	2,571
Minhamite ...	542	1,918	475	1,354,881	46,235	4,830
Moorabbin ...	31	5,615	1,113	1,788,060	149,005	11,993
Mornington ...	115	3,500	720	1,570,000	78,500	6,372
Mortlake ...	915	2,513	450	840,265	84,026	6,909
Mt. Alexander ...	52	2,750	726	70,050	11,675	2,327
Mt. Franklin ...	118	3,293	720	146,700	14,663	2,123
Mt. Rouse ...	537	2,150	500	1,213,900	60,695	6,821
McIvor ...	570	2,459	795	538,100	26,905	2,978
Narracan *	712	3,500	900	671,300	33,565	11,947
Newham ...	90	3,366	600	264,375	17,625	2,503
Newstead ...	105	1,798	607	240,828	16,055	2,240
North Ovens ...	229	1,948	390	417,080	20,854	2,202
Numurkah ...	648	6,800	1,400	1,292,920	64,646	6,483
Nunawading ...	23	3,465	718	1,516,840	75,842	7,188
Oakleigh ...	29	2,384	473	1,667,800	83,398	5,390
Omeo ...	2,210	2,850	450	550,000	28,175	7,277
Oxley ...	1,025	4,739	839	664,700	33,235	3,876
Phillip Island ...	290	1,420	330	450,000	22,500	2,489
Portland ...	1,560	6,050	900	1,191,500	59,575	6,349
Preston ...	11	3,300	452	1,824,800	91,242	5,125
Pyalong ...	216	900	290	281,620	14,081	1,556
Ripon ...	587	3,842	1,270	771,437	61,715	8,144
Rodney ...	433	3,940	863	678,870	45,258	5,575
Romsey† ...	126	2,569	700	285,313	40,759	4,395
Rosedale ...	810	2,988	529	492,370	49,237	7,086
Rutherglen ...	212	2,317	590	572,810	28,640	2,847
Seymour ...	370	3,163	270	293,920	36,990	3,859
Shepparton ...	220	4,525	753	410,000	41,000	4,892
South Barwon ...	53	2,046	580	146,600	14,660	2,187
Springfield ...	113	816	160	304,760	15,238	1,557
St. Arnaud ...	2,580	11,402	2,485	1,779,471	98,859	11,259
Stawell ...	995	4,286	1,000	808,352	50,522	5,578
Strathfieldsaye ...	229	4,576	910	205,115	20,511	2,333

* The Shire of Woorayl was created on the 22nd May, 1888, out of portion of the Shire of Narracan.

† See footnote (§) on page 123, *post*.

SHIRES, 1889—continued.

Name.	Esti- mated Area.	Estimated Popula- tion.	Estimated Number of Dwellings.	Estimated Value of Rateable Property.		Total Revenue.
				Total.	Annual.	
	Sq. miles.			£	£	£
Swan Hill...	10,233	9,812	1,800	1,631,020	81,551	9,706
Talbot ...	183	2,366	500	172,760	17,276	2,108
Tambo ...	4,965	2,866	650	530,300	26,515	4,424
Towong ...	2,545	5,197	1,526	960,200	48,010	9,698
Traralgon ...	480	4,178	820	368,830	36,883	7,895
Tullaroop ...	219	4,600	925	264,170	26,417	3,537
Upper Yarra*	436	500	250	236,900	11,845	1,738
Walhalla ...	404	2,465	817	55,412	13,853	5,509
Wannon ...	753	2,607	550	1,464,880	73,244	8,912
Waranga ...	693	5,636	1,047	1,201,960	60,098	6,401
Warragul ...	155	3,507	390	958,640	47,932	9,582
Warrnambool ...	610	9,300	1,862	2,509,880	125,494	14,481
Whittlesea ...	138	1,512	282	271,890	18,126	2,486
Wimmera †	980	4,385	900	1,206,380	60,319	7,771
Winchelsea ...	608	2,902	650	650,000	44,792	6,127
Wodonga ...	97	1,559	319	132,300	13,230	2,387
Wyndham...	275	1,535	290	1,705,640	85,282	3,746
Woorayl ‡...	172	1,500	450	417,800	20,892	5,906
Yackandandah ...	836	5,500	1,100	735,400	36,770	7,936
Yarrawonga ...	830	9,800	2,000	2,112,320	105,616	9,925
Yea ...	602	3,000	650	693,300	34,665	8,316
Total§	86,860	506,965	109,485	102,346,953	6,271,791	754,069

214. The total area included in the two descriptions of municipalities is as follows :—

Area of mu-
nicipalities.

AREA EMBRACED IN MUNICIPALITIES, 1889.

				Sq. Miles.
Cities, towns, and boroughs	...	...	...	345
Shires ...	...	...	...	86,860
Total	...	...	...	87,205

215. The estimated area of Victoria is 87,884 square miles. It thus appears that all but about a one hundred and thirtieth part of this area is included within the limits of municipal districts.

Proportion
to total
area of
Victoria.

216. The population of the two kinds of districts, as estimated by the municipal authorities, was as follows in 1889 :—

Population
of muni-
cipalities.

* Shire only created on the 16th October, 1888; the country included had not previously been included in any municipality.
† See footnote (§), page 120, ante.
‡ See footnote (*), page 122, ante.
§ In addition to the shires named in the table, the Shire of Lancefield has been created quite recently, viz., on the 7th January, 1890; it was severed from the Shire of Romsey.

POPULATION OF MUNICIPALITIES, 1889.

Cities, towns, and boroughs	...	...	...	589,485
Shires	...	...	...	506,965
Total	...	...	...	1,096,450

Population of Victoria by municipal estimate.

217. Including the persons living in ships, the population living outside municipalities, including the shipping, is believed to amount to 2,675, and it is estimated that the increase between the date of the municipal returns of population and the end of the year was 10,225. Adding these numbers to the municipal estimate, there results a total of 1,109,350, or 8,678 less than the estimated population of the colony already adopted, viz., 1,118,028.

Ratepayers in municipalities.

218. The ratepayers in the two kinds of municipal districts numbered as follow, in 1889. Each ratepayer is not necessarily a distinct individual, as ratepayers having property in more than one municipality, or more than one ward or riding of the same municipality, are entered on the municipal roll for each such property :—

RATEPAYERS IN MUNICIPALITIES, 1889.*

Cities, towns, and boroughs	...	...	...	129,314
Shires	...	...	...	129,666
Total	...	...	...	258,980

Dwellings in municipalities.

219. The following is a statement of the number of dwellings in the two kinds of municipal districts in 1889 :—

DWELLINGS IN MUNICIPALITIES, 1889.

Cities, towns, and boroughs	...	...	...	127,523
Shires	...	...	...	109,485
Total	...	...	...	237,008

Persons to a dwelling in municipalities.

220. According to the figures for 1889, the average number of inhabitants to a dwelling is something less than $4\frac{2}{3}$ in both descriptions of municipalities; the exact proportions being 4.62 in cities, towns, and boroughs, and 4.63 in shires.

Persons to a dwelling in Victorian and other towns.

221. The average number of persons to a dwelling is generally much smaller in Victorian towns than it is in those of other countries. This is made plain by the figures placed opposite the various towns in the following lists :—

* Including both male and female ratepayers; also ratepayers whose rates are in arrear as well as the others.

PERSONS TO A DWELLING IN TOWNS OF VICTORIA AND OTHER COUNTRIES.*

Turin	...	65·0	Brussels	...	9·0	†St. Kilda	...	4·6
Berlin	...	62·0	Marseille	...	9·0	†Ballarat East	...	4·6
Vienna	...	60·0	London	...	8·0	†Port Melbourne	...	4·5
Milan	...	49·0	Boston	...	8·0	†Williamstown	...	4·5
St. Petersburg	...	43·0	Antwerp	...	7·0	†Brighton	..	4·5
Madrid	...	40·0	†Fitzroy	...	5·8	†Pahran	..	4·4
Bombay	...	31·0	†Kew...	...	5·7	†Footscray	...	4·4
Paris	...	29·0	†Northcote	...	5·5	†Richmond	...	4·3
Rome	..	27·0	†Flemington	...	5·2	†Sandhurst	...	4·2
Genoa	...	25·0	†North Melbourne	...	5·0	†Collingwood	...	4·2
Hamburg	...	17·0	Philadelphia	...	5·0	†Ballarat	...	4·1
New York	...	13·0	†South Melbourne	...	4·9	†Geelong	...	4·1
Buenos Aires	...	13·0	†Melbourne	...	4·9	Naples	...	4·0
Calcutta	...	11·0	†Hawthorn	...	4·8	Baltimore	...	4·0
Amsterdam	...	11·0	†Brunswick	...	4·7	Chicago	...	3·0
Pekin	...	10·0	†Essendon	...	4·6			

222. The area contained in shires is about 250 times that in cities, towns, and boroughs ; but the population and dwellings in the latter exceed those in the former by about a sixth.

Area, population, etc., in shires and boroughs compared.

223. The following is the number of cities, towns, and boroughs, and the number of shires, in which rates were struck in each of the last seven years at the amounts set down in the first column :—

Amount of rating in municipalities.

RATINGS‡ IN MUNICIPALITIES, 1883 TO 1889.

Amount levied in the £.			Number of Cities, Towns, and Boroughs.							Number of Shires.						
			1883.	1884.	1885.	1886.	1887.	1888.	1889.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
s.	d.															
0	6	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...
0	8	...	...	...	...	...	...	...	...	...	...	...	...	...	1	1
0	9	...	...	...	...	...	...	...	...	2	2	2	2	3	4	4
0	10	...	2	2	1	1	1	1	...	...	...	...	...	...	...	...
1	0	...	26	26	25	25	22	21	19	111	113	109	112	114	112	113
1	1	...	...	...	...	...	...	...	...	...	...	...	1	1	2	1
1	2	...	1	1	1	1	1	1	1	...	...	1	1	1	...	...
1	3	...	10	9	4	7	6	6	6	2	1	3	4	2	2	5
1	4	...	2	2	2	2	3	3	1	...	...	...	...	...	...	1
1	6	...	11	11	18	14	17	16	18	1	1	4	3	2	2	4
1	6½	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...
1	8	...	1	1	1	1	1	1	2	...	...	...	...	...	...	...
1	9	...	4	6	4	3	3	4	3	1	1	...	1	1	...	...
1	10	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...
2	0	...	3	2	3	3	5	4	8	1	...	2	1	1	3	1
2	3	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...
2	5	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...
Not stated...			...	...	...	1	...	1	...	...	2	2	...	1	2	...
Total ...			60	60	60	59	59	59	59	119	120	123	125	126	128	130

* The figures, except those relating to Victorian towns, have been derived for the most part from an official report upon the census of Buenos Aires, dated 1889. They must be received with some caution.

† Victorian towns. Figures are for 1889.

‡ Including general and special rates.

224. It will be observed that no municipality during the last six years was rated at the lowest amount allowed by law, viz., 6d. in the pound; also, that no municipality in any of the years levied rates up to the full amount allowed by law, viz., 2s. 6d. in the pound, the highest being 2s. 5d. in 1885.

225. Of the cities, towns, and boroughs, 43 per cent. in 1883 and 1884, 42 per cent. in 1885 and 1886, 37 per cent. in 1887, 36 per cent. in 1888, and 32 per cent in 1889, were rated at 1s. in the pound; of the shires, 93 per cent. in 1883, 94 per cent. in 1884, 89 per cent. in 1885, 90 per cent. in 1886 and 1887, 88 per cent. in 1888, and 87 per cent. in 1889, were rated at the same amount.

226. In 1883, 5; in 1884, 4; in 1885 and 1886, 3; in 1887, 4; in 1888, 6; and in 1889, 5 municipal districts were rated at less than 1s. in the pound. In 1883, 37; in 1884, 35; in 1885, 44; in 1886, 43; in 1887, 44; in 1888, 45; and in 1889, 52 municipal districts were rated at over that amount.

227. The number of properties in cities, towns, and boroughs, and in shires, during the sixteen years ended with 1889, arranged in groups according to their rateable values, will be found in the following table. In 1889, as compared with 1888, the increase of the whole number of properties was 30,254, of which 10,293 were in cities, towns, and boroughs, and 19,961 in shires. All the groups relating to both kinds of municipalities showed increase:—

CLASSIFICATION OF PROPERTIES RATED, 1874 TO 1889.

Year.	Number of Properties Rated.							
	Under £50.	£50 to £100.	£100 to £200.	£200 to £300.	£300 to £400.	£400 to £500.	£500 and upwards.	Total.
CITIES, TOWNS, AND BOROUGHES.								
1874	91,320	7,981	2,964	764	289	153	235	103,706
1875	94,769	8,253	3,040	782	301	160	242	107,547
1876	94,893	8,466	3,035	786	300	162	265	107,907
1877	95,911	8,628	3,170	812	332	155	278	109,286
1878	98,942	8,895	3,211	829	363	151	294	112,685
1879	99,846	8,877	3,166	826	331	145	287	113,478
1880	99,949	9,021	3,181	856	345	146	276	113,774
1881	103,188	9,055	3,240	852	348	153	274	117,110
1882	105,312	9,327	3,358	891	376	163	310	119,737
1883	109,811	10,326	3,782	958	427	175	338	125,817
1884	114,615	11,003	3,947	1,018	445	194	362	131,584
1885	119,385	11,693	4,116	1,083	495	227	439	137,438
1886	123,147	14,095	4,560	1,224	545	270	519	144,360
1887	132,887	15,244	5,053	1,254	530	288	578	155,834
1888	141,416	15,714	5,519	1,355	708	376	897	165,985
1889	149,068	17,434	6,077	1,582	723	401	993	176,278

CLASSIFICATION OF PROPERTIES RATED, 1874 TO 1889—*continued*.

Year.	Number of Properties Rated.							
	Under £50.	£50 to £100.	£100 to £200.	£200 to £300.	£300 to £400.	£400 to £500.	£500 and upwards.	Total.
1874	75,852	7,537	2,398	552	268	117	612	87,336
1875	79,425	8,326	2,671	568	279	128	696	92,093
1876	82,817	8,407	2,654	563	256	157	705	95,559
1877	83,583	9,067	2,778	641	283	149	726	97,227
1878	84,338	10,442	2,901	666	300	140	702	99,489
1879	88,598	10,436	3,051	683	296	159	672	103,895
1880	90,874	10,232	3,151	762	342	157	706	106,224
1881	93,266	9,858	3,013	687	294	154	679	107,951
1882	95,615	9,964	3,108	721	320	157	673	110,558
1883	96,048	10,514	3,283	723	336	148	703	111,755
1884	98,089	10,701	3,463	736	321	154	711	114,175
1885	102,041	11,462	3,790	811	377	176	727	119,384
1886	110,440	12,164	4,346	883	423	181	755	129,192
1887	113,583	12,912	4,632	1,050	413	201	765	133,556
1888	121,794	14,717	5,342	1,289	622	282	1,008	145,054
1889	138,466	16,764	6,123	1,547	648	326	1,141	165,015

SHIRES.

TOTAL MUNICIPAL DISTRICTS.

1874	167,172	15,518	5,362	1,316	557	270	847	191,042
1875	174,194	16,579	5,711	1,350	580	288	933	199,640
1876	177,710	16,873	5,689	1,349	556	319	970	203,466
1877	179,494	17,695	5,918	1,453	615	304	1,004	206,513
1878	183,280	19,337	6,112	1,495	663	291	996	212,174
1879	188,444	19,313	6,217	1,509	627	304	959	217,373
1880	190,823	19,253	6,332	1,618	687	303	982	219,998
1881	196,454	18,913	6,253	1,539	642	307	953	225,061
1882	200,927	19,291	6,466	1,612	696	320	983	230,295
1883	205,859	20,840	7,065	1,681	763	323	1,041	237,572
1884	212,704	21,704	7,410	1,754	766	348	1,073	245,759
1885	221,426	23,155	7,906	1,894	872	403	1,166	256,822
1886	233,587	26,259	8,906	2,107	968	451	1,274	273,552
1887	246,470	28,156	9,685	2,304	943	489	1,343	289,390
1888	263,210	30,431	10,861	2,644	1,330	658	1,905	311,039
1889	287,534	34,198	12,200	3,129	1,371	727	2,134	341,293

228. In the fifteen years ended with 1889 the total increase in the number of properties was 150,251, of which 72,572 were in cities, towns, and boroughs, and 77,679 in shires. Increase in fifteen years.

229. The following table gives the estimated total value (or value in fee simple) of rateable property in cities, towns, and boroughs, and in shires, during the sixteen years ended with 1889, arranged in groups according to the value of the properties of which the amounts are made up. In 1889, as compared with 1888, an increase occurred in the value of properties rated under all the heads in both kinds of districts. The valuation on the whole showed an increase of £20,173,301, made up of an increase of £8,260,318 in urban, and of £11,912,983 in country properties :— Total value of rateable property.

CLASSIFICATION OF TOTAL VALUE OF RATEABLE PROPERTY, 1874 TO 1889.

Year.	Total Value of Properties rated annually at—				Total.
	Under £50.	£50 to £100.	£100 to £200.	£200 and upwards.	
	£	£	£	£	
CITIES, TOWNS AND BOROUGHES.					
1874	12,620,396	5,201,090	3,717,516	5,785,603	27,324,605
1875	13,425,920	5,236,868	3,710,671	5,750,344	28,123,803
1876	14,107,710	5,615,811	3,774,874	6,140,120	29,638,515
1877	13,878,561	5,442,678	3,901,064	6,109,727	29,332,030
1878	15,120,374	5,778,025	4,148,800	6,840,617	31,887,816
1879	14,833,220	5,960,162	4,045,167	6,514,331	31,352,880
1880	14,911,152	5,896,372	4,071,366	6,320,593	31,199,483
1881	15,718,312	6,063,311	4,144,817	6,382,354	32,308,794
1882	16,809,572	6,338,181	4,459,555	6,952,045	34,559,353
1883	18,004,909	6,982,466	4,896,619	7,471,377	37,355,371
1884	19,855,306	7,715,575	5,064,994	8,625,789	41,261,664
1885	22,478,820	8,663,192	5,831,623	10,370,965	47,344,600
1886	24,669,900	10,369,594	6,756,713	12,109,385	53,905,592
1887	27,794,412	11,415,365	7,796,400	13,941,350	60,947,527
1888	33,157,265	13,041,125	9,989,043	20,763,807	76,951,240
1889	36,840,166	14,534,828	10,907,233	22,929,331	85,211,558
SHIRES.					
1874	13,105,624	5,070,283	3,319,425	13,401,702	34,897,034
1875	14,807,648	6,106,437	3,749,993	15,138,977	39,803,055
1876	18,218,513	6,790,706	4,328,945	16,805,458	46,143,622
1877	19,185,139	7,430,460	4,578,389	17,088,731	48,282,719
1878	19,922,055	9,111,830	5,197,287	18,314,493	52,545,665
1879	20,914,381	8,653,809	5,304,667	17,018,379	51,891,236
1880	21,429,941	8,647,484	5,239,721	17,330,790	52,647,936
1881	23,122,683	8,912,526	5,518,599	17,779,857	55,333,665
1882	24,380,465	9,119,805	5,720,403	18,012,521	57,233,194
1883	24,017,782	9,780,685	5,998,661	18,458,460	58,255,588
1884	26,106,636	10,335,547	6,573,698	19,518,287	62,534,168
1885	27,630,512	11,327,732	7,239,846	20,740,880	66,938,970
1886	29,470,220	12,066,750	8,482,142	21,954,044	71,973,156
1887	31,081,250	13,538,713	9,161,183	23,157,028	76,938,174
1888	34,243,310	15,571,870	10,960,090	29,658,700	90,433,970
1889	38,784,570	18,258,460	12,920,346	32,383,577	102,346,953
TOTAL MUNICIPAL DISTRICTS.					
1874	25,726,020	10,271,373	7,036,941	19,187,305	62,221,639
1875	28,233,568	11,343,305	7,460,664	20,889,321	67,926,858
1876	32,326,223	12,406,517	8,103,819	22,945,578	75,782,137
1877	33,063,700	12,873,138	8,479,453	23,198,458	77,614,749
1878	35,042,429	14,889,855	9,346,087	25,155,110	84,433,481
1879	35,747,601	14,613,971	9,349,834	23,532,710	83,244,116
1880	36,341,093	14,543,856	9,311,087	23,651,383	83,847,419
1881	38,840,995	14,975,837	9,663,416	24,162,211	87,642,459
1882	41,190,037	15,457,986	10,179,958	24,964,566	91,792,547
1883	42,022,691	16,763,151	10,895,280	25,929,837	95,610,959
1884	45,961,942	18,051,122	11,638,692	28,144,076	103,795,832
1885	50,109,332	19,990,924	13,071,469	31,111,845	114,283,570
1886	54,140,120	22,436,344	15,238,855	34,063,429	125,878,748
1887	58,875,662	24,954,078	16,957,583	37,098,378	137,885,701
1888	67,400,575	28,612,995	20,949,133	50,422,507	167,385,210
1889	75,624,736	32,793,288	23,827,579	55,312,908	187,558,511

230. According to the above table the total value of rateable property in urban and rural municipalities combined has about doubled in the last seven and a half years; and that in cities, towns, and boroughs has more than doubled in the last five years; but that in shires has not quite doubled in the last eleven years.

231. The annual value of rateable property is arranged in similar groups in the next table. In 1889, as compared with the previous year, there was an increase of £358,535 in the urban, and of £659,518 in the country, properties—thus resulting in a total increase of £1,018,053. The increase was spread over the whole of the groups:—

CLASSIFICATION OF ANNUAL VALUE OF RATEABLE PROPERTY,
1874 TO 1889.

Year.	Annual Value of Rateable Properties.				
	Under £50.	£50 to £100.	£100 to £200.	£200 and upwards.	Total.
	£	£	£	£	£
CITIES, TOWNS, AND BOROUGHES.					
1874	1,352,679	537,885	381,885	584,033	2,856,482
1875	1,384,125	539,887	382,546	592,823	2,899,381
1876	1,414,565	563,091	378,503	615,664	2,971,823
1877	1,436,377	563,296	403,745	632,333	3,035,751
1878	1,489,722	569,275	408,757	673,966	3,141,720
1879	1,494,247	600,406	407,496	656,231	3,158,380
1880	1,498,284	592,472	409,094	635,098	3,134,948
1881	1,559,989	601,763	411,359	633,427	3,206,538
1882	1,636,258	616,964	434,097	676,718	3,364,037
1883	1,721,321	667,544	468,131	714,285	3,571,281
1884	1,851,434	719,449	472,292	804,323	3,847,498
1885	2,041,264	786,690	529,560	941,770	4,299,284
1886	2,208,121	928,148	604,771	1,083,871	4,824,911
1887	2,335,021	959,010	654,979	1,171,219	5,120,229
1888	2,715,100	1,067,880	817,960	1,700,260	6,301,200
1889	2,879,254	1,135,974	852,458	1,792,049	6,659,735
SHIRES.					
1874	1,220,327	492,313	315,056	1,111,299	3,138,995
1875	1,320,284	544,464	334,358	1,349,826	3,548,932
1876	1,441,050	537,132	342,412	1,329,280	3,649,874
1877	1,488,197	576,383	355,147	1,325,578	3,745,305
1878	1,474,572	674,431	384,688	1,355,585	3,889,276
1879	1,605,387	664,266	407,186	1,306,330	3,983,169
1880	1,621,249	654,212	396,403	1,311,134	3,982,998
1881	1,658,451	639,242	395,816	1,275,242	3,968,751
1882	1,733,662	648,497	406,770	1,280,846	4,069,775
1883	1,699,193	691,957	424,389	1,305,886	4,121,425
1884	1,774,831	702,650	446,907	1,326,928	4,251,316
1885	1,855,081	760,531	486,075	1,392,519	4,494,206
1886	1,963,868	804,117	565,242	1,462,997	4,796,224
1887	2,033,435	885,746	599,354	1,515,007	5,033,542
1888	2,125,117	966,380	680,176	1,840,600	5,612,273
1889	2,376,707	1,118,873	791,755	1,984,456	6,271,791

CLASSIFICATION OF ANNUAL VALUE OF RATEABLE PROPERTY,
1874 TO 1889—continued.

Year.	Annual Value of Rateable Properties.				
	Under £50.	£50 to £100.	£100 to £200.	£200 and upwards.	Total.
	£	£	£	£	£
TOTAL MUNICIPAL DISTRICTS.					
1874	2,573,006	1,030,198	696,941	1,695,332	5,995,477
1875	2,704,409	1,084,351	716,904	1,942,649	6,448,313
1876	2,855,615	1,100,223	720,915	1,944,944	6,621,697
1877	2,924,574	1,139,679	758,892	1,957,911	6,781,056
1878	2,964,294	1,243,706	793,445	2,029,551	7,030,996
1879	3,099,634	1,264,672	814,682	1,962,561	7,141,549
1880	3,119,533	1,246,684	805,497	1,946,232	7,117,946
1881	3,218,440	1,241,005	807,175	1,908,669	7,175,289
1882	3,369,920	1,265,461	840,867	1,957,564	7,433,812
1883	3,420,514	1,359,501	892,520	2,020,171	7,692,706
1884	3,626,265	1,422,099	919,199	2,131,251	8,098,814
1885	3,896,345	1,547,221	1,015,635	2,334,289	8,793,490
1886	4,171,989	1,732,265	1,170,013	2,546,868	9,621,135
1887	4,368,456	1,844,756	1,254,333	2,686,226	10,153,771
1888	4,840,217	2,034,260	1,498,136	3,540,860	11,913,473
1889	5,255,961	2,254,847	1,644,213	3,776,505	12,931,526

Increase in annual value of property.

232. During the fifteen years ended with 1889 the total increase in the annual valuation of rateable property has amounted to £6,936,049, viz., to £3,803,253 in cities, towns, and boroughs, and to £3,132,796 in shires.

Increase in number and value of properties rated.

233. The increase in the value of rateable properties is no doubt partly due to the greater extent and number of properties rated, as well as to the improvements made. The following table shows the total increase, and the increase under each group in the number of properties, and in their total and annual values, during the fifteen years intervening between 1874 and the end of 1889, the increase in cities, towns, and boroughs being added to that in shires :—

INCREASE IN NUMBER AND VALUE OF RATEABLE PROPERTIES,
1874 TO 1889.

Rateable Values.	Increase during Fifteen Years in the—		
	Number of Properties.	Total Value.	Annual Value.
Under £50 ...	120,362	£49,898,716	£2,682,955
£50 to £100 ...	18,680	22,521,915	1,224,649
£100 to £200 ...	6,838	16,790,638	947,272
£200 and upwards ...	4,371	36,125,603	2,081,173
Total increase ...	150,251	£125,336,872	£6,936,049

Largest increase in small properties.

234. By far the greatest increase in the number of properties, amounting to four-fifths of the whole increase, was in properties rated at less than £50 ; moreover the largest increase in the total and in the

annual value of properties, amounting in each case to about two-fifths of the total gain, was in properties of that rating. The next largest increase was in the value of properties rated at £200 and upwards, which, in each case, amounted to not quite a third of the whole increase.

235. In Victoria, a foreigner, even if naturalized, is not eligible to become a member of the Executive Council, but, with this exception, the highest offices of the State are open to naturalized persons of foreign as well as of British birth; and, without becoming naturalized, alien friends resident in the colony may acquire real and personal property, and may convey, devise, and bequeath it in the same manner as if they had been British subjects by birth. Alien women married to British subjects thereby become naturalized; but to become a member or elector of either House of Parliament it is necessary for a foreigner to take out letters of naturalization, to procure which, in accordance with the provisions of the *Aliens Statute* 1865 (28 Vict. No. 256), he must present a memorial to the Governor, stating his name, age, birthplace, residence, occupation, period of residence in the colony, and his desire to settle therein, which memorial must be accompanied by a certificate from a magistrate, to the effect that he is known to be the person signing and is of good repute. Should letters be granted, the applicant, before they are issued, must take an oath of allegiance to the Sovereign of the United Kingdom of Great Britain and Ireland. The following table shows the native countries of those who obtained letters of naturalization during the year 1889 and the previous eighteen years:—

NATURALIZATION, 1871 TO 1889.

Native Countries.					Eighteen Years : 1871 to 1888.	Year 1889.
France	...	...	...	...	65	4
Belgium	...	...	...	...	11	...
Holland	...	...	...	...	13	...
Austria	...	...	...	...	47	7
Germany	...	...	...	...	720	48
Italy ...	...	...	...	...	38	...
Spain ...	...	...	...	...	5	...
Portugal	...	...	...	...	2	...
Russia	...	...	...	...	36	13
Other European countries	...	...	...	...	422	38
United States ...	...	...	...	...	22	...
South and Central American States	...	...	...	...	1	...
China ...	...	...	...	...	2,969	...
Other countries...	...	...	...	...	17	2*
Total	...	...	...	...	4,368	112

* Syrians.

Chinese
naturalized

236. The tendency of the Chinese to become naturalized greatly increased soon after the passing of the *Chinese Act* 1881 (45 Vict. No. 723), which provided that all Chinese who are not naturalized or natural-born subjects of Her Majesty shall, on entering the colony, be subject to an immigration tax,* and shall be disfranchised as regards both municipal and parliamentary elections. The result of the passing of this measure was that whereas no more than 91 Chinese took out letters of naturalization during the eleven years ended with 1881, such letters were taken out by as many as 317 in 1882, 593 in 1883, 601 in 1884, and 1,178 in 1885; but after 1885, the Government, in view of the increasing number of Chinese applying for naturalization papers, determined to issue no more "unless a sufficient reason was assigned," with the effect that only 173 such papers were issued in 1886, no more than 16 in 1887, and not one in 1888 or 1889.

Occupations
of persons
naturalized
1889.

237. The persons naturalized in 1889 were of the following occupations:—

OCCUPATIONS OF PERSONS NATURALIZED, 1889.

Agent	1	Hawker... ..	1
Agriculturist	1	Hospital wardsman	1
Barber and hairdresser	1	Hotelkeeper	2
Barman	1	Hotel manager	1
Boardinghouse-keeper	2	Importer	4
Bootmaker	2	Labourer	8
Butcher	2	Lady	1
Cabinetmaker	1	Master mariner	2
Carpenter	4	Mariner	8
Caterer	1	Miner	5
Clergyman	1	Pawnbroker	3
Clerk	3	Physician and surgeon	1
Clothier	1	Printer	1
Commercial traveller	2	Restaurant-keeper	5
Contractor	1	Shipwright	1
Cook	1	Stonemason	1
Cordialmaker	1	Storekeeper	2
Dealer	1	Tanner and currier	1
Draper	1	Tailor	3
Electric engineer	1	Timber merchant	1
Engine-driver	1	Upholsterer	1
Farmer	6	Vigneron	2
Farmer and hawker	1	Violinist... ..	1
Fireman	1	Warehouseman	1
Fruit dealer	3	Watchmaker and jeweller	2
Fruit grower	1	Wine and champagne manu- facturer	1
Gardener	2	Wine dealers	3
Gentleman	2		
Grocer	1		
Hardware merchant	2		
		Total	112

* The tax has since been abolished. See paragraph 193 *ante*.

PART III.—FINANCE.

238. The following is a statement of the revenue and expenditure of Victoria in the financial year ended on the 30th June, 1889; the excess of the former over the latter; the credit balance brought forward from 1887-8, and that carried forward to 1889-90:—

FINANCE ACCOUNT OF VICTORIA, 1888-9.*

(Exclusive of recoups and advances to be recouped.)†

	£	s.	d.
Receipts	8,675,989	17	7
Expenditure	7,919,902	0	1
Receipts in excess of expenditure	756,087	17	6
Credit balance from 1887-8	948,758	4	7†
Credit balance carried forward to 1889-90 ...	1,704,846	2	1

239. It is thus shown that during the financial year under review there was a surplus of revenue amounting to £756,088, which being added to a credit balance of £948,758 brought forward from 1887-8, a total is arrived at of £1,704,846 to be carried forward to 1889-90. This exceeds by close on £1,100,000 the largest credit balance ever previously remaining in Victoria at the end of any financial year.

240. With reference to this credit balance, it should be stated that sums amounting in the aggregate to £658,936—as set forth in the report of the Commissioners of Audit upon the Treasurer's Accounts for the year 1888-9—were expended during the financial year 1888-9 over and above the amounts voted for the services to which such sums were applied, and which therefore could not be legally charged to the expenditure of that year. These being deducted, the credit balance is at once reduced to £1,045,910; and if a deduction be also made of the amount of interest on the public debt which had accrued to the 30th June, 1889—viz, £540,998 payable on the 1st July, and £113,546 payable on the 1st October following, or £654,544 in all—the

* According to a statement distributed to members of the Legislative Assembly in July, 1890, by the Honorable the Treasurer, the revenue of 1889-90 was £8,511,105, and the expenditure was £9,750,204, the latter thus exceeding the former by £1,239,099, which amount being deducted from the balance at the beginning of the financial year leaves a credit balance of £465,747 to be carried forward. This credit balance would have been increased to £983,000, but for an alteration in the method of charging the expenditure. See first footnote on next page. The estimated mean population of the same twelve months was about 1,118,200; so that the revenue per head was £7 12s. 3d., and the expenditure per head £8 14s. 5d. These figures are not final. Further details are given in an Appendix published at the end of this volume.

† In consequence of recoups being excluded, as explained in the last edition of this work, the balance carried forward from 1887-8 is here set down as £948,758, instead of £893,493, as shown in the Treasurer's Finance Statement. For particulars of recoups, etc., see paragraph 266, and tables following paragraph 260 *et seq. post.*

credit balance is still further reduced to £391,366. It should, however, be pointed out that the system of carrying forward sums expended but not voted, and making no allowance for interest accrued but not yet payable, has prevailed for years past,* the amounts so treated in the previous financial year (1887-8) being as follow:—Sums expended in the year carried forward to 1888-9, £507,123;† interest accrued in the year, but not due until 1888-9, £603,994 or £1,111,117 in all.

241. In the following table the receipts and expenditure, exclusive of advances recouped and to be recouped, are given for each of the fifteen financial years ended with 1888-9; also the surplus or deficiency of revenue in each year, and the credit or debit balances carried forward from year to year:—

NET PUBLIC REVENUE AND NET PUBLIC EXPENDITURE,
1874-5 TO 1888-9.

Year.	Excluding Advances Recouped and to be Recouped.†			
	Public Revenue.	Public Expenditure.	Surplus (+). Deficiency (-).	Balances carried forward. Credit (+). Debit (-).
	£	£	£	£
1874-5	4,169,700	4,296,649	-126,949	+120,155
1875-6	4,325,156	4,394,066	-68,910	+51,245
1876-7	4,513,738	4,336,139	+177,599	+228,844
1877-8	4,485,412	4,536,062	-50,650	+178,194
1878-9	4,520,277	4,809,724	-289,447	-111,253
1879-80	4,600,627	4,803,790	-203,163	-314,416
1880-81	5,115,041	5,100,225	+14,816	-299,600
1881-2	5,589,972	5,145,764	+444,208	+144,608
1882-3	5,602,066	5,643,885	-41,819	+102,789
1883-4	5,934,578	5,653,293	+281,285	+384,074
1884-5	6,290,361	6,121,564	+168,797	+552,871
1885-6	6,416,406	6,513,540	-97,134	+455,737
1886-7	6,733,826	6,561,251	+172,575	+628,312
1887-8	7,607,598	7,287,151	+320,447	+948,758
1888-9	8,675,990	7,919,902	+756,088	+1,704,846

242. As the amounts of revenue and expenditure as given in this table are exclusive of recoups and advances to be recouped, the figures will not agree with those in the first folding sheet published in the second volume of this work, or in the next table, in which the gross amounts are given.

* The same principle in regard to the charging of interest has been followed since the first loan was floated thirty years ago. The Treasurer in his budget speech, delivered on the 31st July, 1890, stated that he proposed thenceforth to alter the system of charging expenditure forward, and accordingly brought down supplementary estimates to provide for the change; the system of charging interest to the year in which it is paid, is, however, to be continued.
† See Report of the Commissioners of Audit upon the Treasurer's Accounts for the year 1887-8.
‡ For particulars of advances and recoups, see tables following paragraphs 260 and 264 *post*.

243. The following, according to the folding sheet just referred to,* are the amounts of surplus or deficiency of revenue in each year, and the balances carried forward from year to year from 1856 to 1888-9:—

**GROSS SURPLUS OR DEFICIENCY OF REVENUE, AND BALANCES,
1856 TO 1888-9.**

Year.	Including Advances Recouped and to be Recouped.†		Year.	Including Advances Recouped and to be Recouped.†	
	Surplus (+). Deficiency (-).	Balances carried forward. Credit (+). Debit (-).		Surplus (+). Deficiency (-).	Balances carried forward. Credit (+). Debit (-).
	£	£		£	£
1856 ...	+ 303,662	+ 249,994	1871-2...	+ 74,888	+ 101,858
1857 ...	+ 359,645	+ 609,639	1872-3...	+ 139,182	+ 241,040
1858 ...	- 119,337	+ 490,302	1873-4...	- 70,548	+ 170,492
1859 ...	- 132,842	+ 357,460	1874-5...	- 81,698	+ 88,794
1860 ...	- 232,846	+ 124,614	1875-6...	- 247,688	- 158,894
1861 ...	- 139,920	- 15,306	1876-7...	+ 365,781	+ 206,887
1862 ...	+ 229,582	+ 214,276	1877-8...	- 129,936	+ 76,951
1863 ...	- 108,251	+ 106,025	1878-9...	- 211,859	- 134,908
1864 ...	+ 26,435	+ 132,460	1879-80	- 253,747	- 388,655
1865 ...	+ 93,108	+ 225,568	1880-81	+ 77,369	- 311,286
1866 ...	- 142,865	+ 82,703	1881-2...	+ 446,598	+ 135,312
1867 ...	- 25,501	+ 57,202	1882-3...	- 40,632	+ 94,680
1868 ...	+ 41,432	+ 98,634	1883-4 ..	+ 219,394	+ 314,074
1869 ...	+ 157,819	+ 256,453	1884-5...	+ 150,005	+ 464,079
1870 ...	- 166,499	+ 89,954	1885-6...	- 32,519	+ 431,560
1871 six mths	- 62,984	+ 26,970	1886-7...	+ 172,575	+ 604,135
			1887-8...	+ 289,358	+ 893,493
			1888-9...	+ 811,353	+ 1,704,846

244. It will be noticed that the gross revenue showed a surplus in seventeen and a deficiency in sixteen of the years named; a deficiency also in the six months ended with June, 1871. On the whole, the deficiencies were smaller than the surpluses, as the balance carried forward at the end of the last year exceeded that at the end of the first year of the period by £1,454,852. By far the largest surplus of revenue was in the year under review (1888-9), when it exceeded by over one-third of a million sterling that in 1881-2, which came next. The credit balance carried forward at the end of 1888-9 was also much larger than that in 1887-8, which in turn was much larger than in any previous year. The largest deficiency of revenue was in

* The figures in the folding sheet agree with those in the Treasurer's Finance Statements, except as regards the sum of £500,000 raised in 1880-81 by means of Treasury bonds for the temporary relief of the revenue, and the amounts paid for the redemption of these bonds, viz., £471,900 in 1881-2, £18,000 in 1882-3, and £10,100 in 1883-4. These amounts are included in the figures of revenue or expenditure (as the case may be) given in the Finance Statements, but not in those given in the folding sheet.

† See footnote to the last table.

1879-80, that being also the year at the end of which the largest debit balance was carried forward.

Changes in
sources of
revenue.

245 During the year 1888-9 no changes were made affecting the incidence of taxation, or tending to increase or diminish the amounts derived from other sources of revenue, excepting the railway income. As the railways were extended by an average length of 197 miles during the year, the extra revenue derivable therefrom, allowing £1,000 per mile,* should have been £197,000. Moreover an unforeseen increase of £84,600, as compared with 1887-8, occurred in the amount received from duties on estates of deceased persons—a source of income which is naturally subject to fluctuations. Thus, in consequence of the extension of railways and accidental circumstances, the receipts of 1888-9, as compared with those of the previous twelve months, show an increase of £281,600.†

Revenue
1887-8 and
1888-9
compared.

246. The total revenue raised in 1888-9 was about £1,070,000 in excess of that in the previous year; but by making allowances for receipts from sources not common to both years, as shown in the last paragraph, the excess is reduced to £787,000, thus :—

COMPARATIVE REVENUES, 1887-8 AND 1888-9.

	1887-8. £	1888-9. £
Revenue proper (<i>i.e.</i> , exclusive of recoups,‡ etc.) ...	7,607,598	8,675,990
Deduct amounts from sources not common to both years ...	...	281,600
Comparative amounts	<u>£7,607,598</u>	<u>8,394,390</u>

Revenue
1888-9 and
previous
years.

247. The revenue of 1888-9 was by far the largest ever raised in Victoria. It exceeded the revenue of 1887-8, which was the year in which the largest revenue had previously been realized, by £1,070,000, as already stated; and exceeded the revenue of 1886-7, which was the year in which the next highest revenue had been raised, by over £940,000.§ In the ten years ended with the year under review the revenue increased from £4,600,000 to £8,700,000, or by 89 per cent., the population during the same period having increased by only about 29 per cent.

Expenditure
1888-9 and
former
years.

248. The expenditure of 1888-9 was also much above that of any previous year, it being larger than in 1887-8—the year in which the

* See table of "Earnings and Expenses of Railways per mile open," in part "Interchange," in the second volume.
† There was also a small increase of about £2,600 in consequence of the Government Telephone Exchange having been open for two months longer than in 1887-8.
‡ See table following paragraph 260 *post*.
§ Figures showing the revenue and expenditure in each year from the first settlement of the colony will be found in the Statistical Summary of Victoria (first folding sheet) published in the second volume of this work.

next largest expenditure occurred—by over £630,000, larger than in 1886-7, which came next by about £1,360,000.* Prior to 1853, the annual expenditure never exceeded one million sterling; from 1853 to 1872-3 it was usually nearly up to or slightly over three millions; from 1873-4 to 1879-80 it was between four and four and three-quarter millions; from 1880-81 to 1883-4 it ranged from five to nearly five and three-quarter millions, and from 1884-5 to 1888-9, it increased from six to close on eight millions sterling.

249. The revenue and expenditure per head for each year from that of separation from New South Wales to 1888-9 will be found in the following table:—

Revenue
and expen-
diture per
head, 1851
to 1888-9.

REVENUE AND EXPENDITURE PER HEAD, 1851 TO 1888-9.†

Year.	Average Population of each Financial Year.	Revenue per Head.			Expenditure per Head.		
		£	s.	d.	£	s.	d.
1851	86,825	4	10	5	4	14	8
1852	132,905	12	5	11	7	7	4
1853	195,378	16	11	2	16	9	3
1854	267,371	11	11	0	15	13	1
1855	338,315	8	1	4	7	14	6
1856	380,942	7	16	1	7	0	1
1857	430,347	7	14	8	6	17	11
1858	483,827	6	2	11	6	7	10
1859	517,390	6	6	1	6	11	3
1860	534,055	5	15	5	6	4	2
1861	539,824	5	9	4	5	14	6
1862	548,080	5	19	3	5	10	11
1863	562,960	4	18	6	5	2	5
1864	586,450	5	0	9	4	19	11
1865	611,218	5	0	8	4	17	7
1866	629,038	4	17	11	5	2	5
1867	644,276	4	19	10	5	0	7
1868	663,092	4	17	5	4	16	2
1869	687,202	4	18	6	4	13	10
1870	713,195	4	11	5	4	16	2
1871 (six months) ‡	731,528	2	6	3	2	8	0
1871-2	747,412	4	19	11	4	17	11
1872-3	758,984	4	16	0	4	12	4
1873-4	772,039	5	6	5	5	8	3
1874-5	783,274	5	8	2	5	10	3
1875-6	791,399	5	9	4	5	15	7
1876-7	801,717	5	17	10	5	8	9
1877-8	815,494	5	10	6	5	13	8
1878-9	827,439	5	11	8	5	16	10

* Figures showing the revenue and expenditure in each year from the first settlement of the colony will be found in the Statistical Summary of Victoria (first folding sheet) published in the second volume of this work.

† For amounts per head in 1889-90, see footnote to paragraph 238 *ante*.

‡ The financial year was changed in 1871 so as to terminate on the 30th June instead of on the 31st December as formerly.

REVENUE AND EXPENDITURE PER HEAD, 1851 TO 1888-9—continued.

Year.			Average Population of each Financial Year.	Revenue per Head.			Expenditure per Head.		
				£	s.	d.	£	s.	d.
1879-80	...	...	840,620	5	9	11	5	16	0
1880-81	...	...	860,067	6	0	7	5	18	10
1881-2	...	...	880,218	6	7	1	5	16	11
1882-3	...	...	900,222	6	4	8	6	5	7
1883-4	...	...	921,743	6	8	9	6	4	0
1884-5	...	...	946,045	6	13	0	6	9	10
1885-6	...	...	971,145	6	13	6	6	14	2
1886-7	...	...	1,003,100	6	14	3	6	10	10
1887-8	...	...	1,038,130	7	6	7	7	0	5
1888-9	...	...	1,085,630	7	19	10	7	5	11

Revenue
and expen-
diture, per
head, in
1888-9 and
former
years.

250. The revenue per head in 1888-9 was larger by 13s. 3d., and the expenditure per head larger by 5s. 6d., than in the previous year. Both were larger than in any year since 1855. It will be observed that, in proportion to population, both revenue and expenditure declined pretty steadily year by year from 1862 to 1872-3, but ever since the latter a gradual increase has taken place, which, with slight fluctuations, has been maintained up to the present time.

Revenue
estimated
and raised.

251. In the thirty-three and a half years ended with 1888-9 the revenue raised exceeded the Treasurer's estimate on twenty occasions, or by £4,598,865; and was less than that estimate on fourteen occasions, or by £2,426,619. Deducting the latter from the former, the net amount by which the result exceeded the estimate is found to have been £2,172,246. The following table shows the revenue estimated and actually raised, also the difference between those amounts, in each of the years :—

REVENUE ESTIMATED AND RAISED, 1856 TO 1888-9.

Year.				Revenue.		
				According to Treasurer's Estimate.	Actually Raised.	More (+) or Less (–) than Estimate.*
				£	£	£
1856	...	...	...	2,738,600	2,972,496	+ 233,896
1857	...	...	...	3,005,130	3,328,303	+ 323,173
1858	...	...	...	3,197,900	2,973,382	– 224,518

* If certain sums which were not included in the Treasurer's estimate be deducted, the deficiency in 1866 would be increased to £149,250; the excess in 1868 would be reduced to £197,864, and that in 1873-4 to £181,473, whilst the excess in 1871 (6 months) would be changed to a deficit of £7,612.

REVENUE ESTIMATED AND RAISED, 1856 TO 1888-9—*continued*.

Year.	Revenue.		
	According to Treasurer's Estimate.	Actually Raised.	More (+) or Less (-) than Estimate.
	£	£	£
1859	3,384,000	3,261,104	— 122,896
1860	3,150,000	3,082,461	— 67,539
1861	3,136,000	2,952,101	— 183,899
1862	3,113,105	3,269,079	+ 155,974
1863	2,945,600	2,774,686	— 170,914
1864	2,973,000	2,955,338	— 17,662
1865	3,095,400	3,076,885	— 18,515
1866	3,186,265	3,079,160	— 107,105
1867	3,439,078	3,216,317	— 222,761
1868	2,963,050	3,230,754	+ 267,704
1869	3,241,500	3,383,984	+ 142,484
1870	3,332,200	3,261,883	— 70,317
1871 (six months)	1,664,700	1,691,266	+ 26,566
1871-2	3,538,750	3,734,422	+ 195,672
1872-3	3,611,920	3,644,135	+ 32,215
1873-4	3,883,650	4,106,790	+ 223,140
1874-5	4,259,135	4,169,700	— 89,435
1875-6	4,109,750	4,325,156	+ 215,406
1876-7	4,385,716	4,513,738	+ 128,022
1877-8	4,672,880	4,485,412	— 187,468
1878-9	4,855,666	4,520,277	— 335,389
1879-80	5,208,828	4,600,627	— 608,201
1880-81	5,093,647	5,115,041	+ 21,394
1881-2	5,241,544	5,589,972	+ 348,428
1882-3	5,584,104	5,602,066	+ 17,962
1883-4	5,779,775	5,934,578	+ 154,803
1884-5	6,048,720	6,290,361	+ 241,641
1885-6	6,285,308	6,416,406	+ 131,098
1886-7	6,516,797	6,733,826	+ 217,029
1887-8	6,968,706	7,607,598	+ 638,892
1888-9	7,792,624	8,675,990	+ 883,366

NOTE.—Recoups are deducted for all the years since 1873-4. See summary at end of table following paragraph 260 *post*.

The revenue for 1889-90 was estimated at £8,328,270, or about £183,000 below the actual result. The probable revenue for 1890-91 was estimated, in July, 1890, at £8,631,345.

252. The year in which the revenue exceeded the estimate by the largest amount is shown to have been that under review, the excess being £883,366, which is £240,000 larger than in 1887-8, and over two and a-half times as large as the next largest excess (£348,428) in 1881-2; whilst that in which it fell most short of the estimate was 1879-80, viz., by £608,201.

Years of excessive and defective estimates.

253. The sums voted by the Legislature in any year exceed, as is well known, those actually spent, the difference being sometimes erroneously designated the “savings” of the year. The following table shows the amounts voted and expended and the difference, in each of the thirty-three and a half years ended with 1888-9:—

Expenditure authorized and incurred.

AMOUNTS VOTED AND EXPENDED, 1856 TO 1888-9.*

Year.	Amounts—		Balance Unexpended.
	Voted.	Expended.	
	£	£	£
1856 ...	2,588,086	2,327,919	260,167
1857 ...	2,965,610	2,733,562	232,048
1858 ...	3,343,812	2,764,350	579,462
1859 ...	3,273,642	2,982,664	290,978
1860 ...	3,065,784	2,818,107	247,677
1861 ...	2,771,100	2,535,095	236,005
1862 ...	2,617,664	2,359,280	258,384
1863 ...	2,163,855	2,003,961	159,894
1864 ...	2,153,324	1,968,053	185,271
1865 ...	2,399,936	1,976,587	423,349
1866 ...	2,493,213	2,227,297	265,916
1867 ...	2,316,423	2,190,279	126,144
1868 ...	2,355,307	2,199,504	155,803
1869 ...	2,378,772	2,202,798	175,974
1870 ...	2,338,927	2,086,736	252,191
1871 (six months)	1,077,228	1,004,283	72,945
1871-2 ...	2,175,505	2,064,436	111,069
1872-3 ...	2,405,238	2,074,127	331,111
1873-4 ...	3,045,430	2,751,313	294,117
1874-5 ...	3,197,493	2,848,016	349,477
1875-6 ...	2,903,710	2,753,866	149,844
1876-7 ...	2,993,036	2,812,405	180,631
1877-8 ...	3,276,921	2,973,815	303,106
1878-9 ...	3,418,656	3,183,240	235,416
1879-80 ...	3,594,139	3,446,795	147,344
1880-81 ...	3,765,422	3,621,954	143,468
1881-2 ...	3,740,419	3,571,667	168,752
1882-3 ...	4,530,516	4,220,871	309,645
1883 4 ...	4,495,241	4,181,169	314,072
1884-5 ...	4,679,081	4,432,858	246,223
1885 6 ...	4,990,824	4,696,924	293,900
1886-7 ...	5,055,629	4,770,705	284,924
1887-8 ...	5,635,949	5,324,347	311,602
1888-9 ...	6,364,193	5,869,351	494,842

Amount un-
expended,
1856-89.

254. By adding the figures in the last column, it is found that the sum of the unexpended balances in the thirty-three and a half years amounted to over 8½ millions sterling, the exact amount being £8,591,751, or to an average of about £256,000 per annum.

Heads of
revenue,
1887-8 and
1888-9.

255. The various sources from which the revenue of Victoria is derived may be grouped in five main divisions, viz.:—Taxation, Crown Lands, Railways and other Reproductive Public Works, Post and Telegraphs, and Other Sources. In 1888-9, £3,750,000, or 43½ per cent., was derived from taxation ; £616,000, or 7 per cent., from Crown Lands ; £3,909,000, or 45 per cent., from what may be termed

* The amount voted for 1889-90 was £7,850,859 (including £417,328 under supplementary estimates), and the approximate expenditure from votes in that year was £7,305,952, leaving an unexpended balance of about £544,900. The probable expenditure from votes in 1890-91 was estimated in July, 1890, at £6,723,146.

the commercial undertakings of the Government, viz. :—Public Works and Post and Telegraphs, to which the State railways contributed as much as £3,105,000, or 36 per cent. of the total revenue; whilst the balance, amounting to £401,000, or about $4\frac{1}{2}$ per cent. of the whole, was derived from other sources. Of the Land Revenue, amounting to £616,000, by far the greater proportion, or £495,000—being equal to $5\frac{3}{4}$ per cent. of the total revenue—was derived from the sale of public land, which, being a receipt arising from the realization of one of the most valuable assets of the country, is obviously not a permanent source of income. Portion of this amount is properly treated as capital, for on reference to the statement of expenditure it will be seen that a sum of nearly £121,000 was paid during the year towards the construction of railways as directed by the *Land Act* 1884,* which provides that all proceeds arising from the sale of public lands by auction shall be paid to the credit of the Railway Construction Account. In 1888-9, however, the amount so paid represented barely one-fifth of the total proceeds from land sales, the great bulk of land alienated being disposed of otherwise than at auction. The following is a statement of the amounts received under various heads† in each of those divisions during the last two financial years, together with the increase or decrease under each head :—

HEADS OF REVENUE, 1887-8 AND 1888-9.

Heads of Revenue.	Amounts Received.		Increase.	Decrease.
	1887-8.	1888-9.		
TAXATION.				
	£	£	£	£
Customs duties (including also wharfage rates)	2,353,050	2,879,830	526,780	...
Excise	128,369	146,555	18,186	...
Ports and harbours (chiefly tonnage dues)	34,327	45,884	11,557	...
Licences (business)	21,002	23,904	2,902	...
Duties on estates of deceased persons...	151,861	236,449	84,588	...
Duties on bank notes	27,879	34,023	6,144	...
Stamp duty‡	230,000	260,000	30,000	...
Land tax	124,515	123,025	...	1,490
Total	3,071,003	3,749,670	678,667§	...

* 48 Vict., No. 812, section 78.

† The heads of Revenue and Expenditure are arranged according to a classification agreed upon at a conference of representatives of several of the Australian colonies, upon the subject of statistics, which was held in Tasmania in January, 1875.—See Report of Conference, with introductory letter by the Government Statist of Victoria, Parliamentary Paper No. 11, Session 1875.

‡ Estimated roughly, as the Postal Authorities are unable to furnish reliable statements in consequence of the stamps hitherto used to denote stamp duty, postage, and fees having been made interchangeable, and only one class of stamps for all purposes being now issued. The telegraph revenue is now also collected by means of stamps; but there are other means of ascertaining this, so the figures may be taken as correct. The "Postal receipts" include commission on money orders and postal notes.

§ Net figures.

HEADS OF REVENUE, 1887-8 AND 1888-9—continued.

Heads of Revenue.	Amounts Received.		Increase.	Decrease.
	1887-8.	1888-9.		
LAND REVENUE.				
Land sales (including rents counting towards purchase money)	£ 549,149	£ 494,733	£ ...	£ 54,416
Rents of Crown lands (not counting towards purchase money)	106,817	119,778	12,961	...
Penalties under Land Acts ...	301	1,517	1,216	...
Total ...	656,267	616,028	...	40,239*
PUBLIC WORKS.				
Railways ...	2,741,488	3,104,907	363,419	...
Water Supply † ...	235,743	245,734	9,991	...
Other public works ...	4,764	5,805	1,041	...
Total ...	2,981,995	3,356,446	374,451	...
POST AND TELEGRAPHS.				
Postal receipts, etc.‡ ...	354,796	402,834	48,038	...
Telegraph receipts, etc. ...	130,737	150,043	19,306	...
Total ...	485,533	552,877	67,344	...
OTHER SOURCES.				
Mint charges ...	10,377	10,051	...	326
„ subsidy returned ...	3,874	3,642	...	232
Fees, fines, etc. (inclusive of fee stamps)‡	164,721	174,998	10,277	...
Interest on public account ...	136,811	107,888	...	28,923
Rents (other than Crown lands) ...	2,908	3,224	316	...
Reimbursements in aid§ ...	69,041	67,130	...	1,911
Miscellaneous receipts ...	25,068	34,036	8,968	...
Total ...	412,800	400,969	...	11,831*
Grand Total || ...	7,607,598	8,675,990	1,068,392*	...

NOTE.—For further details of the revenue under each head, see table following paragraph 257 *post*, and for particulars of revenue in 1889-90, see Appendices at the end of this volume.

Increased revenue 1888-9 under various heads.

256. Comparing the revenue of 1888-9 with that of the previous year, it will be observed that, although there was a net increase of over £1,068,000 in the total revenue, there was a small decrease in the receipts from Land tax, a decrease of over £40,000 in the Land Revenue, and of nearly £12,000 under that derived from “Other

* Net figures.
† Including interest on loans to local bodies for waterworks, etc.
‡ See footnote (†) on page 141.
§ Embracing amounts received by departments which are not charged, or are only casually charged, with the collection of revenue, such as proceeds of the labour of prisoners, sums paid for the care of lunatics and of children in Industrial and Reformatory Schools ; for the service of the police when specially applied for ; for the sale of works by the Government Printer ; for the storage of gunpowder ; for quarantine expenses, etc.
|| Exclusive of recoups. The amount recouped from loans in 1888-9 was £55,265.

Sources." The decrease in the land revenue resulted from a decrease of £54,000 under land sales, less an increase of £14,000 in the rents from temporary occupation, etc. The decrease from land sales was entirely confined to the deferred payments counting towards the purchase of selected land, which fell off by £61,000;* there being an increase of £7,000 in the proceeds from auction sales. It may be mentioned that a falling-off in the former item, but of minor degree, was noticeable in the previous year. The only falling-off worthy of notice under "Other Sources," was one of £29,000 under interest on public account, which however was largely counterbalanced by increases under other heads in the same division. Large increases, however, appear in the other divisions of the revenue, viz.:—£679,000 under Taxation, £374,000 under Public Works, and £67,000 under Posts and Telegraphs. In the Public Works division the railway revenue shows the chief increase, viz., one of £363,419, which moreover exceeds by £166,000 the amount which might have been expected (viz., £197,000),† from the increased length of lines open for traffic. The Telegraph revenue continues to show remarkable expansion, the increase in 1888-9 being £19,000, whilst the total increase during the past five years was £63,100, or 73 per cent. It should be noted, however, that over £20,000 of this is derived from the telephone exchanges, taken over by the Government in September, 1887. The postal receipts also show an apparent increase of £48,000; but it should be pointed out that, although carefully estimated in the office of the Government Statist, it may be wide of the mark, the data available being, for reasons already explained,‡ inadequate to show with certainty the progress of this important branch of revenue; and the reductions made from time to time in the postal rates still further increase the difficulty of forming a correct estimate. The total stamp revenue in 1888-9 was £875,314, but after deducting the amount received on account of telegrams, which is known, there remains a balance of £749,856 for stamp duty, postage, and fees, as compared with £667,570 in 1887-8. Thus the stamp revenue, exclusive of telegraphs, showed an increase as compared with that revenue in the previous year of £82,286, as against an increase of £140,792 in 1887-8, of only £1,465 in 1886-7, of £36,931 in 1885-6, and of £43,372 in 1884-5. Of the increase in 1888-9, about £40,400 was estimated to have been derived from postage, and, after allowing a reasonable increase for fees, a balance of £30,000 was set down to stamp duty (taxation). The desirability of distinguishing stamp duty, which is

* See next table.

† See paragraph 245 *ante*.

‡ See footnote (§) to last table.

taxation, from the postal revenue and fees, which are for actual services rendered, is of great importance, and attention has often been drawn in previous issues of this work to the want of reliable information on the subject. The increase in the amount raised by taxation will be subsequently referred to.

Heads of
revenue
detailed.

257. The heads of revenue arranged in the preceding table are necessarily comprehensive; but, in order to give some idea of the subordinate items embraced therein, the details for the two years under some of the more important heads, except taxation, which will be dealt with later on, are summarized below:—

HEADS OF REVENUE DETAILED, 1887-8 AND 1888-9.

Heads of Revenue.	1887-8.	1888-9.
LAND SALES.	£	£
Sales by Auction*	118,482	125,130
„ under Deferred Payments—Progress payments ...	359,549	292,238
„ „ „ „ Final „ ...	65,013	70,920
„ otherwise	6,105	6,445
Total	549,149	494,733
RENTS OF CROWN LANDS.		
Pastoral Occupation—Rents of pastoral and grazing lands†	21,147	28,920
„ „ Grazing licences	21,789	20,896
„ „ Mallee pastoral leases	6,890	5,998
Auriferous and Mineral Lands (including Miners' Rights) ...	16,965	18,144
Licences and Leases (not agricultural)	39,724	45,556
Business Licences on goldfields	302	264
Total	106,817	119,778
WATER SUPPLY, ETC.		
Melbourne (Yan Yean)	174,415	181,814
Geelong	8,415	9,009
Goldfields	21,218	21,345
Interest on Loans to Municipalities	17,546	19,551
„ „ Water Trusts	14,149	14,015
Total	235,743	245,734
OTHER PUBLIC WORKS.		
Alfred Graving Dock and Patent Slips	2,245	3,429
Fifty-ton Crane and Ferry Fares (from Harbour Trust) ...	853	732
Interest on Loans to Municipalities (bridges)	1,666	1,644
Total	4,764	5,805

* Including £4,535 in 1887-8, and £4,228 in 1888-9 for interest on deferred payments. The purchase money of land sold by auction may be spread over three years with interest at 6 per cent. added.
† Under Parts II. and III. of *Land Act* 1884.

HEADS OF REVENUE DETAILED—*continued.*

Heads of Revenue.	1887-8.	1888-9.
POST AND TELEGRAPHS.		
	£	£
Postal receipts, etc. :—		
Postage on letters, etc. (estimated)* ...	334,600†	375,000
„ parcels ...	4,790	6,305
Private boxes, transit rates, etc. ...	3,563	8,195
Commission on money orders and postal notes ...	11,843	13,334
Electric Telegraphs ...	114,879	125,458
Telephone Exchanges ...	13,018‡	} 24,510
Private telephone wires, etc. ...	2,728	
Expenses reimbursed ...	112	75
Grand Total ...	485,533	552,877
FINES, FEES, ETC.		
Fee Stamps sold (estimated) * ...	98,180	108,551
Fees, Preparation and Registration of Grants and Leases, and Survey of Lands	35,564	35,244
„ Customs and Harbour Departments ...	9,072	9,570
„ Law Courts ...	4,125	4,021
„ Curator of Estates of Deceased Persons ...	2,076	1,723
„ Mines and Water Supply Departments ...	943	1,125
„ Transfers of Victuallers' Licences ...	2,298	2,464
„ Factories and Shops ...	2,220	2,339
„ Public Service Board Examinations ...	472	382
„ Other ...	1,510	1,511
Fines, etc.—Law Courts ...	5,307	5,091
„ Customs ...	1,277	1,234
„ Factories and Shops ..	111	547
„ Under <i>Public Service Act</i> , etc. ...	537	424
„ Other§ ...	1,029	772
Total ...	164,721	174,998
REIMBURSEMENTS IN AID.		
Towards Maintenance of Industrial School children, prisoners, and lunatics	22,390	23,159
Receipts for Miscellaneous Services rendered (Police protection, storage of gunpowder, etc.)	11,986	11,374||
Sale of Books and Documents (Government Printer) ...	30,948	29,450
Aboriginal Stations—Sale of produce ...	851	936
Local Forces—Sale of rifles, etc. ...	2,649	2,092
Other Reimbursements ...	217	119
Total ...	69,041	67,130

* See note (†) on page 141 *ante*.

† Estimated from the amount of correspondence transmitted.

‡ Revenue for 10 months only, viz., from 1st September, 1887, the date of purchase by the Government.

§ Including £653 confiscated money and property in 1887-8, and £594 costs, etc., mining leases, etc., in 1888-9.

|| Consisting of £2,945 storage of gunpowder, £3,881 for Police protection, £616 percentage on payment of Imperial pensions, £1,000 from Harbour Trust for collection of wharfage, £258 for work performed by Lands Department, £571 for services of dock staff, £500 charter of steamer, £637 towards maintenance of lighthouses from Colonial Governments, £558 recouped from loans for surveys by Lands Department, etc.

HEADS OF REVENUE DETAILED—*continued.*

Heads of Revenue.	1887-8.	1888-9.
MISCELLANEOUS RECEIPTS.	£	£
Sale of Government Property...	4,481	5,697
Transfers from Intestate Estates Fund to Revenue	3,007	6,895
„ „ Other Trust Funds	...	...
Balance of Intestate Estates	4,824	5,426
Melbourne City Council, etc. (on account of public gardens, etc.)	3,438	3,313
Bridge at Queen-street—Contributions of South and Port Melbourne Municipalities	...	928
Immigration Tax on Chinese	1,370	...
Repayments to the Credit of Appropriations	832	834
Customs Overtime Receipts	2,835	2,810
Education Department—Sale of property, rents, etc.	1,060	5,650
Australian Lloyds, etc.—Bonuses	...	117
Kara Kara Shire—First instalment loan for fencing	...	54
Sale of Police Barracks Site, Ballarat	1,659*	...
<i>Marine Board Act</i>	...	262
Pilots' Earnings—Percentage	...	427
Receipts by Agent-General	367	941
„ under Public Service Regulations	323	218
Other Receipts	1,562	464
Total	25,758	34,036

Recoups.

258. Not included in the revenue shown in the last table but one is an amount of £54,265 recouped in 1888-9 from the Loan Account to reimburse the revenue on account of moneys advanced in the previous year for the erection of State school buildings; also an amount of £1,000 from the trustees of the General Cemetery at Frankston, which had been also advanced in 1887-8. The total amount recouped was thus £55,265. Such amounts were formerly included in the returns of Revenue, but so far as this work is concerned, they are now (except in the table headed “Gross Surplus or Deficiency of Revenue,”† and the first folding sheet published in the second volume), and will in future be, excluded from the accounts of revenue, as will also the advances to be recouped be excluded from the accounts of expenditure.

Unrecouped
advances
1888-9.

259. At the end of the financial year 1888-9, the total amount owing to the revenue was about £171,000, as compared with £150,500 at the end of June, 1888. Of the former sum all but 4 per cent. is for interest due by local bodies on moneys lent for the construction of waterworks, it being arranged not only that the interest should be paid annually, but that a further amount, generally equal to about

* This amount has been previously expended on erection of Police Barracks.

† See table following paragraph 243 *ante*.

2 per cent. upon the sum advanced, should be lodged each year to the credit of a sinking fund, in order that the debt might be eventually extinguished. The following are the particulars of the outstanding balances referred to:—

AMOUNTS DUE TO THE REVENUE, 30TH JUNE, 1889.

When Advanced.	Particulars.	Balance Outstanding.
		£
1874-5 {	Advanced Mining Companies, to assist in development of Mining industry, etc.	4,000
1888-9 & previous years. {	Interest due on Loans for Waterworks—	
	By Corporations	89,197
	„ Waterworks Trusts	31,734
	„ Irrigation and Water Supply Trusts	1,333
1875-6 & subseqt. years {	Ballarat Water Commission—Arrears of Interest on Loans capitalized	32,019
	Municipal Bodies—Ditto	9,627
	Balance of Compensation—to be refunded	208
1887-8	Trustees, Coburg Cemetery	300
1888-9 {	Council of Agriculture—	
	Improvements on Tobin Yallock Swamp	2,205
	Rabbit proof fencing, Kara Kara Shire	500
	Total	171,123

260. In the following table the heads of revenue* and the amounts received under each head are given for the last fifteen financial years:—

Heads of revenue, 1874-5 to 1888-9.

HEADS OF REVENUE, 1874-5 TO 1888-9.

Heads of Revenue.	Year.	Amounts received.	Heads of Revenue.	Year.	Amounts Received.
TAXATION.		£	TAXATION— <i>continued.</i>		£
Custom duties (including wharfage rates)	1874-5	1,628,235	Excise§ ...	1874-5	32,475
	1875-6	1,657,788		1875-6	33,437
	1876-7	1,631,832		1876-7	34,768
	1877-8	1,487,448†		1877-8	36,309
	1878-9	1,378,384		1878-9	36,088
	1879-80	1,377,782		1879-80	41,230
	1880-81	1,474,778		1880-81	136,661
	1881-2	1,694,652		1881-2	216,547
	1882-3	1,769,004		1882-3	134,711
	1883-4	1,769,108		1883-4	123,654
	1884-5	1,919,539‡		1884-5	141,225
	1885-6	2,004,460		1885-6	137,709
	1886-7	2,132,361		1886-7	120,701
	1887-8	2,353,050		1887-8	128,369
	1888-9	2,879,830		1888-9	146,555

* See footnote (†) on page 141 *ante*.

† During and after this year, four-fifths of the wharfage rates for the Port of Melbourne, which had previously formed part of the Customs revenue, were transferred to the Harbour Trust.

‡ Duty on spirits increased on 17th July, 1884.

§ Beer and tobacco duties imposed on the 1st November, 1880, the former having expired by effluxion of time on the 31st August, 1882. Duty on spirits increased on 17th July, 1884.

HEADS OF REVENUE, 1874-5 TO 1888-9—continued.

Heads of Revenue.	Year.	Amounts Received.	Heads of Revenue.	Year.	Amounts Received.
		£			£
TAXATION— continued.	1874-5	19,935	TAXATION— continued.	1874-5	...
	1875-6	22,104		1875-6	7,191†
	1876-7	20,993		1876-7	27,248
	1877-8	22,647		1877-8	26,672
	1878-9	20,310		1878-9	24,956
	1879-80	19,194		1879-80	22,470
	1880-81	20,577		1880-81	23,807
	1881-2	26,263		1881-2	27,324
	1882-3	27,787		1882-3	28,685
	1883-4	30,871		1883-4	28,575
	1884-5	31,176		1884-5	27,529
	1885-6	32,710		1885-6	28,769
	1886-7	34,920		1886-7	28,104
	1887-8	34,327		1887-8	27,879
	1888-9	45,884		1888-9	34,023
Ports and harbours (chiefly tonnage dues)	1874-5	10,714	Duties on bank notes	1874-5	...
	1875-6	10,712		1875-6	...
	1876-7	11,688		1876-7	...
	1877-8	17,150*		1877-8	...
	1878-9	20,116		1878-9	...
	1879-80	21,761		1879-80	83,005
	1880-81	23,906		1880-81	115,844
	1881-2	25,977		1881-2	131,020
	1882-3	28,381		1882-3	133,433
	1883-4	31,623		1883-4	133,651
	1884-5	32,535		1884-5	143,382
	1885-6	33,922		1885-6	165,313
	1886-7	18,898†		1886-7	165,000
	1887-8	21,002		1887-8	230,000
	1888-9	23,904		1888-9	260,000
Licences (business)	1874-5	32,526	Stamp duties§ ...	1874-5	...
	1875-6	48,963		1875-6	...
	1876-7	44,104		1876-7	...
	1877-8	72,500		1877-8	50,227
	1878-9	47,983		1878-9	202,251
	1879-80	37,928		1879-80	87,553
	1880-81	78,141		1880-81	129,990
	1881-2	74,368		1881-2	121,555
	1882-3	86,648		1882-3	125,606
	1883-4	77,154		1883-4	123,884
	1884-5	124,370		1884-5	128,415
	1885-6	104,907		1885-6	126,770
	1886-7	114,909		1886-7	124,742
	1887-8	151,861		1887-8	124,515
	1888-9	236,449		1888-9	123,025
Duties on estates of deceased per- sons	1874-5	32,526	Land Tax|| ...	1874-5	...
	1875-6	48,963		1875-6	...
	1876-7	44,104		1876-7	...
	1877-8	72,500		1877-8	50,227
	1878-9	47,983		1878-9	202,251
	1879-80	37,928		1879-80	87,553
	1880-81	78,141		1880-81	129,990
	1881-2	74,368		1881-2	121,555
	1882-3	86,648		1882-3	125,606
	1883-4	77,154		1883-4	123,884
	1884-5	124,370		1884-5	128,415
	1885-6	104,907		1885-6	126,770
	1886-7	114,909		1886-7	124,742
	1887-8	151,861		1887-8	124,515
	1888-9	236,449		1888-9	123,025

* Including a proportion, amounting to £4,600, of publicans' licence fees, etc., received, for the first time, under Act 40 Vict. No. 566, section 111.

† Decrease due to the proportion of revenue formerly derived from publicans' licences, etc., now payable into a Trust Fund, as directed by the *Licensing Act* 1885.

‡ For six months only.

§ The duties were imposed on the 18th December, 1879, and consequently the amount received in 1879-80 was for only 6½ months. Since 1st January, 1884, the revenue therefrom has been estimated. See footnote (‡) on page 141 *ante*. Particulars of the duties levied are given in a subsequent paragraph.

|| The amount of land tax payable annually varied in the years named from £126,000 to £124,000. The fluctuations in the revenue above and below this limit were due to the irregular payment of the tax. Further particulars are given later on.

HEADS OF REVENUE, 1874-5 TO 1888-9—*continued.*

[illegible]

* Including, for the first time, revenue derived from the Melbourne and Hobson's Bay system—purchased by the Government—amounting to £203,679. This amount consisted of £43,728 net revenue for 1878-9, and £159,951 gross revenue for 1879-80.

† Including interest on loans to local bodies.

HEADS OF REVENUE, 1874-5 TO 1888-9—continued.

Heads of Revenue.	Year.	Amounts Received.	Heads of Revenue.	Year.	Amounts Received.
POST AND TELE- GRAPHS.		£	OTHER SOURCES— <i>continued.</i>		£
	1874-5	198,326		1874-5	111,304
	1875-6	209,213		1875-6	112,664
	1876-7	226,597		1876-7	121,676
	1877-8	239,002		1877-8	119,632
	1878-9	244,761		1878-9	113,177
	1879-80	249,414		1879-80	110,639
Postage, tele-	1880-81	272,316	Fees, fines, etc.† (exclusive of	1880-81	113,736
graphs, tele-	1881-2	297,701	Land Act pen-	1881-2	120,768
phones, money	1882-3	324,967	alties)	1882-3	117,296
orders, etc.*	1883-4	349,278		1883-4	111,695
	1884-5	380,556		1884-5	123,428
	1885-6	394,184		1885-6	128,523
	1886-7	413,535		1886-7	131,095
	1887-8	485,533		1887-8	164,721
	1888-9	552,877		1888-9	174,998
OTHER SOURCES.					
	1874-5	7,504		1874-5	66,874
	1875-6	7,659		1875-6	38,595
	1876-7	7,512		1876-7	79,456
	1877-8	7,247		1877-8	70,716
	1878-9	7,906		1878-9	42,281
	1879-80	10,158	Interest on public	1879-80	45,611
	1880-81	10,197	Account, etc.	1880-81	78,605
Mint charges ...	1881-2	10,917		1881-2	92,025
	1882-3	11,292		1882-3	55,922
	1883-4	10,415		1883-4	85,537
	1884-5	13,042		1884-5	98,341
	1885-6	11,705		1885-6	84,973
	1886-7	11,058		1886-7	93,216
	1887-8	10,377		1887-8	136,811
	1888-9	10,051		1888-9	107,888
	1874-5	4,299		1874-5	749
	1875-6	10,695		1875-6	674
	1876-7	7,104		1876-7	730
	1877-8	447		1877-8	824
	1878-9	6,624		1878-9	935
	1879-80	6,350		1879-80	799
Mint subsidy re-	1880-81	5,628	Rents (other than	1880-81	921
turned	1881-2	5,344	Land)	1881-2	997
	1882-3	4,103		1882-3	1,548
	1883-4	4,852		1883-4	3,058
	1884-5	5,304		1884-5	2,031
	1885-6	4,613		1885-6	14,905†
	1886-7	1,986		1886-7	5,049
	1887-8	3,874		1887-8	2,908
	1888-9	3,642		1888-9	3,224

* Partly estimated since 1882-3. See also footnote (†) on page 141 ante.

† Including (during this year only) rents charged to officers for quarters, and added to their salaries.

HEADS OF REVENUE, 1874-5 TO 1888-9—*continued.*

Heads of Revenue.	Year.	Amounts Received.	Heads of Revenue.	Year.	Amounts Received.
OTHER SOURCES— <i>continued.</i>		£	OTHER SOURCES— <i>continued.</i>		£
	1874-5	28,981		1874-5	55,770
	1875-6	37,619		1875-6	16,317
	1876-7	34,372		1876-7	19,609
	1877-8	36,774		1877-8	20,449
	1878-9	28,637		1878-9	28,167
	1879-80	23,860		1879-80	24,655
	1880-81	31,290		1880-81	41,861
Reimbursements in aid	1881-2	33,675	Miscellaneous re- ceipts *	1881-2	27,131
	1882-3	33,570		1882-3	46,211
	1883-4	49,441		1883-4	36,325
	1884-5	52,232		1884-5	31,339
	1875-6	49,187		1885-6	29,178
	1886-7	54,033		1886-7	23,320
	1887-8	69,041		1887-8	25,068
	1888-9	67,130		1888-9	34,036

SUMMARY OF HEADS OF REVENUE, 1874-5 TO 1888-9.

Year.	Revenue derived from—					Total Revenue Proper.	Recoups from Loans and Assets realized.	Grand Total Revenue.
	Taxation.	Land.	Public Works.	Post and Tele- graphs.	Other Sources.			
	£	£	£	£	£	£	£	£
1874-5	1,724,822	946,753	1,024,318	198,326	275,481	4,169,700	66,723	4,236,423
1875-6	1,780,392	1,020,012	1,091,316	209,213	224,223	4,325,156	...	4,325,156
1876-7	1,770,685	1,046,415	1,199,589	226,597	270,452	4,513,738	210,139	4,723,877
1877-8	1,712,953	957,715	1,319,653	239,002	256,089	4,485,412	19,001	4,504,413
1878-9	1,730,088	969,235	1,348,466	244,761	227,727	4,520,277	101,243	4,621,520
1879-80	1,690,923	844,064	1,594,154	249,414	222,072	4,600,627	20,655	4,621,282
1880-81	2,003,704	836,470	1,720,313	272,316	282,238	5,115,041	70,970	5,186,011†
1881-2	2,317,706	826,139	1,857,569	297,701	290,857	5,589,972	2,390	5,592,362
1882-3	2,334,255	679,933	1,992,969	324,967	269,942	5,602,066	9,187	5,611,253
1883-4	2,318,520	719,309	2,246,148	349,278	301,323	5,934,578	109	5,934,687
1884-5	2,548,171	666,557	2,369,360	380,556	325,717	6,290,361	...	6,290,361
1885-6	2,634,560	563,608	2,500,970	394,184	323,084	6,416,406	64,615	6,481,021
1886-7	2,739,635	587,091	2,673,808	413,535	319,757	6,733,826	...	6,733,826
1887-8	3,071,003	656,267	2,981,995	485,533	412,800	7,607,598	24,177	7,631,775
1888-9	3,749,670	616,028	3,356,446	552,877	400,969	8,675,990	55,265	8,731,255

261. Of the total expenditure of Victoria in 1888-9, £1,302,000—or 16½ per cent—was disbursed to defray the cost of Government, maintenance of law and order, and provision against foreign attacks; £774,000—or 10 per cent.—was contributed towards public instruction and the advancement and dissemination of knowledge; £284,000—or nearly 4 per cent.—was expended on public charities, or devoted to

Heads of ex-
penditure,
1887-8 and
1888-9.

* Including "Immigration deposits," £23,074, and accumulation of Pension Fund transferred to revenue, £14,500, in 1874-5; and fire insurance on Government Printing Office, £12,000, in 1882-3.

† Not including £500,000 raised by means of Treasury Bonds.

the preservation of the public health; £101,000—or nearly $1\frac{1}{4}$ per cent.—was expended on the management and survey of the Crown lands, being slightly less than the gross annual rental therefrom during the same financial year; as much as £3,837,000—or 48 per cent.—was absorbed in working the various commercial undertakings of the Government, viz., £1,875,000 on Railways and Waterworks, £619,000 on Post and Telegraphs, and £1,343,000* in interest upon loans raised for their construction; £116,000 was paid as interest on amounts borrowed for the construction of other public works; £87,000 was the cost of collecting the revenue from Customs duties and Excise, whilst £35,000 was spent on the maintenance of Ports and Harbours; and £192,000—or $2\frac{1}{2}$ per cent.—was granted in aid of the agricultural and mining industries. The amounts just enumerated, together with £261,000,† expended on miscellaneous services, form the ordinary annual expenditure for the year; but besides this, an amount of £930,000—or $11\frac{1}{2}$ per cent. of the total expenditure—was spent on productive and unproductive public works of a permanent character, viz., £121,000 on Railways, and £809,000 on “Miscellaneous Public Works,” which embraces the cost of erection of public offices and buildings of all kinds, expenditure on roads and bridges, and municipal subsidies (£341,000). These amounts might be considered as a set off against the proceeds of land sales, before referred to,‡ which they even exceeded by £435,000. The following is a classification of the expenditure§ under 9 divisions and 26 subsidiary heads, during the years 1887-8 and 1888-9, also the increase or decrease in the latter year:—

HEADS OF EXPENDITURE,|| 1887-8 AND 1888-9.

Heads of Expenditure.	Amounts Expended.		Increase.	Decrease.
	1887-8.	1888-9.		
GENERAL GOVERNMENT.				
Civil list¶	£ 45,361	£ 40,564	£ ...	£ 4,797
Legislature	58,631	73,216	14,585	...
Civil Establishment**	132,983	146,617	13,634	...
Retiring allowances and pensions ...	88,484	96,610	8,126	...
Gratuities, compensations, etc. ...	43,329	53,916	10,587	...
Total	368,788	410,923	42,135	...

* The total amount of interest and expenses of the public debt was £1,459,000, but the amount here given is that payable for Railways and Waterworks only.

† This, however, includes the exceptional item of £178,700 towards defraying the cost of the Centennial International Exhibition, Melbourne.

‡ See paragraph 255 *ante*.

§ See footnote (†) on page 141 *ante*.

|| For further details see table following paragraph 263 *post*.

¶ Including Governor's salary and salaries of Ministers, Commissioners of Audit, Agent-General, expenses of Executive Council and Public Service Board.

** Including cost of the following departments:—Chief Secretary, Shorthand Writer, Agent-General's Office, Audit Office, Registrar of Friendly Societies, Treasury, Stores and Transport, and Government Printer.

HEADS OF EXPENDITURE,* 1887-8 AND 1888-9—continued.

Heads of Expenditure.	Amounts Expended.		Increase.	Decrease.
	1887-8.	1888 9.		
LAW, ORDER, AND PROTECTION.	£	£	£	£
Judicial and legal ...	211,111	217,180	6,069	...
Police ...	240,840	261,329	20,489	...
Gaols and penal establishments ...	65,385	66,163	778	...
Defences—Naval and Military† ...	322,119	346,623	24,504	...
Total ...	839,455	891,295	51,840	...
EDUCATION, SCIENCE, CHARITY, ETC.				
Public instruction, science, etc.‡ ...	722,102	774,449	52,347	...
Charitable institutions, medical, etc.§ ...	278,879	283,986	5,107	...
Total ...	1,000,981	1,058,435	57,454	...
CROWN LANDS.				
Administration and survey ...	106,408	100,573	...	5,835
Agriculture, etc. ...	69,947	73,229	3,282	...
Mining ...	117,837	119,139	1,302	...
Total ...	294,192	292,941	...	1,251
PUBLIC WORKS.				
Railways—Working expenses|| ...	1,574,786	1,803,124	228,338	...
„ Construction account ...	118,090	120,873	2,783	...
Water supply ...	46,966	71,989	25,023	...
Other public works¶ ...	718,427	888,803	90,376	...
Total ...	2,458,269	2,804,789	346,520	...
Post and Telegraphs** ...	645,113	619,070	...	24,043
PUBLIC DEBT.				
Interest and expenses—Railways ...	1,070,950	1,126,765	55,815	...
„ „ Water supply ...	199,718	216,195	16,477	...
„ „ Other works ...	114,453	116,282	1,829	...
Total ...	1,385,121	1,459,242	74,121	...

* For further details, see table following paragraph 263 *post*.

† For Expenditure on Defences. See also Part “Defences,” *post*.

‡ Including expenditure under the following heads:—Education, Government Statist, Observatory, Government Botanist, Public Library, Museums and National Gallery, Grants to Mechanics’ Institutes, Free Libraries, etc., and Grants to Schools of Mines and Design.

§ Including expenditure under the following heads:—Chief Medical Officer, Central Board of Health, Hospitals for Insane, Industrial and Reformatory Schools, and Grants to Charitable Institutions.

|| The figures in this line do not represent the actual working expenses, but only the amounts charged to each year under the Annual Appropriation Acts. The actual amount of working expenses, as shown in the Railway Commissioners’ Annual Reports, was £1,753,000 in 1887-8, and £1,945,000 in 1888-9. See also footnote (*) on page 160 *post*.

¶ The cost of erecting and repairing Government Offices, and making and repairing furniture therefor, is not charged to the respective departments, but is placed under this head, which also embraces the cost of all Public Works, except Railways, Waterworks, and Telegraph lines, and works provided for out of loans; it also includes expenditure on Roads and Bridges, and the annual subsidy of £310,000—but increased to £340,854 in 1888-9—to Municipalities. For a summary of the various works, see detailed table, page 160 *post*.

** Including interest on Post Office Savings Banks deposits.

HEADS OF EXPENDITURE,* 1887-8 AND 1888-9—continued.

Heads of Expenditure.	Amount Expended.		Increase.	Decrease.
	1887-8.	1888-9.		
TRADE, NAVIGATION, ETC.				
Customs†	83,975	87,412	3,437	...
Harbours and lights	32,460	34,595	2,135	...
Total	116,435	122,007	5,572	...
OTHER EXPENDITURE.				
Mint subsidy‡	20,000	20,000	...	...
Aborigines	10,982	10,949	...	33
Miscellaneous services§	149,815	230,251	80,436	...
Total	180,797	261,200	80,403	...
Grand Total	7,287,151	7,919,902	632,751	...

NOTE.—For particulars of Expenditure in 1889-90 see Appendices at the end of this volume.

Chief items
of increased
expendi-
ture, 1888-9.

262. It will be observed that an increase appears in the expenditure under all the heads but four, the net increase amounting to £632,751. The most prominent increases were £228,300|| in the working expenses of Railways; £90,400 under Miscellaneous Public Works—which includes £30,554 increased municipal subsidy, £28,000 expended on Parliamentary Buildings and the General Post Office, and £27,000 on Roads and Bridges; £80,400—of which nearly £79,000 was in connexion with the late Exhibition—under Miscellaneous Services; £52,300 under Public Instruction; £25,000 under Water Supply—of which about £24,100 was on account of expenses of boring for water, projects of water supply, and in connexion with Water Supply and Irrigation Trusts; £24,500 under Defences—being more than accounted for by an increase of £28,000 in Defence works and buildings; £20,500 under Police; £18,700 under Retiring Allowances and Pensions; £14,600 under Legislature, in consequence of expenses in connexion with the new Electoral Bill; and £13,600 under Civil Establishment—practically confined to only one department, viz., the Government Printer's. The increase of £52,300 under

* For further details see table following paragraph 263 *post*.

† Including refunds of duty £275 in 1887-8, and of licence fees £52 in 1888-9.

‡ Although the annual subsidy to the Mint is £20,000, portion of that sum has been repaid each year to the revenue. See table following paragraph 255 *ante*, under the head "Mint subsidy returned."

§ Including £100,000 in 1887-8, and £178,694 in 1888-9, towards the expenses of the Melbourne Centennial International Exhibition.

|| This represents merely the increase in the amounts charged to the two years. The increase in the *actual* working expenses was only £192,800. See footnote (||) on page 153 *ante*.

Public Instruction was partly due to the increased cost of State education—£37,400, and partly to additional endowments and grants to educational institutions generally. It has already been stated that nearly half the total expenditure is in connexion with the working of the Railways, Waterworks, and Post and Telegraphs. The most important of these is, of course, the Railways, and a comparison of the Railway finances of 1888-9 with those of the previous year shows that, whilst the actual working expenses* increased by £192,800, the revenue increased by £363,400. Owing to the constantly-increasing amount borrowed for railway construction, the interest paid thereon increased during the year referred to by nearly £56,000. The next most important commercial undertakings are the Postal and Telegraph services, which it has been the policy of the Government to work, irrespective of loss; thus, whilst the annual expenditure in 1888-9 on these services was £619,000, it is estimated that the annual revenue did not quite reach £553,000, and thus the deficiency in that year amounted to about £66,000† as against as much as £158,000 in the previous year;‡ if, however, allowance were made for official correspondence, transmitted free of cost, the deficit would probably have been wiped out. In previous years the deficit, under the head of Post and Telegraphs, averaged fully £100,000. This highly satisfactory improvement in 1888-9 was due not only to a substantial increase in the postal revenue (respecting which, however, there is some doubt),‡ but to a decrease of £24,000 in the expenditure. This decrease was, however, not due to a saving in the cost of administration—which on the contrary was higher by £25,000, whilst an increase of £10,000 also appears in the interest paid on the Savings Bank deposits, and of £5,000 under the Telephone Exchange—but partly to the fact that the expenditure of 1887-8 included the exceptional item of £40,000 for the purchase of the Telephone Exchange, and partly to a saving of £23,400 in the cost of steam postal services consequent on the co-operation of the different colonies in establishing one uniform Australian foreign mail service. The decrease under the head of Civil List was merely accidental, and was due to the contribution to the protectorate of New Guinea for both 1886-7 and 1887-8 having been paid in the latter year.

263. The details of the expenditure for the same two years under several of the more important heads are as follow:—

Heads of expenditure, detailed.

* See last footnote.

† For further details see postal receipts and expenditure in Part "Interchange" in the second volume.

‡ The amount of postal revenue is not accurately known. See footnote (†) to table on page 141 *ante*.

HEADS OF EXPENDITURE DETAILED, 1887-8 AND 1888-9.

Heads of Expenditure.						1887-8.	1888-9.
						£	£
CIVIL LIST.							
Governor's Salary	...	...	...	...	...	10,000	10,000
Salaries of Ministers	...	...	...	...	...	15,500	15,344
Executive Council	...	...	...	...	...	1,474	1,490
Agent-General	...	...	...	...	...	2,500	2,500
Commissioners of Audit	...	...	...	...	...	2,000	2,000
Public Service Board	...	...	...	...	...	4,500	4,446
Protectorate of New Guinea—Contribution towards	...	...	...	...	...	9,387*	4,784
Total	...	...	...	...	...	45,361	40,564
LEGISLATURE.							
Legislative Council	...	...	...	...	...	6,108	6,028
„ Assembly	...	...	...	...	...	11,281	11,087
Parliamentary Library	...	...	...	...	...	3,134	2,997
„ Refreshment Rooms	...	...	...	...	...	1,105	1,242
Parliament Buildings Commission	...	...	...	...	...	493	402
Victorian <i>Hansard</i>...	...	...	...	...	...	2,225	2,219
Expenses of Members of the Legislative Assembly	...	...	...	...	...	22,656	21,709
Electoral Expenses	...	...	...	...	...	10,736	27,450
Federal Council—Contribution to	...	...	...	...	...	893	82
Total	...	...	...	...	...	58,631	73,216
CIVIL ESTABLISHMENT.							
Public Service Board—Office	...	...	...	...	...	2,527	2,640
Chief Secretary's Office	...	...	...	...	...	9,270	9,091
Secretary to Premier	...	...	...	...	...	5,995	4,939
Shorthand Writer	...	...	...	...	...	2,110	2,093
Agent-General's Office	...	...	...	...	...	3,495	3,530
Audit Office	...	...	...	...	...	9,101	9,260
Treasury	...	...	...	...	...	31,636	30,656
Government Printer	...	...	...	...	...	59,000	72,608
„ „ Stamp Printing	...	...	...	...	...	5,527	5,610
Inspector of Stores	...	...	...	...	...	595	668
Registrar of Friendly Societies†	...	...	...	...	...	367	401
Inspector of Factories and Shops	...	...	...	...	...	2,627	2,375
Marine Board	...	...	...	...	...	...	2,146
Sundries	...	...	...	...	...	733	600
Total	...	...	...	...	...	132,983	146,617
JUDICIAL AND LEGAL.							
Judges' Salaries (including Master-in-Equity)	...	...	...	...	...	20,000	20,750
„ other Expenditure	...	...	...	...	...	5,193	5,105
Crown Law Officers	...	...	...	...	...	20,328	20,357
„ Solicitor	...	...	...	...	...	7,226	6,993
Prothonotary	...	...	...	...	...	2,317	2,282
Master-in-Equity and Lunacy	...	...	...	...	...	4,403	4,723

* Including arrears from 1886-7.

† The statistical and actuarial work in connexion with Friendly Societies is performed in the office of the Government Statist, which is placed under the head of "Public Instruction, Science, etc." *post*.

HEADS OF EXPENDITURE DETAILED—*continued.*

Heads of Expenditure.	1887-8.	1888-9.
JUDICIAL AND LEGAL—<i>continued.</i>	£	£
Court of Insolvency	1,023	..
Registrar of Titles	} 43,461	{ 28,095
Registrar-General		
„ Interest on purchase money of land, etc., bought near Titles Office *	2,972	3,003
Deputy Registrars	6,500	6,498
Sheriffs	25,898	27,170
Judges—County Courts, Courts of Insolvency, Courts of Mines, and General and Petty Sessions	10,431	9,297
„ other Expenditure	14,586	16,690
Police Magistrates and Wardens	17,928	18,091
Clerks of Courts	20,005	20,407
Coroners	6,047	7,145
Curator of Estates of Deceased Persons... ..	1,633	1,648
<i>Land Tax Act</i> Administration	1,157	1,060
Sundries	3	...
Total	211,111	217,180
DEFENCES.		
Special Appropriation authorized under Act 47 Vict. No. 777 (for 5 years)	110,000	110,000
Voted to augment special appropriation consequent upon the increase of the permanent forces	21,278	23,958
Civil Staff	6,198	6,059
Ammunition Fund—To replace loss on supply to Rifle Clubs, etc.	3,000	5,000
Purchase of Rifles and modern warlike stores	{ 2,088† 6,000 }	{ 2,600†
Cadet Corps	3,239	3,954
Mounted Rifles	5,388	6,619
Grants to Rifle Associations, etc., for prizes; also prizes for drill and shooting	1,975	3,426
Expenses in connexion with Easter Encampment	11,689	5,000
Rifle Volunteers and Rifle Clubs	3,208	4,524
Grant for invention of Torpedo Dropping Gear ... ..	..	150
Grant for strengthening two private vessels to render them eligible as armed cruisers	1,000	...
Compensation for injuries sustained	147	356
Sundries	148	136
Total	65,358	61,782
Defence Works and Buildings ..	146,761	174,841
Grand Total	322,119	346,623

* The amount required—£75,073—was made available by Act 49 Vict. No. 835 out of the “Assurance Fund” under the *Transfer of Land Statute*.

† Equivalent in each case to the amount realized in the previous year on the sale of rifles and obsolete stores.

HEADS OF EXPENDITURE DETAILED—*continued.*

Heads of Expenditure.	1887-8.	1888-9.
PUBLIC INSTRUCTION, SCIENCE, ETC.		
	£	£
State School Education*	626,739	664,118
University—Endowment	14,500	16,500
„ Grant in aid of laboratories ... ..	...	3,500
„ School for Biology	7,000	...
College of Pharmacy	900	1,000
Schools of Mines and Technical Schools—Working Men's College	3,000	8,000†
Schools of Mines	6,200	12,400
„ Design	1,399	1,393§
„ Arts	500	2,300
Melbourne Public Library, Museums, and National Gallery... ..	23,865	25,971
Mechanics' Institutes, Public Libraries, etc.†	15,600	17,000
Victorian Academy of Arts	250	...
Art Galleries—Ballarat, Sandhurst, etc.... ..	2,000	2,250
Zoological and Acclimatisation Society, etc.	4,200	3,200
Royal Society	200	200
Geographical Society... ..	...	1,000
Government Statist	6,918	6,666
„ Astronomer	6,067	6,166
„ Botanist	2,744	2,703
Other Expenditure	20	82
Total	722,102	774,449
CHARITABLE INSTITUTIONS, MEDICAL, ETC.		
Charitable Institutions—Grant in aid	120,382	119,999
Industrial and Reformatory Schools—State	41,730	41,308
Grant in Aid of Private Institutions	1,764	1,638
Hospitals for the Insane	101,994	106,276
Public Health, Quarantine, etc.	7,310	7,816
Vaccination Allowances	5,496	5,499
Allowance to Instructor of the Blind, etc.	100	240
Intercolonial Medical Congress ... ..	...	1,108
Relief of Ship-wrecked Seamen	103	102
Total	278,879	283,986
CROWN LANDS.		
General Staff for Survey, Sale, and Management of Crown Lands	63,689	62,501
Surveys by contract, including surveys in Mallee districts	4,571	3,987
Surveys of "Grazing Areas"	2,945	2,070
Feature Surveys of Rivers in Gippsland	769	...

* Including cost of maintenance (with fittings and furniture) of school buildings, amounting to about £24,994 in 1888-9, but exclusive of pensions and gratuities. See also table following paragraph 270 *post*.

† Including £8,100 in 1887-8, and £1,000 in 1888-9, in aid of buildings.

‡ Including £5,000 in aid of buildings.

§ Including £5,000 in aid of buildings.

HEADS OF EXPENDITURE DETAILED—*continued.*

Heads of Expenditure.	1887-8.	1888-9.
CROWN LANDS—<i>continued.</i>	£	£
Parks, Gardens, etc.—		
Botanical Gardens and Reserves	8,757	9,734
Public Parks, Gardens, and Reserves in and around Melbourne	11,557	9,007
Public Parks and Gardens in Country Districts—Fencing and Improving	8,717	8,683
Land Purchased as Site for Public Park ... ..	...	1,667
Other Expenditure	5,403*	2,924
Total	106,408	100,573
• AGRICULTURE, ETC.		
Grants to Agricultural and Horticultural Societies, etc. ...	23,477	22,153
Special Prizes awarded by National Agricultural Society (including £500 during Centennial Exhibition)	...	955
Special Prizes and Awards for invention of improvements in Agricultural machinery	80	100
Prizes for best managed farms in Victoria	150	150
Expenses of Judges in connexion with Grants referred to in the two preceding lines, etc.	...	393
Grant to the Board of Viticulture	500	300
State Forests and Nurseries	6,860	8,783
Experimental Cultivation	297	167
Eradication of Vine Diseases	1,614	645
" Bathurst burr at Swan Hill ... ..	...	122
Scab Prevention and Diseases in Stock	7,968	8,230
Extermination of Rabbits and Wild Animals	21,051	25,138
Rates on Mallee Blocks held by Government	327	175
Cost of Rabbit-proof Fencing in the Mallee Country ..	5,630	...
Machinery and Appliances for use in Technical Education of an Agricultural Character	...	1,731
Instruction in Dairying, Fruit-growing, etc.; also Expenses connected with Employment of Experts	...	833
Departmental and other Expenditure	1,993	3,354
Total	69,947	73,229
MINING.		
Mining Department... ..	20,730	20,952
Mining Boards	3,500	3,500
Purchase and Working of Diamond Drills to assist Miners in Prospecting Operations, etc.	80,742	81,072
Prospecting and Boring for Coal	4,344	2,909
Geological Surveys, etc.	2,480	3,500
Underground Surveys of Mines	1,193	1,327
Cutting Tracks and opening up unexplored areas... ..	2,493	3,396
Construction of Dynamite and Powder Magazines	1,566	1,410
Reward for Discovery of Ararat Goldfield	100	...
Miscellaneous	689	1,073
Total	117,837	119,139

* Including £4,250 purchase of Commercial Bank of South Australia's share in the interest of certain Mallee blocks resumed by the Crown.

HEADS OF EXPENDITURE DETAILED—*continued.*

Heads of Expenditure.	1887-8.	1888-9.
RAILWAYS.		
	£	£
Commissioners' Salaries	6,000	6,000
Salaries and Wages	119,512	134,588
Working Expenses	1,421,252	1,547,362
Ditto on account of preceding year	25,000	115,000
Compensation to injured persons	3,022	174
Total Working Expenses*	1,574,786	1,803,124
Paid to "Railway Construction Account" †	113,946	120,873
Towards Construction	4,144	...
Total (including Capital Account)	1,692,876	1,923,997
WATER SUPPLY.		
Melbourne—Salaries and Maintenance	21,930	23,863
Country Waterworks—		
Salaries	8,725	9,233
Coliban District—Travelling Expenses, Contingencies, etc.	4,399	5,578
Geelong District do. do.	1,332	1,092
Boring for Water and Repairs to Government Reservoirs	7,930	17,824
Cost of making wells in the Mallee country ... ..	...	1,169
Surveys and Reports <i>re</i> Projects of Water Supply and Gauging Rivers	2,650	9,677
Water and Irrigation Trusts—Preliminary Expenses, Expenses of Surveys ... ..	...	3,315
Prizes for best Irrigated Farm and Crops ... ..	...	238
Total	46,966	71,989
OTHER PUBLIC WORKS.		
Works and Buildings (including Furniture, Fittings, etc.)—		
Government House	}	2,729
Country Residence for Governor		
" " " Maintenance		
Parliamentary Buildings	193	11,743
Public Offices, etc.—		
Public Offices, Melbourne	2,819	132
New Printing Office... ..	20,000	10,000
" " Fittings, Furniture for, etc....	497	998
Treasury Buildings (country)—Buildings, Repairs, Additions, etc.	2,000	1,091
Registrar-General's Offices—Addition to Strong room	203	...
Sandhurst Public Offices—Erection of	3,343†	...
Ballarat Public Offices—Erection of	819§	...
Land purchased near Law Courts ... ..	...	6,225
Rents and Furniture	23,439	24,984

* The actual expenditure for and on account of 1887-8 was about £1,753,000, and on account of 1888-9 about £1,945,800, as shown in the Railway Commissioners' reports, but only the above amounts could be charged to the year in consequence of the estimates, on which the *Appropriation Acts* were based, having been insufficient.

† See footnote (†) on page 168 *post*.

‡ Including Law Courts.

§ Extension of Post Office.

HEADS OF EXPENDITURE DETAILED—*continued.*

Heads of Expenditure.	1887-8.	1888-9.
	£	£
OTHER PUBLIC WORKS—<i>continued.</i>		
Works and Buildings (including Furniture, Fittings, etc.)—		
Public Offices, etc.—		
Repairs and Additions	495	1,163
Fencing Public Buildings, Sites, and Reserves under Government, including Repairs	13	888
Telephonic communication for police and other buildings	784	635
Insurance	505	219
Court Houses	18,799	16,858
Police Buildings, etc.	31,009	36,557
Gaols and Penal Establishments	2,408	6,633
State Schools, etc.—Erection of Training College ...	...	8,000
Public Library, National Gallery, and Museums ...	8,488	958
Observatory	192	87
Lunatic Asylums	20,220	16,471
Industrial and Reformatory Schools	494	1,231
Immigrants Aid Society—Painting and Improvements to Building	499	...
Cemeteries	1,027	1,034
Sanatory Station—Fencing, Repairs, etc.	1,422	1,417
Lands and Agriculture (including parks, gardens, etc.)	2,725	2,960
Laboratory for Agricultural Chemist	398	200
Raising Low-lying Lands, Draining Lands, Spreading Silt, etc.	37,656	38,886
Preventing Encroachment by Sand, etc.	650	294
Post and Telegraph Offices—		
General Post Office, Melbourne—Extension of Building, etc.	31,998	49,219
Post Offices at other places*	17,230	23,898
Customs Buildings	1,560	1,289
Wharfs, Jetties, Harbours, Rivers, etc.	62,689	56,166
Lighthouses and Lightships	6,112	12,791
Miscellaneous	430	213
Total Works and Buildings, etc. ...	303,570	335,969
Subsidy to Municipalities	310,300	340,854
Roads and Bridges	53,202	80,202
Departmental Expenses	51,355	51,778
Total	718,427	808,803
POST AND TELEGRAPHS.†		
Post and Telegraph Offices—Administration	340,834	365,617
Inland Mail Service	108,174	106,841‡
Steam Postal Communication§	70,106	46,739

* See also under the head of "Public Offices."

† Exclusive of post and telegraph office buildings, which are included under the head "General Public Works;" also exclusive of cost of printing stamps, entered with Government Printer under the head of "Civil Establishment."

‡ Of which £50,986 was paid to the Railway Department, and £55,855 to the private contractors, etc.

§ Including sums paid as gratuities to masters of vessels, £1,934 in 1887-8, and £4,383 in 1888-9; also subsidy for steamer calling at Hayannah Harbour, New Hebrides (including £500 arrears), £1,300.

HEADS OF EXPENDITURE DETAILED—*continued.*

Heads of Expenditure.	1887-8.	1888-9.
POST AND TELEGRAPHS—<i>continued</i>		
	£	£
Telegraph Lines—Construction, Repairs, etc. ...	13,554	14,718
Pneumatic tubes between City Telegraph Offices... ..	...	11
Telephones—		
Purchase of property, goodwill, etc., of the Victorian Telephone Exchange Company; and Solicitors' costs, £204	40,204	...
Telephone Exchanges, telephones, battery materials, wire, etc.	7,497	12,497
New multiple switch-boards, cost of ... ..	...	527
Maintenance of lines to various departments... ..	370	370
Subsidy towards Duplicate Telegraph Cable (Port Darwin to Penang)	14,544	13,163
,, to Eastern Extension Telegraph Co., Tasmania* ...	629	1,045
Interest on Post Office Savings Banks Deposits—4 per cent.	46,870	57,091
Towards a new steam launch ... ..	...	410
Miscellaneous†	331	41
Total	643,113	619,070
PUBLIC DEBT.		
Interest payable—		
In London	1,291,755	1,363,753
In Melbourne	74,019	74,971
Total Interest	1,365,774	1,438,724
Expenses of paying Interest in London—		
Commission to Banks of $\frac{1}{2}$ per cent.	3,182	3,161
Commission to Bank of from £450 to £500 per million for inscribing stock and paying interest thereon	7,984	8,709
Premium on remittances	7,187	7,540
Stamps, advertising, etc.	994	1,108
Total	1,385,121	1,459,242
MISCELLANEOUS SERVICES.		
Expenses of Commissions of Inquiry	3,406	3,167
Expenses <i>re</i> Chinese Immigration (including Conference at Sydney)	482	...
Law Costs, Awards, etc.	284	3,434‡
<i>Poisons and Pharmacy Act</i> —Administration	300	300
Advertising	5,329	5,000
Transport, etc.	2,066	2,405
Exhibitions—		
Colonial and Indian Exhibition, London, 1886 ...	4,900	548
Melbourne Centennial International do.	100,000	178,694

* Paid to the Government of Tasmania, in accordance with a joint guarantee to the company on account of reduction of rates for telegraphic messages to and from Victoria and Tasmania.

† Including £43 in 1887-8 and £41 in 1888-9 towards expenses of International Bureau at Berne; also £277 in 1887-8 for plaintiff's costs of action *re* illegal detention of letters.

‡ Including costs (final) *In re Merry v. The Queen*, £3,225.

HEADS OF EXPENDITURE DETAILED—*continued.*

Heads of Expenditure.	1887-8.	1888-9.
MISCELLANEOUS SERVICES— <i>continued.</i>		£
Exhibitions—		
Melbourne Centennial International Exhibition, to reimburse His Excellency the Governor for expenses of entertaining distinguished visitors	...	6,000
Adelaide Jubilee do.	2,998	399
Paris Universal do., 1889... ..	...	8,988
Victorian Juvenile Industrial do. ... ..	...	1,000
Geelong Juvenile Jubilee do.	500	...
Expenses incurred by the Exhibition Trustees	299	447
Powder Magazines*	1,434	1,625
Fisheries	836	1,015
Payments from Estates of Deceased Persons ... ..	...	314
Refunds, etc.	316	1,171
Assistance to Volunteer Fire Brigades	4,000	4,000
Fire Escape and Life-saving Apparatus... ..	...	1,000
Expenses <i>re</i> the celebration of Her Majesty's Jubilee	7,781	...
Imperial Institute†—Contribution towards	5,922	...
Banquet to the late Earl of Carnarvon... ..	360	...
Expenses of visits of Governor and party to country districts	206	32
Victorian Liedertafel's and Ballarat Firemen's travelling expenses in connexion with Adelaide Exhibition and Centennial Commemoration in Sydney	321	287
Purchase of a "Sketch of Melbourne in the year 1841" ... ..	...	420
Victorian International Regatta, 1888, contribution towards expenses of	...	1,000
New Prince's Bridge, expenses connected with opening of ... ..	...	112
International Free Trade Conference Delegates, travelling expenses to Sandhurst and Ballarat	...	104
Coal Strike at Newcastle, hire of engines in case of failure of gas supply	...	183
Bonuses for manufacture in the colony of the first 10,000 yards of worsted woollen tweeds	5,000	4,000
Services of experts deciding on claims to last-mentioned bonus for 1887-8	...	368
Discounts in London and premiums on remittances (sundry)	178	1,247
Other Expenditure‡... ..	2,897	2,991
Total	149,815	230,251

264. The following are the heads of expenditure during the last fifteen financial years, and the amounts expended under each head; the expenditure specially appropriated by Acts of Parliament other than the *Appropriation Act*, and known as *Special Appropriations*, being distinguished from that sanctioned under that Act in accordance with the annual votes of the Legislature:—

Heads of expenditure, 1874-5 to 1888-9.

* Exclusive of amounts provided for under the head of "Other Public Works."

† The National Memorial of the completion of fifty years of the reign of Queen Victoria to be established in London.

‡ Including balance at credit of Pension Fund, returned to revenue, viz., £500 in 1887-8, and £938 in 1888-9.

HEADS OF EXPENDITURE, 1874-5 TO 1888-9.

Heads of Expenditure.	Year.	Expenditure from—		Total.
		Special Appropriations.	Votes.	
		£	£	£
Civil list* ...	1874-5	70,984	...	70,984
	1875-6	71,227	...	71,227
	1876-7	29,604	...	29,604
	1877-8	29,564	...	29,564
	1878-9	29,636	...	29,636
	1879-80	27,728	...	27,728
	1880-81	24,509	...	24,509
	1881-2	28,469	3,000	31,469
	1882-3	29,926	...	29,926
	1883-4	31,127	...	31,127
	1884-5	36,362	4,693†	41,055
	1885-6	36,269	4,693	40,962
	1886-7	36,416	...	36,416
	1887-8	35,974	9,387	45,361
	1888-9	35,780	4,784	40,564
Legislature ...	1874-5	40,813	15,739	56,552
	1875-6	41,612	15,909	57,521
	1876-7	43,918	14,889	58,807
	1877-8	48,162	15,878	64,040
	1878-9	42,710	16,502	59,212
	1879-80	44,306	16,502	60,808
	1880-81	45,664	16,964	62,628
	1881-2	39,677	16,810	56,487
	1882-3	47,768	18,020	65,788
	1883-4	35,930	17,751	53,681
	1884-5	38,801	18,102	56,903
	1885-6	45,674	18,462	64,136
	1886-7	38,206	18,996	57,202
	1887-8	37,700	20,931	58,631
	1888-9	53,207	20,009	73,216
Civil establishment* ...	1874-5	...	90,422	90,422
	1875-6	...	87,647	87,647
	1876-7	...	89,837	89,837
	1877-8	...	90,215	90,215
	1878-9	...	90,059	90,059
	1879-80	...	91,872	91,872
	1880-81	...	89,987	89,987
	1881-2	...	90,833	90,833
	1882-3	...	117,610	117,610
	1883-4	...	113,628	113,628
	1884-5	...	117,586	117,586
	1885-6	...	122,593	122,593
	1886-7	...	129,001	129,001
	1887-8	...	132,983	132,983
	1888-9	646†	145,971	146,617

* For particulars of the items included under these heads, see footnotes to table following paragraph 261 *ante*. State aid to religion is also included in "Civil List" prior to July, 1876, when it was abolished.

† This and subsequent amounts represent contribution towards the expenses of the protectorate of New Guinea.

‡ Marine Board.

HEADS OF EXPENDITURE, 1874-5 TO 1888-9—*continued*.

Heads of Expenditure.	Year.	Expenditure from—		Total.
		Special Appropriations.	Votes.	
		£	£	£
Retiring allowances and pensions *	1874-5	26,529	2,587	29,116
	1875-6	27,423	2,426	29,849
	1876-7	26,214	4,725	30,939
	1877-8	28,370	5,587	33,957
	1878-9	33,952	9,153	43,105
	1879-80	35,202	9,336	44,538
	1880-81	36,817	12,499	49,316
	1881-2	41,749	16,040	57,789
	1882-3	40,474	20,095	60,569
	1883-4	41,334	24,355	65,689
	1884-5	43,589	26,598	70,187
	1885-6	52,685	20,529	73,214
	1886-7	64,844	20,316	85,160
Gratuities, compensations, etc.	1887-8	71,583	16,901	88,484
	1888-9	80,101	16,509	96,610
	1874-5	3,078	10,884	13,962
	1875-6	1,752	5,963	7,715
	1876-7	3,478	7,187	10,665
	1877-8	42,582	7,146	49,728
	1878-9	13,159	33,444	46,603
	1879-80	2,544	19,416	21,960
	1880-81	12,970	34,085	47,055
	1881-2	9,299	22,828	32,127
	1882-3	2,911	25,345	28,256
	1883-4	10,173	20,889	31,062
	1884-5	22,673	25,099	47,772
Judical and legal	1885-6	22,215	21,863	44,078
	1886-7	18,420	21,817	40,237
	1887-8	23,622	19,707	43,329
	1888-9	21,714	32,202	53,916
	1874-5	16,417	156,558	172,975
	1875-6	16,125	154,469	170,594
	1876-7	16,750	154,932	171,682
	1877-8	16,567	154,498	171,065
	1878-9	14,000	158,056	172,056
	1879-80	14,000	157,664	171,664
	1880-81	15,047	142,444	157,491
	1881-2	16,919	141,263	158,182
	1882-3	17,000	159,689	176,689
	1883-4	16,655	158,319	174,974
	1884-5	16,381	166,916	183,297
	1885-6	19,096	172,194	191,290
	1886-7	22,993	170,912	193,905
	1887-8	22,972	188,139	211,111
	1888-9	23,003	194,177	217,180

* Including vote of £2,600 in 1880-81, of £5,000 in 1881-2, of £8,000 in 1882-3, of £10,000 each year from 1883-4 to 1886-7, £7,000 in 1887-8 and 1888-9, to meet deficiencies in the Police Superannuation Fund.

HEADS OF EXPENDITURE, 1874-5 TO 1888-9—continued.

Heads of Expenditure.	Year.	Expenditure from—		Total.
		Special Appropriations.	Votes.	
		£	£	£
Police	1874-5	...	198,312	198,312
	1875-6	...	199,738	199,738
	1876-7	...	197,371	197,371
	1877-8	...	207,119	207,119
	1878-9	...	209,041	209,041
	1879-80	...	233,732	233,732
	1880-81	...	207,674	207,674
	1881-2	...	201,063	201,063
	1882-3	...	204,561	204,561
	1883-4	...	216,973	216,973
	1884-5	...	217,684	217,684
	1885-6	...	224,237	224,237
	1886-7	...	233,173	233,173
	1887-8	...	240,840	240,840
	1888-9	...	261,329	261,329
Gaols and penal establishments	1874-5	...	60,469	60,469
	1875-6	...	61,051	61,051
	1876-7	...	60,008	60,008
	1877-8	...	58,132	58,132
	1878-9	...	58,442	58,442
	1879-80	...	56,636	56,636
	1880-81	...	53,565	53,565
	1881-2	...	53,032	53,032
	1882-3	...	57,128	57,128
	1883-4	...	55,836	55,836
	1884-5	...	57,311	57,311
	1885-6	...	60,644	60,644
	1886-7	...	59,894	59,894
	1887-8	...	65,385	65,385
	1888-9	...	66,163	66,163
Defences	1874-5	...	53,507	53,507
	1875-6	...	58,233	58,233
	1876-7	...	74,020	74,020
	1877-8	...	121,266	121,266
	1878-9	...	118,122	118,122
	1879-80	...	93,779	93,779
	1880-81	...	78,732	78,732
	1881-2	...	79,442	79,442
	1882-3	...	191,360	191,360
	1883-4	...	231,038	231,038
	1884-5	110,000	88,773	198,773
	1885-6	110,000	209,938	319,938
	1886-7	110,000	194,764	304,764
	1887-8	110,000	212,119*	322,119
	1888-9	110,000	236,623	346,623

* Including vote of £21,278 in 1887-8, and £23,958 in 1888-9, to augment special appropriation.

HEADS OF EXPENDITURE, 1874-5 TO 1888-9—*continued*.

Heads of Expenditure.	Year.	Expenditure from—		Total.
		Special Appropriations.	Votes.	
		£	£	£
Public instruction, science, etc.*	1874-5	9,000	408,136	417,136
	1875-6	9,000	466,280	475,280
	1876-7	9,000	483,939	492,939
	1877-8	9,000	512,725	521,725
	1878-9	9,000	563,900	572,900
	1879-80	11,250	560,742	571,992
	1880-81	9,000	575,225	584,225
	1881-2	9,000	591,799	600,799
	1882-3	9,000	589,970	598,970
	1883-4	9,000	598,822	607,822
	1884-5	9,000	601,026	610,026
	1885-6	9,000	656,442	665,442
	1886-7	9,000	667,569	676,569
	1887-8	9,000	713,102	722,102
	1888-9	9,000	765,449	774,449
State school buildings †	1874-5	...	181,440	181,440
Charitable institutions, medical, etc.*	1874-5	...	273,537	273,537
	1875-6	...	270,318	270,318
	1876-7	...	278,970	278,970
	1877-8	...	281,509	281,509
	1878-9	...	277,016	277,016
	1879-80	...	272,539	272,539
	1880-81	...	241,907	241,907
	1881-2	...	249,367	249,367
	1882-3	...	267,400	267,400
	1883-4	...	259,983	259,983
	1884-5	...	262,359	262,359
	1885-6	...	273,705	273,705
	1886-7	...	268,864	268,864
	1887-8	...	278,879	278,879
	1888-9	...	283,986	283,986
Crown lands	1874-5	...	129,558	129,558
	1875-6	...	128,026	128,026
	1876-7	...	149,210	149,210
	1877-8	...	130,519	130,519
	1878-9	...	129,617	129,617
	1879-80	...	136,889	136,889
	1880-81	...	103,279	103,279
	1881-2	...	99,169	99,169
	1882-3	...	100,367	100,367
	1883-4	...	98,209	98,209
	1884-5	...	104,875	104,875
	1885-6	...	107,556	107,556
	1886-7	...	111,969	111,969
	1887-8	...	106,408	106,408
	1888-9	...	100,573	100,573

* For particulars of the items included under these heads, see footnotes to table following paragraph 261 *ante*.

† Since 1874-5 the amount expended on school buildings has been paid entirely out of loans.—See table following paragraph 268 *post*.

HEADS OF EXPENDITURE, 1874-5 TO 1888-9—continued.

Heads of Expenditure.	Year.	Expenditure from—		Total.
		Special Appropriations.	Votes.	
		£	£	£
Agriculture, etc. ...	1874-5	...	21,473	21,473
	1875-6	...	21,023	21,023
	1876-7	...	24,878	24,878
	1877-8	...	28,139	28,139
	1878-9	...	31,398	31,398
	1879-80	...	31,953	31,953
	1880-81	...	32,382	32,382
	1881-2	...	50,311	50,311
	1882-3	...	54,834	54,834
	1883-4	...	42,418	42,418
	1884-5	...	51,065	51,065
	1885-6	...	84,781	84,781
	1886-7	704*	70,848	71,552
	1887-8	327	69,620	69,947
	1888-9	175	73,054	73,229
Mining † ...	1874-5	3,500	27,153	30,653
	1875-6	3,500	34,653	38,153
	1876-7	3,500	34,043	37,543
	1877-8	3,500	25,030	28,530
	1878-9	3,500	48,882	52,382
	1879-80	3,500	24,704	28,204
	1880-81	3,500	27,406	30,906
	1881-2	3,500	39,379	42,879
	1882-3	3,500	38,940	42,440
	1883-4	3,500	44,334	47,834
	1884-5	3,500	53,236	56,736
	1885-6	3,500	67,962	71,462
	1886-7	3,500	100,154	103,654
	1887-8	3,500	114,337	117,837
	1888-9	3,500	115,639	119,139
Railways ‡ ...	1874-5	100,000	437,931	537,931
	1875-6	300,000	489,751	789,751
	1876-7	200,000	562,517	762,517
	1877-8	100,000	616,207	716,207
	1878-9	200,000	662,178	862,178

* The amounts in this column represent rates paid on unoccupied Mallee Blocks towards extermination of vermin.

† Including amounts advanced to mining companies to assist in the development of the mining industry, etc., viz., £1,500 in 1875-6; £250 in 1877-8; £18,800 in 1878-9; and £500 in 1879-80. Only £1,237 in all has been repaid, leaving a balance of £19,813, of which £15,813 has been written off as unrecoverable.

‡ The amount entered under the head of Special Appropriations in 1885-6, with the exception of £6,000 for salaries of the Railway Commissioners, was paid into the "Railway Construction Account" in accordance with the direction of *The Land Act* 1884 (48 Vict. No. 812), sec. 78, whereby it is provided that all moneys arising from the sale by auction of Crown lands shall be placed to a trust account, the amount standing to the credit of which should be available for the construction of railways. The amounts entered prior to 1882-3 also represent the payment of moneys derived from the alienation of Crown lands, but fixed at £200,000 per annum, to a similar account (known as the "Railway Loan Liquidation and Construction Account"), which was created under *The Land Act* 1869 (33 Vict. No. 366)—full particulars of which are given in the *Victorian Year-Book*, 1885-6, page 123. The total amount paid into both these accounts up to the 30th June, 1889, was £2,590,516, which has been expended on the survey or construction of lines of railway. The amounts entered under the head of "Votes" represent the working expenses of railways, except £500 in 1886-7, and £4,144 in 1887-8 paid towards construction.

HEADS OF EXPENDITURE, 1874-5 TO 1888-9—*continued*.

Heads of Expenditure.	Year.	Expenditure from—		Total.
		Special Appropriations.	Votes.	
		£	£	£
Railways*— <i>continued</i> .	1879-80	...	771,527	771,527
	1880-81	200,000	818,601	1,018,601
	1881-2	200,000	829,103	1,029,103
	1882-3	...	1,173,535	1,173,535
	1883-4	2,750	1,104,285	1,107,035
	1884-5	6,000	1,403,993	1,409,993
	1885-6	94,667	1,317,873	1,412,540
	1886-7	72,650	1,358,466	1,431,116
	1887-8	119,946	1,572,930	1,692,876
	1888-9	126,873	1,797,124	1,923,997
Water supply	1874-5	...	17,013	17,013
	1875-6	...	17,192	17,192
	1876-7	...	18,099	18,099
	1877-8	...	22,621	22,621
	1878-9	...	28,501	28,501
	1879-80	...	26,053	26,053
	1880-81	...	32,339	32,339
	1881-2	...	40,869	40,869
	1882-3	...	34,534	34,534
	1883-4	...	31,472	31,472
	1884-5	...	32,282	32,282
	1885-6	...	35,511	35,511
	1886-7	...	39,756	39,756
	1887-8	...	46,966	46,966
	1888-9	...	71,989	71,989
Other public works†	1874-5	315,640	339,855	655,495
	1875-6	347,754	332,465	680,219
	1876-7	310,704	242,283	552,987
	1877-8	310,000	252,505	562,505
	1878-9	310,000	276,401	586,401
	1879-80	155,000	476,593‡	631,593
	1880-81	...	587,593	587,593
	1881-2	...	550,681	550,681
	1882-3	...	628,611	628,611
	1883-4	...	605,148	605,148
	1884-5	...	636,378	636,378
	1885-6	...	686,825	686,825
	1886-7	...	671,973	671,973
	1887-8	...	718,427	718,427
	1888-9	...	808,803‡	808,803

* See footnote (†) on page 168.

† Exclusive of school buildings and of all public works paid for out of loans, but including endowments of municipalities under the *Local Government Act*. The expenditure on the Port of Melbourne, included under this head prior to 1st January, 1877, has since been paid out of the Harbour Trust Fund. Particulars are given later on.

‡ The provision of the *Local Government Act* 1874, authorizing the annual subsidy of £310,000 to municipalities lapsed on the 31st December, 1879, but amounts equivalent to the subsidy have since been voted by Parliament. This accounts for the gradual transfer of this item of expenditure from Special Appropriations to Votes. The subsidy was increased to £340,854 in 1888-9.

HEADS OF EXPENDITURE, 1874-5 TO 1888-9—continued.

Heads of Expenditure.	Year.	Expenditure from—		Total.
		Special Appropriations.	Votes.	
		£	£	£
Post and telegraphs†	1874-5	85,890	294,726	380,616
	1875-6	26,908*	280,981	307,889*
	1876-7	64,542	298,467	363,009
	1877-8	53,996	312,958	366,954
	1878-9	55,855	333,120	388,975
	1879-80	61,101	338,088	399,189
	1880-81	63,229	375,533	438,762
	1881-2	77,348	358,795	436,143
	1882-3	6,240	386,006	472,246
	1883-4	94,215	407,045	501,260
	1884-5	118,121	416,252	534,373
	1885-6	126,944	437,676	564,620
	1886-7	130,065	455,925	585,990
	1887-8	131,520	511,593	643,113
	1888-9	115,693	503,377	619,070
Interest and expenses of Public Debt‡	1874-5	719,282	...	719,282
	1875-6	772,399	...	772,399
	1876-7	795,191	...	795,191
	1877-8	898,006	...	898,006
	1878-9	892,172	...	892,172
	1879-80	979,864	...	979,864
	1880-81	1,043,535	43,927	1,087,462
	1881-2	1,124,136	16,010	1,140,146
	1882-3	1,162,195	18,381	1,180,576
	1883-4	1,203,440	11,630	1,215,070
	1884-5	1,260,279	11,628	1,271,907
	1885-6	1,272,565	9,445	1,282,010
	1886-7	1,261,514	9,295	1,270,809
	1887-8	1,375,910	9,211	1,385,121
	1888-9	1,449,921	9,321	1,459,242
Redemption of loans...	1874-5	35,000	...	35,000
Customs	1874-5	...	57,364	57,364
	1875-6	...	56,311	56,311
	1876-7	...	56,186	56,186
	1877-8	...	64,058	64,058
	1878-9	...	59,467	59,467
	1879-80	...	62,226	62,226
	1880-81	...	58,621	58,621
	1881-2	...	63,330	63,330
	1882-3	...	65,047	65,047
	1883-4	...	72,978	72,978

* In the year 1885-6, a change was made in the method of keeping the accounts of postal communication with Great Britain. Prior to that year the gross charge, but subsequently the net charge only, was entered. From the gross expenditure for 1885-6 were deducted not only the amount due by other Governments on account of that year, but also the arrears received for 1884-5 and previous years. Hence the small apparent expenditure from Special Appropriations set down against that year.

† Under this head the amounts paid out of Special Appropriations represent the net expenditure on account of Steam Postal Communication (including gratuities to masters of vessels), interest on Savings Bank deposits, and a subsidy for maintenance of the cable from Port Darwin to Penang.

‡ The expenditure under the head of Votes represents interest and expenses in connexion with the late Melbourne and Hobson's Bay Railway Company's debentures, which are being gradually paid off and replaced by Government debentures.

HEADS OF EXPENDITURE, 1874-5 TO 1888-9—*continued*.

Heads of Expenditure.	Year.	Expenditure from—		Total.
		Special Appropriations.	Votes.	
		£	£	£
Customs— <i>continued</i> ...	1884-5	...	71,710	71,710
	1885-6	...	70,925	70,925
	1886-7	...	78,579	78,579
	1887-8	...	83,975	83,975
	1888-9	...	87,412	87,412
Harbours and lights ...	1874-5	...	35,035	35,035
	1875-6	...	34,703	34,703
	1876-7	...	29,980	29,980
	1877-8	...	29,017	29,017
	1878-9	...	28,876	28,876
	1879-80	...	29,272	29,272
	1880-81	...	23,448	23,448
	1881-2	...	25,471	25,471
	1882-3	...	26,763	26,763
	1883-4	...	24,632	24,632
	1884-5	...	28,941	28,941
	1885-6	...	38,988	38,988
	1886-7	...	39,819	39,819
	1887-8	...	32,460	32,460
	1888-9	...	34,595	34,595
Mint subsidy *	1874-5	20,000	...	20,000
	1875-6	20,000	...	20,000
	1876-7	18,333	...	18,333
	1877-8	20,000	...	20,000
	1878-9	20,000	...	20,000
	1879-80	20,000	...	20,000
	1880-81	20,000	...	20,000
	1881-2	20,000	...	20,000
	1882-3	20,000	...	20,000
	1883-4	20,000	...	20,000
	1884-5	20,000	..	20,000
	1885-6	20,000	...	20,000
	1886-7	20,000	...	20,000
	1887-8	20,000	...	20,000
	1888-9	20,000	...	20,000
Aborigines ...	1874-5	..	6,209	6,209
	1875-6	...	6,100	6,100
	1876-7	...	7,500	7,500
	1877-8	...	7,464	7,464
	1878-9	...	10,499	10,499
	1879-80	...	7,500	7,500
	1880-81	...	7,499	7,499
	1881-2	...	7,498	7,498
	1882-3	...	7,498	7,498
	1883-4	...	10,857	10,857
	1884-5	...	10,500	10,500
	1885-6	...	10,514	10,514
	1886-7	...	10,508	10,508
	1887-8	...	10,982	10,982
	1888-9	...	10,949	10,949

* The annual subsidy to the Mint is £20,000; portion of this sum, however, has been repaid each year to the revenue.—See page 150 *ante*, under the head "Mint subsidy returned."

HEADS OF EXPENDITURE, 1874-5 TO 1888-9—*continued.*

Heads of Expenditure.	Year.	Expenditure from—		Total.
		Special Appropriation.	Votes.	
		£	£	£
Miscellaneous Services *	1874-5	2,500	30,108	32,608
	1875-6	2,500	30,627	33,127
	1876-7	2,500	23,364	25,864
	1877-8	2,500	31,222	33,722
	1878-9	2,500	40,566	43,066
	1879-80	2,500	29,772	32,272
	1880-81	4,000	58,244	62,244
	1881-2	4,000	25,574	29,574
	1882-3	4,000	35,177	39,177
	1883-4	4,000	30,567	34,567
	1884-5	4,000	25,851	29,851
	1885-6	4,000	43,569	47,569
	1886-7	2,234	38,107	40,341
	1887-8	750	149,065	149,815
	1888-9	938	229,313	230,251
TOTAL EXPENDITURE PROPER	1874-5	1,448,633	2,848,016	4,296,649
	1875-6	1,640,200	2,753,866	4,394,066
	1876-7	1,523,734	2,812,405	4,336,139
	1877-8	1,562,247	2,973,815	4,536,062
	1878-9	1,626,484	3,183,240	4,809,724
	1879-80	1,356,995	3,446,795	4,803,790
	1880-81	1,478,271	3,621,954	5,100,225
	1881-2	1,574,097	3,571,667	5,145,764
	1882-3	1,423,014	4,220,871	5,643,885
	1883-4	1,472,124	4,181,169	5,653,293
	1884-5	1,688,706	4,432,858	6,121,564
	1885-6	1,816,615	4,696,925	6,513,540
	1886-7	1,790,546	4,770,705	6,561,251
	1887-8	1,962,804	5,324,347	7,287,151
	1888-9	2,050,551	5,869,351	7,919,902
Amounts to be recouped from loans, etc. ...	1874-5	...	21,472	21,472
	1875-6	15,221	163,556	178,777
	1876-7	19,001	2,956	21,957
	1877-8	32,042	66,245	98,287
	1878-9	20,655	3,000	23,655
	1879-80	18,945	52,294	71,239
	1880-81	2,310	6,107	8,417
	1881-2	...	...	...
	1882-3	...	8,000	8,000
	1883-4	...	62,000	62,000
	1884-5	...	18,792	18,792
	1887-8	...	55,265	55,265
	1888-9	...	156,330	156,330†

* Except £888 in 1886-7, and £200 in 1887-8, the amounts in the column for Special Appropriations represent the unexpended balances of the Pension Fund (Schedule D, Part V.), repaid each year to the revenue.

† See paragraph 266 *post*.

HEADS OF EXPENDITURE, 1874-5 TO 1888-9—*continued*.

Heads of Expenditure.	Year.	Expenditure from—		Total.
		Special Appropriations.	Votes.	
		£	£	£
	1874-5	1,448,633	2,869,488	4,318,121
	1875-6	1,655,421	2,917,422	4,572,843
	1876-7	1,542,735	2,815,361	4,358,096
	1877-8	1,594,289	3,040,060	4,634,349
	1878-9	1,647,139	3,186,240	4,833,379
	1879-80	1,375,940	3,499,089	4,875,029
	1880-81	1,480,581	3,628,061	5,108,642
GRAND TOTAL EXPENDITURE*	1881-2	1,574,097	3,571,667	5,145,764
	1882-3	1,423,014	4,228,871	5,651,885
	1883-4	1,472,124	4,243,169	5,715,293
	1884-5	1,688,706	4,451,650	6,140,356
	1885-6	1,816,615	4,696,925	6,513,540
	1886-7	1,790,546	4,770,705	6,561,251
	1887-8	1,962,804	5,379,612	7,342,416
	1888-9	2,050,551	6,025,681	8,076,232

265. Of the total expenditure proper in 1888-9, £2,050,551, or about 25 per cent., was under the head of Special Appropriations, which, being provided for under various Acts of Parliament other than the annual *Appropriation Act*, are not required to be voted annually. It will be observed that the expenditure under such appropriations increased in 1888-9 as compared with the previous year by nearly £88,000, and that under votes increased by about £545,000. Of the former increase, about £7,000 was due to the larger proceeds arising from the sale of lands, and payable to the Railway Construction Account; £74,000 under that of interest, consequent on the growth of the public debt; and £15,500 under Legislature, arising from increased expenses under the new *Electoral Act*; as against which should be set a decrease of £16,000 under Post and Telegraphs, consequent on a saving effected in the cost of Foreign mail services.

Increased expenditure under special appropriations.

266. The sums expended during 1889 to be afterwards recouped, amounted in the aggregate to £156,330. These it is proposed to recoup partly from the proceeds of a future loan and partly from the proceeds of the sale of the site of the City Police Court, Melbourne. The following are the particulars:—

Special expenditure to be recouped.

* Not including £471,900 in 1881-2, £18,000 in 1882-3, and £10,100 in 1883-4, towards the redemption of Treasury bonds.

EXPENDITURE IN 1888-9 TO BE AFTERWARDS RECOUPED.

Wherefrom to be Recouped.	Wherefor Expended.	Amount to be Recouped.
		£
A Future Loan ...	Erection of State Schools ...	60,000
Do. ...	Melbourne Water Supply ...	56,906
Sale of City Police Court, Melbourne }	Purchase of Land in vicinity of Law Courts	13,725
Do. ...	Extension of Titles Office ...	5,699
Do. ...	Purchase of Land in Post Office Place ...	20,000
	Total ...	156,330

New special appropriations.

267. The amounts specially appropriated under Acts of Parliament increased but slightly in the last three financial years, but, in the previous three years, such appropriations were added to by £255,550; of this amount, however, an appropriation of £110,000, for Defences, was authorized for only five years; and £80,000 was merely the re-investment of portions of the land revenue in the Government railways. The following is a statement of the new appropriations referred to :—

ADDITIONAL SPECIAL APPROPRIATIONS AUTHORIZED, 1883-4 TO 1888-9.

Authorization.		Purpose for which Authorized.	Approximate Annual Amount.
Year.	Act.		
			£
1883-4 ...	47 Vict. No. 767	Victorian Railways Commissioners —Salaries	6,000
	47 Vict. No. 773	Victorian Railways—Pensions, etc. Public Service Board—Salaries ...	13,000* 4,500
	47 Vict. No. 777	„ Pensions, etc. Defences—Works, etc. ...	12,500* 110,000†
	47 Vict. No. 780	„ Pensions, etc. Salary of Additional Minister ...	900* 1,500
	47 Vict. No. 781	Subsidy towards maintenance of telegraphic communication between Port Darwin and Penang	20,000*
		Total ...	168,400
1884-5 ...	48 Vict. No. 807	Addition to Agent-General's salary	500
	48 Vict. No. 812	Proceeds of land sales by auction paid to "Railway Construction Account"	80,000‡
		Total ...	80,500

* Previously paid from annual votes. Of the £20,000 authorized for the maintenance of the Port Darwin cable, only £13,000 in 1888-9, and about £14,600 in each of the previous four years has been required.
† This amount is authorized for five years only.
‡ This represents the mean of the amounts paid in the two years, 1885-6 and 1886-7.

ADDITIONAL SPECIAL APPROPRIATIONS AUTHORIZED—continued.

Authorization.		Purpose for which Authorized.	Approximate Annual Amount.
Year.	Act.		
1885-6 ...	49 Vict. No. 835	Interest on payment out of Assurance Fund (Government Trust Fund) for purchase of land near Titles Office	3,000
	49 Vict. No. 844	Additional Judge of Supreme Court	3,000
	49 Vict. No. 870	Commissioner of Audit—Pension ...	650
		Total ...	6,650
1886-7 ...	...	Nil ...	...
1887-8 ...	...	Nil ...	...
1888-9 ...	52 Vict. No. 965	Marine Board ...	6,610
		Total increase in six years	262,160

NOTE.—Besides the amounts specified in the table, a grant of £3,000 was authorized and paid in 1885-6 to the widow of the late Hon. J. M. Grant, and £4,000 in 1887-8, for the purchase of an annuity for the Hon. P. Lalor, who has since died.

268. In addition to the ordinary expenditure from revenue, large sums are annually disbursed for various purposes from amounts raised by means of loans. The following table shows the details of such expenditure prior to 1883-4, and during each subsequent year. This is intended to supplement the table of ordinary expenditure by exhibiting those items which, having never been, or having ceased to be, a charge on the general revenue, are treated in separate accounts:—

Expenditure of loans, etc.

EXPENDITURE OF NET PROCEEDS OF LOANS TO 30TH JUNE, 1889.

Purposes of Expenditure.	Amounts Expended.*							
	Prior to 1883-4.	1883-4.	1884-5.	1885-6.	1886-7.	1887-8.	1888-9.	Total.
	£	£	£	£	£	£	£	£
Railways † ..	18,670,121	1,191,132	901,577	1,408,662	1,711,160	1,774,721	3,083,211	28,740,584
Water Supply† ..	3,735,974	304,585	172,465	235,485	373,994	462,562	484,068	5,769,133
Law Courts & Parliament Houses	390,761	45,505	568	12,153	32,770	44,954	37,563	564,274
Public Offices ..	162,280	..	..	..	..	..	..	162,280
Defences ..	98,299	..	..	..	..	..	..	98,299
State School Buildings	861,577	36,923	69,995	45,438	49,284	54,308	59,970	1,177,495
Yarra Bridge ..	1,800	8,382	3,663	14,205	42,561	32,627	18,207	\$121,445
Alfred Graving Dock	341,819	..	..	..	..	..	..	341,819
Harbour Works, etc.	400	13,706	46,077	20,976	47,856	53,344	||54,279	236,638
Total † ..	24,263,031	1,600,233	1,194,345	1,736,919	2,257,625	2,422,516	3,737,298	37,211,967

NOTE—The figures in this table have been obtained direct from the various Government departments so as to show the actual expenditure during each year, and differ from those given in the Treasurer's Finance Statements, in consequence of an overlapping of the accounts and other causes. The expenditure from loans paid off has not been deducted.

* These are the actual payments during the various years shown, whether made direct from the loans, etc., or indirectly by means of advances from the general revenue—to be subsequently recouped.

† Figures corrected since last publication, the figures for Railways having been revised by the Railway Department.

‡ Of which £2,452,872 was for Melbourne Water Supply, and £3,316,261 for Country Waterworks, etc. For further particulars, see Waterworks in Part "Production," in the second volume.

§ Net charge after deducting contributions by the Melbourne City Council, amounting to £47,000, and by the Melbourne Tramway Trust, amounting to £2,034.

|| Including an expenditure in 1888-9 of £9,493 on works for opening the sea entrance Gippsland Lakes, making a total of £56,888 up to the end of that year.

Annual
subsidies,
grants, etc.

269. Nearly a tenth of the expenditure payable from the General Revenue consists of subsidies, grants, endowments, etc. The whole amount payable in this manner is over £700,000, of which not quite half is paid to municipalities, over a sixth to charitable institutions, and over a ninth in aid of the mining industry. This does not include the grant for free public instruction, which amounts annually to about £600,000; or for the maintenance of the Government charitable institutions—such as the hospitals for the insane and the industrial and reformatory schools—which cost annually about £147,000. The following is a statement of the amounts payable under the various heads:—

ANNUAL SUBSIDIES, GRANTS, ENDOWMENTS, ETC.

Subsidy to Municipalities	£340,850
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Educational Grants, etc.—

Melbourne University—Endowment under Act	9,000
„ „ Additional Endowment voted	7,500*
College of Pharmacy	...	...	...	1,000
Schools of Mines and Technical Schools	...	...	...	24,090
Public Libraries, etc.	...	...	...	16,000
Grant to Royal Society	...	...	...	200
„ Royal Geographical Society of Australasia	...	...	...	1,000
„ Victorian Artists' Society	...	...	...	250
„ Fine Arts Galleries, Ballarat, Sandhurst, etc.	...	...	...	2,000
„ Zoological and Acclimatisation Society, etc.	...	...	...	3,200
Grant to Charitable Institutions	...	...	...	120,000

Post and Telegraphs—

Subsidy—Foreign Mail Service (amount payable by Victoria)	30,478†
„ Maintenance of telegraph line between Port Darwin and Penang	13,163
„ Eastern Extension Telegraph Co., Tasmania	1,045

Mining, Agricultural, and other Industries—

Mining Boards	...	...	...	3,500
Mint Subsidy	...	...	...	20,000
Diamond Drills—Purchase and working expenses of	...	...	...	} 80,000
Grant to assist miners in prospecting operations	...	...	...
„ Agricultural Societies	...	...	...	21,000
„ Board of Viticulture	...	...	...	300
„ Horticultural Societies	...	...	...	2,250

Defences—

Prizes to Rifle Associations, etc.	3,600
Supply of Ammunition to Rifle Clubs, Cadet Corps, etc.	5,000

Total	£705,426
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* In 1888-9 a grant was also made in aid of building the Biological, Chemical, and Mechanical Laboratories.

† A set-off against this amount appears in the account of Postal Revenue, under the head of "Postages Collected," which reduces the ultimate net cost to about £4,000.

270. The system of free public instruction, which was legalized under Act 36 Vict. No. 447, came into force on the 1st January, 1873, and since that date, close upon ten and a quarter millions sterling have been expended by the State in giving effect to its provisions. Of this amount more than a fifth was for the erection, maintenance, and rent of school buildings; and the remainder—viz., nearly eight millions and a half—represents the cost of education, including that of office staff, inspection, instruction, pensions, gratuities, and contingencies, for the last seventeen years. The following table shows the expenditure under those heads for each year from 1872-3 to 1888-9, also the total for the period:—

Expenditure
on public
instruction.

EXPENDITURE ON PUBLIC INSTRUCTION,* 1872-3 to 1888-9.

Year.	Cost of Instruction including Salaries and Contingencies.	Pensions and Gratuities.	Cost of Erection† and Maintenance, and Rent of School Buildings.	Total.
...	£	£	£	£
1872-3 ...	217,704	208	8,759	226,671
1873-4 ...	347,641	500	154,976	503,117
1874-5 ...	367,898	500	191,440	559,838
1875-6 ...	423,694	555	126,700	550,949
1876-7 ...	439,723	2,155	172,890	614,768
1877-8 ...	469,547	2,760	245,454	717,761
1878-9 ...	519,545	6,134	96,769	622,448
1879-80 ...	503,923	10,366	81,884	596,173
1880-81 ...	515,644	6,726	104,625	626,995
1881-2 ...	526,397	8,321	76,911	611,629
1882-3 ...	517,849	9,167	82,225	609,241
1883-4 ...	522,063	9,849	62,015	593,927
1884-5 ...	524,226	13,036	92,393	629,655
1885-6 ...	563,426	14,271	68,136	645,833
1886-7 ...	570,292	17,043	67,908	655,243
1887-8 ...	600,271	16,718	80,726	697,715
1888-9 ...	639,124	20,563	84,964	744,651
Total ...	8,268,967	138,872	1,798,775	10,206,614

NOTE.—Besides the amounts in this table, subsidies are voted each year to the University, Schools of Mines, Schools of Design, etc. For particulars see pages 158 and 176 *ante*.

271. It will be observed that the actual cost of instruction increased rapidly until 1878-9; that during the seven years, 1878-9 to 1884-5, it remained tolerably uniform at £520,000 per annum, but during the last four years it has increased by £115,000. During the last eight years, the annual expenditure on school buildings has been tolerably

Cost of
system at
different
periods.

* Further details for the last two years are given in Part "Social Condition" published in the second volume.

† Including expenditure from loans.

uniform, varying from £62,000 in 1883-4 to £92,000 in 1884-5. It may be remarked that prior to 1872-3 the total annual expenditure on public instruction was under £200,000.

Expenditure
on immi-
gration.

272. Since the separation of Victoria from New South Wales, upwards of two millions sterling have been expended on the introduction of immigrants from the United Kingdom. Of late years, however, it has not been the policy of the State to devote money to this object, and little or nothing was so spent during the last five, and only £65 during the last eight years. The following are the amounts spent in introducing immigrants during each year, beginning with the one in which separation took place:—

EXPENDITURE ON IMMIGRATION, 1851 TO 1888-9.*

£			£			£		
1851	...	116,363	1865	...	41,808	1878-9	...	342
1852	...	206,552	1866	...	35,813	1879-80	...	28
1853	...	209,925	1867	...	38,402	1880-81	...	104
1854	...	390,352	1868	...	32,549	1881-2	...	...
1855	...	187,355	1869	...	50,637	1882-3	...	11
1856	...	115,716	1870	...	33,313	1883-4	...	47
1857	...	115,877	1871 (6 months)	...	14,840	1884-5	...	2
1858	...	59,023	1871-2	...	21,808	1885-6	...	...
1859	...	48,809	1872-3	...	4,094	1886-7	...	...
1860	...	6,948	1873-4	...	2,251	1887-8	...	5
1861	...	63,739	1874-5	...	1,583	1888-9	...	...
1862	...	115,209	1875-6	...	760			
1863	...	50,081	1876-7	...	500	Total ...		£2,013,099
1864	...	47,887	1877-8	...	366			

Expenditure
on immi-
gration in
Austral-
asian
colonies.

273. Up to the end of 1888, most of the Australasian colonies, except Victoria, had continued to expend considerable sums on the introduction of immigrants, but as a whole they spent £70,000 less in 1888 than in the previous year. Nearly £161,000 were spent by the colonies on immigration in 1888, of which Queensland contributed over four-fifths, and New Zealand nearly one-eleventh. Only £25,700 or 16 per cent. of the whole, was provided for out of ordinary revenue, the greater portion having been paid out of the loan account.† In proportion to population, the expenditure was much the highest in Queensland, where it averaged 7s. per head, the average for the whole of Australasia being less than 1s. per head. The following are the total amounts, and the amounts per head, expended on immigration in each colony in 1887 and 1888:—

* Prior to 1870 the figures denote the whole expenditure in connexion with immigration, but from that date onwards it has not been possible to include the amounts for salaries and contingencies, in consequence of the Immigration Department having been amalgamated with the departments of Mercantile Marine and Distilleries.

† See tables following paragraphs 264 and 268 *post*.

EXPENDITURE ON IMMIGRATION IN THE AUSTRALASIAN COLONIES,
1887 AND 1888.

Colony.	Expenditure on Immigration.			
	Total Amount.		Amount per Head of Population.	
	1887.	1888.	1887.	1888.
	£	£	s. d.	s. d.
Victoria	5	...	...	...
New South Wales	31,534	7,854	0 7	0 2
Queensland	151,440	131,913	8 6	7 0
South Australia	9,989	559	0 8	...
Western Australia	17,000	5,820	8 2	2 9
Tasmania... ..	2,680	502	0 5	0 1
New Zealand	18,382	14,168	0 7	0 6
Total	231,030	160,816	1 4	0 11

274. During the eighteen years* ended with 1888 the subjoined amounts were spent on immigration in the following colonies:— Victoria, £80,049; New South Wales, £760,795; South Australia, £775,156; New Zealand, £2,184,382.†

Expenditure on immigration in Australasian colonies, 1871-88.

275. During the last thirty-nine years nearly sixty-two millions sterling have been expended—partly out of loans and partly out of the general revenue—by the Government of Victoria on public works, including railways, roads and bridges, water supply, and other works and buildings. Of this amount nearly four millions and a half were spent in 1888-9. The whole is inclusive of loans to local bodies and water trusts for the construction of waterworks, but exclusive of the sums expended by the former on public works, roads, etc., and on the Port of Melbourne‡ since the 1st January, 1877. The following table gives the amounts expended by the State prior to and during 1888-9:—

Expenditure on public works.

GOVERNMENT EXPENDITURE ON PUBLIC WORKS.

Public Works.	Amount Expended.		
	Prior to 1888-9.	During 1888-9.	Total.
	£	£	£
Railways—Construction	28,212,064	2,977,452	31,189,516
„ Maintenance	3,905,321	407,525	4,312,846
Roads and bridges	7,309,470	80,202	7,389,672
Waterworks, Melbourne—Construction	2,442,730	287,286	2,730,016
„ „ Maintenance	122,431	7,786	130,217
„ Country	3,095,808	289,226	3,385,034
Other public works	12,248,434	356,571	12,605,005
Total	57,336,258	4,406,048	61,742,306

* For Victoria and South Australia 18½ years.
† Including £74,410 expenditure by the Provincial Governments during the years 1871-6.
‡ See table “Melbourne Harbor Trust” *post*.

Revenue and
expendi-
ture in
Austral-
asian
colonies.

276. The total revenue and expenditure, and the amount of each per head of the living population, in each of the Australasian colonies are shown in the following table for the eight years ended with 1888. As the financial year of Victoria terminates on the 30th June, the items for this colony are given for nine years, the last year but one being six months behind, and the last year being six months in advance, of the latest period in respect to which returns are given for the other colonies :—

REVENUE AND EXPENDITURE IN AUSTRALASIAN COLONIES.

Colony.	Year.	Revenue.			Expenditure.				
		Total Amount.	Amount per Head.			Total Amount.	Amount per Head.		
		£	£	s.	d.	£	£	s.	d.
Victoria ...	1880-81	5,186,011	6	0	7	5,108,642	5	18	10
	1881-2	5,592,362	6	7	1	5,145,764	5	16	11
	1882-3	5,611,253	6	4	8	5,651,885	6	5	7
	1883-4	5,934,687	6	8	9	5,715,293	6	4	0
	1884-5	6,290,361	6	13	0	6,140,356	6	9	10
	1885-6	6,481,021	6	13	6	6,513,540	6	14	2
	1886-7	6,733,826	6	14	3	6,561,251	6	10	10
	1887-8	7,607,598	7	6	7	7,287,151	7	0	5
	1888-9	8,675,990	7	19	10	7,919,902	7	5	11
New South Wales...	1881	6,707,963	8	15	10	5,890,580	7	14	5
	1882	7,410,737	9	5	5	6,347,810	7	18	10
	1883	6,470,341	7	13	5	8,048,319	9	10	10
	1884	7,117,592	7	19	0	6,853,189	7	13	1
	1885	7,584,593	8	2	11	8,573,288	9	4	2
	1886	7,594,301	7	15	0	9,078,869	9	5	4
	1887	8,582,811	8	7	11	9,098,460	8	18	0
	1888	8,886,360	8	7	0	8,778,851	8	5	0
Queensland	1880-81	2,023,668	9	8	2	1,757,654	8	3	5
	1881-2	2,102,095	9	5	3	1,904,201	8	7	9
	1883	2,583,444	9	12	11	2,242,971	8	7	6
	1884	2,673,554	8	19	0	2,751,851	9	4	3
	1885	2,840,960	9	4	0	2,875,609	9	6	3
	1886	2,810,147	8	9	0	3,202,030	9	12	7
	1887	3,032,463	8	10	11	3,350,049	9	8	10
	1888	3,463,097	9	3	7	3,368,405	8	18	7
South Australia ...	1881	2,171,988	7	10	4	2,054,285	7	2	4
	1882	2,087,076	7	4	0	2,146,599	7	8	1
	1883	2,060,140	6	17	10	2,330,079	7	15	10
	1884	2,024,928	6	11	3	2,398,191	7	15	5
	1885	2,309,592	7	7	6	2,454,808	7	16	10
	1886	1,975,269	6	6	0	2,234,395	7	2	9
	1887	2,014,102	6	8	7	2,145,135	6	16	11
	1888	2,494,556	7	16	11	2,376,399	7	9	6

REVENUE AND EXPENDITURE IN AUSTRALASIAN COLONIES
—continued.

Colony.	Year.	Revenue.			Expenditure.				
		Total Amount.	Amount per Head.			Total Amount.	Amount per Head.		
		£	£	s.	d.	£	£	s.	d.
Western Australia...	1881	254,313	8	11	4	197,386	6	13	0
	1882	250,372	8	4	9	205,451	6	15	3
	1883	284,364	9	2	1	240,566	7	14	1
	1884	290,319	8	19	7	291,307	9	0	3
	1885	323,213	9	9	9	308,849	9	1	4
	1886	388,564	10	9	0	394,675	10	12	3
	1887	377,903	9	1	3	456,897	10	19	2
	1888	357,003	8	8	9	385,129	9	2	0
Tasmania	1881	505,872	4	6	3	468,613	3	19	11
	1882	551,213	4	11	4	502,771	4	3	4
	1883	562,189	4	10	5	533,036	4	5	9
	1884	549,262	4	5	7	584,047	4	11	0
	1885	571,397	4	6	6	585,767	4	8	8
	1886	568,924	4	4	0	584,756	4	6	4
	1887	594,976	4	5	1	668,759	4	15	8
	1888	640,068	4	8	8	709,486	4	18	4
New Zealand	1881	3,757,493	7	12	3	3,675,797	7	9	0
	1882	3,917,160	7	13	10	3,824,735	7	10	2
	1883	3,871,267	7	6	3	3,924,005	7	8	3
	1884	3,707,488	6	14	2	4,101,318	7	8	5
	1885	3,859,996	6	16	4	4,282,901	7	11	4
	1886	3,688,016	6	6	9	4,310,875	7	8	1
	1887	3,463,495	5	16	2	3,954,290	6	12	7
	1888	4,109,815	6	15	9	3,962,912	6	10	11

NOTE.—In 1889-90, the approximate revenue of Victoria was £8,511,105, and the approximate expenditure £9,750,204. For the revenue and expenditure of each of the neighbouring colonies during 1889, see Appendix A. at the end of the second volume.

277. It should be pointed out that the Victorian returns of revenue and expenditure are prepared on a somewhat different principle from those of New South Wales, the over-payments to the revenue, afterwards refunded, being in the Victorian statements deducted therefrom, and the net amounts only dealt with. In New South Wales, on the other hand, the refunds are not deducted from the revenue, but are placed under the head of expenditure, both revenue and expenditure being swelled thereby. It is not easy from the official statements of public accounts in New South Wales to ascertain the full extent to which this expansion of both sides of the account occurs; but by a superficial analysis of the accounts of the year 1888, sums can be traced amounting in the aggregate to at least £180,130,* which are

Victorian statements differ from those of New South Wales.

* Such items are as follow :—£10,978 repayments to credit of votes; £49,359 drawbacks and refunds of duty; £20,202 railway revenue collected for the Victorian Government; about £99,600 other revenue returned, etc., etc.

included in and go to swell both the revenue and expenditure of that colony, whereas they would not be so included in Victoria, and this may possibly not be the full extent to which such differences occur. It is not known whether a similar system of cross-entry prevails in the other Australasian colonies, but it is probable such entries are not so rigidly excluded in any of the colonies as they are in Victoria.

Revenue and
expendi-
ture
compared.

278. In the last year named in the table there was a surplus of revenue over expenditure in all the colonies except Western Australia and Tasmania, which was in striking contrast to the heavy deficiencies which occurred in most of the colonies during the two preceding years. The surplus amounted to £756,000 in Victoria, £147,000 in New Zealand, £118,000 in South Australia, £107,000 in New South Wales, and £95,000 in Queensland; the surplus in Victoria being thus more than five times as large as that in any other colony. These surpluses amounted altogether to £1,223,000, but allowing for the deficiencies in Western Australia and Tasmania, amounting to £97,000, the aggregate net surplus in the revenues of the Australasian colonies in 1888 was £1,126,000, as against a deficiency in 1887 of £1,289,000, and one of £2,608,000 in 1886. During the years named there has been a surplus seven times in Victoria, four times in New South Wales, Queensland, and Western Australia, three times in Tasmania and New Zealand, and twice in South Australia.

Revenue and
expendi-
ture in
colonies,
1888 and
former
years.

279. In the last year named in the table a larger revenue than in any previous year was raised in all the colonies except Western Australia; but the expenditure was greater in the last than in any previous year in only three of the colonies, viz., Victoria, Queensland, and Tasmania.

Revenue and
expendi-
ture per
head in
colonies.

280. Victoria and South Australia were the only colonies in which the revenue per head was larger in the last year than in any of the previous years named. The only colonies in which the expenditure per head was greatest in the last year were Victoria and Tasmania.

Order of
colonies in
respect to
revenue
and ex-
penditure.

281. Although, as has been already stated,* the returns of Victoria and New South Wales are not strictly comparable, there can be no doubt that in all the years shown in the table the revenue and expenditure of New South Wales exceeded that of Victoria. In both these respects the position of the two colonies named was much above that of all the others of the group. The following is the order in which the respective colonies stood in regard to the total amount they raised and expended in the last year named:—

* See paragraph 277 ante.

ORDER OF COLONIES IN REFERENCE TO REVENUE AND EXPENDITURE, 1888.

1. New South Wales.	5. South Australia.
2. Victoria.	6. Tasmania.
3. New Zealand.	7. Western Australia.
4. Queensland.	

282. In regard to revenue per head, Victoria occupied a higher position in 1888 than South Australia, New Zealand, or Tasmania, but a lower position than any of the other colonies ; and in regard to expenditure per head a similar order prevailed, except that Western Australia stood before Queensland, and South Australia before Victoria. The following is the order in which the colonies stood in these respects :—

Order of colonies in respect to revenue, etc., per head.

ORDER OF COLONIES IN REFERENCE TO AMOUNTS OF REVENUE AND EXPENDITURE PER HEAD, 1888.

Revenue per head.	Expenditure per head.
1. Queensland.	1. Western Australia.
2. Western Australia.	2. Queensland.
3. New South Wales.	3. New South Wales.
4. Victoria.	4. South Australia.
5. South Australia.	5. Victoria.
6. New Zealand.	6. New Zealand.
7. Tasmania.	7. Tasmania.

283. Adding together the amounts of revenue and likewise the amounts of expenditure for 1888,* it will be found that on the continent of Australia the former amounted to over 22¾ millions, and the latter to nearly 22¼ millions ; also that the aggregate revenue of Australia, with the addition of that of Tasmania and New Zealand, amounted to over 27½ millions, and the aggregate expenditure to over 26¾ millions sterling. In Continental Australia there was a surplus on the year's transactions of nearly two-thirds of a million, and in the Australasian colonies as a whole one of nearly three-quarters of a million. The following are the exact amounts of revenue and expenditure, also the proportions per head of population :—

Revenue and expenditure of Australia and Australasia.

REVENUE AND EXPENDITURE OF AUSTRALIA AND AUSTRALASIA, 1888.

	Revenue.		Expenditure.	
	Total Amount.	Amount per head.	Total Amount.	Amount per head.
	£	£ s. d.	£	£ s. d.
Continent of Australia ...	22,808,614	0 8	22,195,935	7 16 4
Ditto, with Tasmania and New Zealand	27,558,497	13 7	26,868,333	7 9 8

* In the case of Victoria, the figures for 1887-8 have been taken.

Increased
revenue of
Austral-
asia in
fifteen
years.

284. A comparison of the aggregate revenue of the colonies upon the Australian continent in 1873 and in 1888 shows that, in the fifteen years, it had risen from £9,161,000 to £22,809,000, the increase being $13\frac{1}{2}$ millions sterling, or 148 per cent. If the revenues of Tasmania and New Zealand be added, the sum shows an aggregate revenue for the whole of Australasia of £12,262,000 at the former and of £27,560,000 at the latter period, the increase being over $15\frac{1}{4}$ millions, or 125 per cent. In the same fifteen years the population of the Australian continent increased from 1,702,840 to 2,925,000, or by 72 per cent., and the population of the whole of Australasia increased from 2,103,000 to 3,678,000, or by 75 per cent.

Heads of
revenue of
Austral-
asian
colonies.

285. The following is a comparative statement of the amounts received, under various heads of revenue, in the respective Australasian colonies during the most recent year for which the particulars are available. The figures have all been derived from official sources:—

HEADS OF REVENUE IN AUSTRALASIAN COLONIES, 1888.

Heads of Revenue.	Victoria, 1888-9.	New South Wales.	Queens- land.	South Australia.	Western Aus- tralia.	Tas- mania.	New Zealand.
	£	£	£	£	£	£	£
Taxation:—							
Customs, etc. ...	2,879,830	1,883,058	1,344,504	533,665	159,059	297,912	1,390,717
Other Taxes * ...	†869,840	798,825	‡233,167	205,688	20,885	107,895	†640,941
Total ...	3,749,670	2,681,883	1,577,671	739,353	179,944	405,807	2,031,658
Crown Lands ...	616,028	2,268,253	638,472	319,510	81,348	76,859	§297,856
Railways ...	3,104,907	||2,497,930	769,275	956,848	37,302	60,237	1,019,791
Post and Telegraphs ...	†402,834	562,909	228,701	214,600	22,701	50,648	†318,558
Other sources ...	802,551	875,385	248,978	264,245	35,708	46,517	¶441,952
Total ...	8,675,990	**8,886,360	3,463,097	2,494,556	357,003	640,068	4,109,815

* The amounts in this line are made up of Excise duties, including licences imposed for revenue purposes; duties on bank notes; stamps, other than those for post and telegraphs and fees of office; legacy, succession and probate duties; property and income taxes; and any other impost, payable to the General Government, levied distinctly as a tax; but excluding fees, licences, and charges for special services rendered.

† Portion of the revenue of Victoria and New Zealand derived from "Other Taxes" and "Post and Telegraphs" has been estimated, there being no means of ascertaining the correct figures.

‡ Excluding licences, which in Queensland are classed under other sources.

§ Inclusive of revenue from gold-fields, £19,447.

|| Exclusive of tramways. Revenue collected for Victoria for traffic beyond Albury (£20,202) is also excluded.

¶ Including £229,125 property tax collected in 1888 on account of 1887.

** Including revenue returned to the extent of at least £180,130. See footnote to paragraph 277 ante.

HEADS OF REVENUE IN AUSTRALASIAN COLONIES, 1888—*continued*.

Heads of Revenue.	Proportions per cent.						
	Victoria, 1888-9.	New South Wales.	Queens- land.	South Australia.	Western Aus- tralia.	Tas- mania.	New Zealand.
Taxation :—							
Customs, etc. ...	33·20	21·19	38·83	21·39	44·55	46·54	33·84
Other Taxes ...	10·03	8·99	6·73	8·25	5·85	16·86	15·59
Total ...	43·23	30·18	45·56	29·64	50·40	63·40	49·43
Crown Lands ...	7·10	25·53	18·44	12·81	22·79	12·01	7·25
Railways ...	35·79	28·11	22·21	38·36	10·45	9·41	24·81
Post and Telegraphs ...	4·64	6·33	6·60	8·60	6·36	7·91	7·75
Other sources ...	9·24	9·85	7·19	10·59	10·00	7·27	10·76
Total ...	100·00	100·00	100·00	100·00	100·00	100·00	100·00

NOTE.—The figures of revenue and expenditure for Victoria are for the twelve months ended 30th June, 1889, but those for the other colonies are for the calendar year 1888. Refunds of revenue, drawbacks, and such similar entries, are rigidly excluded from the accounts of revenue and expenditure of Victoria and New Zealand, but are included in those of New South Wales and Queensland; also, it is believed, in those of some of the other colonies. For later information see Appendix A. at end of the second volume.

286. It will be observed that the proportion of revenue raised by taxation—chiefly derived from Customs duties—varied from about 30 per cent. in South Australia and New South Wales to 63 per cent. in Tasmania, the proportion in Victoria being 43 per cent, or lower than in any of the other colonies except New South Wales and South Australia. The revenue from Railways also formed a very large proportion of the total revenue of all the colonies, varying from a tenth in Western Australia and Tasmania to more than a third of the whole in Victoria and South Australia. The Crown lands revenue varied in the different colonies from 7 to 26 per cent. of the whole—the latter proportion prevailing in New South Wales, and that from Post and Telegraphs from less than 5 to over $8\frac{1}{2}$ per cent.

287 It will be remarked that the land revenue was nearly four times as large in New South Wales as in Victoria, which item alone much more than accounts for the larger total revenue of the former colony. Indeed, if the land revenue be deducted from the total revenues of the two colonies, the revenue of Victoria, notwithstanding the cross entries in the New South Wales returns already alluded to, would exceed the revenue of that colony by £1,442,000, the respective amounts for 1888 being £8,060,000 and £6,618,000. It also appears that the railway revenue of Victoria exceeded that of New South Wales by over £600,000; in the former colony it forms much more than one-third, and in New South Wales nearly one-fourth, of the total revenue. The total taxation of Victoria was greater than that of New South

Proportion
of revenue
from dif-
ferent
sources.

Heads of
revenue in
Victoria
and New
South
Wales
compared.

Wales by over one million, the excess appearing chiefly under the head of Customs. Under other heads, the revenue in New South Wales from Post and Telegraphs exceeded that in Victoria by £160,000, and that from other sources by £73,000.

288. In 1888 the aggregate land revenue of the Australasian colonies amounted to £4,300,000. The following table shows the receipts from the sale and occupation of Crown lands and their proportion to the total revenue in each Australasian colony during 1888. The colonies are arranged in order according to that proportion :—

LAND REVENUE IN AUSTRALASIAN COLONIES, 1888.

Colony.	Revenue derived from Crown Lands for—			Proportion of Land Revenue to Total Revenue.
	Alienation in Fee-simple and Progressive Alienation.	Temporary Occupation and Miscellaneous.	Total.	
	£	£	£	Per cent.
New South Wales ...	1,212,283	1,055,970	2,268,253	25·53
Western Australia ...	6,154	75,194	81,348	22·79
Queensland ...	255,890	382,582	638,472	18·44
South Australia ...	120,173	199,337	319,510	12·81
Tasmania ...	49,220	27,639	76,859	12·01
New Zealand ...	96,270	201,586	297,856*	7·25
Victoria (1888-9) ...	494,733	121,295	616,028	7·10
Total ...	2,234,723	2,063,603	4,298,326	15·02

289. It will be noticed that more than a seventh of the aggregate revenues of the Australasian colonies in 1888 was derived from Crown lands; and that the proportion amounted to about a fourteenth in Victoria and New Zealand; about an eighth in Tasmania and South Australia; about a fifth in Queensland and Western Australia; and over a fourth in New South Wales. It will also be remarked that in the colonies, as a whole, the greater proportion of the land revenue was derived from alienation in fee-simple.

290. In 1888, as compared with 1887, an increase of £127,500 occurred in the land revenue of South Australia, of £58,000 in that of Queensland, of £13,500 in that of New Zealand, of £11,000 in that of Tasmania, and of £4,000 in that of Western Australia; whilst, on the other hand, there was a decrease of £111,000 in that of New South Wales, and of £40,000 in that of Victoria. Taking the colonies as a whole, whilst the increase in 1888 was £63,000, considerable fluctuations will be observed in the land revenue during the

* Inclusive of revenue from goldfields, etc., £19,447.

eleven years ended with 1888, as shown in the following table, from which it will be seen that the amount received was larger in 1888 than in any previous years named, except 1878, 1881, and 1882 :—

LAND REVENUE OF AUSTRALASIAN COLONIES, 1878 TO 1888.

Year.			Land Revenue.	
			Total Amount.	Proportion of Total Revenue.
			£	
1878	...	...	5,814,388	33·00
1879	...	...	3,565,349	22·33
1880	...	...	3,802,143	17·50
1881	...	...	5,744,306	27·00
1882	...	...	5,458,963	25·00
1883	...	...	4,042,722	18·75
1884	...	...	4,001,028	17·50
1885	...	...	3,879,236	16·19
1886	...	...	3,560,297	14·98
1887	...	...	4,235,307	16·49
1888	...	...	4,298,326	15·02

NOTE.—Uniform dates have not always been adhered to in furnishing the above information which in some cases relates to the calendar and in others to the financial year.

291. Of the 27½ millions sterling which formed the total revenue of the Australasian colonies in 1888 over 10½ millions—or nearly two-fifths—was raised by taxation, chiefly through the Customs ; 8 millions—or something less than one-third—was derived from Railways ; over 4½ millions from Crown Lands ; and not quite 2 millions from Post and Telegraphs. The following are the exact figures, also the amounts per head, distinguishing those relating to Continental Australia from those relating to the Australasian colonies taken as a whole :—

Sources of revenue in Australasia.

HEADS OF REVENUE IN AUSTRALIA AND AUSTRALASIA, 1888.

Heads of Revenue.	Continent of Australia.		Australia with Tasmania and New Zealand.	
	Amount.	Proportions per cent.	Amount.	Proportions per cent.
	£		£	
Taxation—				
Customs ...	6,273,336	27·50	7,961,965	28·89
Other Taxes ...	1,976,518	8·67	2,725,354	9·89
Total ...	8,249,854	36·17	10,687,319	38·78
Crown Lands ...	3,963,850	17·38	4,338,565	15·74
Railways ...	7,002,843	30·70	8,082,871	29·33
Post and Telegraphs ...	1,514,444	6·64	1,883,650	6·84
Other Sources ...	2,077,623	9·11	2,566,092	9·31
Total ...	22,808,614	100·00	27,558,497	100·00

NOTE.—For similar figures for 1889, see Appendix A. in the second volume.

Heads of expenditure of Australasian colonies.

292. The following is a comparative statement of the amounts expended under a few of the principal heads in the respective colonies during the most recent year for which the particulars are available:—

HEADS OF EXPENDITURE IN AUSTRALASIAN COLONIES, 1888.*

Heads of Expenditure.	Victoria. (1888-9.)	New South Wales.	Queens- land.	South Australia.	Western Australia.	Tasmania.	New Zealand.
	£	£	£	£	£	£	£
Railways (working expenses)	1,803,124	1,578,590	531,144	483,207	44,080	87,906	675,895
Post and Tele- graphs	619,070	616,371	315,763	179,492	35,429	63,404	252,831
Interest and expenses of Public Debt, etc.†	1,459,242	1,745,695	1,015,667†	717,906	63,820	184,613	1,569,556
Immigration§	...	7,854	11,031	559	5,820	502	...
Other services	4,038,466	4,830,341	1,494,800||	995,235	235,980	373,061	1,464,630
Total ...	7,919,902	8,778,851¶	3,368,405	2,376,399	385,129	709,486	3,962,912

	Proportions per Cent.						
Railways (working expenses)	22·77	17·98	15·77	20·33	11·45	12·39	17·05
Post and Tele- graphs	7·82	7·02	9·37	7·56	9·20	8·94	6·38
Interest and expenses of Public Debt, etc.	18·42	19·89	30·15	30·21	16·57	26·02	39·61
Immigration	...	·09	·33	·02	1·51	·07	...
Other services	50·99	55·02	44·38	41·88	61·27	52·58	36·96
Total ...	100·00	100·00	100·00	100·00	100·00	100·00	100·00

Heads of expenditure in Australasian colonies compared.

293. It will be observed that the Railway expenditure was smaller by nearly £225,000 in New South Wales than in Victoria, where it amounted to over 1 $\frac{3}{4}$ million sterling, or nearly a fourth of the total expenditure, but the interest payable on the Public debt was larger by nearly £290,000 in the former than in the latter colony. In New Zealand also, which has less than half the revenue of Victoria, the

* The figures for Victoria are for the year ended 30th June, 1889, those for the other colonies for the year ended 31st December, 1888. For later figures see Appendix A. in the second volume.
† Interest only.
‡ Borrowed chiefly for the construction of Railways and other reproductive works.
§ Further amounts on the introduction of immigrants were expended during the year out of loans, as follow :—Queensland, £120,882 ; New Zealand, £14,163. See Table VI. *Victorian Year-Book* 1888-9, Vol. I., page 458.
|| Exclusive of charges for the sinking fund (viz., £263,200) formerly charged to revenue, but now virtually provided for out of a loan raised for that purpose.
¶ See footnote (**) to table following paragraph 285 *ante*.

interest on the Public debt exceeded that in Victoria by over £110,000. Four of the colonies have now an annual charge for interest varying from 1 to close on $1\frac{3}{4}$ million sterling. In Victoria and New South Wales the Postal and Telegraph expenditure exceeds £610,000, it being somewhat higher in the former than in the latter colony. The expenditure on immigration should be considered in conjunction with that expended during the year from loans.*

294. It will also be noticed that nearly half the total expenditure in Victoria, New South Wales, and Tasmania, nearly three-fifths in Queensland and South Australia, and over three-fifths in New Zealand, was devoted to the working of Railways and Post and Telegraphs, and the payment of interest on the Public debt. In Victoria, the Railway working expenses alone amounted to nearly one-fourth of the total, and the interest on the Public debt to nearly a fifth, the former being much higher than in the other colonies, whilst the latter was not nearly so high in Victoria as in Tasmania, where it amounted to 26 per cent., or in Queensland or South Australia, where it was 30 per cent., or in New Zealand, where it was as high as 39 per cent. The proportion expended on Post and Telegraph services, it will be noticed, varied from 6 per cent. in New Zealand and 7 per cent. in New South Wales to over 9 per cent. in Queensland and Western Australia. In Victoria it was not quite 8 per cent.

295. The following is a summary of the aggregate expenditure under the various heads referred to for Australia and Australasia:—

HEADS OF EXPENDITURE IN AUSTRALIA AND AUSTRALASIA, 1888.

Heads of Expenditure.	Continent of Australia.		Australia with Tasmania and New Zealand.	
	Amount.	Amount per cent.	Amount.	Amount per cent.
	£		£	
Railways (working expenses)...	4,211,807	18·98	4,975,608	18·52
Post and Telegraphs ...	1,790,168	8·07	2,106,403	7·84
Interest on Public Debt, etc. ...	4,928,209	22·20	6,682,378	24·87
Immigration † ...	25,269	·11	25,771	·10
Other services ...	11,240,482	50·64	13,078,173	48·67
Total ...	22,195,935	100·00	26,868,333	100·00

NOTE.—The amounts in this table are summarized from statements of the amounts expended in the various colonies for the year ended 31st December, 1888; except in the case of Victoria, for which colony the amounts for the year ended 30th June, 1888, have been taken. Later figures are given in Appendix A. to the second volume.

* See tables following paragraphs 273 *ante* and 298 *post*.

† For further amounts expended from loans during the year, see table following paragraph 298 *post*.

Loan ex-
penditure
in Austral-
asian
colonies,
1888.

296. In addition to the expenditure of amounts derived from the General Revenue, as shown in the last two tables, all the colonies spend large sums of borrowed money, chiefly on railways and water-works, but, also, in some instances, on the construction of electric telegraphs, harbour works and lighthouses, defence works, roads and bridges, school buildings, and other public works, and on immigration. The following table shows the total loan expenditure of the various colonies during 1888, also the amounts per head:—

EXPENDITURE FROM LOANS IN AUSTRALASIAN COLONIES, 1888.

Name of Colony.	Expenditure from Loans during 1888.			
	Total Amount.	Amount per Head.		
	£	£	s.	d.
Victoria	2,389,944	2	6	1
New South Wales	1,991,306	1	17	5
Queensland	1,574,258	4	3	6
South Australia	988,803	3	2	4
Western Australia	43,858	1	0	9
Total	6,988,169	2	9	3
Tasmania	412,436	2	17	2
New Zealand	739,674	1	4	5
Grand Total	8,140,279	2	5	4

NOTE.—In this table the figures for Victoria relate to the year ended 30th June, 1888, those for the other colonies to that ended 31st December. For later information, see Appendix A. in the second volume.

Loan ex-
penditure
of different
colonies
compared.

297. It will be observed that the aggregate loan expenditure of the Australasian colonies, in 1888, was over 8 millions sterling, Victoria having spent considerably more, and New South Wales and Queensland somewhat less, than £2,000,000. It will be noticed, however, that the loan expenditure per head of population was much lower in Victoria than in Queensland—where it was highest—South Australia, or Tasmania.

Heads of
loan ex-
penditure
in Australia
and Aus-
tralasia.

298. Of the loan expenditure of the Australasian colonies during 1888, nearly two-thirds was spent in the construction of railways; over one-tenth on waterworks; over 9 per cent. in connexion with harbours, rivers, etc.; not quite 5 per cent. on roads and bridges; $1\frac{2}{3}$ per cent. on the introduction of immigrants; and the balance (about 13 per cent.) for other services. The following are the total and proportionate amounts expended under each of these heads in Australia and Australasia respectively during 1888:—

HEADS OF LOAN EXPENDITURE IN AUSTRALIA AND AUSTRALASIA, 1888.

Heads of Loan Expenditure.	Continent of Australia.		Australia with Tasmania and New Zealand.	
	Amount.	Amount per cent.	Amount.	Amount per cent.
	£		£	
Railways	4,496,371	64·34	4,961,864	60·95
Water Supply	850,440	12·17	850,497	10·45
Roads and Bridges	72,828	1·04	389,125	4·78
Harbours, Rivers, Lighthouses, etc.	701,286	10·04	756,326	9·29
Immigration	120,882	1·73	135,050	1·66
Other services	746,362	10·68	1,047,417	12·87
Total	6,988,169	100·00	8,140,279	100·00

299. The following table gives a statement of the public revenues of the United Kingdom and the various British possessions throughout the world, according to the latest official information available; also the average amount of revenue to each person in the population of the different countries and colonies named. All the calculations have been made in the office of the Government Statist, Melbourne :—

Revenues of British dominions.

REVENUES OF BRITISH DOMINIONS, 1888.

Country or Colony.	Revenue.	
	Gross Amount.	Average per Head.*
EUROPE.		
	£	£ s. d.
United Kingdom (1888-9)	88,472,812	2 6 6
Gibraltar	59,262	3 4 2
Malta	240,146	1 9 7
Heligoland†	8,132	3 13 11
ASIA.		
India (1887-8)‡	78,759,744	0 7 6
Ceylon	1,091,457	0 7 3
Straits Settlements	578,725	1 1 0
Protected Malay States	634,363	1 8 2
British North Borneo	55,967	0 5 1
Sarawak	51,229	0 3 5
Labuan	3,823	0 12 9
Hong Kong	324,438	1 10 1
Cyprus	149,363	0 14 11

* For populations on which most of these calculations have been based, see table following paragraph 175 ante.
† Ceded to Germany whilst these pages were passing through the press.
‡ Revenue of India in 1888-9, £81,585,000.

REVENUES OF BRITISH DOMINIONS, 1888—continued.

Country or Colony.						Revenue.			
						Gross Amount.	Average per Head.*		
AFRICA.						£	£	s.	d.
Mauritius	...	...	...	...	...	857,406	2	4	6
Natal	...	...	...	...	...	990,614	2	1	2
Zululand	...	...	...	...	...	32,873	0	5	6
Cape of Good Hope	...	...	...	...	...	3,426,362	2	8	0
Basutoland	...	...	...	...	...	37,210	0	4	3
British Bechuanaland	...	...	...	...	...	15,742	0	7	2
St. Helena	...	...	...	...	...	9,265	1	16	4
Lagos	...	...	...	...	...	57,058	0	11	5
Gold Coast	...	...	...	...	...	97,807	0	1	4
Sierra Leone	...	...	...	...	...	63,035	0	16	10
Gambia	...	...	...	...	...	20,986	1	6	3
AMERICA.									
Canada	...	...	...	...	...	7,480,930	1	10	1
Newfoundland	...	...	...	...	...	285,423	1	8	7
Bermuda	...	...	...	...	...	29,372	1	17	10
Honduras	...	...	...	...	...	43,511	1	9	0
British Guiana	...	...	...	...	...	461,941	1	13	6
West Indies—									
Bahamas	...	...	...	...	...	45,578	0	18	7
Turk's Island	...	...	...	...	...	6,453	1	4	10
Jamaica	...	...	...	...	...	691,248	1	2	5
St. Lucia	...	...	...	...	...	46,343	1	1	10
St. Vincent	...	...	...	...	...	23,521	0	10	0
Barbados	...	...	...	...	...	162,713	0	18	0
Grenada	...	...	...	...	...	51,378	1	0	10
Tobago	...	...	...	...	...	10,489	0	10	2
Virgin Islands	...	...	...	...	...	1,555	0	6	3
St. Christopher	}	...	...	...	...	40,077	0	18	2
Nevis		...	...	...	...
Antigua	...	...	...	...	...	40,723	1	3	3
Montserrat	...	...	...	...	...	5,854	0	10	8
Dominica	...	...	...	...	...	17,238	0	11	11
Trinidad	...	...	...	...	...	480,523	2	10	8
AUSTRALASIA AND SOUTH SEAS.									
Australia, Tasmania and New Zealand†	...	...	...	...	...	27,558,497	7	13	7
Fiji	...	...	...	...	...	65,018	0	10	4
Falkland Islands	...	...	...	...	...	8,951	4	14	9
Total	...	...	...	...	...	213,595,155	0	15	11

NOTE.—The recently acquired Territory of British New Guinea has a revenue of £15,000, derived solely from contributions by the Australasian colonies and Fiji.

Aggregate
revenue of
British
dominions.

300. It may be ascertained from this table that, out of 214 millions sterling, which represent the aggregate annual revenue of the British

* See footnote (*) on page 191.
† For the revenue of each Australasian colony see table following paragraph 276 ante.

dominions, 91 per cent. is raised in the United Kingdom, India, and Australasia, the proportion contributed by each respectively being 41 per cent., 37 per cent., and 13 per cent. Of the total amount, 41 per cent. is raised in Europe, 38 per cent. in Asia, 3 per cent. in Africa, 5 per cent. in America, and 13 per cent. in Australasia.

301. The very large amount of revenue in proportion to population raised in every one of the Australasian colonies, as compared with other British possessions, will be at once noticed.* It will, however, be remembered that these colonies possess an immense territory, scantily peopled, and that a considerable revenue is derived from the usufruct of the unsold lands, which is not generally the case elsewhere; also, that the revenues are swelled by the large sums which are received annually from the alienation of Crown lands in fee-simple and from the working of the State railways.†

Large
revenues
per head
in Austral-
asian
colonies.

302. Besides the Australasian colonies, Gibraltar, Heligoland,‡ Cape of Good Hope (slightly), Trinidad, and the Falkland Islands, were the only British possessions which raised larger amounts per head than the United Kingdom.

Revenue per
head in
colonies
and United
Kingdom.

303. The following table shows the actual or estimated revenues of the principal Foreign countries at recent dates, according to the best information obtainable. In most cases sums raised by means of loans and other extraordinary receipts have been eliminated. The calculations in the last column have been made in the office of the Government Statist, Melbourne:—

Revenues of
foreign
countries.

REVENUES OF FOREIGN COUNTRIES.

Country.	Year.	Revenue.	
		Gross Amounts (000's omitted.)	Amount per Head.§
EUROPE.		£	£ s. d.
Austria-Hungary	1889	75,794,||	1 17 3
Belgium	"	13,341,	2 4 3
Denmark	1888-9	2,989,	1 8 6
France (including Algeria)	1889	119,437,	2 16 10

* For the revenue of each Australasian colony, see table following paragraph 276 *ante*.

† For a comparison of the railway revenues and land revenues of the Australasian colonies with the total revenues, see paragraphs 285 to 291 *ante*.

‡ Ceded to Germany whilst these pages were passing through the press.

§ The populations of foreign countries on which these calculations are based are generally those given in paragraph 177 *ante*.

|| This amount is made up of £41,408,000, revenue of Austria in 1889; £34,386,000, revenue of Hungary in the same year.

REVENUE OF FOREIGN COUNTRIES—continued.

Country.	Year.	Revenue.	
		Gross Amounts (000's omitted.)	Amount per Head.*
EUROPE— <i>continued.</i>		£	£ s. d.
Germany	1886-8	126,000,†	2 13 9
Greece	1889	3,858,	1 18 11
Holland	„	10,050,	2 4 7
Italy	1889-90	64,605,	2 2 3
Portugal	„	8,986,	2 1 9
Roumania... ..	„	6,385,	1 3 9
Russia in Europe	1889	86,131,	0 18 9
Spain	1888-9	34,067,	1 18 10
Sweden and Norway	„	7,619,‡	1 2 9
Switzerland	1888	2,243,	0 15 3
Turkey	1888-9	16,650,	0 15 2
ASIA.			
Japan	1888-9	16,151,	0 8 3
AFRICA.			
Egypt	1889	10,476,	1 10 9
Tunis	1887-8	864,	0 8 3
AMERICA.			
Argentine Confederation	1889	12,045,	3 3 3
Brazil	1889-90	15,122,	1 1 7
Mexico	1888-9	7,896,	0 13 9
Peru	1887-8	3,237,	1 1 7
United States	1888	79,792,	1 8 9

Countries
raising
largest
revenue.

304. According to this table and that following paragraph 299 ante, the countries which raise the largest revenues of any in the world are Germany and France; and then the United Kingdom. After the revenues of these countries, the largest amounts are raised in Russia, the United States, British India, Austria-Hungary, Italy and Spain in the order named. These are the only countries whose

* See footnote (†) on page 193.

† This amount is made up of the estimated ordinary revenue of the Empire for 1888-9, £30,467,100 (exclusive of contributions by the States and extraordinary receipts), and of the revenues of the following States, according to their Budget estimates, for the dates named, viz. :—Alsace-Lorraine, £2,006,595 in 1887-8; Anhalt, £524,000 in 1887-8; Baden, £2,346,483 in 1888; Bavaria, £12,074,582 in 1887; Bremen, £684,055 in 1886; Brunswick, £637,050 in 1887; Hamburg, £1,995,226 in 1887; Hesse, £879,747 in 1887-8; Lippe, £50,872 in 1887; Lübeck, £149,795 in 1887; Mecklenburg-Schwerin, £827,950 in 1887-8; Oldenburg, £503,867 in 1888; Prussia, £65,141,422 in 1886; Reuss-Greiz, £42,760 in 1887; Reuss-Schleiz, £72,668 in 1888; Saxe-Altenburg, £136,798 in 1888; Saxe-Coburg-Gotha, £329,146 in 1888-9; Saxe-Meiningen, £262,431 in 1888-9; Saxe-Weimar, £337,327 in 1888; Saxony, £3,743,277 in 1886-7; Schaumburg-Lippe, £31,346 in 1887-8; Schwarzburg-Rudolstadt, £101,210 in 1887; Schwarzburg-Sonderhausen, £112,475 in 1887; Waldeck, £54,187 in 1888; and Württemberg, £2,487,120 in 1887-8.

‡ This amount is made up of £5,154,000, revenue of Sweden in 1889-90, and £2,465,000 revenue of Norway in 1887-8.

revenues exceed the united revenues of the Australasian colonies. The revenue of Victoria is larger than that of Denmark, Greece, Roumania, Sweden and Norway, Switzerland, Tunis, Peru or Mexico; and about the same as that of Portugal.

305. France, Germany, and the Argentine Confederation are the only countries named in the table which raise more per head than the United Kingdom, where the proportion is slightly larger than in Belgium or Holland. In Victoria, nearly three times as much per head is raised as in France, and nearly three and a half times as much as in the United Kingdom.

306. The amounts whereof revenue is made up may be divided into two classes, viz., those raised by taxation and those raised otherwise. In Victoria, the former class consists of Customs and Excise duties, wharfage rates, port and harbour dues, business licences, duties on bank notes, duties on estates of deceased persons, a land tax, and stamp duties. The latter class comprises amounts derived from the sale or occupation of Crown lands, from railways, from water supply, from post and telegraph offices, from the Mint, from fees, fines, and forfeitures, from the interest on the public account, from the labour of prisoners, etc. The following figures show the result of a division of the Victorian revenue upon this principle:—

TAXATION, 1888-9.

				£
Revenue raised by taxation	...	...	...	3,749,670
„ otherwise	...	...	...	4,926,320
Total	...	...	...	<u>8,675,990</u>

307. In 1888-9 over 43 per cent. of the total revenue was raised by taxation; and if the amount so raised be divided by the estimated mean population of the financial year, already stated to have been 1,085,630, an average will be obtained of £3 9s. 1d. to each individual. The following table contains a statement of the gross amount of taxation, the average amount per head, and the proportion of taxation to the total revenue, during each year since 1853:—

TAXATION, 1853 TO 1888-9.*

Year.	Taxation.		
	Gross Amount.	Average per Head.†	Percentage of Total Revenue.
	£	£ s. d.	
1853	800,577	4 1 11	24·74
1854	1,052,462	3 18 8	34·08
1855	1,193,309	3 10 6	43·73
1856	1,458,647	3 16 7	49·07
1857	1,331,362	3 1 10	40·00
1858	1,414,511	2 18 6	47·57
1859	1,414,760	2 14 8	43·38
1860	1,330,761	2 9 10	43·11
1861	1,244,389	2 6 1	42·15
1862	1,183,194	2 3 2	36·19
1863	1,158,219	2 1 2	41·74
1864	1,167,036	1 19 10	39·49
1865	1,214,479	1 19 9	39·47
1866	1,219,567	1 18 9	39·61
1867	1,516,231	2 7 1	47·14
1868	1,352,818	2 0 10	41·87
1869	1,539,495	2 4 10	45·49
1870	1,394,333	1 19 1	42·75
1871 (six months) ...	724,261	0 19 10	42·82
1871-2	1,612,034	2 3 2	43·17
1872-3	1,784,056	2 7 0	48·96
1873-4	1,896,842	2 9 2	46·19
1874-5	1,724,822	2 4 0	40·71
1875-6	1,780,392	2 5 0	41·16
1876-7	1,770,685	2 4 2	37·48
1877-8	1,712,953	2 2 0	38·03
1878-9	1,730,088	2 1 10	37·44
1879-80	1,690,923	2 0 3	36·59
1880-81	2,003,704	2 6 7	38·64
1881-2	2,317,706	2 12 8	41·44
1882-3	2,334,255	2 11 10	41·60
1883-4	2,318,520	2 10 4	39·07
1884-5	2,548,171	2 13 10	40·51
1885-6	2,634,560	2 14 3	40·65
1886-7	2,739,635	2 14 8	40·68
1887-8	3,071,003	2 19 2	40·37
1888-9	3,749,670	3 9 1	43·22

NOTE.—An export duty on gold existed from May, 1855, to the end of 1867. The receipts from that source have not, for the purposes of this table, been considered as taxation.

Comparison
of taxation
1888-9 with
former
years.

308. It will be observed that, whilst an increase of £678,700 took place in the gross amount produced by taxation in 1888-9, as compared with the preceding year, the taxation per head increased

* According to figures contained in a statement distributed to Members of the Legislative Assembly by the Honorable the Treasurer in July, 1890, the taxation in 1889-90 amounted to about £3,629,700 or £3 4s. 11d. per head of the estimated mean population (1,118,200) of that financial year.

† For mean population of each year, see table following paragraph 249 ante.

by nearly 10s., and was much higher than in any previous year since 1856. The proportion of taxation to revenue shows a decided advance on the almost uniform level of the previous four years; it was also higher than in any previous year since 1873-4.

309. The following is a statement of the amounts received under the various heads of taxation during each of the last eight years:—

Heads of
taxation.

HEADS OF TAXATION, 1881-2 TO 1888-9.*

Heads of Taxation.	Amount Received.							
	1881-2.	1882-3.	1883-4.	1884-5.	1885-6.	1886-7.	1887-8.	1888-9.
	£	£	£	£	£	£	£	£
Customs duties ..	1,667,306	1,740,467	1,741,053	1,887,718	1,968,640	2,094,356	2,311,331	2,824,788
Wharfage rates† ..	27,346	28,537	28,055	31,821	35,820	38,005	41,719	55,042
Excise :—								
Spirits	52,620	52,522	53,638	68,930	67,250	56,556	65,603	88,867
Beer	98,955	11,256	..	..	..	..	..	..
Tobacco	64,972	70,933	70,016	72,295	70,459	64,145	62,766	57,688
Ports and Harbours‡ ..	26,263	27,787	30,871	31,176	32,710	34,920	34,327	45,884
Licences (not territorial)	25,977	28,381	31,623	32,535	33,922	§ 18,898	21,002	§ 23,904
Duties on estates of deceased persons ..	74,368	86,648	77,154	124,370	104,907	114,909	151,861	236,449
Duty on bank notes ..	27,324	28,685	28,575	27,529	28,769	28,104	27,879	34,023
Stamp duty || .. ..	131,020	133,433	133,651	143,382	165,313	165,000	230,000	260,000
Land tax	121,555	125,606	123,884	128,415	126,770	124,742	124,515	123,025
Total	2,317,706	2,334,255	2,318,520	2,548,171	2,634,560	2,739,635	3,071,003	3,749,670

310. It will be observed that during the three years prior to 1884-5, the amounts received under the head of taxation were almost identical, but in that year there was an increase of £229,600, and further increases of £86,400 in 1885-6, of £105,000 in 1886-7, of £331,000 in 1887-8, and of £679,000 in 1888-9, the total increase in the five years being thus £1,431,000. Only about £90,650 of this increase can be attributed to fresh taxation—viz., £113,000 imposed about the beginning of 1884-5 in the form of increased Customs and Excise duties on spirits, less £13,750 Customs duties remitted in 1886-7, and £8,600 in 1887-8; ¶ whilst the balance (over £1,340,000) represents the growth of the interests by which the sources of taxation

Heads of
taxation in
1888-9 and
previous
years
compared.

* See also footnotes to table following paragraph 260 *ante*.

† Consisting, chiefly, of one-fifth of the total amount of wharfage rates collected at the Port of Melbourne—the remaining portion of these rates being retained by the Melbourne Harbor Trust.

‡ Chiefly tonnage dues.

§ Decrease in 1886-7 owing to preportion of revenue from publicans' licences, etc., now being paid into the "Licensing Act 1885 Fund." Of the amount in 1888-9, £18,075 was for auctioneers' licences.

|| Roughly estimated for 1884-5 and subsequent years. See footnote (†) on page 141 *ante*.

¶ For particulars see table following paragraph 318 *post*.

are affected. The main increase in 1888-9 took place under the head of Customs duties, which showed an increase of £513,000; besides which there was an increase of £84,500 under duties of estates of deceased persons, £13,000 under wharfage rates, £30,000 under stamp duty, £23,000 under excise on spirits, £11,500 under ports and harbours, £8,000 under duty on bank notes, and £3,000 under business licences. Under all other heads, there were decreases. No change was made affecting the sources of taxation during the year 1888-9.

Proportion
of Customs
revenue to
total taxa-
tion, etc.

311. In all the years the greater portion of the taxation has been derived from Customs duties. The proportion from that source, however, has gradually decreased from 89 per cent. in 1874-5, and 87 per cent. in 1875-6, to as low as 72 per cent. in 1881-2, and between 74 and 76½ per cent. in the last seven years. The revenue derived from Customs duties during 1888-9 was equivalent to a charge of 11¼ per cent. on the estimated total value of imports during the same year.*

Customs
revenue,
1881 to
1889.

312. The following is a comparative statement for the same eight financial years of the principal heads under which taxation was levied by means of Customs duties:—

TAXATION BY CUSTOMS DUTIES,† 1881-2 TO 1888-9.

Articles.	Amounts Received.							
	1881-2.	1882-3.	1883-4.	1884-5.	1885-6.	1886-7.	1887-8.	1888-9.
	£	£	£	£	£	£	£	£
Spirits	443,431	468,746	472,259	518,370	545,170	566,134	611,256	664,438
Wine	45,112	44,100	39,096	42,101	41,086	41,335	44,688	53,146
Beer and cider ..	29,770	32,372	33,845	35,210	37,904	41,126	46,047	55,580
Tobacco and snuff	71,525	85,844	97,420	108,405	121,476	151,893	199,540	235,564
Cigars	24,927	29,453	31,311	34,299	33,583	37,848	46,896	61,195
Tea	81,706	80,298	73,970	88,093	87,544	90,660	98,955	103,402
Sugar‡ and molasses	103,466	108,087	119,248	118,031	115,796	128,526	134,861	123,576
Coffee, chicory, co- coa, and chocolate	14,491	14,883	15,665	16,930	16,990	16,788	17,596	17,524
Opium	21,359	20,897	21,389	19,517	15,236	15,043	15,679	19,275
Rice	20,169	20,576	16,607	18,824	19,710	20,279	23,246	23,358
Hops	14,948	8,318	4,416	4,326	4,455	8,955	9,733	15,621
Malt	4,272	1,750	3,301	2,302	3,633	4,655	2,346	3,172
Fruits and vege- tables, dried and preserved	47,510	48,418	43,973	53,348	47,806	54,641	64,376	59,846
Live stock ..	34,948	32,945	38,359	30,064	37,741	34,706	52,632	76,891
Articles subject to <i>ad valorem</i> duties	434,532	444,038	441,470	490,677	494,512	522,884	548,619	788,361
All other articles ..	275,140	299,742	288,724	307,221	345,968	358,883	394,781	523,840
Total ..	1,667,306	1,740,467	1,741,053	1,887,718	1,968,640	2,094,356	2,311,331	2,824,788

* See also table, "Taxation by Customs duties in Australasian Colonies," *post*.

† Wharfage rates, which form part of the Customs revenue, are not included in this table.

‡ Including glucose.

313. The Customs revenue in 1888-9, it will be observed, exceeded that in 1887-8 by £513,000, which was by far the largest excess for many years past; whilst the total increase since 1880-81 amounted to over one million sterling. The increase of £513,000 just referred to is made up chiefly of £239,700 under articles subject to *ad valorem* duties; £71,000 under the head of spirits, wine and beer; £50,300 under tobacco and cigars; £24,300 under live stock; and £129,100 under miscellaneous articles not distinguished in the table; whilst the only decreases that occurred were £11,300 under the head of sugar, and £4,500 under the head of fruits, etc. This large increase under the various heads of Customs revenue is entirely due to the recent large expansion of the import trade of the colony, which rose from 21½ millions in 1887-8 to nearly 24¼ millions in 1888-9; for no alterations were made in the tariff in 1888-9, and only a few slight alterations in the previous years.

314. The relative importance of the various heads of Imports as sources of Customs revenue is shown in the following table, which gives a statement of the total amount and the amount per head of the population, of duty received in 1888-9 from each of the principal groups of articles; also the proportionate amount received from the articles embraced in each group to the total amount received:—

TAXATION ON CHIEF ARTICLES OF IMPORT, 1888-9.

Articles.	Duty received 1888-9.			Proportion to Total Duty received.	
	Total Amount.	Amount per Head of Population.			
	£	£	s.	a.	Per cent.
Spirits, wine, beer, and cider	773,164	0	14	3	27·37
Tobacco, snuff, and cigars	296,759	0	5	6	10·51
Hops and malt	18,793	0	0	4	·67
Sugar* and molasses	123,575	0	2	4	4·38
Tea, coffee, chicory, cocoa, and chocolate...	120,926	0	2	3	4·28
Rice	23,358	0	0	5	·83
Fruits and vegetables... ..	59,846	0	1	1	2·09
Opium	19,275	0	0	4	·68
Live stock	76,891	0	1	5	2·73
Articles subject to <i>ad valorem</i> duties ...	788,361	0	14	6	27·91
All other articles	523,840	0	9	8	18·55
Total	2,824,788	2	12	1	100·00

* Including glucose.

Customs
revenue
estimated
and re-
ceived, 1887
to 1889.

315. The following table shows, for the three years ended with 1888-9, the amount of Customs revenue estimated beforehand by the Treasurer, and the amount actually received under each head:—

CUSTOMS REVENUE ESTIMATED AND RECEIVED, 1886-7 TO 1888-9.

Sources of Revenue.	1886-7.		1887-8.		1888-9.	
	Estimated Receipts.	Actual Net Receipts.	Estimated Receipts.	Actual Net Receipts.	Estimated Receipts.	Actual Net Receipts.
CUSTOMS DUTIES.	£	£	£	£	£	£
Spirits ...	540,900	566,059	565,000	610,974	637,416	664,533
Wine ...	41,400	41,335	41,000	44,699	43,992	53,135
Beer and cider ...	38,200	41,125	41,000	46,045	45,996	55,571
Tobacco and snuff ...	119,800	151,880	151,000	199,587	210,996	235,600
Cigars ...	34,200	37,828	36,500	46,906	43,992	61,219
Tea ...	88,500	89,915	92,000	99,519	105,000	103,553
Sugar and molasses ...	117,600	128,487	152,000	135,069	136,008	123,463
Coffee, chicory, cocoa and chocolate	16,900	16,758	18,000	17,594	15,996	17,674
Opium ...	15,300	15,043	13,000	15,679	15,996	19,276
Rice... ..	19,600	20,277	20,000	23,195	22,008	23,393
Hops ...	4,400	8,932	6,000	9,734	11,004	15,522
Malt ...	2,800	4,655	5,000	2,346	3,000	3,139
Fruits and vegetables, dried and preserved	46,900	54,291	50,000	64,979	66,000	59,475
Live stock ...	37,000	34,497	35,000	52,458	49,404	75,333
Articles subject to <i>ad valorem</i> duties	513,200	521,977	545,500	547,570	538,896	789,244
All other articles ...	348,000	359,520	386,700	394,292	386,904	524,133
Export duty ...	...	19	...	...	...	...
Total ...	1,984,700	2,092,598	2,157,700	2,310,646	2,332,608	2,824,263
EXCISE.						
Spirits distilled in Victoria	68,600	56,556	55,000	65,603	64,992	88,859
Tobacco duty ...	69,800	64,145	62,000	62,766	63,000	57,688
Licences—						
Tobacco and cigars ...	1,150	1,225	1,150	1,225	1,248	1,137
Other ...	850	840	900	844	900	892
Total ...	140,400	122,766	119,050	130,438	130,140	148,576
MISCELLANEOUS.						
Wharfage rates ...	30,300	37,990	40,000	41,678	42,000	55,056
Tonnage ...	33,000	34,931	34,000	34,294	34,992	45,916
Fees... ..	7,300	7,180	7,400	7,340	7,404	6,931
Fines ...	400	951	1,000	1,371	1,008	1,223
Miscellaneous ...	5,670	12,218	10,600	12,890	12,828	10,729
Total ...	76,670	93,270	93,000	97,573	98,232	119,855
Grand Total ...	2,201,770	2,308,634	2,369,750	2,538,657	2,560,980	3,092,694

NOTE.—The receipts, as shown in this and the two following tables, having been obtained from the Customs, will be found to differ somewhat from those shown in the previous table and other tables in this Part, which are based upon the Treasurer's statements. The reason of the difference is that the Treasury accounts are closed absolutely on the 30th June, whereas the Customs accounts are not closed until returns from all the ports in the colony are received in a complete state, so as to embrace transactions up to the last day of the financial year.

316. In seven of the eleven years ended with 1888-9, the total amounts received through the Customs exceeded the Treasurer's estimate, and in four of those years the receipts were below that estimate. Over the whole period the receipts exceeded the estimate by over one million sterling, as is shown in the following table:—

Customs
revenue
estimated
and
received
1879 to 1889.

CUSTOMS REVENUE ESTIMATED AND RECEIVED, 1878-9 TO 1888-9.

Year.	Customs Revenue.		
	Estimate.	Net Receipts.	Net Receipts more (+) or less (−) than Estimates.
	£	£	£
1878-9	1,539,450	1,449,793	− 89,657
1879-80	1,458,700	1,454,138	− 4,562
1880-1	1,561,420	1,649,467	+ 88,047
1881-2	1,809,000	1,950,479	+ 141,479
1882-3	1,974,580	1,949,388	− 25,192
1883-4	1,982,500	1,936,810	− 45,690
1884-5	2,010,150	2,109,477	+ 99,327
1885-6	2,097,300	2,193,148	+ 95,848
1886-7	2,201,770	2,308,634	+ 106,864
1887-8	2,369,750	2,538,657	+ 168,907
1888-9	2,560,980	3,092,694	+ 531,714
Total	21,565,600	22,632,685	+ 1,067,085*

317. In the same eleven years, the cost of collecting the Customs revenue ranged from £2 15s. 9d. per £100 of the net amount collected in 1888-9 to £3 18s. 3d per £100 in 1879-80, the cost per £100 over the whole period being £3 2s. 5d.:—

Cost of
collecting
Customs
revenue.

COST OF COLLECTING CUSTOMS REVENUE, 1878-9 TO 1888-9.

Year.	Customs Revenue.		
	Net Receipts.	Charges of Collection.	
		Total.	Per £100 collected.
	£	£	£ s. d.
1878-9	1,449,793	54,150	3 14 8
1879-80	1,454,138	56,917	3 18 3
1880-1	1,649,467	56,004	3 7 10
1881-2	1,950,479	57,615	2 19 1
1882-3	1,949,388	60,688	3 2 3
1883-4	1,936,810	62,145	3 4 2
1884-5	2,109,477	64,242	3 0 11
1885-6	2,193,148	63,808	2 18 2
1886-7	2,308,634	70,137	3 0 9
1887-8	2,538,657	74,744	2 18 11
1888-9	3,092,694	86,262	2 15 9
Total	22,632,685	706,712	3 2 5

* Net figures.

Taxes
repealed
and
imposed.

318. Difficulties lie in the way of estimating accurately the extent to which the various heads of revenue are effected by the imposition, increase, or reduction of taxes. An attempt has, however, been made to form such an estimate in the following table for the last fourteen years, which, although giving necessarily imperfect results, will afford some idea of the direction in which the contributions of the people towards the cost of Government have been added to or reduced, also the extent of such increase or reduction during the period:—

TAXES REPEALED AND IMPOSED, 1875-6 TO 1888-9.

Year ended 30th June.	Taxes Repealed or Reduced.			Taxes Imposed or Increased.		
	Heads of Taxation.	Estimated Loss to the Revenue—		Heads of Taxation.	Estimated Gain to the Revenue—	
		During the Financial Year.	In Complete Years.		During the Financial Year.	In Complete Years.
		£	£		£	£
1876	Nil ...	...	...	Succession duties increased from 5 to 5-10 per cent. on estates over £20,000 ...	3,000	10,700
				Tax on bank notes imposed ...	7,200	27,000
1877	Nil ...	...	...	Nil ...	...	...
1878	Customs— Wharfage rates for port of Mel- bourne <i>trans- ferred</i> to Har- bour Trust ...	(85,000)*	(85,000)*	Land tax imposed	50,000	124,000
	Various altera- tions resulting in a net remis- sion of about	26,000	85,000†	Excise— Percentage of pub- licans' licence fees from municipal bodies ..	(4,600)*	(4,800)*
				Customs— Stock tax im- posed ...	28,300	37,000
1879	Nil ...	...	...	Nil ...	...	...

* These amounts, being merely transfers of revenue from one Public fund to another, do not affect the general taxation of the country.

† This amount has been arbitrarily assumed to be the difference in the average annual revenue from those items on which the duty has been altered during the two years preceding and following the date of the alteration in the tariff.

TAXES REPEALED AND IMPOSED, 1875-6 TO 1888-9—*continued*.

Year ended 30th June.	Taxes Repealed or Reduced.			Taxes Imposed or Increased.		
	Heads of Taxation.	Estimated Loss to the Revenue.		Heads of Taxation.	Estimated Gain to the Revenue.	
		During the Financial Year.	In Complete Years.		During the Financial Year.	In Complete Years.
		£	£		£	£
1880	... ..	...	...	Stamp duties imposed ...	83,005	120,000
	Customs— (See contra) ...	...	...	Customs— Duties Increased on —Wine, opium, rice, hops, and malt; several 10 per cent. and 20 per cent. <i>ad valorem</i> duties increased by 5 per cent. besides numerous other alterations, for the most part in the direction of in- creased duties, about	47,800	53,000*
1881	Nil ... ..	...	...	Customs— Tobacco and snuff increased Cigars increased	Revenue decreased 2,300	† 3,500
				Excise— Tobacco duty imposed ...	21,872	65,000 .
				Beer „ „	62,557	100,000
1882	Customs — Duty on undressed rice reduced ...	3,000	3,500	Nil ... ..	...	...
1883	Excise—Beer duty remitted ...	88,000	100,000	Nil ... ..	...	...
1884	Nil ... ..	...	...	Nil ... ..	...	...
1885	Nil ... ..	...	...	Customs—Duty on spirits increased	74,972†	94,500
				Excise—Duty on spirits increased	12,653	18,400
1886	Nil ... ..	...	...	Nil ... ..	...	...

* See footnote (†) on page 202.

† Of this item no satisfactory estimate can be given.

‡ This is the proportion actually received in 1884-5 at the increased rate of duty, but it does not correspond with the increased revenue from spirits, viz., £46,100, according to the table following paragraph 312 *ante*, owing to the quantity imported having fallen off by 6 per cent. The amount received from the increased duty was, moreover, much affected by an unusually large proportion—viz., 15 per cent. of the total quantity imported having passed through the Customs during the first seventeen days of the financial year, and consequently at the lower rate of duty.

TAXES REPEALED AND IMPOSED, 1875-6 to 1888-9—continued.

Year ended 30th June.	Taxes repealed or Reduced.			Taxes Imposed or Increased.		
	Heads of Taxation.	Estimated Loss to the Revenue.		Heads of Taxation.	Estimated Gain to the Revenue.	
		During the Financial Year.	In Complete Years.		During the Financial Year.	In Complete Years.
		£	£		£	£
1887	Customs — Duty on bags and sacks and wire netting reduced or remitted ...	19,100	19,300	Customs— Duty on woollen piecegoods and wearing apparel increased 5 per cent. Duty on twine increased 50 per cent. ...	20,700	22,200
	Licences — Proportion of receipts received on account of publicans' licences transferred to Licensing Act 1885 Fund ...	(15,100)*	(16,450)*			
1888	Customs— Sugar—Duty on cane (raw) reduced 33 per cent., but that on beet sugar doubled. Net amount ...	13,900	15,000	Customs— Timber duties increased ...	5,900	6,400
1889	Nil ...	...	...	Nil ...	...	...

319. From the above table it would appear that during the last fourteen years, the taxation imposed or increased, less that repealed or reduced, has resulted in an increased annual charge amounting to nearly half a million sterling,† thus—

	Estimated Annual Amount.
Taxation imposed or increased ...	£681,700
„ repealed or reduced ...	222,800
Net amount imposed, etc. ...	£458,900

320. The tax on bank notes was imposed under the Act 39 Vict. No. 526, which came into operation on the 1st January, 1876. It is

* These amounts, being merely transfers of revenue from one Public Fund to another, do not affect the general taxation of the country.
† This result has been obtained by adding together the amounts estimated to be receivable in the first complete year of the operation of each tax, and deducting therefrom the sum of the amounts of the repealed taxes. In some instances the net amounts receivable would be less, and in others much more in subsequent years. Mere transfers of revenue (see preceding footnote) have been omitted.

at the rate of £2 on every £100 of the average amount of notes circulated by any bank between the 1st July and the 30th June of each financial year. The revenue received from this duty in 1888-9 was, as already shown, £34,023.

321. The Act for imposing a land tax (41 Vict. No. 575) came into operation on the 28th August, 1877. It provides that 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, shall be taxed at the rate of one and a quarter per cent. upon their capital value, after deducting therefrom the sum of £2,500—only one exemption, however, being allowed in the case of a proprietor holding more than one estate. For the purpose of ascertaining the capital value, 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

322. The extent of land assessed under this Act amounted in 1889 to over 7,000,000 acres, nearly half of which was placed in the lowest class, more than a third in the third class, about a ninth in the second class, and not quite a twentieth in the first class.

323. The area of Victoria is 56,245,760 acres, of which 22,494,000 acres either had been alienated in fee-simple or were in process of alienation when the year commenced. The area assessed for land tax thus amounted to nearly 13 per cent. of the area of the colony, or to 31½ per cent. of the area alienated or in process of alienation.*

324. The number of estates assessed was 1,091, or 6 more than in 1888. As some proprietors own more than one estate, their number is less than the number of estates, and is set down at 858. It is, however, actually less than this, as, whilst the returns show where the proprietor holds more than one estate in the same class, they do not distinguish cases of proprietors holding estates embraced in two or more classes.

325. The average size of all the estates assessed is nearly 6,500 acres, which is somewhat above the average of those in Class III. In Classes I. and II. the estates average 2,600 and 3,500 acres respectively, and in Class IV. 9,900 acres.

* The land in process of alienation amounted to 6,910,000 acres, on which, on the average, more than half the purchase money had been paid. If this were left out of account, the proportion of freehold land assessed for land tax would be increased to 46 per cent.

Proprietors
and number
and size of
estates
assessed.

326. The following table shows, for each class, the number and area of estates assessed for land tax, the number of proprietors of such estates, and the average number of acres to each estate and to each proprietor :—

PROPRIETORS AND NUMBER AND SIZE OF ESTATES ASSESSED FOR LAND TAX, 1890.*

Class.	Number of Proprietors.	Estates Assessed.				
		Number.	Area.		Average Area to each.	
			Total.	Percentage of Each Class.	Proprietor.	Estate.
			Acres.		Acres.	Acres.
I.	103	120	312,074	4·41	3,029	2,601
II.	198	222	785,071	11·08	3,965	3,536
III.	306	396	2,502,281	35·34	8,178	6,319
IV.	251	353	3,481,542	49·17	13,871	9,862
Total ...	858	1,091	7,080,968	100·00	8,253	6,490

Valuation of
estates
assessed.

327. The capital value of the estates, according to the valuation prescribed by the Statute, is over twelve millions sterling ; but, after deducting the exemptions allowed, viz., £2,500, from the value of the estate or estates of each proprietor, the net taxable value is reduced to less than ten millions sterling. It may be pointed out that, although it may perhaps have been necessary to fix arbitrarily a scale for valuing estates for purposes of taxation, yet there is no doubt that the taxable value so arrived at is, in most cases, very much below the actual value of the estates.

Valuation of
estates of
each class.

328. The capital value of the estates in each class, according to their estimated carrying capacity, the value of the exemptions, and the net taxable value after deducting these, and the proportion of the net taxable value to the capital value, are given in the following table :—

VALUE OF ESTATES ASSESSED FOR LAND TAX, 1890.*

Class.	Capital Value.	Value of Exemptions.	Net Taxable Value.	Proportion of Net Taxable Value to Capital Value.
	£	£	£	Per cent.
I. ...	1,248,296	257,500	990,796	79·37
II. ...	2,355,213	495,000	1,860,213	78·98
III. ...	5,004,562	765,000	4,239,562	84·71
IV. ...	3,481,542	627,500	2,854,042	81·98
Total ...	12,089,613	2,145,000	9,944,613	82·26

* According to the returns of the half-year ended 27th February, 1890.

329. The land tax payable varied from 9½d. per acre in Class I. to 2½d. per acre in Class IV., the average being about 4¼d. per acre; the amount payable by each holder averaged £145, ranging from an average of £173 in Class III. to one of about £120 in Classes I. and II.; and the amount payable for each estate averaged £114, averaging £134 in Class III., and between £101 and £105 in the other classes. Subjoined is a statement of the total amount payable annually in respect to the estates of each class; also the average amount payable per acre, per holder, and per estate:—

LAND TAX PAYABLE ANNUALLY, 1890.*

Class.	Total Amount per Annum.	Amount per Acre.	Amount by each Holder.	Amount for each Estate.
	£	d.	£	£
I. ...	12,385	9·52	120·2	103·2
II. ...	23,253	7·11	117·4	104·7
III. ...	52,995	5·08	173·2	133·8
IV. ...	35,675	2·46	142·1	101·1
Total ...	124,308	4·21	144·9	113·9

330. It will be observed that, although the average amount payable per acre goes, as may be supposed, in regular succession according to classes, the difference between the acreable payment by each class and its successor is very marked—the difference between each class and the succeeding one varying from 2d. to 2½d. It will also be noticed that the amount paid on behalf of each estate in Class III. is fully 30 per cent. more than that paid on behalf of those in Class IV., notwithstanding that the average area of each estate in the former class is, as is shown in a previous table, one-third smaller than that in the latter.

331. The first general hearing of the appeals against the land tax was concluded in 1880. Since then the number of proprietors has increased by 40, and the area of the estates assessed by 186,000 acres, but the taxable value has decreased by £81,300. Except a slight increase in the number of proprietors in the first and second classes, the increases have all taken place in the fourth class, the other classes showing decrease, as is shown in the subjoined table:—

* According to the returns of the half-year ended 27th February, 1890.

ESTATES ASSESSED FOR LAND TAX, 1880 AND 1890.

	Classes.				Total.
	I.	II.	III.	IV.	
Number of proprietors, 1880	98	196	315	209	818
„ „ 1890	103	198	306	251	858
Increase ...	5	2	...	42	40
Decrease ...	...	...	9	...	...
Area of estates, 1880 ...	Acres. 339,303	Acres. 816,505	Acres. 2,525,221	Acres. 3,213,717	Acres. 6,894,746
„ „ 1890 ...	312,074	785,071	2,502,281	3,481,542	7,080,968
Increase ...	...	...	...	267,825	186,222
Decrease ...	27,229	31,434	22,940	...	...
Net taxable value, 1880 ...	£ 1,112,212	£ 1,959,515	£ 4,262,944	£ 2,691,217	£ 10,025,888
„ „ 1890 ...	990,796	1,860,213	4,239,562	2,854,042	9,944,613
Increase ...	...	...	...	162,825	...
Decrease ...	121,416	99,302	23,382	...	81,275

Cost of ad-
ministering
Land Tax
Act.

332. The cost of administering the *Land Tax Act* during the year 1888-9 amounted to £1,060, as against £1,157 in the previous year.

Stamp
duties.

333. Stamp duties were first imposed during the year 1879-80, under Act 43 Vict. No. 645, which came into force on the 18th December, 1879. The following, in a condensed form, are the particulars of the duties levied thereunder, together with a list of the chief exemptions:—

STAMP DUTIES.

I.—BILLS OF EXCHANGE AND PROMISSORY NOTES.

	£	s.	d.
Bills of exchange, payable on demand, cheques, etc., each	0	0	1
All other kinds (except bank notes)—			
For every £25 or fraction thereof of the total value up to £100 ...	0	0	6
For every additional £50 or fraction thereof	0	1	0

(The maximum duty chargeable on any bill of exchange or promissory note, whatever be its amount or value, to be £10.)

II.—RECEIPTS.

Receipts or discharges for payment of £5 or upwards, each	0	0	1
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III.—CONVEYANCE ON SALE OF ANY REAL PROPERTY, APPLICATIONS, CONSENTS, AND TRANSFERS UNDER TRANSFER OF LAND STATUTE.

For every £50 of consideration or fraction thereof after deducting the first £50	0	5	0
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STAMP DUTIES—*continued*.

IV.—ANNUAL LICENCE.

	£	s.	d.
Fire, fidelity guarantee, or marine assurance or insurance company— For every £100 of premiums received or fraction thereof, a licence- fee per annum of	1	10	0

EXEMPTIONS.

Class I.—Cheques drawn on public accounts, or on those of a registered building or friendly society; drafts or instruments affecting the transmission of public moneys; drafts, orders, etc., of post office or other savings banks; and Government or municipal debentures.

Class II.—Receipts for moneys paid to or from public accounts for municipal rates, for deposits in banks in current account, or for moneys paid into a charitable institution, a registered friendly society, a fire, life, fidelity guarantee, or marine insurance (or assurance) company, or into a post office or other savings bank.

Class III.—Crown grants; instruments for conveyance of property to the Crown or a public department, to a registered friendly society, or to a religious, charitable, or educational association; and marriage settlements.

Class IV.—Any private guarantee fidelity insurance scheme promoted amongst and sustained solely for the benefit of the officers and servants of any one particular public department, company, firm, or person, or of the officers or members of a registered friendly society.

334. The revenue from the “Sale of Stamps” amounted to £875,314* in 1888-9, as compared with £782,449 in the previous year. For reasons already explained,† there is no means of ascertaining accurately what proportion of this is derived from stamp duties; but after making due allowance for the value of stamps on telegrams—which has been ascertained; of those used for postage—which has been carefully estimated; and of those used for fees—the balance representing the revenue from stamp duties is estimated to have amounted to £260,000 in 1888-9. The latest year for which exact information is available is 1882-3, in which the revenue from stamp duties amounted to £133,433. The cost of printing stamps of all kinds amounted to £5,694 in 1889.

335. The following table shows the gross amount raised by taxation, the amount of taxation per head, and the proportion of taxation to the total revenue in Victoria during each of the last nine financial years, and in the other Australasian colonies during each of the eight years ended with 1888:—

* Including £5,080 cash received in lieu of stamps in the Registrar-General's Office under Act No. 1010. The approximate stamp revenue for 1889-90 was £797,893.

† See footnote (†) on page 141 *ante*.

TAXATION IN AUSTRALASIAN COLONIES.

Colony.	Year.	Taxation.		
		Gross Amount.	Average per Head.	Percentage of Total Revenue.
		£	£ s. d.	
Victoria* ...	1880-81	2,003,704	2 6 7	38·64
	1881-2	2,317,706	2 12 8	41·44
	1882-3	2,334,255	2 11 10	41·60
	1883-4	2,318,520	2 10 4	39·07
	1884-5	2,548,171	2 13 10	40·51
	1885-6	2,634,560	2 14 3	40·65
	1886-7	2,739,635	2 14 8	40·68
	1887-8	3,071,003	2 19 2	40·37
	1888-9	3,749,670	3 9 1	43·23
New South Wales ...	1881	1,770,848	2 6 5	26·40
	1882	1,903,413	2 7 7	25·68
	1883	1,891,708	2 4 10	29·24
	1884	2,152,855	2 8 1	30·25
	1885	2,252,651	2 8 5	29·70
	1886	2,611,835	2 13 4	34·39
	1887	2,664,548	2 12 1	31·05
	1888	2,681,883	2 10 5	30·18
Queensland† ...	1880-81	657,753	3 1 2	32·50
	1881-2	806,719	3 11 1	38·38
	1883	929,430	3 9 5	35·98
	1884	1,090,445	3 13 0	40·79
	1885	1,200,111	3 17 9	42·24
	1886	1,196,651	3 12 0	42·59
	1887	1,338,838	3 15 6	44·15
	1888	1,577,671	4 3 8	45·56
South Australia ...	1881	557,188	1 18 7	25·65
	1882	653,864	2 5 1	31·33
	1883	637,751	2 2 8	30·96
	1884	563,841	1 16 7	27·84
	1885	749,447	2 7 11	32·45
	1886	585,123	1 17 5	29·62
	1887	648,645	2 1 5	32·21
	1888	739,353	2 6 6	29·64
Western Australia ...	1881	109,199	3 13 7	42·94
	1882	134,658	4 8 7	53·78
	1883	126,131	4 0 9	39·82
	1884	127,338	3 18 9	43·86
	1885	145,835	4 5 8	45·11
	1886	184,999	4 19 6	47·61
	1887	188,911	4 10 7	50·00
	1888	179,944	4 5 1	50·40
Tasmania ...	1881	350,146	2 19 8	69·22
	1882	370,856	3 1 5	67·28
	1883	388,406	3 2 6	69·09
	1884	344,192	2 13 7	62·66
	1885	366,118	2 15 5	64·07
	1886	371,544	2 14 10	65·29
	1887	375,501	2 13 8	63·12
	1888	405,807	2 16 3	63·40

* The financial year of Victoria ends on the 30th June.

† The financial year of Queensland ends on the 30th June. The figures furnished for the last six years, however, relate to the year ended 31st December.

TAXATION IN AUSTRALASIAN COLONIES—continued.

Colony.	Year.	Taxation.		
		Gross Amount.	Average per Head.	Percentage of Total Revenue.
New Zealand ...	1881	£ 1,881,024	£ s. d. 3 16 3	50·66
	1882	1,999,000	3 18 6	51·03
	1883	2,080,084	3 18 7	53·73
	1884	1,869,496	3 7 8	50·42
	1885	1,995,012	3 10 6	51·68
	1886	1,962,162	3 7 5	53·20
	1887	1,876,235	3 2 11	54·17
	1888	2,031,658	3 7 1	49·43

NOTE.—For returns of taxation in these colonies during 1889 see Summary of Australasian Statistics (third folding sheet) in the second volume ; also Appendix A. to the second volume.

336. The amount of taxation per head in the last year referred to in the table was not so high in Victoria as in Queensland or Western Australia, but higher than in the other colonies. The following is the order in which the colonies stood in this respect during that year, the colony with the highest taxation per head being placed at the top, and that with the lowest at the bottom, of the list:—

Order of colonies in respect to taxation.

ORDER OF COLONIES IN REFERENCE TO AMOUNT OF TAXATION PER HEAD.

1. Western Australia.

2. Queensland.

3. Victoria.

4. New Zealand.
5. Tasmania.

6. New South Wales.

7. South Australia.

337. The colonies differ considerably in respect to the proportion that the amount raised by taxation bears to the total revenue. Thus, in the last year named, whilst Tasmania raised nearly two-thirds of her revenue by taxation, Western Australia and New Zealand raised about one-half, Queensland and Victoria more than two-fifths, and New South Wales and South Australia not quite a third. The following is the order in which they respectively stand in this particular, the colony in which the proportion of revenue raised by taxation is largest being placed first, and the remainder in succession:—

Order of colonies in respect to revenue raised by taxation.

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF REVENUE RAISED BY TAXATION.

1. Tasmania.

2. Western Australia.

3. New Zealand.

4. Queensland.
5. Victoria.

6. New South Wales.

7. South Australia.

338. If the gross amounts raised by taxation in the different colonies during 1888,* of which particulars are given in the table, be added together, it will be found that the total taxation levied on the continent of Australia amounted to eight and a quarter millions sterling; and the total taxation of the colonies on the continent, added to that of Tasmania and New Zealand, amounted to over ten and a half millions sterling. The exact figures will be found in the following table, also the average amount of taxation per head of the population, and the proportion that the taxation bore to the total revenue:—

TAXATION OF AUSTRALIA AND AUSTRALASIA, 1888.*

	Taxation.		
	Gross Amount.	Average per Head.	Percentage of Total Revenue.
	£	£ s. d.	
Continent of Australia	8,249,854	2 18 1	36·17
Ditto, with Tasmania and New Zealand	10,687,319	2 19 6	38·78

339. By comparing the above figures with those of this colony, it will be found that in Victoria the taxation per head of the population is about 10s. higher, and the proportion of taxation to the total revenue is higher by about a tenth, than the corresponding items in the Australasian colonies as a whole.

340. The taxation in the United Kingdom and the few British possessions respecting which particulars are at hand is given in the following table:—

TAXATION IN BRITISH POSSESSIONS.

Country.	Year.	Taxation.			
		Gross Amount.	Average per Head.	Percentage of Total Revenue.	
EUROPE.					
United Kingdom	1888-9	£ 73,597,000	£ s. d. 1 18 9	83·19	
ASIA.					
India	1888-9	24,876,000	0 2 4	31·59	
Ceylon	1887	621,819	0 4 2	46·26	
Straits Settlements	1886	512,036	1 0 3	85·23	
AFRICA.					
Mauritius	1886	428,338	1 3 3	59·24	
Natal	1887	346,717	0 14 6	43·62	
Cape of Good Hope	„	1,053,553	0 15 4	33·33	
Lagos	1886	44,427	0 8 11	86·52	
Gambia	1887	9,709	0 12 11	72·17	

* In the case of Victoria, the figures for 1887-8 have been taken.

TAXATION IN BRITISH POSSESSIONS—continued.

Country.	Year.	Taxation.		
		Gross Amount.	Average per Head.	Percentage of Total Revenue.
AMERICA.		£	£ s. d.	
Canada	1888	5,870,295	1 3 7	78·47
Newfoundland	1886	197,647	0 19 9	79·64
Bermuda	1887	23,950	0 15 11	87·40
West Indies—				
Turk's Island	1884	7,158	1 10 3	68·34
Jamaica	1885	494,729*	0 16 7	80·79
St. Lucia	1887	32,397	0 15 4	81·06
Barbados	1886	103,101	0 12 0	75·65
Grenada	„	28,390	0 11 9	60·19
Tobago	1884	10,294	0 10 0	72·62
Virgin Islands	1886	1,223	0 4 8	84·46
Antigua	1884	33,558	0 19 2	74·09
Montserrat	1883	5,415	0 10 0	92·36
Dominica	1885	12,526	0 8 8	79·07
Trinidad	1886	317,715	1 15 8	70·07
AUSTRALASIA.				
Australia, Tasmania, and New Zealand†	1888	10,687,319	2 19 6	38·78
Fiji	„	44,223	0 7 1	68·02

341. It will be observed that the amount raised by taxation in Australasia is four-fifths more than that in Canada; but that the amount raised by taxation in India is nearly two and a half times, and in the United Kingdom seven times as large as that so raised in Australasia. It might be supposed that those countries which depended almost entirely on taxation for their revenue would be more heavily taxed than countries which had other ample resources. The reverse, however, is the case with the Australasian colonies; for whilst they raise barely 39 per cent. of their revenue by taxation—or the smallest proportion of any of the British possessions named except India and the Cape of Good Hope—their average taxation per head exceeds by 21s. that in the United Kingdom, which raises 83 per cent. of its revenue by taxation, and is, moreover, in proportion to population, more heavily taxed than any of its other dependencies of which particulars are at hand.

Taxation in Australasia and other British possessions compared

342. In Victoria the gross amount of taxation is three and a half times that in the Cape of Good Hope, but is equal to less than two-thirds that in Canada. The average per head is about £1 10s. higher than in the United Kingdom; but, in proportion to revenue, the

Taxation in Victoria and other British possessions compared

* Including local taxation.
† For gross amount of taxation and taxation per head, and proportion of taxation to total revenue, in the various Australasian colonies, see table following paragraph 335 ante.

taxation of Victoria, being little more than the average of Australasia, is extremely low when compared with the other portions of the British dominions of which information is available.

343. From the manner in which the statistical returns of Foreign countries are compiled, it is not always easy to separate the items of taxation from other sources of revenue. An endeavour, which it is believed is fairly successful, has, however, been made to do this in the case of the countries named in the following table:—

TAXATION IN FOREIGN COUNTRIES.

Countries.	Year.	Taxation.				
		Gross Amount (000's omitted.)	Average per Head.*		Percentage of Total Revenue.†	
EUROPE.		£	£	s.	d.	
Austria-Hungary ...	1889	67,262,‡	1	13	0	88·74
Belgium ...	„	6,755,	1	2	5	50·63
Denmark ...	1888	2,490,	1	3	9	83·31
France (including Algeria)	1889	93,023,	2	4	3	77·88
Greece ...	„	2,648,	1	6	9	68·64
Holland ...	„	8,164,	1	16	3	81·23
Italy ...	1889-90	53,235,	1	14	10	82·40
Portugal ..	„	7,043,	1	12	8	78·38
Russia ...	1889	57,376,	§0	12	6	66·61
Spain ...	1888-9	31,931,	1	16	5	93·73
Switzerland ...	1888	897,	0	6	1	39·99
Turkey ...	1883-4	12,712,	0	11	7	76·35
ASIA.						
Japan ...	1888-9	13,810,	0	7	1	85·51
AFRICA.						
Egypt ...	1889	7,884,	1	3	2	75·26
AMERICA.						
Argentine Confederation...	1889	9,360,	2	9	2	77·71
Brazil ...	1889-90	11,199,	0	16	0	74·06
Mexico ...	1888-9	7,208,	0	12	7	91·29
United States ...	1888	71,722,	1	5	10	89·89

344. It will be observed|| that the gross amount raised by taxation is larger in France than in any other country of which information is given, and that the United Kingdom comes next in this respect; the United States follow; then Austria-Hungary, Russia, Italy, Spain, and British India in the order named. The amount of taxation in the Australasian colonies, taken as a whole, is larger than that levied in any other country except Japan, Turkey, Brazil, and the countries just

* For figures of population, see table following paragraph 177 ante.

† For figures of revenue, see table following paragraph 303 ante.

‡ This amount is made up of £12,679,000 taxation in Austria for the year 1889, and £24,583,000 taxation in Hungary for the year 1889.

§ Based on the population of Russia in Europe. The proportion to the population of the whole Russian Empire is 10s. 7d.

|| See also tables following paragraphs 335 and 340 ante.

named, whilst it is considerably larger than that in the Argentine Confederation, Holland, Egypt, Mexico, Portugal, or Belgium. The amount in Victoria is more than four times as large as that levied in Switzerland, and about half as large again as that levied in Greece or Denmark; but considerably below that in any other of the countries named.

345. The taxation per head is larger in the United Kingdom than in any other independent countries except the Argentine Confederation and France, and in this respect Spain, Holland, Italy, and Portugal stand next. The taxation per head, however, in all the Australasian colonies is larger than in the United Kingdom; and in all of those colonies, except South Australia, it is larger than in the Argentine Confederation.

Taxation
per head in
various
countries.

346. It will be observed that, with one exception—Switzerland—all the countries named in the last table raise more than half their revenue by taxation; whilst the Australasian colonies as a whole raise less than two-fifths from that source. The revenues of Spain, Mexico, and the United States appear to be almost entirely derived from taxation; and although the United Kingdom raises five-sixths of its revenue from that source, as many as five of the countries named raise a higher proportion.

Proportion
of revenue
raised by
taxation in
various
countries.

347. In all the Australasian colonies the principal part of the taxation is raised through the Customs. In the following table the amount so raised in each of those colonies is given for a recent year, together with the proportion of such revenue to the total taxation and the total imports* :—

Taxation by
Customs in
Austral-
asian
colonies.

TAXATION BY CUSTOMS IN AUSTRALASIAN COLONIES, 1888.

Colony.	Revenue from Customs Duties.		
	Amount.	Proportion to—	
		Total Taxation.	Total Value of Imports.
	£	Per cent.	Per cent.
Victoria (1888-9)	2,824,788	75·33	11·52
New South Wales	1,883,058	70·21	9·02
Queensland	1,344,504	85·22	20·23
South Australia	533,665	72·18	9·86
Western Australia	159,059	88·39	20·23
Tasmania	297,912	73·41	18·50
New Zealand	1,390,717	68·45	23·41

348. It will be observed that in Victoria, Tasmania, South Australia, and New South Wales during 1888 about three-fourths of the taxation

Customs
revenue in
proportion
to total
taxation.

* For particulars of taxation by Customs in other British and Foreign countries, see *Victorian Year-Book* for 1886-7, paragraphs 329 and 330; also that for 1883-4, paragraph 291 *et seq.*

was raised through the Customs. The colony in which the proportion was highest was Western Australia, in which all but about 10 per cent. was levied through the Customs; and that in which it was lowest was New Zealand, where the proportion was a little more than two-thirds.

Customs
revenue in
proportion
to total
imports.

349. It will, moreover, be noticed that in Victoria the tax on the import trade as a whole was equivalent to an average duty of about 11½ per cent. *ad valorem*; which proportion was considerably lower than in any of the other Australian colonies, except South Australia and New South Wales, in the former of which the rates of duty are not high, and in the latter the dutiable articles are comparatively few in number. Since the duties on manufactured articles are for the most part much higher in Victoria than in any of the other colonies, the small proportion which the Customs revenue bears to the value of imports is probably owing to her importing, in a larger proportion than the others, raw, and consequently undutiable, material. The proportion of Customs duties to imports is seen to be highest in New Zealand, Western Australia, Queensland, and Tasmania, it being 23 per cent. in the first, and 18 per cent. in the last named colony.*

Municipal
revenue
and ex-
penditure.

350. The following table gives a statement of the revenue and expenditure of municipalities in the year 1889, the amounts raised and expended in cities, towns, and boroughs being shown separately from those in shires:—

MUNICIPAL REVENUE AND EXPENDITURE, 1889.

Heads of Revenue and Expenditure.					Cities, Towns, and Boroughs.	Shires.	Total.
REVENUE.					£	£	£
From Government	{	Endowment	...	...	34,221	301,788	336,009
		Other receipts	...	...	38,769	58,420	97,189
,, Rates—General and separate			...	...	402,547	293,563	696,110
,, „ Special			...	...	32,257	3,957	36,214
,, Licences			...	...	72,099	29,376	101,475†
,, Registration of dogs and goats			...	...	5,997	7,048	13,045
,, Market and weighbridge rents and dues...			...	...	67,232	2,053	69,285
,, Formation of private roads, streets, etc., under <i>Health Act</i>			...	...	48,996	11,953	60,949
,, Contributions for flagging, asphaltting footpaths (including pitched crossings)			...	...	30,601	2,976	33,577
,, Registrations under <i>Health Act</i> , noxious trades, dairies, etc.			...	...	2,228	972	3,200
,, Interest			...	...	15,028	1,857	16,885
,, Other sources			...	...	111,445	40,106	151,551
Total			...	...	861,420	754,069	1,615,489

* For particulars of taxation by Customs in other British and Foreign countries, see *Victorian Year-Book* for 1886-7, paragraphs 329 and 330; also that for 1883-4, paragraph 291 *et seq.*
† Including receipts from the “Licensing Act 1885 Fund.” In the financial year, 1887-8, the “equivalent” amounted to £108,493, and in 1888-9 to £92,124.

MUNICIPAL REVENUE AND EXPENDITURE, 1889—*continued*.

Heads of Revenue and Expenditure.	Cities, Towns, and Boroughs.	Shires.	Total.
EXPENDITURE. *	£	£	£
Public works (including labour and material) ...	626,461	542,591	1,169,052
Private streets, roads, etc., under <i>Health Act</i> ...	45,756	14,251	60,007
Salaries	67,469	94,772	162,241
Interest	92,391	27,381	119,772
Other expenditure	223,370	99,629	322,999
Total	1,055,447	778,624	1,834,071

351. Although the appropriation of the sum of £310,000 for the endowment of municipalities, under the *Local Government Act* 1874 (38 Vict. No. 506), ceased by effluxion of time at the end of 1879, an equivalent amount was voted by Parliament annually until 1888-9, in which financial year an additional amount of £30,662 was voted in augmentation of the subsidy of such shires as did not receive as much as £3 for every £1 of rates. Endowment of municipalities.

352. According to the Act just mentioned, the endowment payable to any city, town, or borough was not to exceed £2,000 ; and if the rate levied in a municipality exceeded one shilling in the pound, the endowment was to be calculated on an amount which bears the same proportion to the total amount of rates received as one shilling bears to the rate levied.† Subject to these conditions, the endowment was paid to shires in the proportion of £2, and to cities, towns, and boroughs in the proportion of £1, for every £1 of general rates collected. This is also the basis on which the equivalent subsidy, voted after the appropriation terminated, was calculated, an exception to the rule being, however, made in the case of certain shires (15 in 1889) newly formed or of a mountainous character, which receive £3 for every £1 of rates. Where the rates levied in municipalities were in excess of one shilling in the pound, the amount of subsidy payable during 1889 was at the rate of 17s. 7d. to shires, and 8s. 9½d. to cities, towns, and boroughs, for every £1 up to £2,000 of rates† ; as compared with averages payable in the preceding year of 19s. 1d. and 9s. 6½d. respectively. The low proportions payable to the municipalities referred to was, however, to some extent compensated since the 30th June, 1888, by the additional subsidy of which mention was made in the last paragraph. Rate of endowment.

353. In 1889, the expenditure exceeded the revenue in cities, towns, and boroughs by 23 per cent., and in shires by 3 per cent. ; as compared with an excess of 6 and 4½ per cent. respectively in the previous year. Municipal expenditure in excess of revenue.

* Including expenditure of proceeds of loans. For amount of outstanding loans, see table showing "Municipal Debt" *post*. † For ratings in municipalities, see paragraph 223 *et seq. ante*.

Municipalities in which expenditure exceeded revenue. 354. The expenditure was greater than the revenue in 20 of the 59 individual cities, towns, and boroughs, and in 64 of the 128 individual shires in 1888; and in 31 out of 59 cities, towns, and boroughs, and in 59 out of 130 shires in 1889.

Salaries in municipalities. 355. In 1889 payments of salaries formed nearly 8 per cent. of the revenue of cities, towns, and boroughs, and about 13 per cent. of that of shires.

Harbor Trust receipts and expenditure. 356. Subjoined is a statement of the revenue and expenditure of the Melbourne Harbor Trust* during the twelve and a half years which have elapsed since the Act was passed under which that body was created. The net receipts here shown are less than the gross receipts by about one-fifth, that being the proportion payable by the Commissioners of the Trust into the consolidated revenue :—

MELBOURNE HARBOR TRUST.—ORDINARY RECEIPTS AND EXPENDITURE, 1877 to 1889.

	Four and a half years, 1877-1881.	Five years, 1882-1886.	Year 1887.	Year 1888.	Year 1889.	Total 1877 to 1889.
NET RECEIPTS.	£	£	£	£	£	£
Wharfage rates ...	354,452	569,403	138,804	175,795	183,318	1,421,772
Leases ...	521	344	140	3,493	4,549	9,047
Licences...	9,409	23,724	5,500	2,663	2,919	44,215
Interest ...	2,330	6,624	6,323	8,406	21,024	44,707
Spencer Street ferry	...	1,526	944	1,926	607	5,003
Sundries ...	888	3,059	2,072	2,301	3,079	11,399
Total ...	367,600	604,680	153,783	194,584	215,496	1,536,143†
EXPENDITURE. ‡						
Plant ...	106,046	216,997	9,304	4,198	118,802	455,347
Harbour improvements and maintenance, including dredging, landing, and depositing silt	165,577	509,950	103,857	113,439	150,882	1,043,705
Wharves and approaches, construction and maintenance	63,421	274,904	70,414	83,702	92,386	584,827
General management and contingent expenses	39,517	58,503	17,223	17,799	18,980	152,022
Commissioners' fees ...	7,480	8,142	1,700	1,700	1,275	20,297
Interest ...	3,061	71,434	36,250	36,250	46,250	193,245
Total ...	385,102	1,139,930	238,748	257,088	428,575	2,449,443

Receipts and expenditure compared. 357. In the twelve and a half years the Trust has been in existence, the net receipts have amounted to £1,536,143 and the expenditure to £2,449,443, or £913,300 in excess of the receipts. To meet

* For a short account of the objects of the Trust, and improvements made, see Part "Interchange" in the second volume.

† Exclusive of sums received as net premiums on loans raised, viz., £32,434.

‡ The figures of expenditure have been revised and amended since last publication.

this excess loans* amounting to £1,500,000 have been raised. It will be observed that the revenue, which averaged only about £120,000 in the five years ended with 1886, has since gradually risen to £215,500 in 1889; the revenue having doubled itself in almost five years. The expenditure of the Trust may be condensed into three main divisions, the first being Plant, on which, during the period the Trust has been in existence, £455,347 has been laid out, or less than a fifth of the whole expenditure; the second being the Improvement and Maintenance of the Harbour, together with the wharves and approaches, on which £1,628,532 has been laid out, or nearly two-thirds of the whole expenditure; and the third being the Management and Interest on Loans, on which £365,564 has been expended, or about one-seventh of the whole amount. The cash at credit on the 31st December was £630,078; and the liabilities under contracts in progress, £382,485.

358. A statement of the revenue and expenditure of the General Government added to those of the Municipalities and of the Melbourne Harbor Trust during the last seven years will be found in the following table. From the totals of municipal revenue and expenditure the amounts granted by the State have been deducted. The expenditure of the proceeds of loans is entirely left out of account in the Government returns, but is included in the municipal expenditure:—

General and local revenue and expenditure.

GENERAL AND LOCAL REVENUE AND EXPENDITURE, 1883 TO 1889.†

	Total Amounts Received and Expended.						
	1883.	1884.	1885.	1886.	1887.	1888.	1889.
REVENUE.	£	£	£	£	£	£	£
Government ...	5,611,253	5,934,687	6,290,361	6,481,021	6,733,826	7,607,598	8,675,990
Municipalities ...	693,167	756,966	789,429	859,184	921,466	1,056,437	1,182,291
Melbourne Harbor Trust	103,935	113,141	127,276	149,479	153,783	194,584	215,496
Total ...	6,408,355	6,804,794	7,207,066	7,489,684	7,809,075	8,858,619	10,073,777
EXPENDITURE.							
Government ...	5,651,885	5,715,293	6,140,356	6,513,540	6,561,251	7,287,151	7,919,902
Municipalities ...	730,745	839,007	847,977	897,399	986,846	1,132,783	1,400,873
Melbourne Harbor Trust	189,573	303,280	267,194	271,611	238,748	257,088	428,575
Total ...	6,572,203	6,857,580	7,255,527	7,682,550	7,786,845	8,677,022	9,749,350

359. The next table gives the general and local revenue and expenditure per head of population in the same seven years. It will be observed that in the last year named the local revenue, embracing

General and local revenue and expenditure per head.

* For particulars of loans see table "Melbourne Harbor Trust Loans" post.
† The financial year of the General Government ends on the 30th June; that of Melbourne and Geelong on the 31st August; that of other municipalities on the 30th September; and that of the Melbourne Harbor Trust on the 31st December.

that of the Municipal Bodies and that of the Harbor Trust, amounted to £1 5s. 9d. per head, and the general and local revenue combined to £9 5s. 7d. per head:—

GENERAL AND LOCAL REVENUE AND EXPENDITURE PER HEAD,
1883 TO 1889*.

	Amounts Received and Expended per Head.†											
	1883.			1884.			1885.			1886.		
REVENUE.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Government ...	6	4	8	6	8	9	6	13	0	6	13	6
Municipalities	0	15	5	0	16	5	0	16	8	0	17	8
Melbourne Har- bor Trust	0	2	4	0	2	6	0	2	8	0	3	1
Total ...	7	2	5	7	7	8	7	12	4	7	14	3
EXPENDITURE.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Government ...	6	5	7	6	4	0	6	9	10	6	10	10
Municipalities	0	16	3	0	18	3	0	17	11	0	19	8
Melbourne Har- bor Trust	0	4	2	0	6	7	0	5	7	0	4	9
Total	7	6	0	7	8	10	7	13	4	7	15	3

General,
local, and
loan ex-
penditure,
1879-89.

360. It has been already stated that in the last two tables the expenditure of the proceeds of loans contracted by the General Govern- ment is not included. If, however, it should be desired to know the total amount of public money spent in the colony, this must be added, which, having been done, the result, together with the amount per head of the average population, is given in the following table for the eleven years ended with 1889:—

GENERAL, LOCAL, AND LOAN EXPENDITURE, 1879 TO 1889.

Year.	Expenditure.			Expenditure per head.		
	General and Local.‡	From Government Loans.	Total.	General and Local.	From Government Loans.	Total.
	£	£	£	£ s. d.	£ s. d.	£ s. d.
1879 ...	5,507,869	1,278,217	6,786,086	6 13 2	1 10 11	8 4 1
1880 ...	5,749,623	1,507,778	7,257,401	6 16 10	1 15 10	8 12 8
1881 ...	5,777,479	830,505	6,607,984	6 14 4	0 19 4	7 13 8
1882 ...	5,850,381	1,064,516	6,914,897	6 12 11	1 4 2	7 17 1
1883 ...	6,572,203	2,656,810	9,229,013	7 6 0	2 19 0	10 5 0
1884 ...	6,857,580	1,600,233	8,457,813	7 8 10	1 14 9	9 3 7
1885 ...	7,255,527	1,141,126	8,396,653	7 13 4	1 4 5	8 17 9
1886 ...	7,682,550	1,729,768	9,412,318	7 18 3	1 15 7	9 13 10
1887 ...	7,787,845	2,068,282	9,856,127	7 15 3	2 1 3	9 16 6
1888 ...	8,678,022	2,389,944	11,067,966	8 7 2	2 6 1	10 13 3
1889 ...	9,749,350	3,716,050	13,465,400	8 19 7	3 8 6	12 8 1

* See footnote (†) on page 219.
† Although the financial years of the respective bodies named in this table terminate at different dates (see last footnote), the same populations as have already been taken (see table following para- graph 249 ante) to calculate the amount of general revenue and general expenditure per head have been used to make these calculations. As the population varies but slightly in so short a period, this will scarcely, if at all, affect the result.
‡ Including expenditure from Municipal and Harbor Trust loans.

361. It will be noticed that the total amount of public money spent per head ranged from £7 13s. 8d in 1881 to £12 15s. 1d. in 1889; the proportion of which derived from Government loans varied from 19s. 4d. per head in 1881 to £3 8s. 6d. per head in 1889. It will further be remarked that the total amount per head in 1889 was much larger than in any previous year.

362. The amount of taxation under the General Government, under the Municipal Bodies, and under the Melbourne Harbor Trust, is given in the following table for each of the seven years ended with 1889, the items being specified in the last two cases. The principle upon which the items of taxation are separated from the general revenue has been already explained.* The local taxation is separated from the whole municipal revenue by rejecting—besides all grants received from the General Government—rents of buildings and land, proceeds of the letting of halls, etc., the balance being considered as taxation. The taxation levied by the Harbor Trust consists only of wharfage rates:—

GENERAL AND LOCAL TAXATION, 1883 TO 1889.†

Heads of Taxation.	Amounts Received.						
	1883.	1884.	1885.	1886.	1887.	1888.	1889.
GOVERNMENT TAXATION } ‡ ...	£ 2,334,255	£ 2,318,520	£ 2,548,171	£ 2,634,560	£ 2,739,635	£ 3,071,003	£ 3,749,670
MUNICIPAL TAXATION.							
Rates ...	445,961	473,412	503,474	546,830	592,235	646,694	732,324
Licences ...	92,610	87,925	92,204	90,495	102,313	104,227	101,475
Registration of dogs and goats	11,767	12,144	15,851	13,837	13,853	13,128	13,045
Market dues ...	43,795	47,392	51,697	55,258	56,881	61,064	69,285
Total ...	594,133	620,873	663,226	706,420	765,282	825,113	916,129
MELBOURNE HARBOR TRUST TAXATION.							
Wharfage rates ...	98,809	108,019	120,587	136,134	138,804	175,795	183,318
Total general and local taxation } ...	3,027,197	3,047,412	3,331,984	3,477,114	3,643,721	4,071,911	4,849,117

363. The aggregate amounts of taxation raised by the Government and the municipalities represented, in 1883, a proportion of £3 7s. 3d. to each individual in the community; in 1884, £3 6s. 1d.; in 1885,

* See paragraph 306 *ante*.

† The financial year of the General Government ends on the 30th June; that of Melbourne and Geelong on the 31st August; that of other municipalities on the 30th September; and that of the Melbourne Harbor Trust on the 31st December.

‡ For details of Government taxation, see table following paragraph 309 *ante*.

£3 10s. 5d.; in 1886, £3 11s. 7d.; in 1887, £3 12s. 8d.; in 1888, £3 18s. 5d.; in 1889, £4 9s. 4d.

Chief
sources
of taxation.

364. It has already been pointed out that by far the greater portion of the General Government taxation is derived from Customs duties*—the proportion varying in different years from 72 to 89 per cent. Seventy-five per cent. of the Municipal taxation in 1883, 76 per cent. in 1884 and 1885, 77 per cent. in 1886, 76 per cent. in 1887, 78 per cent. in 1888, and 80 per cent. in 1889 was derived from rates.

Public debt.

365. The public debt of Victoria amounted on the 30th June, 1889,† to £37,627,382, consisting of moneys—

				£
Borrowed in Victoria	...	...	...	1,529,482
„ England	...	...	...	36,097,900
Total	...	...	...	37,627,382

Purposes for
which loans
were
incurred.

366. The aggregate amount of the loans raised up to the 30th June, 1889, was £47,944,902; but a total of £10,317,520 having been repaid, viz., £2,103,100 out of the general revenue, and £8,214,420 out of the proceeds of redemption loans—the balance outstanding on the 30th June, 1889, was reduced to £37,627,382. The amount of public debt borrowed under each of the purposes for which the debt was incurred, the amount paid off, and the amount outstanding on the 30th June, 1889, are shown in the following table:—

PURPOSES FOR WHICH LOANS WERE RAISED.

Purposes.	Total Amount Borrowed.†	Amount Paid off.	Amount Outstanding on 30th June, 1889.
	£	£	£
Railways	29,167,719	68,100	29,099,619§
Water supply—			
Melbourne	2,446,456	800,000	1,646,455
Country	3,992,172	...	3,992,173||
Parliament houses	246,453	...	246,453
Law courts	354,260	...	354,260
Public offices	166,195	...	166,195
Defences	100,000	...	100,000
State schools	1,105,557	...	1,105,557
Yarra Bridge	108,043	...	108,043
Harbours, etc.	275,554	...	275,554
Graving-dock	350,464	...	350,464

* See paragraph 311 ante. † On the 30th June, 1890, the public debt amounted to £41,377,693.
‡ For expenditure of the net proceeds of these amounts, see table following paragraph 268 ante; and for further details of the expenditure of railway loans, see portion relating to Railways in Part "Interchange" post.
§ Inclusive of £183,900 of late Melbourne and Hobson's Bay United Railway Co.'s debentures.
|| Of this amount £664,573 was authorized to be re-lent to municipal bodies, £852,983 to Water Works Trusts, and £289,294 to Irrigation and Water Supply Trusts, for local waterworks, the principal and interest being repayable by annual instalments—the former into a sinking fund, the latter into the general revenue. For accumulation of Sinking Fund (Municipalities Redemption Account), see table, "Trust Funds," post. Waterworks Trusts also received grants from the loan account amounting to £97,396.

PURPOSES FOR WHICH LOANS WERE RAISED—continued.

Purposes.	Total Amount Borrowed.*	Amount Paid off.	Amount Outstanding on 30th June, 1889.
	£	£	£
Tramways in country districts...	182,609	...	182,609
Melbourne and Geelong improvements	735,000†	735,000	...
Treasury bonds	500,000	500,000	...
	39,730,482	2,103,100	37,627,382
Redemption of loans‡ ...	8,214,420	8,214,420	...
Total	47,944,902	10,317,520	37,627,382

367. Of the debt outstanding on the 30th June, 1889, a sum of about £53,000 was authorized as early as 1857, nearly 4 millions during the ten years ended with 1870, over 10 millions in the next decade, and over 23 millions—of which nearly 8 millions, however, was for purposes of redemption—in the nine years ended with 1889, as will be seen by the following table, which shows the years in which the various amounts of which the debt is composed were authorized and the number of the Act by which such authorization was given ; also the changes that have been effected by means of conversion operations :—

AUTHORIZATION OF THE PUBLIC DEBT.

Authorization.		Rate of Interest.	Amount Outstanding on the 30th June, 1889.	
Year.	Under Act.		As originally Authorized.	After Conversion Operations.
	No.	Per cent.	£	£
1857	36	6	52,780	...
1862	150	6	300,000	276,100
1865	287	6	850,000	850,000
1868	331	5	2,107,000	2,107,000
„	332	5	610,000	312,900
1870	371	4	100,000	...
1872	428	4	1,113,000	543,000
„	439	4	...	{ 86,780\$ 13,102||
1873	468	4	1,500,000	1,500,000
1876	531	4	{ ... 2,500,000	500,000\$ 2,500,000
1878	608	4½	5,000,000	5,000,000
„	611	4	...	457,000\$
„	617	5	183,900	183,900¶
1881	717	4	4,000,000	4,000,000
1882	739	4	2,000,000	2,000,000
„	741	4	167,600	167,600

* See footnote (‡) on page 222.
† This amount was borrowed in 1854 by the city of Melbourne and town of Geelong, the principal and interest being guaranteed out of the general revenue of the colony.
‡ Exclusive of conversion loans amounting to £1,043,780.
§ Conversion loans, the total amount of which was £1,043,780.
|| Increase of debt by conversion of 6 and 5 per cent. debentures into 4 per cent. stock.
¶ Debentures of M. and H. B. U. Railway Co., taken over by the Government.

AUTHORIZATION OF THE PUBLIC DEBT—continued.

Authorization.		Rate of Interest.	Amount Outstanding on the 30th June, 1889.	
Year.	Under Act.		As originally Authorized.	After Conversion Operations.
			£	£
1883	No. 760	Per cent. 4	4,000,000	4,000,000
1884	805	4	4,000,000	4,000,000
1885	845	4	6,000,000	6,000,000
1887	963	4	130,000	130,000
1888	989	3½	3,000,000	3,000,000
Total ...		... ..	37,614,280	37,627,382

Growth of the public debt.

368. The gross total of the public debt increased from £5,000,000 in 1860 to nearly £12,000,000 in 1870, and again to over £22,000,000 in 1880-81—the amount at the end of each decennial period being about double that at the commencement. During the nine years subsequent to 1880-1, a net amount of over £15,000,000 was added to the debt. The whole increase in 29 years was in a much greater ratio than the increase of population, for the indebtedness per head gradually rose from £9 10s. in 1860 to £34 in 1888-9. A considerable increase also took place as compared with the total revenue until 1886-7, for whilst in 1860, or three years after the colony commenced to borrow, the debt was equivalent to only 1⅔ year's revenue, in 1870 it was equivalent to 3⅔ years', and in 1886-7 to nearly 5 years' revenue; since 1886-7, however, the proportion has fallen off to only 4⅓ years' revenue in 1888-9, being slightly lower than it was in 1880-81. The amount of debt outstanding, together with the average per head and the multiple of revenue at the end of 1860 and the two following decennial periods, and of the four years ended with 1888-9, are shown in the following table :—

GROWTH OF THE PUBLIC DEBT, 1860 TO 1888-9.*

At end of the Financial Year.				Amount Outstanding.	Average per Head.			Multiple of Revenue.
				£	£	s.	d.	
1860	...	...	...	5,118,100	9	10	4	1·66
1870	...	...	...	11,924,800	16	8	5	3·66
1880-81	...	...	...	22,593,102	26	1	2	4·36
1885-6	...	...	...	30,110,935	30	10	2	4·69
1886-7	...	...	...	33,119,164	32	10	0	4·92
1887-8	...	...	...	34,627,382	32	13	1	4·55
1888-9	...	...	...	37,627,382	34	1	6	4·34

NOTE.—On the 30th June, 1890, the public debt was £41,377,693. At the same date the estimated population was about 1,117,980. The amount of indebtedness per head was thus £37 0s. 3d. ; and the multiple of the revenue was 4·86.

* For amount of the public debt at the end of each year, see first folding sheet to the second volume.

369. It will be noticed that in 1888-9 the public debt increased by £3,000,000. This was in consequence of a loan for that amount having been floated in London in January, 1889. Four per cent. stock to the extent of £130,000* was also issued during the last two financial years, but this was to provide funds for a 6 per cent. local loan which fell due, and was duly paid off on 1st October, 1888. The debt per head of population only increased by £1 8s. 5d. whilst the ratio of debt to revenue fell from over $4\frac{1}{2}$ years of the latter in 1887-8 to $4\frac{1}{3}$ in 1888-9. Increase of debt, 1888-9.

370. The debt is composed of debentures—some of which are inscribable as stock—and inscribed stock. The following are the dates and places at which the various amounts of which the debt is composed are repayable:— Repayment of debt.

REPAYMENT OF DEBT.

Under Act No.	When Repayable.	Rate of Interest per cent.	Amount Repayable.		
			In Melbourne.	In London.	Total.
	<i>Debentures.</i>		£	£	£
150	1st October, 1889 ...	6	276,100	...	276,100†
287	1st January, 1891 ...	„	...	850,000	850,000
331-2	„ 1894 ...	5	312,900	2,107,000	2,419,900
468	1st July, 1899 ...	4	...	1,500,000	1,500,000
531	„ 1901 ...	„	...	3,000,000	3,000,000
608	„ „ ...	$4\frac{1}{2}$	...	5,000,000	5,000,000
611	1st January, 1904 ...	4	...	457,000	457,000
	<i>Stock (London Register).</i>				
717	1st July, 1907‡ ...	4	...	4,000,000	4,000,000
739	1st April, 1908‡ ...	„	...	2,000,000	2,000,000
760	1st October, 1913‡ ...	„	...	4,000,000	4,000,000
805	1st October, 1919 ...	„	...	4,000,000	4,000,000
845	„ 1920 ...	„	...	6,000,000	6,000,000
989	„ 1923 ...	$3\frac{1}{2}$	...	3,000,000	3,000,000
	<i>Stock (Melbourne Register).</i>				
428 } 439 } 741 } 963 }	28th November, 1897§ ...	4	940,482	...	940,482
617	<i>Debentures of late M. & H. B. U. Railway Co.||</i>	5	...	183,900	183,900
	Total ...	...	1,529,482	36,097,900	37,627,382

* Of this amount, £119,354 was raised prior to 1888-9. † Paid off at due date out of revenue.

‡ Originally debentures convertible into inscribed stock at option of holders. The amount so inscribed, according to advices received to the 30th June, 1889, was £8,441,300, the balance being still held in the form of debentures.

§ Or at any time thereafter, at option of the Government, after twelve months' notice in the *Government Gazette*.

|| Of which £30,000 is redeemable on 1st July, 1892; £22,000 on 1st July, 1895; £100,000 on 1st September, 1895; and £31,900 on 1st January, 1897.

Reduced
rate of
interest on
loans.

371. Loans paid off on the 1st October, 1883, and the same date in 1884, 1885 and 1888, amounting together to £7,947,220, bore interest at the rate of 6 per cent.; and it will be noticed that a further amount of £276,100 was repayable on the 1st October, 1889, which was duly paid. By these repayments the portion of the debt bearing 6 per cent. interest has become reduced to £850,000; all of which will fall due on or before 1st January, 1891. The redemption loans bear only 4 per cent. interest, and the nominal saving in the annual interest payable by the substitution of these for the 6 per cent. loans duly paid off amounts to £158,945* per annum.

Loans
redeemed.

372. The loans which had been redeemed up to the 30th June, 1889, amounted in the aggregate to £10,317,520, of which £2,103,100 was provided for out of revenue, and £8,214,420 by means of redemption loans, bearing interest at the rate of 4 per cent. Nearly a fourth of the amount was repayable in Melbourne, and the remainder in London. The following are the particulars:—

LOANS REDEEMED TO 30TH JUNE, 1889.

Under Act No.	Date of Redemption.	Rate of Interest.	Source from which funds were provided.	Amount Redeemed.		
				London.	Melbourne.	Total.
				£	£	£
13	1855 to 1875 ...	...	Revenue	...	525,000	525,000
23	" " ...	...	"	...	210,000	210,000
40	1857 to 1872 ...	6	"	500,900	299,100	800,000
15	1872 to 1874 ...	6	"	65,200	2,900	68,100
36	1st October, 1883	6	Loans	3,587,500	236,600	3,824,100
"	" 1884	6	"	812,500	...	812,500
"	" 1885	6	"	2,600,000	580,620	3,180,620
"	" 1888	6	"	...	130,000	130,000
617	1880 to 1886	6 & 3½†	"	233,400	33,800	267,200‡
663	1st November; 1881	5	Revenue	...	166,600	} 500,000||
"	" 1882§	5	"	...	166,700	
"	" 1883§	5	"	...	166,700	
Total ...				7,799,500	2,518,020	10,317,520

NOTE.—A further 6 per cent. loan for £276,100 was paid off out of revenue on 1st October, 1889.

Victorian
Govern-
ment stock

373. Victorian Government stock on the Melbourne register was first authorized under the *Public Works Loan Act* 1872 (36 Vict.

* Exclusive of the saving, equivalent to £5,522, on the loan of £276,100, which was paid off out of revenue.
† Only £200 bore interest at 3½ per cent.
‡ This amount was repaid as follows:—£100,000 on 1st July, 1880; £59,600 on 1st March, 1881; £20,400 on 1st May, 1882; £48,300 on 1st January, 1883; £38,900 on 1st January, 1886.
§ Due dates. The amount due on 1st November, 1882, and portion (£138,600) of that due on 1st November, 1883, was, however, paid off in February, 1882.
|| Treasury bonds.

No. 428), and originally amounted to £1,113,000. Owing to portion of this being converted into debentures, as being more readily negotiable by the Government in a case of emergency, which operation was counterbalanced to some extent by re-conversions and fresh issues, the amount outstanding became reduced on the 30th June, 1889, to £940,482.* In the case of the first three loans issued in London since the 1st January, 1883—amounting to £10,000,000—the option was given to holders of converting their debentures into stock, to be registered in London; whilst the subsequent loans raised up to the end of the financial year 1888-9—amounting to £13,000,000—were issued as stock in the first instance. The privilege referred to, according to advices received up to the 30th June, 1889, had been availed of to the extent of £8,441,300, so that the stock then outstanding upon the London register amounted to £21,441,300. The total amount of stock on the two registers combined was thus £22,381,782. Of this amount, £19,381,782 bears interest at the rate of 4 per cent., and £3,000,000 at the rate of $3\frac{1}{2}$ per cent. per annum.

374. Only about a twelfth of the public debt bears interest at $3\frac{1}{2}$ per cent., whilst over two-thirds bears interest at 4 per cent., and the balance at higher rates up to 6 per cent. The following are the rates of interest payable on the various amounts of which the public debt of Victoria was composed on the 30th June, 1889:—

Rates of Interest.					Amount at each Rate.	
6 per cent.	...	...	...	...	£1,126,100	
5 per cent.	...	...	...	...	2,603,800	
$4\frac{1}{2}$ per cent.	...	...	...	...	5,000,000	
4 per cent.	...	...	...	...	25,897,482	
$3\frac{1}{2}$ per cent.	...	...	...	...	3,000,000	
Total					£37,627,382	

375. More than two-thirds of the interest on the debt is payable in July and January, and the remainder in October and April. In connexion with this, Messrs. W. Westgarth & Co., of London, whilst admitting the inconvenience to the colony of having large interest amounts falling due at one time, have pointed out that the greatest degree of negotiability for the stock can only be attained by making the periods of payment uniform for all loans. About nineteen-twentieths of the interest is payable in London, and the remainder in Melbourne. The following table shows the amounts payable

* Of the amount outstanding, £522,455 is held by the public, and £418,027 by the Government, viz.—£317,349 on account of Trust Funds invested, and £100,678 on account of investments by municipalities.

during the ensuing financial year at those times and places on the debt existing on the 30th June, 1889 :—

INTEREST ON PUBLIC DEBT.

Rate per cent.	When due.	Amount payable annually—		
		In Melbourne.	In London.	Total.
		£	£	£
6	July and January ...	...	51,000	51,000
5	„ „ ...	15,645	105,350	120,995
4½	„ „ ...	...	225,000	225,000
4	„ „ ...	...	598,280*	598,280
3½	„ „ ...	...	105,000	105,000
	Total ...	15,645	1,084,630	1,100,275
6	October and April ...	16,566	...	16,566
4	„ „ ...	37,619	400,000	437,619
	Total ...	54,185	400,000	454,185
	Melbourne and Hobson's Bay Railway Debentures	69,830 1,460	1,484,630 7,735	1,554,460 9,195
	Grand Total ...	71,290	1,492,365	1,563,655

NOTE.—The figures in this table represent the annual interest payable on the debt (viz., £37,627,382) as it stood at the commencement of that year. It may be remarked that the fresh loan raised in April, 1890, will add £105,000 per annum to the interest payable, but the first half-yearly instalment will not be payable until 1st July, 1890. On the other hand, the 6 per cent. loan of £276,100 having been paid off out of revenue on the 1st October, 1889, will reduce the annual interest by £16,566.

376. The annual interest payable on the public debt, as it existed at the end of the financial year 1888-9, was equivalent to an average rate of about £4 3s. per £100, the rates on the amounts borrowed for the different works in most cases varying from 4 to 4½ per cent. No money has been borrowed at 6 per cent. since 1866 ; and the 5, 4½, 4, and 3½ per cent. loans floated since, together with the substitution of 4 per cent. debentures for the 6 per cents. which had become due, have gradually brought down the rate of interest, so that at the end of 1888-9 it averaged only about £4 3s. per cent. as just stated. The following are the particulars of the amounts borrowed for the different works, and the amount and average rate of interest payable thereon annually :—

* Inclusive of £18,280 which is not actually paid, since the debentures represented are held by the Government on account of Trust Funds invested.

Interest on
loans for
different
works.

INTEREST ON LOANS FOR DIFFERENT WORKS.

Purpose for which Raised.	Amount Outstanding on 30th June, 1889.*	Interest Payable Annually.	
		Amount.	Average Nominal Rate per cent.
	£	£	
Railways	29,099,619†	1,204,829	4·14
Tramways in Country Districts ...	182,609	7,141	3·91
Water Supply { Melbourne ...	1,646,455	66,713	4·05
	{ Country ...	3,992,173	170,744
Law Courts and Parliament Houses ...	600,713	25,265	4·21
Public Offices	166,195	6,789	4·09
Defences	100,000	6,000	6·00
State Schools	1,105,557	45,222	4·09
Yarra Bridge	108,043	4,622	4·28
Harbours, etc.	275,554	11,022	4·00
Graving-dock	350,464	15,308	4·37
Total	37,627,382	1,563,655	4·16

377. By the last two tables it appears that the total sum payable annually as interest amounts to £1,563,655; but as interest (£18,280) on debentures held by the Government is not paid, and as a portion of the debt did not bear interest during the whole of the year, the amount actually paid in 1888-9 was only £1,438,724, viz., £1,363,753 in London and £74,971 in Melbourne. Interest payable and paid.

378. The payment of interest in Melbourne is not attended with any expense; but in connexion with the payment of interest in London expenses are incurred, consisting chiefly of premium on the remittance of money and commission to the Banks. These charges amounted in 1888-9 to £20,518, which is equivalent to a proportion of $1\frac{1}{2}$ per cent. on the total amount paid in London, viz., £1,363,753, as just stated; as compared with £19,347, or $1\frac{1}{2}$ per cent., in 1887-8. During the two previous years, 1885-6 and 1886-7, the proportion was as high as $1\frac{3}{4}$ per cent. in consequence of the rate of exchange having been exceptionally high in those years. The following figures show the items of which the expenses were made up during the last four years:— Expenses of paying interest on debt.

* See also footnotes to table following paragraph 366 *ante*.

† This is inclusive of £183,900, amount outstanding on the Melbourne and Hobson's Bay United Railway Company's debentures, the interest on which is £9,195 annually.

EXPENSES OF PAYING INTEREST ON LOANS, 1885-6 TO 1888-9.

	1885-6.	1886-7.	1887-8.	1888-9.
	£	£	£	£
Commission of $\frac{1}{2}$ per cent. on de- benture coupons payable ...	3,598	3,262	3,182	3,161
Commission of £500 or £450 per million* for inscription of stock and payment of interest ($1\frac{1}{4}$ or $1\frac{1}{8}$ per cent. on interest payable)	5,798	6,586	7,984	8,709
Premium on remittances ...	10,701	10,107	7,187	7,540
Stamps, advertising, etc. ...	649	602	994†	1,108
Total Expenses ...	20,746	20,557	19,347	20,518
Interest paid in London ...	1,165,523	1,176,976	1,291,755	1,363,753
Per centage of expenses thereon	1·78	1·75	1·50	1·51

379. Adding the interest paid in Melbourne—in connexion with which, as has been already stated, there are no expenses—to the interest and expenses in the last column of the table, it will be found that the total interest and expenses of the public debt of Victoria in 1888-9 amounted to £1,459,242,‡ being in the proportion of £1 6s. 11d. per head of population, and equal to rather more than a sixth of the total expenditure.

380. The following is a statement of the total amount and amount per head paid as interest and expenses of the public debt in 1860, in each fifth year from that period to 1884-5, and in the years 1887-8 and 1888-9; also in each of the same years, the proportion of the total amount to the revenue of Victoria:—

INTEREST AND EXPENSES OF PUBLIC DEBT, 1860 TO 1888-9.

Year.	Interest and Expenses of Debt.		
	Total Amount.	Amount Per Head of Population.	Percentage of Revenue.
	£	£ s. d.	
1860 ...	251,777	0 9 4	8·17
1865 ...	517,081	0 16 8	16·81
1870 ...	647,674	0 17 10	19·86
1874-5 ...	719,282	0 18 3	17·25
1879-80 ...	979,864	1 3 1	21·30
1884-5 ...	1,271,907	1 6 6	20·22
1887-8 ...	1,385,121	1 6 8	18·21
1888-9 ...	1,459,242	1 6 11	16·82

* The sum of £500 is charged for the first 10 millions of stock inscribed, £450 for the second 10 millions, and £400 for subsequent amounts.
† Including £153 arrears.
‡ See under head of "Public Debt," page 162 ante.

381. In the other Australasian colonies, in 1888, the interest and expenses of the public debt per head varied from £2 13s. 10d. in Queensland and £2 11s. 10d. in New Zealand, to £2 5s 2d. in South Australia, £1 12s. 10d. in New South Wales, £1 10s. 2d. in Western Australia, and £1 5s. 7d. in Tasmania; and the proportion to the total expenditure varied from 40 per cent. in New Zealand, 30 per cent. in Queensland and South Australia, and 26 per cent. in Tasmania, to 20 per cent. in New South Wales, and 16½ per cent. in Western Australia.* In the Australasian colonies as a whole, the interest and expenses of the public debt in 1888 amounted to £6,682,378, or to nearly £1 17s. 3d. per head, and to nearly a fourth of the total expenditure.

382. The following table contains a statement of the amount of interest payable annually on the Public Debts of various countries, also the proportion that such interest bears to the total expenditure of each country. The countries are arranged in order according to the proportion referred to:—

INTEREST ON PUBLIC DEBT AND PROPORTION THEREOF TO TOTAL EXPENDITURE IN VARIOUS COUNTRIES.†

Countries.	Annual Interest on Public Debt.‡	
	Amount (000's omitted).	Proportion of Total Expenditure.
	£	Per cent.
Portugal	4,720,	55
Roumania	2,360,	48
New Zealand	1,570,	40
Greece	1,480,	40
Austria	11,280,	38
Hungary	10,640,	38
France	53,480,	35
Spain	10,960,	32
Russia	27,800,	31
Italy	12,600,	31
Belgium	3,840,	31
United Kingdom	27,000,	30
Queensland	1,106,	30
South Australia	718,	30
Tasmania	185,	26
Holland	2,640,	24

* See Australasian Statistics for 1888, Table V., Appendix A., Vol. I., *Victorian Year-Book*, 1888-9. For later information see Appendix A. in the second volume.

† Taken, so far as European countries are concerned, from the *Statistical Journal* of Paris, for August, 1889, page 274. The amounts are there given in francs, which have been reduced to pounds sterling, on the assumption that £1 is equivalent to 25 francs.

‡ The figures for the Australasian colonies, which relate to the year 1888, express the expenses, in addition to the interest, of their Public Debts, except in the case of Queensland.

INTEREST ON PUBLIC DEBT AND PROPORTION THEREOF TO TOTAL EXPENDITURE IN VARIOUS COUNTRIES*—continued.

Countries.	Annual Interest on Public Debt.	
	Amount (000's omitted).	Proportion of Total Expenditure.
	£	Per cent.
New South Wales	1,746,	20
Victoria	1,385,	19
Denmark	560,	19
Western Australia	64,	17
Sweden	800,	16
Prussia	8,480,	13
Norway	280,	11
Germany ‡	4,360,	9
Switzerland	80,	3

Relation of debt to expenditure in Victoria and other countries.

383. According to the table the only countries in the world in which the relation of the Public Debt to the Public Expenditure is smaller than in Victoria are Western Australia, Sweden, Prussia, Norway, Germany, and Switzerland. So far as the German Empire is concerned, the result might be different if the indebtedness of the several German States was taken into account. New Zealand, it will be observed, stands near the head of the list, having only two countries above it, and all the other Australasian colonies, except Western Australia, occupy a higher and consequently worse position than Victoria.

Loans authorized, 1889.

384. A loan of £4,600,000—to be floated in instalments as required—was authorized on the 17th December, 1888; and one for £4,000,000 on the 25th November, 1889. The former included a balance of £2,000,000 not floated under the previous Act, and was the first Victorian loan authorized since 1885. It is provided that these loans should be repayable in 1923, and that they should be issued either as debentures or as inscribed stock, interest to be payable half-yearly, the rate of which—not to exceed 3½ per cent.—is left to be determined by an order of the Governor in Council prior to the time of issue. The following are the amounts authorized to be devoted to the respective purposes for which the loan was to be raised :—

* See footnote (†) on page 231.
† See footnote (‡) on page 231.
‡ The interest on the debts of the several German States is not included.

LOANS AUTHORIZED, 1888 AND 1889.

Purposes.	Under <i>Railway Loan Act.</i>	
	52 Vict., No. 989.	53 Vict., No. 1032.
	£	£
Railways	4,100,000	3,150,000
Tramways in country districts	50,000	...
Water Supply—Melbourne	125,000	450,000
Irrigation Works, etc.	325,000	400,000
Total	4,600,000	4,000,000
Amount raised to 30th June, 1889	3,000,000	...
Balance not floated	1,600,000	4,000,000

385. The first instalment—amounting to £3,000,000*—of these authorized loans was floated in London on the 22nd January, 1889, in the form of inscribed stock; the rate of interest being fixed—for the first time in the history of the colony—at as low a rate as $3\frac{1}{2}$ per cent.; and a second instalment for £4,000,000 at the same rate of interest was floated on the 17th April, 1890. Par was determined on as the minimum price for which tenders would be received on both occasions, which, as interest had accrued from the 1st January, was equivalent to £99 8s. $10\frac{1}{2}$ d. *ex* accrued interest in the former, and £98 11s. $11\frac{1}{2}$ d. in the latter case†. The number of tenders sent in was 401 for the first, and 826 for the second loan; whilst the aggregate amounts tendered were £6,558,500 and £13,670,500 respectively. The average prices obtained were £103 5s. $11\frac{1}{2}$ d. and £101 10s. $4\frac{1}{2}$ d. respectively, or £102 14s. 10d. and £100 2s. 4d. *ex* accrued interest; whilst, if expenses of floating be also deducted, the net proceeds will be reduced to £101 11s. $11\frac{1}{2}$ d. and £98 19s. 6d. per £100 respectively. As the loans have currencies of nearly 35 and 34 years respectively the last quoted prices are equivalent to the money having been obtained at the yearly rate of £3 8s. 5d. and £3 11s. 1d. per £100 respectively. The former price is the highest ever obtained for any Australasian loan, or, indeed, for the loan of any British possession, except India and Canada.‡ The lowest rate of interest at which any

Loan floated
in 1890.

* It was stated in the prospectus that this loan would meet the requirements of the Government during the current year.

† The proceeds of the last loan were payable—5 per cent. on application, 15 per cent. on the 24th April, 40 per cent. on the 20th May, and 40 per cent. on the 20th June.

‡ Canada, in June, 1888, succeeded in launching a 3 per cent. loan of £4,000,000 in London, the principal being repayable in 50 years; the average price obtained was £95 1s. per £100, or £94 14s. 10d. *ex* accrued interest. Allowing for expenses, as well as accrued interest, the net price would probably be reduced to about £93 12s., which is equivalent to an annual rate of £3 5s. 3d. per £100, or 3s. 2d. less than that paid by Victoria for the loan of 1888. Canada, which was the first colony to lower the rate of interest to $3\frac{1}{2}$ per cent.—viz., in June, 1884—was again the first to lower it to 3 per cent. The equivalent in 3 per cents. at the price realized for the Victorian $3\frac{1}{2}$ per cent. loan of 1888 is about £93 2s. *ex* accrued interest. See also footnote to paragraph 371, *Victorian Year-Book*, 1887-8. In May, 1890, Ceylon also followed the example set by Canada in issuing a 3 per cent. loan see Note to table following paragraph 395 *post*.

loan of New South Wales had been floated up to the end of 1889 was £3 9s. per £100, that being the rate actually payable on the nominal 3½ per cent. loan floated in April, 1888.*

Net proceeds
of recent
loans.

386. The following is a statement of the leading particulars of the last five loans floated in London, to which is added, in the last line, a statement of the Bank of England minimum rate of discount at the time of floating each loan :—

PARTICULARS OF LOANS FLOATED, 1886 TO 1890.

Particulars.	4 per cent.—Stock. (49 Vict. No. 845.)			£8,600,000, 3½ per cent.— Stock. (52 Vict. No. 9:9, and 53 Vict. No. 1,032.)†	
	First issue, £1,500,000.	Second issue, £3,000,000.	Third issue, £1,500,000.	First issue, £3,000,000.	Second issue, £4,000,000.
When floated ...	2nd Feb., 1886.	20th Jan., 1887.	10th Jan., 1888.	22nd Jan., 1889.	17th April, 1890.
When repayable (1st Oct.)	1920.	1920.	1920.	1923.	1923.
Minimum price fixed per £100	£101 3 3	£101 6 3	£103 9 11¼	£99 8 10½	£98 11 11½
Number of tenders ...	643	817	273	401	826
Amount tendered ...	£10,834,250	£10,191,500	£3,466,800	£6,558,500	£13,670,500
Number of successful tenders ‡	27	62	113	233	...
Highest tender per £100	£105 15 9	£102 18 9	£108 15 5¾	£103 11 4½	£101 11 11½
Lowest successful tender per £100	£105 11 9	£102 5 9	£107 17 5¾	£102 10 10½	...
Gross proceeds average per £100	£105 12 3¼	£102 5 6¾	£108 1 1¼	£102 14 10	£100 2 4
Deduct expenses, do. ...	£1 3 3¼	£1 2 9¾	£1 3 0½	§£1 2 10½	£1 2 10
Net proceeds, do. ...	£104 9 0	£101 2 9	£106 18 0¾	£101 11 11½	£98 19 6
Bank of England mini- mum rate of discount per cent.	3	5	4||	4 ¶	3½**

NOTE —The quotations in this table are exclusive of accrued interest, which was £1 8s. 0½d. for the last loan.

Expenses of
floating and
redemption
of loans.

387. The total expenses connected with floating Victorian loans from 1855 (the time the first loans were authorized) to the 30th June,

* See table following paragraph 393 *post*.
† By Act 54, Vict. No. 1057, the second issue was made redeemable at the same date as the first issue.
‡ Wholly or partly successful.
§ As against this a premium of ½ per cent. on portion of this loan was received on bills drawn on London at 30 days, being equivalent to about 1s. 10d. per £100 on the whole loan.
|| Followed by a 3½ per cent. rate on the 11th, and a 3 per cent. rate on the 18th January.
¶ Two days later it fell to 3½ per cent., and nine days later to 3 per cent. A 5 per cent. rate prevailed in the early part of the month, *i.e.*, prior to the 10th.
** It fell on the same day to 3 per cent. A 4 per cent. rate prevailed about a week previously.

1889, including bank charges, brokerage, advertising, etc., have amounted to £493,154, which figures furnish a proportion of 1·15 per cent. (equal to £1 3s. per £100) on the gross amount (£42,914,000) borrowed in London to that date; and a similar average prevailed for the loans recently floated, as will be seen by figures in the last table. These expenses are made up of 5s.* per £100 commission to the Banks for floating, 5s. brokerage, and 12s. 6d. composition duty on inscription of stock, payable to the British Government; the balance, viz., 6d., defraying the cost of advertisements and other charges. It should be mentioned that there are other charges which, as they do not come into operation until the debentures arrive at maturity, are not usually taken into account. These are the Banks' commission (including brokerage) of $\frac{1}{4}$ per cent. for floating the earlier debenture loans, and $\frac{1}{8}$ per cent. for the more recent inscribable loans, besides exchange on remittances for redemption of the debentures.

388. The minimum price for tenders for a loan is fixed after due inquiry from those supposed to be best acquainted with the state of the money market. The results, however, are very various, and in the case of the loans from 1874 onwards the amounts obtained per £100 debenture or stock have ranged from 2s. 7d. in 1874 to as much as £4 11s. in 1888 above the minimum fixed, as is shown in the last column of the following table:—

Prices fixed
and ob-
tained for
loans.

VICTORIAN LOANS.—PRICES FIXED AND OBTAINED, 1874 TO 1890.

When Raised.	Price per £100 <i>ex</i> Interest.						Amount above Minimum Obtained.		
	Minimum Fixed.			Average Obtained.					
	£	s.	d.	£	s.	d.	£	s.	d.
1874 ...	90	0	0	90	2	7	0	2	7
1876 ...	93	0	0	94	16	10 $\frac{3}{4}$	1	16	10 $\frac{3}{4}$
1879 ...	96	16	1	97	17	5 $\frac{1}{2}$	1	1	4 $\frac{1}{2}$
1880 ...	100	0	0	103	3	8 $\frac{1}{2}$	3	3	8 $\frac{1}{2}$
1883 ...	98	13	7	98	16	8 $\frac{1}{2}$	0	3	1 $\frac{1}{2}$
„ ...	96	13	3	97	14	1 $\frac{1}{2}$	1	0	10 $\frac{1}{2}$
1884 ...	98	2	8	98	5	7	0	2	11
1885 ...	97	4	9 $\frac{1}{2}$	98	18	6 $\frac{1}{2}$	1	13	9
1886 ...	101	3	3	105	12	3 $\frac{1}{4}$	4	9	0 $\frac{1}{4}$
1887 ...	101	6	3	102	5	6 $\frac{3}{4}$	0	19	3 $\frac{3}{4}$
1888 ...	103	9	11 $\frac{3}{4}$	108	1	1 $\frac{1}{4}$	4	11	1 $\frac{1}{2}$
1889 ...	99	8	10 $\frac{1}{2}$	102	14	10	3	5	11 $\frac{1}{2}$
1890 ...	98	11	11 $\frac{1}{2}$	100	2	4	1	10	4 $\frac{1}{2}$

NOTE.—The rate of interest is 4 $\frac{1}{2}$ per cent. on the loans of 1879 and 1880, 3 $\frac{1}{2}$ per cent. on the loans of 1889 and 1890, and 4 per cent. in all other cases.

* It has been asserted that South Australia saves this commission by floating the loans through the medium of the Agent-General; whilst New South Wales pays as much as 10s. per £100.

Loans floated in Melbourne. 389. The amount outstanding on loans floated in Melbourne at one time amounted to over £3,123,000, but owing to portions of such loans having been converted into debentures on the London register, and £947,220 having been paid off and also replaced for the most part by loans raised in London, the debt repayable in Melbourne has become reduced to £1,529,482. The following is a statement of such loans showing the amounts as originally raised, the amounts converted or paid off, and the amounts outstanding on the 30th June, 1889:—

LOANS FLOATED IN MELBOURNE.

Authorization.		Loans as originally raised.			Amounts.		Loans Outstanding on 30th June, 1889.
Act No.	Year.	Rate of Interest.	When due.	Amount.	Converted into Stock or Debentures.	Paid off.	
		Per Cent.		£	£	£	£
				DEBENTURES.			
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	6	1894	610,000	297,100	...	312,900
371	1870	5	...	100,000	100,000	...	...
				STOCK.			
428	1872	4	1897*	1,113,000	570,000	...	543,000
741	1882	4	„	167,600	...	...	167,600
963	1887	4	„	130,000†	...	...	130,000
439	1872	4	„	{ 86,780‡ }	...	...	99,882
				{ 13,102§ }			
Total ...				3,520,482	1,043,780	947,220	1,529,482

Particulars of loans floated in London. 390. Particulars respecting the amounts, due dates of, nominal rates of interest on, and average prices obtained for, the various loans forming part of the public debt of Victoria, raised in London from 1859 to 1890, are given in the following table; also the average prices obtained after deducting expenses of floating, as well as of accrued interest; the rates of interest to which such prices are equivalent, which are really those payable by the colony on the moneys actually available (net proceeds) for the purposes for which the loans were raised; to which is added, in the last column, the minimum rate of

* Or at any time thereafter upon one years' notice.
† Redemption loan.
‡ Conversion loan. The other conversion loans, amounting to £957,000, were raised in London. See footnote (††) to next table.
§ Increase of debt on conversion of 5 and 6 per cent. debentures.

discount, with a view of indicating the state of the money market at the time of floating the respective loans :—

VICTORIAN LOANS FLOATED IN LONDON, 1859 TO 1890.

Act No.	When Raised.	Amount of Loan.*	When Due.	Nominal Rate of Interest.	Average price obtained per £100 Debenture.						Actual Rate of Interest per £100†	Bank of England Minimum Rate of Discoun at time of Floating.
					Ex Accrued Interest.			Ex Interest and Expenses.† (Net proceeds.)				
		£		Per cent.	£	s.	d.	£	s.	d.	£ s. d.	Per cent.
36	1859	1,000,000	1883	6	105	1	11 ³ / ₄	103	18	11 ³ / ₄	5 14 0	2 ¹ / ₂
"	"	750,000	"	"	107	17	7 ¹ / ₄	106	14	7 ¹ / ₄	5 10 1	2 ¹ / ₂
"	1860	1,837,500	"	"	104	17	10 ¹ / ₂	103	14	10 ¹ / ₂	5 14 3	4 ¹ / ₂ -
"	"	812,500	1884	"	103	1	6 ¹ / ₄	101	18	6 ¹ / ₄	5 17 0	6
"	1861	1,000,000	1885	"	102	19	7	101	16	7	5 17 2	2 ¹ / ₂
"	1862	1,600,000	"	"	100	8	11 ³ / ₄	99	5	11 ³ / ₄	6 1 1	4 ¹ / ₂
287	1866	850,000	1891	"	98	4	2 ³ / ₄	97	1	2 ³ / ₄	5 4 3	3
331	1869	588,600	1894	5	100	17	6 ¹ / ₂	99	14	6 ¹ / ₂	5 0 5	3
"	1870	1,518,400	"	"	90	2	7	88	19	7	4 15 5	3-4
468	1874	1,500,000	1899	4	94	16	10 ³ / ₄	93	18	11 ³ / ₄	4 8 1	2
531	1876	{ 500,000\$ 2,500,000 }	{ 1901 1904 }	"	97	17	5 ¹ / ₂	96	19	2 ¹ / ₂	4 14 0	2 ¹ / ₂
611	1878	457,000\$	1904	"	103	3	8 ¹ / ₂	102	5	11	4 6 11	2 ¹ / ₂
608	1879	3,000,000	"	4 ¹ / ₂	98	16	8 ¹ / ₂	97	13	7 ¹ / ₂	4 3 0	5-3
"	1880	2,000,000	"	"	97	14	1 ¹ / ₂	96	10	11 ¹ / ₂	4 4 6	4
717	1883	4,000,000	1907	4	98	5	7 ¹ / ₄	97	2	8 ¹ / ₄	4 3 3	3
739	"	2,000,000||	1908	"	98	18	6 ¹ / ₂ **	97	15	9 ¹ / ₂	4 2 5	3 ¹ / ₂
760	1884	{ 2,636,600|| 1,363,400 }	{ 1913 1919 }	"	105	12	3 ¹ / ₄	104	9	0	3 15 5	3
805	1885	{ 3,180,620|| 819,380 }	1919	"	102	5	6 ³ / ₄	101	2	9	3 18 9	5
845	1886	1,500,000	1920	"	108	1	1 ¹ / ₄	106	18	0 ³ / ₄	3 12 9	4
"	1887	3,000,000	"	"	102	14	10	101	11	11 ¹ / ₂	3 8 5	4
"	1888	1,500,000	"	"	100	2	4	98	19	6	3 11 1	3 ¹ / ₂
989	1889	3,000,000	1923	3 ¹ / ₂								
1032	1890	4,000,000	"	"								
1057												
Total		46,914,000††										

NOTE.—All Victorian loans floated prior to 1884 have originally a currency of 25 years ; the loan of 1884 has a currency of 30 years, and the subsequent loans a currency of from 33 to 35 years.

* The loans referred to in the first six lines have been paid off by means of more recent loans.

† For loans raised prior to 1876, the expenses have been uniformly assumed to have been 1·15 per cent., and the quotations differ slightly from those published last year. See paragraph 387 *ante*.

‡ Based on the prices given in the previous column. Some of the figures have been revised and corrected since last publication.

§ Conversion loans. See footnote (‡) on last page.

|| Redemption loans.

¶ It is believed that a higher price by fully 5s. per £100 would have been obtained but for the unusual occurrence of the shipment of large quantities of gold to Australia, which took place just prior to the loan being floated.

** Money market much affected at time of issue of this loan by a misunderstanding with Russia and the supposed probability of war with that country.

†† Including £957,000 for conversion of debentures and stock issued in Melbourne ; also redemption loans amounting to £7,817,220, of which £7,000,000 was for loans falling due in London. The latter amount being deducted, the net amount borrowed in London is reduced to £39,914,000, of which £1,774,220 is virtually a transfer of debt from Melbourne to London.

Terms upon
which loans
have been
obtained.

391. It will be noticed that the nominal rate of interest was 6 per cent. for all loans floated prior to 1869, when it was reduced to 5 per cent.; it was further reduced to 4 per cent. in 1874, which rate has, with exceptions in 1879 and 1880, prevailed until 1889, when a $3\frac{1}{2}$ per cent. loan was floated. It will be seen that the first 4 per cent. loan was floated at a heavy discount, viz., 10 per cent., but the credit of the colony has improved so considerably of recent years, especially since 1885, that a $3\frac{1}{2}$ per cent. loan, floated at the beginning of 1889, brought a premium of £2 15s. per £100 debenture, although a similar loan in 1890 was not so successful. It should be stated, however, that after the Victorian loan of 1888 was floated, a large advance took place in the value of Australian securities, owing probably for the most part, to the conversion of British 3 per cents., and the possibility that English trustees might sooner or later be allowed to invest in colonial securities, in consequence of which no less than five of the Australasian colonies—viz., New South Wales, Queensland, Victoria, South Australia, and Tasmania, in the order named—have already been able to float $3\frac{1}{2}$ per cent loans, either at a premium or at a small discount.

Actual rate
of interest
on loans.

392. By the last column but one of the table, it appears, in respect to the earlier Victorian loans, that, although the nominal rate of interest was 6 per cent., the money was usually obtained for about $5\frac{3}{4}$ per cent., the lowest rate being $5\frac{1}{2}$ per cent. in 1859, and the highest a small fraction over 6 per cent. in 1866. Since that year, however, the credit of the colony has been gradually improving, for the money was secured in 1870—or four years later—for about 5 per cent.; in the early part of 1883 for $4\frac{3}{20}$ per cent.; in 1885 for $4\frac{1}{8}$ per cent.; in 1888 for about $3\frac{5}{8}$ per cent.; in 1889 for about $3\frac{2}{5}$ per cent., which was the lowest actual rate at which any Victorian—or, in fact, any Australasian—loan has yet been raised; and, although the loan of 1890 was less successful, it realized a far better price than any other previous loan.

New South
Wales
loans.

393. The following table, giving similar information respecting the loans of New South Wales, is taken in substance, as regards the earlier portion, from the *Sydney Morning Herald*, but in the case of the last ten lines the figures were compiled in the office of the Government Statist, Melbourne, from official documents:—

NEW SOUTH WALES LOANS, 1858 TO 1889.

Date of Loan.	Years' Currency.	Amount of Loan.	Gross Amount raised.	Average price per £100 less charges etc.*	Nominal Interest per cent.	Actual Interest per £100.
		£	£	£		£ s. d.
1858	30	130,400	125,888	90·59	5	5 13 3
1859	30	818,100	916,778	99·09	5	5 1 3
1860	30	560,900	560,654	99·20	5	5 1 0
1861	30	206,960	205,887	98·85	5	5 1 7
1862	30	495,500	485,391	97·22	5	5 3 10
1863	30	610,000	613,247	99·78	5	5 0 3
1864	30	288,300	287,609	90·01	5	5 1 5
1865	30	292,800	269,974	91·49	5	5 11 6
1866	30	1,001,900	899,216	88·49	5	5 16 4
1867	30	312,800	267,448	84·32	5	5 2 1
1868	30	1,500,000	1,430,204	88·52	5	5 16 4
1869	...	1,000,000	981,655	96·85	5	5 4 2
1870 } 1871 }	30	985,100	973,696	97·91	5	5 2 11
1872	30	406,800	422,666	103·90	5	4 15 0
1873	Inter.	222,284	217,270	97·74	4	4 2 0
1874	Inter.	282,955	268,808	95·00	4	4 5 11
1875	30	1,000,000	900,581	89·12	4	4 13 0
1876	30	901,500	837,180	92·22	4	4 9 4
1879	30	3,249,500	3,099,443	97·81	4	4 2 8
1881	30	2,050,000	2,120,697	101·67	4	3 18 1
1882†	{ 30 50	{ 813,700 } { 1,186,300 }	2,042,916	100·10	4	3 19 11
1883	50	3,000,000	3,001,067	97·68	4	4 2 3
"	50	3,000,000	3,018,780	98·08	4	4 1 10
1884	40	5,500,000	5,152,386	91·17	3½	3 18 11
1885	40	5,500,000	5,042,041	89·01	3½	4 1 3
1886	38	5,500,000	5,247,690	91·99	3½	3 18 0
1888	30	3,500,000	3,626,300	100·86	3½	3 9 0
1889	29	{ 1,390,630† } { 2,109,400 }	3,584,105	99·57	3½	3 10 2

394. By this table it appears that during the six years ended with 1889, New South Wales has floated seven loans amounting in the aggregate to £29,500,000. The loan of 1882 was issued in the form of debentures, but with right of inscription as stock. All previous loans, it is believed, were issued as debentures only, whilst all subsequent loans were issued either as inscribed stock or debentures inscribable as stock. It would appear that as early as 1881 and 1882 New South Wales was able to borrow, allowing for all charges, for

Success of recent New South Wales loans.

* The quotations respecting New South Wales for 1881 and subsequent years were carefully computed in the office of the Government Statist, Melbourne, and are exclusive of accrued interest as well as expenses ; but, for the loans prior to 1881, it is believed no allowance has been made for accrued interest or—what amounts to the same thing—for discount on deferred instalments. This is often considerable, and, in the case of the last six loans, varied from something less than £1 to nearly £2 per £100.

† The loan of 1882 was issued first as debentures ; but, subsequently, power was given to convert into inscribed stock. The debentures unconverted are shown in the upper line.

‡ Redemption loan. This was the only Redemption loan during the last 10 years.

less than 4 per cent.—the loan floated in 1881 being set down as costing only £3 18s. 1d. per £100 per annum, although, strange to say, the next two 4 per cent. loans floated in 1883 could only be raised at a discount. The last five loans, it will be observed, were launched nominally at $3\frac{1}{2}$ per cent.; New South Wales being the first Australasian, and the second British colony* to issue loans bearing a lower nominal rate of interest than 4 per cent. The actual rate of interest payable on the first three of these, however, was nearer 4 than $3\frac{1}{2}$ per cent., per £100 borrowed; but a considerable improvement took place in the last two, which were floated at or slightly above par. The earlier of these two loans was, at the time, the most successful Australian loan floated, its great success being no doubt attributable to the extraordinary demand for Colonial securities in the London money market, owing to a great extent to the then proposed, and since accomplished, compulsory conversion of the greater portion of the British 3 per cent. debt, first into $2\frac{3}{4}$, and eventually into $2\frac{1}{2}$ per cents.; but this has been since, in its turn, eclipsed by the Victorian $3\frac{1}{2}$ per cent. loan of 1889.

Loans of
Austral-
asian
colonies,
1888 to 1890.

395. New South Wales issued its first $3\frac{1}{2}$ per cent. loan as early as 1884, and it was not until 1888 that nearly all the other Australian colonies followed suit. Victoria and New South Wales, however, have secured the best prices, and each successive loan of those colonies was floated at a higher price than the previous one; whilst the lowest real rate of interest secured—based on the price realized, *ex* interest,—is £3 7s. 4d. per £100 for the Victorian loan of January, 1889. The following are the particulars of the Australasian loans floated during the years 1888, 1889, and 1890, up to the end of May of the latter year:—

LOANS OF AUSTRALASIAN COLONIES RAISED IN 1888 TO 1890.

Colony.	Date.	Amount.	Currency of Loans.	Nominal Rate of Interest.	Price obtainable per £100 Debenture.						Com- parative Rates of Interest per £100.†		
					Gross.			Ex Accrued Interest.					
	1888.	£	Years.	Percent.	£	s.	d.	£	s.	d.	£	s.	d.
Victoria ...	Jan.	1,500,000	33	4	108	11	1½	108	1	1¼	3	11	11
New South Wales	April	3,500,000	30	3½	103	12	2	102	4	3	3	8	1
New Zealand ...	June	2,000,000	41	4	95	15	7	96	11	5	4	3	7
Queensland ...	July	2,500,000	36	3½	95	2	9	94	6	11	3	15	10

* The first one was Canada. See footnote (†) to paragraph 385 *ante*.

† The calculations in this table are based on the prices *ex* accrued interest as shown in the previous column, but not *ex* expenses also, as it was impossible to obtain a statement of these from some of the colonies; the rates for Victoria and New South Wales are, therefore, somewhat lower than those given in previous tables.

LOANS OF AUSTRALASIAN COLONIES RAISED IN 1888 TO 1890
—continued.

Colony.	Date.	Amount.	Currency of Loans.	Nominal Rate of Interest.	Price obtainable per £100 Debenture.						Com- parative Rates of Interest per £100.*		
					Gross.			Ex Accrued Interest.					
		£	Years.	Per cent.	£	s.	d.	£	s.	d.	£	s.	d.
Victoria ...	1889. Jan.	3,000,000	35	3½	103	6	0	102	14	10	3	7	4
South Australia...	„	1,317,800†	40	3½	100	1	10	99	4	6	3	10	9
Tasmania ...	April	1,000,000	30 to 50‡	3½	98	5	8	97	15	0	3	12	5
New South Wales	July	3,500,000	29	3½	102	8	1	101	4	6	3	8	8
Western Australia	July	100,000	45	4	108	15	3	108	1	11	3	12	9
New Zealand ...	Oct.	2,700,000§	50	3½	95	16	8	95	10	2	3	14	1
	1890.												
Queensland ...	Mar.	2,264,734	34½	3½	97	16	7	96	7	4	3	13	9
Victoria ...	April	4,000,000	34	3½	101	10	4½	100	2	4	3	9	10½

NOTE.—Amongst other British Colonies the most remarkable recent loans are as follow :—
Canada, in June, 1888, a 3 per cent. loan for £4,000,000 of 50 years' currency, realized £94 14s. 10d. *ex* interest, equivalent to interest at rate of £3 4s. 3d. per £100. Cape of Good Hope, in March, 1890, a 3½ per cent. loan for £1,150,000 of 59 years' currency, but redeemable after 39 years at option of Government, realized £100 0s. 10d. *ex* interest, equivalent to interest at the rate of £3 9s. 11½d. Ceylon, in May, 1890, offered a 3 per cent. loan for £450,000 of 50 years' currency at a minimum price of £93, equal to £92 6s. 10d. *ex* interest, equivalent to interest at the rate of £3 6s. 4d., but only £300,500 was applied for, and the balance was withdrawn.

396. The expense of floating the loans of New South Wales has lately been much greater than that of floating the loans of Victoria. Thus, the expense of floating Victorian loans averages £1 3s. per £100 debenture, but it varies from £1 2s. to over £1 14s. in the case of New South Wales—the average being £1 10s. 2d. The following table contains a statement of the average expense of floating loans in the two colonies during the nine years ended with 1890 :—

Cost of float-
ing loans
of Victoria
and New
South
Wales com-
pared.

EXPENSES OF FLOATING LOANS OF VICTORIA AND NEW SOUTH
WALES, 1882 TO 1890.||

Year.	Amount of Loan.		Expenses per £100 Debenture or Stock in—					
	Victoria.	New South Wales.	Victoria.			New South Wales.		
	£	£	£	s	d.	£	s.	d.
1882 ...	...	2,000,000	...	...	...	1	1	9
1883 (1st loan) ...	4,000,000	3,000,000	1	3	1	1	1	10
„ (2nd loan) ...	2,000,000	3,000,000	1	3	2	1	6	5
1884 ...	4,000,000	5,500,000	1	2	11	1	11	2
1885 ...	4,000,000	5,500,000	1	2	9	1	14	5
1886 ...	1,500,000	5,500,000	1	3	3	1	13	0
1887 ...	3,000,000	...	1	2	10	...	...	...
1888 ...	1,500,000	3,500,000	1	3	1	1	7	11
1889 ...	3,000,000	3,500,000	1	2	11	1	13	1
1890 (to 30th June)	4,000,000	...	1	2	10	...	...	...
Total ...	27,000,000	31,500,000	1	3	0	1	10	2

* See footnote (†) on page 240.
† At first only £553,700 was taken up at an average price of £100 4s. 5d., but the balance of the loan was, it is believed, subsequently disposed of on the terms of the original prospectus.
‡ Repayable at the option of the Government at any time after 30 years on giving 12 months' notice.
§ Conversion loan. || See also paragraph 387 ante.

Annual cost
of manag-
ing stock of
Victoria
and New
South
Wales.

397. The annual charge per million made by the Bank of England for the inscription and management of the stock of New South Wales is £600 for the first ten millions, and £500 for the second ten millions; whereas the annual charge per million made by the London and Westminster Bank for the same services rendered to the Government of Victoria is only £500 for the first ten millions, £450 for the second ten millions, and £400 for subsequent amounts.

Debts of
Austral-
asian
colonies.

398. The following table shows the total amount of debt, and the indebtedness per head, in Victoria and the other Australasian colonies on the 31st December of each of the eight years ended with 1888; also the number of years' revenue the debt was equal to in each year:—

PUBLIC DEBTS OF THE AUSTRALASIAN COLONIES.

Colony.	Year.	On the 31st December.				
		Total Amount of Debt.	Amount of Indebtedness per Head.		Number of Years' Revenue Debt is equal to.	
			£	s.		d.
Victoria ...	1881	22,426,502	25	9	7	4·32
	1882	22,103,202	24	11	1	3·95
	1883	24,308,175	26	7	5	4·33
	1884	27,526,667	29	1	11	4·64
	1885	28,628,588	29	9	7	4·55
	1886	30,114,203	30	0	5	4·65
	1887	33,127,382	31	19	5	4·92
	1888	34,627,382	31	14	10	4·55
New South Wales ...	1881	16,924,019	21	14	8	2·52
	1882	18,721,219	23	1	9	2·53
	1883	21,632,459	25	4	5	3·34
	1884	30,101,959	33	6	0	4·23
	1885	35,564,259	37	2	8	4·69
	1886	41,034,249	40	19	1	5·43
	1887	40,995,350	39	6	2	4·78
	1888	44,100,149	40	12	4	4·96
Queensland ...	1881	13,245,150	58	7	1	6·55
	1882	13,125,350	52	17	5	6·24
	1883	14,907,850	51	17	2	5·77
	1884	16,419,850	52	19	6	6·14
	1885	19,320,850	61	4	10	6·80
	1886	20,820,850	60	15	5	7·41
	1887	23,320,850	63	11	1	7·69
	1888	25,840,950	66	13	10	7·46
South Australia ...	1881	11,196,800	38	3	6	5·16
	1882	12,472,600	42	9	10	5·98
	1883	13,891,900	45	12	5	6·74
	1884	15,473,800	49	9	5	7·64
	1885	17,020,900	54	6	2	7·37
	1886	18,340,200	58	12	10	9·28
	1887	19,168,500	60	7	8	9·52
	1888	19,147,700	60	3	1	7·68

PUBLIC DEBTS OF THE AUSTRALASIAN COLONIES—*continued.*

Colony.	Year.	On the 31st December.		
		Total Amount of Debt.	Amount of Indebtedness per Head.	Number of Years' Revenue Debt is equal to.
Western Australia ...	1881	£ 511,000	£ s. d. 17 0 6	2·01
	1882	511,000	16 12 2	2·04
	1883	611,000	19 5 6	1·93
	1884	765,000	23 4 3	2·64
	1885	1,288,100	36 12 4	3·99
	1886	1,286,000	32 9 9	3·31
	1887	1,280,700	30 2 10	3·39
	1888	1,275,200	30 5 3	3·57
Tasmania ...	1881	2,003,000	16 16 10	3·96
	1882	2,050,600	16 14 10	3·72
	1883	2,385,600	18 18 0	4·24
	1884	3,202,300	24 10 7	5·83
	1885	3,357,000	25 1 10	5·88
	1886	4,026,720	29 6 11	7·08
	1887	4,109,370	28 16 10	6·91
	1888	4,499,470	30 15 9	7·03
New Zealand*	1881	29,659,111	59 4 2	7·89
	1882	30,235,711	58 8 1	7·72
	1883	31,385,411	58 0 6	8·11
	1884	32,860,982	58 4 8	8·86
	1885	35,790,422	62 4 3	8·74
	1886	37,587,776	63 15 6	10·20
	1887	38,225,537	63 7 1	11·04
	1888	38,325,550	63 2 0	9·33

NOTE.—The following colonies have floated loans in London since the 31st December, 1888:—Victoria, £3,000,000 in January, 1889, and £4,000,000 in April, 1890; New South Wales, £3,500,000 in July, 1889; Queensland, £2,264,734 in March, 1890; South Australia, £1,317,800 early in 1889; Western Australia, £100,000 in July, 1889; Tasmania, £1,000,000 in April, 1889; New Zealand, £2,700,000 in October, 1889. The last amount, however, did not increase the debt, being intended only for the conversion of earlier loans. For public debts of the respective colonies at the end of 1889, see Summary of Australasian Statistics (third folding sheet at the commencement of the second volume), which gives a statement of the debts of the respective colonies at the end of each of the seventeen years 1873 to 1889; also table following paragraph 395 *ante*, and Appendix A. to the second volume.

399. In 1888, as compared with the previous year, Victoria, South Australia, and New Zealand show a decrease of indebtedness per head, but—excepting Western Australia, where the increase was very slight—an increase varying from £1 6s. to £3 per head occurred in the other colonies. According to the returns of the same year, by far the most heavily-indebted colonies in proportion to population were Queensland, which now stands first, and New Zealand, both with over £63; and next South Australia, with over £60 per head. Victoria in proportion to population, was only half as heavily indebted as any

Order of colonies in respect to indebtedness.

* New Zealand, as a set-off against the debt, has an accrued sinking fund, which amounted on the 31st December, 1888, to £1,353,859. The net liability was thus £36,971,691, or £60 17s. 6d. per head, and was equal to 9 times the revenue. The sinking funds in the other colonies are of no great importance.

of these, and was, moreover, less heavily indebted than any other of the Australasian colonies, except Western Australia and Tasmania. The following is the order in which the colonies stood in respect to their indebtedness per head, the most heavily indebted colony being placed first:—

ORDER OF COLONIES IN REFERENCE TO AMOUNT OF INDEBTEDNESS PER HEAD.

1. Queensland.	5. Victoria.
2. New Zealand.	6. Tasmania.
3. South Australia.	7. Western Australia.
4. New South Wales.	

400. The public debts of the different colonies varied, in 1888, from an amount equal to 9½ years' revenue in New Zealand, and about 7½ years' revenue in Queensland and South Australia, to a sum equal to 3½ years' revenue in Western Australia. Victoria occupied a lower, and consequently more favourable, position in this respect than any of the colonies, except Western Australia, her debt being equal to her revenue for only 4½ years. The following is the order in which the colonies stood in respect to this matter:—

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF REVENUE TO PUBLIC DEBT.

1. New Zealand.	5. New South Wales.
2. South Australia.	6. Victoria.
3. Queensland.	7. Western Australia.
4. Tasmania.	

401. If the amounts of debt at the latest period shown in the table be added together, it will be found that the aggregate debt of the colonies on the continent of Australia was nearly 125 millions, being 7 millions more than in 1887; and the aggregate debt of Australia, with the addition of Tasmania and New Zealand, was nearly 168 millions sterling, being over 7½ millions more than in 1887. The following are the exact figures for 1888, also the proportion of indebtedness per head of the population, and the proportion the aggregate debt bore to the aggregate revenue of the colonies within the same limits:—

PUBLIC DEBT OF AUSTRALIA AND AUSTRALASIA, 1888.*

	PUBLIC DEBT.		
	Total Amount.	Amount per Head.	Multiple of Revenue.
	£	£ s. d.	Per cent.
Continent of Australia	124,991,381	42 14 9	5·48
Ditto with Tasmania and New Zealand...	167,816,401	45 12 6	6·09

* For later figures, see Appendix A. in the second volume.

402. It will be observed that a combination of the indebtedness of the insular colonies with that of the colonies upon the Australian continent gives a proportion of debt per head higher by nearly £3 than such a proportion applied to the continental colonies alone, in explanation of which it will be remembered that, although in proportion to population, Tasmania is, next to Western Australia, the most lightly, New Zealand is, next to Queensland, the most heavily indebted colony of the group.

Debt per head higher in Australasia than in Australia.

403. During the year 1888, the public debt of Australasia, taken as a whole, increased by 7½ millions—or nearly 5 per cent., but the amount per head of population increased by only 10s. During the fifteen years ended with 1888, the public debt increased by one hundred and twenty-five millions—or fourfold—whilst the proportion per head was much more than doubled. The debt also, in the first thirteen of those years, increased in a much greater ratio than the public revenue, for whereas in 1873 it was equal to the income of the colonies for only about three and a half years, in 1886 it was equal to their income for six and a half years; but since 1886 it has fallen in this respect and it amounted to little more than six years' revenue in 1888. This is shown by the following figures:—

Increase of debt in Australasia in fifteen years.

INCREASE OF PUBLIC DEBT OF AUSTRALASIA, 1873 TO 1888.

Year.	Public Debt of Australia, Tasmania, and New Zealand.		
	Total Amount.	Amount per Head.*	Multiple of Revenue.
	£	£ s. d.	
1873	42,672,423	20 7 1	3·46
1886	153,209,998	44 14 3	6·52
1887	160,227,689	45 2 3	6·46
1888	167,816,401	45 12 6	6·09
Increase 1873-88	125,143,978	25 5 5	2·63
„ 1888	7,588,712	0 10 3	—·37†

404. The purposes for which the public debts of the Australasian colonies were incurred may be classified under three heads—(1.) Works yielding direct revenue, including all immediately reproductive works, such as railways, telegraphs, waterworks, harbour and river improvements, etc. ; (2.) Other works of a permanent character not returning direct revenue—including roads and bridges, defence works,

Classification of debts of Australasian colonies.

* In 1873, the population was 2,096,560 ; in 1886, 3,426,562 ; in 1887, 3,551,751 ; and in 1888, 3,678,046.
† Decrease.

school buildings, and other public works and buildings; (3.) Miscellaneous—including introduction of immigrants, war debts, amounts borrowed to cover deficiencies in revenue, and amounts unapportioned to their proper heads. In the following table the debt of each colony is classified under these three heads:—

PURPOSES FOR WHICH PUBLIC DEBTS OF AUSTRALASIAN COLONIES
WERE INCURRED.

(Amounts outstanding on the 31st December, 1888.)

Purposes for which incurred.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.*
1.—WORKS YIELDING DIRECT REVENUE.	£	£	£	£	£	£	£
Railways and Tramways	26,575,706	30,990,579	14,467,116	10,883,928	823,099	1,902,224	13,634,501
Electric Telegraphs .. ..	..	700,279	758,371	826,030	188,503	94,471	574,010
Water Supply (including Sewerage)	5,345,150	3,739,701	541,022	2,726,500	917	..	559,996
Harbors, Rivers, Lighthouses and Docks	626,019	2,129,625	1,563,812	1,364,313	9,300	†1,251,742	869,718
Total	32,546,875	37,560,184	17,330,321	15,800,771	1,021,819	3,248,437	15,638,225
—OTHER WORKS OF A PERMANENT CHARACTER.							
Roads and Bridges	108,043	565,072	822,306	1,323,284	48,822	†	3,469,990
Defence Works	100,000	703,177	148,677	187,220	..	103,373	429,719
School Buildings	1,105,557	50,000	..	674,000	..	110,428	..
Other Public Works and Buildings	766,907	1,076,556	1,435,915	471,425	134,592	506,077	2,052,104
Total	2,080,507	2,394,805	2,406,898	2,655,929	183,414	719,878	5,951,813
3.—MISCELLANEOUS.							
Immigration .. ..	..	569,930	2,498,433	..	..	235,714	2,142,460
Deficiencies in Revenue (including Treasury Bonds) .. ..	..	..	..	100,000	..	146,872	218,500
Balance { Other Services .. ..	..	49,855	..	591,000	..	148,569	†1,216,833
{ Unapportioned \$ .. ..	..	3,525,375	3,605,298	..	69,967	..	13,157,719
Total .. ..	..	4,145,160	6,103,731	691,000	69,967	531,155	16,735,512
Grand Total || .. ..	34,627,382	44,100,149	25,840,950	19,147,700	1,275,200	4,499,470	38,325,550

Purposes for which debts of Australasian colonies were contracted.

405. The major portion of the public debt of each of the Australasian colonies was contracted for the purpose of railway construction, but smaller amounts were borrowed for water supply, immigration,

* The figures set down as showing the objects for which the Public Debt of New Zealand was contracted represent the bulk of the expenditure out of the "Public Works Fund" since 1870—the date of the first Immigration and Public Works Loan—which is the only existing record of the loan expenditure; it is, however, stated that, besides loan moneys, receipts in aid from Stamp duties, etc., contributed somewhat towards the total sum so expended. The balance required to make up the total debt at the end of 1888 has been entered as "unapportioned."

† The amount for "Roads and Bridges" is included with that for "Harbors, etc."

‡ Including £1,194,249 for land purchases (presumably from the Maoris) and rates on native lands.

§ Included in this line, in the column for New Zealand, is an amount of £1,021,472 for charges and expenses of raising loans; New South Wales, £1,822,330 for repayment of loans; South Australia, £591,000 for public works for Northern Territory. The amount in the last column also includes the old provincial loans of New Zealand raised prior to the abolition of provinces in 1876, and loans not accounted for, as well as the unspent balance of loan moneys. See also footnote (*) *supra*.

|| As a set-off against the public debt, New Zealand possessed an accrued sinking fund amounting, on the 31st December, to £1,353,859; the net liability for that colony was, therefore, £36,971,691. The sinking funds possessed by the other colonies are comparatively small, consisting of the following amounts:—Victoria, £53,117; Western Australia, £65,854; and Tasmania, £89,031. The debt for South Australia does not include Treasury bonds, £1,100,000.

electric telegraphs, harbour and defence works, roads and bridges, school-houses, and other public works. Up to the end of 1888, New South Wales had borrowed a larger amount for railway construction than any other colony, the amount being nearly £31,000,000, as against £26,600,000 borrowed for the same purpose by Victoria, nearly £14,500,000 by Queensland, over £13,600,000 by New Zealand, and nearly £11,000,000 by South Australia. Victoria has borrowed more for water supply than any other colony, the total amount being £5,300,000, as against £3,700,000 borrowed by New South Wales, and £2,700,000 borrowed by South Australia for the same object. No portion of the public debt of Victoria, South Australia, or Western Australia has been contracted for the promotion of immigration, but up to the end of 1888 Queensland and New Zealand had borrowed two and a half and over two millions respectively for immigration purposes, whilst New South Wales and Tasmania had borrowed smaller sums.

406. Ninety-four per cent. of the Victorian public debt was incurred for the purpose of being expended upon revenue-producing public works, which is a larger proportion than in any of the other colonies. This is shown by the following figures, which give the proportion so incurred in each colony:—

Order of colonies in respect to borrowings for reproductive works.

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF DEBT
INCURRED FOR REPRODUCTIVE WORKS.

	Per Cent.		Per Cent.
1. Victoria ...	93·99	5. Tasmania ...	72·20
2. New South Wales ...	85·17	6. Queensland ...	67·06
3. South Australia ...	82·52	7. New Zealand ...	40·80*
4. Western Australia ...	80·13		

407. Of the total amount borrowed by the colonies on the Australian continent to the end of 1888, over four-fifths was for railways and other reproductive works, nearly 8 per cent. was for other works of a permanent character, and, with the exception of 6 per cent., which was unapportioned, the balance was spent chiefly on immigration. Of the amount borrowed by the continental and insular colonies combined, the proportion for reproductive works is considerably less, but the proportions for immigration and other purposes are considerably more than those for like objects relating to the continental colonies alone. This is shown in the following table:—

Purposes for which debt of Australasia was contracted

* The purposes for which a large portion of the New Zealand debt was incurred cannot now be determined. See last footnotes on preceding page.

PURPOSES FOR WHICH DEBTS OF AUSTRALIA AND AUSTRALASIA
WERE CONTRACTED.

(Amounts outstanding on the 31st December, 1888.)

Purposes for which debt was contracted.	Continent of Australia.		Australia with Tasmania and New Zealand.	
	Amount of Debt.	Proportions per cent.	Amount of Debt.	Proportions per cent.
	£		£	
1.—WORKS YIELDING DIRECT REVENUE.				
Railways and Tramways ...	83,740,428	67·00	99,277,153	59·16
Electric Telegraphs ...	2,473,183	1·98	3,141,664	1·87
Water Supply (including Sewerage)	12,353,290	9·88	12,913,286	7·69
Harbours, Rivers, Lighthouses, and Docks	5,693,069	4·55	7,814,529	4·66
Total ...	104,259,970	83·41	123,146,632	73·38
2.—OTHER WORKS OF A PERMANENT CHARACTER.				
Roads and Bridges ...	2,867,527	2·30	6,337,517	3·78
Defence Works ...	1,139,074	·91	1,672,166	1·00
School Buildings ...	1,829,557	1·46	1,939,985	1·16
Other Public Works and Buildings	3,885,395	3·11	6,443,576	3·83
Total ...	9,721,553	7·78	16,393,244	9·77
3.—MISCELLANEOUS.				
Immigration ...	3,068,363	2·46	5,446,537	3·25
Revenue Deficiencies (including Treasury Bonds)	100,000	·08	465,372	·28
Balance { Other Services ...	640,855	·51	2,006,257	1·19
{ Unapportioned ...	7,200,640	5·76	20,358,359	12·13
Total ...	11,009,858	8·81	28,276,525	16·85
Grand Total ...	124,991,381	100·00	167,816,401	100·00

408. The next table shows the amounts of public debt in Great Britain and her various possessions at latest dates, so far as the information can be gathered from official documents existing in this colony, also the amount of debt per head of the population of each possession, and the number the revenue of each would have to be multiplied by in order to make an amount equal to its debt. All the calculations have been made in the office of the Government Statist, Melbourne:—

Public debts
of British
dominions.

PUBLIC DEBTS OF BRITISH DOMINIONS, 1888.

Country or Colony.	Public Debt.		
	Total Amount.	Amount per Head.*	Multiple of Revenue. †
EUROPE.			
	£	£ s. d.	
United Kingdom	698,430,571	18 7 4	7·89
Malta	79,168	0 9 9	·33
ASIA.			
India	191,945,844	0 18 3	2·44
Ceylon	2,251,906	0 15 0	2·06
Straits Settlements	24,000	0 0 10	·04
Protected Malay States	12,729	0 0 7	·02
Hong Kong	200,000	0 18 6	·61
AFRICA.			
Mauritius	751,700	1 19 0	·88
Natal	4,535,126	9 8 5	4·58
Cape of Good Hope	22,295,124	15 12 1	6·51
St. Helena	2,250	0 8 10	·24
Sierra Leone	58,000	0 15 6	·92
AMERICA.			
Canada	59,273,717†	11 18 5	7·92
Newfoundland	694,915	3 9 6	2·43
Bermuda	8,614	0 11 1	·29
British Guiana	698,251	2 10 2	1·51
Honduras	16,650	0 11 1	·38
West Indies—			
Bahamas	83,126	1 14 0	1·82
Jamaica	1,581,097	2 11 3	2·29
St. Lucia	130,200	3 1 3	2·81
St. Vincent	13,240	0 5 8	·56
Barbados	30,100	0 3 4	·18
Grenada	30,475	0 12 4	·59
Tobago	600	0 0 7	·06
St. Christopher } Nevis ... }	11,900	0 5 5	·30
Antigua	25,571	0 14 7	·63
Montserrat	3,900	0 7 1	·67
Dominica	13,400	0 9 3	·78
Trinidad	552,680	2 18 4	1·15
AUSTRALASIA.			
Australia, Tasmania and New Zealand §	167,816,401	45 12 6	6·09
Fiji	253,289	2 0 5	3·90
Total	1,151,824,544	4 6 6	5·41

* For population of Great Britain and the various colonies, see table following paragraph 175 *ante*.

† For revenue of Great Britain and the various colonies, see table following paragraph 299 *ante*.

‡ Gross liability. The net liability, after deducting “interest bearing investments, loans, cash, and banking accounts,” was only £48,860,696.

§ For public debts and amounts per head and proportion of debt to revenue in the various Australasian colonies, see table following paragraph 398 *ante*.

Indebted-
ness of
British
dominions.

409. It will be observed that the total indebtedness of Great Britain and her dependencies reaches to about 1,152 millions sterling; that $698\frac{1}{2}$ millions, or over three-fifths, of this amount is owing by Great Britain herself; 192 millions by India; 168 millions, or one-seventh of the whole, by the Australasian colonies; and the remainder, $93\frac{1}{2}$ millions, by Canada, the Cape of Good Hope, and other British colonies.

Indebted-
ness per
head of
British
dominions.

410. In Australasia, taken as a whole, the indebtedness, in proportion to population, is about two and a half times as large as that of the United Kingdom, which in this respect is far above any of its other dependencies. As regards individual colonies, the indebtedness per head of Queensland is more than, and that of New Zealand or South Australia is nearly three and a half times as large as the indebtedness per head of the United Kingdom; whilst that of New South Wales is more than twice as large, and that of Victoria is larger by more than one-half. The two first-named colonies are, in proportion to population, by far the most heavily-indebted countries in the world. It may be observed that the indebtedness per head of Canada—which moreover includes its provincial debts—is only a fourth of that of Australasia.

Proportion
of debts to
revenues
of British
dominions.

411. In proportion to revenue, the debt of the United Kingdom is much larger than that of any of her dependencies, except Canada, which stands first in this respect; but, with the exception of the United Kingdom, Canada, and the Cape of Good Hope, there is no portion of the British dominions in which the debt is so high a multiple of its revenue as the united debts of the Australasian colonies are of their united revenues.

Increased
indebted-
ness of
British
dominions.

412. During the year 1888 the public indebtedness of the British dominions increased by £10,000,000*, notwithstanding a reduction of 7 millions in the debt of the United Kingdom. An increased amount of over six millions was borrowed by India, seven and a half millions by Australasia, and one and a half millions by Canada.

National
debt of
United
Kingdom
1888-9.

413. At the end of March, 1889, the National Debt of the United Kingdom stood in round numbers at 699 millions, the various denominations of which will be found in the following table. Goschen's New $2\frac{3}{4}$ per Cent. Stock, into which 3 per cent. Consols were recently converted, will be at once noticed:—

* The figures given in the last edition of this work are not strictly comparable with those in the last table.

NATIONAL DEBT OF THE UNITED KINGDOM, 31ST MARCH, 1889.

Denomination.	Total Amount of National Debt.	Amount of Debt held by Government Departments (included in previous column).
	£	£
FUNDED DEBT—		
3 per Cents. (Consols)	35,606,575	11,099,862
Reduced 3 per Cents.	5,610,766	1,640,539
New 3½ per Cents.	225,746	5,935
2¾ per Cents. Cons. Stock	514,149,320	82,574,245
2¾ per Cents. (1905)	4,647,799	200,027
2½ per Cents.	33,171,734	12,505,009
Debts to Banks of England and Ireland...	13,645,869	...
Terminable Annuities	75,279,438	64,722,067
Exchequer Bills.	4,583,200	2,700,122
Exchequer Bonds	1,310,122	
Treasury Bills	10,200,000	...
Deficit to Savings Banks and Friendly Societies Accounts	308,659	...
Total Debt	699,300,767	175,447,806

NOTE.—The information in this table has been taken from *Burdett's Official Intelligence*, 1890, page 65. The sum of the amounts in the first figure column is less than the total in the lowest line by £561,539. Mr. Burdett does not explain the discrepancy.

414. A gradual but continuous diminution has taken place in the national indebtedness of the United Kingdom; this reduction in the last 31 years having apparently amounted to 132 millions sterling.* The decrease from period to period is shown by the following figures, which indicate the amount of the debt at the end of various financial years :—

British National Debt, 1857 to 1888.

PUBLIC DEBT† OF THE UNITED KINGDOM, 1857 TO 1888.

Debt at the end of each Financial Year.†			Debt at the end of each Financial Year.†		
£			£		
1857-8	...	831,532,535	1877-8	...	772,151,725
1862-3	...	821,992,158	1882-3	...	754,455,270
1867-8	...	799,839,663	1887-8	...	705,575,073
1872-3	...	779,222,110	1888-9	...	699,300,767

415. The public debts of Foreign countries at the latest dates are next shown, so far as the information is available. The calculations as to the amount of indebtedness per head and the multiple of the revenue of each country have all been made in the office of the Government Statist, Melbourne :—

Public debts of Foreign countries.

* The actual reduction is not so great as this, as the practice has prevailed of late years of deducting the amounts borrowed for local reproductive works. It is known that sums amounting in the aggregate to £26,558,959 were so deducted in 1887-8.

† Funded (including stock held on account of unclaimed dividends), unfunded, and capital value of terminable annuities in 3 per cent. stock, at par.

‡ Financial Year ends on the 31st March.

PUBLIC DEBTS OF FOREIGN COUNTRIES.

Country.	Year.	Public Debt.			
		Total Amount (000's omitted).	Amount per Head.*		
		£	£	s.	d.
EUROPE.					
Austria-Hungary ...	1888	539,221,†	13	4	10
Belgium ...	1889	87,207,	14	9	3
Denmark ...	1887-8	10,723,‡	5	2	3
France ...	1889	1,268,715,	30	3	8
Germany ...	1887-8	407,968,§	8	14	2
Greece ...	1889	26,779,	13	10	6
Holland ...	"	88,985,	19	15	0
Italy ...	1888-9	472,488,	15	9	2
Portugal ...	1886-7	115,384,	26	15	11
Roumania ...	1889	31,549,	5	17	6
Russia ...	"	563,112,	6	2	6
Spain ...	"	251,012,	14	6	2
Sweden and Norway ...	1888-9	20,560,||	3	1	4
Switzerland ...	1889	1,223,¶	0	8	4
Turkey... ...	1878	292,830,**	13	6	8
ASIA.					
Japan ...	1889	49,539,	1	5	4
AFRICA.					
Egypt ...	1889	103,936,	15	5	5
Tunis ...	1884	5,000,††	0	8	5
AMERICA.					
Argentine Confederation ...	1888	30,788,	8	1	8
Brazil ...	1889	102,776,	7	6	10
Mexico... ...	"	41,937,	3	13	0
Peru ...	1886	55,423,‡‡	18	10	1
United States ...	1887	258,371,	4	13	0

* For populations on which these calculations are based, see table following paragraph 177 *ante*.

† This amount is made up of £278,779,000, general debt of the whole empire; £105,863,000, special debt of Austria proper; and £154,579,000, special debt of Hungary.

‡ Denmark has State investments amounting to £4,800,000, or nearly half the total debt; it has also a Reserve Fund of £990,000 to meet sudden emergencies.

§ This amount is made up of the debt of the Empire, £35,761,023 (including Treasury Bills) in 1888-9, together with the debts of the following States at the dates named, viz.:—Alsace-Lorraine, £1,334,175 in 1887; Anhalt, £243,770 in 1887; Baden, £17,222,470 in 1886; Bavaria, £2,268,125 in 1886; Brunswick, £3,659,530 in 1886; Hamburg, £9,708,350 in 1886; Hesse, £1,805,539 in 1887; Lippe, £48,645 in 1887; Lübeck, £729,750 in 1887; Mecklenburg-Schwerin, £1,178,500 in 1887; Oldenburg, £1,871,570 in 1886; Prussia, £209,095,650 in 1887-8; Reuss-Greiz, £22,527 in 1887; Reuss-Schleiz, £72,778 in 1887; Saxe-Altenburg, £52,538 in 1887; Saxe-Coburg-Gotha, £384,920 in 1887; Saxe-Meiningen, £609,750 in 1886; Saxe-Weimar, £292,838 in 1886; Saxony, £32,203,070 in 1887; Schaumburg-Lippe, £25,500 in 1887; Schwarzburg-Rudolstadt, £230,350 in 1887; Schwarzburg-Sondershausen, £190,937 in 1887; Waldeck, £116,280 in 1887; and Würtemberg, £21,202,576 in 1887. A large proportion of the debts of the German States was contracted for the construction of railways. As a set-off against the "Debt of the Empire," there exist various invested funds amounting to £35,968,823. Deductions have been made where possible, so as to prevent sums being included twice over, thus appearing in both the Imperial and the State revenues.

|| This amount is made up of £14,716,296, debt of Sweden; and £5,843,515, debt of Norway.

¶ The above amount excludes the debts of the various Cantons, amounting in the aggregate to about £12,000,000. There exists, as a set-off against the debt, State property ("federal fortune") valued at £2,800,000.

** Consisting of foreign debt, £217,830,000, and estimated internal and floating debt, £75,000,000. Paper money estimated at £90,000,000 excluded.

†† Exclusive of a floating debt of at least £702,000.

‡‡ Exclusive of £14,000,000 Government paper in circulation.

416. The public debt of the United Kingdom is larger than that of any other country in the world except France, which is the larger by £570,000,000. Next to these countries in point of indebtedness are Russia, Austria-Hungary, Italy, Germany, Turkey, the United States, Spain, and British India, in the order named. These are the only countries which have larger debts than the present united debts of the Australasian colonies.*

Gross amount of debt in different countries.

417. In proportion to population, the most heavily-indebted independent countries are France and Portugal, which are, however, in this respect, far behind all the Australasian colonies.† The debt per head in the United Kingdom is much smaller than in Portugal and France is also less than in Holland or Peru, but is larger than in any other country outside Australasia.

Amount of debt per head in different countries.

418. According to the table, Turkey is very much more heavily indebted in proportion to its revenue than any other country. The debt of that country, and the debts of Peru, Portugal, France, Egypt, Holland and Canada, are all larger in proportion to their revenues than the debt of the United Kingdom* is to its revenue. The united debts of the Australasian colonies* are smaller in proportion to their united revenues than the debts of Spain, Italy, Austria-Hungary, Greece, Brazil, Tunis, Belgium, or Russia, as well as those of the countries previously so mentioned, are to their respective revenues.

Proportion of debt to revenue in different countries.

419. In comparing the indebtedness of the Australasian colonies with that of other countries, it cannot be too distinctly borne in mind that whereas the latter was mainly incurred for war purposes, the former was, as already pointed out, almost entirely contracted for the construction of railways, water supply, and other works which aid materially in the opening up and development of the country.

Objects of Australasian and other debts.

420. Municipalities in Victoria are empowered by the *Local Government Act* (38 Vict. No. 506) to borrow money for permanent works or undertakings, but the amount so borrowed—except in the case of cities, which have additional powers‡—is not to exceed ten times their average annual net income during the three years prior to the raising of the loan. The following is a statement of the number of cities, towns, and boroughs, and the number of shires, which had loans outstanding in September, 1889, also of the total amounts included therein. These amounts are exclusive of sums borrowed by the municipalities through the General Government for waterworks (viz., £664,573, towards the redemption of which £100,678 has been

Municipal debt.

* See table following paragraph 408 *ante*.

† See table following paragraph 398 *ante*.

‡ Under the *Local Government Act Amendment Act* 1883 (47 Vict. No. 786), section 26.

repaid into a sinking fund)—they being included in the public debt of the colony* :—

MUNICIPAL DEBT, 1889.

Municipalities.	At the end of the Municipal Financial Year.	
	Number of Districts which had Loans outstanding.	Total amount of outstanding Loans.
		£
Cities, towns, and boroughs ...	41	1,956,662
Shires	36	307,945
Total	77	2,264,607

Increase in
municipal
borrowings.

421. In 1889, as compared with 1888, the number of municipalities which had outstanding loans increased by 1 (a shire). The total increase in the amount outstanding was £202,280 ; of which £168,899 was due to the borrowings of cities, towns or boroughs, and £33,381 to those of shires. The municipal debt has been increasing rapidly since 1883, when the debt was barely a third of what it was at the end of 1889, as is indicated by the following figures, which show the municipal debt in each of the last ten years :—

MUNICIPAL DEBT, 1880 TO 1889.

£			£		
1880	...	726,525	1885	...	1,229,203
1881	...	728,093	1886	...	1,479,159
1882	...	742,911	1887	...	1,708,252
1883	...	776,683	1888	...	2,062,327
1884	...	1,083,613	1889	...	2,264,607

Rates of
interest
paid by
municipalities.

422. The interest paid by municipalities in 1889 amounted to £119,772, the rates ranging from 4 to 8 per cent. The average rate paid by cities, towns, and boroughs is 4·99 per cent., and that by shires 5·39 per cent.

Harbor
Trust
loans.

423. The borrowing powers of the Melbourne Harbor Trust were limited prior to 1888 (under Act 47 Vict. No. 763) to £1,000,000, but by an Act (52 Vict. No. 994) passed in December, 1888, these powers were increased to £2,000,000.† Up to the end of 1889 the loans raised amounted to £1,500,000, of which one third bore interest at the rate of 5 per cent., one sixth at 4½ per cent., and the remaining half at 4 per cent. The last loan amounting to £500,000, bearing interest at 4 per cent. and having a currency of 30 years, was offered in London in the form of debentures on the 2nd July, 1889. The minimum price fixed for tenders was £101 ; the amount tendered was as much as £1,435,400, ranging from the minimum to £104, and the

* See table following paragraph 366 *ante*, also footnote (||) to that table.
† For revenue and expenditure of the Trust, see paragraph 356 *ante*.

average price realized was £102 7s. 7d., which. includes 15s. 6d. interest accruing from the 1st July, 1889, up to the periods when the various instalments were due. The leading particulars of the various loans floated are shown in the following table:—

MELBOURNE HARBOR TRUST LOANS.

When raised.	Amount of Loan.	When due.	Nominal Rate of Interest.	Price realized per £100 Debenture.			Actual Rate of Interest per £100.		
				Gross.	Ex Accrued Interest.	Ex Interest and Expenses (Net).			
	£			£ s. d.	£ s. d.	£ s. d.	£ s. d.		
1883	250,000	1908	5	101 6 6	100 6 9	98 19 8	5 1 5		
1884	250,000	1909	5	106 13 2	105 10 0	105 0 11	4 13 1		
1886	250,000	1915	4½	105 7 8	103 5 6	102 1 7*	4 7 6		
1888	250,000	1918	4	101 16 0	100 0 7	98 17 2	4 1 4		
1889	500,000	1919	4	102 7 7	101 12 1	100 8 4	3 19 6		
Total	1,500,000								

424. The tramways in Melbourne and its principal suburbs are constructed by a Trust, consisting of delegates elected annually by the municipalities interested, called The Melbourne Tramways Trust. By the original Act creating this corporation, the Trust was authorized to raise all money required for the construction of tramways, as well as for the expenses of the Trust, by means of debentures secured on the lines constructed, also on the resources of the municipalities represented, in the proportion of the length and cost of the tramways within their respective limits. The Melbourne Tramway and Omnibus Company, to which the lines when completed were to be leased for a period of thirty years (subsequently increased to 32 years), are required to pay to the Trust the annual interest, also a yearly percentage to form a sinking fund calculated to extinguish the loan by the end of the lease. Owing to objections raised by the London Stock Exchange, however, further Acts† were passed limiting the borrowing powers of the Trust—first to £1,200,000, and subsequently to £1,500,000; securing the debentures on the property as well as on the revenues of the municipalities interested; and making the latter jointly and severally liable for the amount borrowed. Although the security offered was thus of the very best character, it was some time apparently before its true value was appreciated in London, as is evident by the low price obtained for the first issue as compared with the

* The stamp duty payable to the British Government was raised between the floating of this and the previous loan from $\frac{1}{8}$ to $\frac{1}{2}$ per cent.; otherwise the net price for this and each of the succeeding loans would have been 7s. 6d. higher than the amount stated.

† 48 Vict. No. 788; 49 Vict. No. 836; and 51 Vict. No. 952.

higher price for the later issues. The last instalment, viz., £50,000, was raised early in July, 1889, the borrowing of the full amount authorized, viz., £1,500,000, all bearing interest at the rate of $4\frac{1}{2}$ per cent. being thus completed. The particulars of the various loans, together with the prices realized, are given in the following table* :—

MELBOURNE TRAMWAYS TRUST LOANS— $4\frac{1}{2}$ PER CENT.

Year.	Amount of Loan.	When due.	Price realized per £100 Debenture.			Actual rate of Interest.
			Gross.	Ex Interest.	Ex Interest and Expenses (Net).	
	£		£ s. d.	£ s. d.	£ s. d.	£ s. d.
1884	500,000	1914	100 2 10	98 2 7	97 6 6	4 13 5
1886	500,000	„	...	...	101 15 0†	4 7 10
1887	200,000	„	106 6 8	105 16 8	104 13 3	4 4 1
1888	250,000	1916	109 15 11	109 5 4	108 2 1	4 0 4
1889	50,000	„	110 4 8	109 14 2	108 8 8	3 19 8
	1,500,000					

Sinking
Fund for
Tramways
Trust loans

425. The following particulars relating to the Sinking Fund for the redemption of the Tramways Trust loans has been kindly furnished for this work by Mr. T. Hamilton, Secretary to the Trust:—

Sinking Fund.—Act No. 765 provides that the Company shall pay to the Trust as sinking fund $1\frac{1}{2}$ per cent. for the first ten years, 2 per cent. for the second ten years, and 3 per cent. for the last ten years on the total amount borrowed, these terms to run from the date on which the first loan was floated. The total amount, as already stated, borrowed under this Act and its subsidiary one was £1,200,000, the sinking fund on which had to be paid by the Company from the first July, 1884. It was calculated that, capitalized at 4 per cent., these contributions would give an excess over the Trust's debt of £129,000. When Act 925 was passed, increasing the Trust's borrowing powers to £1,500,000, the Tramway and Omnibus Company consented on condition that the liability to pay to the sinking fund on the new loan should not commence until the 1st July, 1889. It was also agreed by the corporations that these percentages should cease to be paid by the Company if at any time before the end of the extended lease (1st July, 1916) the amounts so contributed should be sufficient to repay the loan with all expenses; and that the Company should, on the other hand, be liable for any deficiency. Power was also given to the Trust to invest the sinking fund contributions in first mortgages of freehold land in Victoria, instead of restricting them to municipal and Government debentures and bank deposits. The total amount of sinking fund invested to the 31st December, 1889, is £98,650, all in 5 per cent. Victorian municipal debentures, which have cost the Trust a small fraction above par.

General and
municipal
debt.

426. If the municipal debts, together with the debts of the Harbor and Tramway Trusts, be added to the Government debt on the 30th June, 1889, viz., £37,627,382,† it will appear that the total gross liability of the colony was £42,341,989, or a proportion of £38 6s. 8d. per head of population.

* For further particulars relating to the Tramways Trust, see latter part of "Interchange" *post*.
† It should be stated that, in the first instance, the debentures for this loan were disposed of in Melbourne at a premium of 35s., to two of the Banks, who undertook to pay all expenses of floating the loan in London. The loan was duly floated there on the 4th February, 1886, and realized as high an average price as £107 16s. 8d., or about £107 *ex* accrued interest.

‡ On the 30th June, 1890, the debt of the General Government had increased to £41,627,382.

427. At the end of June, 1889, there was a total balance of *Trust funds* £2,433,000 to the credit of the various trust funds, as against a credit *1888 and 1889.* balance of £2,189,000 at the end of the previous year, the principal increase being under the head of Post Office Savings Banks; also large increases in the Trustees, Executors, etc., Companies' fund, the Municipal Investments account, the Licensing Act fund, and the Assurance fund. The following are the particulars of the various funds at each of these periods:—

TRUST FUNDS, 1888 AND 1889.

Accounts.	Credit Balances on the 30th June.		Increase.	Decrease
	1888.	1889.		
	£	£	£	£
Assurance fund*	53,886	66,425	12,539	...
Suitors' fund	88,649	64,925	...	23,724
Police Superannuation fund	79,615	76,119	...	3,496
Port Phillip Pilot Sick and Superannua- tion fund ... ..	...	1,100	1,100	...
Intestate estates	115,110	115,128	18	...
Municipal Investments account	78,570	100,678	22,108	...
Waterworks Trust Sinking fund ... ..	...	21	21	...
Melbourne and Hobson's Bay Railway Deposit account	12,498	88	...	12,410
Trustees, Executors, and Agency Com- panies, and Insurance Companies	55,000	100,000†	45,000	...
Defences— <i>Discipline Act</i> 1883—Ammu- nition and Deferred Pay fund, etc.	9,929	6,790	...	3,139
Post Office Savings Banks	1,537,197	1,712,630	175,433	...
Insolvency (unclaimed dividends)	4,006	4,133	127	...
Customs Goods overtime	574	665	91	...
Municipalities Sinking fund and Re- demption account... ..	53,117	54,112	995	...
Survey Fees account	18,406	17,429	...	977
Security account	4,755	4,784	29	...
<i>Licensing Act</i> 1885	26,817	45,567	18,750	...
New Falls Bridge Construction account ... ..	...	6,485	6,485	...
Country Tramways ... ..	...	15,211	15,211	...
Sundries	50,600	40,715	...	9,885
Total ‡	2,188,729	2,433,005	244,276§	...

428. The trust funds at the end of 1889 amounted to nearly 2½ *Trust funds* millions sterling, whereas nineteen years previously they amounted to *1870 to 1889.* less than half a million. Thirty-six per cent. of the total is invested in debentures or inscribed stock, and the balance is either deposited in banks or used by the Government as a temporary loan fund to fall back on in case of emergency. The following table shows the amounts,

* It should be pointed out that the balance at the credit of this fund has been reduced in the last three years by £79,423, advanced towards the purchase of land adjoining the Titles Office (under Act 49 Vict. No. 835), on which amount the Assurance fund receives 4 per cent. per annum from the general revenue. † This amount represents 8 Trustees' and 4 Insurance Companies.

‡ Exclusive of the amount of £79,423 referred to in the preceding footnote, but including £4 671 advanced to the Bungaree Loan Liquidation account. § Net increase.

and manner of their investment, at the end of each of the last twenty financial years :—

TRUST FUNDS, 1870 TO 1889.

On the 30th June.	Amount at Credit of Trust Funds.			
	Invested in Debentures or Inscribed Stock.	Deposited in Banks.	Held otherwise.*	Total.
	£	£	£	£
1870 ...	129,000	320,181	...	449,181
1871 ...	250,000	267,421	...	517,421
1872 ...	297,000	390,877	...	687,877
1873 ...	553,600	347,035	...	900,635
1874 ...	605,574	361,799	...	967,373
1875 ...	608,454	237,090	76,451	921,995
1876 ...	613,344	89,909	240,370	943,623
1877 ...	626,844	290,645	66,249	983,738
1878 ...	642,746	155,005	200,048	997,799
1879 ...	675,423	114,628	316,518	1,106,569
1880 ...	690,511	...	308,616	999,127
1881 ...	709,872	546,014	...	1,255,886
1882 ...	725,045	574,984	281,351	1,581,380
1883 ...	726,186	394,851	332,887	1,453,924
1884 ...	756,980	673,736	84,395	1,515,111
1885 ...	766,095	904,073	7,133	1,677,301
1886 ...	787,439	976,528	43,996	1,807,963†
1887 ...	782,820	985,178	41,689	1,809,687
1888 ...	829,735	1,315,508	43,486	2,188,729
1889 ...	875,027	945,269	612,709	2,433,005

Pensions.

429. The retiring allowances paid from the Victorian revenue are of two kinds, pensions and superannuation allowances. Of the former there were in 1888-9 six in all, embracing allowances to four former Ministers released from office on political grounds, to the widow of a former Governor of Victoria, and to the daughter of an eminent explorer of the Australian coasts. The total amount included in these pensions was £4,233.

Super-
annuation
allowances
under Acts
of Parlia-
ment.

430. The persons entitled under Acts of Parliament to superannuation allowances in the same year numbered 672, and consisted of two ex-Supreme-Court Judges, seven former judges of County Courts, a late Clerk of Parliaments, a late Master-in-Equity, two late Commissioners of Audit, 598 ex-officers of the Public Service, 23 ex-officers of the Lunacy Department, 29 ex-officers of the Railway Department, and 9 ex-officers of the Defence Forces. The aggregate amount of the allowances to these persons was £73,868, or an average of £109 18s. 5d. to each recipient.

* In agent's hands, London ; owing by other Governments ; advanced on account of *Stock Act* in anticipation of sales ; advanced on account of loans ; "deficiency met," "charges on account finance of succeeding year," etc.
† Amount chargeable under advances included in this and subsequent years.

431. Taken together, the pensions and superannuation allowances numbered 678, or 100 more than in the previous year, and the sum paid amounted to £78,101, or £8,518 more than in that year. The average to each recipient was £115 4s., or £5 3s. 9d. less than in 1887-8. It may be mentioned that the increase in the number and amount of these allowances is more apparent than real, it being due chiefly to the circumstance that a large proportion of allowances which were formerly voted annually are now paid under Special Appropriation.

432. The different authorities under which pensions and superannuation allowances are legalized, and the individuals to whom they were awarded, also the number on the list, and the gross and average amount of the pensions and superannuation allowances not subject to annual votes paid during 1888-9, will be found in the following table:—

PENSIONS AND SUPERANNUATION ALLOWANCES,* 1888-9.

Authority under which legalized.	Description of the Recipients.	Number of Persons on the List.	Amount paid.					
			Total.			Average to each Recipient.		
	PENSIONS.		£	s.	d.	£	s.	d.
18 & 19 Vict. cap. 55 (<i>Constitution Act</i> , Schedule D)	Former Ministers of the Crown	4	3,133	6	4	783	6	7
21 Vict. No. 20 ...	Daughter of the late Captain Flinders, R.N.	1	100	0	0	100	0	0
33 Vict. No. 362 ...	Widow of a former Governor of Victoria	1	1,000	0	0	1,000	0	0
	SUPERANNUATION ALLOWANCES.							
18 & 19 Vict. cap. 55	Supreme Court Judges...	2	3,062	10	0†	1,531	5	0
" " " "	Clerk of Parliaments ...	1	500	0	0	500	0	0
33 " Vict. " No. 345 (<i>County Court Statute</i>)	County Court Judges ...	7	5,406	9	0	772	7	0
36 Vict. No. 435 ...	Master-in-Equity ...	1	750	0	0	750	0	0
49 Vict. No. 870 ...	Commissioners of Audit	2	1,116	13	4	558	6	8
25 Vict. No. 160 (<i>Civil Service Act</i>)	Officers in the Public Service	329	42,741	14	7	129	18	3
47 Vict. No. 773 (<i>Public Service Act</i>)	Ditto ...	269	15,758	1	0	58	11	7
31 Vict. No. 309 (<i>Lunacy Statute</i>)	Officers in the Lunacy Department	23	669	11	2	29	2	3
47 Vict. No. 767 (<i>Victorian Railways Act</i>)	Officers in the Railway Department	29	2,977	13	4	102	13	7
47 Vict. No. 777 (<i>Discipline Act</i>)	Officers of the Defence Force	9	885	4	4	98	7	2
Total ...	...	678	78,101	3	1	115	4	0

* Not including £2,000 paid to the Police Superannuation Fund, and allowances voted annually, for which see paragraph 437 *post*.

† One of these—since dead—also drew a pension as a former Minister of the Crown, *supra*.

Police pensions, how granted.

433. Superannuation allowances to the police are not included in the foregoing statement, as they are paid under the *Police Regulations Statute* (37 Vict. No. 476) out of a fund called the Police Superannuation Fund, which is maintained by an annual income of £2,800 arising from the investment of £70,000 in Government stock; by an annual subsidy of £2,000 from the consolidated revenue; by a moiety of the fines inflicted by Courts of Petty Sessions under various Statutes (£8,196 in 1888-9); 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 all cases of a police superannuation allowance being granted, the option is given to the retiring member to commute it for a gratuity equal to one month's pay for each year of service.

Number of police pensions and gratuities, 1888-9

434. The number of recipients of police retiring allowances in 1888-9 was 254,* on which the annual amount payable was £25,462, or an average of £100 4s. 11d. to each recipient. It should be mentioned, however, that the actual amount paid in 1888-9 was only £24,225, in consequence of some amounts not having been drawn. In addition, gratuities in lieu of retiring allowances were paid in 11 instances, amounting in the aggregate to £3,725, or an average of nearly £339 to each recipient.

Deduction from pay of police, and votes in aid.

435. In the year under review, for the twelfth time, a deduction was made from the pay of the police for the purpose of enabling the superannuation fund to meet the demands made thereon. The deduction was at the rate of $2\frac{1}{2}$ per cent., or the full amount allowed by law, and realized £5,158. Even with this addition, however, the ordinary receipts have proved insufficient, and the large balance which existed in the earlier years of the fund's existence having gradually become exhausted, it became necessary for Parliament to vote in aid of the fund a sum of £2,600 in 1880-81, £5,000 in 1881-2, £8,000 in 1882-3, £10,000 in each of the four years 1883-4 to 1886-7, and £7,000 in 1887-8 and in 1888-9. The balance to the credit of the fund at the beginning of 1888-9 was £9,615, but at the end of the year this had decreased to £6,819.†

Retiring allowances granted for infirmity.

436. Except in cases of infirmity of mind or body, the ordinary minimum age at which retiring allowances are granted to members of the civil service is sixty years,‡ and to members of the police force

* Of these 15 lapsed during the year, so that the number at the end of the year was 239.

† The actual balance was only £6,119, but £700 of the Government grant due on account of the year was paid soon afterwards.

‡ Now generally extended to 65 years by Order in Council.

fifty-five years. Of the existing retiring allowances, however, 35 per cent. of those granted to public servants, and as many as 41 per cent. of those granted to the police,* were awarded in consequence of infirmity or disablement before the full age had been attained.

437. Besides the superannuation allowances and pensions for which amounts are specially appropriated, certain allowances are voted by Parliament each year to retired public servants who, whilst in the employment of the State, were attached to the unclassified branches of the service, and consequently were not comprehended in any of the several Statutes under which retiring allowances are legalized; in addition to which there was voted a grant in aid of the Police Superannuation Fund, and pensions to three persons—two being the widows of constables who were shot by the Kelly gang of outlaws. The number of retiring allowances voted in 1888-9, the gross amount paid, and the average to each recipient, also the departments in which the several recipients served, will be found in the following table:—

SUPERANNUATION ALLOWANCES AND PENSIONS VOTED BY
PARLIAMENT, 1888-9.

Department.	Number of Recipients.	Allowances voted.			
		Total Amount paid.	Average to each Recipient.		
SUPERANNUATION ALLOWANCES.		£	£	s.	d.
Chief Secretary†	12	599	49	18	4
Minister of Public Instruction ...	63	4,731	75	1	11
Attorney-General	1	240	240	0	0
Treasurer	1	68	68	0	0
Commissioner of Crown Lands and Survey	1	75	75	0	0
Commissioner of Public Works ...	14	1,450	103	11	5
Commissioner of Trade and Customs ...	3	563	187	13	4
Postmaster-General	8	392	49	0	0
Commissioner of Railways	10	1,261	126	2	0
PENSIONS.					
Widows of Constables shot by the Kelly gang of outlaws	2	87	43	10	0
Pioneer‡ of overland route to India and Australia	1	43	43	0	0
Total	116	9,509	81	19	6

* Including pensions granted under the *Civil Service* and *Public Service Acts*.

† Five of these pensions, amounting to £128, were granted to ex-constables of police for injuries received in execution of duty, in addition to amounts paid out of Police Superannuation Fund.

‡ Pension granted to sister.

Pensions,
gratuities,
etc.

438. The following is a summary of the pensions, superannuation allowances, compensations, and gratuities, paid out of the general revenue during the year 1888-9, distinguishing those paid from special appropriations from annual votes or otherwise:—

PENSIONS, RETIRING ALLOWANCES, COMPENSATIONS, AND GRATUITIES PAID, 1888-9.

Pensions, Compensations, etc.	Annual Allowances.	Compensa- tions and Gratuities.	Total.
	£	£	£
<i>Under Special Appropriations—</i>			
<i>Constitution Act</i>	6,696	...	6,696
County Court Judges	5,406	...	5,406
Master-in-Equity	750	...	750
Commissioners of Audit	1,117	...	1,117
Railway Department	2,978	14,053	17,031
Public Service*	60,054	7,661	67,715
Others (Lady Darling and Mrs. Petrie) ...	1,100	...	1,100
Total	78,101	21,714	99,815
<i>Under Annual Votes—</i>			
Railway Department	1,261	16,677	17,938
Public Service	8,118	15,525	23,643
Others	130	...	130
Total	9,509	32,202	41,711
Total, exclusive of Police Pensions ...	87,610	53,916	141,526
<i>To the Police—</i>			
Endowment and amount voted £9,000† } From Police Superannuation Fund 18,950 }	24,225	3,725	27,950
Grand total	111,835	57,641	169,476
Less amount derived from Police Superannua- tion Fund	15,225	3,725	18,950
Amount paid by State ‡	96,610	53,916	150,526

Retiring
allowances,
etc., 1887-8
and 1888-9.

439. Taking into account pensions, retiring allowances, compensa-
tions, and gratuities of all kinds, whether specially appropriated or
voted, the amount paid by the State was greater by £18,713 in 1888-9
than in the previous year.

Pilots pen-
sions.

440. The Port Phillip Pilot Sick and Superannuation Fund was
formerly under the control of the Pilot Board, but under the *Marine*

* Including allowances to officers under the *Civil Service* and *Public Service Acts*, the *Lunacy Statute* and the *Discipline Act*.
† These figures represent the amount paid from the general revenue, which consists of the usual endowment of £2,000, and an additional grant of £7,000 voted by Parliament.
‡ See table following paragraph 261 *ante*.

Board Act (55 Vict. No. 965), it was handed over to the Treasurer of the colony on the 26th April, 1889. The amount then at its credit was £41,460, consisting of £40,900 in securities and £560 in cash. The receipts between the 26th April and the 30th June amounted to £924, of which £492 was deducted from the pay of pilots, and £432 was received as interest on moneys invested; whilst the amount paid on account of pensions was £384. The number of pensions granted to the 30th June, 1889, was 17, and the annual amount payable was £1,763. These pensions are not included in the foregoing tables.

441. Since the passing of the *Pensions Abolition Act* (45 Vict. No. 710), viz., on the 24th December, 1881, no persons entering the Public Service, except Judges of the Supreme and County Courts and officers and members of the police force, are entitled to a retiring allowance or gratuity of any kind whatever. Abolition of
retiring
allowances.

PART IV.—VITAL STATISTICS.

442. The marriages returned to the Registrar-General in 1889 numbered 9,194*, as against 8,946 in the previous year. The excess in favour of 1889 was thus 248.

443. More marriages were returned in 1889 than in any previous year. The number returned annually had been almost stationary during the seven years prior to 1880, but in that year an advance was made which has been more than sustained since. In 1882, for the first time, the marriages returned exceeded 6,000; in 1884, they exceeded 7,000; in 1888, they nearly realized 9,000; and in 1889 they exceeded that number by 200.†

444. The proportion which the number of marriages bear to the total population is generally called the marriage rate. This for many years was declining in Victoria, for, whilst in the three years prior to 1863 it was above 8 per 1,000 of both sexes, and all ages; from 1863 to 1865 it was between 7 and 8, and between 1868 and 1878 it was between 6 and 7 per 1,000. It reached its lowest point, 5·98 per 1,000, in 1879; then gradually revived, and in 1889, although not quite so high as in 1888, it had been exceeded in no other year since 1859. The following table gives the number of marriages and number of persons married per 1,000 of the population during each of the thirty years ended with 1889:—

ANNUAL MARRIAGE RATE, 1860 TO 1889.

Year.	Per 1,000 of the Mean Population.	
	Number of Marriages.	Number of Persons Married.
1860	8·15	16·30
1861	8·21	16·42
1862	8·26	16·52
1863	7·51	15·02
1864	7·77	15·54
1865	7·36	14·72
1866	6·76	13·52

* Exclusive of 9 marriages celebrated during the years 1868 and 1869, registered for the first time in 1889.
† For the number of marriages during each year since the first settlement of Port Phillip, see Statistical Summary of Victoria (first folding sheet) published in the second volume of this work.

ANNUAL MARRIAGE RATE, 1860 TO 1889—*continued*.

Year.	Per 1,000 of the Mean Population.	
	Number of Marriages.	Number of Persons Married.
1867	6·97	13·94
1868	7·08	14·16
1869	6·89	13·78
1870	6·63	13·26
1871	6·37	12·74
1872	6·36	12·72
1873	6·50	13·00
1874	6·33	12·66
1875	6·33	12·66
1876	6·21	12·42
1877	6·31	12·62
1878	6·20	12·40
1879	5·98	11·96
1880	6·22	12·44
1881	6·79	13·58
1882	7·09	14·18
1883	7·43	14·86
1884	7·73	15·46
1885	7·72	15·44
1886	7·84	15·68
1887	7·62	15·24
1888	8·42	16·84
1889	8·33	16·66
Mean of 30 years	7·11	14·22

445. It has been shown, upon more than one occasion,* that the frequency of marriage is not dependent upon the numbers 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 habits and occupations, and upon the view they take of their future prospects. Thus men have a greater tendency to marry in prosperous than in dull times, and the men of a rural, and especially of an agricultural, community have a greater tendency to marry than those of an urban one. 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 of the last five census years :—

Marriage
rate at
various
periods.

* See *Victorian Year-Book*, 1879-80, pages 103 and 104 ; same work, 1880-81, pages 199 and 200 ; and same work, 1881-2, pages 165 and 166.

PROPORTION OF MARRIAGES TO POPULATION* AND TO SINGLE MEN AND WOMEN, 1854 TO 1881.

Year of Census.	Exclusive of Chinese and Aborigines.				
	Population.	Number of Marriages.	Proportion of Marriages per 1,000 of the—		
			Population.	Marriageable Men.†	Marriageable Women.‡
1854	234,361	3,696	15·77	52·16	245·04
1857	383,668	4,465	11·64	46·79	169·66
1861	513,896	4,528	8·81	42·34	122·36
1871	712,263	4,715	6·62	52·43	72·11
1881	849,438	5,732	6·75	57·40	48·02

Reasons for fluctuations in marriage rate.

446. The numbers in the last column but two, and those in the last column, show such a falling-off that, if the proportion that marriages bear to the total population or to the number of single females were to be accepted as an index of the prosperity of the community, an alarming amount of depression would be indicated. The figures in the last column but one, however, tell a very different tale, and exhibit just such fluctuations as might have been expected from the changes which took place in the circumstances of the population between the different periods. Thus, in 1854, there was a very large influx to the colony of single adult males, some of whom brought capital with them, which they saw, or thought they saw, every prospect of speedily increasing, whilst others actually did make money very quickly, and, consequently, the proportion who married was high, but, doubtless, not so high as it would have been had it not been for the discomfort of living in tents and other privations incident to life on the early goldfields, to which a large portion of the community was then subjected. By 1857, immigration had for the time been overdone, the result being that the gold obtained was very much less in proportion to the number of miners at work than it had been, whilst the discomforts of a goldfields life were as great as ever, and so the rate naturally declined. By 1861, the yield of gold had seriously diminished, and as persons had not yet turned, to any great extent, to other pursuits, much distress was experienced, and

* The populations in this table are those returned at the respective censuses, the Chinese and Aborigines being excluded; and the marriages are those (exclusive of marriages of Chinese and Aborigines) which took place in the twelve months of which the date of each census was the middle. The proportions of the latter to the former, therefore, differ slightly from those in the previous table, which are based upon the total mean population and all the marriages in the calendar year.

† Comprising bachelors of 20 and upwards, and widowers at all ages.
‡ Comprising spinsters of 15 and upwards, and widows at all ages.

the rate fell to a minimum. By 1871, and in a greater degree by 1881, a large proportion of the population had settled on farms, whilst some unable to obtain congenial occupation, had left the colony; tents had almost disappeared from the goldfields; the miners were, for the most part, working for wages, and did not, as formerly, rush about from place to place; manufactures had been started, and had made considerable progress, and, accordingly, the rate improved. In 1871, the marriage rate was higher than at any previous period of the colony's history, and in 1881, it was still higher than in 1871.

447. The decline in the female marriage rate shown in the last column of the table will be better realized when it is considered that in 1854 about 1 in 4 of all the spinsters and widows in the colony married in the year—which proportion, three years after, had fallen to 1 in 6; four years later, it had fallen to 1 in 8; ten years still later, it had fallen to 1 in 14; and ten years later, viz., in 1881, it had reached the exceedingly low point of 1 in 21. The tide had probably then turned, and the youthful native-born male population growing up to manhood had commenced to fill the gap in early adult life caused by the passing on to later periods of the immigrants who, at the time of the discovery of the first goldfields, came to Victoria unaccompanied by persons at younger ages who should supply their places as they passed onward or disappeared altogether from the scene. It may, therefore, be expected that, if the colony continues to enjoy a fair amount of prosperity, the next census will show that the marriages have increased in proportion to the available females, as the last enumeration showed they had done in proportion to the available males.

Probability of female marriage rate reviving.

448. Whilst, according to the lowest line in the last table, marriageable males in Victoria marry at the annual rate of 57 per 1,000, and marriageable females at the annual rate of 48 per 1,000, similar proportions are in France 57 and 46, and in Switzerland 49 and 38; the former approximating very closely to, but the latter, as regards both males and females, being much lower than, the proportions for Victoria.*

Victorian, French, and Swiss marriage rates.

449. The following table gives a statement of the number of marriages to every 1,000 of the population of the various Australasian colonies for each year from 1865 to 1889, except Western Australia, for which colony it is given for the last eighteen of those years:—

Marriage rates in Australasian colonies.

* The French and Swiss male and female marriage rates are taken from papers read by M. Toussaint Loua before the Statistical Society of Paris in September and December, 1884.

MARRIAGE RATES IN AUSTRALASIAN COLONIES, 1865 TO 1889.*

Year.		Number of Marriages † per 1,000 of Mean Population.						
		Victoria.	New South Wales.	Queens-land.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1865	...	7·36	8·94	13·27	9·45	...	6·27	10·47
1866	...	6·76	8·26	11·61	8·12	...	5·93	10·32
1867	...	6·97	7·84	9·54	8·20	...	6·10	9·69
1868	...	7·08	8·23	8·33	7·37	...	6·57	9·35
1869	...	6·89	8·04	8·31	6·78	...	6·44	8·32
1870	...	6·63	7·85	7·80	6·90	...	6·62	7·62
1871	...	6·37	7·78	8·06	6·77	...	5·90	7·15
1872	...	6·36	7·46	8·70	7·20	5·56	6·17	6·85
1873	...	6·50	8·05	9·66	8·00	6·25	6·36	7·91
1874	...	6·33	7·70	8·62	8·00	6·96	6·83	8·87
1875	...	6·33	7·88	8·63	8·01	7·26	6·63	8·94
1876	...	6·21	7·66	7·57	8·49	7·07	7·13	8·25
1877	...	6·31	7·94	7·57	8·66	6·38	7·79	7·63
1878	...	6·20	8·08	6·98	9·47	6·50	7·96	8·03
1879	...	5·98	7·80	7·49	8·81	7·57	7·23	7·60
1880	...	6·22	7·68	6·97	8·69	7·42	7·38	6·71
1881	...	6·79	8·27	7·71	8·33	6·60	7·30	6·65
1882	...	7·09	8·74	8·56	8·73	7·07	8·03	7·07
1883	...	7·43	8·88	8·93	8·49	6·95	9·01	6·82
1884	...	7·73	8·49	8·91	8·28	7·11	7·81	6·88
1885	...	7·72	8·18	9·20	7·82	7·51	7·97	6·73
1886	...	7·84	7·97	8·38	6·31	7·99	7·27	5·99
1887	...	7·62	7·42	8·21	6·31	7·58	6·71	5·97
1888	...	8·42	7·37	8·63	6·56	7·18	6·59	5·97
1889	...	8·33	6·76	7·87	6·47	6·99	6·50	5·99
Means	...	6·94	7·97	8·62	7·85	7·00	6·98	7·67

Reasons for marriage rates being higher in other colonies than in Victoria.

450. It will be observed that the mean marriage rate is slightly lower in Victoria than in Western Australia and Tasmania, and much lower than in the other colonies, and as during the whole period over which the calculations extend, Victoria has certainly been second to none of the other colonies in point of wealth and prosperity, this may create surprise in the minds of those who fail to realize the fact that marriage rates, calculated upon the total population, do not afford an indication of the amount of prosperity in a community so much as of the proportion which single men at marriageable ages bear to the population as a whole. In civilized countries, the age at which four-fifths of the males who marry enter the marriage state is between

* For the number of marriages in the various colonies during the seventeen years ended with 1889, see General Summary of Australasian Statistics (third folding sheet) published in the second volume of this work.

† The numbers doubled give the persons married per 1,000 of the population.

20 and 35 years. It naturally follows, therefore, that on the number of single males at such ages the number of marriages mainly depends. Prior to the taking of the last census it was mentioned as probable that there had been a falling-off in the male population of Victoria at those ages; and, as was anticipated, the census disclosed the fact that Victoria had, in proportion to the total population, a smaller number of males between 20 and 40 than any of the other colonies. The explanation of the higher proportion in the other colonies of males at the period named is to be found mainly in the fact that they—especially New South Wales, Queensland, South Australia, and New Zealand—had, for many years, introduced large numbers of adults at the cost of the State, and, as is nearly always the case when immigration is subsidized, these were accompanied or followed by a steady stream of unassisted immigrants. Besides, not one of the neighbouring colonies was subjected, in the early days of its history, to so large an influx of adult male immigrants unaccompanied by persons at younger ages, followed by a cessation of immigration, as was the case in Victoria at and since the time of the early gold discoveries. As the young population has grown to a marriageable age, however, this colony has assumed a normal condition; and this circumstance has for several years past brought about a marked improvement in the marriage rate, so much so, that in this respect, Victoria was in 1889 in advance of all the neighbouring colonies.

451. In 1889 Victoria was the only colony whose marriage rate was above the mean rate during the whole period, as shown in the last line of the table, whereas the rates in most of the other colonies were considerably below the average. The marriage rate in 1889 was almost identical with the rate in the previous year in New Zealand, was slightly below it in Victoria, South Australia, Western Australia, and Tasmania, and much below it in New South Wales and Queensland. The marriage rate has for some years past been diminishing in New South Wales, South Australia, Tasmania, and New Zealand. For many years South Australia and New Zealand had higher marriage rates than almost any of the other colonies, but now they have lower ones than any of the others, thus affording remarkable instances of a high marriage rate coincident with an influx of adult immigrants, and a low one consequent upon such influx being stopped. A similar change, although in a less marked

Comparison
of marriage
rates of
colonies in
1889 and
former
years.

degree, and doubtless attributable to a similar cause, has taken place in the marriage rate of New South Wales, which has fallen from nearly 9 per 1,000 in 1883 to only about $6\frac{3}{4}$ per 1,000 in 1889.*

452. The following is the order of the colonies in reference to their respective marriage rates in the last year shown in the table and according to the average of the whole period of twenty-five years :—

ORDER OF COLONIES IN REFERENCE TO MARRIAGE RATES.

Order in Latest Year.	Order in a Series of Years.
1. Victoria.	1. Queensland.
2. Queensland.	2. New South Wales.
3. Western Australia.	3. South Australia.
4. New South Wales.	4. New Zealand.
5. Tasmania.	5. Western Australia.
6. South Australia.	6. Tasmania.
7. New Zealand.	7. Victoria.

453. Since the last publication of the *Victorian Year-Book*, Victoria in the list showing the order in the latest year, has risen from the second to the first place, Western Australia from the fourth to the third, and Tasmania from the sixth to the fifth, whilst Queensland, New South Wales, and South Australia all fell one place lower on the list. According to the average over a series of years, Victoria, which now stands first, occupied the lowest position on the list; whilst South Australia and New Zealand, which now stand last, occupied higher positions in regard to the marriage rate than any of the other colonies except Queensland and New South Wales.

454. The mean marriage rate of the five colonies situated upon the Australian continent, and of those colonies with the addition of Tasmania and New Zealand, shows a falling-off since 1883 or 1884,† when it was at a maximum, and was lower in 1889 than in any year since 1880; it was, however, higher than in any other year since 1872 on the continent, but, taking Australasia as a whole, it was lower in 1889 than in any of those years except 1876, 1879, and 1880, as is shown by the following figures :—

* Such an event was foreshadowed by the present writer in a paper read by him before the Melbourne Social Science Congress on the 25th April, 1880, in the following words :—“ A depression in the marriage rate, it may be anticipated, will before long overtake several of the neighbouring colonies wherein marriages now bear a high proportion to the population, but which proportion must inevitably decline upon the cessation of the stream of adult immigrants which now flows towards their shores.”

† In Australasia in 1883; in Australia in 1884.

MARRIAGE RATES IN AUSTRALIA AND AUSTRALASIA,
1873 TO 1889.

Number of Marriages* per 1,000 of Mean Population.			Number of Marriages* per 1,000 of Mean Population.		
Year.	Continent of Australia.	Australia with Tasmania and New Zealand.	Year.	Continent of Australia.	Australia with Tasmania and New Zealand.
1873 ...	7·35	7·38	1882 ...	8·04	7·87
1874 ...	7·07	7·32	1883 ...	8·20	8·03
1875 ...	7·12	7·38	1884 ...	8·22	7·72
1876 ...	6·93	7·15	1885 ...	8·07	7·83
1877 ...	7·05	7·18	1886 ...	7·78	7·45
1878 ...	7·08	7·27	1887 ...	7·47	7·19
1879 ...	6·88	7·01	1888 ...	7·84	7·48
1880 ...	7·15	7·08	1889 ...	7·46	7·18
1881 ...	7·62	7·41	Means ...	7·49	7·41

455. Returns of marriages, births, and deaths are obtainable for few British colonies outside of Australasia. The following are the marriage rates in those colonies—which, it is to be regretted, are, for the most part, of only minor importance—for which such particulars have come to hand, or can be gathered from their official reports. The low rate in Barbados is explained by the fact that the negro population as a rule ignore the marriage ceremony. The same circumstance, to a greater or less extent, doubtless also affects the marriage rate in Trinidad, and perhaps also in the Mauritius, although the low marriage rate in the latter would, to a certain extent, be accounted for by the fact that the large imported Cooly population is for the most part comprised of males, the females introduced being extremely few:—

Marriage rates in certain British possessions.

MARRIAGE RATES IN CERTAIN BRITISH COLONIES.

Annual Rate per 1,000 of the Population.*			Annual Rate per 1,000 of the Population.*		
Years.			Years.		
Ceylon ... 1867-76	...	7·3	West Indies—		
Mauritius ... 1871-75	...	2·5	St. Vincent 1872-76	...	6·3
Seychelles ... 1875-77	...	8·7	Barbados ... 1872-77	...	3·7
Nova Scotia ... 1871-75	...	7·7	Grenada ... 1871-75	...	5·6
Bermudas ... 1871-75	...	8·3	Dominica ... 1871-75	...	6·9
West Indies—			Trinidad ... 1871-75	...	3·8
St. Lucia ... 1878-79	...	5·2			

456. The following table gives for each of the five years ended with 1888 a statement of the marriage rates in British and such Foreign

Marriage rates in European countries.

* The numbers doubled give the persons married per 1,000 of the population.

countries as the information is available for. The figures have been taken from the reports of the Registrar-General of England:—

MARRIAGE RATES IN EUROPEAN COUNTRIES, 1884 TO 1888.

Countries.	Number of Marriages* per 1,000 of Mean Populations.					
	1884.	1885.	1886.	1887.	1888.	Mean of 5 Years.
Hungary	10·1	9·9	9·6	8·9	...	9·6†
Prussia	8·0	8·1	8·1	8·0	8·0	8·0
Italy	8·2	7·9	7·8	7·7	7·8	7·9
German Empire	7·8	7·7	7·9	7·8	7·8	7·8
Austria	7·8	7·6	7·7	7·8	7·9	7·8
France	7·6	7·4	7·4	7·3	7·2	7·4
Denmark	7·8	7·6	7·1	7·0	7·1	7·3
England and Wales‡	7·5	7·2	7·0	7·1	7·1	7·2
Belgium	6·7	6·8	6·7	7·1	7·3	6·9
Holland	7·2	6·1	6·9	7·0	6·9	6·8
Switzerland	6·8	6·9	6·8	6·8	7·0	6·8
Spain	6·7	...	..	...	...	6·5§
Scotland	6·7	6·4	6·2	6·3	6·2	6·4
Norway	6·8	6·6	6·5	6·2	6·1	6·4
Sweden	6·5	6·6	6·4	6·2	...	6·4†
Ireland|| ... ..	4·5	4·3	4·2	4·4	4·2	4·3

European marriage rates in 1888 and former years.

457. It will be observed that, in four of the thirteen countries of which particulars are given for 1888, viz., Austria (slightly), Holland (slightly), Belgium, and Switzerland, the marriage rate was above the average ; in seven of those countries, viz., Italy (slightly), Denmark, France, England (slightly), Scotland, Norway, and Ireland (slightly) it was below the average ; and in two, viz., Prussia, and Germany, it was exactly equal to the average ; also that in Austria, Belgium, and Switzerland, the rate was higher, in France and Norway lower than, and in Prussia, Germany, Scotland and Ireland, as low as, in any of the other years named.

Australasia and European marriage rates compared.

458. In the same five years, the mean marriage rate in Queensland was above that in any of the countries named, except Hungary (four years) ; and in New South Wales and Victoria it was about the same as in Italy, Germany, or Austria, but higher than in any of the other countries except Hungary and Prussia ; whilst the mean rate

* The numbers doubled give the *persons* married per 1,000 of the population.
† Mean of four years.
‡ In 1889, the marriage rate in England was 7·36.
§ Mean of two years, 1883 and 1884.
|| The low marriage rate in Ireland is partly attributed to the defective registration of Roman Catholic marriages, which amount to over 70 per cent. of the whole. It is also stated to be in part due to “the abnormal conditions arising from a large annual emigration of unmarried persons at what may be called the marrying ages.”—See 15th Detailed Report of the Registrar-General of Ireland, page 6.

was higher in Western Australia than in eleven, in Tasmania than in nine, in South Australia than in eight, but in New Zealand than in only one, of these countries. The following are the rates referred to :—

MEAN MARRIAGE RATES IN AUSTRALASIAN COLONIES,
1884 TO 1888.

					Number of Marriages per 1,000 of Mean Population.
Queensland	...	...	...	...	8·67
New South Wales	...	...	...	...	7·89
Victoria	...	...	...	...	7·87
Western Australia	...	...	...	...	7·47
Tasmania	...	...	...	...	7·27
South Australia	...	...	...	...	7·06
New Zealand	...	...	...	...	6·31

459. The following, according to the reports of the Registrar-General of England, is the marriage rate of the United Kingdom during the eighteen years ended with 1888. If, however, the registrations in Ireland are defective, as is alleged,* some disturbance to the calculations must result therefrom. It will be observed that the rate was lower in 1888 than in any other years named except 1886 and 1887 :—

Marriage
rate in
United
Kingdom.

MARRIAGE RATE IN THE UNITED KINGDOM, 1871 TO 1888.

Marriages per 1,000 of the Population.				Marriages per 1,000 of the Population.			
1871	...	...	8·21	1881	...	...	7·01
1872	...	...	7·98	1882	...	...	7·17
1873	...	...	8·03	1883	...	...	7·15
1874	...	...	7·79	1884	...	...	7·04
1875	...	...	7·67	1885	...	...	6·72
1876	...	...	7·70	1886	...	...	6·51
1877	...	...	7·32	1887	...	...	6·64
1878	...	...	7·09	1888	...	...	6·65
1879	...	...	6·69				
1880	...	...	6·83	Mean	...	...	7·23

460. Although rural rather than urban life tends to the promotion of marriage, it happens that, since the marriage ceremony is generally performed in towns, whatever may be the ordinary residence of the persons marrying, the marriage rate recorded there is much higher than that in the country. In Victoria, during the year 1889, it was three times as high in the metropolis and over two and a half times as high in country towns as it was in rural districts, as will be seen by the following table, which contains a statement of the proportion of marriages to the population in the three classes of districts in the year 1889 and in a previous quinquennial period :—

Marriage
rates in
town and
country.

* See footnote (II) on previous page.

MARRIAGES IN URBAN AND COUNTRY DISTRICTS, 1889.

Districts.	Estimated Mean Population.	Marriages, 1889.		Proportion per 1,000 of the Population, 1881-1885.
		Total Number.	Number per 1,000 of the Population.	
Melbourne and suburbs (Greater Melbourne)	445,220	5,318	11·94	10·49
Extra-Metropolitan towns ...	196,400	2,070	10·54	10·99
Country districts ...	462,680	1,806	3·90	3·12
Total ...	1,104,300	9,194	8·33	7·30

Marriages
in each
quarter.

461. Marriages in Victoria are generally most numerous in the autumn quarter, next in the spring quarter, next in the summer quarter, and least numerous in the winter quarter. In 1889, however, the numbers in the spring exceeded those in the autumn quarter. The following table shows the number and percentage of marriages in each quarter of that year, and the mean percentage in each quarter of two previous periods:—

MARRIAGES IN EACH QUARTER.

Seasons.	Quarter ended on the last day of—	Year 1889.		Percentage in—	
		Number of Marriages.	Percentage.	Ten Years : 1871 to 1880.	Five Years: 1881 to 1885.
Summer ...	March... ..	2,207	24·00	24·43	23·46
Autumn ...	June	2,379	25·88	26·19	26·52
Winter ...	September ...	2,132	23·19	23·81	23·66
Spring ...	December ...	2,476	26·93	25·57	26·36
	Year ...	9,194	100·00	100·00	100·00

Former
condition
of those
marrying

462. Over a series of years rather over four-fifths of the unions which take place are between bachelors and spinsters ; but in the last two years nearly seven-eighths were between people in those conditions of life. The next most numerous are generally those between widowers and spinsters, although they have sometimes been exceeded by marriages between bachelors and widows. Marriages between widowers and widows are generally in a proportion ranging from a twentieth to a twenty-fifth, but in 1889 and the two preceding years only about a thirty-third, of the whole. The following is the number and percentage in each of these groups during 1889 and the percentage during two previous periods:—

FORMER CONDITION OF PERSONS MARRIED.

Previous Condition.	Year 1889.		Percentage in—	
	Number of Marriages.	Percentage.	Ten Years : 1871 to 1880.	Five Years : 1881 to 1885.
Bachelors and spinsters ...	7,987	86·87	80·59	84·67
Bachelors and widows ...	418	4·55	7·10	5·01
Widowers and spinsters ...	521	5·67	7·75	6·63
Widowers and widows ...	268	2·91	4·56	3·69
Total ...	9,194	100·00	100·00	100·00

463. The following statement gives the proportions of marriages of persons of different conjugal conditions in various countries; the figures have been taken entirely from official documents published in the respective countries named:—

Former condition of those marrying in various countries.

FORMER CONDITION OF PERSONS MARRYING IN DIFFERENT COUNTRIES.

Countries.	Per 1,000 Marriages Celebrated, Number between—			
	Bachelors and Spinsters.	Bachelors and Widows.	Widowers and Spinsters.	Widowers and Widows.
Victoria ...	847	50	66	37
Austria ...	758	62	129	51
Belgium ...	834	50	81	35
Denmark ...	832	50	96	22
England and Wales ...	819	44	84	53
Finland ...	788	54	113	45
France ...	844	41	78	37
Greece ...	861	39	67	33
Holland ...	805	44	103	48
Hungary ...	752	50	97	101
Ireland ...	857	31	86	26
Italy ...	832	37	94	37
Massachusetts ...	790	48	103	59
Norway ...	854	34	91	21
Prussia ...	807	53	105	35
Roumania ...	848	28	61	63
Russia in Europe ...	772	42	98	88
Scotland ...	851	29	89	31
Spain ...	811	40	100	49
Sweden ...	854	34	91	21
Switzerland ...	816	49	104	31
Vermont ...	747	44	128	81

464. In 1889, 789 widowers and 686 widows re-entered the marriage state. During the last sixteen years more widowers have re-married than widows. Formerly it was different. In the eight

Re-marriages in Victoria.

years ended with 1873 the widowers re-entering the married state numbered 4,344, and the widows 4,618, and at earlier periods in the history of the colony the preponderance of re-marriages of widows over those of widowers was even greater than this. Such a preponderance would be likely to happen only in a country in which females are much less numerous than males; and the fact of the reverse having been the case of late years would afford indirect proof, if such were needed, that the proportion of marriageable females to marriageable males in the population has increased, a circumstance which was made evident by the results of the last census.* In England and Wales, during the ten years ended with 1885, 40 per cent. more widowers re-married than widows, the number of the former being 258,061, that of the latter 184,665. The following is a statement of the number of widowers and widows who re-married in Victoria during each of the twenty-four years ended with 1889:—

RE-MARRIAGES, 1866 TO 1889.

Year.	Number of Re-marriages of—		Year.	Number of Re-marriages of—	
	Widowers.	Widows.		Widowers.	Widows.
1866 ...	487	498	1879 ...	637	553
1867 ...	504	591	1880 ...	603	520
1868 ...	558	623	1881 ...	679	551
1869 ...	553	563	1882 ...	628	547
1870 ...	547	595	1883 ...	699	562
1871 ...	587	605	1884 ...	725	615
1872 ...	522	552	1885 ...	735	646
1873 ...	586	591	1886 ...	696	607
1874 ...	602	593	1887 ...	692	552
1875 ...	614	583	1888 ...	823	668
1876 ...	678	623	1889 ...	789	686
1877 ...	666	600	Total...	15,244	14,109
1878 ...	634	585			

Re-marriages in various countries.

465. By the figures in the following, which have been derived from those in the foregoing table, it would appear that a larger proportion of widowers re-marry in Vermont and a smaller in Greece, and a larger proportion of widows re-marry in Hungary and a smaller in Sweden and Norway, than in any other of the countries named; also, that, in Victoria, widowers re-marry less frequently than in any of those countries except Greece, but that in ten of those countries widows re-marry less frequently than in Victoria:—

* According to the census returns, there were in Victoria, in 1881, nearly 120 marriageable females to every 100 marriageable males.

RE-MARRIAGES IN VARIOUS COUNTRIES.

Countries.	Widowers re-married per 1,000 marriages.	Countries.	Widows re-married per 1,000 marriages.
Vermont ...	209	Hungary ...	151
Hungary ...	198	Russia in Europe ...	130
Russia in Europe ...	186	Vermont ...	125
Austria ...	180	Austria ...	113
Massachusetts ...	162	Massachusetts ...	107
Finland ...	158	Finland ...	99
Holland ...	151	England and Wales ...	97
Spain ...	149	Holland ...	92
Prussia ...	140	Roumania ...	91
England and Wales ...	137	Spain ...	89
Switzerland ...	135	Prussia ...	88
Italy ...	131	Victoria ...	87
Roumania ...	124	Belgium ...	85
Scotland ...	120	Switzerland ...	80
Denmark ...	118	France ...	78
Belgium ...	116	Italy ...	74
France ...	115	Denmark ...	72
Ireland ...	112	Greece ...	72
Sweden ...	112	Scotland ...	60
Norway ...	112	Ireland ...	57
Victoria ...	103	Sweden ...	55
Greece ...	100	Norway ...	55

466. Divorced persons marrying are classed as bachelors and spinsters, unless in cases where they had become widowers or widows before contracting the marriage from which they were released by divorce. Eleven divorced men and ten divorced women were married in 1889; nine of the former married spinsters, and two widows; eight of the latter married bachelors, and two widowers. In the previous year, five divorced men and twelve divorced women were re-married.

467. The persons returned at the census of 1881 as living in a state of divorce numbered 19, viz., 9 males and 10 females. Of the former, 4 were farmers or gardeners, 1 was a merchant, 1 a shopkeeper, 1 a cabinetmaker, 1 a bootmaker, and 1 a maltster; 5 were members of the Church of England, 1 was a Presbyterian, 1 a Roman Catholic, and 2 were Free Thinkers. Of the females, 1 was an innkeeper, 1 a farmer, 1 a tailoress, 1 a needlewoman, 1 of independent means, 2 were washerwomen, and 3 were merely performing domestic duties; 3 were members of the Church of England, 1 was a Presbyterian, 1 a Methodist, 1 a Baptist, 1 a Lutheran, and 3 were Roman Catholics.*

* For further particulars respecting these divorced persons, see General Report, by the Government Statist, on the Census of Victoria, 1881, paragraph 314.

Deserted
husbands
and wives

468. Persons whose wives or husbands have not been heard of for a period of seven years may marry again without rendering themselves liable to be prosecuted for bigamy; but such unions are subject to the serious disadvantage that the issue by the second marriage would be illegitimate, and the marriage itself void, if it should turn out that the first husband or wife was alive at the time thereof. Three deserted wives, and two deserted husbands availed themselves of this provision in 1889. The former married bachelors; they had not heard of their former husbands—one for 9 years, and two for 12 years. The deserted husbands married widows; they had not heard of their former wives for 7 and 12 years respectively. In the previous year eight deserted wives and two deserted husbands re-married.

Divorce Act
1889.

469. It may be mentioned that by the *Divorce Act* 1889* (53 Vict. No. 1056), which received the Royal assent on the 13th May, 1890, it is provided that any married person domiciled in Victoria for 2 years and upwards may obtain a divorce, after which he or she may legally re-marry, on proving that he or she had, without just cause or excuse, been wilfully deserted, and continuously so deserted over a period of three years or upwards.

Marriages of
Aborigines.

470. The marriages of 4 Aboriginal males with Aboriginal females are included in the returns of 1889. Two of the males and one of the females were natives of New South Wales, and the others natives of Victoria. In the previous year, 5 marriages of Aborigines took place.

Marriages of
Chinese.

471. Eighteen (including 1 half-caste) Chinese males were married in Victoria in the year 1889, as against 8 in 1888, 13 in 1887, and 18 in 1886. Of the women who married Chinese in the year under review, one was a half-caste, and another was of Chinese parentage, although both born in Victoria. During the twenty-three years prior to 1889, 365 Chinamen were married in Victoria, or an average of about 16 per annum. The following table shows the nationalities of the women who formed matrimonial unions with Chinese during that period, also during the year under review :—

* An account of the provisions of this Statute is given in the second volume under the head "Law, Crime, etc."

NATIONALITY OF WOMEN MARRYING CHINESE, 1866 TO 1889.

Birthplace of Wives.	Number of Marriages of Chinese Males.		
	Twenty-three years : 1866 to 1888.	Year 1889.	Total : 1866 to 1889.
Victoria	182	12*	194
Other Australian colonies ...	59	...	59
England and Wales ...	64	2	66
Scotland	15	1	16
Ireland	26	1	27
Other British possessions ...	1	...	1
France	1	...	1
Germany	2	...	2
Spain	1	...	1
The United States ...	2	...	2
China	4	...	4
At sea	8	1	9
Not known ... ..	...	1	1
Total	365	18	383

472. The marriage ceremony in Victoria may be performed either by the registered clergy of any religious sect, or by lay registrars. In 1889, over 94 per cent. of the marriages were celebrated according to the former, and less than 6 per cent. according to the latter, system. Lay marriages, in both 1888 and 1889, numbered 510, and were more numerous than in 1887, when they numbered 494, or than in the previous two years, in which respectively they numbered 453 and 426. They were, however, not so numerous as in 1884, when they numbered 645; in 1883, when they numbered 565; or in 1882, when they numbered 588. The following table gives a statement of the number and percentage of marriages celebrated by each religious sect and by lay registrars during 1889, also the percentage in the quinquennial period ended with 1885, and in the decennial period ended with 1880:—

Marriages
by different
sects.

MARRIAGES BY DIFFERENT DENOMINATIONS.

Marriages performed according to the usages of the—	Marriages in 1889.		Percentage of Marriages in—	
	Number.	Percentage.	Five Years : 1881 to 1885.	Ten Years : 1871 to 1880.
Church of England	3,077	33·47	28·34	24·63
Presbyterians	1,542	16·77	17·77	20·46
Wesleyans	1,432	15·58	15·93	16·38
Bible Christians	172	1·87	2·09	1·69
Independents	290	3·15	5·04	5·42

* One of the wives, although born in Victoria, was stated to be of the Chinese race, and another was a half-caste.

MARRIAGES BY DIFFERENT DENOMINATIONS—continued.

Marriages performed according to the usages of the—	Marriages in 1889.		Percentage of Marriages in—	
	Number.	Percentage.	Five Years: 1881 to 1885.	Ten Years: 1871 to 1880.
Baptists ...	462	5·02	4·94	3·70
Lutherans ...	68	·74	·98	1·02
Unitarians ...	11	·12	·03	·02
Calvinistic Methodists ...	3	03	·07	·16
Roman Catholics ...	1,361	14·80	14·69	17·21
Jews ...	54	·59	·43	·42
Other sects ...	212	2·31	1·14	1·07
Lay registrars ...	510	5·55	8·55	7·82
Total ...	9,194	100·00	100·00	100·00

473. It should be mentioned that, occasionally, a marriage is performed twice over, viz., by a lay registrar and a clergyman, or by clergymen of two different denominations. It is not always easy to detect these cases in the registers, but the circumstance occurs too seldom to cause any serious disturbance in the marriage statistics. One such case, however, was noticed in 1889, viz., that of a couple who had been previously married—under what rites not stated—being re-united under the forms of the Presbyterian church.

474. Of the 4 Aboriginal marriages which took place in 1889, 1 was solemnized according to the rites of the Moravians, 2 according to those of the Wesleyans, and 1 according to those of the Presbyterians.

475. Of the 18 marriages of Chinese in 1889, 4 were celebrated according to the rites of the Church of England, 2 according to those of the Free Church of England, 2 according to those of the Presbyterians, 4 according to those of the Wesleyans, 1 according to those or the Independents, 2 according to those of the Baptists, 1 according to those of the Roman Catholics, and 2 were performed by local registrars.

476. The returns of the census of 1881 afford an opportunity of comparing the number of marriages performed according to the rites of each particular denomination with the numbers of that denomination in the population ; and by taking the mean of the returns of that census and the preceding one, and of the marriages which were performed in the interval which elapsed between the two censuses, the same information is obtained extending over a period of ten years. The result is given in the following table :—

PROPORTION OF MARRIAGES TO NUMBER OF EACH
DENOMINATION.

Religious Denomination.	Persons of each Denomination, 1881.	Marriages celebrated annually, 1880 to 1882.		Persons of each Denomination (mean of 1871 and 1881).	Marriages celebrated annually, 1871 to 1880.	
		Mean Number.	Proportion per 1,000 persons living.		Mean Number.	Proportion per 1,000 persons living.
Church of England ...	311,291	1,554·3	5·00	284,563	1,226·4	4·31
Presbyterians ...	132,591	1,107·0	8·35	122,787	1,018·6	8·30
Wesleyans ...	108,393	936·3	8·64	99,209	815·5	8·22
Bible Christians ...	6,660	117·3	17·57	5,427	84·0	15·48
Independents ...	19,878	286·3	14·40	19,034	269·8	14·17
Baptists ...	20,373	234·0	11·49	18,342	184·0	10·03
Lutherans ...	11,149	57·3	5·14	10,854	50·8	4·68
Unitarians ...	942	2·0	2·12	979	·9	·92
Society of Friends ...	282	...	...	308	·4	1·30
Calvinistic Methodists ...	712	6·3	8·85	1,072	8·2	7·65
Roman Catholics ...	203,480	828·3	4·07	187,050	856·8	4·58
Jews ...	4,330	24·0	5·54	3,950	21·1	5·34
Other sects ...	8,465	69·3	...	7,430	52·8	...
Residue ...	33,800*	607·7†	...	35,932*	389·1†	...
Total ...	862,346	5,830·1	6·76	796,937	4,978·4	6·25

477. It will be observed that the denominations which solemnize most marriages in proportion to their numbers in the population are the Bible Christian, the Independent, and the Baptist, in the order named. In all these cases the proportion in the three years of which the census year is the middle, viz., 1880 to 1882, was higher than that shown for the decennium. In proportion to their respective numbers, the marriages performed in the three years named according to the rites of the Church of England, the Lutherans, and the Jews were more numerous, and those according to the rites of the Wesleyans, Presbyterians, and Calvinistic Methodists were much more numerous, than those performed according to the rites of the Roman Catholic Church; but, according to the average of the decennium, more marriages were solemnized according to the rites of the Roman Catholic Church than according to those of the Church of England.

Sects which perform most marriages and vice versa.

478. The numbers of either sex who evinced their want of elementary education by signing the marriage register with a mark instead of

Signing with marks.

* Including Buddhists, Confucians, etc., those of no denomination and of no religion, and the unspecified.

† Marriages by lay registrars.

in writing were as follow in 1889, the proportion of those who signed with marks to the total numbers married being also shown :—

SIGNING MARRIAGE REGISTER WITH MARKS, 1889.

Persons Married.	Numbers Married.	Signing with marks.	
		Total Number.	Number in every 100 Married.
Bridegrooms ...	9,194	139*	1·51
Brides ...	9,194	127	1·38
Mean ...	9,194	133	1·45

Increased numbers signing in writing.

479. In proportion to the total numbers married, a very satisfactory increase has taken place of late years in the number of both males and females signing the marriage register in writing. With few exceptions, a constant improvement has been apparent from year to year—nearly every year, as compared with its predecessor, showing a smaller proportion of persons signing with marks. In 1889, the proportion of both men and women signing with marks was considerably lower than in any previous year, as will be seen by the following figures, which show the proportions for the last seventeen years :—

NUMBERS SIGNING WITH MARKS PER 100 MARRIED, 1873 TO 1889.

Year.	Men.	Women.	Mean.	Year.	Men.	Women.	Mean.
1873 ...	6·55	9·97	8·26	1882 ...	2·88	3·27	3·07
1874 ...	6·52	9·91	8·22	1883 ...	3·09	3·47	3·28
1875 ...	5·48	9·43	7·46	1884 ...	2·55	2·77	2·66
1876 ...	5·31	7·50	6·41	1885 ...	2·56	2·62	2·59
1877 ...	5·04	6·02	5·53	1886 ...	2·00	1·93	1·99
1878 ...	4·12	5·30	4·71	1887 ...	1·73	2·12	1·92
1879 ...	3·81	5·60	4·71	1888 ...	1·72	1·81	1·76
1880 ...	4·18	4·09	4·13	1889 ...	1·51*	1·38	1·45*
1881 ...	2·90	4·16	3·53				

Signing with marks, 1853 to 1872.

480. A very much more decided improvement is shown by comparing these results with those of the twenty years prior to 1873, which embrace the whole period from 1853, when the registration

* Of these, 4 were Chinese, who signed in the Chinese character. If these be excluded, the number of men signing with marks would be reduced to 135, and the mean of both sexes to 131, the proportion to every 100 marriages being 1·47 of the former and 1·42 of the latter.

system was inaugurated in Victoria, to the end of 1872. In this period, 86,062 marriages were registered, with the result that 7,902 of the bridegrooms and 17,824 of the brides signed the register with marks. These numbers give the following proportions as the average for the twenty years:—

NUMBERS SIGNING WITH MARKS PER 100 MARRIED,
1853 TO 1872.

Men.		Women.		Mean.
9·18	...	20·71	...	14·95

481. It will be noticed that in every one of the years, except 1880, 1886 and 1889, the proportion of men able to write has been greater than that of women. More females than males sign with marks.

482. The marriages in which marks instead of writing were made use of in 1889 numbered 266, but in only 21 of these, or about 1 in 12, did both parties use marks. In the 245 other instances either the husband or the wife signed in writing. Thus, whereas in the case of 1 marriage in 38, either the bride or the bridegroom was unable to write, it happened in the case of only 1 marriage in 438 that neither party was able to sign the marriage register in writing. Cases of both signing with marks.

483. Of the 18 Chinese who married in 1889, 3 signed with an ordinary cross, 4 with a Chinese character, and 11 in writing. Of the women they married, all but 1 signed in writing. Signatures of Chinese.

484. In the case of the Aborigines who married in 1889, only 1 of the 4 males signed in writing, but only 1 of the 4 females signed with a mark. Signatures of Aborigines.

485. The proportion of persons signing with marks is found to differ according to the religious denomination. Means are afforded by the following table of observing the position of the adherents of the different sects so far as the possession of a sufficient amount of rudimentary education to enable them to write their names is concerned. The figures are those of the year 1889, the average of the quinquennial period ended with 1885, and of the decennial period ended with 1880. Considerable improvement will be noticed in respect to all the principal sects:— Signing with marks in each sect.

SIGNING WITH MARKS IN EACH SECT.

Marriages performed according to the usages of the—	Number signing with Marks in every 100 Married.								
	Year 1889.			Five Years: 1881 to 1885.			Ten Years: 1871 to 1880.		
	Men.	Women.	Mean.	Men.	Women.	Mean.	Men.	Women.	Mean.
Church of England ...	1·11	1·27	1·19	1·90	2·11	2·00	4·54	6·11	5·33
Presbyterians ...	·78	·58	·68	1·71	2·06	1·88	3·67	5·97	4·82
Methodists ...	1·37	1·00	1·18	2·28	2·33	2·30	4·15	5·33	4·74
Bible Christians }									
Independents ...	·69	...	·34	2·36	2·18	2·27	3·37	5·49	4·43
Baptists ...	·65	1·52	1·08	2·17	2·77	2·47	3·48	5·22	4·35
Lutherans ...	...	...	...	...	...	...	1·77	4·13	2·95
Calvinistic Methodists	...	...	...	...	...	...	1·22	6·10	3·66
Roman Catholics ...	2·87	2·28	2·57	5·19	5·55	5·37	10·14	15·43	12·79
Jews* ...	5·56	9·26	7·41	...	...	...	·95	·47	·71
Other sects ...	1·35	·90	1·12	3·66	4·45	4·05	7·01	3·79	5·40
Lay registrars ...	4·12	3·53	3·82	5·78	8·29	7·03	6·60	12·93	9·77
Total ...	1·51†	1·38	1·45	2·78	3·22	3·00	5·31	7·93	6·62

Roman Catholic and civil marriages

486. It will be observed that the proportion of those signing with marks is higher amongst marriages performed according to the rites of the Roman Catholic Church than amongst those celebrated by any other religious denomination, but that the numbers in 1889 show a very considerable improvement as compared with the five years ended with 1885, which show a still more marked improvement as compared with the ten years ended with 1880. The proportion so signing amongst civil marriages, although formerly lower, has of late been much higher than amongst marriages by Roman Catholics.

Marriages by Unitarians, Calvinists, and Jews.

487. In 39 marriages by Unitarians which took place in the nineteen years ended with 1889 not one instance occurred of either of the parties signing with a mark; this sect, therefore, finds no place in the above table. In 115 marriages by Calvinistic Methodists during the same period, all but two of the males signed in writing, but five of the females signed with marks. In 418 marriages of Jews which took place prior to 1889 only 7 persons signed with marks; but in that year in 54 marriages of Jews as many as 8 persons signed with marks. It has been found that, with the exception of one English Jew, these were Eastern Jews, mostly from Russia or Russian Poland.

* The large proportion in 1889 of Jews signing with marks is explained in paragraph 487 *post*.
† See footnote to table following paragraph 478 *ante*.

488. A statement of the numbers who sign the marriage register with marks is published in all the Australasian colonies except Western Australia and Tasmania, and from the figures given the following percentages for the five years 1884 to 1888 have been deduced. The colonies are placed in order according to the state of education thus displayed, the colony with the smallest proportion signing with marks being placed first, and that with the reverse last:—

Signing with
marks in
Austral-
asian
colonies.

SIGNING WITH MARKS IN AUSTRALASIAN COLONIES, 1884 TO 1888.

Colony.	Year.	Number Signing with Marks to every 100 Married.		
		Men.	Women.	Mean.
1. Victoria ...	1884	2.55	2.77	2.66
	1885	2.56	2.62	2.59
	1886	2.00	1.98	1.99
	1887	1.73	2.12	1.92
	1888	1.72	1.81	1.76
Mean of 5 years	...	2.11	2.26	2.18
2. New Zealand ...	1884	2.82	4.45	3.63
	1885	2.83	3.82	3.32
	1886	1.92	2.89	2.40
	1887	1.94	3.11	2.52
	1888	1.66	2.52	2.09
Mean of 5 years	...	2.23	3.36	2.79
3. South Australia ...	1884	2.86	3.80	3.33
	1885	4.00	4.30	4.15
	1886	3.04	3.49	3.26
	1887	2.18	1.80	1.99
	1888	2.40	2.45	2.42
Mean of 5 years	...	2.90	3.17	3.03
4. New South Wales ...	1884	4.68	5.79	5.24
	1885	4.31	5.19	4.75
	1886	3.76	4.20	3.98
	1887	3.04	3.95	3.49
	1888	3.91	3.57	3.74
Mean of 5 years	...	3.94	4.54	4.24
5. Queensland ...	1884	4.06	7.48	5.77
	1885	3.76	7.35	5.56
	1886	4.52	6.71	5.62
	1887	3.53	5.39	4.46
	1888	3.01	4.98	4.00
Mean of 5 years	...	3.78	6.38	5.08

Victoria the least illiterate colony.

489. By these figures it appears that the proportion of persons able to sign in writing is, on the average, larger in this than in any other colony. Next to Victoria in this respect is New Zealand, in which the proportion of males signing in writing was in two of the years—viz., 1886, and 1888—even larger than in this colony. In South Australia, moreover, in 1887, the proportion of females set down as having signed with marks was smaller than in any other colony. The colonies, generally, show improvement from year to year, and there is every reason to expect that in all the colonies, as the children educated under the compulsory systems established arrive at marriageable ages, it will become a rare occurrence for a marriage to be attested otherwise than in writing.

Signing with marks in various countries.

490. No returns are at hand showing the manner in which the marriage registers are signed in British colonies other than those named. The following, however, is a statement of the numbers who signed with marks in the latest year for which the information is available in the undermentioned countries, which are arranged in order; the least illiterate country being placed first and the rest in succession :—

SIGNING WITH MARKS IN VARIOUS COUNTRIES.

Country.	Year.	Number Signing with Marks to every 100 Married.		
		Men.	Women.	Mean.
Prussia	1884	3·31	5·11	4·21
Scotland	1886	4·65	8·28	6·46
England and Wales ...	1887	9·10	10·60	9·85
Holland	1877	7·53	14·83	11·18
France	1882	14·39	22·62	18·50
Ireland	1887	22·20	24·80	23·50
Italy	1886	21·58	31·73	26·65

Countries compared as to illiteracy.

491. By comparing these figures with those in the previous table for the corresponding years, it will appear that adult education, so far as it is indicated by signature to the marriage register, is more forward in Victoria, New Zealand and South Australia than in any of the countries named; also that in New South Wales and Queensland it is more forward than in any except Prussia, in which the proportion signing with marks is much smaller than in any of the other countries named. Scotland comes next to Prussia, but it is more than half as illiterate again. Holland, which comes next to Scotland and England, would probably rank higher were it not that the latest return available dates as far as 1877, when adult education was probably not so

advanced as it is now. Attention is called to the very large proportion signing with marks in Italy and Ireland.

492. The age of both bridegroom and bride was specified in the case of all but 50 of the 9,194 marriages which took place in 1889. In 41 of the defective entries the age of neither party was given; in 6 cases the age of the husband was stated, but not that of the wife; and in 3 instances the age of the wife was given, but not that of the husband. The following table shows the ages of the husbands and of the wives in combination:—

Ages of
bride-
grooms
and brides
in combina-
tion.

AGES OF BRIDEGROOMS AND BRIDES IN COMBINATION, 1889.

Ages of Bridegrooms.	Ages of Brides.																			Total Bridegrooms.	
	Under 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	21 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.		Unspecified.
18 to 19 years	2	...	...	4	...	...	...	...	...	...	...	...	...	...	...	...	6
19 to 20 „	...	2	2	8	11	7	5	23	4	...	...	...	...	...	...	...	...	...	...	...	62
20 to 21 „	...	3	2	6	19	24	20	41	8	1	...	...	...	...	...	...	...	...	...	124	
21 to 25 „	1	3	25	91	185	227	296	1564	332	37	8	...	...	...	...	...	...	...	...	3*	2772
25 to 30 „	10	49	118	183	253	1576	1111	181	25	9	3	1	1	...	...	...	...	3	3523
30 to 35 „	5	9	35	50	71	467	522	234	47	12	5	...	...	...	...	...	...	...	1457
35 to 40 „	1	3	1	8	12	109	164	94	55	13	11	3	1	...	...	...	...	...	475
40 to 45 „	4	2	2	45	56	64	38	23	13	4	...	...	1	...	...	...	252
45 to 50 „	1	1	1	...	18	37	39	34	19	19	7	...	...	...	1	...	...	177
50 to 55 „	1	...	2	7	11	22	18	26	16	10	3	1	1	...	...	...	118
55 to 60 „	3	8	9	12	17	16	8	7	3	3	...	...	...	86
60 to 65 „	3	...	5	6	8	10	15	3	3	...	...	...	...	53
65 to 70 „	1	...	...	3	2	2	3	5	5	4	...	...	...	25
70 to 75 „	1	...	1	1	2	...	1	3	2	1	...	...	...	12
75 to 80 „	1	3	1	...	...	...	1	...	...	6
80 to 85 „	1	1	...	...	...	2
Unspecified	1	1	1	...	...	...	...	...	...	...	...	...	...	...	41†	...	44
Total Brides	1	8	45	167	378	503	662	3862	2253	687	247	132	98	53	23	15	11	1	1	47	9194

NOTE.—This table may be read thus:—Three men between 21 and 25 married girls between 15 and 16; eight women between 35 and 40 married men between 21 and 25, etc.

493. An examination of the 9,144 cases in which the ages of both parties are specified will show that in 3,060 instances, or 33 per cent. of the whole, both parties to the marriage were about the same age; in 812 instances, or 9 per cent. of the whole, the wife was older than the husband; and in 5,272 instances, or 58 per cent. of the whole, the husband was older than the wife.

Relative
ages of
husband
and wife

494. Some striking inequalities of age amongst the parties married appear in several of the columns, as, for instance, a man between 65 and 70 and a man between 70 and 75 married women between

Inequalities
of age.

* Including one under age.
† Including cases in which one male and two females were under age.

21 and 25; three men between 50 and 55 married girls under 21; and three men between 45 and 50 married girls between 17 and 20. On the other hand, four women between 21 and 25 married youths of 18; a woman between 30 and 35 married a youth of 20; a woman between 55 and 60 married a man between 25 and 30; a woman between 65 and 70 married a man between 40 and 45, etc.

Extreme
ages of
marriage.

495. It will be noticed that six youths, aged 18, took upon themselves the cares and responsibilities of matrimony, four of their wives, however, being at least three years older than their husbands. On the other hand, it will be remarked that eight men, who had passed the age of 75—two of whom had passed the age of 80—entered the marriage state, the bride of one being of the same mature age as her husband, whilst the brides of the others were generally much younger; the youngest, however, not being less than 40.

Age at
which mar-
riage is
contracted.

496. The next table has been designed for the purpose of showing the age at which persons of either sex generally marry, the information being given for the year 1889, and for the decennial period 1871 to 1880:—

PROPORTION OF MALES AND FEMALES MARRYING AT DIFFERENT AGES, 1871-80 AND 1889.

Ages.	Bridegrooms.			Brides.		
	Numbers, 1889.	Proportions per 1,000.		Numbers, 1889.	Proportions per 1,000.	
		Year 1889.	Ten Years, 1871-80.		Year 1889.	Ten Years, 1871-80.
Under 15 years...	...	...	...	1	·11	·48
15 to 16 „ ...	...	...	...	8	·88	2·71
16 to 17 „ ...	...	...	·02	45	4·92	12·74
17 to 18 „ ...	...	...	·46	167	18·26	36·74
18 to 19 „ ...	6	·66	1·57	378	41·33	62·69
19 to 20 „ ...	62	6·78	6·33	503	54·99	80·93
20 to 21 „ ...	124	13·55	16·79	662	72·37	86·94
21 to 25 „ ...	2,772	302·95	281·06	3,862	422·22	375·69
25 to 30 „ ...	3,523	385·03	295·83	2,253	246·31	174·64
30 to 35 „ ...	1,457	159·23	165·38	687	75·11	69·13
35 to 40 „ ...	475	51·91	97·22	247	27·00	44·26
40 to 45 „ ...	252	27·54	59·54	132	14·43	26·44
45 to 50 „ ...	177	19·34	37·58	98	10·71	14·99
50 to 55 „ ...	118	12·90	20·49	53	5·79	6·79
55 to 60 „ ...	86	9·40	9·92	23	2·51	3·03
60 to 65 „ ...	53	5·79	4·96	15	1·64	1·16
65 to 70 „ ...	25	2·73	1·85	11	1·20	·40
70 and upwards ...	20	2·19	1·00	2	·22	·24
Total ...	9,150*	1,000·00	1,000·00	9,147*	1,000·00	1,000·00

* The bridegrooms and brides of unspecified ages being omitted, these numbers are less than those in the last table, the bridegrooms by 44 and the brides by 47. The reason of the bridegrooms being fewer than the brides is that the age was not stated in the case of three more of the former than of the latter.

497. The large proportion of both sexes marrying at between 21 and 30 years of age is very marked; thus in 1889 more than two-thirds of both males and females who married were between those ages. Owing to their relatively larger numbers in the population, the proportions marrying at the ages named in the last four years were much higher than those in the decennial period; the latter amounting to only four-sevenths of the males, and only five-ninths of the females.

498. In the case of the marriages of Chinese which took place in 1889, the men without exception were older than the females with whom they formed unions. None of the former were under 22 years of age, but of the latter, two had not reached the age of 21. The following table shows the ages of the Chinese bridegrooms and of their brides in combination :—

AGES OF CHINESE BRIDEGROOMS AND THEIR BRIDES IN COMBINATION, 1889.

Ages of Bridegrooms.			Ages of Brides.											Total Bridegrooms.	
			18.	19.	21.	22.	23.	25.	26.	28.	29.	30.	34.		40.
22	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
27	...	...	...	...	1	1	...	...	1	...	...	...	...	...	3
29	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
31	...	...	...	1	...	...	...	...	...	...	...	...	...	...	1
33	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
37	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
38	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
40	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
41	...	...	...	...	...	...	...	...	...	1	...	...	...	...	1
42	...	...	...	...	...	...	...	...	...	...	1	...	...	...	1
43	...	...	...	...	...	...	1	...	...	...	...	...	...	...	1
44	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
46	...	...	...	...	...	...	...	1	...	...	...	...	...	...	1
48	...	...	...	...	...	...	...	...	...	...	...	1	...	...	1
52	...	...	...	...	1	...	...	...	...	...	...	...	...	...	1
57	...	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Total Brides			1	1	4	1	3	1	1	1	1	1	2	1	18

499. Of the four male Aborigines who married in 1889, two were widowers, and of their four partners, two were widows. The ages of bridegroom and bride were set down as follows :—23 and 20, 28 and 19, 33 and 32, 45 and 39.

500. In almost all civilized countries, minors are not permitted to marry without the consent of their parents or guardians, but the youngest age at which persons may marry after obtaining such

consent varies in different countries, ranging from 14 for males and 12 for females in the United Kingdom, Switzerland, Spain, Portugal, Greece, and the Roman Catholic portion of the population of Hungary, to 21 for males and 18 for females in the United States. The figures in the following table, giving information on the subject, have been taken from *The Annual Statistician** for the year 1889 :—

AGE AT WHICH MARRIAGE MAY BE CONTRACTED IN DIFFERENT COUNTRIES.

Country.				Age at, and after, which persons may marry.	
				Males.	Females.
				Years.	Years.
Austria	...	...	...	14	14
Belgium	...	...	...	18	15
France	...	...	...	18	15
Germany	...	...	...	18	14
Greece	...	...	...	14	12
Hungary (Protestants)	...	...	...	18	15
„ (Roman Catholics)	...	...	...	14	12
Portugal	...	...	...	14	12
Russia	...	...	...	18	16
Saxony	...	...	...	18	16
Spain	...	...	...	14	12
Switzerland	...	...	...	14	12
Turkey	...	...	...	Puberty	Puberty
United Kingdom	...	...	...	14	12
United States	...	...	...	21	18

Marriages of
of minors.

501. The minimum age at which persons may, with consent, marry, is the same in Victoria as in the United Kingdom, viz., 14 for males and 12 for females; but, as a matter of fact, marriages are seldom contracted at such early ages. Six of the males, however, who married in 1889 had not completed their nineteenth year. Of the brides, one had not reached the age of 15 years, eight had not completed their sixteenth, and 45 more had not completed their seventeenth year. As many as 193 of the males, or one in every 48, and no fewer than 1,767 of the females, or nearly a fifth, had not attained the full age of 21 years.

Marriages of
minors in
Victoria
and Eng-
land.

502. From the experience of Victoria during the year 1889, the five years 1881-85, and the decade, 1871-80, it would appear that, in proportion to the total numbers marrying, the males who marry under age are much less numerous in this colony than in England

* See that work, page 307 : McCarty, San Francisco, California, 1889.

and Wales. The proportion of females marrying under age, which was formerly higher in Victoria than in England, has fallen considerably, and in 1889, as well as in the two previous years, was lower than in England. This is shown by the figures in the following table:—

MARRIAGES OF MINORS IN VICTORIA AND ENGLAND AND WALES.

Persons Married.	In every 100 Marriages, Numbers under 21 Years of Age.			
	In Victoria.			In England and Wales.
	Year 1889.	Five Years: 1881 to 1885.	Ten Years: 1871 to 1880.	Ten Years: 1871 to 1880.
Bridegrooms	2·10	2·37	2·52	7·95
Brides	19·22	22·53	28·32	21·96
Mean	10·66	12·45	15·42	14·96

503. As the proportion of minors at marriageable ages existing in the population may vary greatly in different countries, and in the same country at different times, it will readily be understood that a comparison of the marriages of minors with the total number of marriages does not afford an infallible test of the tendency to marry under age, to determine which accurately the number of minors marrying should be compared with the number of marriageable minors in the population. This has been done for the last two census periods, and the last three years, and the result is given in the following table:—

Marriage
rate of
minors.

MARRIAGES OF MINORS, 1871, 1881, AND 1887 TO 1889.

Year.	Number of Marriageable Minors.*		Number of Minors who Married.†		Proportion of Minors who Married to every 1,000 Marriageable Minors Living.	
	Males Aged 17 to 21.	Females Aged 15 to 21.	Males.	Females.	Males.	Females.
1871	19,816	30,306	85	1,305	4·29	43·05
1881	37,675	57,863	151	1,420	4·01	24·54
1887	47,693	64,948	147	1,525	3·08	23·48
1888	49,260	65,270	211	1,742	4·28	26·69
1889	50,460	66,847	193	1,767	3·82	26·43

504. According to the table, the proportion of both males and females marrying under age became considerably reduced between 1871 and 1881; but since the latter year the proportion of females so marrying was again slightly increased, whereas that of males was on

Decreasing
tendency to
marry
under age.

* Census figures for 1871 and 1881, estimated for the other years.

† Mean number of minors who married in the years 1870 to 1872, and 1880 to 1882, and actual number who married in the other years.

the average slightly lower than in 1881. In 1889 the proportion of male minors marrying was lower than in 1881, although in the preceding year it was as high as in 1871; whilst that of female minors marrying, although not so high as in 1871 by $16\frac{1}{2}$ per 1,000 living, was 2 per 1,000 higher than in 1881.

505. By means of the returns of the last census, it has been possible to analyze still further the marriages of minors, and to show the proportion of the males and females who contract them at each year of age to the total number of males and females living at the same age. Similar results for England and Wales are available,* and are contrasted in the following table with the results relating to Victoria:—

AGES OF MINORS† MARRYING IN VICTORIA AND ENGLAND AND WALES.

Age last Birthday.	Victoria.				Proportion of Marriages per 1,000 Marriageable Minors.			
	Marriageable Minors at Census of 1881.		Minors who Married (Mean of Three Years, 1880 to 1882.)		Males.		Females.	
					Victoria. (Mean of 1880 to 1882.)	England and Wales. (Mean of 1870 to 1872.)	Victoria. (Mean of 1880 to 1882.)	England and Wales. (Mean of 1870 to 1872.)
	Males.	Females.	Males.	Females.				
15	...	10,076	...	11	...	...	1·09	·18
16	...	10,209	...	39	...	·02	3·82	1·53
17	9,718	10,100	3	146	·31	·41	14·45	9·33
18	9,763	9,966	10	282	1·02	4·04	28·29	36·39
19	9,580	9,352	36	443	3·76	20·34	47·37	72·46
20	8,614	8,160	102	499	11·84	52·98	61·15	105·84
Total...	37,675	57,863	151	1,420	4·01	18·32	24·54	34·08

506. It appears that in the case of both males and females the tendency to marry under age is much greater in England and Wales than in Victoria. This, as regards females, is the reverse of the result obtained by comparing the marriages of those under 21 with the total number married.‡ The English proportions relating to males are higher at each age than those of Victoria, but in the first three years of minority the Victorian proportions relating to females are higher than those of England. This, however, is much more than made up in the three succeeding years.

507. The following table contains a statement of the proportion of males and females marrying at different ages in various countries.

* See 35th Annual Report of the Registrar-General of England, page xii.
† In this and the preceding table, marriageable minors have been considered to be males from 17 to 21, females 15 to 21. In England, there were 4 marriages of males at 16, but there were none at that age in Victoria.
‡ See table following paragraph 502 ante.

The figures, except those relating to Victoria, which are for the year 1889, and for the decennial period 1871-80, have been taken from the 46th Report of the Registrar-General of England*:

AGES OF MALES AND FEMALES MARRYING IN VARIOUS COUNTRIES.

Countries.	Per 10,000 of All Ages Marrying, Numbers—						
	Under 20.	20 to 25.	25 to 30.	30 to 40.	40 to 50.	50 to 60.	Over 60.
BRIDEGROOMS.							
Victoria, 1889 ...	75	3,166	3,850	2,113	467	222	107
„ 1871-80 ...	84	2,979	2,958	2,626	971	304	78
England and Wales ...	329	4,805	2,538	1,436	510	256	126
Scotland ...	311	3,919	2,965	1,877	604	237	87
Ireland ...	253	3,003	3,056	2,643	685	242	118
Denmark ...	2,092		3,820	2,968	752	279	89
Norway ...	173	2,681	3,530	2,459	699		458
Sweden ...	6	2,325	3,569	2,883	778		439
Russia (in Europe) ...	3,784	3,063	1,230	1,183	549		191
Austria ...	2,084		4,172	2,311	848	415	170
Hungary ...	3,173		4,571	1,255	604	296	101
Switzerland ...	127	2,525	3,133	2,710	927	404	174
Prussia ...	58	6,716		2,265	624	256	81
Bavaria ...	19	1,875	3,674	3,002	1,244		186
Saxony ...	38	3,432	3,823	1,767	561	278	101
Holland ...	256	2,405	3,370	2,659	846	345	119
Belgium ...	94	2,161	3,467	2,952	885	322	119
France ...	236	2,469	3,757	2,512	622	282	122
Italy ...	107	2,491	3,699	2,611	704	266	122
BRIDES.							
Victoria, 1889 ...	1,201	4,949	2,465	1,022	250	83	30
„ 1871-80 ...	1,963	4,626	1,747	1,134	414	98	18
England and Wales ...	1,441	4,966	1,911	1,091	407	145	39
Scotland ...	1,338	4,570	2,325	1,314	370	72	11
Ireland ...	1,349	4,899	2,275	1,104	264	77	32
Denmark ...	616	3,608	3,076	2,054	515	112	19
Norway ...	824	3,919	2,889	1,749	476		143
Sweden ...	555	3,413	3,089	2,225	573		145
Russia (in Europe)†	5,801	2,120	699	616	229		35
Austria ...	1,807		2,851	2,881	1,696	590	175
Hungary ...	3,604		3,422	1,604	810	408	152
Switzerland ...	879	3,876	2,498	1,886	656	173	32
Prussia ...	1,030	6,974		1,487	403	92	14
Bavaria ...	644	3,532	2,949	2,061	761		53
Saxony ...	1,073	4,500	2,588	1,305	406	110	18
Holland ...	1,084	3,236	2,897	1,976	599	174	34
Belgium ...	640	3,573	2,770	2,124	647	193	53
France ...	2,116	3,911	2,048	1,374	377		174
Italy ...	1,692	4,384	2,195	1,254	347	101	27

* Table D., page x.

† The figures, which are those of the Registrar-General of England, add in this line only to 9,500 instead of to 10,000.

Marriages of
minors in
different
countries.

508. According to the figures for 1889, fewer males marry under 20 in Victoria than in any of the other countries named, except Sweden, Prussia, Bavaria, and Saxony; but, on the other hand, more females marry under that age in Victoria than in any of those countries except England, Scotland, Ireland, France, Italy, and Russia. Attention is called to the very large proportion shown as marrying under age in the last-named country, exceeding a third of the total marriages in the case of the males, and exceeding half in the case of the females.

Husbands
and wives
in Austral-
asian
colonies.

509. The following are the numbers of husbands and wives in each Australasian colony according to the returns of the simultaneous census of 1881, those under and over 21 years of age being distinguished:—

HUSBANDS AND WIVES IN EACH AUSTRALASIAN COLONY, 1881.

Colony.	Husbands.			Wives.		
	Under 21 Years.	Over 21 Years.	Total.	Under 21 Years.	Over 21 Years.	Total.
Victoria	283	124,371	124,654	3,006	123,036	126,042
New South Wales ...	408	109,810	110,218	4,040	103,793	107,833
Queensland	118	30,004	30,122	1,285	28,839	30,124
South Australia ...	95	43,860	43,955	1,344	42,339	43,683
Western Australia ...	15	4,260	4,275	207	3,769	3,976
Total	919	312,305	313,224	9,882	301,776	311,658
Tasmania*	73	17,671	17,744	607	16,527	17,134
New Zealand... ..	97	73,234	73,331	2,374	70,433	72 807
Grand Total ...	1,089	403,210	404,299	12,863	388,736	401,599

Conjugal
condition
in various
countries.

510. It is to be regretted that no figures are at hand showing the conjugal condition of males and females at marriageable ages living in countries out of Australasia; but the following table contains a statement of the proportions of those of both sexes and all ages unmarried, married, and widowed in various countries. The figures, except those in the first line, have been taken from *Mulhall's Dictionary of Statistics*†:—

* In this line the numbers under and over 21 have been partly estimated.
† Page 305.

CONJUGAL CONDITION IN VARIOUS COUNTRIES—BOTH SEXES AND
ALL AGES.

Countries.				Numbers in every 1,000 Living.		
				Unmarried.	Married.	Widowed.
Victoria (1881)	...	...	...	665	294	41
England	...	...	...	602	345	53
France	...	...	...	511	405	84
Prussia	...	...	...	606	336	58
Wurtemberg	...	...	...	623	319	58
Austria	...	...	...	605	342	53
Hungary	...	...	...	532	407	61
Italy	...	...	...	582	352	66
Switzerland	...	...	...	609	319	72
Spain	...	...	...	572	360	68
Portugal	...	...	...	628	310	62
Holland	...	...	...	611	328	61
Belgium	...	...	...	629	315	56
Scandinavia	...	...	...	618	330	52
Chile	...	...	...	688	260	52

511. It appears from this table that, in Victoria, in proportion to the numbers of the population, fewer persons have been living in the marriage state than in any of the other countries named, except Chile ; and fewer have been living in the widowed state than in any of those countries. This is probably in part accounted for by the fact that the proportion living at marriageable ages, especially of males, is smaller in Victoria than in most of those countries. It is, however, probable that the proportion of widowed persons in Victoria has considerably increased since 1881.

Small proportion of married in Victoria.

512. The births registered in Victoria during 1889 numbered 36,359, as against 34,503 in 1888. The increase in the year under review, as compared with the previous one, was thus 1,856.

Births, 1889.

513. During the 20 years ended with 1883, the number of births in Victoria had remained almost stationary ; but in 1884 a marked increase took place, which has continued during the five subsequent years, the number of births in 1889 being the highest ever recorded.* The increase between 1889 and 1888 was 1,856, as compared with 1,460 between 1888 and 1887.

Births in 1889 and former years.

514. In proportion to population, the births decreased steadily for a number of years. The lowest point was reached in 1882, since which year there has been a gradual improvement, the birth rate in

Birth rate.

* For number of births in each year, see Statistical Summary of Victoria (first folding sheet), published in the second volume of this work.

1889 having been higher than it had been in any year since 1876. The following are the birth rates for the last thirty years:—

ANNUAL BIRTH RATE, 1860 TO 1889.

Births per 1,000 of Mean population.				Births per 1,000 of Mean population.			
1860	...	...	42·81	1876	...	...	33·61
1861	...	...	43·46	1877	...	...	32·17
1862	...	...	44·50	1878	...	...	32·36
1863	...	...	42·46	1879	...	...	32·18
1864	...	...	43·79	1880	...	...	30·75
1865	...	...	42·40	1881	...	...	31·24
1866	...	...	39·76	1882	...	...	30·05
1867	...	...	39·75	1883	...	...	30·23
1868	...	...	41·08	1884	...	...	30·89
1869	...	...	37·89	1885	...	...	31·27
1870	...	...	38·07	1886	...	...	31·23
1871	...	...	37·15	1887	...	...	32·40
1872	...	...	36·33	1888	...	...	32·49
1873	...	...	36·71	1889	...	...	32·92
1874	...	...	34·46				
1875	...	...	33·94	Mean of 30 years ... 35·94			

Proportion
of births to
population
and to mar-
ried women.

515. Birth rates, based upon a comparison of the number of events with the total population, are, like marriage rates calculated upon a similar basis, apt to mislead, unless the population is in a normal condition. It must be quite evident that, if there is not a sufficient proportion of married women at the fruitful or child-bearing ages in a community, the birth rate is not likely to be high, but that an excess of such women would probably cause a high birth rate. This will be made apparent by the following table, which shows the birth rate, calculated upon the total population and upon the number of married women at the child-bearing period of life, in the last two census years:—

PROPORTION OF BIRTHS TO POPULATION AND TO MARRIED WOMEN.

Year of Census.	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

Reason for
decline of
birth rate.

516. It will be noticed that the married women at reproductive ages were fewer by 3,730 in 1881 than in 1871, that the proportion of births to such women, viz., $302\frac{2}{3}$ per 1,000, was exactly the same in both years, but that the proportion of births to the total population was considerably less in 1881 than in 1871. Thus, while the birth

* In both cases these are the legitimate births which occurred during the twelve months of which the census was the middle.

rate based upon a comparison of the births with the married women remained perfectly steady, that rate based upon a comparison of the births with the population showed a falling-off of nearly 7 per 1,000. The reduction in the birth rate, calculated in the ordinary way, which had been going on for years, is therefore conclusively shown—at any rate so far as the period 1871 to 1881 is concerned—to be due to a deficiency in the community of married women at the fruitful period of life.

517. Returns of the births in all the Australasian colonies are available to the end of 1889, and from these and the mean populations of the respective colonies during each year the birth rates have been calculated in the office of the Government Statist, Melbourne. The following table gives the birth rates of the different colonies for each year from 1865 to 1889, or as many years between those periods as the figures are available for:—

Birth rates
in Austral-
asian
colonies.

BIRTH RATES IN AUSTRALASIAN COLONIES, 1865 TO 1889.*

Year.	Number of Births per 1,000 of Mean Populations.						
	Victoria.	New South Wales.	Queens-land.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1865	42·40	43·21	43·65	43·90	...	32·56	41·12
1866	39·76	40·45	44·86	42·38	...	29·15	42·89
1867	39·75	41·94	45·66	41·87	...	30·34	42·18
1868	41·08	40·72	43·03	41·51	...	30·03	42·14
1869	37·89	40·74	42·83	39·03	...	28·27	41·90
1870	38·07	40·09	43·51	38·48	...	30·18	42·32
1871	37·15	39·63	43·25	38·34	...	30·16	40·64
1872	36·33	38·46	40·70	37·60	32·42	29·44	39·50
1873	36·71	39·38	40·82	36·42	31·43	29·43	39·00
1874	34·46	39·30	41·11	38·22	33·71	29·72	40·27
1875	33·94	38·53	38·90	35·70	28·72	29·88	40·23
1876	33·61	38·56	37·48	37·71	33·98	30·11	41·73
1877	32·17	37·92	36·75	37·36	33·07	30·21	41·28
1878	32·36	38·50	35·77	38·23	31·11	32·27	42·14
1879	32·18	38·99	36·74	38·96	34·38	32·05	40·32
1880	30·75	38·80	36·92	38·94	32·35	32·91	40·78
1881	31·24	38·13	37·19	38·66	33·67	33·40	37·95
1882	30·05	37·37	35·85	37·40	35·84	33·50	37·32
1883	30·23	37·49	36·92	37·37	33·87	34·25	36·28
1884	30·89	38·54	36·23	38·38	33·84	35·66	36·15
1885	31·37	37·64	37·80	38·47	35·22	35·08	34·78
1886	31·23	37·03	37·84	35·70	39·43	34·15	33·15
1887	32·40	36·42	38·09	34·56	37·34	33·87	32·09
1888	32·49	36·20	37·77	33·06	35·88	33·10	31·22
1889	32·92	33·73	36·27	32·37	37·14	31·97	30·07
Means ...	34·45	38·71	39·44	38·02	34·08	31·67	38·70

* For the number of births in the various colonies during the seventeen years ended with 1889, see General Summary of Australasian Statistics (third folding sheet) in the second volume. See also Appendix A. to the same volume.

Low birth-rates in Australasian colonies in 1889.

518. In 1889 the birth rate was remarkably low in most of the colonies, and was below the average in all except Western Australia and Tasmania. Even in Tasmania it was lower than in any year since 1877. In New South Wales, South Australia and New Zealand the rate was absolutely the lowest recorded during the whole period of 25 years; whilst in Queensland, it was about the same as in 1884, but lower than in any other year shown in the table except 1882 and 1878. In Victoria, the rate, although still below the average, was higher than in any year since 1876, as has been already stated. In Western Australia the birth rate was about equal to that in 1887, but was much higher than in any previous year except 1886.

Order of colonies in respect to birth rates.

519. The following is the order of the colonies in reference to their respective birth rates in the last year shown in the table and according to the average of the whole period of twenty-five years. It will be observed that Victoria stands fourth on the list for 1889 but fifth in the twenty-five-year series :—

ORDER OF AUSTRALASIAN COLONIES IN REFERENCE TO BIRTH RATES.

Order in 1889.	Order in a Series of Years.
1. Western Australia.	1. Queensland.
2. Queensland.	2. New South Wales.
3. New South Wales.	3. New Zealand.
4. Victoria.	4. South Australia.
5. South Australia.	5. Victoria.
6. Tasmania.	6. Western Australia.
7. New Zealand.	7. Tasmania.

Birth rate in Australia and Australasia.

520. On the continent of Australia, taken as a whole, and on that continent, combined with Tasmania and New Zealand, the birth rate in 1889 was not only lower than in 1888, but was absolutely the lowest recorded during the last seventeen years. The following are the figures for the period referred to :—

BIRTH RATE IN AUSTRALIA AND AUSTRALASIA, 1873 TO 1889.

Number of Births per 1,000 of Mean Populations.			Number of Births per 1,000 of Mean Populations.		
Year.			Year.		
	Continent of Australia.	Australia with Tasmania and New Zealand.		Continent of Australia.	Australia with Tasmania and New Zealand.
1873	37·36	37·19	1883	34·54	34·84
1874	36·46	36·70	1884	35·25	34·33
1875	35·29	35·82	1885	35·33	35·22
1876	35·20	36·04	1886	34·85	34·52
1877	34·15	35·16	1887	34·95	34·42
1878	34·31	35·51	1888	34·68	34·03
1879	34·55	35·42	1889	33·64	32·99
1880	35·33	36·20	Means ...	35·02	35·22
1881	35·22	35·63			
1882	34·28	34·78			

521. Comparing this table with that showing the marriage rates in the same countries, it is found that a high birth rate is generally concurrent with a high marriage rate, and *vice versâ*. A notable exception to this is France, in which, although the marriage rate is high, the birth rate is lower than any of the countries named, except Ireland. The low rate in the latter is attributed to the small proportion of women at child-bearing ages in the population,* but the low birth rate in France cannot be accounted for by any such cause, as it is stated that the proportion of women at the reproductive period of life is higher in that than in any other European country; the chief, though indirect cause is said to be—"the sub-division of land among the peasant proprietors. The better class of the labouring population aspire to become proprietors of small holdings; by thrift and industry they accumulate capital for this purpose, and avoid by their social philosophy the division of their property amongst a large family at their decease."†

Low birth rates in Ireland and France.

522. In the same five years the mean birth rates in Queensland and New South Wales were above those in any of the European countries named, except Hungary, Austria, Italy and Prussia—the rates in the two latter being about the same as in Queensland; the mean birth rates in Western Australia, South Australia, and Tasmania were above those in any except the four countries first named, together with Germany and Spain; the mean birth rate in New Zealand was below that in any of the countries named, with the addition of Holland; the mean birth rate in Victoria was below that in any of the countries named in the table except Norway, Sweden, Belgium, Switzerland, France, and Ireland. The following are the birth rates referred to :—

Australasian and European birth rates compared.

MEAN BIRTH RATES IN AUSTRALASIAN COLONIES, 1884 TO 1888.

						Number of Births per 1,000 of Mean Population.
Queensland	...	...	...	...	...	37·55
New South Wales	...	...	...	...	...	37·17
Western Australia	...	...	...	...	...	36·34
South Australia	...	...	...	...	...	36·03
Tasmania	...	...	...	...	...	34·37
New Zealand	...	...	...	...	...	33·48
Victoria	...	...	...	...	...	31·68

* See 15th Detailed Report of the Registrar-General of Ireland, pages 12 and 29. For many years the registration of births in Ireland was admitted to be defective, but Dr. T. W. Grimshaw, the Registrar-General of that country, in a letter addressed to the Government Statist of Victoria, dated 6th May, 1886, stated that since the passing of the *Public Health Amended Vaccination and Registration Acts* (1878 to 1880), this is no longer the case, and the births occurring in Ireland are now very well recorded. It may be remarked, however, that this improvement has not been accompanied by any improvement in the birth rate as calculated from the published figures.

† See 41st Report of the Registrar-General of England, page xlv.

Birth rates
in British
possessions.

523. The birth rates in certain British colonies outside Australasia including all those for which the information is available, are shown in the following table. The low birth rate in Hong Kong is probably owing to the small proportion of women in the population, the bulk of which consists of Chinese males. In Mauritius and Jamaica, considerably more than half the births were stated to be illegitimate. In some cases the figures are only for one or two years:—

BIRTH RATES IN BRITISH POSSESSIONS.

Colonies.				Years.	Number of Births per 1,000 of the population.
Malta	...	...	...	1886	40·0
Ceylon	...	...	...	1886-7	30·0
Straits Settlements	...	...	...	1882-4	19·0
Hong Kong	...	...	...	1882-6	8·5
Mauritius	...	...	...	1886	36·3
Seychelles	...	...	...	1886	39·8
Nova Scotia	...	...	...	1871-5	32·0
Bermudas	...	...	...	1884-5	35·7
British Guiana	...	...	...	1886	35·2
West Indies—					
Bahamas	...	...	...	1874-5	39·0
Jamaica	...	...	...	1886-7	36·0
St. Lucia	...	...	...	1869-87	41·8
St. Vincent	...	...	...	1870-9	46·0
Barbados	...	...	...	1886	41·5
Grenada	...	...	...	1871-5	45·2
Tobago	...	...	...	1886	36·0
Antigua	...	...	...	1875-6	40·4
Montserrat	...	...	...	1886	40·4
Dominica	...	...	...	1871-6	31·0
Trinidad	...	...	...	1886	35·9

Birth rates
in Euro-
pean
countries.

524. A statement of the birth rates in British and certain Foreign countries for each of the five years ended with 1888, is given in the following table. The figures have been taken from the reports of the Registrar-General of England or other official sources:—

BIRTH RATES IN EUROPEAN COUNTRIES, 1884 to 1888.

Countries.				Number of Births per 1,000 of Mean Population.					
				1884.	1885.	1886.	1887.	1888.	Mean of 5 years.
Hungary	...	...	...	46·0	...	45·5	...	...	45·8*
Austria...	...	...	...	38·4	37·4	38·0	38·2	37·9	38·0
Italy	...	...	...	38·7	38·1	36·4	38·3	36·6	37·6
Prussia	...	...	...	37·4	37·6	37·7	37·8	37·7	37·6
German Empire	...	...	...	37·2	37·0	37·1	36·9	36·7	37·0
Spain	...	...	...	37·1	...	...	...	...	36·5†
Holland	...	...	...	34·9	34·4	34·6	33·7	33·7	34·3

* Mean of two years.

† Mean of two years, 1883 and 1884.

BIRTH RATES IN EUROPEAN COUNTRIES, 1884 TO 1888—continued.

Countries.		Number of Births per 1,000 of Mean Population.					
		1884.	1885.	1886.	1887.	1888.	Mean of 5 years.
England and Wales	...	33·4	32·5	32·4	31·4	30·6	32·1
Scotland	...	33·4	32·3	32·4	31·2	30·5	32·0
Norway...	...	31·0	31·3	30·9	30·8	30·8	31·0
Sweden...	...	30·0	29·6	29·8	29·7	...	29·8*
Belgium	...	30·5	29·9	29·6	29·4	29·1	29·7
Switzerland	...	28·1	27·5	27·5	27·9	27·7	27·7
France ...	...	24·8	24·3	23·9	23·5	23·1	23·9
Ireland ...	...	24·0	23·5	23·3	23·2	22·9	23·4

525. According to the reports of the Registrar-General of England, the birth-rate of the United Kingdom in 1888 was lower than in any year since 1870, and, for the first time, was less than 30 per 1,000 persons living, as will be seen by the following figures:—

Birth rate in United Kingdom.

BIRTH RATE IN THE UNITED KINGDOM, 1871 TO 1888.

Births per 1,000 of the Population.			Births per 1,000 of the Population.		
1871	...	35·0	1881	...	32·5
1872	...	34·4	1882	...	32·2
1873	...	34·1	1883	...	31·8
1874	...	34·5	1884	...	32·1
1875	...	34·0	1885	...	31·3
1876	...	34·9	1886	...	31·3
1877	...	34·5	1887	...	30·3
1878	...	34·1	1888	...	29·6
1879	...	33·5			
1880	...	32·7	Mean	...	32·9

526. The following table shows the births and birth rates, together with the estimated mean population in the metropolis, the extra-metropolitan towns, and the country districts of Victoria during 1889; also the average birth rates in the same divisions during the five years ended with 1885:—

Birth rates in town and country, 1889.

BIRTHS IN URBAN AND COUNTRY DISTRICTS, 1889.

Districts.	Estimated Mean Population, 1889.	Births.		
		Total Number, 1889.	Number per 1,000 of the Population.	
			1889.	Annual Mean, 1881 to 1885.
Melbourne and suburbs (Greater Melbourne)	445,220	16,934	38·04	33·50
Extra-Metropolitan towns	196,400	6,547	33·34	32·54
Country Districts	462,680	12,878	27·83	27·82
Total	1,104,300	36,359	32·92	30·74

* Mean of four years.

Birth rates
in town and
country,
1873 to 1889.

527. The next table shows the number of births per 1,000 of the population of the same three divisions of the colony during each of the last seventeen years:—

BIRTH RATES IN URBAN AND COUNTRY DISTRICTS, 1873 TO 1889.

Year.	Number of Births per 1,000 of the Population.			
	Greater Melbourne.	Extra-Metropolitan Towns.	Country Districts.	Total of Victoria.
1873 ...	34·36	40·18	36·32	36·71
1874 ...	32·98	39·81	32·46	34·46
1875 ...	33·63	38·63	31·54	33·94
1876 ...	33·20	37·80	31·61	33·61
1877 ...	33·09	34·51	30·30	32·17
1878 ...	33·67	35·42	29·89	32·36
1879 ...	33·32	35·65	29·63	32·18
1880 ...	31·19	34·21	28·72	30·75
1881 ...	32·42	34·76	28·70	31·24
1882 ...	32·85	31·35	27·43	30·05
1883 ...	33·15	32·07	27·22	30·23
1884 ...	33·81	32·80	27·78	30·89
1885 ...	34·94	31·87	28·00	31·27
1886 ...	34·82	31·76	27·87	31·23
1887 ...	37·24	33·30	27·72	32·40
1888 ...	37·30	32·23	28·09	32·49
1889 ...	38·04	33·34	27·83	32·92

Results
compared

528. It will be noticed that in the first two years of the period to which the table refers the birth rate of the country districts was about equal to that of the metropolis, whilst the birth rate of the extra-metropolitan towns was very much higher than either. Since 1874, however, the metropolitan rate has been much above that of the country districts, but until 1882 was still below that of the extra-metropolitan towns. In 1882 and the subsequent years, however, owing to a general falling-off in the birth rate of the extra-metropolitan towns and in the country districts, and a gradual increase in that of the metropolis, the rate in the last-named division was much above that in other urban districts. It will also be noticed that, in 1889, the birth rate in the metropolis was higher than in any previous year, and in the extra-metropolitan towns it was higher than in any year since 1881, but only slightly higher than in 1887; whilst in the country districts it was lower than in 1888, but was about equal to the average of the last six years.

Birth rates
in metro-
politan sub-
districts.

529. The mean population, the number of births, and the birth rate during 1889; also the mean annual birth rate during the five years, 1881 to 1885, in the different municipalities, etc., forming

the component parts of the district of Greater Melbourne, are shown in the following table:—

BIRTHS IN GREATER MELBOURNE.

Sub-districts.	Estimated Mean Population, 1889.	Births.		
		Total Number, 1889.	Number per 1,000 of the Population.	
			1889.	Annual Mean, 1881 to 1885.
Melbourne City	73,890	1,762	23·85	25·49
North Melbourne Town	21,475	965	44·94	38·32
Fitzroy City	31,780	1,153	36·28	34·70
Collingwood City	33,790	1,349	39·92	37·35
Richmond City	36,610	1,553	42·42	35·93
Brunswick Town	17,915	870	48·56	42·27
Northcote Borough	5,800	273	47·07	32·66
Prahran City	35,600	1,337	37·56	31·93
South Melbourne City	41,820	1,399	33·45	34·87
Port Melbourne Borough	12,480	517	41·43	41·18
St. Kilda Borough	18,187	528	29·03	25·35
Brighton Town	8,596	335	38·97	28·97
Essendon Town*	10,215	385	37·69	} 32·88
Flemington & Kensington Borough	8,664	373	43·05	
Hawthorn Town	15,440	587	38·02	29·82
Kew Borough	5,620	183	32·56	24·20
Footscray Town	14,940	757	50·67	42·50
Williamstown Town	13,620	540	39·65	35·35
Remainder of district	33,410	1,312	39·27	29·72
<hr/>				
<i>Hospitals, Asylums, etc.</i> †	3,890	756	1·70‡	...
Shipping in Hobson's Bay and River	1,478	...	...	...
<hr/>				
Total	445,220	16,934	38·04	33·50

NOTE.—It should be specially noted that the births in Public Institutions are eliminated from the individual sub-districts, although included in the total line.

530. It will be observed that during the five years ended with 1885 the births in three municipalities, viz., Brunswick, Port Melbourne, and Footscray, averaged above 40 per 1,000 of the population; that in four municipalities, viz., North Melbourne, Collingwood, Richmond, and Williamstown, they were between 35 and 40 per 1,000; in five municipalities, viz., Fitzroy, Northcote, Prahran, South Melbourne, and Essendon and Flemington, they were between 30 and 35 per 1,000; and that in five municipalities, viz., Melbourne City, St. Kilda, Brighton, Hawthorn, and Kew, as also in "Remainder of District,"

Birth rates
in sub-dis-
tricts, 1881
to 1885.

* Essendon (Borough) was proclaimed a Town on the 7th January, 1890.
† The population given is that of all the institutions, but the Lying-in Hospital is the only one in which births occurred.
‡ Per 1,000 of the population of the whole of Melbourne and Suburbs.

they were below 30 per 1,000. The lowest rate was in Kew, viz., only a fraction over 24 per 1,000.

Birth rates
in sub-dis-
tricts, 1889.

531. During 1889, the birth rates in all the sub-districts except Melbourne and South Melbourne cities, were higher than they were in the five years ended with 1885, but this was more particularly noticeable in North Melbourne, Richmond, Brunswick, Northcote, Prahran, Brighton, Essendon and Flemington, Hawthorn, Kew, Footscray, and the "Remainder of District." The sub-district with the highest birth rate in 1889 was Footscray, with 51 per 1,000, which was followed by Brunswick, Northcote, North Melbourne, Flemington, Richmond, and Port Melbourne; in all of which the rates were above 40 per 1,000; those with the lowest rates were Melbourne City and St. Kilda, in which the rates were below 30 per 1,000.

Births in
Austral-
asian
capitals.

532. In 1889, the birth rate in Melbourne was lower than that in Brisbane or Perth, but above that in Sydney, Adelaide, Wellington, or Hobart, as is shown in the following table, which gives, for that year, a statement of the estimated population and the number of births, and number per 1,000 of the population, in each of those capital cities:—

BIRTHS IN AUSTRALASIAN CAPITAL CITIES, 1889.

Capital Cities.*	Estimated Mean Population.	Births, 1889.	
		Total Number.	Number per 1,000 of the Population.
Brisbane	91,300	3,963	43·41
Perth	9,000	363	40·33
Melbourne	445,220	16,934	38·04
Sydney	374,207	13,344	35·66
Adelaide	120,600	4,239	35·15
Wellington	32,050	981	30·61
Hobart	35,043	1,054	30·08

Birth rate
in London.

533. The average birth rate in the Australasian capital cities in 1889 was 36·2, that being a fraction higher than the rate in London, according to the average of the ten years 1876-85, viz., 34·7, which was a fraction higher than that of England and Wales (34·4) during the same period. The rate in London was thus higher than that in

* With suburbs.

Wellington or Hobart, but below that in any of the other Australasian cities named in the last table.

534. In the five years ended with 1885 the mean birth rate of the principal towns of Scotland was 36·07; of the large towns, 35·52; and of the small towns, 33·50. All these rates are much below the mean birth rate of the Australasian capital cities or than the birth rate of Melbourne.

Birth rates
in Scotch
towns.

535. By comparing the following statement of the birth rates in British towns during 1887 with the figures in the last column of the last table, it will be found that the birth rate is higher in Brisbane than in any of those towns; in Perth, than in any except Cardiff; in Melbourne, than in any except Cardiff, Newcastle, and Preston; and Sydney and Adelaide, than in any except those towns and Glasgow, Portsmouth, Manchester, and Blackburn; whilst the birth rates in Wellington and Hobart are lower than in any of the towns in the list except Derby, Bristol, Edinburgh, Halifax, Dublin, Bradford, Huddersfield, and Brighton:—

Birth rates
in British
towns.

BIRTH RATES IN BRITISH TOWNS, 1887.

Births per 1,000 of the Population.			Births per 1,000 of the Population.		
Cardiff	...	41·1	28 British Towns	...	32·2
Newcastle	...	39·1	Salford	...	31·9
Preston	...	38·5	Birmingham	...	31·8
Glasgow	...	37·0	London	...	31·7
Portsmouth	...	36·8	Plymouth	...	31·5
Manchester...	...	35·9	Oldham	...	31·3
Blackburn	...	35·8	Liverpool	...	31·2
Sunderland...	...	34·6	Derby	...	30·0
Norwich	...	33·9	Bristol	...	29·7
Nottingham	...	33·3	Edinburgh...	...	29·3
Wolverhampton	...	33·2	Halifax	...	28·4
Sheffield	...	32·9	Dublin	...	28·0
Leicester	...	32·8	Bradford	...	27·7
Bolton	...	32·5	Huddersfield	...	27·7
Birkenhead...	...	32·5	Brighton	...	25·8

536. Comparing the birth rates in the following Foreign towns (including two in British India), with those in the capital cities of Australasia, it will be found that the birth rate in Brisbane is above that in any of the towns named; the birth rate in Perth is above that in all but 3, in Melbourne above all but 8, in Sydney and Adelaide above all but 12, in Wellington above all but 16, and in Hobart above all but 17, of the towns:—

Birth rates
in Foreign
towns.

BIRTH RATES IN FOREIGN TOWNS, 1880.

Births per 1,000 of Population.			Births per 1,000 of Population.		
Alexandria ...	...	42·9	Dresden ...	...	34·5
Madras (1887) ...	...	41·2	Christiania ...	...	33·7
Buda-Pesth ...	...	40·6	Berlin (1889) ...	...	32·8
Hamburg (State) ...	...	39·5	Brussels ...	...	31·2
The Hague ...	...	39·3	New York ...	...	30·4*
Rotterdam ...	...	38·3	Turin ...	...	29·8
Vienna ...	...	38·3	Boston (1883) ...	...	28·3
Munich ...	...	38·2	Paris (1887)...	...	27·2
Rome ...	...	37·3	Venice ...	...	23·9
Copenhagen ...	...	36·8	Geneva ...	...	22·9
Breslau ...	...	36·7	Bombay ...	...	20·0
Amsterdam ...	...	36·6	altimore (1889) ...	...	18·7

Birth rates
in Victorian
towns.

537. The following are the birth rates in six Victorian towns during 1889; the rate in the metropolis being, as will be observed, below that in Stawell, but above that in Sandhurst, Geelong, Ballarat, or Castlemaine:—

BIRTH RATES IN SIX VICTORIAN TOWNS, 1889.

Births per 1,000 of Population.			Births per 1,000 of Population.		
Stawell ...	...	51·62	Geelong ...	...	37·18
Melbourne ...	...	38·04	Ballarat ...	...	32·15
Sandhurst ...	...	37·84	Castlemaine ...	...	24·84

Births of
males and
females.

538. The births of males in Victoria during 1889 numbered 18,713, those of females 17,646. These numbers furnish a proportion of 106·05 boys to 100 girls, which is an exceptionally high proportion, it having been exceeded only twice in the last 17 years, viz., in 1878, when the proportion was as high as 107·19, and in 1885, when it was 106·44.† In 1888, the proportion was only 104·33, and in 1887, 104·39; whilst in the ten years 1871-80, 137,275 births of males and 131,435 births of females were registered, giving a proportion of 104·45 boys to 100 girls.

Births of
males and
females in
Austral-
asian
colonies.

539. In every country in which births are registered, it is found that more boys are born than girls. This was the case in all the Australasian colonies during the period of seventeen years ended with 1889, although not in every one of those years so far as Western Australia and Tasmania are concerned. The following are the

* The number of births registered in New York would give a proportion of 22·8 per 1,000 of the population, but it is officially stated that the registered births are 25 per cent. below the actual number which take place, so that the correct proportion is as here stated.

† See table following paragraph 539 *post*.

numbers of boys per 100 girls born in the respective colonies during each year of the period referred to :—

PROPORTION OF MALE TO FEMALE BIRTHS IN AUSTRALASIAN COLONIES, 1873 TO 1889.

Year.	Number of Boys to 100 Girls Born.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1873 ...	102·65	104·38	106·13	102·77	109·04	98·44	103·48
1874 ...	103·94	104·31	105·74	103·44	103·25	107·02	106·83
1875 ...	104·95	102·08	104·01	103·85	98·95	109·51	107·80
1876 ...	105·76	102·47	105·26	101·08	106·76	111·48	106·01
1877 ...	104·19	106·34	106·78	102·91	101·32	105·04	104·59
1878 ...	107·19	106·83	103·89	107·14	101·15	105·52	101·57
1879 ...	104·69	105·71	103·36	102·53	117·59	99·11	105·93
1880 ...	104·44	104·99	103·63	110·98	92·37	101·56	104·71
1881 ...	104·99	105·59	106·64	106·48	108·07	107·41	104·90
1882 ...	103·63	103·23	107·55	106·36	110·64	104·81	104·46
1883 ...	105·04	104·89	106·17	103·29	104·64	110·42	105·17
1884 ...	105·98	105·37	102·25	104·40	106·42	103·37	104·28
1885 ...	106·44	104·88	102·50	101·57	108·00	104·36	103·59
1886 ...	104·53	106·35	102·51	104·48	115·90	108·99	104·72
1887 ...	104·39	103·09	105·24	109·70	103·26	106·63	103·35
1888 ...	104·33	103·74	105·05	109·82	107·38	98·71	104·10
1889 ...	106·05	107·45	107·15	105·05	107·28	105·13	106·38

540. In the Australasian colonies, taken as a whole, the proportion during the five years ended with 1889 was 105·5 male to 100 female infants. In the different colonies, the proportions ranged from 108·4 males per 100 females in Western Australia to 104·4 males per 100 females in New Zealand and Queensland. The following is the order of the colonies in respect to these proportions :—

Order of colonies in respect to sexes of those born.

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF MALE TO FEMALE BIRTHS, 1885 TO 1889.

Boys to 100 Girls.			Boys to 100 Girls.		
Western Australia	...	108·36	Queensland ...	...	104·49
South Australia	...	106·12	New Zealand	...	104·43
Victoria	...	105·15			
New South Wales	...	105·10	Mean ...	...	105·49
Tasmania	...	104·76			

541. The proportions of male to female births in the countries included in the following list have been derived from official sources. The averages for the Australasian colonies extend over the ten years

Births of males and females in certain countries.

1878 to 1887, and those for the other countries named extend over periods of various lengths :—

PROPORTION OF MALE TO FEMALE BIRTHS IN VARIOUS COUNTRIES.

Boys to 100 Girls.			Boys to 100 Girls.		
Greece	...	112·0	Scotland	...	105·7
Roumania	...	111·0	Ireland	...	105·6
Connecticut	...	110·0	Tasmania	...	105·3
Italy	...	107·1	Victoria	...	105·1
Spain	...	107·0	New South Wales	...	105·1
Western Australia	...	106·8	Sweden	...	105·0
Austria	...	106·8	Denmark	...	105·0
France	...	106·4	Russia in Europe	...	105·0
Switzerland	...	106·3	Finland	...	105·0
German Empire	...	106·2	Vermont	...	105·0
Holland	...	106·1	Rhode Island	...	105·0
Norway	...	106·0	Queensland	...	104·4
Servia	...	106·0	New Zealand	...	104·3
Massachusetts	...	106·0	England and Wales	...	104·3
Belgium	...	105·9	Russian Poland	...	104·1
South Australia	...	105·7			

Australasian and other countries compared.

542. It will be observed that the proportion of boys born to girls is in Western Australia below that in 5, and in South Australia below that in 14 countries out of Australasia; whilst the proportion in Tasmania, Victoria, and New South Wales, is above that in only 8, and in Queensland and New Zealand, above that in only 2 of such countries.

Low proportion of boys born in England.

543. In England and Wales the proportion of boys born to girls is not only lower than that in any other European country, except Russian Poland (of which the statistics are of doubtful authenticity), but it has for years past had a tendency to diminish. The proportion given in the table (104·3) is for the fifty years ended with 1887, but in the ten years ended with that year, it was only 103·8. The Registrar of England states he is unable to offer any explanation of that “curious fact.*”

Twins and triplets.

544. In 1889, 381 twin births and 1 triple birth were registered, as against 374 twin births and 3 triple births in 1888. In the five years ended with 1885, 1,105 cases of twins and 10 cases of triplets were recorded, the total number of births in the same period having been 140,258. There were thus 139,133 confinements in the five years, and it follows that 1 mother in every 126 gave birth to twins, and 1 mother in every 13,913 was delivered of three children at a

* See 43rd Report of the Registrar-General of England, page xvi.

birth. Moreover, during the decade 1871 to 1880, 1 mother in every 111, on the average, gave birth to twins, and one in every 12,796 was delivered of three children at a birth.

545. It appears that only three of the Australasian colonies besides Victoria distinguish the double and treble births in their returns. The following are the numbers of such births in each of the four colonies during each of the six years ended with 1888:—

Twins and triplets in Australasian colonies.

Twins and Triplets in Australasian Colonies, 1883 to 1888.

Year.	Victoria.		New South Wales.		Queensland.		New Zealand.	
	Twins.	Triplets.	Twins.	Triplets.	Twins.	Triplets.	Twins.	Triplets.
1883	183	...	287	2	103	...	...	...
1884	239	4	288	4	94	...	188	2
1885	237	1	306	2	115	...	161	1
1886	236	...	330	1	114	1	165	...
1887	285	3	310	1	105	...	185	3
1888	374	3	363	2*	130	1	192	1

546. The following figures purport to express the proportions of twins and triplets to the total births in different countries over a series of years; but as they have not in all cases been derived from official sources, they must be taken only for what they may be worth. The countries are arranged in order, according to the proportion of the births said to occur in each:—

Twins and triplets in various countries.

Twins and Triplets in Various Countries.

Countries.			Per 1,000 Births.		Countries.			Per 1,000 Births.	
			Cases of Twins.	Cases of Triplets.				Cases of Twins.	Cases of Triplets.
Ireland	...	17·6	...	...	Norway	...	11·8	·15	...
Iceland	...	14·2	·33	...	Scotland	...	11·7	...	...
Denmark	...	13·7	·24	...	England	...	11·2	...	...
Sweden	...	13·6	·18	...	France	...	10·1	·12	...
Austria	...	13·4	·18	...	Belgium	...	9·1	·10	...
Germany	...	12·9	·13	...	Queensland	...	9·1	·012	...
Holland	...	12·8	...	...	New Zealand	...	8·96	·077	...
Russia	...	12·1	...	...	New South Wales	...	8·75	·058	...
Switzerland	...	12·0	...	...	Spain ...	...	8·4	...	...
Italy ...	...	11·8	·14	...	Victoria	...	7·85	·053	...

NOTE.—Some of the figures in this table have been taken from Mulhall's *Dictionary of Statistics*, page 50.

* Including one case of quartettes.

Results in
different
countries
compared.

547. In proportion to the total number of births, fewer births of twins appear to occur in Victoria than in any of the other countries named; moreover, all the Australasian colonies stand low on the list. Ireland, it will be observed, stands at the head of the list, whilst England and Scotland have—except the Australasian colonies—only three countries below them. There are no records of treble births in Ireland, Holland, Russia, Switzerland, Scotland, England, or Spain, although doubtless some occur in those countries, where it is possible they are included with the twin births.

Illegitimate
births.

548. The illegitimate children born in 1889 numbered 1,809, or 1 to every 20 births registered, as against a proportion of 1 to every 21 in each of the three preceding years. In the five years, 1881-85, out of 140,258 infants born, 6,491 were traced as having been born out of wedlock, which numbers furnish a proportion of 1 illegitimate child to every 22 births, as compared with an average during the ten years ended with 1880 of 1 to every 27 births.*

Women
living in
concubi-
nage.

549. It was shown in a previous table† that the legitimate births registered in each of the last two census years were in the proportion of $302\frac{2}{3}$ to every 1,000 married women living at the reproductive period of life. It follows, therefore, from the number of legitimate births registered in 1889, that, approximately, 114,200 married women at the fruitful or child-bearing age were living in the colony during that year. Assuming that the illegitimate births bear the same proportion to unmarried women, it also follows, from the number of such births in 1889, that, exclusive of public prostitutes (who, as they rarely have children, are omitted from the computation), at least 5,977 single women at the fruitful or child-bearing ages were living in concubinage. If from the total number of women in the colony between the ages of 15 and 45—estimated to be nearly 253,700—be deducted the approximate number of married women above referred to, viz., 114,200, the difference will give 139,500 as the number of unmarried women and widows at those ages. It therefore follows that 1 out of every 23 of these was living immorally.

Illegitimacy
and concu-
binage,
1873 to
1889.

550. The following table gives a statement of the number of illegitimate births and their proportion to the total number registered;

* For many reasons, statistics of illegitimacy generally understate the truth.—See remarks upon the subject in the *Victorian Year-Book*, 1877-8, paragraph 259.

† See table following paragraph 515 *ante*.

also the estimated number of women living in concubinage, and their proportion to the total number of single women at reproductive ages living, in Victoria, according to the returns of the last seventeen years:—

ILLEGITIMACY AND CONCUBINAGE, 1873 TO 1889.

Year.	Illegitimate Births.		Women Living in Concubinage (exclusive of Public Prostitutes).	
	Total Number.	Percentage of Total Births.	Estimated Total Number.	Number per 100 Single Women between 15 and 45 Years of Age Living in Victoria.
1873	893	3.18	2,951	4.54
1874	984	3.67	3,251	4.41
1875	779	2.92	2,573	3.36
1876	975	3.64	3,221	4.02
1877	1,010	3.88	3,337	3.85
1878	1,103	4.15	3,644	4.20
1879	1,304	4.86	4,308	4.78
1880	1,254	4.80	4,143	4.39
1881	1,382	5.09	4,551	4.49
1882	1,271	4.75	4,200	3.91
1883	1,292	4.69	4,268	3.72
1884	1,238	4.29	4,090	3.46
1885	1,308	4.36	4,320	3.54
1886	1,465	4.75	4,840	3.87
1887	1,580	4.78	5,214	4.12
1888	1,658	4.81	5,475	4.12
1889	1,809	4.98	5,977	4.28
Means	1,253	4.33	4,139	4.06

551. All the Australasian colonies, except Western Australia, now publish statistics of illegitimacy. According to these, which possibly may not in every case represent the whole truth,* illegitimacy, over a series of years, was most rife in New South Wales, next in Victoria, next in Tasmania, next in Queensland, and least of all in South Australia and New Zealand, and in 1889 the same order prevailed except that the rate in Tasmania was lower than in Queensland. In most of the colonies, so far as figures are available, illegitimacy appears to have a tendency to increase. The following table shows the percentage of illegitimate to the total births, in the five colonies which publish the information, during a series of years:—

Illegitimacy
in Austral-
asian
colonies.

* See footnote to paragraph 548 *ante*.

ILLEGITIMACY IN AUSTRALASIAN COLONIES, 1872 to 1888.

Year.			Illegitimate Births to every 100 Children Born.					
			Victoria.	New South Wales.	Queensland.	South Australia.	Tasmania.	New Zealand.
1872	...	...	2.99	4.03	2.92	...	...	...
1873	...	...	3.18	4.15	2.71	...	...	1.42
1874	...	...	3.67	4.22	2.76	...	...	1.30
1875	...	...	2.92	4.20	3.43	...	...	1.36
1876	...	...	3.64	4.08	3.21	...	...	2.23
1877	...	...	3.88	4.14	3.64	...	...	2.08
1878	...	...	4.15	4.03	3.68	...	...	2.41
1879	...	...	4.86	4.51	4.31	...	...	2.30
1880	...	...	4.80	4.35	4.31	...	...	2.43
1881	...	...	5.09	4.26	4.20	2.25	...	2.85
1882	...	...	4.75	4.24	4.40	2.25	4.40	2.87
1883	...	...	4.69	4.24	3.66	1.75	3.96	2.78
1884	...	...	4.29	4.40	4.05	2.10	4.46	2.96
1885	...	...	4.36	4.60	4.08	2.42	4.55	3.20
1886	...	...	4.75	4.65	3.97	2.38	4.13	3.12
1887	...	...	4.78	4.59	4.49	2.49	3.40	3.22
1888	...	...	4.81	5.08	4.13	2.67	3.62	3.05
Means	...	...	4.21	4.34	3.76	2.29	4.07	2.47

Concubinage in Australasian colonies.

552. A calculation, based upon the illegitimate births which occurred in the census year, shows that of the four colonies which then published statistics of these occurrences concubinage was most rife in Queensland, next in New South Wales, and next in Victoria and New Zealand, there being only a slight difference between the two last-named colonies. In the following table the colony in which the largest proportion of concubinage existed is placed first, and that in which the smallest proportion existed last:—

CONCUBINAGE IN AUSTRALASIAN COLONIES, 1881.

Colony.	Single Women between 15 and 45 Years of age.	Illegitimate Births, 1881.	Single Women living in Concubinage (exclusive of Public Prostitutes).	
			Total Number.	Number per 100 Single Women, between 15 and 45.
1. Queensland ...	15,441	345	1,059	6.86
2. New South Wales	71,085	1,263	3,665	5.16
3. Victoria ...	101,451	1,382	4,551	4.49
4. New Zealand ...	38,659	534	1,686	4.36

Proportion of concubinage in each colony.

553. The figures in the last column show the proportions which the single women leading a sexually immoral life, without being public prostitutes, bore to the whole number of single women at the

fruitful period of life in each of the four colonies. These proportions will, perhaps, be better understood if expressed in another manner as follow :—

In Queensland	1 single woman in 13	was living immorally.
In New South Wales	„ „	19 „ „
In Victoria	„ „	22 „ „
In New Zealand	„ „	23 „ „

554. Illegitimacy in England and Wales appears to be commoner than, and in Scotland twice as rife as, it is in any of the Australasian colonies named. In Ireland, on the other hand, it seems to be less prevalent than in any of those colonies except South Australia or New Zealand. This will be observed by comparing the following table with the previous one :—

Illegitimacy in United Kingdom.

ILLEGITIMACY IN ENGLAND, SCOTLAND, AND IRELAND,
1871 TO 1888.

Year.			Illegitimate Births to every 100 Children born.		
			England and Wales.	Scotland.	Ireland.
1871	...	...	5·6	9·5	2·7
1872	...	...	5·4	9·1	2·5
1873	...	...	5·2	9·0	2·4
1874	...	...	5·0	8·7	2·3
1875	...	...	4·8	8·6	2·3
1876	...	...	4·7	8·6	2·3
1877	...	...	4·7	8·4	2·4
1878	...	...	4·7	8·4	2·3
1879	...	...	4·8	8·5	2·5
1880	...	...	4·8	8·4	2·5
1881	...	...	4·9	8·3	2·5
1882	...	...	4·9	8·1	2·7
1883	...	...	4·8	8·1	2·6
1884	...	...	4·7	8·1	2·7
1885	...	...	4·8	8·5	2·8
1886	...	...	4·7	8·2	2·7
1887	...	...	4·8	8·3	2·8
1888	...	...	4·6	...	2·9
Means	...	...	4·9	8·5	2·5

555. The following figures, taken from various sources, show certain countries arranged in order according to the extent of illegitimacy prevailing in each, the proportion of illegitimate births being also shown :—

Illegitimacy in various countries.

ILLEGITIMACY IN VARIOUS COUNTRIES.

Country.	Illegitimate Births to every 100 Children Born.	Country.	Illegitimate Births to every 100 Children Born.
Austria ...	12·9	England ...	4·9
Denmark ...	11·2	Switzerland ...	4·6
Sweden ...	10·2	New South Wales ...	4·3
Scotland ...	8·5	Victoria ...	4·2
Norway ...	8·5	Tasmania ...	4·2
Germany ...	8·4	Queensland ...	3·7
France ...	8·1	Holland ...	3·5
Belgium ...	7·0	Russia ...	3·1
Italy ...	6·8	Ireland ...	2·5
Portugal ...	5·6	New Zealand ...	2·4
Spain ...	5·5	Greece ...	1·6

Position of Victoria in respect to illegitimacy.

556. According to the figures, more illegitimacy prevails in Austria and less in Greece than in any other countries. In Victoria, illegitimacy appears to be less prevalent than in fourteen and more so than in six of the countries.

Illegitimacy in town and country.

557. It will be readily supposed that a larger proportion of illegitimacy prevails in Melbourne and suburbs than in any other district of Victoria, and that the proportion in the country districts is the smallest of all. In 1889, in the metropolitan district about 1 birth in 14, in the extra-metropolitan towns 1 birth in 23, but in country districts only 1 birth in 39 was registered as illegitimate. In the previous year the proportions were 1 in 15, 1 in 22, and 1 in 42 respectively.

Illegitimacy in large cities.

558. By the following figures, which, with the exception of those for Melbourne, have been taken from the annual report for 1886 of the Statistical Department of the Argentine Republic,* it would appear that illegitimacy is less rife in the capital of this colony than in any of the foreign cities named:—

ILLEGITIMACY IN LARGE CITIES.

	Illegitimate Births to every 1,000 Children Born.		Illegitimate Births to every 1,000 Children Born
Vienna ...	449	Leipsic ...	211
Prague ...	439	Dresden ...	208
Munich ...	439	Milan ...	204
Stockholm ...	396	Rome ...	194
Moscow ...	300	Venice ...	189
Buda-Pesth ...	299	Breslau ...	186
Copenhagen ...	279	Bucharest ...	175
Paris ...	268	Liége ...	174
St. Petersburg ...	236	Christiana ...	162
Trieste ...	211	Stuttgart ...	160

* *Procedimientos del Departamento Nacional de Estadística*, 1886, page 87. Buenos Aires, 1887.

ILLEGITIMACY IN LARGE CITIES—*continued*.

Illegitimate Births to every 1,000 Children Born.			Illegitimate Births to every 1,000 Children Born.		
Berlin	...	154	Palermo	...	101
Ghent	...	144	The Hague	...	90
Hamburg	...	138	Naples	...	89
Frankfort	...	132	Rotterdam	...	76
Turin	...	132	Buenos Aires...	...	74
Antwerp	...	129			
Cologne	...	124	Melbourne	...	69

559. To ascertain the relative fruitfulness of women in different countries, it is necessary to compare the number of married women at the reproductive ages with the legitimate births. This can be done in the case of Victoria, New South Wales, Queensland, South Australia, and New Zealand; but not in that of the other two Australasian colonies, as in the returns of the latter no distinction was made at the time the census was taken between the infants born in and those born out of wedlock. By means of such a comparison in regard to the five colonies named, it would appear that the highest degree of fecundity exists in New South Wales, and the lowest in Victoria, this being probably owing to the fact that the married women are, on the average, younger in the former and older in the latter than in the other two colonies. The following table shows the number of married women under 45 years of age, the number of legitimate births in the census year, and the proportion of such births to such women in each of the four colonies :—

PROPORTION OF BIRTHS TO MARRIED WOMEN IN AUSTRALASIAN COLONIES.*

Colony.	Married Women under 45 Years of age.	Legitimate Births, 1881.	
		Total Number.	Number per 100 Married Women under 45.
1. New South Wales ...	80,473	27,730	34.46
2. South Australia ...	31,799	10,467	32.92
3. Queensland ...	24,183	7,875	32.56
4. New Zealand ...	57,464	18,198	31.67
5. Victoria ...	84,831	25,763†	30.37 †

560. Another method of determining the fecundity of women is to find the average number of children born to a marriage, which may

* The Government Statistician of Tasmania gives the proportion of births—including illegitimate births—to married women under 45 years in that colony in 1881 as 347 per 1,000, as compared with 326 per 1,000 in New Zealand, and 309 per 1,000 in Victoria, during the same year.

† In consequence of the births here quoted being those for the calendar year, these figures differ slightly from those in table following paragraph 515 *ante*.

be ascertained approximately by dividing the legitimate births in any year by the number of marriages in the preceding year. The following is the result of such a calculation for Victoria during the sixteen years ended with 1889:—

CHILDREN TO A MARRIAGE, 1874 TO 1889.

Year.			Legitimate Births.	Marriages in Year prior to that named in first Column.	Average Number of Children to a Marriage.
1874	...	...	25,816	4,974	5·19
1875	...	...	25,941	4,925	5·27
1876	...	...	25,794	4,985	5·17
1877	...	...	25,000	4,949	5·05
1878	...	...	25,478	5,103	4·99
1879	...	...	25,535	5,092	5·01
1880	...	...	24,894	4,986	4·99
1881	...	...	25,763	5,286	4·87
1882	...	...	25,476	5,896	4·2
1883	...	...	26,249	6,309	4·16
1884	...	...	27,612	6,771	4·08
1885	...	...	28,667	7,218	3·97
1886	...	...	29,359	7,395	3·97
1887	...	...	31,463	7,737	4·07
1888	...	...	32,845	7,768	4·23
1889	...	...	34,550	8,946	3·86
Sums and Mean ...			440,442	98,340	4·48

561. The figures show a steady diminution in the proportion of children born, amounting—notwithstanding a slight revival in 1887 and 1888—in the sixteen years to a child and a third per marriage, or four children to every three marriages. It is evident that if the births increased with the marriages as they should do, the proportions would remain steady; but this is shown not to be the case. There are, however, many matters affecting the birth rates of infants respecting which it is not possible to obtain precise information. The falling-off shown by the figures in the last column of the table is a result which, although perhaps it cannot be proved, may be conjectured to be owing to the increasing desire on the part of married women to evade the cares of maternity, and the steps taken by them—often, no doubt, with the concurrence of their husbands—to prevent its occurrence.

562. According to this mode of reckoning, it would appear that there are, upon the average, fewer children to a marriage in Victoria than in any of the other Australasian colonies respecting which particulars are at hand. For Western Australia the information cannot be given, as their returns make no distinction between illegitimate children and children born in wedlock:—

Decrease in children to a marriage in Victoria.

Children to a marriage in Australasian colonies.

CHILDREN TO A MARRIAGE IN AUSTRALASIAN COLONIES,
1880 TO 1888.

Year.	Average Number of Children to a Marriage.					
	Victoria.	New South Wales.	Queensland.	South Australia.	Tasmania.	New Zealand.
1880 ...	4.99	5.00	4.89	4.61	...	5.54
1881 ...	4.87	5.48	5.09	4.57	...	5.72
1882 ...	4.32	4.53	4.78	4.59	4.51	5.63
1883 ...	4.16	4.31	4.68	4.34	4.22	5.18
1884 ...	4.08	4.38	4.28	4.57	3.91	5.33
1885 ...	3.97	4.68	4.39	4.60	4.62	5.18
1886 ...	3.97	4.54	4.25	4.46	4.21	4.90
1887 ...	4.07	4.55	4.63	5.34	4.64	5.31
1888 ...	4.23	4.82	4.69	5.17	4.90	5.14
Means	4.29	4.70	4.63	4.69	4.43	5.33

563. It seems that in all the colonies except Tasmania and South Australia there is a tendency for the average number of children to a marriage to decrease in numbers, the proportions in the later years not having been so high as in the earlier years shown in the table. In 1888, however, the proportion was slightly above the average in New South Wales, Queensland, and Tasmania, and very slightly below it in Victoria and New Zealand.

Decrease in children a marriage in each colony.

564. The following statement of the average number of children born to a marriage in certain countries has been derived from various sources. The figures are generally for a series of years. The country having the highest average is placed first in order, and the remainder in succession:—

Children to a marriage in various countries.

CHILDREN TO A MARRIAGE IN VARIOUS COUNTRIES.

Children to each Marriage.			Children to each Marriage.		
Ireland ...	...	5.46	Holland ...	...	4.34
New Zealand ...	...	5.33	Victoria ...	...	4.29
New South Wales ...	...	4.70	Belgium ...	...	4.21
Queensland ...	...	4.63	England ...	...	4.16
Italy ...	...	4.56	Sweden ...	...	4.01
Scotland ...	...	4.43	Denmark ...	...	3.55
Tasmania ...	...	4.43	France ...	...	2.98

565. Ireland is at the head of the list, and New Zealand follows immediately after, but it may be questioned whether the high proportion in the former does not in some degree result from the fact that the registration of marriages there* is more defective than that of

Position of Victoria in reference to births to a marriage.

* See footnote (II) to table following paragraph 456 ante.

births. It will be observed that Ireland, Italy, Scotland, and Holland are the only countries out of Australasia which stand above Victoria.

Surviving children to a family.

566. The foregoing calculations relate to the average number of children born to each married couple, but the eminent statistician, M. Jacques Bertillon, in a paper read before the Statistical Society of Paris on the 10th May, 1888,* has given the following as the average number of children actually surviving in each family in the Department of the Seine at the time the French census of 1886 was taken:—

In every 1,000 families there were—

328 with no child surviving			
270	„	1	„
198	„	2 children	„
106	„	3	„
54	„	4	„
25	„	5	„
12	„	6	„
7	„	7 or more	„

Sterile families.

567. With reference to the startling fact that nearly a third of the families referred to were completely sterile, it will be remembered that this group contains a certain number of couples too recently married to have children; still the proportion appears enormous. It is to be regretted that similar figures relating to other countries are not available for purposes of comparison.

Births in each quarter.

568. According to the registrations, births in Victoria are always most numerous in the winter quarter, and next so in the autumn quarter. The proportion of births in the spring and summer quarters varies in different years, the advantage being generally in favour of the former. The following are the numbers and percentage for 1889, and the percentage for a previous quinquennial and a decennial period:—

BIRTHS IN EACH QUARTER.

Seasons.		Quarter ended on the last day of—	Year 1889.		Percentage in—		
			Number of Births.	Percentage.	Five Years: 1881 to 1885.	Ten Years: 1871 to 1880.	
Summer	...	March	...	8,828	24·28	23·57	23·74
Autumn	...	June	...	8,918	24·53	25·64	25·10
Winter	...	September	...	9,912	27·26	26·62	27·15
Spring	...	December	...	8,701	23·93	24·17	24·01
		Year	...	36,359	100·00	100·00	100·00

* See *Journal de la Société de Statistique de Paris*, 1888, page 174, et seq.

569. In the following table the average proportion of births occurring in each quarter in Victoria during a series of years is compared with that proportion in the opposite, and consequently (so far as seasons are concerned) corresponding quarter in certain countries of the northern hemisphere. The figures for such countries have been taken from Mr. Mulhall's work* :—

Births in each quarter in various countries.

PERCENTAGE OF BIRTHS IN EACH QUARTER IN VARIOUS COUNTRIES.

Countries.	Quarter ending on the last day of—			
	March in Victoria, September in the other Countries.	June in Victoria, December in the other Countries.	September in Victoria, March in the other Countries.	December in Victoria, June in the other Countries.
	Per Cent.	Per Cent.	Per cent.	Per Cent.
Victoria ...	23·6	25·6	26·6	24·2
England ...	24·0	23·8	26·2	26·0
France ...	24·0	24·1	27·0	24·9
Germany ...	25·0	24·9	25·9	24·2
Sweden ...	23·7	25·7	26·8	23·8
Italy ...	23·7	24·7	27·5	24·1
Russia ...	24·7	23·7	25·6	26·0

570. It appears that in most countries the largest number of births take place in what may be called the winter quarter (ending September in Victoria, March in the other countries named), the exception being Russia, in which most births occur in the quarter ending June. Fewest births occur in what may be called the summer quarter (ending March in Victoria, September in the other countries named), except in Germany, where the proportion in the quarter ending June is the smallest, and in England and Russia, where it is the smallest in the quarter ending December.

Quarters in which most and fewest births occur.

571. The deaths registered in 1889 numbered 19,392, as against 16,287 in 1888. The increase in the year under notice was thus 3,105, or 19 per cent.

Deaths, 1889.

572. In 1889 for the first time, the deaths exceeded 19,000; whereas in 1887 and 1888 they did not much exceed 16,000; in 1886 they numbered less than 15,000, but in only one prior year, viz., 1875, did they reach that number.† The high mortality in the last-named year, in which 15,287 deaths were recorded, was due to the prevalence of measles and scarlatina in an epidemic form.

Deaths, 1889 and former years.

* Dictionary of Statistics, page 49.
† For the number of deaths during each year since the first settlement of Port Phillip, see Statistical Summary of Victoria (first folding sheet) in the second volume.

573. The births in 1889 exceeded the deaths by 16,967 or 88 per cent., the corresponding proportion being 112 per cent. in the previous year. The proportion in 1889 was much the lowest recorded in any of the last twenty-four years, except 1875, when it was as low as 75 per cent. In the five years ended with 1885 the proportion averaged 110 per cent.; and in the ten years ended with 1880 it averaged 119 per cent.; whilst during the whole period of twenty-four years ended with 1889 the average was 117 per cent. The following were the births and deaths in each of those twenty-four years, and the excess of the former over the latter :—

EXCESS OF BIRTHS OVER DEATHS, 1866 TO 1889.

Year.	Births.	Deaths.	Excess of Births over Deaths.	
			Numerical.	Centesimal.
				Per Cent.
1866	25,010	12,286	12,724	104
1867	25,608	11,733	13,875	118
1868	27,243	10,067	17,176	171
1869	26,040	10,630	15,410	145
1870	27,151	10,420	16,731	161
1871	27,382	9,918	17,464	176
1872	27,361	10,831	16,530	153
1873	28,100	11,501	16,599	144
1874	26,800	12,222	14,578	119
1875	26,720	15,287	11,433	75
1876	26,769	13,561	13,208	97
1877	26,010	12,776	13,234	104
1878	26,581	12,702	13,879	109
1879	26,839	12,120	14,719	121
1880	26,148	11,652	14,496	124
1881	27,145	12,302	14,843	121
1882	26,747	13,634	13,113	96
1883	27,541	13,006	14,535	112
1884	28,850	13,505	15,345	114
1885	29,975	14,364	15,611	109
1886	30,824	14,952	15,872	106
1887	33,043	16,005	17,038	106
1888	34,503	16,287	18,216	112
1889	36,359	19,392	16,967	88
Total in 24 years	674,749	311,153	363,596	117

574. It will be noticed that the births more than doubled the deaths in all the years except 1875, 1876, 1882, and 1889.

575. Of the Australasian colonies, New Zealand is the one in which the births have always exceeded the deaths by the highest proportion. This is due to the high birth rate and low death rate prevailing in that colony, the latter being no doubt promoted by the salubrity of the

climate of New Zealand, but still more so by the circumstance of the population being spread over the country or dispersed throughout a number of small towns, instead of being to a great extent crowded into a few large cities, as is too much the case in the other colonies. The position of Victoria in regard to the proportionate increase of births over deaths is below any of the other colonies. The following table shows the percentage of excess of births over deaths in each of the Australasian colonies during the respective years 1880 to 1889, both inclusive. The colonies are arranged in order, that with the highest mean percentage being placed first, and that with the lowest last:—

EXCESS OF BIRTHS OVER DEATHS IN AUSTRALASIAN COLONIES,
1880 TO 1889.

Colony.	Excess per Cent. of Births over Deaths.										
	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	Mean of 10 years.
New Zealand ...	256	241	233	217	246	224	215	212	231	220	230
South Australia ...	162	167	147	152	147	202	164	175	180	195	169
New South Wales ...	151	151	132	155	139	129	149	177	168	151	150
Queensland ...	172	148	99	96	56	87	126	162	158	135	124
Tasmania ...	104	126	112	101	130	128	134	119	135	127	122
Western Australia ...	144	144	153	89	55	100	82	122	126	161	118
Victoria ...	124	121	96	112	114	109	106	106	112	88	109

576. In 1889 the percentage of excess of births over deaths in Melbourne was below that in any of the Australasian capital cities except Hobart, as will be seen by the following figures :—

Excess of births over deaths in Australasian capitals.

EXCESS OF BIRTHS OVER DEATHS IN AUSTRALASIAN CAPITAL
CITIES, 1889.

Per cent.			Per cent.		
1. Brisbane ...	...	152	5. Perth ...	...	103
2. Wellington ...	...	142	6. Melbourne ...	...	63
3. Adelaide ...	...	128	7. Hobart ...	...	51
4. Sydney ...	...	111			

577. The following table shows the percentage of excess of births over deaths in certain European countries during each of the five years ended with 1888. The countries are arranged in order according to the means of the quinquennial period shown in the last column, the country with the highest mean being placed first, and the rest in succession :—

Excess of births over deaths in European countries.

EXCESS OF BIRTHS OVER DEATHS IN EUROPEAN COUNTRIES,
1884 TO 1888.

Countries.	Excess per cent. of Births over Deaths.					
	1884.	1885.	1886.	1887.	1888.	Mean of 5 years.
Norway	89	91	92	92	82	89
Denmark	82	82	79	75	61	76
Sweden	71	66	79	84	...	75*
Scotland	72	69	74	67	73	71
England and Wales ...	71	71	69	67	72	70
The Netherlands ...	57	64	58	71	66	63
Prussia	46	48	45	58	64	52
German Empire ...	43	44	42	53	54	47
Belgium	46	49	40	52	45	46
Hungary	47	41	41	31	...	40*
Italy	45	43	29	38	36	38
Switzerland	40	31	34	38	39	36
Ireland	36	28	30	27	28	30
Austria	31	25	29	32	30	29
France	9	10	6	7	5	7

Excess of births over deaths in Australia and elsewhere.

578. It will be observed that deaths bear a much larger proportion to births in all the countries named than they do in any of the Australasian colonies, part of which difference is probably due to the Australian climate being more healthy and the circumstances of the colonies more favourable to longevity, and part to the fact that the countries named contain a larger proportion than the colonies of the young and the very old. In not one of those countries did the births double the deaths in any year of the period. On the other hand, in the Australasian colonies, it is the exception for the births not to double the deaths, and in one of them (New Zealand) it is the exception for the births not to be three times as numerous as the deaths.†

Natural increase of population.

579. In 1889 the population of Victoria increased at the rate of 1·56 per cent. by excess of births over deaths, at which rate, irrespective of immigration, the population would double itself in 45 years. This proportion, however, was the lowest, with one exception, during the last ten years, as will be seen by the following figures:—

INCREASE OF POPULATION BY EXCESS OF BIRTHS OVER DEATHS,
1880 TO 1889.

Per Cent.			Per Cent.		
1880 ... ..	...	1·70	1886 ... ..	...	1·63
1881 ... ..	...	1·73	1887 ... ..	...	1·70
1882 ... ..	...	1·49	1888 ... ..	...	1·76
1883 ... ..	...	1·61	1889 ... ..	...	1·56
1884 ... ..	...	1·66			
1885 ... ..	...	1·65	Mean ... 1·65		

* Mean of 4 years.

† See paragraph 575 ante.

580. Comparing the mean of the nine years ended with 1889 with similar means for the other Australasian colonies during the same period the figures are as follow :—

Natural
increase in
Austral-
asian
colonies.

MEAN ANNUAL INCREASE BY EXCESS OF BIRTHS OVER DEATHS
IN AUSTRALASIAN COLONIES, 1881-1889.

	Per Cent.		Per Cent.
1. New Zealand	... 2·40	5. Western Australia	... 1·94
2. South Australia	... 2·29	6. Tasmania	... 1·90
3. New South Wales	... 2·26	7. Victoria	... 1·64
4. Queensland...	... 2·06		

581. Sir Rawson W. Rawson, in the opening address delivered by him as President of the Statistical Society of London in 1885, gave the following as the mean annual rates of increase by excess of births over deaths in various countries, the averages extending generally over the nineteen years ended with 1883. The countries have here been arranged in order according to the rate of increase shown in each country :—

Natural
increase in
various
countries.

MEAN ANNUAL RATE OF INCREASE BY EXCESS OF BIRTHS OVER
DEATHS IN VARIOUS COUNTRIES.

	Per Cent.		Per Cent.
Servia	... 1·69	Ireland	... ·86
Poland (Russian)	... 1·51	Finland	... ·85
England and Wales	... 1·37	Alsace-Lorraine	... ·80
Russia in Europe	... 1·37	Italy	... ·77
Norway	... 1·36	Greece	... ·76
Saxony	... 1·34	Connecticut	... ·76
Scotland	... 1·33	Austria	... ·74
German Empire	... 1·24	Switzerland	... ·71
Prussia	... 1·23	Rhode Island...	... ·69
Thuringia	... 1·19	Vermont	... ·67
Denmark	... 1·16	Croatia and Slavonia	... ·66
Sweden	... 1·13	Massachusetts	... ·65
Holland	... 1·13	Spain	... ·48
Württemberg	... 1·11	Hungary	... ·48
Baden	... 1·05	Roumania	... ·32
Belgium	... ·91	France	... ·16
Bavaria	... ·89		

582. According to the figures, the rate of natural increase (excess of births over deaths) is a fraction higher in Servia than in Victoria, but with this exception, the rate in every one of the Australasian colonies is higher than in any of the countries named. It will be noticed that England and Wales stands near the head of the list, Scotland lower, and Ireland very much lower, also that in France the rate of natural increase is much below that in any other country.

Results in
various
countries
compared.

583. In Victoria, deaths of males in 1889 numbered 11,064, and deaths of females, 8,328. These numbers furnish a proportion of nearly 75 females to every 100 males, as against 74 per cent. in the

Deaths of
males and
females.

three years 1886-8, and in the five years 1881-5, and a proportion of 75 females to every 100 males in the ten years 1871-80. Females in the total population were in the proportion of 88 to every 100 males during the last three years and during the quinquennium referred to, and of about 87 during the decennium ; therefore at each period more males and fewer females died than their relative numbers in the population might have given reason to expect.

Annual
death rate.

584. The following table shows the estimated mean population of either sex, the number of deaths of either sex, and the death rate of males and females, and of both sexes, during each of the last twenty-nine years :—

ANNUAL DEATH RATE, 1861 TO 1889.

Year.	Estimated Mean Population.		Number of Deaths.		Deaths per 1,000 of the Mean Population.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.*
1861 ...	324,988	214,836	6,124	4,398	18·84	20·47	19·49
1862 ...	322,916	225,164	5,900	4,180	18·27	18·56	18·39
1863 ...	325,680	237,280	5,646	3,856	17·34	16·25	16·88
1864 ...	335,272	251,178	5,202	3,685	15·51	14·67	15·15
1865 ...	347,083	264,135	6,158	4,303	17·74	16·29	17·11
1866 ...	353,941	275,097	7,016	5,270	19·82	19·16	19·53
1867 ...	359,642	284,634	6,613	5,120	18·39	17·99	18·21
1868 ...	367,752	295,340	5,865	4,202	15·95	14·23	15·18
1869 ...	379,396	307,806	6,221	4,409	16·40	14·32	15·47
1870 ...	392,159	321,036	6,114	4,306	15·59	13·41	14·61
1871 ...	403,319	333,686	5,845	4,073	14·49	12·21	13·46
1872 ...	409,081	344,117	6,308	4,523	15·42	13·14	14·38
1873 ...	412,597	352,914	6,565	4,936	15·91	13·99	15·02
1874 ...	416,725	360,931	6,994	5,228	16·78	14·48	15·72
1875 ...	419,779	367,558	8,563	6,724	20·40	18·29	19·42
1876 ...	422,931	373,627	7,716	5,845	18·24	15·64	17·02
1877 ...	427,727	380,878	7,345	5,431	17·17	14·26	15·80
1878 ...	433,153	388,313	7,179	5,523	16·57	14·22	15·46
1879 ...	438,563	395,467	7,033	5,087	16·04	12·86	14·53
1880 ...	446,445	403,898	6,610	5,042	14·81	12·48	13·70
1881 ...	456,107	412,835	7,024	5,278	15·40	12·78	14·16
1882 ...	467,630	422,590	7,900	5,734	16·89	13·57	15·32
1883 ...	478,865	432,117	7,410	5,596	15·47	12·95	14·28
1884 ...	491,720	442,174	7,675	5,830	15·60	13·18	14·46
1885 ...	505,716	452,879	8,300	6,064	16·41	13·39	14·98
1886 ...	522,203	464,891	8,575	6,377	16·42	13·72	15·15
1887 ...	541,070	478,630	9,213	6,792	17·03	14·19	15·70
1888 ...	565,065	496,985	9,385	6,902	16·61	13·89	15·34
1889 ...	587,550	516,750	11,064	8,328	18·83	16·12	17·56
Average of twenty-nine years ..					16·80	14·58	15·78

NOTE.—In 1861, 1866, and 1875, and to a certain extent in the preceding and in the succeeding years, the death rate was swelled by epidemics of measles and scarlatina.

* The total mean population and the total deaths in each year may be obtained by taking the sum of the figures in the male and female columns.

585. It will be noticed that in all the years, except 1861 and 1862, death bore more hardly upon males than upon females. The figures in the lowest line of the table show that, over a period of twenty-nine years, the deaths of males per 1,000 of the same sex living exceeded by 2 the deaths of females per 1,000 of that sex living.

Male and
female
death rate
compared.

586. In countries in which the climate is healthy, hygiene properly attended to, and the population in a normal condition as regards age, the ordinary mortality incident to human nature would probably cause the death rate to be in the proportion of about 17 per 1,000 persons living. It should, however, be borne in mind that death rates based merely upon the total population, in common with birth and marriage rates, calculated upon a like basis, are not always fair tests of the state of a community. If the proportion of very young or old people is high, the death rate will also be high; but if, on the other hand, the number of persons at the middle ages is excessive, the death rate will be low. It will be remarked that the mortality exceeded 17 per 1,000 eight times in the twenty-nine years named in the table, but over the whole period it has averaged below 16 per 1,000. In the last thirteen years it has only once been so high as 16 per 1,000, whilst in six of those years it was below 15 per 1,000, in one being even below 14 per 1,000.

Normal
death rate.

587. In 1871 the death rate of both males and females was the lowest recorded during the whole period of twenty-eight years, after which and the death rate in 1880 the next lowest death rate was in 1881; it thus happened that the last two census years, viz., 1871 and 1881, were years of exceptionally low mortality. Such a circumstance occurring at two successive census periods is apt to mislead those who attempt, without due allowance, to base conclusions upon the relation which exists between the number of deaths and the population of the colony, as derived from the results of the census years alone.

Low mor-
tality in
census
years 1871
and 1881.

588. In 1889, the death rate of males was about the same as in 1861, but was higher than in any other year since 1860, except 1866 and 1875; that of females was lower than in the years 1861 to 1863, 1865 to 1867, or than in 1875, but higher than in the other years of the period. Taking the mean of the two sexes, the death rate in 1889 was nearly 2 per 1,000 above the average, and was higher than that in any previous years of the period referred to in the table, except 1861, 1862, 1866, 1867, and 1875.

Death rate
1889 and
previous
years.

589. The proportion which the deaths that occurred in each Australasian colony bore to the total population of that colony during each of the twenty-five years from 1865 to 1889 will be found in the following table:—

DEATH RATES IN AUSTRALASIAN COLONIES, 1865 TO 1889.*

Year.	Number of Deaths per 1,000 of Mean Populations.						
	Victoria.	New South Wales.	Queensland	South Australia.	Western Australia.	Tasmania.	New Zealand.
1865 ...	16·97	16·49	21·42	14·30	...	13·40	15·13
1866 ...	19·37	17·57	25·67	17·20	...	13·79	12·86
1867 ...	18·06	19·76	17·80	17·48	...	14·48	12·78
1868 ...	15·00	15·92	17·36	14·41	...	14·70	11·94
1869 ...	15·47	14·17	16·20	12·37	...	13·20	11·73
1870 ...	14·61	13·38	14·59	13·94	...	13·88	11·13
1871	13·46	12·61	14·83	12·87	...	13·38	10·13
1872 ...	14·38	14·18	14·97	15·33	14·02	13·79	11·68
1873 ...	15·02	13·98	16·06	13·48	16·24	14·52	12·67
1874 ...	15·72	15·33	17·98	17·05	18·74	16·21	13·05
1875 ...	19·42	18·42	23·80	19·45	17·88	20·00	15·92
1876 ...	17·02	18·53	18·82	16·28	14·18	16·54	12·66
1877 ...	15·80	15·69	17·29	13·99	15·70	19·17	11·47
1878 ...	15·46	16·36	20·41	15·44	14·07	15·66	11·01
1879 ...	14·53	14·76	14·97	14·09	14·46	15·18	12·46
1880 ...	13·70	15·47	13·59	14·85	13·24	16·12	11·46
1881 ...	14·16	15·17	15·02	14·49	13·80	14·77	11·13
1882 ...	15·32	16·12	17·99	15·15	14·16	15·79	11·19
1883 ...	14·28	14·68	18·82	14·83	17·93	17·06	11·45
1884 ...	14·46	16·14	22·97	15·52	21·87	15·50	10·39
1885 ...	14·98	16·42	20·19	12·73	17·61	15·40	10·74
1886 ...	15·15	14·89	16·77	13·52	21·67	14·58	10·54
1887 ...	15·70	13·15	14·56	12·59	16·83	15·45	10·29
1888 ...	15·34	13·54	14·66	11·83	15·91	14·11	9·43
1889 ...	17·56	13·43	15·44	10·89	14·19	14·10	9·40
Means ...	15·64	15·45	17·69	14·57	16·25	15·23	11·71

590. Considerable fluctuations in the death rates of the different colonies have occurred from year to year. Thus a high rate of mortality prevailed, more especially in the continental colonies, in 1866 and 1867 (in Queensland extending also to 1868), which was caused by the presence of an epidemic of measles and scarlatina; Tasmania and New Zealand appear on this occasion to have almost entirely escaped, as their death rates were but little affected. Moreover, in 1875-6 a high death rate—caused by the same complaints—also occurred in all the colonies of the group. In like manner, low death

* For the number of deaths in the various colonies during the last seventeen of the years named, see General Summary of Australasian Statistics (third folding sheet) in the second volume.

rates prevailed in all the colonies about 1870 and 1871, extending in the case of some of them to 1872; also about 1880 and 1881. In Queensland and Western Australia a period of high mortality occurred also in 1884, but this did not extend to the other colonies, in most of which for several years past the mortality has been comparatively low. Again, in 1889, an exceptionally low rate of mortality prevailed in all the colonies except Victoria, in South Australia and New Zealand the rate having been absolutely the lowest during the whole period of 25 years.

591. In the twenty-five years over which the observations extend, the normal death rate of 17 per 1,000 persons living was reached in Queensland thirteen times, in Victoria five times, in New South Wales and South Australia four times, in Tasmania three times, and in New Zealand not at all. In the last eighteen of those years it was reached six times in Western Australia. Queensland is the only one of the colonies in which, over a series of years, the death rate has exceeded 17 per 1,000.

592. According to the average of a series of years, the death rate of Queensland was much higher, and that of New Zealand much lower, than that of any of the other colonies; the death rate of Western Australia comes next to that of Queensland; the average death rates differ but slightly from one another in Victoria, New South Wales, and Tasmania; but the average death rate in South Australia is lower than that of these three. In 1889, the death rate of Victoria appears to have been considerably higher than that of any of the other colonies. The following is the order of the colonies in reference to their respective death rates; the colony with the highest rate being placed first, and that with the lowest last:—

ORDER OF AUSTRALASIAN COLONIES IN REFERENCE TO DEATH RATES.

Order in 1889.	Order over a Series of Years.
1. Victoria.	1. Queensland.
2. Queensland.	2. Western Australia.
3. Western Australia.	3. Victoria.
4. Tasmania.	4. New South Wales.
5. New South Wales.	5. Tasmania.
6. South Australia.	6. South Australia.
7. New Zealand.	7. New Zealand.

593. The death rate of the colonies situated upon the continent of Australia taken in combination, and the death rate of those colonies with the addition of Tasmania and New Zealand, are shown in the following table for the seventeen years ended with 1889:—

DEATH RATE IN AUSTRALIA AND AUSTRALASIA, 1873 TO 1889.

Year.	Number of Deaths per 1,000 of Mean Population.		Year.	Number of Deaths per 1,000 of Mean Population.	
	Continent of Australia.	Australia with Tasmania and New Zealand.		Continent of Australia.	Australia with Tasmania and New Zealand.
1873 ...	14·43	14·20	1882 ...	15·85	15·02
1874 ...	15·73	15·36	1883 ...	15·06	14·51
1875 ...	19·08	18·63	1884 ...	16·35	15·29
1876 ...	17·12	16·37	1885 ...	15·89	14·97
1877 ...	15·23	14·77	1886 ...	15·15	14·33
1878 ...	15·72	14·94	1887 ...	14·27	13·64
1879 ...	14·06	13·84	1888 ...	14·20	13·39
1880 ...	14·47	14·01	1889 ...	14·97	14·02
1881 ...	14·62	14·01	Means ...	15·42	14·78

Normal death rate in Australia and Australasia.

594. It will be noticed that in 1875 and 1876 the mortality on the Australian continent exceeded 17 per 1,000, but in no other years; also that it exceeded that rate upon the continent combined with the colonies of Tasmania and New Zealand only in 1875. It will further be noticed that in 1889 the rate for the continent, as well as that for the whole of Australasia, was lower than in any previous years since 1873, except 1879, 1880, 1881, 1887, and 1888.

Death rates in certain British possessions.

595. The following table shows the death rates in as many British colonies outside Australasia as the particulars are available for. In many cases the average extends only over a short period, and in few, if any, of the colonies are the conditions affecting the duration of human life similar to those prevailing in the Australasian group:—

DEATH RATES IN BRITISH POSSESSIONS.

Colonies.	Years.	Number of Deaths per 1,000 of the Population.
Malta	1886	27·0
Ceylon	1886-7	23·8
Straits Settlements	1881-4	27·9
Hong Kong	1879-86	26·6
Mauritius	1886-8	31·4
Seychelles	1886	20·1
St. Helena	1871-5	13·2
Gambia	1882	51·5
Nova Scotia	1871-5	12·1
Bermudas	1875-85	24·5
British Guiana	1871-83	33·7
West Indies—		
Bahamas... ..	1874-5	22·6
Jamaica	1883-7	22·9
St. Lucia... ..	1869-84	25·3
St. Vincent	1886	23·0

DEATH RATES IN BRITISH POSSESSIONS—continued.

Colonies.	Year.	Number of Deaths per 1,000 of the Population.
West Indies—		
Barbados...	1886	25·7
Grenada ...	1883-4	21·0*
Tobago ...	1886	21·0
Antigua ...	1883-4	39·5
Montserrat	1883-6	20·4
Dominica	1882-3	17·3
Trinidad ...	1883-6	27·8*

596. In all the European countries of which the information is at hand, the mean annual death rates are higher than in Queensland, and much higher than in any of the other Australasian colonies. Moreover, in all, with the exception of Norway and Sweden, the mean annual death rate is above 17 per 1,000, and, with the same exceptions, in not one of those countries did the annual death rate during any of the years named ever fall as low as 17 per 1,000; whilst in Hungary and Spain, on the other hand, the average death rates amount to nearly twice that proportion. In the following table, the countries are arranged in the order of their mean death rates, as shown in the last column:—

DEATH RATES IN EUROPEAN COUNTRIES, 1884 TO 1888.

Countries.	Number of Deaths per 1,000 of Mean Population.					
	1884.	1885.	1886.	1887.	1888.	Mean of Five Years.
Hungary ...	31·4	...	32·2	33·5	...	32·4†
Spain ...	31·1	...	...	...	...	32·1‡
Austria ...	29·2	29·9	29·4	28·9	29·2	29·3
Italy ...	26·7	26·6	28·3	27·7	26·8	27·2
German Empire	26·0	25·7	26·2	24·2	23·8	25·2
Prussia ...	25·5	25·7	26·0	23·9	23·0	24·8
France ...	22·2	22·0	22·5	22·0	21·8	22·1
The Netherlands	22·2	21·0	21·8	19·7	20·4	21·0
Switzerland ...	20·2	21·3	20·7	20·2	19·9	20·5
Belgium ...	20·9	20·1	21·1	19·3	20·1	20·3
England and Wales	19·6	19·0	19·3	18·8	17·8	18·9
Scotland ...	19·4	19·1	18·6	18·7	17·6	18·7
Denmark ...	18·4	17·9	18·2	18·3	19·7	18·5
Ireland ...	17·6	18·4	17·9	18·3	18·0	18·0
Sweden ...	17·5	17·8	16·6	16·1	...	17·0§
Norway ...	16·4	16·5	16·1	16·0	16·9	16·4

597. According to the reports of the Registrars-General of England and Scotland, the death rate of the latter country approximates

* Inclusive of still-births, which are recorded as deaths.
† Mean of three years.
‡ Mean of two years, 1883 and 1884.
§ Mean of four years.

very closely to that of the former, but in Ireland it is somewhat lower than in the other two countries.* From the figures for the United Kingdom during each of the eighteen years ended with 1888, it will be noticed that the death rate in 1888 was, for the first time, below 18 per 1,000 persons living:—

DEATH RATE IN THE UNITED KINGDOM, 1871 TO 1888.

Deaths per 1,000 of the Population.				Deaths per 1,000 of the Population.			
1871	...	...	22·6	1881	...	...	18·7
1872	...	...	20·9	1882	...	...	19·2
1873	...	...	20·8	1883	...	...	19·5
1874	...	...	21·6	1884	...	...	19·3
1875	...	...	22·2	1885	...	...	18·9
1876	...	...	20·5	1886	...	...	19·0
1877	...	...	20·0	1887	...	...	18·7
1878	...	...	21·2	1888	...	...	17·8
1879	...	...	20·5				
1880	...	...	20·4				
				Mean	...		20·1

Death rates
in town and
country,
1889.

598. In every country the death rate is higher in towns than it is in the extra-urban 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 serious illness for the sake of the superior nursing and medical attendance to be obtained in town. In 1889, the death rate was somewhat higher in Melbourne and suburbs than in the country towns, whilst in the former it was nearly two and a third times as high, and in the latter more than twice as high as in the country districts. The following are the figures for that year:—

DEATHS IN URBAN AND COUNTRY DISTRICTS, 1889.

Districts.	Estimated Mean Population.	Deaths, 1889.	
		Total Number.	Number per 1,000 of the Population.
Melbourne and suburbs (Greater Melbourne)	445,220	10,412	23·39
Extra-metropolitan Towns	196,400	4,303	21·91
Country districts	462,680	4,677	10·11
Total	1,104,300	19,392	17·56

* Formerly the registrations in Ireland were admitted to be defective; but the Registrar-General of that country states that in recent years much improvement has taken place—especially since the passing of certain Acts of Parliament in the years 1878-80; and he has reason to believe that, at the present time, but few deaths escape registration.

599. The number of deaths per 1,000 of the estimated population of the metropolitan towns (Greater Melbourne), the extra-metropolitan towns, and the country districts of Victoria is given in the following table for each of the last seventeen years :—

Death rates
in town and
country,
1873 to
1889.

DEATH RATES IN URBAN AND COUNTRY DISTRICTS, 1873 TO 1889.

Years.		Number of Deaths per 1,000 of the Estimated Population.			
		Greater Melbourne.	Extra-Metropolitan Towns.	Country Districts.	Total of Victoria.
1873	...	19·86	18·50	9·65	15·02
1874	...	21·27	20·47	9·09	15·71
1875	...	25·82	26·03	11·24	19·42
1876	...	21·84	23·00	10·45	17·02
1877	...	21·18	20·07	9·86	15·80
1878	...	20·12	20·21	9·83	15·46
1879	...	19·23	18·65	9·17	14·53
1880	...	18·70	17·65	8·13	13·70
1881	...	19·32	19·44	7·91	14·16
1882	...	21·02	20·24	8·94	15·32
1883	...	19·46	18·81	8·33	14·28
1884	...	20·54	18·74	7·86	14·46
1885	...	20·15	18·88	9·00	14·98
1886	...	20·42	19·27	8·75	15·15
1887	...	21·25	20·64	8·65	15·70
1888	...	20·52	19·56	8·64	15·34
1889	...	23·39*	21·91	10·11	17·56

NOTE.—In 1875, and to a certain extent in the preceding and succeeding years, the death rate was swelled by epidemics of measles and scarlatina.

600. It will be noticed that in thirteen of the years, including the last eight years, the death rate in Melbourne and suburbs was above that in the other town districts ; but in the other four years the death rate in the extra-metropolitan towns was the higher. The greater mortality in proportion to population prevailing in the urban than in the country districts is very striking in all the years. In the former the mortality was invariably much above the normal 17 per 1,000 persons living, whilst in country districts it was always very considerably below that rate. It will also be noticed that the death rate in 1889 in each district was, with one or two exceptions, higher than in any previous year shown in the table.

Normal
death rate
in town and
country.

601. In England and Wales, during the ten years 1876-85, the death rate in urban districts was 21·5 per 1,000, and in country districts, 18·0 per 1,000 ; the difference between these rates being not nearly so great as in similar divisions of Victoria.†

Death rates
in town
and country
districts of
England.

* The death rate in Greater Melbourne during 1889 would be reduced to 19·74 per 1,000 persons living, if the deaths which occurred in the metropolitan hospitals, asylums, etc., should be eliminated from the total.

† See 48th Report of the Registrar-General of England, page lxxv.

Death rates
in Mel-
bourne and
suburbs.

602. The following table shows the mean population, the number of deaths, and the proportion of the latter to the former, in 1889, also the number of deaths to every 1,000 persons living during the period of five years commencing with 1881 and ending with 1885, in each of the different municipalities and other sub-districts forming the component parts of the district of Melbourne and suburbs (Greater Melbourne. In order to render the rates of the various districts comparable as far as possible, the deaths in hospitals and similar institutions have been eliminated from the districts in which they occurred, and are shown separately near the foot of the table :—

DEATHS IN GREATER MELBOURNE.

Sub-districts.	Estimated Mean Population, 1889.	Deaths.			
		Total Number.	Number per 1,000 of the Population.*		
			1889.	Annual Mean, 1881 to 1885.	
Melbourne City	73,890	1,378	18·65	16·28	
North Melbourne Town... ..	21,475	471	21·93	18·12	
Fitzroy City	31,780	574	18·06	18·15	
Collingwood City	33,790	758	22·43	19·40	
Richmond City	36,610	790	21·58	18·09	
Brunswick Town	17,915	362	20·21	17·25	
Northcote Borough	5,800	107	18·45	11·33	
Prahran City	35,600	696	19·55	16·00	
South Melbourne City	41,820	786	18·79	17·03	
Port Melbourne Borough	12,480	305	24·44	18·73	
St. Kilda Borough	18,187	299	16·44	13·31	
Brighton Town	8,596	154	17·92	13·82	
Essendon Town†	10,215	134	13·12	12·85	
Flemington and Kensington Borough	8,664	160	18·47		
Hawthorn Town	15,440	287	18·59	12·79	
Kew Borough... ..	5,620	107	19·04	11·50	
Footscray Town	14,940	404	27·04	16·66	
Williamstown Town	13,620	264	19·38	16·53	
Remainder of district	33,410	663	19·84	13·23	
Shipping in Hobson's Bay and river	1,478‡	11	7·44	9·20	
Total	441,330	8,710	19·74	16·55	
Hospitals, Asylums, etc.§	3,890	1,702	3·82||	3·84||	
Grand Total	445,220	10,412	23·39	20·11	

* In order to compare the death rate with density of population, see table following paragraph 152 ante.

† Essendon, formerly a Borough, was proclaimed a Town on the 7th January, 1890.

‡ Census figures.

§ Includes the Melbourne, Alfred, Women's, Children's, and Homœopathic Hospitals, and the Immigrants' Home, all situated in Melbourne City; the Benevolent Asylum, which is on the boundary between North Melbourne Town and Melbourne City; the Home of the Little Sisters of the Poor, which is in Northcote; the Metropolitan Lunatic Asylum, which is in Kew Borough; and the Yarra Bend Lunatic Asylum and the Austin Hospital for Incurables, which are in "Remainder of district."

|| Per 1,000 of the population of the whole of Melbourne and suburbs.

603. It will be observed that in 1889 the death rates in every one of the sub-districts, except Fitzroy, were above the average of the quinquennial period; the excess being most marked in the case of Northcote, Port Melbourne, Hawthorn, Kew, Footscray, and the "Remainder of district." It should be borne in mind, however, that some of these districts have also higher birth rates than formerly, and this would to some extent account for the increased mortality.

Death rates
in 1889 and
series of
years.

604. The only sub-district which, according to the average of five years, had a higher death rate than 19* per 1,000 is the low-lying and still imperfectly drained locality of Collingwood; the next highest death rate prevailed in the shipping borough of Port Melbourne, and next in the densely populated suburbs of Fitzroy, North Melbourne, and Richmond. In 1889 the highest death rates were in Footscray and Port Melbourne, where the excessive, but, fortunately, exceptional rates of 27 and 24·4 per 1,000 were recorded; then followed in the order named Collingwood, North Melbourne, Richmond, Brunswick, "Remainder of district," Prahran, Williamstown, and Kew—all with rates above 19 per 1000. During the period of five years, after the shipping, the lowest death rates were in Northcote and Kew; the next in Essendon and Flemington, and Hawthorn; and the next in the "Remainder of district," St. Kilda, and Brighton. In 1889 the lowest death rate was in Essendon, and the next in St. Kilda, these being the only districts in that year having a death rate below 17 per 1,000.

Places in
which death
rate was
highest and
lowest.

605. The death rate of Greater Melbourne, taken as a whole, in the calculation of which the deaths in charitable institutions are included, was about $23\frac{1}{3}$ per 1,000 persons living in 1889, or over 3 per 1,000 higher than the average during the period of five years. During the last-named period the annual death rate was over 17 per 1,000 in all the sub-districts except Prahran, St. Kilda, Brighton, Hawthorn, Kew, Melbourne, Northcote, Essendon and Flemington, and "Remainder of district;" and during 1889 it was above 17 per 1,000 in all the sub-districts except Essendon and St. Kilda. It will be borne in mind that the deaths in hospitals, asylums, etc., are excluded from the returns of the individual districts; if such deaths should also be excluded from the total, the deaths in Greater Melbourne would only number 8,711, or a proportion of 19·74 per 1,000 living, a similar proportion for the five years ended with 1885 being 16·55.

Sub-districts
with death
rates over
17 per 1,000.

* It should be remembered that the deaths in hospitals, asylums, etc., have been eliminated from the various sub-districts. If this had not been done, the death rates of several sub-districts would have been much higher than those shown in the table.

Deaths in
Austral-
asian
capitals,
1889.

606. In 1889, according to the following figures, the death rate of Melbourne—already stated to have been exceptionally high—was apparently much higher than that of any of the other Australasian capital cities. There is strong reason to believe, however, that in some of the colonies either the metropolitan population is over-estimated, or the metropolitan radius, so far as the deaths are concerned, is smaller than that for which the population is calculated. In either of these cases, the death rate would obviously appear to be lower than it really is. It should, moreover, be mentioned that the death rate of Melbourne is swelled by the large number of country residents who are admitted to and die in the metropolitan hospitals. In the Wellington returns, and probably in those of some other of the capital cities, it is the custom to eliminate such entries, and it is probable that in Melbourne such deaths bear a higher proportion to the total number of deaths recorded than they do in any other of the capital cities named:—

DEATHS IN AUSTRALASIAN CAPITAL CITIES, 1889.

Capital Cities.*	Estimated Mean Population.	Deaths, 1889.	
		Total Number.	Number per 1,000 of the Population.
Melbourne	445,220	10,412	23·39
Hobart	35,043	699	19·95
Perth	9,000	179	19·89
Brisbane	91,300	1,572	17·22
Sydney†	374,207	6,338	16·94
Adelaide†	120,600	1,856	15·39
Wellington	32,050	405	12·64

Death rates
in Austral-
asian
capitals,
1881.

607. The populations of the various metropolitan cities being merely estimated, they may perhaps be inaccurate, in which case the death rates would appear lower or higher than the truth, according to whether the estimate might be too high or too low. In the year of the last general census of the Australasian colonies (1881) when the populations of these cities could be accurately known, the death rate then shown for Melbourne was much lower, and the death

* With Suburbs.
† There are some doubts as to whether too high an estimate has not been given of the populations of Sydney and Adelaide. If this should be the case, the death rates for those cities, as shown in the table, would, as a matter of course, be lower than the true rates. The metropolitan district of the latter was somewhat extended in 1888 so as to embrace a well-defined area, having its boundary at an average distance of about 10 miles from a central point between North and South Adelaide. It is possible, moreover, that the registration districts do not fit in with the area over which the population is calculated, and consequently that some of the deaths occurring within the ten mile radius may be registered outside, and consequently not be included in the metropolitan returns.

rates for all the other capital cities were much higher than those given in the last table. The following are the figures for the census year:—

DEATH RATES IN AUSTRALASIAN CAPITAL CITIES, 1881.

	Deaths per 1,000 of the Population.		Deaths per 1,000 of the Population.
Adelaide ...	23·55	Sydney ...	19·12
Hobart ...	23·18	Brisbane ...	18·82
Melbourne ...	19·32	Wellington...	14·00

608. According to the following figures, showing the death rates in the principal towns in the United Kingdom, and the figures just given (for 1881) showing the death rates in Australasian capital cities, the death rate is lower in Wellington than in any British town; in Brisbane, than in any except Brighton, Derby and Nottingham; in Sydney and Melbourne, than in any except those towns and Hull; whilst the death rates in Adelaide and Hobart are below those in 7 of the towns named on the list. If, however, deaths in hospitals and asylums should be excluded from the Melbourne returns, the death rate would be lower in that city than in any of the British towns named:—

DEATH RATES IN BRITISH TOWNS, 1887.

	Deaths per 1,000 of the Population.		Deaths per 1,000 of the Population.
Dublin ...	30·6	Halifax ...	21·0
Manchester ...	28·7	Birkenhead ...	21·0
Preston ...	27·9	Twenty-eight large towns	20·8
Blackburn ...	25·5	Bristol ...	20·4
Newcastle ...	25·3	Norwich ...	20·4
Oldham ...	23·8	Bradford ...	19·9
Liverpool ...	23·7	Edinburgh ...	19·8
Glasgow ...	23·2	Sunderland ...	19·7
Huddersfield ...	23·0	Birmingham ...	19·7
Plymouth ...	22·7	London ...	19·6
Salford ...	22·2	Portsmouth ...	19·5
Cardiff ...	21·9	Leicester ...	19·5
Wolverhampton ...	21·7	Hull ...	19·2
Sheffield ...	21·6	Nottingham ...	18·7
Bolton ...	21·3	Derby ...	17·1
Leeds ...	21·1	Brighton ...	16·9

609. It will be noticed that the death rate is higher in Dublin than in any other large town in the United Kingdom. In this respect it contrasts very unfavourably with London, which is one of the towns in which the death rate is lowest. Manchester is one in which the death rate has always been, and still continues to be, highest; but Liverpool, which some years since stood at the very head of the

list, has now six towns above it, and stands immediately above Glasgow. In Birmingham the mortality is comparatively low, and approximates closely with that of London

610. The death rates in all the Australasian capitals will be found to be considerably lower than the average death rates of most of the 45 Colonial and Foreign towns named in the subjoined list:—

Death rates
in foreign
towns.

DEATH RATES IN 45 COLONIAL AND FOREIGN TOWNS,
1878-80.*

Annual Deaths per 1,000 of the Population.			Annual Deaths per 1,000 of the Population.		
Vera Cruz	...	70·5	Leipsic	...	26·1
Valparaiso	...	64·6	Turin	...	25·6
St. Petersburg	...	51·4	Dresden	...	25·4
Havanna	...	45·7	Stockholm	...	24·7
Madras (1887)	...	40·3	Lyons	...	24·7
Rio Janeiro	...	39·4	Hamburg	...	24·5
Madrid	...	37·4	Bucharest	...	24·5
Montreal	...	37·2	Brussels	...	23·9
Buda-Pesth	...	35·2	Boston	...	23·5
Breslau	...	32·5	Paris (1887)	...	23·4
Rouen	...	31·3	Rotterdam	...	23·3
Calcutta	...	31·1	Berlin (1889)	...	23·1
Mexico	...	30·9	Quebec	...	22·9
Milan	...	30·6	Venice	...	22·7
Buenos Aires	...	30·1	Copenhagen	...	22·1
Vienna	...	29·0	Amsterdam (1887)	...	22·1
Palermo	...	28·5	Geneva	...	21·2
Marseilles	...	28·0	Baltimore	...	21·1
Chicago	...	27·2	Philadelphia	...	20·3
Rome	...	26·8	St. Louis	...	19·3
Bordeaux	...	26·7	Christiania	...	18·8
Bombay (1887)	...	26·3	San Francisco	...	18·1
New York	...	26·2			

Death rates
in Victorian
towns.

611. Of the 4 principal towns in Victoria next in importance to Melbourne, 2 had in 1889 a higher, and 2 had a lower, death rate than that city; but in none of them was the death rate as high as in the majority of Colonial and Foreign towns just referred to. This will be seen by the following figures:—

DEATH RATES IN 5 VICTORIAN TOWNS, 1889.

Deaths per 1,000 of the Population.			Deaths per 1,000 of the Population.		
Castlemaine	...	23·97	Sandhurst	...	22·99
Geelong	...	23·90	Ballarat	...	19·58
Melbourne	...	23·39			

* Partly taken from Mulhall's *Dictionary of Statistics*, page 126.

612. The mortality of Victoria is highest in the first five months and in the last month of the year. The relative mortality of the various months fluctuates, however, in different years. According to the average of the quinquennium ended with 1885, the months in which most deaths occur appear to be March, December, and January, and then April, February, and May, in the order named; whereas in the decade ended with 1880 fewer deaths occurred in December than in any of the other months named. In the year under review more deaths occurred in January than in any other month. The number of deaths in each month of 1889, and their percentage to the total number in the year, also the percentage of the deaths in each month of the quinquennium ended with 1885, and of the decennium ended with 1880, to the total number of deaths during the same periods, will be found in the following table:—

DEATHS IN EACH MONTH.

Months.	Year 1889.		Percentage in—	
	Number of Deaths.	Percentage.	Five Years : 1881 to 1885.	Ten Years : 1871 to 1880.
January ...	2,225	11·47	9·34	10·29
February ...	1,738	8·96	8·46	9·09
March ...	1,811	9·34	9·57	10·17
April ...	1,728	8·91	8·68	9·73
May ...	1,587	8·18	8·40	8·55
June ...	1,314	6·78	7·69	7·44
July ...	1,573	8·11	7·79	7·89
August ...	1,436	7·41	8·22	7·37
September ...	1,294	6·67	7·31	6·81
October ...	1,279	6·60	7·39	7·09
November ...	1,540	7·94	7·76	7·12
December ...	1,867	9·63	9·39	8·45
Total ...	19,392	100·00	100·00	100·00

613. In Victoria the summer is the most trying portion of the year, especially to invalids and young children. It is not astonishing, therefore, that most deaths usually occur during that period. Next to the summer, the autumn quarter is usually the most fatal; but in 1889, there were more deaths in the spring than the autumn quarter. In the United Kingdom, on the contrary, the greatest mortality occurs in the winter, and the least in the summer quarter. A statement of the relative mortality of the different seasons in Victoria, according to the experience of the past year and two previous periods;

in England and Wales, according to the experience of thirty-one years; in Scotland, according to the experience of ten years; and in Ireland, according to the experience of five years, together with the mean temperature in each quarter in Melbourne and Greenwich, will be found in the following table:—

RELATIVE MORTALITY OF EACH QUARTER IN VICTORIA, ENGLAND, SCOTLAND, AND IRELAND.

Seasons.*	Mean Temperature in Shade.		Deaths per 100 at all Seasons.					
			Victoria.			England and Wales.	Scotland.	Ireland.
	Melbourne, Victoria.	Greenwich, England.	Year 1889.	Average of Five Years 1881 to 1885.	Average of Ten years, 1871 to 1880.	Average of Thirty-one Years.	Average of Ten Years.	Average of Five Years.
Summer	65·2	60·5	29·77	27·37	29·55	23·24	22·34	20·21
Autumn	53·8	44·3	23·87	24·76	25·72	24·65	24·71	23·45
Winter	50·2	40·0	22·19	23·32	22·07	27·49	27·95	30·19
Spring	60·3	52·8	24·17	24·55	22·66	24·62	25·00	26·15
Year	57·6	49·4	100·00	100·00	100·00	100·00	100·00	100·00

Deaths of Chinese and Aborigines.

614. The Chinese who died in 1889 numbered 150—all of whom were males; and the Aborigines who died numbered 36—of whom 4 (including 1 adult) were stated to be half-castes. The former furnish a proportion of 12·84 and the latter of 55·39 to every 1000 of their numbers.† In the same year the proportion of deaths of all races to every 1,000 of the population was 17·56.

Ages at death of Chinese and Aborigines.

615. The mortality of the Chinese would doubtless have been higher but for the fact that the Chinese population in Victoria consists almost entirely of persons at the adult period of life. In 1889 only 1 of the Chinese who died was under the age of 5 years, and only 24 others were under 45 years of age; the great majority, or three-fifths, were between 45 and 65; whilst the oldest were said to be aged 80, 83, 84, 86, and 87 respectively. Of the Aborigines who died, eleven were under 5, whilst a female was stated to have attained the age of 85, whereas the oldest male was under 65.

* The summer, autumn, winter, and spring seasons in Victoria approximate to the quarters ending on the last day of March, June, September, and December respectively; and in the United Kingdom to those ending on the last day of September, December, March, and June respectively.

† The estimated number of Chinese in 1889 was 11,679; and on the 3rd April, 1881, the Aborigines numbered 780.

616. The following table shows the number of deaths at various periods of age registered in Victoria during the year 1889, and the proportion of the deaths at each age to the total at all ages :—

DEATHS AT EACH AGE, 1889.

Ages.	Number of Deaths at each Age, 1889.			Percentage of Deaths at each Age.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years ...	4,180	3,621	7,801	37·78	43·48	40·23
5 years to 10 years ...	336	294	630	3·04	3·53	3·25
10 " 15 "	171	191	362	1·54	2·29	1·87
15 " 20 "	275	265	540	2·49	3·18	2·78
20 " 25 "	425	380	805	3·84	4·56	4·15
25 " 35 "	870	719	1,589	7·86	8·64	8·20
35 " 45 "	668	513	1,181	6·04	6·16	6·09
45 " 55 "	931	614	1,545	8·41	7·37	7·97
55 " 65 "	1,440	661	2,101	13·02	7·94	10·83
65 " 75 "	1,091	576	1,667	9·86	6·92	8·60
75 years and upwards ...	677	494	1,171	6·12	5·93	6·03
Total ...	11,064	8,328	19,392	100·00	100·00	100·00

617. It will be noticed that nearly two-fifths of the males and over two-fifths of the females who died had not reached their fifth year ; that a fourth of the males and between a fourth and a third of the females were between 5 and 45 years of age ; that over a fifth of the males, but little more than a seventh of the females, were between 45 and 65 years of age ; and that about a sixth of the males and more than an eighth of the females were over 65 years of age ; it will moreover be found that, on the average, the females who died were about 11 years younger than the males—about half the former being under and half over 16 years of age, whilst about half the latter were under and half over 27 years of age.

618. The exact ages of the population of Victoria were ascertained at the census of 1881, and since then they have been brought on by means of the records of the births, of the deaths at each age, and of the net immigration, and thus an opportunity is afforded of calculating the death rates of males and females at different ages. Such results for 1889 are given in the following table, and are compared with the average rates which prevailed during the ten years 1871-80, the increase or decrease at each age being also shown :—

DEATH RATE AT EACH AGE, 1871-80 AND 1889.*

Ages.	Number of Deaths per 1,000 of the Population at different Ages.					
	Males.			Females.		
	Mean of 10 Years: 1871 to 1880.	1889.	Increase + Decrease —	Mean of 10 Years: 1871 to 1880.	1889.	Increase + Decrease —
Under 5 years ...	47·34	59·21	+ 11·87	42·19	53·53	+ 11·34
5 to 10 „ ...	6·10	5·59	— ·51	6·00	5·07	— ·93
10 to 15 „ ...	3·30	2·88	— ·42	3·30	3·34	+ ·04
15 to 20 „ ...	4·43	4·53	+ ·10	4·29	4·55	+ ·26
20 to 25 „ ...	5·38	6·32	+ ·94	5·39	6·40	+ 1·01
25 to 35 „ ...	7·60	8·23	+ ·63	8·50	7·80	— ·70
35 to 45 „ ...	12·18	13·47	+ 1·29	11·76	11·68	— ·08
45 to 55 „ ...	18·67	18·93	+ ·26	14·31	15·42	+ 1·11
55 to 65 „ ...	31·24	32·46	+ 1·22	24·20	24·09	— ·11
65 to 75 „ ...	60·47	64·69	+ 4·22	48·10	55·74	+ 7·64
All ages ...	16·45	18·83	+ 2·38	14·15	16·12	+ 1·97

Death rate at each age 1889 compared with average of previous years.

619. It has already been stated that in 1889 the death rate of both males and females was much above the average. The table shows that this was especially the case in regard to children under 5 of both sexes, amongst whom the rate of mortality increased by about one-fourth; in regard to persons of both sexes between 20 and 25, amongst whom it increased by one-fifth; and in regard to females aged 65 to 75, amongst whom it increased by one-seventh; whilst in a minor degree an increased mortality occurred amongst males at the age-periods between 25 and 45 and between 65 and 75, and amongst females at the age-periods 15 to 20 and 45 to 55. On the other hand, it will be observed that there was a decreased mortality amongst males at the age-periods between 5 and 15, and amongst females at the age-periods 5 to 10, between 25 and 45, and 55 to 65.

“Ordinary” death rate seldom reliable.

620. It has often been pointed out in the *Victorian Year-Book* that the ordinary mode of computing the death rate at all ages, viz., by comparing the total number of deaths of either sex with the number of the same sex living, as shown in the lowest line of the table—although that adopted in every country which publishes Vital Statistics—gives results which are misleading for the purpose of comparing the mortality of one country with that of another, or the mortality of a country at one period with the mortality of the same country at another period, unless the proportions living at different ages are identical in the two countries or at the two periods respecting which

* For population at each age in 1889, see table following paragraph 134 ante; the deaths at each age are given in table following paragraph 616 ante.

it is desired to make comparison, which is seldom if ever the case. To render accurate comparisons possible, it therefore becomes necessary to devise a mode of computing the total death rate whereby the ages of the population might be taken into account.

621. Several modes have been proposed to effect this object* ; of which the mode probably least open to objection is that termed the “Adjusted death rate.” This is obtained by applying the rates of mortality actually experienced at the various age-periods during any period to a certain standard population, in which the proportions living at the various ages are in a normal condition, and after finding the total number of deaths which would, according to the actual experience have occurred amongst such a population, calculating therefrom the average rate of mortality (or “Adjusted death rate”). The standard population selected is shown in the following table; also the method of calculating the “Adjusted death rate,” the deaths dealt with being those of males under 75 years of age which occurred in Victoria during the ten years ended with 1880 :—

Mode of computing
“Adjusted death rate.”

MODE OF COMPUTING “ADJUSTED DEATH RATE.”

Ages.	Standard Population.	Males under 75, 1871 to 1880.	
		Death Rates experienced.†	Deaths in Standard Population accord- ing to rates in previous column.‡
<i>Quinquennial Age-periods.</i>			
Under 5 years ...	1,350	47·34	63·91
5 to 10 „ ...	1,200	6·10	7·32
10 to 15 „ ...	1,075	3·30	3·55
15 to 20 „ ...	1,000	4·43	4·43
20 to 25 „ ...	900	5·38	4·84
<i>Decennial Age-periods.</i>			
25 to 35 years ...	1,475	7·60	11·21
35 to 45 „ ...	1,125	12·18	13·70
45 to 55 „ ...	825	18·67	15·40
55 to 65 „ ...	600	31·24	18·75
65 to 75 „ ...	325	60·47	19·65
Total ...	9,875§	...	162·76
Average, or “ Adjusted death rate ”	1,000	...	16·48

* For an account of three of these methods, see *Victorian Year-Book* 1885-6, paragraphs 594 et seq.

† Ascertained by finding the proportion of deaths at each age-period per 1,000 of the actual population at the same age-period.

‡ Ascertained as follows :—Under 5 years, $\frac{1,350 \times 47\cdot34}{1,000} = 63\cdot909$, and so on for the other lines.

§ The difference between this number and 10,000 (viz., 125) represents the number over 75 years of age.

622. It is thus shown that if the mortality of males under 75 years of age, which occurred in Victoria during the ten years 1871 to 1880, had been experienced by a male population of 9,875—the ages of such population being in the same proportions as those of the standard population shown on the table—the total deaths of such males would have numbered 162·76, or a proportion to the total number (9,875) of 16·48 per 1,000, which may be termed the “Adjusted death rate” of males during the period of 10 years alluded to. This “Adjusted death rate” is available for forming a correct comparison with a proportion similarly obtained relating to the other sex or to any other period or country, no matter what may have been the differences of age between the sexes at the two periods, or in the two countries. It should be mentioned that the age of 75 is the highest taken into the computation, as, in most countries, the deaths and population are generally tabulated in quinquennial or decennial periods up to, but not beyond that age; and, moreover, the higher ages may safely be left out of account, since, although the death rate at such ages is high, the number living over 75 in a normal population usually amounts to only about 1 per cent.*

623. For the decennium 1871 to 1880 and the year 1889, the “Adjusted death rates” of males and females, obtained in the manner just described, are, in the following table, placed side by side with the “Ordinary death rates,” or those obtained by comparing the deaths with every 1,000 of the population of the same sex irrespective of age:—

“ORDINARY” AND “ADJUSTED” DEATH RATES, 1871–1880 AND 1889.

Period.	Ordinary Death Rate.†	Adjusted Death Rate.‡
<i>Males.</i>		
1871 to 1880	16·45	16·48
Year 1889	18·83	18·58
Increase	2·38	2·10
<i>Females.</i>		
1871 to 1880	14·15	14·64
Year 1889	16·12	16·42
Increase	1·97	1·78

* It has been suggested that another age group —75 and upwards—should be added in order to complete the series, but this has been omitted advisedly, inasmuch as the average age of persons living over 75 would obviously be lower in the younger colonies of Australasia than in the older ones, and this would introduce an element of uncertainty, seeing that the death-rate doubles itself every tenth year at such high ages.

† Per 1,000 of the actual population.

‡ Per 1,000 of the standard population.

624. Comparing the death rates in 1889 with those in the decennium 1871-80, it is found that according to the “ Ordinary ” and less reliable method of computation, there was an apparent increase in the mortality of males, amounting to 2·38 per 1,000, and in that of females, amounting to 1·97 per 1,000 ; whereas, according to the “ Adjusted ” or more correct method, there was an increase of 2·10 per 1,000 in the case of the males, and an increase of 1·78 per 1,000 in the case of females.

Results of the two methods compared.

625. In the next table the death rates of males and females at different ages in Victoria, England and Wales, and France are compared—the observations being in all cases for periods of ten years:—

Death rates at various ages in Victoria, England, and France.

DEATH RATE AT EACH AGE IN VICTORIA, ENGLAND, AND FRANCE.

Ages.	Number of Deaths per 1,000 of the Population.					
	Victoria.		England and Wales.		France.	
	Average of 10 Years : 1871 to 1880.		Average of 10 Years : 1871 to 1880.		Average of 10 Years.	
	Males.	Females.	Males.	Females	Males.	Females.
All ages (“ Ordinary ” death rate)	16·45	14·15	22·6	20·0	23·80	23·19
„ (“ Adjusted ” death rate)	16·48	14·64	20·7	18·0	23·15	21·67
Under 5 years	47·34	42·19	68·1	58·1	84·55	75·45
5 to 10	6·10	6·00	6·7	6·2	10·49	11·04
10 to 15	3·30	3·30	3·7	3·7	5·36	6·41
15 to 20	4·43	4·29	5·2	5·4	10·34	8·41
20 to 25	5·38	5·39	7·3	6·8		
25 to 35	7·60	8·50	9·3	8·6	10·02	9·69
35 to 45	12·18	11·76	13·7	11·6	10·96	11·03
45 to 55	18·67	14·31	20·0	15·6	14·76	14·88
55 to 65	31·24	24·20	34·8	28·5	29·19	27·27
65 to 75	60·47	48·10	69·6	60·8	60·69	63·49
75 to 85	114·80	102·94	150·9	155·8	160·22	153·76

626. It will be observed that the average mortality of both males and females at all ages is much lower in Victoria than in England or France, but the difference is not so striking when the new method of comparison is used (“ Adjusted ” death rate) as it is when the old method is used (“ Ordinary ” death rate.) Thus, according to the old method, deaths of males per 100,000 living are, in England, 615, and in France, 735, more than in Victoria ; but according to the new method only 422 more in England, and 667 more in France. And, according to the old method, deaths of females per 100,000 living are, in England, 585, and in France, 904, more than in Victoria ; but, according to the new method, only 336 more in England, and 703 more in France.

Death rates “ Ordinary ” and “ Adjusted,” in Victoria, England, and France.

627. It will further be noticed that at none of the age-periods is the mortality of males, and at only one age-period (35 to 45) is that of females, as high in Victoria as in England ; but the Victorian mortality is higher than that of France, in the case of males at from 35 to 65 and in the case of females at from 35 to 45.

628. It is very commonly believed that the conditions of life in Victoria are more fatal to children than those conditions in older countries ; but the figures in the table prove the fallacy of this opinion so far as England and France are concerned—the low mortality in Victoria, as compared with that obtaining in either of those countries, being especially marked at the age-periods under 10 years.

629. According to the table, the death rate of females exceeds that of males at from 20 to 35 in Victoria (during a term of years), at from 15 to 20, and from 75 to 85 in England and Wales, and at from 5 to 15, from 35 to 55, and from 65 to 75 in France ; moreover, both in Victoria and in England and Wales, at from 10 to 15, the death rates of males and females are equal. At every other period of life the death rate of males exceeds that of females in the countries named.

630. Mr. Mulhall gives the ordinary death rate at various ages for different countries,* and these, with the figures for Victoria—which will be found at almost every age much lower than those for any of the other countries—are subjoined:—

DEATH RATE AT VARIOUS AGES IN DIFFERENT COUNTRIES.

Countries.	Number of Deaths per 1,000 living at each Age.						
	Under 5.	5 to 10.	10 to 25.	25 to 45.	45 to 55.	55 to 65.	65 to 75.
Victoria ...	38·6	3·5	3·9	10·2	16·2	29·1	59·4
England ...	63·6	6·6	5·5	10·2	17·4	31·8	64·3
United States	58·8	10·1	5·4	10·8	17·6	27·2	51·4
France ...	75·6	9·2	8·8	12·7	16·6	28·3	66·3
Prussia ...	...	9·2	6·4	11·5	18·6	33·0	64·5
Austria ...	111·7	9·8	6·6	11·3	21·1	41·5	92·8
Switzerland ...	...	8·5	6·3	11·6	19·3	38·4	82·5
Italy ...	110·6	11·6	7·8	11·7	17·3	33·1	70·1
Spain ...	106·2	11·7	8·8	12·9	23·8	42·0	95·0
Belgium ...	68·1	12·7	8·1	12·9	19·0	32·3	74·5
Sweden ...	57·6	8·0	4·8	8·2	14·7	27·4	62·6

* Dictionary of Statistics, page 127.

631. The mortality of infants in 1889, in proportion to the number born, was considerably above the average, and was by far the highest recorded since 1866. The total number under 1 year of age who died in 1889 was 5,549, and as the births numbered 36,359, it follows that 1 infant died to every 6·5 births, or 15·25 infants to every 100 births. In the twenty-three years 1866 to 1888, the proportion of infants dying before completing their first year was 12·42 to every 100 births.*

Infantile mortality, 1889.

632. It has already been stated that more boys are born than girls, but the balance of the sexes is to a certain extent maintained by more male than female infants dying. This is shown in the following table, which contains a statement, for the nineteen years ended with 1889, of the number of births of boys and girls, the number of deaths of each before completing their first year, and the proportion of the deaths of infants of either sex to the number of births of infants of the same sex:—

Mortality of male and female infants.

MORTALITY OF MALE AND FEMALE INFANTS, 1871 TO 1889.

Year.	Births.		Deaths at under 1 Year of Age.			
			Total Number.		Number per 100 Births.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1871	14,000	13,382	1,710	1,404	12·21	10·49
1872	13,831	13,530	1,801	1,533	13·02	11·33
1873	14,234	13,866	1,679	1,502	11·80	10·83
1874	13,659	13,141	1,839	1,502	13·46	11·43
1875	13,683	13,037	2,071	1,740	15·14	13·35
1876	13,759	13,010	1,637	1,343	11·90	10·32
1877	13,272	12,738	1,838	1,461	13·85	11·47
1878	13,752	12,829	1,763	1,499	12·82	11·68
1879	13,727	13,112	1,817	1,402	13·24	10·69
1880	13,358	12,790	1,669	1,436	12·49	11·23
1881	13,903	13,242	1,696	1,423	12·20	10·75
Sums and Means	151,178	144,677	19,520	16,245	12·91	11·23
1882	13,612	13,135	2,049	1,673	15·05	12·74
1883	14,109	13,432	1,702	1,448	12·06	10·78
1884	14,844	14,006	1,853	1,428	12·49	10·20
1885	15,455	14,520	2,046	1,725	13·24	11·88
1886	15,753	15,071	2,127	1,797	13·50	11·92
1887	16,876	16,167	2,354	1,942	13·95	12·01
1888	17,617	16,886	2,390	2,011	13·57	11·91
1889	18,713	17,646	2,989	2,560	15·97	14·51

* See table following paragraph 639 post.

Mortality
of male
greater
than of
female
infants.

633. According to a previous paragraph,* the births of male infants in a series of years were in the proportion of about $104\frac{1}{2}$ to 100 female infants, and the numbers in this table point to a proportion of 120 deaths of the former to 100 of the latter. It will be noticed that in every one of the years deaths of male infants very much exceeded those of female infants; and as the numbers living were about equal (the excess, if any, being slightly in favour of male infants), the greater tendency of boys than of girls to die before completing one year of life may be considered to be invariable.

Proportion
of infants
dying to
births.

634. In proportion to every 1,000 born, the number of male infants dying varied from 118 in 1873 to 151 in 1875 and 1882 and 160 in 1889, and that of female infants dying from 103 in 1876 to 134 in 1875 and 145 in 1889—the mean number dying per 1,000 births during the eleven years ended with 1881 being 129 of the former and 112 of the latter. The high mortality of infants in 1875 was caused by an epidemic of measles. The next year was one in which the general mortality was much increased by an epidemic of scarlatina, but infants under 1 year appear not to have been at all affected thereby, as their mortality in 1876 was remarkably low. The high infantile mortality in 1882 was exceptional, as in that year no such epidemics were prevalent. It was not sustained in 1883 or 1884, the infantile mortality in those years having been lower than in most of the preceding ones, but concurrently with an increasing birth rate, there has been a gradual rise in the infantile death rate. The high mortality of 1889 was partly due to an epidemic of whooping cough, and partly to a largely increased mortality under diarrhœa, gastro-enteritis, and debility.

Deaths of
infants at
different
ages.

635. In classifying the deaths of infants, those are distinguished which occur at under 1 month of age, at from 1 to 3 months, at from 3 to 6 months, and at from 6 to 12 months. The numbers of these during 1889 and the eleven years ended with 1881 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. It will be noticed that in 1889 the mortality of both male and female infants under 1 month of age was below the average, but at every other period under 1 year the mortality of both sexes was above the average:—

* See paragraph 538, *ante*.

AGE AT DEATH OF MALE AND FEMALE INFANTS.

Ages.	Deaths at under 1 Year of Age.				
	Year 1889.			Average of 11 years, 1871 to 1881.	
	Number.	Percentage at each Age.	Number per 100 Births.	Percentage at each Age.	Number per 100 Births.
Boys.					
Under 1 month ...	792	26·50	4·23	34·23	4·42
1 to 3 months ...	556	18·60	2·97	17·30	2·23
3 to 6 „ ...	719	24·05	3·84	19·43	2·51
6 to 12 „ ...	922	30·85	4·93	29·04	3·75
Total ...	2,989	100·00	15·97	100·00	12·91
GIRLS.					
Under 1 month ...	584	22·81	3·31	30·81	3·46
1 to 3 months ...	458	17·89	2·60	17·23	1·94
3 to 6 „ ...	640	25·00	3·63	20·14	2·26
6 to 12 „ ...	878	34·30	4·98	31·82	3·57
Total ...	2,560	100·00	14·51	100·00	11·23

636. During the period of eleven years, the mortality of male infants in proportion to the number born exceeded that of female infants at each of the age-periods. This was more especially the case in the first month of life, when the excess of the former was not quite a third; in the next two months this excess was reduced to about a seventh, in the next three months to about a ninth, and in the next six months to only a twentieth. In 1889, however, the relative mortality at the age-period 6 to 12 months was slightly higher amongst females than males.

More deaths of male than female infants at all ages.

637. In the same period of eleven years, over a third of the male and nearly a third of the female infants who died before they were a year old did so in the first month after birth; about a sixth of both males and females in the next two months; about a fifth of both males and females in the next three months; between a third and a fourth of the males and nearly a third of the females in the next six months. The proportions for 1889 are considerably less for the first month of life, but much higher for the period 3 to 6 months, and slightly higher for the other age-periods than the proportions just alluded to.

Periods at which infants die.

638. As a practical result of these calculations, it may be mentioned that of every 20,000 newly-born boys and girls in equal numbers, 442 of the former and 346 of the latter may be expected to die before they are a month old; 223 more boys and 194 more girls may be expected to die between 1 month and 3 months of age; 251 more boys and 226

Probable mortality of infants.

more girls between 3 and 6 months; 375 more boys and 357 more girls between 6 and 12 months. At the end of a year it is probable that 1,291 of the boys and 1,123 of the girls will have died, and 8,709 of the former and 8,877 of the latter will be still living.

Infantile mortality in Australasian colonies.

639. In Victoria, the infantile death rate in 1888 was slightly above, but in all the other colonies it was below, the average, as will be seen by the following table, which gives the number of births, the number of deaths of infants under one year, and the proportion of the latter to the former, in each of the colonies of the group, for each of the twenty-three years ended with 1888, except in regard to Western Australia, for which the information is given at the foot of the table for the last three of those years. All the calculations were made in the office of the Government Statist, Melbourne:—

INFANTILE MORTALITY IN AUSTRALASIAN COLONIES.

Year.	Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.	
		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.
	VICTORIA.			NEW SOUTH WALES.			QUEENSLAND.		
• 1866	25,010	3,838	15·35	16,950	1,939	11·44	4,127	690	16·72
1867	25,608	3,534	13·80	18,317	2,269	12·39	4,476	578	12·91
1868	27,243	3,054	11·21	18,485	1,791	9·69	4,460	552	12·38
1869	26,040	3,284	12·61	19,243	1,858	9·66	4,654	528	11·35
1870	27,151	3,203	11·80	19,648	1,867	9·50	4,905	526	10·72
1871	27,382	3,114	11·37	20,143	1,812	9·00	5,205	516	9·91
1872	27,361	3,334	12·19	20,250	2,116	10·45	5,265	578	10·98
1873	28,100	3,181	11·32	21,444	1,985	9·26	5,720	701	12·26
1874	26,800	3,341	12·47	22,178	2,428	10·95	6,383	776	12·16
1875	26,720	3,811	14·26	22,528	2,695	11·96	6,706	1,025	15·28
1876	26,769	2,980	11·13	23,298	2,629	11·28	6,903	994	14·40
1877	26,010	3,299	12·68	23,851	2,785	11·68	7,169	1,058	14·76
1878	26,581	3,262	12·27	25,328	3,126	12·34	7,397	1,234	16·68
1879	26,839	3,219	11·99	26,933	2,886	10·72	7,870	917	11·65
1880	26,148	3,105	11·86	28,162	3,200	11·36	8,196	865	10·55
1881	27,145	3,119	11·49	28,903	3,341	11·56	8,220	918	11·17
1882	26,747	3,722	13·91	29,702	3,897	13·12	8,518	1,188	13·95
1883	27,541	3,150	11·44	31,281	3,590	11·48	9,890	1,319	13·34
1884	28,850	3,281	11·37	33,946	4,285	12·62	10,679	1,574	14·74
1885	29,975	3,771	12·57	35,043	4,596	13·12	11,672	1,733	14·85
1886	30,824	3,924	12·73	36,284	4,635	12·85	12,582	1,584	12·59
1887	33,043	4,296	13·00	37,236	3,945	10·59	13,513	1,526	11·29
1888	34,503	4,401	12·75	38,525	4,271	11·09	14,247	1,719	12·70
Sums and means	638,390	79,223	12·42	597,678	67,946	11·22	178,757	23,099	12·90

INFANTILE MORTALITY IN AUSTRALASIAN COLONIES—*continued.*

Year.	Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.	
		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.
	SOUTH AUSTRALIA.			TASMANIA.			NEW ZEALAND.		
1866	6,782	1,178	17·37	2,805	264	9·41	8,466	849	10·03
1867	7,041	1,254	17·81	2,971	267	8·98	8,918	873	9·79
1868	7,247	1,084	14·96	2,990	351	11·73	9,391	899	9·57
1869	6,976	911	13·06	2,859	291	10·18	9,718	957	9·85
1870	7,021	1,031	14·68	3,054	298	9·76	10,277	956	9·30
1871	7,082	961	13·57	3,053	260	8·52	10,592	882	8·33
1872	7,105	1,145	16·12	3,010	306	10·17	10,795	1,074	9·95
1873	7,107	990	13·93	3,048	266	8·73	11,222	1,213	10·81
1874	7,696	1,319	17·13	3,097	321	10·36	12,844	1,394	10·85
1875	7,408	1,343	18·13	3,105	407	13·11	14,438	1,816	12·58
1876	8,224	1,228	14·93	3,149	286	9·08	16,168	1,673	10·35
1877	8,640	1,212	14·03	3,211	365	11·37	16,856	1,527	9·06
1878	9,282	1,466	15·79	3,502	375	10·71	17,770	1,486	8·36
1879	9,902	1,217	12·29	3,564	384	10·77	18,070	1,941	10·74
1880	10,262	1,393	13·57	3,739	420	11·23	19,341	1,805	9·33
1881	10,708	1,364	12·74	3,918	405	10·34	18,732	1,731	9·24
1882	10,844	1,647	15·19	4,043	419	10·36	19,009	1,678	8·83
1883	11,173	1,627	14·56	4,259	528	12·40	19,202	1,995	10·39
1884	11,847	1,590	13·42	4,578	457	9·98	19,846	1,573	7·93
1885	12,046	1,366	11·34	4,637	522	11·26	19,693	1,756	8·92
1886	11,177	1,409	12·62	4,627	485	10·48	19,299	1,899	9·84
1887	10,831	1,204	11·12	4,736	478	10·09	19,135	1,795	9·38
1888	10,510	1,008	9·59	4,777	460	9·63	18,902	1,336	7·07
Sums and means	206,911	28,947	14·25	82,732	8,615	10·38	348,684	33,108	9·50

NOTE.—In Western Australia the proportions for the last 3 years were as follow :—1886, 15·48 ; 1887, 15·68 ; 1888, 12·38, or an average of 14·51 for the three years.

640. For many years the returns of South Australia showed a very high infantile death rate, much higher than that in any of the other Australian colonies. It is now, however, stated that the apparently high rate referred to had no existence in reality, but was due to the ages of young children and infants having been incorrectly classified through a misunderstanding on the part of the registering officers. Latterly this has been rectified, with the result that for several years past the death rate of South Australia has compared favourably with that of the other colonies. The misunderstanding referred to is thus explained by the Registrar-General of births, deaths, and marriages, in South Australia, in his report for 1888* :—

Apparently high infantile death rate in South Australia explained.

“It is believed, however, that some years ago, when a great deal of the classification of deaths under the different diseases and ages was done by the outside district registrars, the amount of infantile mortality in this colony was, in regard to children under one year, considerably overstated. The registrars were not, it is thought,

always careful to remember that the age "one year" or "twelve months" appearing in a death registration entry really meant over one year; while the one year columns in the classification sheets were intended only for the enumeration of the deaths of children under one year. Whenever this distinction was forgotten, the deaths of some children who had died really in their second year were almost certain to be entered in the first columns of the classification sheets, as if the children had died in their first year."

641. In the following lists the colonies are placed in order according to their respective rates of infantile mortality, the colony with the highest rate being placed first, and the rest in succession. The reduced rate in South Australia is indicated by the low place it occupies in the list for 1888, as compared with that it occupied in the list extending over a series of years :—

ORDER OF COLONIES IN REFERENCE TO INFANTILE MORTALITY.	
Order in 1888.	Order over a Series of Years.
1. Victoria.	1. Western Australia.*
2. Western Australia.	2. South Australia.
3. Queensland.	3. Queensland.
4. New South Wales.	4. Victoria.
5. Tasmania.	5. New South Wales.
6. South Australia.	6. Tasmania.
7. New Zealand.	7. New Zealand.

642. Of all the countries respecting which the information is procurable, infantile mortality is highest in Germany, Austria and Italy. In France it is just below the average of the whole of the countries, and in England it is next below that in France. South Australia stands just below England and Belgium, Queensland and Victoria below these and Denmark and Sweden; New South Wales below these and Scotland; and Tasmania and New Zealand below all these and Norway; Ireland stands below all the other countries :—

INFANTILE MORTALITY IN VARIOUS COUNTRIES.			
		Deaths under 1 Year of Age to 100 Births.	Deaths under 1 Year of Age to 100 Births.
Wurtemberg	...	31·25	Denmark ...
Bavaria	...	30·84	Sweden ...
Saxony	...	28·22	Queensland ...
Baden	...	26·17	Victoria ...
Austria	...	25·63	Scotland ...
Alsace-Lorraine	...	21·27	New South Wales ...
Italy	...	20·97	Norway ...
Prussia	...	20·78	Tasmania ...
Holland	...	19·32	New Zealand ...
Switzerland...	...	18·79	Ireland ...
France	...	16·60	
England	...	14·92	Mean of the countries
Belgium	...	14·82	named ...
South Australia	...	14·23	17·50

NOTE.—The information respecting all the countries except the Australasian colonies and Ireland is based upon the average of the 19 years ended with 1883. That respecting the Australasian colonies is based on the average of the 22 years ended with 1887, and that respecting Ireland is for the year 1887. All the figures have been derived from official documents.
* According to an average of 3 years only.

643. The infantile mortality of large towns is naturally always above that in country districts. Thus the deaths at under 1 year of age in Melbourne and suburbs (Greater Melbourne) during the seventeen years ended with 1889 averaged 17 per 100 births, whilst in the extra-metropolitan districts of Victoria the mortality of infants at the same period of life averaged less than 10 per 100 births. The following table shows the death rate of infants in the metropolis and in the other districts of the colony during each of the seventeen years named :—

Infantile mortality in Melbourne and country.

INFANTILE MORTALITY IN AND OUTSIDE OF GREATER MELBOURNE, 1873 TO 1889.

Year.	Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.		
		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.	
Greater Melbourne.				Victoria, outside Greater Melbourne.			
1873	...	8,007	1,277	15·95	20,093	1,904	9·48
1874	...	7,946	1,480	18·63	18,854	1,861	9·87
1875	...	8,227	1,546	18·79	18,493	2,265	12·25
1876	...	8,202	1,339	16·33	18,567	1,641	8·84
1877	...	8,295	1,407	16·96	17,715	1,892	10·68
1878	...	8,636	1,297	15·02	17,903	1,965	10·98
1879	...	8,829	1,467	16·61	18,010	1,752	9·73
1880	...	8,645	1,439	16·65	17,503	1,666	9·52
1881	...	9,237	1,514	16·39	17,908	1,605	8·96
1882	...	9,576	1,857	19·39	17,171	1,865	10·86
1883	...	10,093	1,603	15·89	17,448	1,547	8·87
1884	...	10,911	1,832	16·79	17,939	1,449	8·08
1885	...	12,066	2,041	16·92	17,909	1,730	9·60
1886	...	12,941	2,309	17·84	17,883	1,615	9·03
1887	...	14,583	2,553	17·51	18,460	1,743	9·44
1888	...	15,645	2,688	17·18	18,858	1,713	9·08
1889	...	16,934	3,290	19·43	19,425	2,259	11·63
Sums and means	}	178,773	30,939	17·19	310,139	30,472	9·82

644. In Brisbane and Adelaide the rate of infantile mortality is higher, and in Hobart and Wellington lower than in Melbourne and Sydney—the rate in these two being nearly indentical. In the four last-named cities, the rate of infantile mortality compares favourably with that in the majority of the following towns, which are arranged in order according to the extent to which infantile mortality prevails in each :—

Infantile mortality in English and Australian towns.

INFANTILE MORTALITY IN TOWNS OF ENGLAND AND AUSTRALASIA,
1877 to 1886.

Deaths under 1 Year of Age to 100 Births.			Deaths under 1 Year of Age to 100 Births.		
Preston	...	21·8	Sheffield	...	16·3
Leicester	...	20·1	Bradford	...	16·2
Blackburn	...	18·7	Hull	...	16·1
Liverpool	...	18·3	Twenty-eight English		
Salford	...	17·8	Towns	...	16·1
Bolton	...	17·7	Newcastle	...	16·0
Nottingham	...	17·5	Wolverhampton	...	15·9
Manchester	...	17·4	Halifax	...	15·9
Brisbane (1883 to 1887)		17·4	Sunderland	...	15·7
Norwich	...	17·3	Plymouth	...	15·7
Adelaide (1884 to 1887)		17·2	London	...	15·2
Leeds	...	17·2	Brighton	...	14·8
Cardiff	...	16·9	Bristol	...	14·5
Huddersfield	...	16·9	Hobart (1883 to 1887)		14·5
Oldham	...	16·9	Derby	...	14·3
Melbourne (1878 to 1888)		16·9	Wellington (1883 to 1887)		14·2
Sydney (1878 to 1888)	...	16·8	Portsmouth	...	13·8
Birmingham	...	16·4	Birkenhead	...	13·7

Deaths of
infants in
Women's
Hospital.

645. In, or in connexion with the Women's Hospital, Melbourne, 711 children were born alive during the year ended with 30th June, 1889, and of these, 30, or about 4 per cent., died whilst under the care of the institution. In the previous year, 3 per cent. ; in 1886-7, 4 per cent. ; in 1885-6, $4\frac{2}{3}$ per cent. ; in 1884-5 and 1883-4, 9 per cent. ; in the year 1882-3, 7 per cent. ; in 1881-2 (18 months), $11\frac{1}{2}$ per cent. ; in the year 1880, $5\frac{1}{2}$ per cent. ; in 1879, 8 per cent. ; in 1878, $6\frac{1}{2}$ per cent. ; in 1877, 7 per cent. ; and in 1876 and 1875, 9 per cent., of the infants born in the Women's Hospital, or outside under the supervision of its medical officers and committee, died before the mother had been discharged. It is satisfactory to find that the proportions in the last and three previous years were the lowest recorded in the institution ; at the same time it may be pointed out that, in consequence of the bad class of cases which come to maternity hospitals for treatment, the infants who die in such institutions, in proportion to the numbers born, are, all over the world, in excess of a similar proportion outside.

Deaths of
children
under 5.

646. In the year 1889, deaths of male children under 5 years of age numbered 4,180, and deaths of female children under that age numbered 3,621—the former being in the proportion of nearly 38 per cent. and the latter of about 43 per cent. to the total number of deaths at all ages. These proportions are considerably higher than in the preceding eight or ten years, but somewhat below the average of the eleven years 1871-81, and are still lower than those which prevailed in the earlier years of that period. This is accounted for by the fact that the proportion of children to the total population has been diminishing from year to year, and is now very much lower than it was

in the early years referred to. The following table shows the number of such deaths at each year of age and their proportion to the deaths at all ages in 1889 and in each of the previous eighteen years:—

DEATHS OF CHILDREN UNDER 5 YEARS OF AGE, 1871 TO 1889.

Years.	Years of Age at Death (last birthday).					Total Deaths under 5 Years.	
	0.	1.	2.	3.	4.	Number.	Proportion per 100 Deaths at All ages.
MALES.							
1871 ...	1,710	463	135	79	77	2,464	42·15
1872 ...	1,801	486	155	120	102	2,564	42·23
1873 ...	1,679	456	186	146	97	2,564	39·06
1874 ...	1,839	504	184	159	128	2,814	40·43
1875 ...	2,071	917	383	234	217	3,822	44·78
1876 ...	1,637	511	312	261	210	2,931	38·04
1877 ...	1,838	512	216	123	108	2,797	38·08
1878 ...	1,763	465	176	140	87	2,631	36·65
1879 ...	1,817	353	159	117	94	2,540	36·12
1880 ...	1,669	414	156	103	74	2,416	36·55
1881 ...	1,696	357	141	102	72	2,368	33·71
Means ...	1,775	494	200	144	115	2,728	39·40
1882 ...	2,049	400	134	87	92	2,762	34·96
1883 ...	1,702	358	123	114	95	2,392	32·28
1884 ...	1,853	457	162	114	82	2,668	34·76
1885 ...	2,046	402	162	106	78	2,794	33·66
1886 ...	2,127	467	130	75	69	2,868	33·44
1887 ...	2,354	539	149	91	72	3,205	34·79
1888 ...	2,390	475	164	139	100	3,268	34·82
1889 ...	2,989	668	237	157	129	4,180	37·78
FEMALES.							
1871 ...	1,404	413	136	94	68	2,115	51·93
1872 ...	1,533	473	155	106	94	2,361	52·20
1873 ...	1,502	427	160	132	119	2,340	47·41
1874 ...	1,502	472	171	135	99	2,379	45·58
1875 ...	1,740	864	408	256	169	3,437	51·22
1876 ...	1,343	469	275	217	177	2,481	42·46
1877 ...	1,461	484	171	148	102	2,366	43·57
1878 ...	1,499	481	204	108	95	2,387	43·22
1879 ...	1,402	353	156	100	89	2,100	41·28
1880 ...	1,436	386	143	89	51	2,105	41·75
1881 ...	1,423	331	124	95	65	2,038	38·61
Means ...	1,477	468	191	135	103	2,374	45·93
1882 ...	1,673	358	121	94	86	2,332	40·67
1883 ...	1,448	310	125	86	68	2,037	36·40
1884 ...	1,428	423	182	128	87	2,248	38·56
1885 ...	1,725	370	125	92	75	2,387	39·36
1886 ...	1,797	460	155	76	62	2,550	40·00
1887 ...	1,942	435	146	102	76	2,701	39·77
1888 ...	2,011	400	156	94	85	2,746	39·79
1889 ...	2,560	620	197	127	117	3,621	43·48

More boys
die than
girls.

647. During the eleven years ended with 1881, deaths of male children under 5 numbered 30,011, and deaths of female children under 5 numbered 26,109, and thus the former exceeded the latter by 3,902, or by 15 per cent. The deaths of male children in all the years bore a smaller proportion to the total deaths of males than the deaths of female children did to the total deaths of females, a circumstance mainly due to the small proportion of adults in the female as compared with that in the male population. In the eight years ended with 1889, the mortality of boys under 5 amounted to 35 per cent., and that of girls under 5 amounted to 40 per cent., of the whole mortality of their respective sexes. In none of the years to which the table relates did the former exceed 45 per cent., or the latter exceed 53 per cent., of that mortality. The epidemic periods, 1875 and 1889, are easily recognised by the increased mortality which occurred thereat.

Number of
children
under 5 and
their
deaths.

648. The average number of male and female children at each year of age under 5 living, during the period of eleven years ended with 1881, are 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 AND DEATHS OF CHILDREN UNDER 5 YEARS OF AGE,
1871 TO 1881.

Age last Birthday.	Males.				Females.			
	Mean Number of Children living at each age, 1871 & 1881.	Mean Annual Number of Deaths at each age, 1871 to 1881.	Per- centage of Deaths at each age.	Number of Deaths per 1,000 Children living.	Mean Number of Children living at each age, 1871 & 1881.	Mean Annual Number of Deaths at each age, 1871 to 1881.	Per- centage of Deaths at each age.	Number of Deaths per 1,000 Children living.
0 ...	12,152	1,775	65·07	146·07*	11,809	1,477	62·22	125·07*
1 ...	11,228	494	18·11	43·99	11,004	468	19·71	42·53
2 ...	11,943	200	7·33	16·75	11,635	191	8·04	16·42
3 ...	11,807	144	5·28	12·20	11,469	135	5·69	11·77
4 ...	11,261	115	4·21	10·21	11,138	103	4·34	9·25
Total...	58,391	2,728	100·00	46·72	57,055	2,374	100·00	41·61

Proportion
of children
dying
annually.

649. During the period to which the table refers, the mean number of children of both sexes under 5 living was 115,446, and the mean

* These results, being based upon infants living at any one time instead of annual births, are naturally in excess of those in the total lines of the last two columns of table following paragraph 632. ante.

number of deaths of such children was 5,102, whence it results that 44 in every 1,000 children under 5, or about 1 in 23, died annually. In every 1,000 boys the proportion who died annually was 47, or 1 in 21; in every 1,000 girls it was 42, or 1 in 24.

650. Of every 1,000 boys under 1 year of age, 146, and of every 1,000 girls under 1 year of age, 125, died annually. These are larger proportions than those quoted in the table showing the comparison of deaths of children under 1 with the births, the proportions in which were 129 deaths of male infants and 112 deaths of female infants to every 1,000 births of infants of those sexes respectively.*

Proportion
of infants
dying
annually.

651. 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 21 at under 1,† but only about $1\frac{1}{2}$ at from 1 to 2, and less than 1 at subsequent ages.

More boys
died than
girls.

652. 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.

Boys and
girls dying
under 1.

653. Of the whole number of children who died before they attained the age of 5, nearly two-thirds, viz., 65 per cent. of the boys and 62 per cent. of the girls, were under 1 year of age; less than a fifth of the boys and about a fifth of the girls were between 1 and 2; about a fourteenth of the boys and about a twelfth of the girls were between 2 and 3; 1 in 19 of the boys and 1 in 18 of the girls were between 3 and 4; 1 in 24 of the boys and 1 in 23 of the girls were between 4 and 5.

Proportion
of deaths of
children at
each age.

654. It results from actuarial calculations, based upon the figures in this and a previous table,‡ that of every 20,000 boys and girls in equal numbers born in Victoria, 1,291 boys and 1,123 girls may be expected to die before they complete a year of life, 374 more boys and 369 more girls before they complete 2 years, 138 more boys and 139 more girls before they complete 3 years, 99 more boys and 98 more girls before they complete 4 years, and 83 more boys and 76 more

Probable
mortality
of children
under 5.

* See table following paragraph 632 *ante*.

† See also paragraph 636 *ante*.

‡ See paragraph 638, also table following paragraph 635 *ante*, from which probable deaths at under 1 year of age have been deduced. Probability of death at other ages under 5 has been calculated from the numbers in the last table.

girls before they complete 5 years. At the end of that period it is probable that 1,985 of the boys and 1,805 of the girls will have died; and 8,015 of the boys and 8,195 of the girls will be still living.

Deaths of
octogen-
arians.

655. The persons who died at the age of 80 or upwards numbered 613 in 1889, as against 582 in 1888, and 531 in 1887. Those in 1889 consisted of 337 males and 276 females. Thirty-five of the males and 41 of the females had passed the age of 90, and 4 of the males and 4 of the females had passed the age of 100. The following are the exact registered ages of such persons in the last nineteen years:—

DEATHS OF OCTOGENARIANS, 1871 TO 1889.

Years of age.	Year 1889.		Seven Years, 1882-88.		Eleven Years, 1871-81.	
	Males.	Females.	Males.	Females.	Males.	Females.
80	59	53	334	210	253	144
81	50	31	169	130	135	98
82	36	28	262	139	119	97
83	21	19	191	113	101	75
84	35	21	219	157	115	79
85	22	22	170	126	91	70
86	17	17	123	100	63	61
87	20	15	99	85	65	46
88	22	15	72	72	48	38
89	20	14	42	48	35	26
90	7	8	47	45	26	37
91	1	9	32	21	10	16
92	4	7	21	20	18	18
93	7	3	16	25	9	8
94	4	2	15	14	14	8
95	4	4	13	12	16	9
96	1	1	8	3	11	4
97	...	1	7	6	3	4
98	3	1	5	6	5	2
99	...	1	6	7	8	...
100	1	2	9	4	2	5
101	1	1	2	3	1	2
102	1	...	4	2	3	...
103	...	...	3	2	1	2
104	...	1	2	1	2	1
105	1	...	...	1	2	...
106	...	...	3	1	...	1
107	...	...	...	1	...	...
109	...	...	1	...	...	...
110	...	...	...	...	...	1
111	...	...	1	...	...	...
114	...	...	...	...	...	1
Unspecified	...	...	...	...	135*	98*
Total ...	337	276	1,876	1,354	1,291	951

* These figures are those relating to the years 1871 and 1872, in which the exact ages of octogenarians were not noted.

656. In the 8 years ended with 1889, 2,213 males and 1,630 females died in Victoria at the age of 80 or upwards. The deaths of males and females at all ages during the same period numbered 69,522 and 51,623 respectively, therefore 1 male in every 31, and 1 female in every 32, lived to be upwards of 80 years of age. In the same period, 230 of the males, or 1 in 302, and 215 of the females, or 1 in 240, lived to be 90 years of age or upwards; and 29 of the males, or 1 in 2,397, and 19 of the females, or 1 in 2,717, lived to be upwards of 100 years of age. Owing to the rapidly increasing proportion of old people in the population, these proportions are much higher than those prevailing in the preceding period of 9 years ended with 1881, when only 1 male in every 56 males and 1 female in every 58 females who died was upwards of 88 years of age; only one male in 496, and 1 female in 413, was upwards of 90 years; and only 1 male in 5,912, and only 1 female in 3,776, was upwards of 100 years.

Deaths of
octogena-
rians, 1882
to 1889.

657. The average age at death in 1889 was 28·5 years, or 28 years and 6 months. For males the average was 30·65 years, or about 30 years and 8 months, and for females was 25·66 years, or about 25 years and 8 months; the females being thus on the average 5 years younger than the males. Until 1882, the average age at which both males and females died in Victoria had a tendency to advance from year to year, but since then the average has remained tolerably steady—the year 1889, however, being an exception, owing to the high mortality of children in that year having lowered the average—as will be seen by the following figures:—

Average age
at death.

AVERAGE AGE AT DEATH IN VICTORIA.

				Males.			Females.
				—			—
				Years.			Years.
23 years—1852 to 1875	...	...	...	21·70	...	...	15·01
Year 1875	...	...	...	24·28	...	...	18·23
„ 1876	...	...	...	26·81	...	...	21·84
„ 1877	...	...	...	28·60	...	...	23·06
„ 1878	...	...	...	29·54	...	...	23·24
„ 1879	...	...	...	30·65	...	...	24·71
„ 1880	...	...	...	30·72	...	...	25·35
„ 1881	...	...	...	32·63	...	...	25·98
„ 1882	...	...	...	32·04	...	...	26·58
„ 1883	...	...	...	33·13	...	...	27·55
„ 1884	...	...	...	32·24	...	...	27·50

AVERAGE AGE AT DEATH IN VICTORIA—continued.

				Males.		Females.
				Years.		Years.
Year 1885	...	...	...	33·48	...	27·52
„ 1886	...	...	...	33·32	...	27·40
„ 1887	...	...	...	32·80	...	27·35
„ 1888	...	...	...	32·68	...	27·59
„ 1889	...	...	...	30·65	...	25·66

Expectation
of life in
Victoria
and Eng-
land.

658. It should be explained that the average age of death, as given above, would not give a correct idea of the average duration of life, even if the ages of the population were in a normal condition. In an increasing population the former must be always considerably below the latter, in consequence of the undue proportion of children, which tends to lower the average age. A knowledge of the average duration of life can only be accurately obtained from a life table based upon actuarial calculations of a complex character. In England and Wales, according to the most recent life table, the average duration of life—technically called “expectation of life,” or “mean lifetime”—is 41·35 years for males, and 44·62 years for females. In Victoria, according to a life table constructed some time since by Mr. A. F. Burridge, F.I.A. of London, based on the mortality experienced in the 10 years, 1871–80, the average duration of life is 46·37 for males, but a table for females was not given. It would thus appear that a male Victorian may expect, on the average, to enjoy 5 years more of life than an Englishman.

New classi-
fication
adopted in
Victoria.

659. The system of classifying the causes of death in Victoria was changed in 1886 in accordance with a system which had been adopted in England a few years previously. This new mode of classification was based upon one devised by a committee composed of members of the Royal College of Physicians, London, and was published by them, first in 1869, and afterwards, in a revised form, in 1885. The system of classification, now adopted, has superseded that of the late Dr. Farr, which, until the new system was introduced, had been the mode used for classifying the causes of death, both in England and Wales and in the Australasian colonies. A full account of the difference between the two systems was given in the *Victorian Year-Book*, 1886–7.*

* Paragraph 635 et seq.

660. A Nosological Index was compiled by the present writer more than a quarter of a century since, under the sanction of the then Registrar-General, Mr. W. H. Archer, F.I.A., to be used in connexion with Dr. Farr's classification, in order to facilitate the bringing of all the circumstances resulting in death under classified heads, also for the guidance of deputy registrars in receiving, and of medical men in supplying, information respecting the causes of death, and of officers of charitable and other public institutions in preparing statistical tables of the deaths and sickness occurring therein. The adoption of a new system of classification has made it necessary that the Nosological Index should be completely altered to suit the change. This has been done according to the best knowledge possessed by the Department of the Government Statist, Melbourne, the place to be assigned to each disease or cause of death having been carefully considered by experienced officers and compared with the revised nomenclature proposed by the Royal College of Physicians. At the same time the opportunity has been taken greatly to increase the number of entries in the Index.*

Nosological
Index.

661. From the date of its publication until the adoption of the new classification in 1886 the former Index had been in general use in the registration departments of all the Australasian colonies, some of which received such a supply of copies as they required from the Victorian Government, and others reprinted the work. Most of the colonies have now adopted the new system. To all the colonies adopting this system the revised Index will be found as indispensable as the former one proved itself to be during a period of twenty-five years in connexion with the system which has been abandoned.

Victorian
Index
in use
throughout
Australasia.

662. The following table shows the causes of death in classified arrangement; the total number and the number of Chinese and Aborigines who died from each cause during 1889, also the total number who died from each cause during the five years ended with 1885 and during the ten years ended with 1880 :—

Causes of
death
classified.

* A copy of the new Nosological Index was published in the *Victorian Year-Book*, 1886-7, page 853 et seq.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT.
(10 Years : 1871 to 1880; 5 Years : 1881 to 1885; and Year 1889.)

Class.	Sub-Class.	Causes of Death.*	Number of Deaths.				
			Ten Years : 1871-1880.	Five Years 1881-1885.	Year 1889.		
					Total. †	Chinese	Abori- gines.
		All causes	122,570	66,811	19,392	250	36
		CLASSES.					
I.	...	SPECIFIC FEBRILE OR ZYMOTIC DISEASES :— Zymotici (ζύμη, leaven). Diseases of the whole body, dependent on morbid poisons.	28,430	10,447	3,272	10	4
II.	...	PARASITIC DISEASES :— Parasitici (παράσιτος, parasite). Diseases dependent on animal or vege- table parasites.	734	391	81	...	1
III.	...	DIETIC DISEASES :— Dietici (δίαιτα, way of life; diet). Diseases produced by errors of diet.	1,979	1,124	283	4	...
IV.	...	CONSTITUTIONAL DISEASES :—Ca- chectici (καχεξία, bad habit of body). This class, according to the nomencla- ture of the Royal College of Physicians, is designated "Diseases of the whole body—not classed." The term used by Dr. Farr in the old classification, however, is retained; Dr. Farr's de- finition being as follows :—"Sporadic diseases; affecting several organs in which new morbid products are often deposited; sometimes hereditary."	17,205	10,617	2,853	57	9
V.	...	DEVELOPMENTAL DISEASES :—Me- tamorphici (μεταμόρφωσις, change of form). Special diseases, the incidental result of the formative and nutritive processes.	6,042	4,431	1,352	20	2
VI.	...	LOCAL DISEASES :— Monorganici (μόνος, alone, without others; ὄργανον, organ). Sporadic diseases, in which the functions of particular organs or systems are disturbed or obliterated, with or without inflammation.	51,209	30,575	8,726	117	14
VII.	...	VIOLENT DISEASES OR DEATHS :— Thanatici (θάνατοι, violent deaths). Diseases which are the evident and direct results of physical or chemical forces, acting either by the will of the sufferer, of other persons, or accidentally.	8,607	4,243	1,186	24	5
VIII.	...	ILL-DEFINED AND NOT SPECIFIED CAUSES :— This group includes several diseases which were formerly classed under specific heads, such as dropsy, de- bility, tumor, abscess, etc.	8,364	4,983	1,639	18	1

* The definitions given in this column are chiefly those of the late Dr. Farr.

† The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*

(10 Years: 1871 to 1880; 5 Years: 1881 to 1885; and Year 1889.)

Class.	Sub-Class.	Causes of Death.	Number of Deaths.				
			Ten Years 1871-1880.	Five Years: 1881-1885.	Year 1889.		
					Total.*	Chinese.	Abori- gines.
		SUB-CLASSES.					
I.	1	Miasmatic diseases ...	15,459	4,588	1,756	4	...
	2	Diarrhœal diseases ...	11,036	4,886	1,330	5	3
	3	Malarial diseases ...	213	39	5	...	...
	4	Zoogenous diseases ...	1	...	1	...	...
	5	Venereal diseases ...	377	218	36	...	1
	6	Septic diseases ...	1,344	716	144	1	...
II.	...	Parasitic diseases ...	734	391	81	...	1
III.	...	Dietic diseases ...	1,979	1,124	283	4	...
IV.	...	Constitutional diseases ...	17,205	10,617	2,853	57	9
V.	...	Developmental diseases ...	6,042	4,431	1,352	20	2
VI.	1	Diseases of the nervous system ...	13,532	7,414	1,831	13	1
	2	Diseases of the organs of special sense ...	?	?	16	...	...
	3	Diseases of the circulatory system...	6,804	4,453	1,382	39	...
	4	Diseases of the respiratory system...	15,534	9,966	2,450	39	10
	5	Diseases of the digestive system ...	11,240	6,135	2,213	21	3
	6	Diseases of the lymphatic system and ductless glands	44	23	9	...	...
	7	Diseases of the urinary system ...	1,875	1,511	548	4	...
	8	Diseases of the organs of generation	295	120	52	...	...
	9	Diseases of parturition ...	1,267	624	101	...	...
	10	Diseases of the organs of locomotion	290	137	59	1	...
	11	Diseases of the integumentary system	328	192	65	...	...
VII.	1	Accident or negligence ...	7,447	3,662	1,000	19	5
	2	Homicide ...	190	110	40	...	...
	3	Suicide ...	951	463	143	5	...
	4	Execution ...	19	8	3	...	...
VIII.	...	Ill-defined causes, or unspecified ...	8,364	4,983	1,639	18	1
		DISEASES, ETC.					
I.	1	Small-pox ...	2	6	...	...	...
		Chicken-pox ...	13	6	...	...	...
		Measles ...	2,080	386	19	...	...
		Epidemic rose rash ...	...	...	...	...	...
		Scarlet fever ...	4,101	282	41	...	...
		Influenza ...	276	162	21	...	...
		Whooping-cough ...	1,974	701	234	...	...
		Mumps ...	...	...	1	...	...
		Diphtheria † ...	3,040	681	530	...	...
		Cerebro-spinal fever ...	...	...	...	...	...
		Simple continued fever ...	3,973	2,364	910	4	...
		Typhoid (or enteric) fever ...					
		Others ...	...	...	...	...	...
	2	Cholera (simple) ...	523	263	147	...	...
		Diarrhœa ...	7,667	3,994	1,042	2	3
		Dysentery ...	2,846	629	141	3	...
	3	Remittent fever ...	169	25	3	...	...
		Beri Beri ...	...	...	2	...	...

* The Chinese and Aborigines are included in this column.

† See also Croup (VI., 4).

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued*.
(10 Years : 1871 to 1880 ; 5 Years : 1881 to 1885 ; and Year 1889.)

Class.	Sub-Class.	Causes of Death.	Number of Deaths.				
			Ten Years : 1871-1880.	Five Years : 1881-1885.	Year 1889.		
					Total.*	Chinese.	Aborigines.
		DISEASES, ETC.— <i>continued</i> .					
I.	3	Ague	44	14	...	...	...
	4	Glanders	1	...	...	...	...
		Cow-pox and other effects of vaccination	?	?	1	...	...
	5	Syphilis	286	178	30	...	1
		Gonorrhœa, stricture of the urethra	91	40	6	...	...
	6	Phagadæna	?	?	2	...	...
		Erysipelas	619	260	31	1	...
		Pyæmia, septicæmia	†264	†142	49	...	...
		Puerperal fever†	461	314	62	...	...
II.	...	Thrush	327	119	19	...	...
		Others from vegetable parasites ...	?	?	...	...	...
		Hydatids	379	268	61	...	1
		Others from animal parasites ...	28	4	1	...	...
III.	...	Starvation, want of breast-milk ...	1,322	726	159	4	...
		Scurvy	§	§	2	...	...
		Intemperance	646	394	116	...	...
		Other dietetic diseases	11	4	6	...	...
IV.	...	Rheumatic fever, rheumatism of heart	817	379	90	3	1
		Rheumatism					
		Gout	133	80	22	...	...
		Rickets	?	3	4	...	...
		Cancer, malignant disease ...	||2,957	||2,065	629	15	...
		Tabes mesenterica	723	484	150	...	...
		Tubercular meningitis (acute hydrocephalus)	1,394	719	201	1	...
		Phthisis	10,155	6,428	1,571	33	8
		Other forms of tuberculosis, scrofula, etc.	780	301	91	2	...
		Purpura, hæmorrhagic diathesis ...	¶100	¶44	17	...	...
		Anæmia, chlorosis, leucocythæmia...	**	**	42	...	...
		Diabetes mellitus ††	146	114	32	...	...
		Other constitutional diseases ...	?	?	4	3	...
V.	...	Premature birth	2,715	1,689	475	...	...
		Atelectasis	††	††	46	...	...
		Cyanosis	203	115	33	...	...
		Spina bifida	108	51	14	...	...
		Imperforate anus	289	122	50	...	...
		Cleft palate, harelip					
		Other congenital defects					
		Old age	2,727	2,454	734	20	2

* The Chinese and Aborigines are included in this column.

† A few cases of mumps and other miasmatic diseases probably included under this head.

‡ See also accidents of childbirth (Class VI., Sub-class 9, *post*).

§ Included with purpura (IV.).

|| Including lupus.

¶ Including scurvy.

** Distributed over other heads, viz., anæmia with dropsy (VIII.), chlorosis with disorders of menstruation (VI., 8), and leucocythæmia with other diseases of the circulatory system (VI., 3).

†† Includes diabetes insipidus, and diabetes undefined.

‡‡ Included with debility (VIII.).

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*

(10 Years: 1871 to 1880; 5 Years: 1881 to 1885; and Year 1889.)

Class.	Sub-Class.	Causes of Death.	Number of Deaths.				
			Ten Years : 1871-1880.	Five Years : 1881-1885.	Year 1889.		
					Total.*	Chinese.	Aborigines.
VI.		DISEASES, ETC.—<i>continued.</i>					
	1	Inflammation of brain or its membranes	2,383	1,249	183	...	...
		Apoplexy ...	2,750	1,674	376	5	...
		Softening of brain ...	†	†	61	2	...
		Hemiplegia, brain paralysis	1,596	968	362	3	...
		Paralysis, undefined ...					
		Insanity (general paralysis of insane)					
		Chorea ...	20	9	1	...	...
		Epilepsy ...	588	365	110	1	...
		Convulsions ...	3,390	1,454	456	...	...
		Laryngismus stridulus ...	?	?	2	...	...
		Idiopathic tetanus ...	2,805	1,695	280	2	1
		Paraplegia, diseases of spinal cord					
		Other diseases of nervous system					
	2	Otitis, otorrhœa ...	†	†	16	...	...
		Epistaxis and diseases of nose					
		Ophthalmia and diseases of eye					
	3	Endocarditis, valvular disease	377	229	238	4	...
		Pericarditis ...					
		Hypertrophy of heart ...					
		Angina pectoris ...	‡	‡	227	1	...
		Syncope ...					
		Aneurism ...					
		Senile gangrene ...	§	§	17	...	...
		Embolism, thrombosis ...	5,642	3,902	836	30	...
		Phlebitis ...					
		Varicose veins ...					
		Other diseases of the circulatory system	359	253	58	...	...
	4	Laryngitis ...					
		Croup || ...					
		Other diseases of larynx and trachea	?	?	5	...	...
		Asthma, emphysema ...	392	261	80	4	...
		Bronchitis ...	4,588	3,039	753	6	5
		Pneumonia ...	5,077	3,769	898	20	3
		Congestion of the lungs ...	1,812	1,049	196	6	2
		Pleurisy ...	811	540	118	1	...
		Others ...	598	260	63	2	...
	5	Stomatitis ...	¶ 3	¶ 2	13	...	...
		Dentition ...	1,469	464	196	...	...
		Sore throat, quinsy ...	153	42	17	...	...

* The Chinese and Aborigines are included in this column.

† Included with other diseases of nervous system.

‡ Included with other diseases of the circulatory system.

§ Included with mortification (VIII.)

|| Including diphtheritic croup.

¶ The great majority of cases of stomatitis for these periods are included with diseases of stomach.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*
(10 Years: 1871 to 1880; 5 years: 1881 to 1885; and Year 1889.)

Class.	Sub-Class.	Causes of Death.	Number of Deaths.				
			Ten Years: 1871-1880.	Five Years: 1881-1885.	Year 1889.		
					Total.*	Chinese.	Aborigines.
VI.	5	DISEASES, ETC.— <i>continued.</i>					
		Dyspepsia ...					
		Hæmatemesis ...					
		Melæna ...					
		Diseases of stomach ...					
		Enteritis ...	1,971	1,294	823	1	2
		Ulceration of intestine ...					
		Ileus, obstruction of intestine ...	2,134	1,137	366	4	...
		Stricture or strangulation of intestine ...	160	121	14	...	...
		Intussusception of intestine ...	424	244	95	3	...
		Hernia ...	44	35	10	...	...
		Fistula ...	93	60	23	...	...
		Peritonitis ...	191	139	41	1	...
		Ascites ...	17	8	...	...	...
		Gallstones ...	771	442	130	4	...
		Cirrhosis of liver ...	184	58	14	...	...
		Other diseases of liver ...					
		Other diseases of the digestive system ...	3,623	2,084	435	8	1
		Diseases of lymphatic system ...	3	5	36	...	...
		Disease of spleen ...	?	?	5	...	...
		Bronchocele ...	44	19	3	...	...
		Addison's disease ...	?	4	...	...	...
		Nephritis ...	†	†	1	...	...
		Bright's disease ...	218	182	107	...	...
		Uræmia ...	749	777	248	1	...
		Suppression of urine ...	†	†	40	1	...
		Calculus ...	29	32	8	...	...
		Hæmaturia ...	48	50	11	1	...
		Diseases of bladder and prostate ...	†	†	1	...	...
		Other diseases of the urinary system ...	203	140	89	1	...
		Ovarian disease ...	628	330	44	...	...
		Diseases of the uterus and vagina ...	44	33	23	...	...
		Disorders of menstruation ...	170	58	13	...	...
		Pelvic abscess ...	52	27	4	...	...
		Perineal abscess ...	†	†	7	...	...
		Diseases of the testes, penis, scrotum, etc.	†	†	2	...	...
		Abortion, miscarriage ...	29	2	3	...	...
		Puerperal mania ...					
		Puerperal convulsions ...					
		Placenta prævia, flooding ...					
		Phlegmasia dolens ...					
		Other accidents of childbirth ...	1,267	624	101	...	...
		Caries, necrosis ...					
		Arthritis, osteitis, periostitis ...	§	§	35	1	...
		Other diseases of the organs of locomotion ...	87	58	10	...	...
			203	79	14	...	...

* The Chinese and Aborigines are included in this column.

† Included with other diseases of urinary system.

‡ Included with abscess (VIII.).

§ Included with "Other diseases," in same sub-class.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued*.

(10 Years : 1871 to 1880 ; 5 Years : 1881 to 1885 ; and Year 1889.)

Class.	Sub-Class.	Causes of Death.	Number of Deaths.				
			Ten Years : 1871-1880.	Five Years : 1881-1885.	Year 1889.		
					Total.*	Chinese.	Aborigines.
		DISEASES, ETC.—<i>continued</i>.					
VI.	11	Carbuncle ...	37	27	3	...	...
		Phlegmon, cellulitis ...	20	4	15	...	...
		Lupus ...	†	†	1	...	...
		Ulcer, bed sore ...	86	59	11	...	...
		Eczema ...	?	?	20	...	...
		Pemphigus ...	...	...	6	...	...
		Other diseases of the integumentary system	185	102	9	...	...
VII.	1	Fractures, contusions ...	3,152	1,632	406	6	...
		Wounds ...	262	124	30	...	...
		Burn, scald ...	885	434	102	2	3
		Sunstroke ...	218	70	19	...	...
		Lightning ...	25	12	3	...	...
		Poison ...	178	93	23	1	...
		Bite of snake or insect ...	37	18	2	...	...
		Drowning ...	1,937	933	270	6	1
		Suffocation ...	625	283	84	2	...
		Otherwise ...	128	63	61	2	1
	2	Murder and manslaughter ...	190	110	40	...	...
	3	Gunshot wounds ...	254	{ 69	31	...	...
		Cut, stab ...			19	...	...
		Poison ...	188	71	29	...	...
		Drowning ...	217	95	29	1	...
		Hanging ...	256	138	26	4	...
		Suicide by other means ...	36	16	9	...	...
	4	Judicial hanging ...	19	8	3	...	...
VIII.	...	Dropsy ...	† 613	† 322	23	...	...
		Debility, atrophy, inanition ...	§ 6,987	§ 4,279	1,491	14	1
		Mortification ...	131	55	8	2	...
		Tumour ...	269	204	13	...	...
		Abscess ...	38	3	20	...	...
		Hæmorrhage ...	...	...	11	...	...
		Sudden (cause unascertained) ...	...	...	6	...	...
		<i>Causes not specified</i> ...	326	120	67	2	...

663. The next table shows the same causes of death, arranged in the order of their fatality, during 1889, with the numbers who died from each cause in that year, during the five years ended with 1885, and during the ten years ended with 1880, also the order of fatality of the different causes during that period :—

Causes of death in order of fatality.

* The Chinese and Aborigines are included in this column.

† Included with cancer (IV.).

‡ Including anæmia (IV.).

§ Including atelectasis (V.).

CAUSES OF DEATH IN ORDER OF FATALITY.

(10 Years : 1871-80; 5 Years : 1881-85; and Year 1889.)

Order of Fatality.			Causes of Death.	Number of Deaths.		
Ten Years : 1871-80.	Five Years : 1881-85.	Year 1889.		Ten Years : 1871-80.	Five Years : 1881-85.	Year 1889.
1	1	1	Phthisis	10,155	6,428	1,571
4	3	2	Heart disease, etc., exclusive of aneurism (64) and pericarditis, endocarditis and valvular disease (238)	642	3,902	1,080
2	2	3	Diarrhœa	7,667	3,994	1,042
3	5	4	Accidents	7,447	3,662	1,000
8	8	5	Typhoid (or enteric) and simple continued fever	3,973	2,364	910
5	4	6	Pneumonia	5,077	3,769	898
22	15	7	Dyspepsia, and other diseases of the stomach	1,971	1,294	823
6	6	8	Bronchitis	4,588	3,039	753
16	7	9	Old age	2,727	2,454	734
12	10	10	Cancer, malignant disease ...	2,957	2,065	629
11	26	11	Diphtheria	3,040	681	530
17	12	12	Premature birth	2,715	1,689	475
10	14	13	Convulsions	3,390	1,454	456
9	9	14	Liver diseases not classed ...	3,623	2,084	435
15	13	15	Apoplexy	2,750	1,674	376
19	17	16	Enteritis	2,134	1,137	366
26	19	17	Hemiplegia, paralysis, insanity ...	1,596	968	362
23	21	18	Croup (including diphtheritic croup)	1,897	795	279
14	11	19	Diseases of spinal cord and other diseases of nervous system	2,805	1,695	271
36	22	20	Bright's disease	749	777	248
48	48	21	Endocarditis, pericarditis, valvular disease	377	229	238
21	25	22	Whooping cough	1,974	701	234
28	24	23	Tubercular meningitis (acute hydrocephalus)	1,394	719	201
24	18	24	Congestion of the lungs	1,812	1,049	196
27	30	25	Dentition	1,469	464	196
18	16	26	Inflammation of brain or its membranes	2,383	1,249	183
25	20	27	Childbirth and puerperal fever ...	1,728	938	163
29	23	28	Starvation, want of breast milk ...	1,322	726	159
37	29	29	Tabes mesenterica	723	484	150
44	43	30	Cholera (simple)	523	263	147
30	31	31 {	Suicide	951	463	143
41	40		Malformation	600	288	143
13	27	32	Dysentery	2,846	629	141
35	32	33	Peritonitis	771	442	130
32	28	34	Pleurisy	811	540	118
38	33	35	Intemperance	646	394	116
43	36	36	Epilepsy	588	365	110
54	49	37	Nephritis	218	182	107
45	47	38	Ileus, obstruction of intestine ...	424	244	95
34	39	39	Other forms of tuberculosis, scrofula, etc.	780	301	91

CAUSES OF DEATH IN ORDER OF FATALITY—*continued.*

(10 Years : 1871-80; 5 Years : 1881-85; and Year 1889.)

Order of Fatality.			Causes of Death.	Number of Deaths.		
Ten Years : 1871-80.	Five Years : 1881-85.	Year 1889.		Ten Years : 1871-80.	Five Years : 1881-85.	Year 1889.
31	35	40	Rheumatic fever and rheumatism ...	817	379	90
55	53	41	Diseases of bladder and prostate ...	203	140	89
46	44	42	Asthma, emphysema ...	392	261	80
33	38	43	Aneurism ...	785	322	64
42	45	44	Diseases of the respiratory system not classed	598	260	63
...	...	} 45 {	Softening of the brain ...	*	*	61
47	42		Hydatids ...	379	268	61
49	46	46	Laryngitis ...	359	253	58
53	52	47	Pyæmia, septicæmia ...	264	142	49
39	37	48	Diseases of the urinary system not classed	628	330	44
...	...	49	Anæmia, chlorosis, leucocythæmia ...	?	?	42
56	54	} 50 {	Hernia ...	191	139	41
7	41		Scarlet fever ...	4,101	282	41
57	58	} 51 {	Murder and manslaughter ...	190	110	40
...	...		Uræmia ...	?	?	40
83	78	52	Diseases of the digestive system not classed	3	5	36
...	...	53	Caries, necrosis ...	?	?	35
64	57	54	Diabetes mellitus ...	146	114	32
40	45	55	Erysipelas ...	619	260	31
51	50	56	Syphilis ...	286	178	30
73	70	} 57 {	Ovarian disease ...	44	33	23
67	62		Intussusception of intestine ...	93	60	23
65	60	58	Gout ...	133	80	22
52	51	59	Influenza ...	276	162	21
...	...	60	Eczema ...	?	?	20
50	56	} 61 {	Thrush ...	327	119	19
20	34		Measles ...	2,080	386	19
63	67	} 62 {	Sore throat, quinsy ...	153	42	17
66	66		Purpura, hæmorrhagic diathesis ...	100	44	17
...	...	63	Diseases of the eye and ear ...	?	?	16
58	59	} 64 {	Diseases of the integumentary system not classed	185	102	15
77	79		Phlegmon, cellulitis ...	20	4	15
59	58	} 65 {	Ascites ...	184	58	14
55	61		Diseases of the organs of locomotion not classed	203	79	14
62	55	} 66 {	Ulceration of intestines ...	160	121	14
60	64		Diseases of the uterus and vagina ...	170	58	13
83	81	} 67 {	Stomatitis ...	3	2	13
70	63		Ulcer, bedsore ...	86	59	11
72	65	} 68 {	Calculus ...	48	50	11
69	64		Arthritis, ostitis, periostitis ...	87	58	10
73	69	} 69 {	Stricture or strangulation of intestine	44	35	10
...	...		Idiopathic tetanus ...	...	...	9

* Included with diseases of spinal cord and other diseases of nervous system, *ante.*

CAUSES OF DEATH IN ORDER OF FATALITY—continued.
(10 Years : 1871-80; 5 Years : 1881-85; and Year 1889.)

Order of Fatality.			Causes of Death.	Number of Deaths.		
Ten Years : 1871-80.	Five Years : 1881-85.	Year 1889.		Ten Years : 1871-80.	Five Years : 1881-85.	Year 1889.
75	71	70	Suppression of urine	29	32	8
...	...	71	Pelvic abscess ... ..	...	...	7
81	79	72 {	Dietic diseases not classed... ..	11	4	6
68	68		Gonorrhœa, stricture of the urethra...	91	40	6
...	..	73 {	Diseases of the larynx and trachea not classed	?	?	5
...	...		Diseases of the lymphatic system ...	?	?	5
...	80	74 {	Rickets ... ..	...	3	4
...	...		Constitutional diseases not classed ...	?	?	4
71	71		Disorders of menstruation... ..	52	27	4
75	81	75 {	Diseases of testes, penis, scrotum, etc.	29	2	3
61	72		Remittent fever	169	25	3
78	76		Judicial hanging	19	8	3
73	73		Diseases of spleen	44	19	3
74	71	76 {	Carbuncle	37	27	3
...	...		Laryngismus stridulus ... ..	...	...	2
...	...		Perineal abscess ... ..	...	...	2
...	...		Beri Beri ... ..	...	...	2
...	...		Phagadœna ... ..	...	...	2
...	...	77 {	Scurvy	?	?	2
...	...		Mumps ... ..	...	...	1
...	...		Lupus	?	?	1
77	75		Chorea	20	9	1
...	...		Hæmaturia	?	?	1
...	...	77 {	Addison's disease	?	...	1
...	...		Cow-pox and other effects of vaccination	?	?	1
76	79	...	Other parasitic diseases	28	4	1
...	79	...	Bronchocele	?	4	...
84	77	...	Small-pox	2	6	...
80	77	...	Chicken-pox	13	6	...
79	76	...	Fistula	17	8	...
73	74	...	Ague	44	14	...
85	...	...	Glanders	1	...	...
...	...	...	Epidemic rose-rash	?	?	...
...	...	...	Cerebro-spinal fever ... ..	...	...	...
Deaths from well-defined causes ...				114,206	61,828	17,753
Deaths from "atrophy and debility" and other ill-defined and unspecified causes				8,364	4,983	1,639
Deaths from all causes				122,570	66,811	19,392

Death rate from various causes in Victoria and England.

664. The fatality of the different circumstances which cause death in this colony, as compared with the fatality resulting from similar causes in England and Wales, is shown by the following table, in which the number of persons dying from each cause in either country

is compared with the number of persons living in the same country. The total of each class and order is given, as also are some of the principal diseases. The Victorian results relate to the year 1889, the five years ended with 1885, and the ten years ended with 1880, and the results for England and Wales to the five years ended with 1880:—

ANNUAL DEATH RATE FROM EACH GROUP OF CAUSES AND CERTAIN DISEASES IN VICTORIA AND ENGLAND AND WALES.

Class.	Sub-Class.	Causes of Death.	Number of Annual Deaths per 100,000 of Mean Population.			
			Victoria.			England and Wales.
			Year 1889.	Average of 5 Years: 1881-1885.	Average of 10 Years: 1871 to 1880.	Average of 5 Years: 1876 to 1880
		All causes ...	1,756·04	1,464·31	1,538·01	2,081·74
		CLASSES.				
I.	...	Specific febrile or zymotic diseases	296·30	228·97	356·74	332·00
II.	...	Parasitic diseases ...	7·33	8·57	9·21	5·74
III.	...	Dietic diseases ...	25·63	24·64	24·83	6·72
IV.	...	Constitutional diseases ...	258·35	232·70	215·89	358·26
V.	...	Developmental diseases ...	122·43	97·11	75·82	163·14
VI.	...	Local diseases ...	790·18	670·12	642·57	1,004·80
VII.	...	Violent deaths ...	107·40	92·99	108·00	72·00
VIII.	...	Ill-defined and not specified causes	148·42	109·21	104·95	139·08
		SUB-CLASSES AND DISEASES.				
I.	1	Miasmatic diseases ...	159·01	100·56	193·98	219·26
		Measles ...	1·72	8·47	26·10	38·54
		Scarlet fever ...	3·71	6·18	51·46	68·04
		Diphtheria* ...	48·00	14·93	38·15	12·18
		Whooping-cough ...	21·19	15·36	24·77	52·76
		Typhoid or enteric fever, etc.	82·40	51·81	49·85	34·66
	2	Diarrhœal diseases ...	120·44	107·09	138·48	85·40
		Diarrhœa ...	94·36	87·54	96·21	) 83·36
		Dysentery ...	12·77	13·79	35·71	
	3	Malarial diseases ...	·45	·85	2·67	·74
	4	Zoogenous diseases ...	...	...	·01	·36
	5	Venereal diseases ...	3·26	4·78	4·73	9·56
	6	Septic diseases ...	13·04	15·69	16·87	16·68
		Puerperal fever (see also Childbirth and Puerperal <i>infra</i>)	5·62	6·88	5·78	6·20

* Deaths from diphtheritic croup are not included with those from diphtheria, but under the head of croup, which is classed as a disease of the respiratory system, Class VI., Sub-Class 4.

ANNUAL DEATH RATE FROM EACH GROUP OF CAUSES AND CERTAIN
DISEASES IN VICTORIA AND ENGLAND AND WALES—*continued.*

Class.	Sub-Class.	Causes of Death.	Number of Annual Deaths per 100,000 of Mean Population.			
			Victoria.			England and Wales.
			Year 1889.	Average of 5 Years : 1881-1885.	Average of 10 Years : 1871 to 1880.	Average of 5 Years : 1876 to 1880.
		SUB-CLASSES AND DISEASES.				
IV.	...	Constitutional diseases—				
		Cancer, malignant disease	56·96	45·26	37·10	49·60
		Phthisis	142·26	140·88	127·42	204·24
		Other tubercular and scrofulous diseases	40·03	32·96	36·35	77·87
V.	...	Developmental diseases—				
		Of children (premature birth or malformation)	55·87	43·33	41·60	55·80
		Of old age	66·47	53·78	34·22	107·34
VI.	...	Diseases of the systems—				
	1	Nervous (brain diseases, etc.)	165·81	162·50	169·80	277·80
	2	Organs of special sense (nose, ear, and eye diseases)	1·45	?	?	1·34
	3	Circulatory (heart diseases, etc.)	125·15	97·59	85·37	141·70
	4	Respiratory (lung diseases, etc.)*	221·86	218·43	194·92	395·50
	5	Digestive (stomach, bowel, liver diseases, etc.)	200·39	134·46	141·04	117·60
	6	Lymphatic, and ductless glands	·81	·50	·55	1·26
	7	Urinary (kidney, bladder diseases, etc.)	49·62	33·12	23·53	37·50
	8	Generative (diseases of ovary, uterus, and vagina, etc.)	4·71	2·63	3·70	5·88
	9	Childbirth (see also Childbirth and puerperal fever <i>infra</i>)	9·15	13·68	15·90	7·96
	10	Locomotive (arthritis, ostitis, etc.)	5·34	3·00	3·64	10·78
	11	Integumentary (carbuncle, phlegmon, ulcer, etc.)	5·89	4·21	4·12	7·48
VII.	1	Accident or negligence ...	90·55	80·26	93·45	63·12
	2	Homicide	3·62	2·41	2·38	1·40
	3	Suicide	12·95	10·15	11·93	7·38
	4	Execution	·27	·17	·24	·10
I. VI.	6 } 9 }	Childbirth and puerperal fever	14·77	20·55	21·68	14·16

NOTE.—See notes to table following paragraph 661 *ante*.

* Deaths from diphtheritic croup are not included with those from diphtheria, but under the head of croup, which is classed as a disease of the respiratory system, Class VI., Sub-Class 4.

665. By means of the results shown in this table, it is found that, over a series of years, the mortality from the following causes is greater in Victoria than in England and Wales:—Diphtheria,* typhoid fever, diarrhoeal diseases, dietic diseases (including want of breast-milk and alcoholism), parasitic diseases (including thrush, hydatids, etc.); diseases of the stomach, bowels and liver; violent deaths of all kinds; and the consequences of childbirth. From every other cause shown, also from all causes combined, the death rate is, on the average, higher in England and Wales than in Victoria.

Diseases
more fatal
in Victoria
than in
England.

666. It should be explained that under the altered nosological classification, which has now been in force for four years, the increased number of distinct diseases specified, and the numerous changes made in the grouping of diseases, have rendered it difficult in some instances to compare correctly the number of deaths resulting from many diseases now stated separately, with the deaths which resulted from the same diseases before the change took place, when they were grouped with other complaints in such a way as to be now not distinguishable. Such discrepancies have, as far as possible, been pointed out in the footnotes to a previous table, by means of which it will generally be found possible to institute a fair comparison.

New nos-
ology pre-
vents
returns
from being
strictly
compar-
able.

667. Per 100,000 of the population, 296 deaths in 1889 were set down to specific febrile or zymotic diseases. The number was 30 per cent. above the average of recent years, but 17 per cent. below the average of the decade 1871-80, during which period, in consequence of the prevalence of epidemics, the rate of mortality from this class of complaints was somewhat higher than in England. Of the 296 deaths referred to, 159 were set down to miasmatic diseases, 120 to diarrhoeal diseases, 13 to septic diseases, 3 to venereal diseases, and a much smaller proportion to malarial diseases. Of miasmatic diseases, the most prominent in Victoria is typhoid fever, which caused 82 deaths per 100,000 of the population in 1889, as compared with only 51 in 1888; although the relative mortality from this disease is on the average about 44 per cent. higher than in England, in 1889 it was two and a third times as high as in that country. Diphtheria,* which in 1889 caused nearly a third of the deaths from miasmatic diseases, or rather more than half as many as from typhoid fever, has been much more fatal than usual in the last two

Specific
febrile or
zymotic
diseases.

* There is some difficulty in making comparisons in the case of diphtheria, as diphtheritic croup, which is generally classed with croup, may sometimes be classed with diphtheria. See footnote to last table.

years, but the rate of mortality was greater in 1889 than in 1888 by 20 per 100,000; in 1889, moreover, it was three times as high as the average of recent years (1881-5), but only 10 per 100,000 higher than the average of the ten years 1871-80. Whooping cough appeared in an epidemic form in 1889, causing, per 100,000 of the population, 21 deaths, as against barely 2 deaths in 1888, 15 deaths in the quinquennial period 1881-5, and 25 deaths in the decennial period 1871-80. The mortality from diarrhœal diseases in 1889 (120 per 100,000) was considerably higher than in 1888, also higher than in the five years 1881-85, but somewhat lower than in the decade 1871-80. The mortality from most of the other zymotic diseases—which, however, are of but minor importance—were considerably below the average.

Zymotic diseases, etc., in Australasian colonies.

668. The following is a statement of the number of deaths from zymotic diseases under the old classification, which now corresponds as nearly as possible with the zymotic, parasitic, and dietic classes of disease together, and of the proportion of such deaths to the total mortality and to the population over a series of years in all the Australasian colonies. The colonies are placed in order according to the death rate from diseases of this class prevailing in each:—

ORDER OF COLONIES IN REFERENCE TO MORTALITY FROM ZYMOTIC, PARASITIC, AND DIETIC DISEASES, 1878-87.

Colony.	Deaths from Zymotic, Parasitic, and Dietic Diseases, 1878-87.		
	Total Number.	Percentage of Total Deaths.	Annual Proportion per 10,000 Persons Living.
1. Queensland	13,190	28·11	49·5
2. Western Australia	1,099	20·34	34·2
3. South Australia	8,425	20·53	29·3
4. New South Wales	22,909	18·13	27·7
5. Victoria	23,776	17·71	26·2
6. Tasmania	2,793	14·59	22·7
7. New Zealand	11,544	20·25	22·3

Results compared in different colonies.

669. It will be observed that in Victoria, during the 10 years 1878 to 1887, the mortality from zymotic, parasitic, and dietic diseases was less in proportion to the population as well as to the mortality from all causes than it was in any of the other Australasian colonies except Tasmania and New Zealand. Queensland was much above the other colonies in these respects, and was the only one of the colonies in which the death-rate from this class of complaints was higher than that in England. In New South Wales, on the other hand, the proportion was only slightly higher than in Victoria.

670. Small-pox has never prevailed as an epidemic amongst the people of Victoria. On several occasions persons sickening from or affected by that complaint have arrived in vessels, and before the nature of the malady was discovered it has been caught by others; but in every case the patients have been promptly isolated by order of the Government, and the disease has soon disappeared. No case of small-pox occurred in the year under review, and since the registration system was first introduced in 1853 only 26 deaths from it have been recorded, five of which occurred in 1884, that being the period of the last outbreak. It may not, however, be uninteresting to give some statistics of deaths from small-pox in other countries, material for which is at hand in the valuable paper contributed by Dr. E. Raseri to the International Statistical Institute at its session held at Rome in the month of April, 1886. The following are the figures referred to, which relate generally to the mean of the four years 1881 to 1884:—

ANNUAL DEATH RATE FROM SMALL-POX IN VARIOUS COUNTRIES.*

Deaths from Small-pox Annually per 10,000 persons living.		Deaths from Small-pox Annually per 10,000 persons living.	
Spain (principal towns) ...	13·07	Holland ...	·57
Spain ...	8·46	Sweden ...	·41
Austria (principal towns) ...	8·43	Switzerland ...	·33
Austria ...	7·05	Prussia ...	·29
Belgium ...	4·09	Germany (principal towns) ...	·23
Belgium (principal towns) ...	3·15	Ireland ...	·20
Russia ...	2·96	Massachusetts ...	·18
Italy ...	1·63	Denmark (towns) ...	·08
Switzerland (principal towns) ...	·80	Scotland (eight towns) ...	·05
Sweden (principal towns) ...	·69	Scotland ...	·03
England and Wales ...	·67		

671. Although cases of small-pox have rarely occurred in Victoria, parents are required by law to cause their children to be vaccinated. In 1889 the number of cases of successful vaccination performed in Victoria was 25,331; and, as the number of births was 36,359, it appears that 70 per cent of the children born were vaccinated. This proportion is higher than that in 1888, but below the average of the last 14 years. Part of the remainder are accounted for by death—3,749, or over 10 per cent., of those born having died before they were 6 months old. The average proportion of vaccinations to infants born is 77 per cent., as is seen by reference to the following figures, which indicate the proportions during each of the 14 years ended with 1889:—

* For an account of the mortality of small-pox amongst the Australian aborigines, see *Victorian Year-Book*, 1888-9, paragraph 228.

PROPORTION OF VACCINATIONS TO BIRTHS, 1876 TO 1889.

Vaccinations Per 100 Births.				Vaccinations Per 100 Births.			
1876	...	...	80	1884	...	...	74
1877	...	...	87	1885	...	...	69
1878	...	...	82	1886	...	...	70
1879	...	...	82	1887	...	...	78
1880	...	...	73	1888	...	...	67
1881	...	...	100*	1889	...	...	70
1882	...	...	75				
1883	...	...	67	Mean of 14 years			77

Vaccina-
tions in
various
countries.

672. Dr. Raseri† gives the following as the proportions of successful vaccinations to births in different countries, generally during the years 1880 to 1884. To these have been added the proportions in such of the Australasian colonies as the information is available for:—

PROPORTION OF VACCINATIONS TO BIRTHS IN VARIOUS COUNTRIES.

Vaccinations Per 100 Births.				Vaccinations Per 100 Births.			
Ireland	...	...	89	Italy	...	...	73
Scotland	...	...	88	Germany	...	...	71
Norway	...	...	87	South Australia (1878 to 1887)	...	...	69
England and Wales	...	...	86	New Zealand (1886 to 1887)	...	...	68
Hungary	...	...	86	France	...	...	64
Holland	...	...	82	Russia in Europe	...	...	56
Sweden	...	...	80	Tasmania (1878 to 1887)	...	...	55
Austria	...	...	78	New South Wales (1878 to 1887)	...	...	25
Victoria (1878 to 1887)	...	...	77				

Vaccina-
tions in
Australasia
and else-
where.

673. It appears by the figures that the proportion of infants vaccinated is larger in Ireland than in any other country, and next so in Scotland; and that whilst in Victoria more than three-fourths of the children born are vaccinated, in South Australia and New Zealand little more than two-thirds, in Tasmania little more than half, and in New South Wales only one-fourth, of the infants are vaccinated.

Cost of
vaccina-
tion.

674. The number of public vaccinators in Victoria is 188, and the amount paid in 1888-9 for vaccinations, including fees to Deputy-Registrars and travelling allowances to vaccinators, was £5,499.

Zymotic
diseases
affecting
children.

675. The seven zymotic diseases which chiefly affect children are measles, scarlet fever, diphtheria, croup, whooping-cough, dysentery, and diarrhoea. The following table shows the number of deaths from such diseases which occurred during the twenty-six years ended with

* In this year owing to an alarm occasioned by an outbreak of small-pox, first in Sydney and subsequently on board vessels arriving at Melbourne, the vaccinations exceeded the births by 100.
† *Bulletin*, etc., page 189.

1889, the annual means of the decade 1864-1873 and of the decade 1874-1883 being also given:—

DEATHS FROM ZYMOTIC DISEASES CHIEFLY AFFECTING CHILDREN,
1864 TO 1889.

Year.	Number of Deaths from—							
	Measles.	Scarlet Fever.	Diph- theria.	Croup.	Whooping cough.	Dysen- tery.	Diarrhœa.	Total.
1864 ...	7	278	451	160	25	243	528	1,692
1865 ...	11	215	391	171	304	402	864	2,358
1866 ...	427	462	331	132	365	525	1,027	3,269
1867 ...	630	621	334	115	205	430	986	3,321
1868 ...	24	460	451	194	243	220	640	2,232
1869 ...	24	224	493	162	100	306	858	2,167
1870 ...	3	24	418	99	50	244	706	1,544
1871 ...	4	27	255	90	318	316	626	1,636
1872 ...	7	135	320	121	227	424	747	1,981
1873 ...	1	188	420	142	299	357	629	2,036
Annual mean } 1864-1873 }	113·8	263·4	386·4	138·6	213·6	346·7	761·1	2,223·6
1874 ...	256	120	375	159	151	325	846	2,232
1875 ...	1,541	985	239	135	58	509	1,002	4,469
1876 ...	5	2,240	201	173	13	202	675	3,509
1877 ...	6	183	359	315	245	254	963	2,325
1878 ...	5	136	336	331	291	197	877	2,173
1879 ...	3	61	337	275	193	140	693	1,707
1880 ...	252	26	198	156	179	122	604	1,537
1881 ...	62	86	114	125	167	115	671	1,340
1882 ...	15	89	122	142	109	182	968	1,627
1883 ...	7	59	131	167	48	139	885	1,436
Annual mean } 1874-1883 }	215·2	398·5	241·2	197·8	145·4	218·5	818·9	2,235·5
1884 ...	233	34	162	181	209	78	643	1,540
1885 ...	69	14	152	180	168	115	827	1,525
1886 ...	20	14	121	160	209	115	906	1,545
1887 ...	78	4	199	191	129	138	933	1,672
1888 ...	30	21	301	282	21	109	817	1,581
1889 ...	19	41	530	279	234	141	1,042	2,286

NOTE.—Croup is included in this table, although not now classed as a zymotic disease, since a large number of deaths are set down to diphtheria and croup conjointly.

676. The year 1889 has been marked by an increase in the mor-
tality from all the diseases named in the table except measles and
croup—deaths from the latter, however, being only 3 less than in
1888. The largest increase was under the heads of diphtheria,
whooping cough, dysentery and diarrhœa. Taken as a whole, these
diseases in 1889 caused half as many deaths again as in 1888, and
a much larger number than in any previous year since 1877.

Children's
zymotic
diseases,
1889.

Measles.

677. An epidemic of measles occurred in 1884, and caused in that and the following year 302 deaths, or 12 less than resulted from the preceding epidemic of the same complaint in 1880 and 1881. Neither of these outbreaks of measles was so serious in its effects as the two previous ones of 1874-5 and 1866-7, when the resulting deaths numbered 1,797 and 1,057 respectively. Per 10,000 of the population, the proportion of deaths from measles was .17 in 1889 and .86 in the ten years ended with 1887, the latter proportion being lower than in any of the following European countries, but very slightly higher than that in the other Australasian colonies, except South Australia, as is shown by the following figures:—

ANNUAL DEATH RATE FROM MEASLES IN VARIOUS COUNTRIES,
1881 TO 1884.*

	Deaths from Measles per 10,000 persons living.		Deaths from Measles per 10,000 persons living.
Spain (principal towns) ...	11.44	Switzerland (principal towns) ...	2.46
Spain	8.84	Sweden	2.40
Italy	7.04	Austria (principal towns) ...	2.32
Scotland (eight towns) ...	5.34	Ireland	1.81
Belgium	5.24	Massachusetts	1.16
Austria	4.60	Russia in Europe	1.09
England and Wales	4.01	South Australia (1878 to 1887)	1.00
Denmark (towns)	3.66	Switzerland ... ..	.88
Scotland... ..	3.58	Victoria (1878 to 1887) ...	.86
Prussia	3.51	New Zealand ... ..	.64
Sweden (principal towns) ...	3.27	New South Wales ... ..	.63
Germany (principal towns) ...	3.15	Tasmania!... ..	.54
Holland	2.88	Queensland ... ..	.27
Belgium (principal towns) ...	2.80		

NOTE.—A useful circular issued under the direction of the Central Board of Health describing the symptoms of measles, and the precautions necessary to be taken to prevent its spread and mode of treatment in the absence of medical aid, was published in the *Victorian Year-Book*, 1887-8, Vol. I., paragraph 661.

Scarlet
fever.

678. On the occasion of both the earlier visitations of measles just referred to, the epidemic was accompanied or followed by one of scarlet fever (scarlatina), which proved to be even more fatal than the former complaint; but no such calamity has attended the last two outbreaks of measles, during the whole period of which, especially the last outbreak, the mortality from scarlet fever was exceedingly low. The fatality attending this complaint has very much diminished of late years, the deaths from it—notwithstanding the increased population—having numbered only 408 in the last ten years, or an average of 41 per annum; as against 3,987, or an average of 570 per annum,

* These proportions, except those for the Australasian colonies, have been taken and re-arranged from Dr. Raseri's paper already alluded to, page 193.

in the preceding seven years; and 2,260, or an average of 377 per annum, in the six years ended with 1869. In 1889, scarlet fever caused 41 deaths, or .37 per 10,000 of the population, as against .62 in the five years ended with 1885, and 5.1 in the ten years ended with 1880. Whilst the death rate from this complaint in the last ten years was lower than the average prevailing in any of the following countries, that in the decade preceding those years was higher than in most of the countries named:—

ANNUAL DEATH RATE FROM SCARLET FEVER IN VARIOUS COUNTRIES,
1881 TO 1884.*

	Deaths from Scarlet Fever per 10,000 persons living.		Deaths from Scarlet Fever per 10,000 persons living.
Sweden (principal towns)	... 6.10	Spain	... 2.00
Austria	... 5.86	Russia in Europe	... 1.79
Prussia	... 5.30	Belgium (principal towns)	.. 1.58
England and Wales	... 5.29	Switzerland (principal towns)	1.49
Germany (principal towns)	... 5.09	Spain (principal towns)	... 1.46
Sweden	... 4.85	South Australia (1878 to 1887)	1.27
Scotland (8 towns)	... 4.77	Holland	... 1.15
Austria (principal towns)	... 4.45	Switzerland	... 1.01
Scotland	... 4.44	New South Wales (1878 to 1887)	.89
Ireland	... 3.00	New Zealand	„ .75
Italy	... 2.94	Victoria	„ .59
Belgium	... 2.90	Tasmania	„ .49
Denmark (towns)	... 2.64	Queensland	„ .13
Massachusetts	... 2.54		

NOTE.—A useful circular on scarlet fever, issued by the Central Board of Health, was published in the *Victorian Year-Book*, 1888-9, Vol. II., paragraph 238.

679. In consequence of the similarity of the complaints, and the number of deaths set down to a combination of both, it is misleading to consider the deaths caused by diphtheria apart from those caused by croup. Taking the two affections together, they were to every 10,000 of the population in the proportion of 7.32 in 1889, 5.49 in 1888, 3.83 in 1887, 2.85 in 1886, 3.23 in the five years ended with 1885, and 6.19 in the ten years ended with 1880. The proportion, over a series of years, is lower than that for any of the foreign countries of which information is at hand, except Ireland, England, Holland, Scotland, and European Russia, as will be seen by the following figures:—

* Except those for the Australasian colonies, the figures have been taken and re-arranged from Dr. Raseri's paper, page 193.

ANNUAL DEATH RATE FROM DIPHTHERIA AND CROUP IN VARIOUS COUNTRIES, 1881 TO 1884.*

Deaths from Diphtheria and Croup per 10,000 persons living.				Deaths from Diphtheria and Croup per 10,000 persons living.			
Austria ... ..	...	...	16·63	South Australia (1878 to 1887)	...	...	5·93
Prussia ... ..	...	...	15·45	Scotland (8 towns) ...	...	...	4·99
Spain (principal towns)	...	...	11·83	New South Wales (1878 to 1887)	...	...	4·77
Germany (principal towns)	...	...	11·54	Queensland	..	...	4·75
Massachusetts ...	...	...	11·13	Russia in Europe ...	...	...	4·67
Austria (principal towns)	...	...	10·36	Scotland ... ..	...	...	4·55
Sweden ... ..	...	...	9·79	Tasmania (1878 to 1887)	...	...	4·46
Sweden (principal towns)	...	...	9·74	Victoria	..	...	4·16
Italy ... ..	...	...	9·18	Belgium (principal towns)	...	...	3·79
Switzerland (principal towns)	...	...	8·49	Holland ... ..	...	...	3·76
Belgium ... ..	...	...	7·72	England aud Wales	...	...	3·05
Spain ... ..	...	...	6·85	Ireland ... ..	...	...	2·70
Denmark (towns) ...	...	...	6·28	New Zealand (1878 to 1887) ...	...	...	2·42
Switzerland ... ..	...	...	6·09				

NOTE.—A circular, giving the symptoms of diphtheria and directions for its management in the absence of medical assistance, was issued by the Central Board of Health during the early part of 1888, and was republished in the *Victorian Year-Book*, 1887-8, Volume I., paragraph 664.

Whooping
cough.

680. Deaths from whooping-cough in 1889 were in the proportion of 2·12, in 1888 of ·20, in 1887 of 1·27, in 1886 of 2·12, in the previous five years of 1·53, and in the ten years ended with 1880 of 2·48 per 10,000 persons living. All these proportions, as well as those in the other Australasian colonies, are lower than those generally prevailing in most of the foreign countries named in the following table :—

ANNUAL DEATH RATE FROM WHOOPING-COUGH IN VARIOUS COUNTRIES, 1881 TO 1884.*

Deaths from Whooping-cough per 10,000 persons living.				Deaths from Whooping-cough per 10,000 persons living.			
Austria ... ..	...	...	10·63	Austria (principal towns)	...	...	2·74
Scotland (8 towns) ...	...	...	9·64	Spain (principal towns)	...	...	2·68
Belgium ... ..	...	...	7·18	Italy ... ..	...	...	2·45
Denmark... ..	...	...	6·62	New Zealand (1878 to 1887) ...	...	...	2·42
Scotland ... ..	...	...	6·23	Switzerland	...	...	2·31
Prussia ... ..	...	...	5·40	South Australia (1878 to 1887)	...	...	2·19
England and Wales	...	...	4·67	New South Wales	..	...	1·93
Holland ... ..	...	...	3·82	Sweden ... ..	...	...	1·80
Germany (principal towns)	...	...	3·48	Victoria (1878 to 1887)	...	...	1·79
Belgium (principal towns)	...	...	3·37	Queensland	..	...	1·51
Ireland ... ..	...	...	3·18	Tasmania	..	...	1·44
Spain ... ..	...	...	3·14	Massachusetts	...	...	1·16
Sweden (principal towns)	...	...	2·98	Russia in Europe	...	...	·23
Switzerland (principal towns)	...	...	2·74				

NOTE.—A circular on whooping-cough and its treatment, issued by the Central Board of Health, was republished in the *Victorian Year-Book*, 1887-8, Volume I., paragraph 666.

* Except those for the Australasian colonies, the figures have been taken and re-arranged from r. Raseri's paper, page 193.

681. The mortality from typhoid fever* was exceptionally high in 1889, as many as 910 deaths having been caused by it, as against only 541 in the previous year. The rate of mortality from this complaint in 1889 was 8·24 per 10,000 persons living, which was much higher than in any previous year since 1866, when it was 8·39; these were the only occasions during the last twenty-four years on which the rate exceeded 8 per 10,000, whilst the average of the whole period was only 5½ per 10,000. During the last 24 years the death rate from typhoid fever has fluctuated considerably, but, nevertheless, there were four pretty well-marked maximum periods, viz., 1866-7, 1877-8, 1883, and 1889, when the rates rose to over 6½ per 10,000 persons living. The minimum periods are not so well marked; but the two principal ones appear to be 1871-3 and 1880-81, when the average rate was below 4 per 10,000; and 1885, when it was a little above that proportion. Typhoid fever causes, on the average, over 3 per cent. of the total deaths from all causes, and as many as 13 per cent. of those at between 10 and 25 years of age; but in 1889, nearly 5 per cent. of the total deaths from all causes, and no less than 25 per cent of those at the ages named were due to the same cause. The following table shows the number of deaths from typhoid fever, and their proportion to the population, during each of the past 24 years:—

DEATHS FROM TYPHOID FEVER, 1866 TO 1889.†

Year.	Deaths from Typhoid Fever.		Year.	Deaths from Typhoid Fever.	
	Total Number.	Number per 10,000 Persons Living.		Total Number.	Number per 10,000 Persons Living.
1866 ...	528	8·39	1879 ...	438	5·25
1867 ...	455	7·06	1880 ...	297	3·49
1868 ...	295	4·45	1881 ...	351	4·04
1869 ...	360	5·24	1882 ...	472	5·30
1870 ...	416	5·83	1883 ...	661	7·26
1871 ...	269	3·65	1884 ...	456	4·88
1872 ...	323	4·29	1885 ...	424	4·42
1873 ...	282	3·68	1886 ...	530	5·37
1874 ...	470	6·04	1887 ...	631	6·19
1875 ...	455	5·78	1888 ...	541	5·09
1876 ...	375	4·71	1889 ...	910	8·24
1877 ...	532	6·58			
1878 ...	532	6·48	Mean ...	458	5·49

* A useful circular issued under the direction of the Central Board of Health, describing the symptoms of typhoid fever, and the precautions necessary to be taken to prevent its spread and mode of treatment in the absence of medical aid, was published in the *Victorian Year-Book*, 1888-9, Vol. II., paragraph 242.

† In the new classification, simple continued fever is entered as a separate complaint from typhoid fever, but as no such distinction was observed in former years, cases occurring in 1886 and subsequent years, which might possibly have been placed under the former head have, for the sake of comparison, been still placed under the latter.

682. The following table shows the mortality from typhoid fever in all the Australasian colonies, except Western Australia, during the sixteen years ended with 1888, or during as many of those years as the information is available for:—

Typhoid
fever in
Austral-
asian
colonies.

DEATHS FROM TYPHOID FEVER* IN AUSTRALASIAN COLONIES,
1873 TO 1888.

Year.	Number of Deaths from Typhoid Fever.					
	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	282	3·68	...	...	67	4·78
1874 ...	470	6·05	...	...	78	5·03
1875 ...	455	5·78	298	5·10	158	9·16
1876 ...	375	4·71	401	6·64	72	3·91
1877 ...	532	6·58	375	5·96	105	5·38
1878 ...	532	6·48	441	6·70	197	9·53
1879 ...	438	5·25	265	3·84	132	6·16
1880 ...	297	3·49	240	3·31	54	2·03
1881 ...	351	4·04	266	3·50	85	3·30
1882 ...	472	5·30	450	5·66	166	6·31
1883 ...	661	7·26	397	4·76	255	8·89
1884 ...	456	4·88	516	5·86	563	19·10
1885 ...	424	4·42	503	5·40	541	17·52
1886 ...	530	5·37	591	6·03	408	12·27
1887 ...	631	6·19	434	4·24	245	6·91
1888 ...	541	5·11	441	4·14	228	6·04
Total ...	7,447	5·28	5,618	5·08	3,354	7·90

	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	68	3·48	24	2·32	127	4·41
1874 ...	97	4·82	44	4·22	161	5·05
1875 ...	94	4·53	50	4·81	340	9·47
1876 ...	92	4·22	26	2·49	195	5·03
1877 ...	84	3·63	41	3·86	133	3·26
1878 ...	106	4·37	50	4·61	131	3·11
1879 ...	101	3·97	38	3·42	208	4·64
1880 ...	63	2·39	29	2·55	177	3·73
1881 ...	85	2·95	33	2·81	137	2·78
1882 ...	146	5·03	36	2·98	128	2·51
1883 ...	135	4·51	64	5·15	182	3·44
1884 ...	151	4·89	50	3·89	118	2·15
1885 ...	145	4·63	30	2·27	128	2·26
1886 ...	106	3·39	47	3·47	134	2·30
1887 ...	153	4·88	112	8·01	168	2·82
1888 ...	120	3·77	84	5·82	139	2·30
Total...	1,746	4·09	758	3·92	2,606	3·70

* Including simple continued and ill-defined fever. It is possible that in some of the colonies a few cases of remittent fever may be returned under one or other of these heads.

683. In Tasmania, the death-rate from typhoid fever in 1888 was above, but in all the other colonies it was below the average. In Queensland the mortality from typhoid fever in 1884 and the two following years was simply enormous, amounting to 19, 17½, and 12¼ per 10,000 of the population in the three years respectively, but it fell off considerably in the two succeeding years, when it was more comparable with, although still higher than, the rates prevailing in the other colonies. In Tasmania, the fever appeared in an epidemic form in 1887, when it caused as many as 8 deaths per 10,000 persons living, and in 1888 the rate had not yet fallen to its usually low level.

Deaths from typhoid fever in the colonies, 1888, and previous years compared.

684. In England and Wales the mortality from typhoid or enteric fever* has been considerably reduced of late years, and it is now lower than in any of the Australasian colonies, except Tasmania and New Zealand. During the ten years ended with 1880 the mean death rate therefrom was 4·30, but in the seven years ended with 1888 only 2·41 per 10,000 persons living, the latter being far lower than even the minimum rate (3·49) recorded in Victoria during the last twenty-four years.

Typhoid fever in England and Wales.

685. In the returns of most European countries deaths from typhoid fever are not distinguished from those caused by typhus, the latter being a complaint which it is said does not exist in the Australasian colonies. In England and Wales these fevers have been returned separately since 1869, and it is probable the following figures, so far as they relate to that country, apply to typhoid only, whilst those for most of the other countries, it is believed, refer to the two descriptions of fever combined:—

Typhoid and typhus in various countries.

ANNUAL DEATH RATE FROM TYPHOID AND TYPHUS IN VARIOUS COUNTRIES, 1881 TO 1884.†

Per 10,000 Persons Living.			Per 10,000 Persons Living.		
Italy ...	...	9·37	Sweden (principal towns) ...	...	3·95
Spain (towns) ...	...	8·35	Denmark (towns) ...	...	3·85
Austria ...	...	7·31	Scotland ...	...	3·77
Belgium ...	...	6·17	Scotland (8 towns) ...	...	3·62
Spain ...	...	5·63	Ireland ...	...	3·57
Massachusetts ...	...	5·30	Germany (principal towns) ...	...	3·56
Prussia ...	...	5·14	Sweden ...	...	2·87
Belgium (principal towns) ...	...	4·69	England and Wales ...	...	2·70
Austria (15 towns) ...	...	4·49	Switzerland ...	...	2·30
Switzerland (17 towns) ...	...	4·31	Russia in Europe ...	...	2·07
Holland ...	...	4·24			

* The English figures quoted are those of enteric, or typhoid, and simple continued fever, which probably correspond with the fevers tabulated as typhoid in Victoria.
† See Dr. Raseri's paper, page 193. The fevers referred to are there termed "Febbre tifoide e ifo esantematico."

Venereal
diseases.

686. Deaths from venereal diseases numbered 377 in the ten years ended with 1880, 218 in the five years ended with 1885, 111 in the three years ended with 1888, and 36 in 1889, being in the ratio per 10,000 of the population annually of .47 at the first period, of .48 at the second period, of .36 at the third, at .33 at the last period. If deaths from syphilis be considered apart from those caused by other venereal diseases, the numbers at the same periods would be 286, 178, 79 and 30, and the proportions .36, .39, .26, and .27, which contrast favourably with those in most of the following countries:—

ANNUAL DEATH RATE FROM SYPHILIS IN VARIOUS COUNTRIES,
1881 TO 1884.*

	Per 10,000 Persons Living.		Per 10,000 Persons Living.
Italy ... ..	... 1.65	Scotland ... ..	... .63
Sweden (towns) ...	... 1.16	Massachusetts ...	... .32
Scotland (8 towns)	... 1.01	Switzerland ... ..	... .24
Denmark (towns)	... .94	Ireland ... ..	... .16
England and Wales	... .84	Holland ... ..	... .11

Venereal
disease
amongst
the Abori-
gines.

687. Venereal disease has long prevailed amongst the Australian aborigines, and was no doubt first communicated to them by Europeans. The late Mr. Curr † gave it as his opinion that “it was first introduced into Australia by the whites many years ago, and has never since ceased to commit terrible ravages among our tribes. Probably this disease alone would suffice to exterminate them.”

Parasitic
diseases.

688. Parasitic diseases, chief amongst which are thrush and hydatids, caused rather more than 7 deaths in 1889 per 100,000 of the population, which was $1\frac{1}{4}$ below the average of the five years ended with 1885, and nearly 2 below the average of the ten years 1871 to 1880. These diseases are more prevalent in Victoria than in England.

Hydatids.

689. Hydatid disease, which is said to be communicated to man by reason of the ova of the tape worm in dogs (*Tænia Echinococcus*) being taken into the stomach, generally in water, and to prove fatal to 25 per cent. of the human victims it attacks, during the seventeen years ended with 1889 has caused 819 deaths, or an average of 48 per annum. Per 100,000 of the population, deaths from this disease ranged from 3.79 in 1873 to 7.19 in 1879, the average for the first eight years being 5.18, for the nine succeeding years 5.57, and for the whole period 5.38. In the last five years, however, the mortality from hydatids was much below that of the previous six years. The following are the figures for the last seventeen years:—

* See Dr. Raseri's paper, page 193. † *The Australian Race*, Vol. I., page 227.

DEATHS FROM HYDATIDS, 1873 TO 1889.

Year.	Deaths from Hydatid Disease.		Year.	Deaths from Hydatid Disease.	
	Total Number.	Number per 100,000 Living.		Total Number.	Number per 100,000 Living.
1873 ...	29	3·79	1883 ...	56	6·15
1874 ...	41	5·27	1884 ...	59	6·32
1875 ...	47	5·97	1885 ...	47	4·90
1876 ...	36	4·52	1886 ...	51	5·17
1877 ...	37	4·57	1887 ...	51	5·01
1878 ...	37	4·50	1888 ...	53	4·99
1879 ...	60	7·19	1889 ...	61	5·52
1880 ...	48	5·64	Mean ...	48	5·38
1881 ...	48	5·50			
1882 ...	58	6·52			

690. According to the returns of the seven years ended with 1888, as embodied in the following table, hydatids in a fatal form appear to be much more common in Victoria than in any of the other Australasian colonies. It should be mentioned, however, that medical men sometimes enter the cause of death simply as “disease” of the liver, lungs, kidney, etc. In such cases inquiry should be made as to whether the “disease” referred to was hydatid disease or not, which may possibly not be done so rigidly in the other colonies as it is in Victoria, and for this reason the mortality from the complaint may appear to be relatively higher here than it really is :—

Hydatids
in Austral-
asian
colonies.

DEATHS FROM HYDATIDS IN AUSTRALASIAN COLONIES,
1882 TO 1888.

Year.	Number of Deaths from Hydatids.					
	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1882 ...	58	6·52	12	1·51	3	1·26
1883 ...	56	6·15	10	1·20	4	1·50
1884 ...	59	6·32	20	2·27	8	2·71
1885 ...	47	4·90	28	2·92	3	·97
1886 ...	51	5·08	23	2·35	Nil.	...
1887 ...	51	5·01	27	2·64	1	·28
1888 ...	53	4·99	22	2·07	Nil.	...
Total ...	375	5·57	142	2·14	19	·96

DEATHS FROM HYDATIDS IN AUSTRALASIAN COLONIES,
1882 TO 1888—continued

Year.	Number of Deaths from Hydatids.					
	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1882 ...	12	4·14	4	3·31	7	1·37
1883 ...	6	2·01	4	3·22	1	·19
1884 ...	13	4·21	6	4·67	3	·55
1885 ...	5	1·60	2	1·51	3	·53
1886 ...	18	5·76	2	1·46	4	·68
1887 ...	9	2·87	3	2·15	3	·50
1888 ...	13	4·09	2	1·39	5	·83
Total ...	76	3·53	23	2·53	26	·66

NOTE.—In Western Australia only 1 death in 1888, but none in the previous years were set down to this disease.

Hydatids in
England.

691. Hydatid disease is much more fatal in all the Australasian colonies than it is in England and Wales, where there were only 54 deaths from it in 1888, or a proportion of '19 per 100,000 persons living, as compared with a mean of '20 in the five years 1881 to 1885.*

Dietic
diseases.

692. Dietic diseases, consisting principally of want of breast milk and alcoholism, caused nearly 26 deaths in 1889 per 100,000 persons living, which was 7 higher than in 1888, and slightly above the average, viz., 25. These diseases appear to be nearly four times as fatal in Victoria as in England.

Alcoholism.

693. In 1889, 116 deaths were set down to alcoholism, as against 130 in 1888, 100 in 1887, 107 in 1886, 394 in the previous five years, and 646 in the ten years preceding that period. These figures furnish annual proportions per million persons living of 105 for 1889, 122 for 1888, 99 for 1887, 108 for 1886, 86 for the quinquennium 1881 to 1885, and 81 for the decennium 1871 to 1880, and would appear to indicate that the mortality from this cause was increasing. As a matter of fact, however, returns of the mortality from alcoholism are of doubtful

* For further information respecting hydatid disease, see *Victorian Year-Book*, 1888-9, Vol. II. paragraphs 253 and 254.

value, as comparatively few deaths are set down to intemperance pure and simple, although a large number of complaints are no doubt brought on or aggravated, and many lives are doubtless shortened, from that cause, which, however, is not mentioned in the returns. By the following figures, taken from Dr. Raseri's paper*—which must only be accepted for what they may be worth—the mortality from alcoholism would appear to be as high in Victoria, especially in 1886, as compared with that prevailing in most of the countries and towns named:—

ANNUAL DEATH RATE FROM ALCOHOLISM IN VARIOUS TOWNS AND COUNTRIES.

	Deaths from Alcoholism per 1,000,000 persons living.		Deaths from Alcoholism per 1,000,000 persons living.
Denmark (towns) ...	274	Massachusetts ...	65
Sweden (principal towns) ...	99	Scotland ...	61
Paris ...	95	Italy ...	47
Switzerland ...	88	England and Wales ...	46
Scotland (8 towns) ...	83	Berlin ...	40
Connecticut ...	80	Vienna ...	36
Belgium ...	76	Sweden ...	34
London ...	74	Ireland ...	30
Russia in Europe ...	70	Holland ...	21

694. The name "Constitutional Diseases"—originally used in the old—has been continued in the new classification as applying to a group of complaints of obscure origin, which the committee of the Royal College of Physicians did not attempt to classify or even name in their own classification. These complaints for the most part appear to arise from morbid poisons—deeply seated and widely diffused throughout the system, affecting several organs, in which new products are often deposited. The most prominent are phthisis and other tubercular diseases, and cancer; also rheumatism, gout, and diabetes mellitus. Under this class there were, in 1889, 258 deaths per 100,000 of the population, or 26 more than the average of the five years 1881-85, and 42 above the average of the decade 1871-80. Of the 258 deaths per 100,000 referred to, 142 resulted from phthisis, or pulmonary consumption; 57 were set down to cancer; 40 to tabes mesenterica, acute hydrocephalus and other tubercular or scrofulous diseases; and 19 to other constitutional diseases.

Phthisis.

695. Phthisis, or pulmonary consumption, caused 1,571 deaths in 1889, or 43 more than in the previous year. Except during the prevalence of epidemics, phthisis is the occasion of more deaths in Victoria than any other disease;* next to phthisis, diarrhœa is usually the most fatal disease on the list (although in 1889 heart disease stood before it), but this complaint causes less than two-thirds of the number of deaths set down to phthisis. It should moreover be borne in mind, as showing the baneful effects of phthisis as compared with those of the other diseases named, that the deaths ascribed to diarrhœa are for the most part those of infants and young children, whilst the majority of the victims of phthisis are at the adult period of life. The following table shows the number of deaths from phthisis and their proportions to the total population, in each of the last twenty-nine years :—

DEATHS FROM PHTHISIS IN VICTORIA, 1861 TO 1889.

Year.	Deaths from Phthisis.		Year.	Deaths from Phthisis.	
	Total Number.	Number per 10,000 Persons Living.†		Total Number.	Number per 10,000 Persons Living.†
1861... ..	753	13·94	1877... ..	1,088	13·46
1862... ..	707	12·90	1878... ..	1,124	13·68
1863... ..	717	12·74	1879... ..	1,058	12·69
1864... ..	686	11·70	1880... ..	1,175	13·82
1865... ..	741	12·12	1881... ..	1,199	13·80
1866... ..	782	12·43	1882... ..	1,274	14·31
1867... ..	793	12·31	1883... ..	1,212	13·30
1868... ..	746	11·25	1884... ..	1,359	14·55
1869... ..	893	12·99	1885... ..	1,384	14·44
1870... ..	888	12·45	1886... ..	1,375	13·93
1871... ..	841	11·41	1887... ..	1,557	15·27
1872... ..	876	11·63	1888... ..	1,528	14·39
1873... ..	945	12·34	1889... ..	1,571	14·23
1874... ..	1,011	13·00	Total in 29 years	30,320	13·25
1875... ..	1,027	13·04			
1876... ..	1,010	12·68			

NOTE.—Deaths registered as occurring from hæmoptysis are included in this table.

Death rate from phthisis.

696. By the figures in the table it appears that the death rate from phthisis fell with tolerable steadiness from 1861 to 1871, but since that period there has, on the whole, been a gradual increase. During

* See table following paragraph 663 ante.

† For figures of mean population used in making these calculations, see table "Breadstuffs Available for Consumption" in Part "Production" in the second volume.

the whole period of twenty-nine years the deaths from this complaint were in the proportion of $13\frac{1}{4}$ to every 10,000 persons living; during the first ten of those years that proportion was about $12\frac{1}{2}$ (12·483); in the second ten it was over $12\frac{3}{4}$ (12·775), and in the last nine it was $14\frac{1}{4}$ (14·26). It must, however, be borne in mind that the proportions living at the ages at which phthisis is most fatal, viz., between 15 and 45, have also increased. It will be observed that the death rate from phthisis in 1889 (14·23 per 10,000) was lower than in 1888, 1887, 1885, 1884, or 1882, but higher than in any other year of the period.

697. Phthisis in Victoria generally affects males more heavily than females. In 1889, 956 of the former, and 615 of the latter, died of that complaint; the males being in the proportion of 16·27, but the females of only 11·90, per 10,000 of their respective sexes living.

698. The following table gives the number of deaths from phthisis at each age in 1889; also the proportion which such deaths bore to the total deaths from all causes in 1889 and in the ten years ended with 1880:—

DEATHS FROM PHTHISIS, 1889.—AGES AT DEATH.

Ages.	Number who Died from Phthisis, 1889.			Percentage of Deaths from Phthisis to those from all Causes.	
	Males.	Females.	Total.	1889.	Ten Years : 1871-80.
Under 5 years	18	11	29	·37	·51
5 to 10	6	5	11	1·75	1·40
10 „ 15	5	17	22	6·08	5·15
15 „ 20	39	61	100	18·52	21·22
20 „ 25	95	94	189	23·48	32·22
25 „ 35	266	187	453	28·51	29·18
35 „ 45	170	103	273	23·12	20·27
45 „ 55	156	87	243	15·73	13·69
55 „ 65	146	40	186	8·85	8·30
65 „ 75	47	9	56	3·36	2·97
75 years and upwards	8	1	9	·77	·83
Total	956	615	1,571	8·10	8·29

699. From a comparison of the figures in the last two columns, it will be observed that in proportion to the total deaths the mortality from phthisis in 1889, at the age-periods under 5, between 15 and 35,

and over 75 years, were considerably below, but at the other age-periods were above, the average. In the year under review, about one-fourth of the deaths in the colony between the ages of 20 and 45, nearly one-fifth of those between 15 and 20, and nearly a sixth of those between 45 and 55, were caused by phthisis.

Phthisis in
Melbourne
and
country.

700. Of the 1,571 deaths from phthisis in 1889, 923 occurred in Melbourne and suburbs (Greater Melbourne) and 648 in other parts of the colony. In proportion to population, the deaths from phthisis have always been much more numerous in the metropolis than in the remainder of the colony, as is shown by the following figures, which are the results for twenty-nine years:—

DEATHS FROM PHTHISIS PER 10,000 PERSONS LIVING IN AND OUTSIDE GREATER MELBOURNE, 1861 TO 1889.

Year.	Greater Melbourne.	Extra-Metropolitan Districts.	Year.	Greater Melbourne.	Extra-Metropolitan Districts.
1861	23·44	10·63	1877	22·74	9·29
1862	24·64	8·71	1878	22·62	9·63
1863	23·71	8·79	1879	21·77	8·45
1864	20·08	8·70	1880	23·95	8·92
1865	22·11	8·57	1881	22·71	9·45
1866	20·42	9·53	1882	23·09	10·03
1867	21·56	8·87	1883	22·27	8·80
1868	20·83	7·63	1884	24·45	9·32
1869	23·87	8·83	1885	23·92	9·10
1870	22·49	8·56	1886	21·25	9·51
1871	22·08	7·20	1887	23·22	10·31
1872	18·69	8·62	1888	21·55	9·71
1873	20·51	8·77	1889	20·73	9·83
1874	22·04	8·94			
1875	21·46	9·25	Means	22·23	9·04
1876	22·46	8·28			

Death rate
from
phthisis in
England.

701. In England and Wales, in the twenty-five years ended with 1888, the death rate from phthisis, per 10,000 persons, ranged from 25·33 in 1866 to 15·41 in 1888, the mean of the first five years of the period having been as high as 25·10, whilst that of the last five years was as low as 16·83.* The latter proportion, though considerably lower than that of Greater Melbourne, is still much higher than that of Victoria taken as a whole. It may be remarked that there is no

* See Fifty-first Report of the Registrar-General of England, page xlvi.

doubt the death rate from phthisis in the metropolis has for years past been swelled by the presence of persons who started from Europe whilst suffering from the disease in an advanced stage and who were induced to take the voyage under the hope that benefit might be derived from the Australian climate, but have landed in Melbourne only to die there.

702. Of the 250 Chinese who died in Victoria in 1889, 33, or 13 Phthisis among Chinese. per cent., fell victims to phthisis. In the previous year 18 per cent. of the deaths of Chinese were from phthisis.

703. Eight out of the 36 deaths of Aborigines in 1889 were set Phthisis among Aborigines down to phthisis. Mr. Henry Jennings, Vice-Chairman of the Board for the Protection of the Aborigines, in his report dated 1st July, 1879,* says—"Lung disease" (with which he probably includes phthisis) "is the chief cause of the death of the Aborigines, who, when once affected, very seldom recover;" and Mr. Richard Bennet, in an article entitled *Some Account of Central Australia*,† says, with reference to the Australian Aborigines generally, "From my experience among the blacks, I believe nine-tenths of them die of consumption." Similar testimony is given by the late Mr. E. M. Curr, in his admirable and exhaustive work, *The Australian Race*.‡

704. The rate of mortality from phthisis in Victoria would appear, Phthisis in Australasian colonies. by the calculations in the following table, to have been, over a series of years, lower than in Queensland, but much higher than in any other of the Australasian colonies. It will be observed that the figures of the other colonies in the several years exhibit more variation than those of Victoria, and that Queensland is the only colony besides Victoria in which the rate in any of the years exceeded 13 per 10,000; also that the rate in Queensland in 1884 and 1885, viz., 19 per 10,000, was most exceptionally high § :—

* See Fifteenth Report of the Board, Parliamentary Paper No. 68, Session 1879.

† See *Victorian Review* for April, 1880, page lxxv.

‡ See *Victorian Year-Book*, 1888-9, Vol. II., paragraph 267.

§ It is pointed out by the Registrar-General of Queensland, in his Annual Reports, that the death rate from phthisis as well as from other complaints in that colony is considerably swelled by the high mortality amongst the Polynesians, and that the diminished mortality since 1884-5 is probably to some extent due to the gradual decrease of the Polynesian element, viz., from 4½ per cent. in 1884 to only 2½ per cent. in 1887-8 of the total population. Nearly half the deaths from phthisis in 1884 and 1885, and nearly two-fifths in 1886 and 1887, were of Polynesians, although they form a very small section of the total population. Excluding the Polynesians from the calculation, the death rate from phthisis in Queensland in 1884 was only 10·4, in 1885 only 10·5, in 1886 only 9·2, in 1887 only 10·2, and in 1888 only 8·75 per 10,000. It is stated that the general death rate of Polynesians in Queensland during 1884 was as high as 148, and during 1885 as high as 99, per 1000.

DEATHS FROM PHTHISIS IN AUSTRALASIAN COLONIES,
1873 TO 1888.

Year.	Number of Deaths from Phthisis.					
	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	945	12·34	...	...	145	10·35
1874 ...	1,011	13·00	...	...	163	10·51
1875 ...	1,027	13·04	614	10·50	228	13·22
1876 ...	1,010	12·68	616	10·21	260	14·12
1877 ...	1,088	13·46	597	9·49	225	11·53
1878 ...	1,124	13·68	652	9·91	263	12·72
1879 ...	1,058	12·69	746	10·80	281	13·12
1880 ...	1,175	13·82	803	11·06	301	13·56
1881 ...	1,199	13·80	874	11·50	292	13·21
1882 ...	1,274	14·31	927	11·66	404	17·00
1883 ...	1,212	13·30	948	11·36	471	17·58
1884 ...	1,359	14·55	1,018	11·56	572	19·40
1885 ...	1,384	14·44	1,078	11·58	593	19·20
1886 ...	1,375	13·93	1,051	10·73	494	14·86
1887 ...	1,557	15·27	977	9·56	441	12·43
1888 ...	1,528	14·39	1,045	9·82	492	13·04
Total...	19,326	13·68	11,946	10·70	5,625	14·12

	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	153	7·84	115	11·10	206	7·16
1874 ...	179	8·89	101	9·69	270	8·47
1875 ...	209	10·07	114	10·97	339	9·45
1876 ...	226	10·36	102	9·75	307	7·92
1877 ...	203	8·78	127	11·95	326	7·98
1878 ...	267	11·00	115	10·60	326	7·73
1879 ...	271	10·66	90	8·09	399	8·90
1880 ...	277	10·51	113	9·95	447	9·42
1881 ...	274	9·49	115	9·80	468	9·28
1882 ...	341	11·77	127	10·52	438	8·60
1883 ...	313	10·47	139	11·18	500	9·45
1884 ...	323	10·46	145	11·29	498	9·07
1885 ...	307	9·80	145	10·97	514	9·08
1886 ...	339	10·85	145	10·57	500	8·48
1887 ...	353	11·27	154	11·01	534	8·95
1888 ...	365	11·48	116	8·04	476	7·86
Total...	4,400	10·23	1,963	10·34	6,548	8·61

Tubercular diseases.

705. Deaths from tubercular diseases, viz., tabes mesenterica, tubercular meningitis (acute hydrocephalus), phthisis, and “other forms of tuberculosis,” taken as a whole, numbered 13,052 in the ten

years 1871 to 1880, 7,932 in the five years 1881 to 1885, 5,578 in the three years 1886 to 1888, and 2,013 in 1889. These numbers furnish proportions per 10,000 of the population of 16·36 deaths annually at the first period, 17·38 at the second, 18·17 at the third, and 18·23 at the fourth, which are all lower than the proportions relating to any of the subjoined countries except Spain :—

ANNUAL DEATH RATE FROM TUBERCULAR DISEASES IN VARIOUS COUNTRIES, 1881 TO 1884.*

					Deaths from Tubercular Diseases per 10,000 persons living.
Austria (principal towns)	...	...	...	...	72·20
Austria	...	...	...	...	38·39
Belgium (towns)	...	...	...	...	35·11
Germany (principal towns)	...	...	...	...	34·40
Massachusetts	...	...	...	...	34·25
Switzerland (towns)	...	...	...	...	32·50
Sweden (towns)	...	...	...	...	31·61
Scotland (8 towns)	...	...	...	...	31·12
Prussia	...	...	...	...	30·88
Belgium	...	...	...	...	30·48
Denmark (towns)	...	...	...	...	30·42
Spain (towns)	...	...	...	...	29·24
Scotland	...	...	...	...	25·93
Italy	...	...	...	...	25·54
Ireland	...	...	...	...	22·43
Switzerland	...	...	...	...	21·79
England and Wales	...	...	...	...	21·09
Holland	...	...	...	...	19·73
Spain	...	...	...	...	12·32

706. Next to phthisis, the most fatal of the constitutional diseases is cancer. This complaint caused 629 deaths in 1889, or 108 more than in the previous year. Cancer in a fatal form has been much increasing of late years, for during the ten years ended with 1880 it caused only 1 death in every 41 from all causes, but in the last five years the proportion had risen to 1 in 32; moreover since 1861 the death rate from it has increased steadily from less than 2 to over 5 per 10,000 of the population; whilst in 1889 the exceptionally high rate of 5·7 was reached—the highest previous to that year being only 5·17. The following table shows the number of deaths from cancer, and the number per 10,000 persons living, in each of the last twenty-nine years :—

* See Dr. Raseri's paper, page 193. The diseases referred to are there termed "Tubercolosi diffusa, Tisi polmonare, Tubercolosi meningea, ed Idrocefalo."

DEATHS FROM CANCER, 1861 TO 1889.

Year.	Deaths from Cancer.			
	Total Number.			Number per 10,000 Persons Living.
	Males.	Females.	Total.	
1861	52	50	102	1·89
1862	30	50	80	1·46
1863	58	45	103	1·83
1864	55	72	127	2·17
1865	81	70	151	2·47
1866	52	64	116	1·84
1867	63	57	120	1·87
1868	95	88	183	2·76
1869	85	99	184	2·68
1870	109	105	214	3·00
1871	100	93	193	2·62
1872	130	96	226	3·00
1873	122	128	250	3·27
1874	146	122	268	3·45
1875	168	140	308	3·91
1876	150	153	303	3·80
1877	169	160	329	4·07
1878	182	132	314	3·82
1879	205	178	383	4·59
1880	202	181	383	4·50
1881	172	179	351	4·04
1882	208	165	373	4·19
1883	234	216	450	4·94
1884	221	225	446	4·78
1885	234	211	445	4·64
1886	247	249	496	5·02
1887	275	252	527	5·17
1888	276	245	521	4·91
1889	324	305	629	5·70
Total in 29 years ...	4,445	4,130	8,575	3·75

Proportions
of the sexes
who died of
cancer.

707. Cancer is a complaint which generally affects females more than males.* In the twenty-nine years of which mention is made in the table, 93 of the former have died of it to every 100 of the latter, whereas the proportion of females to males at ages at which cancer is most prevalent (*i.e.*, above 30 years of age) has over the whole period† been considerably below the proportion named. In 1889, 94 females died of cancer to every 100 males, although, in the population, females over the age of 30 were in the proportion of only 78 to every 100 males.

* The difference may not really be so great as it appears to be from the figures. See *Victorian Year-Book*, 1887-8, Vol. I., paragraph 699.

† At the age referred to, females in the population were in the proportion of 42 at the census of 1861, of 59 at the census of 1871, and of 74 at the census of 1881, to every 100 males.

708. Judging from the experience of the seven years ended with 1888, cancer is more fatal in Victoria than in any other Australasian colony except Tasmania, to the rate in which the Victorian rate is about equal. Tasmania is a colony in which—as cancer is essentially a complaint of advanced life—the large proportion of old people would naturally lead to the expectation of a high death rate therefrom. The following are the figures for the seven years referred to :—

Cancer in
Austral-
asian
colonies.

DEATHS FROM CANCER IN AUSTRALASIAN COLONIES, 1882 TO 1888.

Colony.	Year.	Number of Deaths from Cancer.	
		Total.	Per 10,000 Persons Living.
Victoria ...	1882	373	4·19
	1883	450	4·94
	1884	446	4·78
	1885	445	4·64
	1886	496	4·94
	1887	527	5·17
	1888	521	4·91
	Mean of 7 years	465	4·79
New South Wales ...	1882	215	2·71
	1883	215	2·58
	1884	233	2·65
	1885	267	2·87
	1886	333	3·40
	1887	354	3·46
	1888	404	3·80
	Mean of 7 years	289	3·07
Queensland ...	1882	54	2·27
	1883	70	2·61
	1884	94	3·19
	1885	53	1·71
	1886	92	2·68
	1887	81	2·28
	1888	88	2·33
	Mean of 7 years	76	2·44
South Australia ...	1882	89	3·07
	1883	86	2·88
	1884	109	3·53
	1885	100	3·19
	1886	104	3·33
	1887	110	3·51
	1888	116	3·65
	Mean of 7 years	102	3·31

DEATHS FROM CANCER IN AUSTRALASIAN COLONIES, 1882 TO 1888
—continued.

Colony.	Year.	Number of Deaths from Cancer.	
		Total.	Per 10,000 Persons Living.
Western Australia ...	1882	9	2·96
	1883	10	3·20
	1884	10	3·09
	1885	17	4·99
	1886	15	3·74
	1887	17	4·08
	1888	18	4·25
	Mean of 7 years	14	3·76
Tasmania ...	1882	60	4·97
	1883	67	5·39
	1884	65	5·06
	1885	60	4·54
	1886	57	4·16
	1887	67	4·79
	1888	68	4·71
	Mean of 7 years	63	4·80
New Zealand ...	1882	147	2·88
	1883	158	2·99
	1884	191	3·48
	1885	177	3·13
	1886	214	3·63
	1887	238	3·99
	1888	263	4·34
	Mean of 7 years	198	3·49

Deaths from cancer in England and Wales.

709. In England and Wales there has for years past been a progressive increase in the death rate from cancer. This rate, in the three years ended with 1888, was much higher than that prevailing in in any Australasian colony. The following figures are taken from the reports of the Registrar-General, who, however, indicated that he entertained doubts as to whether the increase shown by the figures was not partly due to improved diagnosis and more careful statement of the cause* :—

DEATHS FROM CANCER IN ENGLAND AND WALES.

Deaths from Cancer per 10,000 persons living.		Deaths from Cancer per 10,000 persons living.	
1861 to 1865	3·68	1886	5·83
1866 to 1870	4·04	1887	6·06
1871 to 1875	4·46	1888	6·10
1876 to 1880	4·95		
1881 to 1885	5·45	Mean	4·76

* See Forty-sixth Annual Report, page xviii.; also *Victorian Year-Book*, 1887-8, Vol. I., paragraph 699.

710. According to the following figures, cancer would appear to be less fatal in Victoria and Tasmania than in any of the countries named except Prussia, Ireland, and Austria; less fatal in Western Australia than any except Ireland and Prussia; less fatal in South Australia and New Zealand than in any except Prussia; and less fatal in the other two colonies than in any one of the countries referred to :—

Deaths from cancer in various countries.

ANNUAL DEATH RATE FROM CANCER IN VARIOUS COUNTRIES, 1881 TO 1884.*

Deaths from Cancer per 10,000 persons living.			Deaths from Cancer per 10,000 persons living.		
Austria (15 principal towns) ...	...	11·20	England and Wales ...	...	5·35
Denmark (towns) ...	...	10·98	Massachusetts ...	...	5·30
Sweden (towns) ...	...	8·71	Scotland (8 towns) ...	...	5·27
Switzerland, ...	...	8·46	Scotland ...	...	5·26
Italy ...	...	6·13	Austria ...	...	4·23
Holland ...	...	5·82	Ireland ...	...	3·69
			Prussia ...	...	3·13

711. Developmental diseases,† Class V., caused 122 deaths in 1889 to every 100,000 of the population. Of these 56 were due to diseases peculiarly affecting infants, such as premature birth and malformations, and 66 to old age. The rate of mortality from the whole class in 1889—viz., 122 per 100,000—appears to have been about 25 more than the average of the five years 1881-5, and 47 more than the average of the ten years ended with 1880; the increase, especially as compared with the last named period, being chiefly confined to deaths from old age. The increased death rate from old age is accounted for by the circumstance that the proportion of old people (75 and upwards) in the population has increased since 1871-80 by 88 per cent., whilst the average age of such persons has advanced also. The actual deaths of infants born prematurely numbered 475 in 1889—which number gives a proportion of 8½ per cent. of the total deaths under one year, or 1⅓ per cent. of the total births recorded, which proportions closely correspond with the average during the five years ended with 1885. The death rate from this class of complaints is always much higher in England than in Victoria.

Developmental diseases.

712. Local diseases, Class VI., or diseases of special organs or systems, usually cause a much higher mortality than any other class of complaints; thus, in 1889, 8,726 deaths, or 45 per cent. of the deaths from all causes, were ascribed to them, that being the same proportion

Local diseases.

* See Dr. Raseri's paper, page 193.
† This class of diseases differs from that under the old nosology; dentition, paramenia and childbirth, and atrophy and debility not being now classed as developmental diseases.

as in the five years 1881 to 1885. The deaths from diseases placed in this class were in 1889 in the proportion to every 100,000 of the population of 790, or 120 above the five years' average. Over a fifth of these diseases were due to affections of the brain and nerves; nearly a sixth to diseases of the circulatory system, including heart diseases; about two-sevenths to lung and throat diseases—viz., croup, bronchitis, pneumonia, pleurisy, etc.; a fourth to diseases of the digestive organs; $6\frac{1}{4}$ per cent. to diseases of the urinary organs; a little over 1 per cent. to the accidents of childbirth; and the remainder to diseases of the integumentary, locomotive, and generative systems; of the organs of special sense; and of the lymphatic and ductless glands, in the order named. In the year under review the death rates from complaints classed under all the principal sub-classes of local diseases, except childbirth—more especially diseases of the circulatory, digestive, and urinary systems—were above the average of the five years ended with 1885; and, excepting diseases of the nervous system and childbirth, they were also higher than in the earlier period 1871-80. In England, the death rate from local diseases is, on the average, fully 50 per cent. higher than the death rate from that class of complaints in Victoria.

Diseases of
respiratory
system.

713. The mortality from diseases of the respiratory system in 1889 was somewhat above the average. The proportion in 1889 was 222 to every 100,000 persons living, while it was 218 in the five years 1881-5, but only 195 during the ten years 1871-80. The diseases in this group cause, on the average, half as many deaths again as phthisis (which is not included amongst "lung diseases," being classed as a "constitutional" disease*). The victims are, for the most part, young children and old people, the majority dying in the winter quarter (July to September). In the year under review the actual number of deaths from these causes was 2,450, being equal to over one-eighth of the total mortality; and of these pneumonia caused 898, bronchitis 753, congestion of the lungs 196, and croup 279. Of those who died from these complaints, 1,127 were under 5 years—more than half of these being under 1 year—and 779 were over 50 years of age. If deaths from phthisis be added to those from diseases of the respiratory system, it will be found that altogether 4,021 deaths in 1889 (or 362 more than in 1888) were from diseases particularly affecting the organs of respiration, which is equal to between one-fourth and one-fifth of the total mortality.

* See paragraph 694 *ante*.

714. Bronchitis and pneumonia, with congestion of the lungs, caused 11,477 deaths in the ten years ended with 1880, 7,857 in the five years ended with 1885, 1,777 in 1886, 1,591 in 1887, 1,539 in 1888, and 1,847 in 1889, which numbers furnish proportions per 10,000 of the population of 14.40 deaths annually for the first period, of 17.22 annually for the second period, of 18.00 for 1886, 15.60 for 1887, 14.49 for 1888, and 16.72 for 1889. The complaints referred to are, according to the following figures, much less fatal here than in any of the countries named except Prussia, it being assumed that congestion of the lungs is included with bronchitis and pneumonia in the returns of the various countries:—

Bronchitis and pneumonia in various Countries.

ANNUAL DEATH RATE FROM BRONCHITIS AND PNEUMONIA IN
VARIOUS COUNTRIES, 1881 TO 1884.*

Per 10,000 persons living.		Per 10,000 persons living.	
Spain (principal towns) ...	53.15	Germany (principal towns)	27.87
Italy	45.31	Denmark (towns) ...	27.47
Scotland (8 towns) ...	38.06	Belgium (principal towns)	27.06
Austria (principal towns)...	37.95	Ireland	26.76
Holland	36.32	Switzerland (principal towns)	26.69
Scotland	34.13	Spain	24.12
Belgium	32.87	Sweden (principal towns)	24.10
England and Wales ...	32.25	Massachusetts	21.03
Switzerland	31.52	Prussia	16.63
Austria	28.09		

715. The death rate from a given complaint is usually ascertained by comparing the number of deaths from it with the number of persons living, but the death rate of women in childbed is better realized 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 child-bearing 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. In 1889 the proportion of deaths of child-bearing women to the number of children born was, with the exception of that in 1871, the lowest recorded in the last twenty-six years, as is shown in the following table:—

Deaths in childbed.

* See Dr. Raseri's paper, page 193. The complaints referred to are there termed "Bronchite e Polmonite."

DEATHS OF WOMEN IN CHILDBIRTH, 1864 TO 1889.

Year.	Number of Mothers who died of—			Deaths of Mothers to every 10,000 Children born alive.
	Childbirth.	Puerperal Fever (Metria).	Total.	
1864	100	21	121	47·12
1865	99	24	123	47·46
1866	112	26	138	55·18
1867	117	20	137	53·51
1868	110	23	133	48·82
1869	105	18	123	47·23
1870	115	9	124	45·67
1871	90	12	102	37·25
1872	123	16	139	50·80
1873	127	44	171	60·85
1874	142	109	251	93·66
1875	154	83	237	88·70
1876	117	48	165	61·64
1877	131	42	173	66·51
1878	149	49	198	74·49
1879	123	38	161	59·99
1880	111	20	131	50·09
1881	155	78	233	85·84
1882	117	59	176	65·80
1883	115	43	158	57·37
1884	131	72	203	70·36
1885	106	62	168	56·05
1886	122	70	192	62·29
1887	116	58	174	52·66
1888	113	74	187	54·20
1889	101	62	163	44·83
Total in twenty-six years	3,101	1,180	4,281	59·17

Increase of
deaths in
childbed at
epidemic
periods.

716. In 1884, the death rate of parturient women showed a sudden increase concurrently with the prevalence of an epidemic of measles, followed by a remarkable decrease in 1885 coincidently with the gradual disappearance of that epidemic. It is a singular fact that at or about the four periods during the last twenty-four years at which epidemics of measles and scarlatina have prevailed in Victoria,* viz., 1866-7, 1874-5, 1881-2 and 1884, the mortality of child-bearing women largely increased. Whether this is only a coincidence, or whether there is any connexion between the two circumstances, is a matter which merits the consideration of the medical faculty. It should be mentioned that the visitation in 1881-2 differed somewhat from the others, as the deaths of child-bearing women did not increase in numbers concurrently with the epidemic, but in the year following that in which it was most fatal.

* See table following paragraph 675 ante.

717. The proportion of women dying in childbed during the whole period of twenty-six years was 1 to 168 births, and in 1889 the proportion was 1 to every 223 births. In 1888, the proportion was 1 to every 185 births; in 1887, 1 to every 190 births; in 1886, 1 to every 161 births; in 1885, 1 to every 178 births; and in 1884, it was as high as 1 to every 142 births. All these proportions are much higher than those in England and Wales, where, in the five years ended with 1887, 200 births occurred to each death of a mother.* In Scotland, 1 woman died in childbirth to every 207 births during 1873, and to every 149 births in 1874; and in Ireland, during the ten years, 1869-78, 1 woman died in childbirth to every 151 births.

Deaths in
childbed in
Victoria
and United
Kingdom.

718. In the Midwifery Department of the Melbourne Women's Hospital, 762† women were confined, and 711‡ infants were born alive, during the year ended 30th June, 1889. Ten deaths of mothers occurred during or shortly after parturition; or 1 death of a mother to every 76 deliveries, or to every 71 births. In 1887-8, 1 death of a mother took place therein to 168 deliveries, or 158 births; in 1886-7, 1 to 28 deliveries, or 26 births; in 1885-6 1 to 34 deliveries, or 32 births; in 1884-5, 1 to 17 deliveries, or 16 births; in 1883-4, 1 to 31 deliveries, or 28 births; in 1882-3, 1 to 86 deliveries, or 77 births; in 1882 (first six months), 1 to 60 deliveries, or 56 births; in 1881, 1 to 29 deliveries, or 27 births; in 1880, 1 to 98 deliveries, or 89 births; in 1879, 1 to 71 deliveries, or 67 births; and in 1878, 1 to 92 deliveries, or 86 births. These proportions are, on the average, about $2\frac{1}{2}$ times as high as those for the whole colony; but it should be mentioned that, all over the world, maternity hospitals are subject to receive a worse class of cases than the average of those dealt with outside, women not unfrequently being brought in such a state as to render their recovery from the first almost hopeless; therefore, in all such institutions, the death rate of the inmates is higher than that which prevails amongst child-bearing women in the general population. It should be mentioned that the committee of management of this hospital attribute

Deaths from
childbirth
in Women's
Hospital.

* There is reason to believe that the mortality from childbirth and metria in England is much understated, as the sending out of letters of inquiry in 1882—an exceptional proceeding—respecting certain ill-defined causes of death had the effect of increasing the recorded mortality from childbirth and metria ten per cent. If this correction be applied to the average above stated, the proportion would be 1 death of a mother to as few as 185 births.—See 45th Annual Report of the Registrar-General of England, page xvii.

† Including 87 cases occurring outside the hospital at houses provided by the committee, amongst whom 2 deaths occurred.

‡ Including 7 cases of twins.

the low rate of mortality in 1887-8 to the fact that antiseptic precautions were more rigorously carried out than they had been in former years; but it will be noticed that such a low rate was not maintained in 1888-9.

Deaths in
childbed in
Austral-
asian
colonies.

719. Deaths of lying-in women appear to be more common in Victoria than in any other Australasian colony. It should, however, be mentioned that the fact of a woman dying in child-bed is not always at once discoverable from the death registers. Whether from a desire to conceal the fact of their losing patients in this manner, or from inadvertence, medical men frequently enter the cause of death as debility, exhaustion, blood-poisoning, pyæmia, septicæmia, phlebitis, embolism, peritonitis, hæmorrhage, etc., omitting to state that these circumstances were consequent upon child-bearing until specially asked whether such was the case. The causes of death of females at child-bearing ages should be carefully scrutinized, and the entry should be referred back for inquiry in all cases where the death is stated to have occurred from any of the above causes. It is questionable whether in any of the other colonies the scrutiny is as close as it is in Victoria, and hence it is probable that the full extent of the mortality in child-birth occurring is not known. The inaccuracy with which such deaths are often described excited attention a few years since in England, where the Registrar-General in 1881 and 1882 caused special letters of inquiry to be sent out respecting doubtful deaths of women at child-bearing ages, with the result that 348 deaths in the former and 428 in the latter year were added to those assigned to puerperal fever and the other incidents of child-birth.* Such a practice has been followed for some years in Victoria, and it is much to be wished that it should be adopted by the other colonies of this group. The rule prescribed, although not always followed, is that whenever child-birth has occurred within one month before death, this fact should be registered with the cause of death. The following table contains a statement of the deaths recorded as having occurred from child-birth and metria in all the Australasian colonies except Western Australia during the sixteen years ended with 1888, and the proportion of such deaths to every 10,000 children born alive in each colony :—

* See 45th Annual Report, for the year 1882.

DEATHS FROM CHILDBIRTH AND PUERPERAL FEVER (OR METRIA)
IN AUSTRALASIAN COLONIES, 1873 TO 1888.

Year.	Number of Deaths from Childbirth and Puerperal Fever.					
	Total.	Per 10,000 Children Born Alive.	Total.	Per 10,000 Children Born Alive.	Total.	Per 10,000 Children Born Alive.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	171	60·85	...	...	23	40·21
1874 ...	251	93·66	...	...	33	51·70
1875 ...	237	88·70	149	66·14	37	55·17
1876 ...	165	61·64	186	79·84	43	62·29
1877 ...	173	66·51	113	47·38	53	73·93
1878 ...	198	74·49	103	40·67	46	62·19
1879 ...	161	59·99	90	33·42	38	48·28
1880 ...	131	50·09	127	45·10	42	51·24
1881 ...	233	85·84	117	40·35	70	85·15
1882 ...	176	65·80	118	39·73	49	57·53
1883 ...	158	57·37	114	36·44	42	42·47
1884 ...	203	70·36	137	40·36	67	62·74
1885 ...	168	56·05	127	36·24	69	59·12
1886 ...	192	62·29	191	52·64	71	56·43
1887 ...	174	52·66	173	46·46	62	45·88
1888 ...	187	54·20	151	39·20	75	52·64
Sums & } Means }	2,978	66·28	1,896	46·00	820	56·69

	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	22	30·96	26	85·30	52	46·34
1874 ...	38	49·38	20	64·58	74	57·61
1875 ...	54	72·89	32	103·06	93	64·41
1876 ...	49	59·58	20	63·51	74	45·77
1877 ...	45	52·08	25	77·86	74	43·90
1878 ...	41	44·17	16	45·69	85	47·83
1879 ...	50	50·49	11	30·86	81	44·83
1880 ...	39	38·00	18	48·14	76	39·29
1881 ...	63	58·83	14	35·73	92	49·11
1882 ...	70	64·55	14	34·63	101	53·14
1883 ...	49	43·86	19	44·61	95	49·47
1884 ...	49	41·36	12	26·21	137	69·03
1885 ...	53	44·00	16	34·50	144	73·12
1886 ...	36	32·21	13	28·10	111	57·52
1887 ...	54	49·86	19	40·12	95	49·65
1888 ...	43	40·91	18	37·68	111	58·72
Sums & } Means }	755	48·32	293	50·04	1,495	53·11

NOTE.—In Western Australia 6 deaths of child-bearing women occurred in 1887, and 3 in 1888, or at the rates of 36·7 and 19·8 per 10,000 births, respectively.

720. The above figures show that, in proportion to the children born alive, the number of deaths of child-bearing women in 1888 was below the average in all the colonies except New Zealand. In that colony the rate was exceeded in only three previous years.

Low death rate from childbirth in colonies, 1888.

Deaths from
child-bear-
ing in
various
countries.

721. Comparing the deaths of child-bearing women with every 10,000 of the population, the proportions annually are 2·17 for the decennial period 1871 to 1880, 2·05 for the quinquennial period 1881 to 1885, 1·71 for 1887, 1·77 for 1888, and 1·48 for 1889. These and the following figures show Victoria to stand rather high in regard to the mortality of women in child-bed as compared with many other countries, and especially so as it would appear that deaths from diseases of pregnancy, as well as from circumstances attendant upon child-bearing, are included in the following list, which they are not in the figures for Victoria :—

ANNUAL DEATH RATE FROM DISEASES OF PREGNANCY AND
CHILD-BEARING IN VARIOUS COUNTRIES, 1881-84.*

Deaths from Pregnancy and Child-bearing per 10,000 persons living.			Deaths from Pregnancy and Child-bearing per 10,000 persons living.		
Spain (principal towns)...	3·77		Massachusetts ...	...	1·80
Spain ...	3·56		Denmark (towns) ...	...	1·76
Belgium ...	2·32		Belgium (principal towns)		1·72
Prussia ...	2·20		Ireland ...	...	1·65
Italy ...	2·13		England and Wales ...	...	1·60
Scotland (eight towns) ...	2·10		Holland ...	...	1·43
Switzerland ...	2·06		Sweden ...	...	1·29
Switzerland (principal towns) ...	2·02		Sweden (principal towns)		1·27
Scotland ...	1·87		Germany (principal towns)		1·23

Violent
deaths.

722. Deaths from external causes, Class VII., in proportion to population, were formerly twice as numerous in Victoria as in England and Wales ; but in recent years, as the number of individuals engaged in mining operations has decreased, and greater precautions are taken for the prevention of accidents, the rate in the former has fallen considerably. Over a series of twenty-seven years, the average annual number of violent deaths per 100,000 of the population was 136, but during the ten years 1871-80 it was only 108, and in the subsequent five years it fell to as low as 93, whilst in 1889 it again rose to 107. The last-named rate, however, is still higher by about one half than the rate prevailing in England and Wales, where it averages only 72. The greater frequency of violent deaths in Victoria than in England appears in all classes of such deaths, those from accidents and suicides being, in proportion to population, about a third more numerous, homicides more numerous by two-thirds, and executions twice as numerous.

Violent
deaths, 1889
and pre-
vious years.

723. The number of violent deaths recorded in Victoria during 1889 was 1,186, of which 1,000, or 84 per cent., were ascribed to

* See Dr. Raseri's paper, page 193 ; the complaints referred to are there termed " *Malattie di gravidanza, parto e puerperio.*"

accident; 40, or 4 per cent., to homicide; 143, or 12 per cent., to suicide; and 3 to execution. Deaths from accidents were formerly more numerous than those from any single disease, and more recently than those from any specific disease except phthisis and diarrhœa.* Forty-one per cent. of the deaths from accidents in 1889 were due to fractures, 27 per cent. to drowning, and 10 per cent. to burns and scalds. Both homicides and suicides were above the average of the five years ended with 1885. The following table shows the number of deaths and the exact modes of death under the heads of accident and suicide, also the number of deaths from homicide and execution, during the year 1889 and the five years ended with 1885, the sexes of those who died being distinguished:—

VIOLENT DEATHS.

Causes of Death.	Year 1889.			Five Years,: 1881 to 1885.		
	Males.	Females.	Total.	Males.	Females.	Total.
Accidents :—						
Fractures and contusions	359	47	406	1,464	168	1,632
Gunshot wounds ...	20	2	22	} 107	17	124
Cuts, stabs, etc. ...	6	2	8			
Burns and scalds ...	42	60	102		255	434
Sunstroke ...	14	5	19	44	26	70
Lightning ...	2	1	3	11	1	12
Poison ...	15	8	23	63	30	93
Snake, insect—bite ...	2	...	2	16	2	18
Drowning ...	227	43	270	754	179	933
Suffocation ...	50	34	84	169	114	283
Others ...	46	15	61	44	19	63
Total ...	783	217	1,000	2,851	811	3,662
Homicide ...	20	20	40	53	57	110
Suicide :—						
Gunshot wounds ...	31	...	31	67	2	69
Cuts, stabs, etc. ...	16	3	19	61	13	74
Poison ...	19	10	29	45	26	71
Drowning ...	23	6	29	68	27	95
Hanging ...	23	3	26	131	7	138
Otherwise ...	6	3	9	15	1	16
Total ...	118	25	143	387	76	463
Execution ...	3	...	3	8	...	8
Grand Total ...	924	262	1,186	3,299	944	4,243

* See table following paragraph 663 *ante*.

Violent
deaths in
proportion
to total
deaths.

724. During the five years ended with 1885, 38,213 males and 28,478 females died of specified causes; and it results, from these figures and those in the foregoing table, that, of the males, 1 in every 12 died a violent death; 1 in every 13 died of an accident; 1 in every 721 was a victim to homicide; 1 in every 99 committed suicide; and 1 in every 4,780 was executed. Of the females, 1 in every 30 died a violent death; 1 in every 35 died of an accident; 1 in every 500 died by the hand of another; 1 in every 375 committed suicide; but, happily, not one was executed.

Violent
deaths of
males and
females.

725. Males are much more subject to violent deaths than females. Of those who so died in 1889, 924, or 78 per cent., belonged to the male, and 262, or 22 per cent., to the female sex. These proportions are identical with those which prevailed during the five years ended with 1885.

Violent
deaths:
proportion
of males and
females.

726. Omitting fractions, it may be roughly stated that, where 1 female dies a violent death in Victoria, 4 males die violent deaths; where 1 female dies of an accident, 4 males die of accidents; where 1 female commits suicide, 5 males do so; but, according to the experience of recent years, more females are murdered than males. Only 1 woman has been executed in the colony since its first settlement; but in the $38\frac{1}{2}$ years since Victoria has been an independent colony as many as 132 males have been executed.

Burns and
scalds.

727. The only violent deaths which habitually affect females more than males are those resulting from burns and scalds. All other circumstances which occasion such deaths, as a rule, bear more hardly upon males than upon females.

Suicidal
deaths.

728. One hundred and forty-three persons took their own lives in 1889, and 139 in the previous year. During the five years ended with 1885 the mean annual number of deaths by suicide was 93.

Modes of
suicide in
Victoria.

729. Hanging is the most common mode by which men commit suicide, drowning and shooting with almost equal frequency the next, cutting or stabbing the next, and taking poison the next. Females most frequently take their lives by drowning or by taking poison, next by stabbing or hanging, but only four times in 131 cases which have occurred during the last nine years by shooting. It may be mentioned that suicide by shooting is much more common now than formerly, the number of cases in the five years ended with 1885 being equal to the number in the preceding ten years.

730. The Registrar-General of England in his 46th Report gives the following table, showing the proportion, during the ten years ended with 1880, of suicides effected by different methods in England and Wales. With the exception of shooting, the relative frequency of each method follows substantially the same order as that obtaining in Victoria :—

Modes of suicide in England.

MODES OF COMMITTING SUICIDE IN ENGLAND AND WALES.

Methods.	Number by each Method per 1,000 by all Methods.	
	Males.	Females.
Hanging or strangulation	400	268
Drowning	165	333
Cut or stab	212	149
Poison	79	172
Shooting	68	2
Jump from height	20	36
Railway train	24	7
Otherwise	32	33
Total	1,000	1,000

731. Suicide frequently occurs amongst the Chinese. Six men of this race committed that act in 1888, and five in 1889. Of the 11 referred to, all but four hanged themselves. The total number of Chinese males in the colony is about 12,000; so that those who committed suicide during 1888 were in proportion of about 1 in 2,000, and during 1889 about 1 in 2,400. In the general population the proportion of persons committing self-destruction averages only 1 in about 10,000.

Suicides of Chinese.

732. According to the results in the following table, it would appear that, in proportion to population, suicide is more common in Victoria than in any other Australasian colony except Queensland. It should, however, be stated that the death records frequently do not upon the surface show that the death has been suicidal, and close examination, with sometimes further inquiry, is therefore necessary to determine that fact. It is hence likely that the full extent to which suicide prevails in some of the colonies is not ascertained. The following are the suicides and their proportion to every 100,000 of the population during the sixteen years ended with 1888 recorded in all the Australasian colonies except Western Australia :—

Suicides in Australasian colonies.

DEATHS FROM SUICIDE IN AUSTRALASIAN COLONIES,
1873 TO 1888.

Year.	Number of Deaths from Suicide.					
	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	97	12·7	41	7·5	22	15·7
1874 ...	97	12·5	64	11·2	10	6·4
1875 ...	91	11·6	55	9·4	23	13·3
1876 ...	100	12·6	61	10·1	24	13·0
1877 ...	92	11·4	66	10·5	27	13·8
1878 ...	87	10·6	48	7·3	29	14·0
1879 ...	108	13·0	62	9·0	40	18·7
1880 ...	118	13·9	68	9·4	22	9·9
1881 ...	102	11·7	83	10·9	21	9·5
1882 ...	83	9·3	55	7·0	40	16·8
1883 ...	103	11·3	54	6·5	37	13·8
1884 ...	86	9·2	81	9·2	45	15·3
1885 ...	89	9·3	95	10·2	36	11·7
1886 ...	101	10·2	95	9·7	44	13·2
1887 ...	132	12·9	121	11·8	63	17·8
1888 ...	139	13·1	132	12·4	62	16·4
Means ...	102	11·6	74	9·5	34	13·7

	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	10	5·1	6	5·8	20	7·0
1874 ...	22	10·9	6	5·8	20	6·3
1875 ...	24	11·5	6	5·8	29	8·1
1876 ...	15	6·9	6	5·7	42	10·8
1877 ...	17	7·3	10	9·4	32	7·8
1878 ...	18	7·4	8	7·4	37	8·8
1879 ...	18	7·1	5	4·5	42	9·4
1880 ...	25	9·5	8	7·0	38	8·0
1881 ...	34	11·8	6	5·1	42	8·5
1882 ...	18	6·3	3	2·5	53	10·4
1883 ...	31	10·4	5	4·0	55	10·4
1884 ...	31	10·0	7	5·5	57	10·4
1885 ...	32	10·2	5	3·8	54	9·5
1886 ...	31	9·9	3	2·2	66	11·3
1887 ...	29	9·2	6	4·3	52	8·7
1888 ...	31	9·8	7	4·9	39	6·4
Means ...	24	9·0	6	5·2	42	8·9

Proportion of suicides in different colonies.

733. It will be observed that, according to the records, the suicides which take place annually in Victoria and Queensland are almost invariably above 1 per 10,000 persons living, but those which take place in the other colonies are generally below that proportion, which

indeed was not once reached in Tasmania, seven times in New South Wales, five times in New Zealand, and six times in South Australia, during the sixteen years named in the table. The rate in Tasmania appears to be much lower than in any of the other colonies.

734. By the following figures, which have been derived from various sources, it appears that suicide is more common in eight countries out of Australasia than in Queensland, in nine than in Victoria or New South Wales, and in ten than in New Zealand or South Australia, whilst there are only seven out of the twenty-two countries named in which suicide is less common than it is in Tasmania:—

Suicides in various countries.

DEATHS FROM SUICIDE IN DIFFERENT COUNTRIES.

Deaths from Suicide in each year per 100,000 Persons Living.			Deaths from Suicide in each year per 100,000 Persons Living.		
Saxony	...	31.1	New Zealand	...	8.9
Denmark	...	25.8	Sweden	...	8.1
Schleswig-Holstein	...	24.0	Norway	...	7.5
Austria	...	21.2	Belgium	...	6.9
Switzerland	...	20.2	England and Wales	...	6.9
France	...	15.7	Tasmania	...	5.2
German Empire	...	14.3	Hungary	...	5.2
Hanover	...	14.0	Scotland	...	4.0
Queensland	...	13.7	Italy	...	3.7
Prussia	...	13.3	Netherlands	...	3.6
Victoria	...	11.6	United States	...	3.5
New South Wales	...	9.5	Russia	...	2.9
Bavaria	...	9.1	Ireland	...	1.7
South Australia	...	9.0	Spain	...	1.4

735. It has been pointed out that suicide is a more terrible destroyer of human life than war, for whilst during the first fifty years of the Queen's reign war occasioned 52,000 deaths of subjects of the United Kingdom, and 316,000 deaths of subjects of France, Germany, and Austria, suicide claimed 77,000 victims in the first-named country, and 610,000 victims in the other three countries named.*

Suicide more destructive than war.

736. According to the following figures, violent deaths during the seven years ended with 1888 were about the same as in New Zealand, but less common in Victoria than in any other of the Australasian colonies, except South Australia and Tasmania:—

Violent deaths in Australasian colonies.

* See Mulhall's *Fifty Years of National Progress*, page 11.

VIOLENT DEATHS IN AUSTRALASIAN COLONIES, 1882 TO 1888.

Colony.	Year.	Number of Violent Deaths.	
		Total.	Per 10,000 Persons Living.
Victoria	1882	841	9·44
	1883	908	9·97
	1884	799	8·56
	1885	846	8·83
	1886	942	9·54
	1887	1,023	10·03
	1888	1,119	10·54
	Mean of 7 years	925	9·56
New South Wales ...	1882	904	11·37
	1883	850	10·19
	1884	990	11·24
	1885	1,106	11·88
	1886	1,083	11·05
	1887	1,148	11·23
	1888	1,140	10·71
	Mean of 7 years	1,032	11·10
Queensland	1882	439	18·48
	1883	396	14·78
	1884	509	17·27
	1885	492	15·93
	1886	496	14·92
	1887	599	16·88
	1888	593	15·72
	Mean of 7 years	503	16·28
South Australia ...	1882	210	7·24
	1883	202	6·76
	1884	239	7·74
	1885	212	6·77
	1886	272	8·69
	1887	229	7·31
	1888	234	7·36
	Mean of 7 years	228	7·41
Western Australia...	1882	53	17·44
	1883	59	18·89
	1884	51	15·78
	1885	45	13·21
	1886	67	18·02
	1887	57	13·67
	1888	90	21·27
	Mean of 7 years	60	16·90
Tasmania	1882	88	7·29
	1883	106	8·53
	1884	90	7·01
	1885	92	6·97
	1886	94	6·94
	1887	112	8·01
	1888	118	8·18
	Mean of 7 years	100	7·56

VIOLENT DEATHS IN AUSTRALASIAN COLONIES, 1882 TO 1888
—continued.

Colony.	Year.	Number of Violent Deaths.	
		Total.	Per 10,000 Persons Living.
New Zealand ...	1882	505	9·92
	1883	494	9·33
	1884	548	9·98
	1885	517	9·13
	1886	571	9·81
	1887	555	9·31
	1888	513	8·47
	Mean of 7 years	529	9·42

737. In the following table, the Australasian colonies and certain European countries are arranged in order in accordance with the proportion of deaths from violence to the population of each country which have occurred during a series of years; the proportion of such deaths from accident or negligence, homicide, and suicide being also shown. The figures relating to European countries have been partly derived from the 40th Report of the Registrar-General of England :—

Death rate
from
violence in
various
countries.

DEATH RATE FROM VIOLENCE IN VARIOUS COUNTRIES.

Countries.	Proportion per 100,000 Living of Deaths from—			
	Violence of all kinds.	Accident or Negligence.	Homicide.*	Suicide.
Queensland ...	163·8	141·1	6·4	13·5
Western Australia ...	161·7	133·9	12·1	9·2
New South Wales ...	111·7	94·9	3·1	9·3
New Zealand ...	95·7	84·0	1·4	9·0
Victoria ...	94·0	80·8	2·7	11·5
Switzerland ...	92·4	68·9	3·9	20·2
United Kingdom†	77·5	69·7	1·6	6·2
England and Wales ...	75·7	66·7	1·7	6·9
Tasmania ...	74·5	68·5	1·5	5·3
South Australia ...	74·2	63·4	1·4	8·9
Norway ...	72·4	64·1	1·3	7·5
Scotland ...	72·0	68·2	·1	4·0
Finland ...	62·6	55·7	3·5	3·4
Sweden ...	61·9	50·7	2·0	8·1
Russia ...	61·6	46·1	2·1	13·3
Bavaria ...	51·9	37·7	3·9	9·1
Belgium ...	48·3	38·5	1·6	6·9
Austria ...	47·1	...	...	21·2
Ireland ...	39·1	35·3	1·7	1·7
Italy ...	24·0	14·9	5·4	3·7

NOTE.—In some instances the proportions of deaths from accident, homicide, and suicide are not for the same period as those from violence of all kinds.

* Not including executions.

† Including the Shipping.

Proportion
of violent
deaths in
different
countries.

738. It will be seen that the list is headed by five Australasian colonies, in all of which the proportion of violent deaths is higher than in any of the European countries named. Victoria, however, stands below the other four colonies referred to, and immediately above Switzerland, which, with the United Kingdom and England and Wales, stands immediately above Tasmania and South Australia. According to the figures, the country in which the proportion of accidents is greatest is Queensland, that in which the proportion of homicides is greatest is Western Australia, and that in which the proportion of suicides is greatest is Austria.

Railway
accidents.

739. The following table gives a statement of the number of cases of death and injury from accidents on the Government lines of railway during the thirty and a half years ended with 30th June, 1889, embracing the whole period of the existence of railways in Victoria:—

DEATHS FROM RAILWAY ACCIDENTS, 1859 TO 1888-9.

Year.	Total Number.	Passengers.			Servants of the Railway Department or of Contractors.			Others.		
		From causes beyond their own control.	From their own miscon- duct or want of caution.	Total.	From causes beyond their own control.	From their own miscon- duct or want of caution.	Total.	At crossings.	Trespassers.	Miscellaneous.
1859 to 1868	37	...	...	...	3	19	22	1	14	...
1869	4	...	...	...	...	2	2	...	1	1
1870	2	...	...	...	...	1	1	...	1	...
1871	6	...	...	...	...	2	2	...	2	2
1872	3	...	...	...	...	...	...	...	3	...
1873	...	...	...	...	...	...	...	...	...	...
1874	10	...	...	...	4	...	4	1	4	1
1875	11	...	...	...	...	6	6	...	4	1
1876	23	...	...	...	3	10	13	2	6	2
1877	22	...	1	1	3	10	13	...	8	...
1878	16	...	...	...	...	7	7	2	6	1
1879	21	...	...	...	1	8	9	2	9	1
1880	18	...	...	...	...	7	7	3	6	2
1881	34	4	4	8	...	14	14	3	8	1
1882	38	1	1	2	...	22	22	3	9	2
1883	32	...	5	5	...	10	10	5	10	2
1884 (six months)	10	1	...	1	4	2	6	...	3	...
1884-5	36	...	1	1	...	12	12	7	14	2
1885-6	38	...	1	1	1	15	16	5	14	2
1886-7*	50	4	...	4	2	14	16	5	25	...
1887-8	45	...	2	2	...	22	22	8	13	...
1888-9	78	1	4	5	4	23	27	7	37	2
Total killed	534	11	19	30	25	206	231	54	197	22

* The high mortality in 1886-7 was chiefly due to the Windsor railway accident. So far as the numbers killed and injured are concerned, this is the worst railway accident which has occurred in Victoria.

PERSONS INJURED BY RAILWAY ACCIDENTS, 1859 TO 1888-9.

Year.	Total Number.	Passengers.			Servants of the Railway Department or of Contractors.			Others.		
		From causes beyond their own control.	From their own misconduct or want of caution.	Total.	From causes beyond their own control.	From their own misconduct or want of caution.	Total.	At crossings.	Trespassers.	Miscellaneous.
1859 to 1868 ...	84	22	2	24	5	45	50	1	7	2
1869 ...	...	...	...	...	...	...	...	...	...	...
1870 ...	4	...	...	...	4	...	4	...	...	...
1871 ...	3	...	...	...	...	1	1	...	1	1
1872 ...	32	28	2	30	1	1	2	...	...	...
1873 ...	1	...	...	...	...	1	1	...	...	...
1874 ...	1	...	...	...	...	1	1	...	...	...
1875 ...	8	...	...	...	6	1	7	...	1	...
1876 ...	27	1	1	2	4	15	19	...	5	1
1877 ..	49	36	...	36	3	5	8	1	2	2
1878 ...	40	22	3	25	6	5	11	...	1	3
1879 ...	45	7	2	9	11	20	31	3	1	1
1880 ...	20	5	...	5	1	7	8	2	3	2
1881 ...	64	46	4	50	1	10	11	...	2	1
1882 ...	261	210	5	215	13	25	38	1	2	5
1883 ...	101	67	8	75	7	12	19	2	1	4
1884 (six months) ...	90	44	9	53	10	21	31	2	1	3
1884-5 ...	116	13	23	36	10	46	56	5	9	10
1885-6 ...	191	3	33	36	17	101	118	6	4	27
1886-7* ...	358	266	24	290	16	43	59	3	3	3
1887-8 ...	169	18	34	52	15	84	99	2	10	6
1888-9 ...	358	116	82	198	24	107	131	5	12	12
Total injured ...	2,022	904	232	1,136	154	551	705	33	65	83

740. It will be observed that, in the whole period of thirty and a half years, 534 persons were killed and 2,022 were injured on the State lines of railway, and that, exclusive of trespassers, persons crossing the lines, etc., 225 of the former and 783 of the latter met their death or injury in consequence of their own misconduct or want of caution. Of the persons killed throughout the period, 30 were passengers, and as many as 231 railway or contractors' servants; 19 of the former, and 206 of the latter, having suffered in consequence of their own carelessness. The passengers injured numbered 1,136, and the railway servants 705; as many as 551 of the latter, but only 232 of the former, suffered from their own action. At crossings, 54 persons were killed, and 33 injured. As many as 197 trespassers were killed; these no doubt included persons who committed suicide by placing themselves in the way of trains. The trespassers injured

Railway passengers and servants killed and injured.

* See footnote (*) on previous page.

have numbered 65, half of whom received their injuries during the last five years.

741. In the sixteen years ended with 1889, embracing the whole period during which the Regulation and Inspection of Mines and Machinery Statutes* have been in operation, 855 persons lost their lives, and 1,917 persons were injured, from accidents connected with mining operations. The following were the numbers in each year and their proportion to the number of miners at work :—

DEATHS AND INJURIES FROM MINING ACCIDENTS, 1874 TO 1889.

Year.	Average Number of Miners at work.	Number of Persons—			Numbers per 1,000 Miners at work—		
		Killed.	Injured.	Total.	Killed.	Injured.	Total.
1874	46,512	90	245	335	1·93	5·27	7·20
1875	42,058	83	217	300	1·97	5·16	7·13
1876	41,531	55	170	225	1·32	4·10	5·42
1877	38,860	64	154	218	1·65	3·96	5·61
1878	37,212	40	106	146	1·07	2·85	3·92
1879	37,195	48	112	160	1·29	3·01	4·30
1880	38,076	50	89	139	1·31	2·34	3·65
1881	38,436	72	108	180	1·87	2·81	4·68
1882	37,446	71	130	201	1·90	3·47	5·37
1883	33,927	59	128	187	1·74	3·77	5·51
1884	29,182	41	106	147	1·40	3·63	5·03
1885	27,033	40	67	107	1·48	2·48	3·96
1886	25,361	44	68	112	1·73	2·68	4·41
1887	25,511	28	72	100	1·09	2·82	3·91
1888	25,142	36	76	112	1·43	3·02	4·45
1889	24,577†	34	69‡	103	1·38	2·80	4·18
Means	34,253	53	120	173	1·55	3·50	5·05

742. In 1889, fatal mining accidents numbered 2 less than in the previous year, and, in proportion to the number of miners at work, were below the average. In comparison with earlier years, the persons killed and injured in and in connexion with mines have much diminished both in numbers and in proportion to the miners at work.

743. According to the mean of the sixteen years to which reference is made, 1 miner in every 641 loses his life annually. In 1889 the proportion was as low as 1 in 723. These proportions contrast favourably with the proportion of fatal accidents in the metalliferous mines of Great Britain and Ireland, where, according to the report of

* 37 Vict. No. 480, 41 Vict. No. 583, 45 Vict. No. 719, and 47 Vict. No. 783.

† Including 254 coal miners.

‡ Including 2 by coal mining accidents.

Her Majesty's Inspectors of Mines for 1883, 1 person in every 584 employed in and about mines lost his life by accident during the year, and one in every 607 during the ten years 1874 to 1883. This is exclusive of coal mines, in respect to which the proportion of fatal accidents is much higher. Dr. Raseri says that in Italy, during the six years 1879 to 1884, 1 miner in 450 lost his live annually by accident.

744. It appears by the following table that, in the sixteen years named, 1,362, or 49 per cent., of the mining accidents in Victoria were caused by the fall of earth or materials; 530, or 19 per cent., by falling down shafts, etc., and cage accidents; 337, or 12 per cent.. by explosions, principally of blasting charges; and the balance, or 20 per cent., by timber and truck accidents, machinery in motion, foul air, flooding, and undescribed casualties :—

Causes of mining accidents.

CAUSES OF MINING ACCIDENTS, 1874 TO 1889.

Nature of Accident.	Number of Persons—		
	Killed.	Injured.	Total.
Fall of earth or rock underground...	341	630	971
„ „ on surface ...	109	79	188
„ materials down shafts, passes, etc. ...	44	157	201
„ „ winzes, etc....	2	...	2
Falling down shafts ...	120	159	279
„ „ winzes, shoots, etc. ...	15	77	92
Cage accidents ...	49	110	159
Timber accidents ...	17	26	43
Truck accidents...	6	45	51
Machinery in motion ...	21	85	106
Explosion of charges of gunpowder ...	26	142	168
„ „ guncotton ...	1	10	11
„ „ nitro-glycerine compounds ...	28	64	92
„ stored explosives ...	7	28	35
„ boilers ...	2	6	8
„ fire damp ...	1	22	23
Foul air ...	11	1	12
Flooding of mines ...	25	...	25
Undescribed ...	30	276	306
Total ...	855	1,917	2,772

745. Under the *Factories and Shops Act* 1885 (49 Vict. No. 862) it is prescribed, under a penalty not exceeding £5 for non-compliance, that notices shall be sent to the Inspector of Factories, and to the certifying medical practitioner for the district, of any accident causing loss of life to a person employed in a factory or workroom, also of

Accidents in factories 1889.

any accident whereby a person so employed receives bodily injury, provided it is produced either by machinery moved by steam, water, or other mechanical power, or through a vat, pan, or other structure, filled with hot liquid or molten metal or other substance, or by escape of gas, steam, or metal, and is of such a nature as to prevent the person injured by it from returning to his work in the factory or workroom within forty-eight hours of the occurrence of the accident. The following cases of injury were reported in the last two years :—

ACCIDENTS IN FACTORIES OR WORKROOMS, 1888 AND 1889.

Nature of Injury.	Males.		Females.	
	1888.	1889.	1888.	1889.
Death	5	4	...	...
Loss of arm or hand ...	28	5	...	...
„ leg ... ..	...	1	...	...
„ fingers or toes ...	...	39	...	1
Fractures... ..	21	6	1	...
Lacerations, contusions, etc....	43	54	3	2
Total	97	109	4	3

Factory accidents to persons under 20.

746. Of the males who were killed or injured in factories or work-rooms, 35, or 36 per cent. in 1888, and 37, or 34 per cent. in 1889 were under 20 years of age. Of the females injured, 3 out of 4 in 1888, and all 3 in 1889 were under 20 years of age.

Ill-defined and un-specified causes of death.

747. In 1889, the year under review, there were no fewer than 1,639 deaths in Victoria from ill-defined or unspecified causes, or nearly 9 per cent. of the deaths from all causes, as compared with 8 per cent. in 1888, 7½ per cent. in the five years ended with 1885, and 7 per cent. in the ten years ended with 1880. The great majority of these—viz., 1,491 in 1889—were returned as from atrophy and debility; whilst 13 were set down to tumours, 23 to dropsy, 20 to abscess, 25 to other ill-defined causes, and 67 were altogether unspecified.

Atrophy and debility in Victoria.

748. The mortality under the head of atrophy and debility is almost entirely confined to infants and young children—thus, of the 1,491 deaths set down thereto in 1889, 1,364 were under 5 years, 1,214 were under 1 year, and 318 were under 1 month, of age. It is probable that a large number of these deaths might have been

returned more definitely if sufficient pains had been taken. The following are the numbers of both sexes recorded as having died from atrophy and debility in each of the twenty-three years ended with 1889:—

DEATHS FROM ATROPHY AND DEBILITY, 1867 TO 1889.

Year.				Males.	Females.	Total.
1867	...	...	..	399	347	746
1868	...	...	...	337	328	665
1869	...	...	...	386	337	723
1870	...	...	..	422	368	790
1871	...	...	...	368	311	679
1872	...	...	...	354	338	692
1873	...	...	...	378	336	714
1874	...	...	...	402	337	739
1875	...	...	...	413	349	762
1876	...	...	...	344	305	649
1877	...	...	...	344	304	648
1878	...	...	...	389	311	700
1879	...	...	...	407	304	711
1880	...	...	...	369	324	693
1881	...	...	...	392	345	737
1882	...	...	...	493	442	935
1883	...	...	...	412	387	799
1884	...	...	...	488	365	853
1885	...	...	...	541	414	955
1886	...	...	...	577	472	1,049
1887	...	...	...	659	503	1,162
1888	...	...	...	639	550	1,189
1889	...	...	...	811	680	1,491
Annual mean 1867 to 1889...				449	381	830

749. Notwithstanding the proportions of the sexes of persons at ages to be affected by atrophy and debility were about equal, it will be observed that in every one of the years more males died than females. During the whole period, females died of these complaints in the proportion of 85 to every 100 males.

Sex of those who died of atrophy, etc.

750. The practice of returning atrophy and debility as causes of death appears to be no less common in the other Australasian colonies than in Victoria, the mortality (generally of infants or young children) from those circumstances which medical men seem to find a difficulty in giving a more definite name to, being apparently more common generally in the warmer than in the cooler colonies. The following are the figures for the seven years ended with 1888:—

Atrophy and debility in Australasian colonies.

DEATHS FROM ATROPHY AND DEBILITY IN AUSTRALASIAN COLONIES,
1882 to 1888.

Colony.	Year.	Number of Deaths from Atrophy and Debility.	
		Total.	Per 10,000 Persons Living.
Victoria ...	1882	935	10·49
	1883	799	8·77
	1884	853	9·13
	1885	955	9·96
	1886	1,049	10·63
	1887	1,162	11·40
	1888	1,189	11·20
	Mean of 7 years	992	10·24
New South Wales ...	1882	776	9·76
	1883	832	9·97
	1884	975	11·07
	1885	1,059	11·38
	1886	971	9·91
	1887	756	7·39
	1888	886	8·32
	Mean of 7 years	894	9·69
Queensland ...	1882	299	12·58
	1883	344	12·84
	1884	438	14·86
	1885	402	13·02
	1886	297	8·93
	1887	114	3·21
	1888	76	2·01
	Mean of 7 years	281	9·64
South Australia ...	1882	337	11·62
	1883	353	11·81
	1884	380	12·31
	1885	307	9·81
	1886	315	10·06
	1887	264	8·42
	1888	215	6·76
	Mean of 7 years	310	10·11
Western Australia ...	1882	30	9·87
	1883	19	6·08
	1884	35	10·83
	1885	48	14·09
	1886	47	12·64
	1887	63	15·11
	1888	43	10 16
	Mean of 7 years	41	11·25

DEATHS FROM ATROPHY AND DEBILITY IN AUSTRALASIAN COLONIES,
1882 TO 1888—continued.

Colony.	Year.	Number of Deaths from Atrophy and Debility.	
		Total.	Per 10,000 Persons Living.
Tasmania ...	1882	112	9·28
	1883	124	9·98
	1884	126	9·81
	1885	124	9·38
	1886	115	8·49
	1887	148	10·58
	1888	152	10·53
	Mean of 7 years	129	9·72
New Zealand ...	1882	334	6·56
	1883	269	5·08
	1884	304	5·54
	1885	294	5·19
	1886	318	5·46
	1887	271	4·54
	1888	238	3·93
	Mean of 7 years	290	5·19

751. The number of deaths of persons over 80 years of age, and their exact ages at death, have been already quoted for the year 1889 and the two preceding periods of seven and eleven years respectively.* The following table shows the causes of death of these persons :—

Causes of death of octogenarians.

CAUSES OF DEATH OF OCTOGENARIANS, 1871 TO 1889.

Causes of Death.	Year 1889.		Seven Years, 1882-88.		Eleven Years ended with 1881.	
	Males.	Females.	Males.	Females.	Males.	Females.
Influenza, Coryza, Catarrh ...	1	...	5	2	5	11
Diphtheria ...	...	...	1	...	...	...
Typhoid Fever, etc. ...	...	...	6	3	3	2
Cholera ...	1	1	...	3	6	1
Dysentery and Diarrhoea ...	14	8	60	49	51	36
Venereal Diseases ...	...	...	2	...	4	...
Erysipelas ...	...	...	6	2	3	7
Hydatids ...	...	...	...	...	1	...
Privation ...	...	...	2	...	3	...
Scurvy ...	...	...	...	...	1	...
Intemperance ...	...	...	...	...	2	1
Rheumatism ...	1	1	5	10	7	4
Gout ...	...	1	4	1	2	...
Cancer ...	6	10	43	25	35	13
Tabes Mesenterica ...	...	...	1	...	...	...
Phthisis ...	4	1	7	3	3	3

* See table following paragraph 655 ante.

CAUSES OF DEATH OF OCTOGENARIANS, 1871 TO 1889—continued.

Causes of Death.	Year, 1889.		Seven Years, 1882-88.		Eleven Years ended with 1881.	
	Males.	Females.	Males.	Females.	Males.	Females.
Purpura, Hæmorrhagic Diathesis	1	...	...	...	...	...
Anæmia, Chlorosis, Leucocy- thæmia	...	...	1	1	...	...
Diabetes Mellitus	...	...	1	...	...	...
Old Age	164	164	958	757	631	538
Brain Diseases, etc.	29	23	165	121	136	103
Ear and Nose Diseases	...	...	...	3	...	...
Heart Diseases, etc.	39	26	139	93	66	46
Lung Diseases, etc.	46	28	261	183	183	116
Quinsy	...	...	...	...	...	1
Stomach Diseases, etc.	8	6	71	38	37	21
Kidney Diseases, etc.	12	2	71	11	47	1
Gennetic Diseases	...	...	1	1	...	1
Bone Diseases	1	...	1	...	...	...
Carbuncle, Boil	...	...	...	1	3	2
Skin Diseases, etc.	...	...	1	...	4	2
Accidents	9	4	38	30	22	18
Suicide	1	...	3	2	4	...
Dropsy	...	1	8	9	20	18
Mortification	...	...	4	2	9	3
Tumour	...	...	3	1	...	3
Abscess, etc.	...	...	1	...	1	...
Unspecified Causes	...	...	7	3	2	...
Total	337	276	1,876	1,354	1,291	951

Complaints
most fatal
to octoge-
narians—
1871-89.

752. It will be noticed that during the nineteen years referred to in the case of more than half of both the males and females, no complaint was set down except old age. Little is to be learnt from such a vague definition, and it is much to be wished that medical men would endeavour to describe the causes of death with more precision. Of the remainder, two-sevenths of both sexes died of diseases of the organs of respiration, chiefly pneumonia and bronchitis, and about one-fifth died of affections of the brain and nerves.

Occupations
at death.

753. Elaborate tables showing the occupations at death of males at various ages in Melbourne, in the extra-metropolitan towns, and in the extra-urban districts, were published in the *Statistical Register of Victoria* for 1883, and statements based upon these have been given in former issues of the *Victorian Year-Book*.* The following is a summary of the proportions of adult males of each class of occupations dying annually in the three years embracing the census year (1881), and the year immediately succeeding and following it, the groups being arranged according to the order of fatality:—

* See *Statistical Register*, 1883, page 278; also, *Victorian Year-Book*, 1883-4, paragraph 619; *ibid.*, 1884-5, paragraph 669; *ibid.*, 1885-6, paragraph 684 *et seq.*

OCCUPATIONS OF ADULT MALES AT DEATH IN ORDER OF FATALITY.

				Annual Deaths of Males over 20 per 1,000 Living.
1.	Engaged in industrial pursuits	...	...	21.89
2.	„ entertaining and serving	...	...	20.42
3.	„ commercial pursuits	...	...	17.62
4.	„ professional pursuits	...	...	16.51
5.	„ food and drinks...	...	...	15.53
6.	„ books and literature	...	...	12.48
7.	„ on land and with animals	...	...	9.96

754. As bearing upon the mortality, it is important to consider whether the number of medical men is sufficient to minister to the health of the population. At the census of 1881, 454 legally qualified medical practitioners were returned, which gives 1 to every 1,900 persons, or to every 194 square miles. The first of these proportions compares favourably with that in most other countries, the only ones known to have a higher proportion being England and Wales, Italy, and Switzerland. In regard to the second proportion, in consequence of Victoria being much more thinly peopled than any of the countries of the old world, it is naturally low; lower, in fact, than in any other country respecting which the information is at hand, except Sweden and Norway. These results are shown in the following table, in which the countries are arranged in order according to the proportion of medical men to the population and to the area of each country:—

Medical men
in various
countries.

MEDICAL MEN IN PROPORTION TO POPULATION AND AREA IN
VARIOUS COLONIES.

Countries.	Year.	Medical Men per 100,000 Persons Living.	Countries.	Square Miles to a Medical Man.
Switzerland ...	1880	75	England and Wales	3.9
Italy ...	1885	60	Belgium ...	4.7
England and Wales ...	1881	58	Italy ...	6.2
Victoria ...	1881	53	Holland ...	6.9
Scotland ...	1881	50	Switzerland ...	7.3
Ireland ...	1881	48	Ireland ...	13.2
Holland ...	1884	43	France ...	13.9
Belgium ...	1884	42	Germany ...	15.1
France ...	1883	39	Austria ...	15.8
Germany ...	1876	32	Scotland ...	15.9
Austria ...	1884	32	Hungary ...	33.6
Norway ...	1882	32	Spain ...	37.1
Spain ...	1877	31	Portugal ...	43.4
Hungary ...	1876	24	Russia in Europe ...	148.4
Portugal ...	1880	18	Victoria ...	193.6
Russia in Europe ...	1882	16	Norway ...	205.0
Sweden ...	1883	13	Sweden ...	294.9

NOTE.—The figures, except those relating to Victoria, have been taken (with some corrections) from a table given by Dr. Raseri. The area per medical man is there stated in square kilometres, which have been converted into square miles on the assumption that one of the former is equal to .386 of one of the latter.

Sickness and
death in
general
hospitals.

755. There are 39 general hospitals in Victoria, 9 of which are also benevolent asylums. The total number of patients discharged from these institutions during the year ended 30th June, 1889, was 16,024, and the number of deaths was 2,160. There was thus 1 death to every 7·4 discharges during the year 1889, as against 1 death to every 8·0 during the previous year. The following table gives a list of the various hospitals throughout the colony, also a statement of the number of discharged, the number of deaths which occurred in the year ended 30th June, 1889, and the proportion of deaths to cases in each hospital during that year:—

SICKNESS AND MORTALITY IN GENERAL HOSPITALS.

Name of Hospital.	Year ended 30th June, 1889.			Percentage of Mortality to Discharges, Year ended 30th June, 1888.
	Number of Patients Discharged.*	Number of Deaths.	Percentage of Mortality to Discharged.	
Alexandra	75	9	12·00	6·25
Amherst	309	30	9·71	6·36
Ararat†	311	43	13·83	9·36
Bairnsdale	128	16	12·50	...
Ballarat	1,054	146	13·85	10·53
Beechworth	547	47	8·60	13·51
Belfast† (Port Fairy) ...	44	5	11·36	20·59
Bendigo	1,187	140	11·79	11·84
Castlemaine	407	56	13·76	11·56
Clunes	113	7	6·19	6·80
Colac	71	9	12·68	9·68
Creswick	220	18	8·18	6·86
Daylesford†	208	24	11·54	15·69
Dunolly	310	35	11·29	10·13
Echuca	199	14	7·04	5·56
Geelong†	826	100	12·11	11·76
Hamilton†	240	32	13·33	8·75
Heathcote	101	10	9·90	10·00
Horsham	184	24	13·04	8·19
Inglewood	418	37	8·85	9·16
Kilmore	168	12	7·14	9·21
Kyneton	437	30	6·86	6·93
Maldon†	46	7	15·22	18·00
Mansfield	117	5	4·27	·93
Maryborough	329	40	12·16	9·18
Melbourne	4,013	747	18·61	19·24
Melbourne (Alfred) ...	1,494	223	14·93	12·11
Melbourne (Austin)† ...	42	37	88·10	71·11
Melbourne (Homœopathic)	668	77	11·53	9·75
Mooroopna	384	34	8·85	8·57
Nhill	93	13	13·98	10·66
Pleasant Creek (Stawell)†	181	24	13·26	9·88
Portland†	14§	6	42·86	3·85
Sale	284	38	13·38	8·78

* Including deaths. † These institutions are also Benevolent Asylums. ‡ For incurables.
§ Exclusive of six inmates who were not under treatment.

SICKNESS AND MORTALITY IN GENERAL HOSPITALS—continued.

Name of Hospital.	Year ended 30th June, 1889.			Percentage of Mortality to Discharges, Year ended 30th June, 1888.
	Number of Patients Discharged.*	Number of Deaths.	Percentage of Mortality to Discharged.	
St. Arnaud ...	252	23	9·13	6·99
Swan Hill ...	92	7	7·61	9·26
Wangaratta ...	233	18	7·73	6·14
Warrnambool†	118	16	13·56	13·45
Wood's Point...	107	1	·93	5·10
Total ...	16,024	2,160	13·48	12·49

NOTE.—In this table the number of discharges from hospitals have been shown instead of the total number of inmates as in previous years.

756. In proportion to the cases discharged in 1888-9 the greatest mortality occurred in the Austin (Melbourne),‡ Portland, Melbourne, Maldon, and the Alfred (Melbourne) Hospitals; and the lowest in the Wood's Point, Mansfield, Kyneton, and Clunes Hospitals. It should be borne in mind, however, that the Portland and Maldon Hospitals are also Benevolent Asylums.

757. The following figures, calculated from numbers given in Dr. Raseri's paper,§ show the proportions of deaths to inmates of hospitals in various countries; those for Victoria during the six years ended with 1885 being added:—

PROPORTIONS OF DEATHS TO INMATES OF HOSPITALS IN VARIOUS COUNTRIES.

						Per cent.
Victoria ...	...	...	...	1880-85	...	11·85
England and Wales	...	...	...	1884	...	11·11
Austria ...	...	...	...	1883	...	10·43
Italy ...	...	...	...	1885	...	10·22
Saxony ...	...	...	...	1882	...	9·40
Norway ...	...	...	...	1883	...	9·36
France ...	...	...	...	1883	...	9·14
Portugal ...	...	...	...	1884	...	9·02
Hungary ...	...	...	...	1882	...	8·68
Prussia ...	...	...	...	1882	...	8·24
German Empire	...	...	...	1882	...	7·18
Sweden ...	...	...	...	1883	...	6·23
Baden ...	...	...	...	1882	...	4·86
Bavaria ...	...	...	...	1882	...	3·86
Württemberg ...	...	...	...	1882	...	3·49

758. The rate of mortality in hospitals would appear by the figures to be higher in Victoria than in any of the other countries named.

* Including deaths.
† For incurables.

‡ This institution is also a Benevolent Asylum.
§ Page 195.

In the absence of information it is impossible to say whether the cases treated in the hospitals of this colony may not be of a worse class than those in the other countries, or whether hospitals for special complaints—ophthalmic, maternity, etc., where the mortality would naturally not be so great as in general hospitals—may not be included with the latter in the returns of some of the countries.

Sickness and deaths in Women's Infirmary Department.

759. The patients discharged* from the Infirmary Department of the Women's Hospital numbered 283 during the year 1887-8, and 251 in 1888-9. The deaths in the same institution numbered 16 in the former, and 18 in the latter year. Therefore, 1 patient in 18 who left the institution died in 1887-8, and 1 in 14 in 1888-9.

Deaths of mothers in Women's Midwifery Department.

760. In the Midwifery Department of the Women's Hospital, Melbourne, 671 women were confined in 1887-8, and 762 in 1888-9.† Four died in the former period, and 10 in the latter. Thus, only 1 woman in 168 died in 1887-8, but as many as 1 woman in 76 in 1888-9. From the founding of the institution to the end of June, 1889, 14,483 women were accouched therein,† of whom 257 died, which is equivalent to 1 death to every 56 confinements.‡

Deaths of infants in Women's Hospital.

761. The infants born alive in the Women's Hospital numbered 634 in the year 1887-8, and 711 during the year 1888-9, and of these 20 in the former and 30 in the latter year died before being taken from the institution; thus, 1 infant in 32 died in the former, and 1 in every 24 in the latter year.‡

Sickness and deaths in Children's Hospital.

762. In the Melbourne Hospital for Sick Children the discharges numbered 636, and 43 deaths occurred, in the year 1887-8; and there were 941 discharges, and 77 deaths occurred, during the year 1888-9. These numbers furnish proportions of 1 death to every 15 patients in the former and 1 death to every 12 in the latter year.

Sickness and deaths in benevolent asylums.

763. Cases of sickness in benevolent asylums (exclusive of Melbourne Immigrants' Home) numbered 2,003 in 1887-8, and 2,785 in the year 1888-9; deaths numbered 251 and 257. The deaths were thus to the cases treated in the proportion of 1 to every 8 in 1887-8, and of 1 to 11 in 1888-9.

Sickness and deaths in Immigrants' Home.

764. In the Melbourne Immigrants' Home the cases of sickness in the year 1887-8 amounted to 670, and the deaths to 93, or 1 death to every 7 cases of sickness. In the year 1888-9 the cases of sickness in this institution numbered 676, and the deaths 102, or 1 death to every 7 cases of sickness.

* The discharges referred to in this and the following paragraphs in all cases include deaths.
 † Including women accouched outside the hospital by midwives connected with the institution, who numbered 212 in 1887-8, and 87 in 1888-9.
 ‡ See paragraph 645 *ante*.

765. In 1887-8 the cases of sickness in orphan asylums numbered 128, and the deaths 5. In the year ended 30th June, 1888-9, these numbers were 184 and 7 respectively. Thus, in both years, 1 death occurred to every 26 cases of sickness. Sickness and deaths in orphan asylums.

766. In hospitals for the insane during 1888, the cases discharged numbered 735, and during 1889 they numbered 773. The deaths amounted to 217 at the former period, and 237 at the latter, or an average of 1 death to every 3 cases of sickness in both years. Sickness and deaths in lunatic asylums.

767. In gaols and penal establishments 2,030 cases of sickness occurred in 1889. The deaths in the same year were 89, exclusive of three deaths by execution. Thus 1 death occurred to every 23 cases of sickness. Sickness and deaths in gaols.

768. Altogether the number of deaths in penal or charitable institutions during 1888-9* was 3,085, being in the proportion of 1 to every 6·3 deaths which took place in Victoria during the year. The deaths in such institutions in the five years ended with 1886 were in the proportion of 1 to every 6·3 deaths; and in the four years, 1877-80, in that of 1 to every 6 deaths which took place in the whole colony. The following are the names of the institutions and the number of deaths which occurred in each during the year 1888-9:— Deaths in public institutions.

DEATHS IN PUBLIC INSTITUTIONS, 1888-9.

	Number of Deaths.
General hospitals	2,160
Women's Hospital—	
Infirmary Department	18
Midwifery Department	40†
Hospital for Sick Children	77
Benevolent asylums... ..	257
Melbourne Immigrants' Home	102
Orphan Asylums	7
Eye and Ear Hospital	3
Victorian Asylum and School for the Blind	1
Hospitals for the insane	237
Female refuges	23‡
Victorian Infant Asylum	15
Industrial and reformatory schools	56§
Gaols (inclusive of Police gaols)	80||
Penal establishments	9
Total	3,085

NOTE.—No deaths occurred in 1888-9 in the Deaf and Dumb Institution.

* The figures relating to hospitals for the insane, industrial and reformatory schools, gaols, and penal establishments are for the year ended 31st December, and those relating to the other institutions are for the year ended 30th June, 1889.

† Including the deaths of 30 infants born in the institution.

‡ Seventeen of this number were infants, who were admitted with their mothers.

§ Including deaths of boarded-out and licensed children.

|| Excluding 3 executions.

Deaths in public institutions in England.

769. In England and Wales during 1882, 1 out of every 10 deaths registered occurred in a workhouse, hospital, or lunatic asylum. Of such deaths, 63 per cent. occurred in the first of these institutions, 28 per cent in the second, and 9 per cent. in the third.

Sick and infirm.

770. The householder's schedule used at the census of 1881 contained a column headed "Health," respecting which an instruction was given to the effect that, if any person was unable to follow his usual occupation by reason of illness or accident, or was afflicted with deafmuteism, blindness, lunacy, idiocy, epilepsy, or leprosy,* the name of such infirmity should be entered. As the result of this inquiry, the following information was obtained :—

SICKNESS AND INFIRMITY, 1881.

	Males.	Females.	Total.
Suffering from sickness	7,381	5,822	13,203
„ „ accident	1,162	202	1,364
„ „ deafmuteism	168	119	287
„ „ blindness	502	240	742
„ „ lunacy	1,590	1,243	2,833
„ „ idiocy	108	53	161
„ „ epilepsy	176	114	290
„ „ lameness, mutilation, deformity, etc.†	83	49	132
Total	11,170	7,842	19,012

Proportion of infirm to population.

771. The total numbers furnish a proportion of 221 persons suffering from infirmity in every 10,000 of the population, of 247 infirm males in every 10,000 males, and 191 infirm females in every 10,000 females.

Sickness and accidents.

772. The sick, when the census of 1881 was taken, were found to be in the proportion of 153, and those laid up in consequence of accidents in that of 16 to every 10,000 of the population. The two combined, representing those entirely disabled for the time being, but not as a rule permanently affected, were thus in the proportion of 169 to every 10,000 living, or 1 in 59. A similar combination gives a proportion of 189 disabled males in every 10,000 males living, or 1 in 53 ; of 147 disabled females in every 10,000 females living, or 1 in 68.

Permanent infirmities.

773. The deaf mutes, the blind, the lunatics, the idiots, and the crippled, maimed, and deformed persons represent those having some

* No case of leprosy was returned either in 1871 or 1881. It is known that this infirmity existed at both periods, to a small extent, among the Chinese ; but the sub-enumerators did not distinguish it from ordinary sickness.
† The information in this line was not asked for, and is no doubt incomplete.

defect or injury which is generally permanent, but which often does not disable them from following some description of labour, and does not always prevent them from earning their own livelihood, although no doubt in most cases it seriously affects their usefulness to the community. These numbered 4,445, viz., 2,627 males, and 1,818 females, or 1 person in every 194, 1 male in every 172, and 1 female in every 226.

774. The deaf and dumb were in the proportion of 3·33 per 10,000 persons living; of 3·72 deaf and dumb males per 10,000 males, and of 2·90 deaf and dumb females per 10,000 females. These proportions, stated in other words, are 1 deafmute in 3,005 of the total population, 1 in 2,691 of the males, and 1 in 3,448 of the females. Deafmute-ism.

775. The following are the proportions per 10,000 of the population of deaf and dumb persons in as many Australasian colonies and other countries as the information is available for :— Deaf-muteism in various countries.

DEAFMUTEISM IN VARIOUS COUNTRIES.

	Deafmutes per 10,000 living.		Deafmutes per 10,000 living.
Switzerland ...	24·52	France ...	6·26
Austria ...	13·07	Denmark ...	6·20
Hungary ...	12·63	Great Britain and	
Sweden ...	10·23	Ireland ...	5·74
Prussia ...	10·19	Tasmania ...	5·44
Finland ...	10·18	Italy ...	5·37
Germany (exclusive of		Spain ...	4·59
Prussia) ...	9·31	Belgium ...	4·45
Norway ...	8·64	Holland ...	3·35
Canada ...	8·05	Victoria ...	3·33
Portugal ...	7·47	South Australia ...	2·90
United States ...	6·75	Western Australia ...	2·36
Greece ...	6·46	New Zealand ...	2·33

NOTE.—The figures, except those relating to the Australasian colonies, have been taken (with some corrections) and rearranged from Dr. Raseri's paper, page 179.

776. It will be observed that the proportions of deaf and dumb persons to the population are smaller in New Zealand, Western Australia, South Australia, and Victoria, than in any other countries; but Holland, Belgium, Spain, and Italy stand above Tasmania. The country in which deafmuteism prevails to its greatest extent is Switzerland, about 1 person in every 400 being affected in this manner. Deaf-muteism in Australasia and elsewhere.

777. Blind persons in Victoria were found in 1881 to be in the proportion of 8·60 per 10,000 persons living; blind males in that of 11·10 to every 10,000 males; blind females in that of 5·85 to every 10,000 females. There was thus 1 blind person in every 1,162 of Blindness.

mixed sexes, or 1 blind male in every 901 males, and 1 blind female in every 1,709 females.

Blindness in
various
countries.

778. Subjoined are the proportions of blind persons to the populations of the respective countries named :—

BLINDNESS IN VARIOUS COUNTRIES.

Blind persons per 10,000 living.			Blind persons per 10,000 living.		
Portugal ...	...	21·90	France ...	...	8·37
Finland ...	...	21·15	Prussia ...	...	8·31
Tasmania ...	...	16·00	Belgium ...	...	8·11
Spain ...	...	14·79	Sweden ...	...	8·06
Western Australia ...	...	13·79	Germany (exclusive of Prussia)	...	7·93
Norway ...	...	13·57	Denmark ...	...	7·86
Hungary ...	...	13·24	Italy ...	...	7·63
Great Britain and Ireland	...	9·85	Switzerland ...	...	7·61
United States ...	...	9·75	South Australia ...	...	7·06
Austria ...	...	9·07	Canada ...	...	6·19
Greece ...	...	8·96	Holland ...	...	4·45
Victoria ...	...	8·60	New Zealand ...	...	2·82

NOTE.—These figures, except those relating to the Australasian colonies, have been taken (with some corrections) and rearranged from Dr. Kaseri's paper, page 179.

Blindness
in Austral-
asian colo-
nies and
elsewhere.

779. According to these figures, the people of New Zealand enjoy a greater immunity from blindness than those of any other country, and the people of South Australia than those of any other country except New Zealand, Holland, and Canada. Victoria has a larger proportion of blind persons than twelve, but a smaller one than eleven of the other countries named; whilst Western Australia has a larger proportion than all but four, and Tasmania than all but two of the other countries. Most blindness appears to exist in two countries situated so widely apart as Portugal and Finland, the proportion being 1 blind person to about every 450 of the population.

Lunacy.

780. Lunatics in Victoria were in the proportion of 32·85 per 10,000 of the population, viz., 35·17 male lunatics per 10,000 males living, and 30·30 female lunatics per 10,000 females living. Thus 1 person in every 304, 1 male in every 284, 1 female in every 330, was a lunatic.

Lunacy in
England
and Wales.

781. From whatever cause, lunacy appears to be much more rife in Victoria than in England and Wales. When the census of 1881 was taken, the proportion in the latter was 1 lunatic in every 502 of the population, which is a much lower proportion than that found to exist in Victoria at the same census.*

* See General Report on the Census of England and Wales, 1881, page 67.

782. The only Australasian colonies besides Victoria which collected complete returns of lunacy apart from idiocy were New Zealand, South Australia, and Tasmania, in all of which the proportion was lower than in this colony, as will be seen by the following figures :—

Lunacy in Australasian colonies.

LUNACY IN AUSTRALASIAN COLONIES, 1881.

1. Victoria had 1 lunatic in every	...	304 persons.
2. Tasmania	„	334 „
3. South Australia	„	436 „
4. New Zealand	„	437 „

783. The census returns of Queensland contain a return of the number of lunatics in asylums, but give no account of those in private houses, gaols, etc. The number was 563, or 1 in 379 of the population, which is a higher proportion than that which the total number of lunatics bore to the population of New Zealand or South Australia, but not so high as that which obtained in the other two colonies furnishing returns.

Lunacy in Queensland.

784. Persons returned as idiots in this colony were in the proportion of 1·87 per 10,000 of the population ; 2·38 idiot males per 10,000 males, 1·29 idiot females per 10,000 females. These proportions may be otherwise stated as 1 idiot in every 5,356 persons, 1 idiot male in every 4,186 males, 1 idiot female in every 7,741 females.

Idiocy.

785. The following are the proportions of idiots to the populations of three of the Australasian colonies and various other countries. It is probable that imbeciles are included with idiots in most if not all the countries out of Australasia, as the proportions relating to such countries are in every case higher than those relating to New Zealand and Victoria, and in all cases but four they are also higher than those relating to Tasmania :—

Idiocy in various countries.

IDIOCY IN VARIOUS COUNTRIES.

Idiots per 10,000 living.			Idiots per 10,000 living.		
United States	...	15·33	Italy	...	6·91
Portugal	...	15·09	Tasmania	...	6·57
Austria	...	14·64	Greece	...	6·53
Germany (exclusive of Prussia)	...	13·65	Spain	...	5·47
Great Britain and Ireland	...	12·92	Belgium	...	5·02
Hungary	...	11·86	Sweden	...	3·92
France	...	11·40	Victoria	...	1·87
Denmark	...	8·31	New Zealand	...	1·18

NOTE.—The figures, except those relating to the Australasian colonies, have been taken (with some corrections) and rearranged from Dr. Raseri's paper, page 179.

Epilepsy.

786. Epileptic persons in 1881 were in proportion of 3·36 per 10,000 of the population of Victoria, of 3·89 per 10,000 males, and of 2·78 per 10,000 females ; or, in other words, 1 person in every 2,974, 1 male in every 2,569, 1 female in every 3,599, was subject to attacks of epilepsy.

Epilepsy in
New
Zealand.

787. The census of England and Wales does not supply any information on the subject of epilepsy, and the only Australasian colony, except Victoria, which collects such information appears to be New Zealand, in which, according to the census of 1881, the proportion of epileptic persons was 1 in every 2,525 of the population, thereby showing a higher ratio of epilepsy than that found to prevail in Victoria.

Depart-
ment of
Public
Health.

788. The *Public Health Act* 1889 (53 Vict., No. 1044) provides for the formation of a Department of Public Health, and for vesting in a responsible Minister the former powers and duties of the late Central Board, which has been abolished. The following account of the new Department has been furnished by the secretary :—

Matters relating to Public Health in Victoria are administered by the various municipal councils, which act as sanitary authorities for their districts. Of these councils there are now 192, and their functions and powers have been considerably extended by the *Public Health Act* 1889.

This Act has also created a separate Government Department with a responsible Minister of the Crown for the carrying out, in conjunction with an elective Board of Public Health, of the Health Acts, and for exercising supervision over local councils acting as sanitary authorities.

The new Board of Public Health consists of the chairman who is also permanent head of the Department and is appointed by the Government, a medical inspector who is an expert in sanitary science and is appointed by the Government, and seven representative members who hold office for three years, are members of municipal councils, and are elected by these councils. The powers of this Board are very large. It may compel local councils to carry out most of the provisions of the Health Acts which were previously optional, it may make general regulations for the inspection of dairies, it may provide hospital accommodation where councils are in default, it may order the isolation of persons suffering from dangerous, infectious, or contagious diseases, may require councils to provide destructors, incinerators, etc., and to pass by-laws providing for the effective treatment of house refuse, nightsoil, etc., and for the prevention of the pollution of rivers, and acts as a court of appeal in regard to abattoirs and offensive trade establishments.

The Act came into operation on the 1st February, 1890, and the Honorable Alfred Deakin was gazetted as the first Minister of Health; Mr. C. A. Topp, M.A., was appointed Chairman of the Board; and Dr. D. Astley Gresswell, M.A., M.D., formerly one of the Medical Staff of the Local Government Board, England, was appointed Medical Inspector.

The Board meets as a board or in committee weekly.

789. The following are the results of meteorological observations taken at different stations throughout the colony during 1889. These places are arranged in the table in the order of their altitude above the level of the sea. The last three are situated in the interior, but the others are on the sea-board. The times at which the observations for mean temperature and mean atmospheric pressure are obtained differ at the various stations; but a correction is applied, in order to make the results equivalent to those which would be derived from hourly observations taken throughout the day and night:—

Meteorological observations, 1889.

METEOROLOGICAL OBSERVATIONS AT VARIOUS STATIONS, 1889.

Stations.	Height above Sea-level.	Temperature in the Shade.		
		Max.	Min.	Mean.
	feet.	°	°	°
Portland	37·0	102·0	33·0	57·1
Gabo Island	50·0	87·0	42·0	57·2
Melbourne	91·3	99·8	31·3	58·5
Cape Otway	270·0	94·0	36·0	55·9
Wilson's Promontory ...	300·0	91·0	37·0	57·2
Echuca	314·0	111·0	33·0	61·8
Sandhurst	701·0	109·0	33·0	59·7
Ballarat	1,438·0	104·5	29·2	54·6

Stations.	Mean Atmospheric Pressure.	Days on which Rain fell.	Amount of Rainfall.	Mean Relative Humidity.	Amount of Cloud.
	Inches.	No.	Inches.	0—1.	0—10.
Portland	29·985	190	33·90	·77	4·9
Gabo Island	29·918	144	42·97	·85	6·9
Melbourne	29·943	125	27·14	·71	5·8
Cape Otway	29·739	198	39·33	·80	5·9
Wilson's Promontory ...	29·640	162	43·74	·75	6·1
Echuca	29·659	99	24·38	...	...
Sandhurst	29·271	125	28·29	·66	4·4
Ballarat	28·568	139	32·41	·73	5·3

790. The following are the results for Melbourne in each of the twenty-six years ended with 1889: —

Meteorology in Melbourne, 1864 to 1889.

METEOROLOGICAL OBSERVATIONS AT MELBOURNE—RETURN FOR
TWENTY-SIX YEARS.

(Observatory 91·3 feet above the Sea-level.)

Year.	Temperature in the Shade.			Mean Atmospheric Pressure.	Days on which Rain fell.	Amount of Rainfall.	Mean Relative Humidity.	Mean Amount of Cloud.
	Max.	Min.	Mean.					
				inches.	No.	inches.	0—1.	0—10.
1864	96·6	30·5	57·1	29·94	144	27·40	·72	6·1
1865	103·4	30·9	56·5	29·94	119	15·94	·68	5·6
1866	108·2	28·0	57·8	29·95	107	22·41	·70	5·5
1867	108·4	29·7	57·7	29·92	133	25·79	·72	5·7
1868	110·0	27·4	57·1	29·98	120	18·27	·70	5·7
1869	108·4	27·0	57·2	29·94	129	24·59	·71	6·0
1870	109·0	29·6	57·4	29·93	129	33·76	·74	5·8
1871	106·0	32·1	57·7	29·93	125	30·17	·74	5·9
1872	103·3	32·5	57·6	29·92	136	32·52	·74	6·4
1873	102·4	30·2	58·0	29·94	134	25·61	·72	6·0
1874	102·7	29·3	56·6	29·93	134	28·10	·72	6·1
1875	110·4	31·1	56·6	29·89	158	32·87	·72	6·2
1876	110·7	29·0	57·0	29·93	134	24·04	·70	5·8
1877	100·7	31·0	56·7	29·99	124	24·10	·70	5·8
1878	103·4	31·1	57·4	29·90	116	25·36	·71	6·0
1879	106·0	30·5	56·8	29·92	127	19·28	·71	5·8
1880	106·5	29·0	57·8	29·92	147	28·48	·72	6·0
1881	99·9	31·9	57·1	29·97	134	24·08	·68	5·9
1882	110·5	31·5	57·4	29·90	131	22·39	·68	5·6
1883	104·9	31·7	58·0	29·92	130	23·71	·69	5·9
1884	100·7	29·9	56·7	29·94	128	25·85	·71	6·2
1885	101·6	29·9	57·1	30·00	123	26·94	·71	6·3
1886	104·1	28·1	57·1	29·96	128	24·00	·71	6·0
1887	104·9	33·0	58·1	29·94	153	32·39	·74	6·1
1888	104·0	28·3	57·5	29·99	123	19·42	·71	5·5
1889	99·8	31·3	58·5	29·94	125	27·14	·71	5·8
Means	104·9	30·2	57·3	29·94	130	25·56	·71	5·9

Observations in 1889 compared with means.

791. It will be noticed that in 1889, according to observations taken at the Melbourne Observatory, although the maximum temperature was 5 degrees below the average, and the lowest recorded—with two exceptions—during the whole period of twenty-six years, yet the minimum and the mean in temperature were each over 1 degree above the average; also that, whilst the mean atmospheric pressure and the mean relative humidity were the same as, the rainfall was 1½ inch above, the average. The mean amount of cloud, however, was slightly below the average, and the number of wet days was 5 less than usual.

Observations in 1889 and former years compared.

792. During the period of twenty-six years a higher temperature than the maximum of 1889 was experienced in all the years but two, and a lower one than the minimum in all but six of the previous years;

moreover, the mean temperature was higher than in any previous year; the days on which rain fell were less numerous than in seventeen of the years, and the amount of rainfall was higher than in any of the years except eight.

793. The mean temperature of Melbourne over a series of years (57·3°) corresponds with that of Bathurst, a town in the interior of New South Wales, situated 2,150 feet above the sea-level, and is about equal to that of Washington (56·9°), Bordeaux (57·0°), Madrid (57·2°), and Marseilles (58·3°). It is lower by over 2 degrees than that of Hobart (55·1°), lower by $5\frac{1}{3}$ degrees than that of Sydney (62·5°), and lower by $7\frac{1}{3}$ degrees than that of Adelaide (64·6°).*

Mean temperature in Melbourne and elsewhere.

794. The mean rainfall in Melbourne (25·5in.) corresponds approximately with that of Ventnor in England (25·5in.), Bathurst in New South Wales (25·0in.), and Toulouse in France (24·9in.). It is above that in London (24·0in.), Nottingham (23·7in.), or Paris (22·9in.), is $2\frac{1}{2}$ inches above that in Hobart (22·9in.), is 5 inches above that in Adelaide (20·5in.), but is only about half as much as that in Sydney (50·1in.).*

Mean rainfall in Melbourne and elsewhere.

795. The Board of Visitors to the Melbourne Observatory in their report dated 12th September, 1889,† state that the polishing of the mirrors of the great telescope has been in progress some time, and, although certain preliminary difficulties have been overcome, it is doubtful whether the work can be satisfactorily completed; for while it has been found possible to obtain both figure and polish sufficient for many of the ordinary uses of the instrument, it is admitted on all hands that to procure results at all adequate to the higher purposes to which telescopes of the first order are now applied is a matter of extreme difficulty. In this opinion Sir Howard Grubb, who constructed the telescope, fully concurs, and has stated his reluctance to undertake the task of repolishing the mirrors. From the fact that such repolishing will become more frequently necessary henceforward, and that the climatic extremes of temperature render it specially difficult in this country, the visitors state that they are almost forced

Mirrors of great telescope.

* The observations, except those for Melbourne, Adelaide, and Hobart, have been taken from a work entitled *Physical Geography and Climate of New South Wales*, by H. C. Russell, F.R.A.S., Government Astronomer of that colony.

† Parliamentary Paper, No. 144, Session 1889.

to the conclusion—already arrived at elsewhere—that for astronomical purposes a refracting telescope is preferable to a reflector, and that the great success which has lately attended the production of object glasses of large diameter confirms this view; they therefore suggest that the expediency of replacing the mirror of the great telescope with a refracting objective—which, they believe, could be done at a comparatively moderate cost—be considered.*

Meteorology
elsewhere
treated on.

796. An extended account of the meteorology and climate of Victoria will be found in the *Victorian Year-Book*, 1874, paragraphs 54 to 95.

* An interesting description of the Melbourne Observatory and of the great Melbourne telescope, by Mr. E. J. White, the then acting Government Astronomer, will be found in the *Victorian Year-Book*, 1874, page 231 *et seq.*

PART V.—ACCUMULATION.

797. The coins in circulation in Victoria are in all respects the same as those used in the United Kingdom. The accounts are kept in sterling money (£ s. d.). Coins and accounts.

798. In dealing with moneys or money values taken from returns where foreign moneys have been quoted, such values, for the purpose of this work, have been converted into their British equivalents according to the scale adopted by the Imperial Board of Trade, which is given in the following table:— Foreign moneys.

FOREIGN MONEYS AND BRITISH EQUIVALENTS.

Countries.	Foreign Moneys.	British Equivalents.
		£ s. d.
Austria ...	Gulden ...	0 1 8
		or 12 to the £
Argentine Republic ...	Peso nacional ...	0 4 0
Belgium ...	Franc ...	0 0 9·6
		or 25 to the £
Chile ...	Peso fuerte ...	0 4 2
China ...	Tael ...	Various *
Denmark ...	Krone ...	0 1 1½
		or 18 to the £
Egypt ...	Piastre ...	0 0 2½
		or 96 to the £
France ...	Franc ...	0 0 9·6
		or 25 to the £
	Mark ...	0 1 0
Germany ...	Krone ...	0 10 0
	Doppel krone ...	1 0 0
Greece ...	Drachme ...	0 0 8½
		or 28 to the £
Holland ...	Gulden ...	0 1 8
		or 12 to the £
Italy ...	Lira ...	0 0 9·6
		or 25 to the £
Japan ...	Yen ...	0 4 2
Mexico ...	Dollar ...	0 4 2†
Norway ...	Krone ...	0 1 1½
		or 18 to the £

* The Tael is not a coin but a weight. The ideal tael should consist of sycee (pure) silver, and should weigh 583·2 grains. As a matter of fact, however, the weight as well as the purity of the tael varies in different localities. The weight of the Haikwan tael—which is that employed by the Chinese Government in collecting revenue—is about 580 grains, and the fineness about ·9855. The value of the tael is regulated by the price of silver; that of the Haikwan tael has been as follows in the last six years:—1888, 4s. 8¾d.; 1887, 4s. 10¼d.; 1886, 5s. 0½d.; 1885, 5s. 3½d.; 1884, 5s. 7d.; 1883, 5s. 7¼d.

† In making payments from the Imperial funds in places where the dollar is current, the valuation of the Mexican dollar is fixed by the Lords of Her Majesty's Treasury, for the ensuing six months, on the 1st April and 1st October of each year, according to the market price of silver. Upon this basis the price of the dollar was fixed in 1887-8, at 3s. 4d. for the first, and 3s. 2d. for the second six months; and in 1888-9, at 3s. 3d. for the first, and 3s. for the second six months. See 19th Report of the Deputy Master of the Imperial Mint, page 20.

FOREIGN MONEYS AND BRITISH EQUIVALENTS—(continued).

Countries.				Foreign Moneys.	British Equivalents.		
					£	s.	d.
Portugal	...	...		Milreis ...	0	4	6
Roumania	...	...		Lei ...	0	0	9·6
Russia	...	...		Silver rouble ...	0	2	0
Spain ...	...	...		Peseta ...	0	0	9·6
Sweden	...	...		Krona ...	0	1	1½
Switzerland	...	...		Franc ...	0	0	9·6
Turkey	...	...		Piastre ...	0	0	2·16
United States	...	...		Dollar ...	0	4	2
Uruguay	...	...		Peso fuerte ...	0	4	2

Coins in
British
Dominions.

799. The following is a statement of the metallic money which circulates in the various dominions of the British Empire:—

METALLIC CURRENCY IN BRITISH DOMINIONS.*

Countries.				Metallic Circulation.
Great Britain and Ireland				£ s. d.
Australasian Colonies (including Fiji)				
South African Colonies				
Falkland Islands	...			
St. Helena	...	...
Channel Islands	...	...		£ s. d., and a special subsidiary copper coinage.
Malta	...	...		£ s. d., and a special ⅓ farthing called a grain.
West African Settlements	...	...		£ s. d., supplemented with other coins.
West Indian Colonies	...	...		British silver and bronze. In some places accounts are kept in dollars at 4s. 2d.
Canada	...	...		Dollars at 4s. 1·31d.
Newfoundland	...	...		Dollars at 4s. 2d.
Gibraltar	...	...		Mixed British and Spanish coins.
Cyprus	...	...		British, French, and Turkish gold ; British silver, and special bronze piastres.
India	...	...		Rupees, annas, and pies.
Ceylon	...	...		Rupees, and local subsidiary coins.
Mauritius	...	...		Rupees, and local subsidiary coins.
British Honduras	...	...		Guatemalan, and other dollars worth 2s. 11·15d.; special bronze cents.
Hong Kong	...	...		Mexican dollars worth 3s. 2·21d., with special subsidiary silver and bronze.
Labuan	...	...		Mexican dollars worth 3s. 2·21d., with subsidiary silver and copper of Straits Settlements and British North Borneo copper.
Straits Settlements	...	...		Mexican dollars worth 3s. 2·21d., with special subsidiary silver and copper.
British North Borneo...	...	...		Mexican dollar worth 3s. 2·21d., with special subsidiary copper.

* The information in this table was obtained for the most part from a paper read before the Royal Colonial Institute, London, on the 11th February, 1890, by Mr. L. C. Probyn.

800. A branch of the Royal Mint was established in Melbourne Royal Mint. in 1872, and was opened to the public on the 12th June of that year. The premises occupy 2 acres 1 rood and 26 perches of land, valued in October, 1880, at £8,500, but now probably worth ten times that amount; the original cost of the buildings, machinery, fittings, and furniture was £68,350.*

801. From the time of the opening of the Mint to the end of 1889 Gold received at Mint. 11½ million ounces of gold were received thereat. In point of average purity, the gold sent to the Mint is considerably above the standard (viz., 22 carats, worth £3 17s. 10½d. per oz.), and thus the value of the whole quantity was 45 millions sterling, or almost exactly £4 per oz.† The following table shows the quantity and value of the gold received in each year :—

GOLD RECEIVED AT THE MELBOURNE MINT, 1872 TO 1889.

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	Oz.	£		Oz.	£
1872 ...	190,738	764,917	1882 ...	818,905	3,310,971
1873 ...	221,870	887,127	1883 ...	785,716	3,158,420
1874 ...	335,318	1,349,102	1884 ...	945,429	3,802,229
1875 ...	489,732	1,947,713	1885 ...	836,169	3,350,737
1876 ...	548,199	2,149,481	1886 ...	756,249	3,028,374
1877 ...	378,310	1,491,819	1887 ...	769,897	3,074,223
1878 ...	569,932	2,267,431	1888 ...	757,548	3,022,384
1879 ...	656,556	2,637,738	1889 ...	761,616	3,029,731
1880 ...	758,721	3,061,820			
1881 ...	692,213	2,792,985	Total ...	11,268,118	45,127,202

802. A simple calculation, based upon the total value as shown in the lowest line of the last column of the table, will show that the gold received amounted to 11,589,650 oz. standard, valued at £3 17s. 10½d. per oz., or 321,532 oz. more than the actual weight of gold received at the Mint. Gold received in standard ounces.

803. It will be observed that the gold received at the Mint in 1889 exceeded by 4,068 ounces the quantity in 1888, but was less than in any other year since 1881 except 1886. Gold received, 1889.

804. Gold is issued from the Mint as coin or as bullion. The former, with the exception of 555,500 half-sovereigns, has consisted entirely of sovereigns. The following is a statement of the gold issued in each year, whether in the shape of coin or bullion :— Gold issued from Mint.

* See Amended Return to an order of the Legislative Assembly, Parliamentary Paper C.—No. 4*, Session 1880.

† See also paragraph 810 *post*.

GOLD ISSUED AT MELBOURNE MINT, 1872 TO 1889.

Year.	Coin.		Bullion.		Total Value of Coin and Bullion.
	Sovereigns.	Half-sovereigns.	Quantity.	Value.	
	Number.	Number.	Oz.	£	
1872	748,000	...	1,205	3,611	751,611
1873	752,000	165,000	3,106	11,035	845,535
1874	1,373,000	...	2,912	10,417	1,383,417
1875	1,888,000	...	3,553	13,857	1,901,857
1876	2,124,000	...	3,625	14,145	2,138,145
1877	1,487,000	80,000	3,326	13,004	1,540,004
1878	2,171,000	...	3,691	14,640	2,185,640
1879	2,740,000	...	1,740	6,830	2,746,830
1880	3,052,800	...	1,861	7,219	3,060,019
1881	2,324,800	42,000	106,999	448,767	2,794,567
1882	2,465,250	107,500	189,837	789,687	3,308,687
1883	2,050,000	...	266,679	1,112,478	3,162,478
1884	2,942,000	48,000	200,766	835,728	3,801,728
1885	2,966,500	11,000	91,335	379,839	3,351,839
1886	2,901,500	38,000	25,701	107,719	3,028,219
1887	2,855,800	64,000	45,030	186,395	3,074,195
1888	2,830,000	...	46,611	194,219	3,024,219
1889	2,732,000	...	72,497	299,285	3,031,285
Total ...	40,403,650	555,500	1,070,474	4,448,875	45,130,275

Gold coin issued.

805. The difference in value between the gold coin issued from the Mint in 1888 and 1889 was £98,000, the excess being in favour of the former. The gold coin issued in 1889 was less not only than that in 1888, but was also less than that in 1887, 1886, 1885, 1884, 1880, or 1879; it was, however, in excess of that in any other year.

Gold bullion issued.

806. The quantity of gold issued in the form of bullion has fallen off very considerably since 1883. In that year its value amounted to over £1,100,000, or to 35 per cent. of the total value of coin and bullion issued; but in 1889, although in excess of the value in the previous three years, it amounted to not quite £300,000, or something under 10 per cent. of that value.

Victorian and other gold minted.

807. Nearly four-fifths of the gold received at the Mint since its first establishment was raised in Victoria, and about a seventh came from New Zealand. The bulk of the remainder was contributed by the other Australasian colonies—chiefly Tasmania and South Australia—and a very small quantity by Natal. The following were the quantities received from these countries respectively prior to and during 1889 :—

VICTORIAN AND OTHER GOLD RECEIVED AT MELBOURNE MINT,
1872 TO 1889.

Colony in which the Gold was raised.	Gold Received.		
	Prior to 1889.	During 1889.	Total.
	Oz.	Oz.	Oz.
Victoria	8,304,602	623,802	8,928,404
New South Wales	8,581	1,163	9,744
Queensland	4,879	3,724	8,603
South Australia	198,517	16,469	214,986
Western Australia	4,203	12,365	16,568
Tasmania	424,613	35,455	460,068
New Zealand	1,489,805	58,240	1,548,045
Natal	1,731	...	1,731
Unknown	69,571	10,398	79,969
Total	10,506,502	761,616	11,268,118

808. Gold deposited at the Mint is subject to a charge of $1\frac{1}{2}$ d. per ounce on the gross weight before melting if the deposit contains 1,000 ounces of standard gold or over; and of 2d. per ounce if the deposit contains less than 1,000 ounces—the minimum charge on any deposit being four shillings. Mint charges.

809. Any silver in a deposit in excess of 4 per cent. of the weight of the deposit after melting is allowed for at a rate per ounce to be fixed from time to time by the Deputy Master. A reduction of a sixth of the charges is made on deposits containing more than 24 ounces of unrefinable gold, or gold containing silver in less proportion than $4\frac{1}{2}$ per cent. and base metal in less proportion than 2 per cent. of the weight of the deposit after melting. Mint allowances

810. Standard gold contains 91·67 per cent. (22 carats out of 24) of pure gold, but the gold (chiefly dust and bars) received at the Mint in 1889 contained as much as 94·3 per cent. of pure gold, and therefore it had to be considerably reduced in fineness to bring it to a fit state for making into money. The silver in the gold received in 1889 amounted to 4·3 per cent., and the base metals to 1·4 per cent. These proportions vary but little from year to year. Fineness of gold received at Mint.

811. The standard weight of the sovereign is ·25682 of an ounce (equal to 7·988 grammes or 123·27447 grains troy), and the standard weight of the half-sovereign is ·12841 of an ounce. The standard fineness of those pieces is 916·6 parts (or $\frac{11}{12}$) of pure gold in every 1,000 parts. In practice a small margin is allowed, and the actual weight and fineness of the gold coins struck at the Melbourne Mint, as based on the assay of pyx pieces transmitted to London for examination, and there tested, at the periods named, for the information of the Lords Commissioners of Her Majesty's Treasury, were as follow:— Weight and fineness of gold pieces coined, 1887 and 1888.

WEIGHT AND FINENESS OF GOLD COINS STRUCK AT THE
MELBOURNE MINT.

Date.	Average Weight.		Average Proportion of Gold in 1000 parts.	
	Sovereigns.	Half-sovereigns.	Sovereigns.	Half-sovereigns.
	Oz.	Oz.		
September, 1887 ...	·2568	·1284	916·680	916·606
December „ ...	·2568	...	916·623	...
March, 1888 ...	·2568	...	916·689	...
June „ ...	·2568	...	916·685	...

812. Mr. Roberts-Austen, the chemist and assayer to the London Mint, reports that samples of the pieces struck at the Melbourne Mint in 1889, on being assayed in his office, proved to approximate very closely to the standard prescribed by law. The exact figures, however, are not given.

813. By the *Victorian Mint Act* (31 Vict. No. 307) it is provided that the sum of £20,000 shall be paid annually to the Mint from the Consolidated Revenue, but in the following table, which shows the Mint revenue and expenditure in each of the sixteen financial years ended with 1888-9, and the excess of the latter over the former, the net results alone are given, the amount of subsidy returned to the Treasury each year being omitted from both sides of the account:—

MINT REVENUE AND EXPENDITURE,* 1873-4 TO 1888-9.

Year.	Mint Receipts.	Mint Expenditure.	Excess of Expenditure over Receipts.	
			Amount.	Percentage.
	£	£	£	
1873-4 ...	4,799	4,972	173	3·60
1874-5 ...	7,504	15,701	8,197	109·24
1875-6 ...	7,659	9,305	1,646	21·49
1876-7 ...	7,512	11,229	3,717	49·48
1877-8 ...	7,247	19,553	12,306	169·81
1878-9 ...	7,906	13,376	5,470	69·19
1879-80 ...	10,158	13,650	3,492	34·38
1880-81 ...	10,197	14,372	4,175	40·94
1881-2 ...	10,917	14,656	3,739	34·24
1882-3 ...	11,292	15,897	4,605	40·78
1883-4 ...	10,415	15,148	4,733	45·44
1884-5 ...	13,042	14,696	1,654	12·68
1885-6 ...	11,705	15,387	3,682	31·46
1886-7 ...	11,058	18,014	6,956	62·91
1887-8 ...	10,377	16,126	5,749	55·40
1888-9 ...	10,051	16,358	6,307	62·75
Total ...	151,839	228,440	76,601	50·45

* Figures derived from those given in the Treasurer's Finance Statements. The fluctuations in the expenditure are probably due chiefly to the subsidy being returned at irregular periods.

814. It will be observed that in the period to which the table relates the Mint expenditure exceeded the Mint receipts by about 50 per cent., and the establishment was worked at an apparent total loss of £76,601, the average loss per annum being £4,787. During 1888-9 the loss was £6,307, or 63 per cent. over the receipts.

815. Whilst in 1889, the expenditure in the Melbourne Mint exceeded the revenue by more than half, the expenditure in the Sydney Mint exceeded the revenue by only an eighth. In the London Mint, on account of the large profit made on the purchase of silver* and bronze for coinage, the receipts amounted to over nine times the expenditure. The following is a statement of the revenue and expenditure, and difference between those items, in the three Mints during the past year:—

MELBOURNE, SYDNEY, AND LONDON MINTS.—REVENUE AND EXPENDITURE, 1889.

Locality of Mint.	Mint Receipts.†	Mint Expenditure.	Excess of Expenditure over Receipts.	
			Amount.	Percentage.
	£	£	£	
Melbourne ...	10,051	16,358	6,307	62·75
Sydney ...	12,084	13,622	1,538	12·73
London ...	874,925	94,233	+ 780,692	+ 828·47

NOTE.—The plus sign (+) indicates that the receipts exceeded the expenditure.

816. At the London Mint in 1889 the profit made upon silver bullion purchased for coinage was £800,038; and the profit made upon bronze coinage was £61,911. As against this there was a loss of £4,672 on the coinage of gold, and a loss of £27,775 on worn silver coin exchanged. Of this exchange £811 was effected at the Melbourne Mint, and £382 at the Sydney Mint.

817. The Sydney Branch of the Royal Mint was established in 1855, and from that date to the end of 1889, 17,113,910 ounces‡ of gold were received thereat, of which it is believed that 7,296,781 ounces, or considerably less than half, were raised in the colony of New South Wales; 5,945,231 ounces, or rather more than a third, in Queensland 2,121,361 ounces, or about an eighth, in New Zealand; and 1,440,972

* The average price at which silver bullion was purchased by the London Mint in 1889 was 3s. 6½d. per ounce, as compared with 3s. 6¼d. in 1888; and as silver coin is issued at 5s. 6d. per ounce, the profit (seigniorage) which accrued to the State in the year under review was 1s. 11¾d. per ounce, or at the rate of 54 per cent. The rate of seigniorage averaged only 9 per cent. in the years 1870 to 1872, but rose rapidly—especially since 1877—to 42 per cent. in 1886 and 54 per cent. in 1889. (See 20th Report of London Mint, p. 14.)

† The Melbourne Mint receives an annual subsidy of £20,000 from the Government of Victoria, and the Sydney Mint one of £15,000 from the Government of New South Wales. The unexpended portions of these amounts are left out of account in this table.

‡ Including 226,974 ounces of coin.

ounces, or about a twelfth, in Victoria. In the same period, 59,297,500 sovereigns, 4,841,000 half-sovereigns, and 683,796 ounces of bullion (valued at £2,733,568), were issued from this branch, the whole being valued at £64,451,568. It should be mentioned that since the establishment of the Melbourne Mint only about 3,620 ounces of Victorian gold have been coined in Sydney.

Sydney
Mint, 1889.

818. The quantity of gold received at the Sydney Mint during 1889 was 900,475* ounces, valued at £3,340,473, four-fifths of which was produced in Queensland, about one-eighth in New South Wales. but only a very small quantity in the other colonies. The total value of coin and bullion issued in that year amounted to £3,322,750, consisting of 3,262,000 sovereigns, 64,000 half-sovereigns, and 6,804 ounces of gold bullion valued at £28,750. The value of coin and bullion issued from the Sydney Mint was less by nearly a million sterling in 1887, and by over three-quarters of a million in 1888; but was more by over a quarter of a million in 1889 than that issued from the Melbourne Mint in those years.

London
Mint, 1889

819. No other metal than gold is coined at the Melbourne and Sydney Mints, the silver and bronze coinage required by the colonies being obtained from England. Besides gold, silver, and bronze British money, silver, nickel and bronze coins of various denominations are struck at the Royal Mint, London, for several of Her Majesty's possessions. The following table shows the number and value of coins of twenty-nine different denominations issued from that Mint in 1889:—

COINS STRUCK AT THE LONDON MINT, 1889.

Denomination.	Number of Coins.	Nominal Value.		
		£	s.	d.
Imperial—				
Gold—Sovereigns	7,257,455	7,257,455	0	0
Silver—Crowns	1,807,223	451,805	15	0
„ Double Florins	1,185,111	237,022	4	0
„ Half-crowns	4,811,954	601,494	5	0
„ Florins	2,973,561	297,356	2	0
„ Shillings	7,039,628	351,981	8	0
„ Sixpences	8,738,928	218,473	4	0
„ Fourpences (Maundy money only)	6,088	101	9	4
„ Threepences	4,591,498	57,393	14	6
„ Twopences (Maundy money only)	6,727	56	1	2
„ Pence „ „ „	14,028	58	9	0
Bronze—Pence	12,559,737	52,332	4	9
„ Half-pence	7,748,234	16,142	3	1
Total	58,740,172	9,541,671	19	10

* Including 40,097 ounces of coin.

COINS STRUCK AT THE LONDON MINT, 1889—*continued*.

Denomination.	Number of Coins.	Nominal Value.
Colonial—		
British Honduras, Bronze—Cents ...	50,000	75 0 0
Canada, Silver—Twenty-five cents. ...	66,324	3,407 1 1
„ „ Ten cents ...	600,000	12,328 15 4
„ „ Five cents. ...	1,200,000	12,328 15 4
Cyprus, Bronze—Piastres ...	27,000	150 0 0
„ „ Half-piastres ...	54,000	150 0 0
Hong Kong, Silver—Twenty cents ...	440,735	13,222 1 0
„ „ Ten cents ...	4,026,700	60,400 10 0
„ „ Five cents ...	5,168,590	38,764 7 0
Jamaica, Nickel—Pence ...	24,000	100 0 0
„ „ Half-pence ...	96,000	200 0 0
„ „ Farthings ...	192,000	200 0 0
Straits Settlements, Silver—Fifty cents...	32,042	2,403 3 0
„ „ „ Twenty cents ...	423,580	12,707 8 0
„ „ „ Ten cents ...	1,502,290	22,534 7 0
„ „ „ Five cents ...	1,000,120	7,500 18 0
Total ...	73,643,553	9,728,144 5 7

820. According to the table, the silver coined at the London Mint in 1889, represented an aggregate nominal value of £2,401,340, which was more by £1,374,253 than that coined in 1888, more by £1,435,474 than that coined in 1887, more by £1,815,322 than that coined in 1886, and more by £1,095,733 than that coined in 1883, that being the year in which, after the year under review, the silver coinage was larger than in any other year since the introduction of the present coinage in 1817.

821. In consequence, no doubt, of the gold coined at the Colonial Mints having been sufficient to meet all requirements, no sovereigns were struck at the London Mint in 1881, 1882, 1883, or 1886, and no half-sovereigns in the first two and last of those years, or in 1888 or 1889. Gold to the value of £1,999,075, however, was coined in 1887, of £2,287,841 in 1888, and of £7,257,455 in 1889. The dies used in 1887 were of a new design, in honour of the Jubilee of Her Majesty, whilst the gold coined in 1888 included 25,000 double dollars for Newfoundland, of the value of £10,417. In 1889 the only gold coins struck at the London Mint were sovereigns. The following is the nominal value of the gold coins struck at the London Mint during the last 18 years:—

Silver coined
at London
Mint, 1889.

Gold coined
at London
Mint, 1872
to 1889.

NOMINAL VALUE OF GOLD COINS STRUCK AT THE LONDON MINT,
1872 TO 1889.

£				£			
1872	...	...	15,261,436	1882	...	...	Nil
1873	...	...	3,384,564	1883	...	...	1,403,713
1874	...	...	1,461,564	1884	...	...	2,324,015
1875	...	...	243,247	1885	...	...	2,973,453
1876	...	...	4,696,649	1886	...	...	Nil
1877	...	...	981,469	1887	...	...	1,999,075
1878	...	...	2,265,069	1888	...	...	2,287,841
1879	...	...	35,050	1889	...	...	7,257,455
1880	...	...	4,150,053				
1881	...	...	Nil				
				Total	...	...	£50,724,653

825. It may be mentioned that, according to experiments made by the late Professor Stanley Jevons, the sovereign when in circulation loses .043 grain and the half-sovereign .069 grain per annum. According to this rate of wear a sovereign would become light after 18 years, and a half-sovereign after $7\frac{1}{2}$ years of circulation ; but owing to certain peculiarities of the half-sovereign circulation, Mr. Jevons preferred to adopt 10 years as the average "legal life" of that coin, which would make the annual wear .051 grain. Mr. J. B. Martin, who read a paper on the subject before the London Institute of Bankers in 1882, estimated the annual wear of the sovereign at .04325 grain, thus confirming Mr. Jevons' figure. His experiments on the half-sovereign, however, gave the rate of wear as .04379 grain, or rather less than Mr. Jevons' estimate. An enquiry made by the London Mint in the early part of 1888 showed an annual rate of wear for sovereigns of .03956 grain, and for half-sovereigns of .05511 grain, which would give a legal life for sovereigns of $19\frac{1}{2}$ years and for half-sovereigns of 9 years.*

Loss of weight of gold coins by circulation.

826. The subjoined account of the currency system of the United Kingdom has been taken, almost word for word, from a statement submitted by the Right Honorable G. J. Goschen to a monetary conference held in Paris in 1878 :—

Currency system of United Kingdom.

"Gold is the only standard metal.

"The metal coined is .916 fine, *i.e.*, $\frac{11}{12}$ pure gold, and $\frac{1}{12}$ alloy.

"The coins are sovereigns and half-sovereigns. There is also a five-sovereign piece, and a two-sovereign piece, but these coins are not in general circulation. The sovereign, representing the pound sterling, contains 113.001 grains of pure gold, or 123.27447 grains of standard gold. The half-sovereign precisely half of the above.

"Sovereigns and half-sovereigns are legal tender to any amount, provided that the pieces be not worn below 122.5 grains and 62.125 respectively.

"Below these weights they may be refused, and the Bank of England cuts all such light coins tendered to it, and receives them only as so much standard gold. The loss on light gold is thus borne by the public. Special arrangements have, however, been made under which the State will bear the loss on light pre-Victorian gold coins presented up to a certain date.

"Every person is entitled to bring gold to the Mint for coinage, and to receive it back, in his turn, cut into coins, stamped with the proper die, as a certificate of due weight and fineness, at the rate of £3 17s. 10½d. per ounce troy of standard gold—that is to say, 1,869 sovereigns for 40 lbs. troy of standard gold.

"If the gold so brought to the Mint is higher or lower than the standard, the Mint adds alloy or fine gold for the account of the owner, according as it is needed, to bring it down to the standard or to bring it up.

"The Bank of England is by law obliged to receive all gold brought to it by the public, paying for it immediately at the rate of £3 17s. 9d. per ounce standard.

"The difference of three halfpence per ounce compensates the Bank for the loss of interest between the date of its bringing the gold to the Mint and the date of receiving it again in the form of coin, and gives it also a small profit by way of brokerage for its trouble.

* See London Mint Report 1889, page 96

“The public finds that its own loss in interest and expenditure in the operation, were it to take gold to the Mint, would be more than three halfpence. Consequently, by far the greater part of the gold coined in the United Kingdom is taken to the Mint by the Bank of England.

“The silver crown, double florin, half-crown, florin, shilling, sixpence piece, fourpence piece, and threepence piece represent respectively one-quarter, one-fifth, one-eighth, one-tenth, one-twentieth, one-fortieth, one-sixtieth, and one-eightieth of a sovereign, while the bronze penny, half-penny, and farthing represent respectively one two-hundred and-fortieth, one four-hundred-and-eightieth, and one nine-hundred-and-sixtieth of the same coin.

“The piece of fourpence is no longer coined for use in Great Britain, but it is sometimes supplied to some of the West Indian Colonies, where, especially in Barbados, it is found a useful coin for wages. There are also coined silver penny and twopence pieces, but they are not in general circulation, though some of the latter are said to be still in Jamaica, in which colony, as also in Sierra Leone, some of the old silver three-halfpenny pieces, which have not been coined for many years, are still said to circulate.

“The silver coinage is a legal tender to the amount of 40 shillings only.

“The bronze coinage is legal tender to the amount of one shilling.

“The silver to be coined is .925, or $\frac{37}{40}$ fine, and one troy pound, costing about 45 shillings at the present market price, is coined into 66 shillings, a sum fixed when the price was nominally about 60 shillings.

“One pound avoirdupois of bronze is coined into 48 pence. The same quantity is coined in 80 halfpence or into 160 farthings. Thus, two halfpence, or four farthings, weigh more than one penny.

“It will be seen that, beyond the cost of making the subsidiary coins, a considerable seigniorage is charged on both silver and copper, which contributes towards the cost of coining the sovereign, and of replacing the silver coinage which is withdrawn from circulation as soon as any pieces are so worn by use that neither effigy nor legend are distinguishable.”

827. Besides supplying the silver and bronze coinage required for circulation in the Australasian colonies, as already stated, the London Mint also withdraws silver coin from the colonies after it has become worn or defaced, allowing for the same at its full nominal value. The following are the values of the coin supplied and withdrawn in the last eleven years :—

COIN SUPPLIED TO AND WITHDRAWN FROM THE AUSTRALASIAN COLONIES BY THE LONDON MINT, 1879 TO 1889.

Colony.	Year.	Value of Coin Supplied.			Value of Worn Silver Coin Withdrawn.
		Silver.	Bronze.	Total.	
		£	£	£	£
Victoria ...	1879	125,500	2,080	127,580	24,230
	1880	80,000	...	80,000	58,039
	1881	74,800	...	74,800	51,519
	1882	55,200	1,005	56,205	34,036
	1883	24,800	600	25,400	10,601
	1884	10,000	2,000	12,000	9,474
	1885	30,000	2,500	32,500	9,483
	1886	21,600	2,500	24,100	9,407
	1887	28,800	1,000	29,800	7,633
	1888	63,200	2,000	65,200	2,980
	1889	16,000	3,500	19,500	6,172

Silver and bronze coin supplied and withdrawn.

COIN SUPPLIED TO AND WITHDRAWN FROM THE AUSTRALASIAN
COLONIES BY THE LONDON MINT, 1879 TO 1889—*continued*.

Colony.	Year.	Value of Coin Supplied.			Value of Worn Silver Coin Withdrawn.
		Silver.	Bronze.	Total.	
		£	£	£	£
New South Wales ...	1879	85,000	1,000	86,000	890
	1880	25,000	...	25,000	16,574
	1881	24,000	500	24,500	9,950
	1882	44,000	2,000	46,000	7,590
	1883	49,000	2,000	51,000	9,207
	1884	40,000	1,000	41,000	4,531
	1885	56,000	3,000	59,000	4,075
	1886	34,000	1,500	35,500	2,380
	1887	2,400	500	2,900	4,042
	1888	...	1,000	1,000	4,850
	1889	9,000	2,000	11,000	3,251
Queensland ...	1882	50,000	...	50,000	...
	1885	51,200	520	51,720	...
	1888	57,300	500	57,800	...
South Australia ...	1879	30,000	2,240	32,240	...
	1880	57,000	...	57,000	...
	1882	40,000	...	40,000	...
	1886	4,000	1,100	5,100	...
	1887	...	20	20	...
	1888	...	20	20	...
	1889	20,000	...	20,000	...
Western Australia ...	1879	5,000	400	5,400	...
	1880	...	...	...	1,200
	1881	...	...	...	1,200
	1889	...	...	...	890
Tasmania ...	1882	16,000	...	16,000	...
	1883	14,000	20	14,020	10,045
	1885	...	600	600	...
	1886	2,400	...	2,400	...
New Zealand ...	1879	500	2,500	3,000	...
	1882	73,800	...	73,800	...
	1884	500	1,500	2,000	...
	1886	2,000	500	2,500	...
	1887	5,295	480	5,775	...
	1889	2,200	1,000	3,200	...
Total ...	1879	246,000	8,220	254,220	25,120
	1880	12,000	...	162,000	75,813
	1881	8,800	500	99,300	62,669
	1882	279,000	3,005	282,005	41,626
	1883	87,800	2,620	90,420	29,853
	1884	50,500	4,500	55,000	14,005
	1885	137,200	6,620	143,820	13,558
	1886	4,000	5,600	69,600	11,787
	1887	86,495	2,000	38,495	11,675
	1888	120,500	3,520	124,020	7,830
	1889	7,200	6,500	53,700	10,313

Coinage of
the world.

828. The value of gold and silver coin issued from the mints of the different countries of the world in the three years ended with 1888 is stated to have been as follows* :—

GOLD AND SILVER COINAGE OF THE WORLD, 1886 TO 1888.†

Countries.	1886.		1887.		1888.	
	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.
	£	£	£	£	£	£
Australia ...	4,628,500	...	4,956,800	...	5,017,000	...
Europe—						
Austria-Hungary...	559,196	913,424	556,198	1,157,582	572,423	1,149,206
Belgium ...	...	192,035	...	121,590	...	...
Denmark ...	...	2,838	...	...	...	13,017
France ...	928,278	6,207	991,867	358,280	22,281	231,746
Germany ...	1,772,127	240,409	5,861,515	149,030	7,154,317	206,068
Great Britain ...	...	423,165	2,026,770	862,945	2,061,120	767,060
Italy ...	47,452	374,034	...	1,302,750	97,865	...
Monaco ...	60,313	...	...	...	...	...
Netherlands ...	45,343	...	34,131	15,913	29,802	...
Norway ...	112,392	...	...	16,750	...	11,167
Sweden ...	204,623	...	65,590	11,684	...	3,482
Portugal ...	37,422	62,451	56,250	200,025	21,375	319,500
Russia ...	3,075,358	271,688	4,189,432	323,273	4,262,602	242,318
Spain ...	493,701	1,053,647	...	2,372,795	...	924,334
Switzerland ...	201,042	104,542	...	56,292	3,538	...
Turkey ...	760,833	183,333	...	...	13,750	15,510
Asia—						
Cochin China ...	...	669,952	...	651,335	...	229,275
Hong Kong ...	...	...	...	83,333	...	230,208
India ...	...	5,650,295	885	9,196,253	...	10,648,381
Japan ...	187,534	1,892,933	186,962	2,141,574	202,987	2,129,606
Siam ...	...	...	...	461,680	...	...
Straits Settlements	...	...	...	36,875	...	50,833
Africa—						
Congo ...	...	...	...	4,021	...	...
Egypt ...	...	667,531†	51,324	449,935	53,574	1,767
America—						
Argentine Republic	414,306	...	1,911,119	...	1,732,568	...
Bolivia ...	...	...	...	367,386	...	367,386
Brazil ...	4,303	6,328	...	...	5,434	184,074
Canada ...	...	46,875	...	17,708	...	51,495
Chile ...	7,752	201,267	5,283	69,375	8,785	25,495
Columbia ...	5,618	282,255	...	138,139	...	125,092
Costa Rica ...	...	30,841	...	...	...	...
Ecuador ...	...	...	...	...	...	98,579
Guatemala ...	...	5,705	...	...	...	...
Hayti ...	...	30,156	...	104,167	...	...
Honduras ...	...	...	...	14,995	...	...

* Taken, except the figures for Australia, from the report for 1889 of Mr. Edward O. Leech, director of the United States Mint. Mr. Leech gives the amount in dollars, which have been turned into pounds sterling upon the assumption that £1 is equal to 4½ dollars.

† Calendar years, except for India and Mexico.

‡ Recoinage.

GOLD AND SILVER COINAGE OF THE WORLD, 1886 TO 1888
—continued.

Countries.	1886.		1887.		1888.	
	Gold.	Silver.	Gold.	Silver.	Gold.	Silver.
	£	£	£	£	£	£
America—						
Mexico ...	76,560	5,623,293	83,051	5,592,506	62,600	5,553,951
Nicaragua ...	...	...	...	83,333	...	...
Peru ...	...	123,347	...	351,042	...	678,750
United States ...	6,030,321	6,684,731	4,994,246	7,331,475	6,537,668	6,880,335
Venezuela ...	...	267,989	...	...	137,604	56,666
Total ...	19,652,974	26,011,271	25,971,423	34,044,041	27,997,293	31,195,301

829. The figures in the table show that the value of the gold coin issued from the Australian Mints in 1888 was less by £2,137,000 than that issued from the Mint of Germany, less by £1,500,000 than that issued from the Mint of the United States, but more by £754,000 than that issued from the Mint of Russia, and considerably more than that issued from the mints of any of the other countries named.

Gold coined
in Australia
and other
countries.

830. Since the establishment of the Melbourne Mint in 1872, the value of gold coin exported from Victoria (£36,559,814), less the value of that imported (£2,708,829), has amounted to £33,850,985, or less by £6,552,665 than the total value of such coin issued from the Mint. In 1889, the value of the gold coin exported amounted to £1,983,913, or less by £1,539,729 than in the previous year; and the value of that imported was £217,166, or less by £280,327 than in the previous year. The destination and value of the exports of gold coin in that year were as follow:—

Exports of
gold coin.

EXPORTS OF GOLD COIN, 1889.

Destination.	£	Destination.	£
United Kingdom ...	1,442,649	Ceylon ...	9,900
South Australia ...	250,000	Tasmania ...	2,000
India ...	112,772	New South Wales ...	1,763
New Zealand ...	110,000		
Hong Kong ...	54,829	Total ...	1,983,913

831. The returns of the Bank of England show that a considerable quantity of the Australian gold coinage finds its way there. The figures are complete for each year from 1875 to 1889, and in the following table are collated with those showing the amount of coinage struck in the same years at the two Australian Mints, the difference

Australian
coinage at
Bank of
England.

between the amount coined and the amount lodged in the Bank of England being also shown :—

AUSTRALIAN GOLD COINAGE.—AMOUNT STRUCK AND AMOUNT RECEIVED AT BANK OF ENGLAND.

Year.	Nominal Value of Australian Gold Coinage.			Nominal Value of Australian Gold Coinage received at Bank of England.	Excess of Australian Gold Coinage over and above that received at the Bank of England.
	Struck at Melbourne Mint.	Struck at Sydney Mint.	Total.		
	£	£	£	£	£
1875 ...	1,888,000	2,122,000	4,010,000	2,726,000	1,284,000
1876 ...	2,124,000	1,643,000	3,767,000	2,075,000	1,692,000
1877 ...	1,527,000	1,590,000	3,117,000	3,748,000	— 631,000*
1878 ...	2,171,000	1,322,000	3,493 000	2,773,000	720,000
1879 ...	2,740,000	1,413,000	4,153,000	1,617,000	2,536,000
1880 ...	3,052,800	1,499,000	4,551,800	2,377,000	2,174,800
1881 ...	2,345,800	1,391,000	3,736,800	3,306,000	430,800
1882 ...	2,519,000	1,324,000	3,843,000	2,203,000	1,640,000
1883 ...	2,050,000	1,218,000	3,268,000	1,518,000	1,750,000
1884 ...	2,966,000	1,595,000	4,561,000	284,040	4,276,960
1885 ...	2,972,000	1,486,000	4,458,000	3,012,000	1,446,000
1886 ...	2,920,500	1,708,000	4,628 500	2,187,000	2,441,500
1887 ...	2,887,800	2,069,000	4,956,800	202,000	4,754,800
1888 ...	2,830,000	2,187,000	5,017,000	3,535,000	1,482,000
1889 ...	2,732,000	3,294,000	6,026,000	3,423,500	2,602,500
Total ...	37,725,900	25,861,000	63,586,900	34,986,540	28,600,360†

832. It will be noticed that in the fifteen years named in the table more than half the gold coin issued from the Australian Mints found its way to the Bank of England ; also, that the value of Australian coinage received at the Bank of England exceeded that struck in 1877, but in no other year. The smallest quantity was received in 1887, in which year in consequence of the large amount of English money which for some time previously had been in course of remittance to Australia for investment, the coined gold was necessarily retained in the colonies for purposes of exchange, and the next smallest amount was in 1884 ; ‡ whilst the amounts received in 1888 and 1889 were larger than in any previous year except 1877.

833. Herr Soetbeer, a distinguished German economist, has estimated as follows the total value—to which has been added the value per head—of the gold and silver employed as circulating medium in the various countries named at the end of 1885§ :—

* The minus sign (—) indicates that the value of Australian gold coinage received at the Bank of England exceeded that struck in the year by the amount against which it is placed.
† Net figures.
‡ See *Victorian Year-Book*, 1885-9, Vol. I., paragraph 676.
§ See *L'Almanach de Gotha*, 1887, page 1068.

Proportion of Australian coinage sent to Bank of England.

Value of coinage in various countries.

APPROXIMATE VALUE* OF GOLD AND SILVER COIN IN THE
CIVILIZED COUNTRIES OF THE WORLD, 1885.

Country.	Gold.			Silver.			Total Gold and Silver per Head.				
	Total Millions.	Amount per Head.			Total Millions.	Amount per Head.					
	£	£	s.	d.	£	£	s.	d.	£	s.	d.
England †	111,	3	1	8	22,	0	12	3	3	13	11
British Colonies (without India)	34,	2	8	7	3,	0	4	3	2	12	10
Holland	4,	1	0	0	13,	3	5	0	4	5	0
France, Italy, Belgium, Switzerland	210,	2	14	7	160,	2	1	7	4	16	2
Austria-Hungary	8,	0	3	11	19,	0	9	3	0	13	2
Germany	87,	1	15	6	45,	0	18	4	2	13	10
Sweden and Norway	6,	0	17	2	2,	0	5	9	1	2	11
Russia ‡	39,	0	8	10	14,	0	3	2	0	12	0
United States §	123,	2	3	11	65,	1	3	3	3	7	2
Other countries in Europe and America	47,	...			50,	...			...
Total	669,	...			393,	...			...

834. The total value of gold and silver money circulating in the civilized countries of the world is thus estimated to have been 1,062 millions sterling, of which about 12½ per cent., viz., 16⅔ per cent. of the gold and 5½ per cent. of the silver, circulated in the United Kingdom.

Gold and silver circulating in United Kingdom.

835. There is no doubt that in every country a considerable quantity of gold and some silver coins are withdrawn from circulation for use in manufactures. From information published by Mr. Leech, Director of the United States Mint,|| it appears that in 1888, 21 per cent. of the gold, but very few of the silver, objects made in the United States were manufactured from coins of that country, and that only 1¼ per cent. of the gold, but as much as 10 per cent. of the silver, objects were manufactured from coins of other countries.

Gold and silver coins used in manufactures.

836. The following is Dr. Soetbeer's estimate of the annual consumption of the precious metals in arts and manufactures by the various civilized nations of the world¶ :—

Quantity of gold and silver used in arts, etc.

* Value given in marks, which have been converted into English money on the assumption that a mark is equal to one shilling.

† It is presumed that Wales, Scotland, and Ireland are included.

‡ The calculations have been based on the population of Russia in Europe.

§ According to the Director of the U.S. Mint, the stock of U.S. coin on the 1st July, 1889, was—gold, 128 millions ; silver, 85½ millions sterling.

|| Report for 1889, page 41.

¶ *Verwendung des Goldes und Silbers.* Jena, 1881.

GOLD AND SILVER USED IN ARTS, ETC., IN VARIOUS COUNTRIES.

Countries.				Average Annual Consumption for Art purposes of—	
				Gold.	Silver.
				Oz.	Oz.
United Kingdom	...	...	...	643,000	2,893,500
France	...	...	...	675,150	3,215,000
Germany	...	...	...	472,605	3,215,000
Austria-Hungary	...	...	...	93,235	1,286,000
Switzerland	...	...	...	482,250	1,028,000
Italy	...	...	...	192,900	803,750
Russia	...	...	...	96,450	1,286,000
United States	...	...	...	482,250	3,858,000
Other civilized countries	...	...	...	160,750	1,703,950
Total	...	...	...	3,298,590	19,289,200

Value of
gold and
silver used
in arts, etc.

837. If Dr. Soetbeer's estimate be correct, the gold used in arts and manufactures by the civilized nations of the world would amount in value, at £4 per oz., to £13,194,360, or, at £3 15s. per oz., to £12,369,712 annually ; and the silver so used, at 4s. per oz., would amount in value to £3,857,840, or, at 3s. 6d. per oz., to £3,375,610 annually.

Silver sold
from
Melbourne
Mint.

838. The silver sold by the Melbourne Mint in 1889 to silversmiths and others was 17,955 oz., as against 35,951 oz. in 1888.* Owing to the depreciation of silver, it is probable that but little silver coin is now melted for use in the arts and manufactures.

Number of
banks.

839. During 1889 there were 16 banks of issue† in Victoria, possessing therein 485 branches or agencies. There were only 11 banks of issue in the colony both in 1884 and 1879.

Liabilities,
assets, etc.,
of banks.

840. The position of the banks as regards liabilities, assets, capital, and profits, according to the sworn returns for the last quarter of the same three years, was as follows :—

FINANCIAL POSITION OF BANKS, 1879, 1884 AND 1889.

—				1879.	1884.	1889.
LIABILITIES.				£	£	£
Notes in circulation	...	...	...	1,090,760	1,391,644	1,657,082
Bills in circulation	...	...	...	53,957	53,076	115,532
Balances due to other banks	...	...	...	247,343	324,572	269,220
Deposits‡ not bearing interest	...	...	...	4,187,452	6,654,296	10,114,154
„ bearing interest	...	...	...	12,238,713	21,762,748	28,654,782
Total	...	...	...	17,818,225	30,186,336	40,810,770

* See Mint Report, 1889, page 122.
† Three of these did not issue notes in 1889.
‡ Including Government deposits, the amount of which was not returned in 1879, but in 1884 consisted of £53,258 not bearing interest, and £2,093,777 bearing interest ; and in 1889 of £199,671 not bearing interest, and £1,386,163 bearing interest.

FINANCIAL POSITION OF BANKS, 1879, 1884 AND 1889—*continued*.

—	1879.	1884.	1889.
ASSETS.	£	£	£
Coined gold, silver, and other metals	3,154,566	4,666,586	6,230,624
Gold and silver in bullion and bars ...	320,779	348,163	302,413
Landed property ...	847,389	1,037,844	1,679,255
Notes and bills of other banks ...	113,373	135,959	307,710
Balances due from other banks ...	185,986	342,345	288,539
Debts due to the banks* ...	20,717,750	29,487,969	48,817,112
Total ...	25,339,843	36,018,866	57,625,653
CAPITAL AND PROFITS.			
Capital stock paid up ...	9,026,250	8,663,184	13,389,662
Average rate per annum of last dividend declared	10·698 per cent.	12·321 per cent.	11·443 per cent.
Amount of last dividend declared ...	482,800	533,690	766,095
Amount of reserved profits after declaring dividend	2,698,097	3,553,358	6,141,628

841. It will be observed that the shareholders' capital (including reserves) amounted in 1889 to over 19½ millions, having increased by £7,800,000, or by about two-thirds since 1879. The total liabilities show an increase of 23 millions—or 129 per cent.—since 1879, or of nearly 10½ millions—or 35 per cent.—since 1884; whilst the total assets increased by 32½ millions—or 127 per cent.—since 1879, and by 21½ millions—or 60 per cent.—since 1884. This expansion in banking business has been greater than that of the population, which, during the ten years ended with 1889, increased by only 33 per cent. Of the liabilities, the notes and bills in circulation have increased 55 per cent. since 1879, and 23 per cent. since 1884, and this, notwithstanding the former have been restricted by a Government tax and other charges, which are said to average as much as 3½ per cent.,† whilst the deposits, which now compose 95 per cent. of the total liabilities, have increased by over 22 millions in the last ten, and by over 10 millions in the last five years, and now amount to over 38¾ millions. Under the head of assets it will be noticed that in 1889 the banks had over 6½ millions sterling in coin and bullion—which was

Liabilities,
assets, etc.,
compared
at three
periods.

* Including notes, bills of exchange, and all stock and funded debts of every description, except notes, bills, and balances due to the banks from other banks.

† Including a tax on bank notes of 2 per cent. per annum payable to the general revenue. See *Australasian Insurance and Banking Record* for May, 1884, p. 191: McCarron, Bird & Co., 37 Flinders-lane west.

nearly one million more than in 1888, but £300,000 less than in 1887,* and was 1½ million more than in 1884, and nearly twice as much as in 1879; the landed property also represented over 1⅔ million sterling, showing an increase of over £640,000 since 1884, or of £830,000 since 1879; but the most important item of all, the advances (debts due to the banks), which embrace 85 per cent. of the total assets, shows a marked advance in recent years, for since 1879 they have increased by nearly 28 millions, and since 1884 by 19½ millions; and thus in 1889 they amounted to close on 49 millions sterling.† It will be observed that, in 1889, the advances exceeded the deposits by a little over 10 millions as against an excess of only 1 million in 1884 and 4⅓ millions in 1879. The average rate of the last dividend declared in 1889 (£11 8s. 11d. per £100) was not so high as at the middle period, but higher than at the first period. This dividend, it may be remarked varied in different banks in 1889 from 6 to 17½ per cent.

Percentage
of items of
liabilities
and assets.

842. The following table shows the proportion of each item of the liabilities to the total liabilities, and of each item of the assets to the total assets, of the banks at the same periods :—

LIABILITIES AND ASSETS OF BANKS.—PERCENTAGE OF ITEMS.

—	1879.	1884.	1889.
LIABILITIES.	Per Cent.	Per Cent.	Per Cent.
Notes in circulation ...	6·12	4·61	4·06
Bills in circulation ...	·30	·18	·28
Balance due to other banks ...	1·39	1·08	·66
Deposits not bearing interest‡ ...	23·50	22·04	24·78
„ bearing interest‡ ...	68·69	72·09	70·22
Total ...	100·00	100·00	100·00
ASSETS.			
Coined gold, silver and other metals	12·45	12·95	10·81
Gold and silver in bullion or bars	1·27	·97	·53
Landed property ...	3·35	2·88	2·92
Notes and bills of other banks ...	·44	·38	·53
Balance due from other banks ...	·73	·95	·50
Debts due to the banks ...	81·76	81·87	84·71
Total ...	100·00	100·00	100·00

* See paragraph 845 *post.*

† See also paragraph 846 *post.*

‡ In 1889, the proportion of Government deposits not bearing interest to the total liabilities was only one-half per cent., and the proportion of those bearing interest was only about 3 per cent.

843. The following results are arrived at by analyzing the bank returns at the three periods :—

Analysis of
bank
returns.

The liabilities amounted to ...	{	70·32	per cent. of the assets in 1879	
		83·81	„	1884
		70·82	„	1889
Coin and bullion formed ...	{	13·72	per cent. of the assets in 1879	
		13·92	„	1884
		11·34	„	1889
The paid-up capital was equal to	{	35·62	per cent. of the assets in 1879	
		24·05	„	1884
		23·24	„	1889
	{	50·66	per cent. of the liabilities in 1879	
		28·70	„	1884
		32·81	„	1889
Of the moneys deposited ...	{	74·51	per cent. bore interest in 1879	
		76·58	„	1884
		73·91	„	1889

844. It will be observed that in 1889 the liabilities bore a much lower proportion to the assets than in 1884, but a slightly higher proportion than in 1879; that coin and bullion bore a much smaller proportion to the assets than in either 1884 or 1879; that the paid-up capital, which was formerly equal to over one-third of the assets, or rather more than half of the liabilities, was, in 1889, equal to less than one-fourth of the assets and not quite a third of the liabilities; and that of the moneys deposited a smaller proportion bore interest at the last period than at the two previous periods.

Former
periods
and 1889
compared.

845. In 1889 the coin and bullion held by the banks increased by nearly 1 million sterling as compared with the previous year, but was less by £300,000 in 1887, when the quantity was the largest ever held. The following figures show the value of coin and bullion held by the Victorian banks in the last quarter of 1889, and of each of the previous thirteen years :—

Coin and
bullion in
banks.

COIN AND BULLION HELD BY BANKS, 1876 TO 1889.*

(Average of the last quarter of each year.)

£			£		
1876	...	3,519,377	1883	...	3,245,472
1877	...	2,438,657	1884	...	5,014,749
1878	...	2,387,972	1885	...	4,230,618
1879	...	3,475,345	1886	...	4,932,940
1880	...	3,854,635	1887	...	6,838,719
1881	...	3,008,491	1888	...	5,604,097
1882	...	3,201,733	1889	...	6,533,037

846. In all the years the bank advances exceeded the moneys on deposit. The maximum of excess, viz., over 10 millions, was reached

Deposits and
advances of
banks.

* In the second quarter of 1890, the amount was £7,373,449.

in 1889 ; the next largest excess being $7\frac{3}{4}$ millions in 1888. In no other previous years except 1877 and 1878 did the excess exceed $4\frac{1}{2}$ millions. The enormous increases in the last two years were brought about by the large speculations chiefly in land, which received a sudden check about the latter part of 1888. The great commercial depression of 1879-80 is indicated by the restriction of advances in 1880, when the excess was as low as £66,000. The two chief periods of inflation, as indicated by the advances during the last 14 years were 1887-8 and 1888-9, as is shown by the figures in the following table :—

DEPOSITS IN AND ADVANCES BY BANKS, 1876 TO 1889.*

(Average of the last quarter of each year.)

Year.	Deposits.			Advances.	Excess of Advances over Deposits.
	Government.†	Other.	Total.		
	£	£	£	£	£
1876 ...	1,956,619	12,893,529	14,850,148	19,138,461	4,288,313
1877 ...	1,148,176	15,355,352	16,503,528	22,493,261	5,989,733
1878 ...	422,211	15,684,370	16,106,581	22,430,329	6,323,748
1879 ...	1,120,809	15,305,356	16,426,165	20,717,750	4,291,585
1880 ...	1,953,241	16,019,462	17,972,703	18,039,020	66,317
1881 ...	2,470,880	18,681,030	21,151,910	22,783,420	1,631,510
1882 ...	951,809†	22,673,284	23,625,093	26,562,427	2,937,334
1883 ...	575,058	23,484,111	24,059,169	26,994,137	2,934,968
1884 ...	2,147,035	26,270,009	28,417,044	29,487,969	1,070,925
1885 ...	2,268,435	28,325,129	30,593,564	33,212,694	2,619,130
1886 ...	2,023,687	29,215,785	31,239,472	34,625,144	3,385,672
1887 ...	2,899,185	32,316,362	35,215,547	38,034,062	2,818,515
1888 ...	2,559,702	35,011,136	37,570,838	45,325,559	7,754,721
1889 ...	1,585,834	37,183,102	38,768,936	48,817,112	10,048,176

847. By *The Banks and Currency Statute* 1887 (52 Vict., No. 1,002), passed on the 22nd December, 1888, it was provided that bank notes issued in Victoria should be a first charge on the assets in Victoria in the case of insolvency or bankruptcy ; that banks issuing notes must have a subscribed capital of at least £250,000, and a paid-up capital of £125,000 ; and that the banks may advance or lend money on the security of lands, houses, ships, or pledges of merchandise. The provisions of the Banking Statutes were, moreover, extended so as to apply to every foreign banking company, firm, or

* In the second quarter of 1890 the average of deposits was £40,318,556, and of advances £49,951,219.

† The figures in this column, for years prior to 1883, represent the amounts at the end of the year. The figures of 1883 and subsequent years represent, like the other figures in the table, the average amounts during the last quarter of the year.

‡ Excluding an advance of £2,000,000 obtained from the contracting banks on account of a new loan of £4,000,000, floated in 1883 under the *Railway Loan Act* 1881 (45 Vict. No. 717).

individual banker trading in Victoria engaged in the ordinary business of banking by receiving deposits and issuing in Victoria or elsewhere bills or notes payable to the bearer at sight or on demand ; whilst banks publishing misleading advertisements as to their capital were made liable to certain penalties.

848. Subjoined are the average rates of exchange for bank bills drawn on the following places in 1889, and in the first year of each of the two previous quinquennia. Those upon London are drawn at sixty days' sight, and those upon the neighbouring colonies at sight :—

Rates of exchange.

RATES OF EXCHANGE, 1879, 1884, AND 1889.

Places on which Bills were drawn.	Average Rates of Exchange.		
	1879.	1884.	1889.
London	$\frac{3}{4}$ per cent. premium	par to $\frac{1}{2}$ per cent. premium	$\frac{1}{2}$ to $\frac{3}{4}$ per cent. premium
British India ..	5 per cent. premium nominal	$2\frac{1}{2}$ per cent premium	..
New South Wales ..	$\frac{1}{4}$ per cent. premium	$\frac{1}{4}$ per cent premium	$\frac{1}{4}$ per cent. premium
Queensland ..	$\frac{1}{2}$ to 1 per cent. premium	$\frac{1}{2}$ to $\frac{3}{4}$ per cent. premium	$\frac{1}{4}$ to $\frac{3}{4}$ per cent. premium
South Australia ..	$\frac{1}{4}$ to $\frac{1}{2}$ per cent. premium	$\frac{1}{4}$ per cent premium	$\frac{1}{4}$ to $\frac{3}{4}$ per cent. premium
Tasmania ..	$\frac{1}{4}$ to $\frac{1}{2}$ per cent. premium	$\frac{1}{4}$ per cent premium	$\frac{1}{4}$ to $\frac{1}{2}$ per cent. premium
New Zealand ..	$\frac{1}{4}$ to $\frac{1}{2}$ per cent. premium	$\frac{1}{4}$ to $\frac{1}{2}$ per cent. premium	$\frac{1}{4}$ to $\frac{1}{2}$ per cent. premium

849. The average rates of discount on local bills were higher at the last than at the middle period, but not so high as at the first period, as will be seen by the following figures :—

Rates of discount

RATES OF DISCOUNT ON LOCAL BILLS, 1879, 1884, AND 1889.

Currency of Bills.	Average Rates of Discount per Annum.		
	1879.	1884.	1889.
Under 65 days	Per Cent. 8 to 9	Per Cent. 6 to 7	Per Cent. 7 to $7\frac{1}{2}$
65 to 95 „	8 to 9	6 to 8	7 to 8
95 to 125 „	9 to 10	7 to 9	7 to 9
Over 125 „	9 to 10	7 to 9	8 to $9\frac{1}{2}$

850. For overdrafts, the bank rate was from 8 to 9 per cent. during 1889, as compared with 8 per cent. for nearly the whole of the preceding year.

Interest on overdrafts.

851. According to the *Bankers' Magazine*,* the average Bank of England rate of discount—by which all financial operations are ruled

Bank of England rate of discount.

* Waterlow and Sons, Limited.

—was as follows, during the first and second half of each of the ten years ended with 1889 :—

AVERAGE BANK OF ENGLAND RATE OF DISCOUNT, 1880-1889.

Year.	January to June.	July to December.	Average for the Year.
	£ s. d.	£ s. d.	£ s. d.
1880	2 19 2	2 11 2	2 15 2
1881	2 18 5	4 0 5	3 9 6
1882	3 19 0	4 6 3	4 2 8
1883	3 14 3	3 8 10	3 11 6
1884	2 16 4	3 2 4	2 19 4
1885	3 9 7	2 7 1	2 18 2
1886	2 12 6	3 9 7	3 1 2
1887	3 4 1	3 9 7	3 6 11
1888	2 12 0	3 19 6	3 6 4
1889	3 1 0	4 3 0	3 12 0
Average ...	3 2 8	3 9 9	3 6 3

Rates of interest on bank deposits.

852. The rates of interest allowed on moneys deposited with the principal Victorian banks for a period of 12 months ranged from 6 to 6½ per cent. in 1879, from 5 to 6 per cent. in 1884, and remained steady at 5 per cent. during the whole of 1889. It may be mentioned that the rate on deposits for 6 months is usually 1 per cent. lower than that for 12 months, and the rate for three months 1 per cent. lower than that for 6 months. As a rule, no interest is allowed by the Associated Banks on deposits at call.*

Fluctuation in rate or interest on deposits.

853. In 1887 and the first nine months of 1888 extensive speculations took place in land, mining, and other securities, but these, which had no doubt been partly induced by the cheapness of money—only 4 per cent. being allowed by the banks on deposits for 12 months—were suddenly checked in October of the latter year by the rate being raised to 5 per cent. The 4 per cent. rate lasted for 14 months, that being the only period since 1882 in which the rate had been below 5 per cent. From the time of its being raised the rate has stood firm at 5 per cent. until just before going to press (July, 1890) when it was again lowered to 4 per cent. According to the *Australasian Insurance and Banking Record*, the following are the periods at which the changes in the rate of interest allowed by the banks on deposits are reported to have taken place since August, 1880:—

* One or two of the smaller banks allow from ½ to 1 per cent. above the rates quoted, and allow also interest on current accounts and deposits at call.

BANK RATE OF INTEREST ON DEPOSITS* FOR TWELVE MONTHS,
1880 TO 1890.

Date of Alteration.	Duration of Rate. (Months.)	Rate.
From August, 1880 †	6	4 per cent.
„ February, 1881	9	3 „
„ November, 1881	9	4 „
„ August, 1882 ...	3	5 „
„ November, 1882	1	5½ „
„ December, 1882	19	6 „
„ July 8th, 1884	½	5½ „
„ July 25th, 1884	23	5 „
„ June 22nd, 1886	7	6 „
„ January 17th, 1887	7	5 „
„ August 12th, 1887	14	4 „
„ October 22nd, 1888	20	5 „
„ July 28th, 1890	...	4 „

854. The average annual rates of interest for “deposits at notice” given by the London joint stock banks are thus quoted for the eight years ended with 1889:—

Rates of interest on bank deposits in London.

INTEREST PER £100 DEPOSITED IN LONDON BANKS.

	£	s.	d.		£	s.	d.
1882 ...	2	14	0	1886 ...	1	12	11
1883 ...	2	10	10	1887 ...	1	19	6
1884 ...	1	17	10	1888 ...	1	18	0
1885 ...	1	17	2	1889 ...	2	2	0

855. The following are the proportions which the Government deposits bore to the total amounts on deposit with the Victorian banks during each of the thirteen years ended with 1889. Until 1883, the proportions are based upon the amount of Government deposits at the end of the year, but, on and after 1883, upon the average amount during the last quarter of the year:—

Proportion of Government moneys with the banks.

PROPORTIONS OF GOVERNMENT MONEYS TO ALL BANK DEPOSITS,
1877 TO 1889.‡

	Per Cent.		Per Cent.
1877 ...	6·96	1884 ...	7·56
1878 ...	2·62	1885 ...	7·41
1879 ...	6·82	1886 ...	6·48
1880 ...	10·87	1887 ...	8·24
1881 ...	11·68	1888 ...	6·81
1882 ...	4·03	1889 ...	4·09
1883 ...	2·39		

* One or two of the smaller banks allow from ½ to 1 per cent. above the rates quoted.

† Immediately prior to this date, 5 per cent.

‡ For figures on which these proportions were based see table following paragraph 846 *ante*.

Banks in
Austral-
asian
colonies,
1890.

856. The particulars contained in the following table respecting the assets and liabilities of the banks in each of the Australasian colonies at the end of the first quarter of the present year have, in the absence of official information, been taken from the *Australasian Insurance and Banking Record*.* The care habitually exercised by the proprietors and writers of this publication to procure accurate information, and state it correctly, leave no reason for doubt as to the substantial reliability of the figures:—

BANKS IN AUSTRALASIAN COLONIES, 1890.

(Compiled from the Averages of the Quarter ended 31st March, 1890.)

Colony.	Number of Banks.	Liabilities.				
		Notes in Circulation.	Bills in Circulation.	Balances due to other Banks.	Deposits.†	Total.
		£	£	£	£	£
Victoria ...	16	1,612,378	111,405	273,025	39,297,627	41,294,435
New South Wales...	17	1,522,400	119,106	178,544	34,577,297	36,397,347
Queensland ...	12	621,466	47,701	87,644	9,908,311	10,665,122
South Australia ...	10	512,987	10,068	107,663	7,259,481	7,890,199
Western Australia...	4	54,578	7,301	1,368	893,713	956,960
Tasmania ...	5	154,438	91,341	6,313	4,122,867	4,374,959
New Zealand ...	6	919,425	61,528	30,678	12,219,648	13,231,279
Total ...	70	5,397,672	448,450	685,235	108,278,944	114,810,301

Colony.	Assets.					Total.
	Coin and Bullion.	Landed Property.	Notes and Bills of other Banks.	Balances due from other Banks.	All Debts due to Banks.‡	
	£	£	£	£	£	£
Victoria ...	6,896,007	1,712,783	260,284	275,858	48,881,962	58,026,894
New South Wales...	5,228,489	1,561,041	281,191	3,461,970§	39,803,613	50,336,304
Queensland ...	2,245,122	676,947	16,160	322,659	17,071,029	20,331,917
South Australia ...	1,704,811	462,577	53,762	351,940	8,992,926	11,566,016
Western Australia...	277,097	86,485	4,327	25,246	1,356,793	1,749,948
Tasmania ...	551,804	109,126	...	394,970	3,531,158	4,587,058
New Zealand ...	2,402,373	510,840	38,170	142,523	14,482,035	17,575,941
Total ...	19,305,703	5,119,799	653,894	4,975,166	134,119,516	164,174,078

* *Record* for May, 1890, page 347.

† Including Government deposits, which in Victoria amounted to £1,238,148, in Queensland to £1,441,064, in South Australia to £371,014, and in New Zealand to £491,809.

‡ Including Government securities, which in New South Wales amounted to £919,085, in Queensland to £19,075, in South Australia to £20,400, in Western Australia to £7,500, in Tasmania to £154,113, and in New Zealand to £100,641. If any Government securities were held by the Victorian banks, they were not distinguished in the returns.

§ This amount probably includes capital lent by the New South Wales banks to their own branches outside the colony.

857. It will be noticed that both the bank liabilities and the bank assets are smaller in New South Wales than in Victoria, notwithstanding the fact that in New South Wales the bank assets include the large amount of £3,462,000 as due from other banks, which, in addition to sums due from independent institutions, is said to embrace capital lent to their own branches outside the colony, the latter being an item which is not considered as forming part of the assets of the banks in the other colonies.

Liabilities
and assets
in Victoria
and New
South
Wales
compared.

858. In Tasmania the assets of the banks only slightly exceed the liabilities, but in all the other colonies they are considerably in excess. In Victoria the liabilities amount to 71 per cent. of the assets, which is a slightly lower proportion than obtains in New South Wales, but a higher proportion than in any of the other colonies except New Zealand and Tasmania. The following are the positions of the colonies in respect to the proportion the bank liabilities bear to the bank assets, the colony in which the former are least in proportion to the latter being placed first and the rest in succession, the figures showing the percentage of liabilities to assets being placed against each colony:—

Proportion
of liabilities
to assets in
Austral-
asian banks.

PROPORTION OF LIABILITIES TO ASSETS OF BANKS OF AUSTRALASIAN COLONIES, 31ST MARCH, 1890.

	Per Cent.		Per Cent.
1. Queensland ...	52·46	5. New South Wales ...	72·31
2. Western Australia ...	54·69	6. New Zealand ...	75·28
3. South Australia ...	68·22	7. Tasmania ...	95·38
4. Victoria ...	71·16		

859. Coin and bullion in 1890 bore a higher proportion to the total assets of the banks in Victoria than they did to those in Queensland or New South Wales, but a lower proportion than that borne in the other four colonies. In 1889 also, Victoria occupied a similar position in this respect. The following is the order of the colonies in reference to this matter about the beginning of 1890:—

Proportion
of specie to
assets of
Austral-
asian banks.

PROPORTION OF COIN AND BULLION TO ASSETS OF BANKS IN AUSTRALASIAN COLONIES, 31ST MARCH, 1890.

	Per Cent.		Per Cent.
1. Western Australia ...	15·83	5. Victoria ...	11·88
2. South Australia ...	14·74	6. Queensland ...	11·04
3. New Zealand ...	13·67	7. New South Wales ...	10·39
4. Tasmania ...	12·03		

860. In his evidence before a Royal Commission on banking laws appointed in February, 1887,* Mr. J. F. McMullen, a Victorian

Proportion
of specie to
liabilities
of Austral-
asian banks.

* See *Victorian Year-Book*, 1886-7, page 500 ; also Parliamentary Paper No. 65, Session 1887.

banker of great experience, and at the time general manager of the Union Bank of Australasia, gave it as his opinion that every bank ought to possess a metallic reserve equal to three shillings in the pound (15 per cent.) of its liabilities. By the following figures it is shown that on the 31st March, 1890, this proportion was exceeded in all the Australasian colonies, except New South Wales, where it was $\frac{2}{3}$ per cent. lower, and in Tasmania, where it was as much as $2\frac{1}{2}$ per cent. lower than the proportion referred to; also that the average for the whole of Australasia was $16\frac{4}{5}$ per cent., or about 3s. $4\frac{1}{2}$ in the pound:—

PROPORTION OF COIN AND BULLION TO LIABILITIES OF BANKS
IN AUSTRALASIAN COLONIES, 31ST MARCH, 1890.

Per Cent.			Per Cent.		
1. Western Australia	...	28·96	6. New South Wales	...	14·37
2. South Australia	...	21·61	7. Tasmania	...	12·61
3. Queensland	...	21·05			
4. New Zealand	...	18·16			
5. Victoria	...	16·70			
			Australasia	...	16·82

Austral-
asian
banks' de-
posits not
bearing and
bearing
interest.

861. The deposits quoted in the last table may be divided into those bearing and those not bearing interest, except in the case of Tasmania, respecting which colony the necessary information is not given. The following is a statement of the division referred to:—

DEPOSITS IN BANKS IN AUSTRALASIAN COLONIES* NOT BEARING AND
BEARING INTEREST.

(Average during the Quarter ended 31st March, 1890.)

Colony.	Amount of Deposits.†		Proportion of Deposits.	
	Not Bearing Interest.	Bearing Interest.	Not Bearing Interest.	Bearing Interest.
	£	£	Per cent.	Per cent.
Victoria	10,770,174	28,527,453	27·41	72·59
New South Wales	10,202,381	24,374,916	29·51	70·49
Queensland	3,129,949	6,778,362	31·59	68·41
South Australia	1,994,551	5,264,930	27·48	72·52
Western Australia	404,320	489,393	45·24	54·76
New Zealand	3,562,379	8,657,269	29·15	70·85

Proportion
of interest
bearing de-
posits in
Austral-
asian banks.

862. It will be seen that between two-thirds and three-fourths of the bank deposits are interest-bearing in all the colonies except Western Australia, in which not much more than half of the deposits bear interest.

* Exclusive of Tasmania.
† Including Government deposits, amounting in Victoria to £1,238,148, of which £212,369 did not bear, and £1,025,779 bore interest; in Queensland to £1,441,064, all bearing interest; in South Australia to £371,014, of which £79,248 did not bear, and £291,766 bore interest; and in New Zealand to £491,809, all of which bore interest.

863. The following particulars taken from the *Australasian Insurance and Banking Record*,* show the capital and profits of the banks of issue carrying on business in the Australasian colonies, according to the sworn averages of the quarter ended 31st December of the last three years :—

Capital and profits of Australasian banks.

CAPITAL AND PROFITS OF BANKS IN AUSTRALASIAN COLONIES, 1887 TO 1889.

	1887.	1888.	1889.
	£	£	£
Capital paid up ...	15,866,162	16,609,852	17,497,739
Amount of reserved profits at declaration of dividend ...	7,974,382	7,913,731	8,427,505
Capital and reserved profits ...	23,840,544	24,523,583	25,925,244
Amount of last dividend declared (half-year)	880,350	934,323	1,018,655
Average per cent. per annum of dividend on paid-up capital	11·10	11·25	11·64

NOTE.—There were 27 banks in 1887, and 29 in 1888 and 1889.

864. In the quarter ended 31st December, 1889, the circulation of bank notes ranged from £1 12s. 9d. per head in Queensland to £1 0s. 7d. per head in Tasmania; the proportion in Victoria being £1 9s. 8d., and in the whole of Australasia £1 8s. 5d. The following are the figures for the different colonies :—

Note circulation in Australasian colonies.

BANK NOTE CIRCULATION IN AUSTRALASIAN COLONIES, 1889.

Colony.	Estimated Population on 31st December.	Bank Note Circulation (Last Quarter of 1889).	
		Total.	Per Head of Population.
		£	£ s. d.
1. Queensland ...	406,658	665,436	1 12 9
2. Victoria ...	1,118,028	1,657,082	1 9 8
3. New Zealand ...	620,279	883,114	1 8 6
4. South Australia ...	324,484	449,229	1 7 8
5. New South Wales ...	1,122,200	1,516,047	1 7 0
6. Western Australia ...	43,698	49,730	1 2 9
7. Tasmania ...	151,472	155,936	1 0 7
Australasia ...	3,786,819	5,376,574	1 8 5

865. At the end of 1889 the average note circulation was only 18s. 4d. per head in England and Wales, whereas it was as high as

Note circulation in the United Kingdom.

* *Record* for March, 1890, page 165.

£1 12s. 11d. in Scotland, and £1 11s. 6d. in Ireland. In the United Kingdom, as a whole, the paper currency was close on 41 millions sterling, the proportion per head being £1 1s. 7d. It will be remembered that whilst the lowest denomination of bank notes in England and Wales is five pounds, in Scotland and Ireland, as in the Australasian colonies, it is one pound :—

BANK NOTE CIRCULATION IN THE UNITED KINGDOM, 1889.

Division.	Estimated Population. (000's omitted.)	Bank Note Circulation, December, 1889.	
		Total. (000's omitted.)	Per Head of Population.
		£	£ s. d.
England and Wales ...	29,209,	26,807,	0 18 4
Scotland... ..	4,099,	6,748,	1 12 11
Ireland	4,685,	7,377,	1 11 6
United Kingdom ...	37,993,	40,932,	1 1 7

Savings
banks.

866. Two kinds of savings banks exist in Victoria, the General Savings Banks, which were first established in 1842, and the Post Office Savings Banks, which were established in 1865. The following figures show the number of institutions, the number of depositors having accounts at the last dates of balancing in 1889, and the total and average amount of depositors' balances at such dates* :—

SAVINGS BANKS, 1889.

Description of Institution.	Number of Savings Banks.	Number of Depositors.	Amount remaining on Deposit.	
			Total.	Average to each Depositor.
			£	£ s. d.
Post Office Savings Banks ...	314	98,134	1,790,756	18 5 0
General Savings Banks ...	16	162,933	3,230,766	19 16 7
Total	330	261,067	5,021,522	19 4 8

Savings
banks, 1872
to 1889.

867. In the eighteen years, 1872 to 1889, the number of depositors in savings banks has increased nearly fourfold. For several years prior to 1880 the amount standing to the credit of the depositors had been tolerably uniform, but since then a steady increase has taken place, and by 1889 it had risen to over 5 millions sterling, or £352,000

* The financial year of the Post Office Savings Banks terminates on the 31st December, that of the Ordinary Savings Banks on the 30th June.

more than in the previous year, and over three times the amount in 1880—nine years previously. The average amount to each depositor was highest in 1872 and lowest in 1887, the proportion of the latter being £1 6s. 10d. less than in the year under review. The following is a statement of the number of depositors and the amount remaining on deposit during the period referred to:—

SAVINGS BANKS, 1872 TO 1889.

Year.			Number of Depositors.	Amount remaining on Deposit.		
				Total.	Average to each Depositor.	
				£	£	s. d.
1872	...	...	52,749	1,405,738	26	13 0
1873	...	...	58,547	1,498,618	25	11 1i
1874	...	...	64,014	1,617,301	25	5 3
1875	...	...	65,837	1,469,849	22	6 6
1876	...	...	69,027	1,507,235	21	16 9
1877	...	...	73,245	1,575,305	21	10 2
1878	...	...	76,696	1,510,273	19	13 7
1879	...	...	82,941	1,520,296	18	6 7
1880	...	...	92,115	1,661,409	18	0 9
1881	...	...	107,282	2,569,438	23	19 0
1882	...	...	122,584	3,121,246	25	9 3
1883	...	...	136,087	2,818,122	20	14 2
1884	...	...	152,342	2,981,083	19	11 4
1885	...	...	170,014	3,337,018	19	12 7
1886	...	...	189,359	3,589,916	18	19 2
1887	...	...	206,596	3,696,699	17	17 10
1888	...	...	237,433	4,669,541	19	13 4
1889	...	...	261,067	5,021,522	19	4 8

868. The highest rate of interest savings banks are permitted to give on moneys left on deposit is 4 per cent., which rate was paid in all the years. Interest is allowed on the minimum monthly balance, but not on any amounts which do not remain in the savings banks for a full month.

Rate of interest in savings banks.

869. In the General Savings Banks, the male depositors in 1889 numbered 90,018, and the female depositors 72,915, or about 81 of the latter to 100 of the former. In the general population the proportion of females per 100 males is 88, so that relatively to their respective numbers females do not appear to use the savings banks as much as males.

Male and female depositors.

870. Nearly four-fifths of the depositors in savings banks have less than £20 to their credit, and over a tenth have between £20 and £50.

Small Depositors.

Savings banks in Melbourne.

871. The depositors and deposits in the savings banks of Melbourne and suburbs amount to rather over three-fifths of the whole.

Savings banks in Australasian colonies.

872. The following is a statement of the number of depositors and their proportion to population, also the total and average amount standing to their credit in the savings banks of the various Australasian colonies at the end of 1888 :—

SAVINGS BANKS IN AUSTRALASIAN COLONIES, 1888.*
(Including both General and Post Office Savings Banks.)

Colony.	Number of Depositors.		Amount remaining on Deposit.	
	Total.	Per 100 of Population.	Total.	Average to each Depositor.
			£	£ s. d.
Victoria † ...	247,425	22·68	4,881,198	19 14 7
New South Wales ...	128,297	11·82	4,037,675	31 9 5
Queensland ...	43,003	11·10	1,611,876	37 9 8
South Australia ...	62,365	19·59	1,759,592	28 4 3
Western Australia ...	3,096	7·35	30,808	9 19 0
Tasmania ...	23,090	15·80	469,928	20 7 0
New Zealand ...	103,046	16·96	2,691,693	26 2 5
Total ...	610,322	16·60	15,482,770	25 7 4

Rate of interest in Australasian savings banks.

873. In Victoria the rate of interest paid in both descriptions of savings banks is 4 per cent., as already stated, but the rate paid in the other Australasian colonies is often higher than in Victoria. Thus, in New South Wales, whilst the rate in the Post Office Savings Banks is 4 per cent., as in Victoria, that in the General Savings Banks is 5 per cent. for accounts remaining open at end of year, only 4 per cent., however, being allowed on closed accounts ; in Queensland, the rate is 5 per cent. on deposits below £100 ; in South Australia it is 4½ per cent. ; in Tasmania the rates are from 5 per cent on sums up to £150 in the General, and 3½ per cent. in the Post Office Savings Banks ; and in New Zealand they are 4½ and 4 per cent. respectively. On the other hand, the rate is only 3¾ per cent. in Western Australia.

Order of colonies in respect to proportion of depositors to population.

874. In proportion to population, the number of depositors is greatest in Victoria, and next in South Australia. The following is the order of the colonies in this respect :—

* For later figures see *Australasian Statistics* for 1889, in Appendix to the second volume.
† These figures relate to the 31st December, both for General and Post Office Savings Banks, and therefore differ slightly from the figures given in paragraph 867 *ante*.

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF DEPOSITORS
IN SAVINGS BANKS TO POPULATION.

1. Victoria.	5. New South Wales.
2. South Australia.	6. Queensland.
3. New Zealand.	7. Western Australia.
4. Tasmania.	

875. Judged by the average amounts to the credit of depositors, the savings banks of Queensland, New South Wales, and South Australia appear to attract the larger capitalists in a greater degree than any of the other colonies; but those of Victoria, more than any other colony except Western Australia, appear rather to attract persons of small means, for whom savings banks are specially established. The following is the order of the colonies in reference to the average balance lying to the credit of each depositor:—

Order of colonies in respect to average amount of deposits.

ORDER OF COLONIES IN REFERENCE TO AVERAGE BALANCE OF
DEPOSITORS IN SAVINGS BANKS.

1. Queensland.	5. Tasmania.
2. New South Wales.	6. Victoria.
3. South Australia.	7. Western Australia.
4. New Zealand.	

876. The amount lying to the credit of depositors in the savings banks of the United Kingdom at the end of 1889 was £107,882,373, of which £44,861,448 was in ordinary savings banks, and £63,020,925 in Post Office Savings Banks. The present Chancellor of the Exchequer, the Right Honorable G. J. Goschen, in an address delivered by him at a meeting of the Royal Statistical Society of London, stated that the number of depositors in the savings banks at the end of 1886 was 5,322,225, and the amount on deposit £97,660,000, or an average of £18 7s. 0d. per depositor, or £2 12s. 9d. per head of population.

Savings banks of United Kingdom.

877. A return issued by the French Minister of Commerce shows that, at the end of 1884, there were 4,704,452 depositors in French savings banks, who had at their credit £81,011,200. In the previous twelve months the depositors had increased by 169,021, and the amount to the credit of depositors by £8,367,700; and in the last five years the former increased by 25 per cent., and the latter more than doubled.

Savings banks of France.

878. The substance of the following table, which embodies the returns for 1888 and 1889 of the Life Assurance Companies whose head offices are in the Australasian colonies, has been taken from the *Australasian Insurance and Banking Record*.* It contains a summary

Life assurance.

* *Record* for January, 1890, page 53.

of the results of twelve offices, one of which is the Government Life Insurance Department of New Zealand, the remainder being proprietary or mutual companies. It should be mentioned that there are many English, and three large American, offices also doing business in Australasia, but no returns are available of the local business done by these institutions :—

LIFE ASSURANCE RETURNS OF AUSTRALASIAN COLONIES,
1888 AND 1889.

Particulars.	1888.	1889.	Increase (+) or Decrease (—)	
			Numerical.	Centesimal.
New Policies during the Year*—				
Assurances and endowments No.	30,427	30,497	+ 70	+ ·23
„ amount assured £	8,588,948	8,690,542	+ 101,594	+ 1·18
Annuities † No.	49	48	— 1	— ·02
„ amount per annum † £	2,205	4,131	+ 1,926	+ 87·35
Premiums, single ... £	30,755	37,802	+ 7,047	+ 22·91
„ annual ... £	282,986	277,457	— 5,529	— 1·95
Funds at beginning of the year £	11,153,022	12,505,500	+ 1,352,478	+ 12·13
Receipts—				
New premiums £	262,369	257,531	— 4,838	— 1·84
Renewal „ £	1,724,015	1,891,554	+ 167,539	+ 9·72
Consideration for annuities £	19,861	29,284	+ 9,423	+ 47·44
Interest £	700,447	786,514	+ 86,067	+ 12·29
Other £	74,435	2,035	— 72,400	— 97·27
Disbursements—				
Claims (with bonus additions) and endowments matured £	654,444	756,289	+ 101,845	+ 15·26
Surrenders ‡ £	203,656	235,853	+ 32,197	+ 15·81
Annuities £	19,207	21,706	+ 2,499	+ 13·01
Bonuses and dividends ... £	79,382	46,647	— 32,735	— 41·24
Expenses £	446,960	504,490	+ 57,530	+ 12·87
Funds at the end of the year £	12,530,501	13,907,432	+ 1,376,931	+ 10·99

Receipts and disbursements. 879. The total receipts of these offices amounted to £2,781,127 in 1888, and to £2,966,918 in 1889, and the total disbursements to £1,403,649 and £1,564,985 respectively. The balance in favour of receipts thus amounted to £1,377,478 in the former and £1,401,933 in the latter year.

Working expenses. 880. The working expenses of the same offices amounted to 16 per cent. in 1888 and to 17 per cent. in 1889 of the total receipts.

* One of the companies did not furnish this information. Mr. T. S. Robertson estimated the whole number of policies in force in Australian offices in 1884 at 150,000, assuring £12,000,000.—See his paper read before the Insurance Institute of Victoria, 10th September, 1884.
† Information incomplete.
‡ Information incomplete, but including surrenders, advances reduced by surrender, and endowment premiums returned.

In the former year they amounted to $22\frac{1}{4}$ per cent. and in the latter to $23\frac{1}{2}$ per cent. of the premium income.

881. The average rate of interest realized in 1889 on the total funds standing to the credit of these institutions was 5.95 per cent., or slightly below the average of the previous eight years, which was 6 per cent. The rates in those years were as follow:—

RATES OF INTEREST REALIZED ON FUNDS OF AUSTRALASIAN LIFE ASSURANCE OFFICES.

	Per Cent.		Per Cent.
1881 ...	6.29	1886 ...	6.06
1882 ...	6.07	1887 ...	5.98
1883 ...	5.61	1888 ...	5.91
1884 ...	6.10	1889 ...	5.95
1885 ...	6.00		

882. The following statement of the liabilities and assets of the life assurance offices in the last two years has been taken from the same publication* :—

LIABILITIES AND ASSETS OF AUSTRALASIAN LIFE ASSURANCE OFFICES, 1888 AND 1889.

	1888.	1889.	Increase.†
LIABILITIES.	£	£	£
Life, endowment, and annuity funds ...	12,435,583	13,856,892	+ 1,421,309
Investment fluctuation funds ...	100,562	55,152	— 45,410
Paid-up capital ...	90,000	90,000	...
Reserve funds ...	141,000	171,000	+ 30,000
Deposits and interest ...	44,642	53,150	+ 8,508
Profit and loss balances ...	208,096	211,616	+ 3,520
Outstanding claims, annuities, and surrenders	174,325	179,439	+ 5,114
Outstanding accounts ...	104,075	125,691	+ 21,616
Total ...	13,298,283	14,742,940	+ 1,444,657
ASSETS.			
Mortgages ...	6,927,792	7,756,329	+ 828,537
Loans on policies and on personal security ...	2,126,956	2,396,281	+ 269,325
Government securities ...	1,262,731	1,249,599	— 13,132
Debentures ...	124,846	123,478	— 1,368
Shares ...	850,622	1,023,093	+ 172,471
Cash on deposit ...	1,546,393	1,696,014	+ 149,621
Cash on hand and on current account ...	25,364	18,449	— 6,915
Freehold and leasehold property ...	223,793	248,103	+ 24,310
Agents' balances ...	118,811	134,969	+ 16,158
Outstanding premiums ...	90,975	96,625	+ 5,650
Outstanding and accrued interest ...			
Sundries ...			
Total ...	13,298,283	14,742,940	+ 1,444,657

* *Australasian Insurance and Banking Record* for January, 1890, page 55.

† When the minus sign (—) occurs a decrease has taken place.

Capital of
fire and
marine in-
surance
companies.

883. The following is a statement of the capital and reserves of 32 fire and marine insurance companies doing business in Australasia in 1889 * :—

AUSTRALASIAN FIRE AND MARINE INSURANCE COMPANIES.—CAPITAL AND RESERVES, 1889.

Colony in which Head Office is situated.	Number of Companies.	Paid-up Capital.	Reserve Funds and Unappropriated Profits.	Total Paid-up Capital and Reserves.
		£	£	£
Victoria	9	287,081	556,980	844,061
New South Wales	11	232,739	285,800	518,539
South Australia	2	112,500	179,706	292,206
Tasmania	3	99,366	11,610	110,976
New Zealand	7	694,342	563,357	1,257,699
Total	32	1,426,028	1,597,453	3,023,481

Large pro-
portion of
capital in
New Zea-
land com-
panies.

884. It will be noticed that the amount of capital and reserves of the seven New Zealand companies is nearly equal to that of the 20 companies having their head offices in Victoria and New South Wales.

Profits of
fire and
marine
insurance
companies.

885. The profits, losses, dividends, etc., of the same companies in 1889, and of 33 companies in 1888 and 1887, were as follows :—

PROFITS, ETC., OF AUSTRALASIAN FIRE AND MARINE INSURANCE COMPANIES, 1887 TO 1889.

Profits, Losses, Dividends, etc.	1887. (33 Companies.)	1888. (33 Companies.)	1889. (32 Companies)
	£	£	£
Premiums, less reassurances and returns	1,421,017	1,474,821	1,527,674
Interest, rents, and fees	167,973	160,928	154,520
Total	1,588,990	1,635,749	1,682,194
Losses	958,492	966,895	1,075,940
Expenses and commission	405,447	415,150	424,125
Total	1,363,939	1,382,045	1,500,065
Net profits	225,051	253,704	182,129
Dividends paid	177,104	213,706	201,071
Proportion of losses and expenses to premium income	Per cent. 95·98	Per cent. 93·71	Per cent. 98·19

* The figures relating to these companies have been rearranged from figure statements contained in tables at page 446 of the Insurance and Banking Record for June, 1890.

886. The net profits exceeded the dividends paid by £47,947 in 1887, and £39,998 in 1888; but the dividends paid exceeded the net profits by £18,942 in 1889. The losses and expenses were less than the premium income by 4·02 per cent. in 1887, by 6·29 per cent. in 1888, and by 1·81 per cent. in 1889. Dividends compared with profits of fire and marine companies.

887. In the returns of 22 of these companies in 1887 and 1888, and of 20 in 1889, the premiums and losses on fire business were distinguished from those on marine business, with the following result:— Fire and marine business in certain companies.

PREMIUMS, LOSSES, ETC., OF CERTAIN AUSTRALASIAN FIRE AND MARINE INSURANCE COMPANIES, 1887 TO 1889.

(Fire Business distinguished from Marine Business.)

Premiums, Losses, etc.	1887 (22 Companies.)	1888 (22 Companies.)	1889 (20 Companies.)
FIRE ASSURANCE.	£	£	£
Premiums, less reassurances and returns	317,648	301,737	279,300
Losses	190,517	148,098	173,558
Premiums in excess of losses	127,131	153,639	105,742
MARINE ASSURANCE.			
Premiums, less reassurances and returns	275,525	301,531	251,316
Losses	170,248	227,068	197,228
Premiums in excess of losses	105,277	74,463	54,088
FIRE AND MARINE ASSURANCE.			
Premiums in excess of losses (as above)	232,408	228,102	159,830
Interest, rents and fees	109,135	106,586	98,055
Expenses and commission	341,543 177,171	334,688 169,894	257,885 155,989
Net profits	164,372	164,794	101,896

888. An Imperial Blue Book for 1884 contains the balance-sheets of 104 life assurance companies doing business in the United Kingdom, from which it is ascertained that during the year the receipts of these companies amounted to £21,857,000, of which £5,857,000 was from investments, £15,364,000 from premiums, and £636,000 from sales of annuities; and that their working expenses amounted to £3,000,000, or 13 per cent. of the receipts. Of the working expenses, £1,400,000 s set down to commissions, and £1,600,000 to management. Life assurance in the United Kingdom.

Price of
debentures
and stock in
Melbourne.

889. The following, according to the *Australasian Insurance and Banking Record*, were the prices in Melbourne of Victorian debentures payable thereat, and of Victorian stock, at the dates named * :—

PRICE OF VICTORIAN DEBENTURES AND STOCK IN MELBOURNE,
1889 AND 1890.

Interest.		Outstanding Debt.		Closing Price per £100.			
Rate per annum.	When Payable.	Amount.	When due.	January.	April.	July.	October.
1889.							
6	April 1 and Oct. 1	†276,100	1889	103	103	103	...
5	Jan. 1 and July 1	312,900	1894	102-103	102-103	102-103	102-103
4	April 1 and Oct. 1	‡940,482	§1897	100	100	100	100
Total ...		1,529,482					
1890.							
5	Jan. 1 and July 1	312,900	1894	102-103	102-103	102-103	...
4	April 1 and Oct. 1	‡940,482	§1897	100	100	100	...
Total ...		1,253,382					

NOTE.—See note to next table. The debentures of the late Melbourne and Hobson's Bay Railway Company are not included.

Price of
debentures
in London.

890. According to *Westgarth's Circular*, the following are the prices at four periods of 1889 and three periods of 1890 of debentures payable in London; || the lower price indicates that at or about which sales might be effected, and the higher that at which purchases might be made :—

PRICE OF VICTORIAN DEBENTURES IN LONDON, 1889 AND 1890.

Interest.		Outstanding Debentures and Stock.		Price per £100 Bond.			
Rate per annum	When payable.	Amount. ¶	When due.	January.	April.	July.	October.
1889.							
6	Jan. 1 & July 1	850,000	1891	104-106	105-107	103 ³ / ₄	103-105
5	" "	2,107,000	1894	105-107	107-109	106 ¹ / ₂ -106 ³ / ₄	106-108
4	" "	4,500,000	1899-1901	103-105	105-107	105 ¹ / ₄ -105 ¹ / ₂	105-107
4 ¹ / ₂	" "	5,000,000	1904	110-112	113-115	111 ³ / ₄	110-112
4	" "	4,000,000	1907	110-112	111-113	110 ¹ / ₂ -110 ³ / ₄	109-111
4	April 1 & Oct. 1	2,000,000	1908	111-113	112-113	111 ¹ / ₄ -111 ³ / ₄	108 ¹ / ₂ -109 ¹ / ₂
4	" "	4,000,000	1913	112 ¹ / ₄ -112 ³ / ₄	112-113	111 ¹ / ₄ -111 ³ / ₄	108 ¹ / ₂ -109 ¹ / ₂
4	" "	4,000,000	1919	112 ¹ / ₄ -112 ³ / ₄	112-112 ¹ / ₂	111 ¹ / ₄ -111 ³ / ₄	109-109 ¹ / ₂
4	Jan. 1 & July 1	6,000,000	1920	111 ¹ / ₄ -111 ³ / ₄	113-113 ¹ / ₂	111 ¹ / ₄ -111 ³ / ₄	111-111 ¹ / ₂
3 ¹ / ₂	" "	3,000,000	1923	...	104-104 ¹ / ₈	102 ¹ / ₂ -103	102 ³ / ₄ -103 ¹ / ₄
Total ...		35,457,000					

* See also tables following paragraphs 370 and 389 *ante*. † Paid off on 1st October, 1889.
‡ Government stock. The figures in the other lines represent debentures.
§ Or at any time thereafter at option of Government.
|| See also tables following paragraphs 370, 390 and 395 *ante*.
¶ The first four amounts in this column are debentures, and the subsequent amounts are stock, or debentures inscribable as stock.

PRICE OF VICTORIAN DEBENTURES IN LONDON, 1889 AND 1890
—continued.

Interest.		Outstanding Debentures and Stock.		Price per £100 Bond.			
Rate per annum	When payable.	Amount.*	When due.	January.	April.	July.	October.
	1890.						
6	Jan. 1 & July 1	850,000	1891	101-103	101-103	100 $\frac{1}{4}$	...
5	" "	2,107,000	1894	104-106	104-106	103 $\frac{1}{4}$ -103 $\frac{3}{4}$	...
4	" "	4,500,000	1899-1901	103-105	104-106	101 $\frac{1}{2}$ -102 $\frac{1}{4}$	...
4 $\frac{1}{2}$	" "	5,000,000	1904	109-111	111-113	108	...
4	" "	4,000,000	1907	107-109	108-110	106 $\frac{1}{8}$	...
4	April 1 & Oct. 1	2,000,000	1908	110-111	108-110	} 105 $\frac{1}{2}$ -108	...
4	" "	4,000,000	1913	110-111	108-110		
4	" "	4,000,000	1919	110-112	108-109		
4	Jan. 1 & July 1	6,000,000	1920	111 $\frac{1}{8}$ -111 $\frac{3}{8}$	110 $\frac{3}{4}$ -111 $\frac{1}{4}$	108-108 $\frac{1}{4}$	...
3 $\frac{1}{2}$	" "	3,000,000	1923	102-103	101 $\frac{1}{2}$ -102	97 $\frac{1}{2}$ -99 $\frac{7}{8}$	...
	Total ...	35,457,000					

NOTE.—When the figures appear in a column and line wherein the month of the quotation and one of the months in which the interest is payable correspond, the price is exclusive of interest; in other cases the deduction of about a quarter's interest will give the net price.

891. Evidence of the improved credit of the Australasian colonies is to be found in the circumstance, not only that their stocks have risen in price in the London market, but all of them, except Western Australia, have succeeded in floating loans at as low a rate as 3 $\frac{1}{2}$ per cent. There is no doubt that the fear of conversion of British 3 per cent. Consols to a lower rate of interest had for some time before the actual announcement of that policy directed attention to colonial and other high-class securities. This impression, however, was not very marked until towards the end of January, 1888, when it appears a large amount of Consols were sold with a view to investment of the proceeds in English Corporation Bonds and Indian and Colonial Stocks;† and then, for the first time, Australian (New South Wales) 3 $\frac{1}{2}$ per cent. stock passed beyond par, and reached 102 $\frac{1}{4}$; but immediately after Mr. Goschen's announcement (on the 9th March, 1888), the prices of all colonial stocks went up with a bound. Thus Victorian 4 per cent. inscribed stock (January and July), due in 1920, which was quoted on the official list in 1887 as ranging from 102 $\frac{3}{4}$ to 109 $\frac{3}{8}$, ran up to 113 $\frac{7}{8}$; the New South Wales 4 per cent. inscribed stock (January and July), due in 1933, which fluctuated between 106 $\frac{3}{4}$ and 112 $\frac{1}{4}$ in 1887, similarly rose to 118 $\frac{1}{2}$; whilst the 3 $\frac{1}{2}$ per cent. inscribed stocks of the same colony (April and October), which brought scarcely 92 two years previously, and fluctuated between 92 $\frac{1}{4}$ and 99 $\frac{1}{2}$

Prices of
Austral-
asian stock
in London.

* See footnote (§) on previous page.

† See *Westgarth's Circular*, No. 293, of 3rd February, 1888.

in 1887, rose as high as $107\frac{3}{4}$. Subsequently, however, about June, 1888, the prices of the Victorian 4 per cents. eased to about 112; the New South Wales 4 per cents. to 113; and its $3\frac{1}{2}$ per cents. to 104. Taking the mean of the highest and lowest rates quoted in the official list, the price of the Victorian 4 per cents. rose from 106 in 1887 to $110\frac{1}{4}$ in 1888; that of New South Wales 4 per cents. from $109\frac{1}{2}$ to $114\frac{1}{4}$; and the $3\frac{1}{2}$ per cents. of the same colony from nearly 96 to $103\frac{1}{2}$. The extreme prices of 1888 were also realized in 1889, but they were not maintained in 1890, when the prices seem to have exhibited fewer fluctuations. At the same time a decided permanent improvement continues to take place in the stocks of all the colonies, as will be observed from a comparison of the prices quoted for this year and the previous one in the following table:—

PRICES OF STOCK OF THE AUSTRALASIAN COLONIES IN LONDON,
1889 AND 1890.

Colony.	Stock.*		Prices.†				
	Year when principal is due.	Interest payable on the first day of	1889.		1890 (to 6th June).		Latest (week ended 6th June, 1890)
			Highest	Lowest.	Highest	Lowest.	
	4 per cents.						
Victoria ...	1920	Jan. & July.	113 $\frac{3}{4}$	110 $\frac{1}{2}$	112 $\frac{1}{4}$	110 $\frac{1}{2}$	111 $\frac{3}{8}$
New South Wales...	1933	„ „	118 $\frac{3}{4}$	113	114 $\frac{3}{4}$	112	112 $\frac{1}{4}$
Queensland ...	1924	„ „	114	109 $\frac{1}{4}$	112	107 $\frac{7}{8}$	110 $\frac{1}{4}$
South Australia ...	1917-18	April & Oct.	111	107 $\frac{7}{8}$	110 $\frac{1}{4}$	107 $\frac{1}{2}$	109 $\frac{1}{2}$
Western Australia...	1934	Jan. & July.	112 $\frac{1}{8}$	109	110 $\frac{1}{8}$	109 $\frac{1}{4}$	...
Tasmania ...	1913	„ „	108	102 $\frac{3}{4}$	105 $\frac{3}{4}$	102 $\frac{1}{2}$	105 $\frac{1}{4}$
New Zealand ...	1929	May & Nov.	109 $\frac{1}{4}$	99 $\frac{5}{8}$	109 $\frac{1}{8}$	106	106 $\frac{5}{8}$
	3 $\frac{1}{2}$ per cents.						
Victoria ...	1923	Jan. & July.	105	102 $\frac{3}{8}$	103 $\frac{1}{8}$	101	102 $\frac{1}{4}$
New South Wales...	1924	April & Oct.	106	101 $\frac{1}{4}$	105	101 $\frac{5}{8}$	103 $\frac{5}{8}$
Queensland ...	1924	Jan. & July.	103 $\frac{1}{2}$	100	101 $\frac{3}{4}$	97 $\frac{1}{2}$	100 $\frac{3}{8}$
South Australia ...	1939	„ „	102 $\frac{1}{8}$	99 $\frac{3}{4}$	101 $\frac{7}{8}$	99 $\frac{1}{2}$	101 $\frac{1}{2}$
Tasmania ...	† 1920-40	„ „	101	98 $\frac{5}{8}$	100 $\frac{1}{4}$	98 $\frac{1}{8}$	100 $\frac{1}{4}$
New Zealand ...	1940	„ „	...	...	98 $\frac{5}{8}$	96 $\frac{1}{8}$	98 $\frac{3}{8}$

Prices of
New South
Wales and
New Zea-
land stocks.

892. The following figures, showing the highest and lowest prices quoted in London of New South Wales and New Zealand Government stocks during 1889 and previous years, which have been taken from *Burdett's Official Intelligence* for 1890 will give some idea of the

* Debentures in the case of Tasmania.
† Taken from *Burdett's Official Intelligence* and the *Weekly Official Intelligence*.
‡ At any time on or after 1st January, 1920, on giving 12 months' notice.

increased value of colonial Government securities over a series of years. Strange to say, the prices of Victorian stocks were not given :—

PRICES IN LONDON OF 4 PER CENT. GOVERNMENT STOCKS OF NEW SOUTH WALES AND NEW ZEALAND.

Year.	New South Wales. (Prices per £100.)		New Zealand. (Prices per £100.)	
	Highest.	Lowest.	Highest.	Lowest.
1877	102½	98¼	...	...
1878	103¼	95¾	..	...
1879	101¾	95½	...	...
1880	105⅛	95¾	...	...
1881	105¾	99¼	99	88½
1882	105¼	99½	101¾	94
1883	104	99¼	102½	98½
1884	105¾	99½	104½	99
1885	106⅝	99	101	93¼
1886	107	102	103¾	95¼
1887	108	101½	100¾	93¾
1888	111¼	105¼	104½	96¼
1889	111	105	109¼	99¾

893 According to the same valuable work, the par value of all British Colonial and Provincial Government securities dealt with on the London Stock Exchange at the end of 1889 was £236,608,287; and it was calculated that, at the end of 1889, the market value of £70,791,000 of these securities was £76,017,000, as compared with £73,780,000 at the end of 1888.* The excess above the par value was thus 7½ per cent. in 1889, as against 4¼ per cent. in 1888; but in connexion with this it should be borne in mind that most of the securities were disposed of in the first instance at a discount.

Value of Colonial Government securities in London.

894. The following table contains a statement of the number and amount of mortgages on land and live stock, and of preferable liens on wool and growing crops, effected during 1889, also the number and amount of releases registered in that year. It should be mentioned that the figures do not express the full amounts secured and released, as the amounts were frequently not given † :—

Mortgages, liens, and releases.

* See Bankers' Magazine, 1890, page 40.

† Assuming that the average amount was the same in all cases as in those for which the information was returned, the following would be the total amounts :—Mortgages of land—under Transfer of Land Statute, £17,763,400, under old system, £2,882,700; and of live stock, 306,482. Releases of land—under Transfer of Land Statute, £6,406,900; under old system, £975,800; and of live stock, £22,200.

MORTGAGES AND LIENS, AND RELEASES, 1889.

Security.	Mortgages and Liens.		Releases.	
	Number.	Amount.	Number.	Amount.
Land under <i>Transfer of Land Statute</i> ...	11,500	£ 15,605,071	6,644	£ 5,662,680
„ under old system...	1,425	2,680,374	1,003	768,537
Live stock	1,227	305,982	56	14,264*
Wool	367	160,543	4	1,929
Crops	934	124,635	1	38
Total	15,453	18,876,605	7,708	6,447,448

Mortgages
and liens,
1870 to 1889.

895. The number of registered mortgages and liens of all descriptions, and the amounts advanced in respect thereof, during each of the twenty years ended with 1889 were as follow :—

MORTGAGES AND LIENS, 1870 TO 1889.

Year.	Number of Transactions.	Amount.	Year.	Number of Transactions.	Amount.
		£			£
1870 ...	4,410	4,203,743	1880 ...	10,722	5,615,401
1871 ...	4,849	4,278,197	1881 ...	10,636	6,672,733
1872 ...	5,151	4,076,229	1882 ...	9,416	6,985,689
1873 ...	5,155	5,248,365	1883 ...	9,023	6,021,120
1874 ...	5,929	6,019,904	1884 ...	9,236	7,139,774
1875 ...	6,035	4,542,569	1885 ...	10,738	9,476,724
1876 ...	6,417	5,081,387	1886 ...	13,547	12,224,992
1877 ...	6,510	4,706,138	1887 ...	12,981	11,427,243
1878 ...	9,655	6,233,752	1888 ...	13,685	16,772,497
1879 ...	12,063	7,358,952	1889 ...	15,453	18,876,605

Mortgages
and liens,
1889 and
former
years.

896. It will be observed that the number of mortgages and the amount secured thereby fell to the lowest point in 1883, and reached by far the highest point in 1889, the number of mortgages in the latter year having been larger by 1,768, and the amount advanced larger by over 2 millions sterling than in the previous year. The increase shown in returns of the last five years was almost entirely confined to transactions in land, and is doubtless the result of the large amount of land sold on credit consequent upon the growth of

* Amount of 36 releases only ; in the case of 20 no particulars were given.

the metropolis combined with the extensive land speculations which have accompanied it. It should be mentioned, however, as a favourable sign, that the increase in the amount advanced on mortgages of land in the same period has been accompanied by a large increase in the paying off and release of such mortgages, as the amount for which releases were granted in those five years was nearly twice as great as the similar amount in the previous five years.

897. In 1889 the number of releases of mortgages on land and the amounts paid off were equal to about 59 and 35 per cent. respectively of the number of mortgages effected and the amounts lent thereon, as compared with 91 and 61 per cent. respectively in the previous year. The number of releases of live stock is small as compared with the number of mortgages, and of liens on wool and crops not one release was registered; the reason being, in regard to these descriptions of property, that, although the mortgage or lien may be paid off, the mortgagor seldom takes the trouble to protect himself by a registered release.

Proportion
of releases
to mort-
gages.

898. The live stock mortgaged in 1889 consisted of 438,709 sheep, 17,436 head of cattle, 3,272 horses, and 413 pigs. The live stock released consisted of 6,786 sheep, 124 cattle, 53 horses, and 40 pigs.

Live stock
mortgaged.

899. During the twenty-nine years ended with 1889, the sums advanced on mortgage of landed property amounted in the aggregate to £151,716,781, and the sums paid off amounted in all to £78,483,946. The balance is £73,232,835, or nearly half the amount originally advanced. Part of this balance represents the amount of mortgages still outstanding, and part the amount in default of payment of which properties have passed from the mortgagor either by foreclosure or sale.

Difference
between
mortgages
and re-
leases, 1861
to 1889.

900. In 1889, the number of bills of sale filed was more numerous than in 1888 by 69, and also much more so than in any other year since 1876; whilst the amount secured under such instruments was not as high as in 1888 by over £320,000, but was much higher than in any other year since 1873. The following are the number and amounts of those filed and satisfied in each of the last sixteen years :—

Bills of sale.

BILLS OF SALE, 1874 TO 1889.

Year.			Bills of Sale Filed.		Bills of Sale Satisfied.	
			Number.	Amount.	Number.	Amount.
				£		£
1874	...	...	3,207	727,370	251	98,492
1875	...	...	3,182	788,339	189	85,477
1876	...	...	3,330	747,717	194	56,318
1877	...	...	1,063	288,015	131	79,746
1878	...	...	1,117	348,319	76	28,710
1879	...	...	849	239,793	59	42,459
1880	...	...	752	593,857	47	25,628
1881	...	...	842	432,251	65	56,739
1882	...	...	812	461,710	68	51,804
1883	...	...	839	253,863	40	24,385
1884	...	...	866	248,768	36	30,761
1885	...	...	954	379,864	51	38,882
1886	...	...	980	436,900	48	32,724
1887	...	...	1,395	420,400	25	19,164
1888	...	...	1,547	1,317,122	25	21,443
1889	...	...	1,616	994,690	27	23,897

Decrease in
bills of sale
since 1876.

901. The decrease in the number and amount of bills of sale filed in 1877 and subsequent years was chiefly owing to the law relating to such securities having been made more stringent under Act 40 Vict. No. 557, which came into force during 1877, which rendered it necessary to give 15 days' notice to the Registrar-General previous to any bill of sale being filed, during which period any creditor may lodge a caveat against its registration.

Contracts
for sale and
letting.

902. The contracts for sale and amount secured thereby, also the contracts for letting, and extremes within which the rent named therein ranged, filed with the Registrar-General under Act 40 Vict. No. 557, during the last thirteen years, were as follow :—

CONTRACTS FOR SALE AND LETTING, 1877 TO 1889.

Year.			Contracts for Sale Filed.		Contracts for Letting Filed.	
			Number.	Amount.	Number.	Average Rents.
				£		Per Week.
1877	605	47,720	668	} 2/6 to £5
1878	...	...	1,074	83,608	1,074
1879	...	...	1,803	142,809	1,802
1880	...	...	1,828	137,959	1,829
1881	...	...	1,730	90,699	1,730
1882	...	...	1,612	73,892	1,611

CONTRACTS FOR SALE AND LETTING, 1877 TO 1889—*continued*.

Year.	Contracts for Sale Filed.		Contracts for Leting Filed.	
	Number.	Amount.	Number.	Average Rents.
		£		Per Week.
1883	1,472	63,434	1,472	} 2/6 to £5
1884	1,495	57,061	1,495	
1885	1,617	49,221	1,617	
1886	1,703	50,769	1,703	
1887	924	37,418	924	
1888	429	24,702	430	
1889	480	32,286	480	

903. It would seem that contracts for sale and letting appeared at first to be more convenient for the security of the creditor without injuring the credit of the person giving the security than bills of sale, as they increased very rapidly from 1877, that being the year in which the Act legalizing their registration came into operation, until 1880, whilst the bills of sale largely decreased. In the last three years there has been a falling-off in the number and amount of these contracts, whilst there has been more than a corresponding increase in the number and amount of bills of sale.

Increase in
contracts
for sale and
letting.

904. Building societies in Victoria date from an early period in the colony's history, and much success both to borrowers and investors has attended their operations. Seventy-two such institutions sent in returns during 1889, as against 74 in 1888, and 66 in 1887. The following are the principal items furnished for the last three years. It should be mentioned that the returns of some of the societies were not perfect:—

Building
societies.

BUILDING SOCIETIES, 1887 TO 1889.

	1887.	1888.	1889.
Number of societies	66	74	72
Number of shareholders ... ..	...	26,312	22,222
Number of borrowers	17,465	19,288	19,210
Paid-up capital	£2,925,938	£3,310,774	£3,306,981
Value of landed property	£903,808	£1,512,439	£1,012,422
Advances under periodical repayments during the year	£2,544,688	£4,381,330	£3,264,984
Repayments by instalments during the year	£1,919,100	£2,968,887	£2,345,843
Working expenses during the year ...	£73,687	£82,081	£92,984
Bank overdraft at end of the year ...	£124,127	£224,418	£264,409
Deposits at end of the year	£4,216,758	£5,292,364	£5,062,328

NOTE.—The returns of the Premier Permanent Building Society, which suspended payment on the 21st December, 1889, and is now in liquidation, are not included.

Advances by
building
societies,
1876-1889.

905. In 1889, the business done by building societies, as measured by the advances made, fell off by over one million as compared with 1888, but was above that in 1887 by over £720,000. Moreover, in 1889 the amount advanced was three times as large as in 1883—six years previously. The advances made by these institutions during the last fourteen years have been as follow:—

ADVANCES BY BUILDING SOCIETIES, 1876 TO 1889.

		£			£
1876	...	870,203	1883	...	1,089,480
1877	...	815,860	1884	...	1,469,542
1878	...	703,932	1885	...	2,073,189
1879	...	489,312	1886	...	2,358,729
1880	...	564,411	1887	...	2,544,688
1881	...	805,551	1888	...	4,381,330
1882	...	1,040,965	1889	...	3,264,984*

Rates of
interest in
building
societies.

906. The rates of interest allowed by building societies on moneys left with them for a period of twelve months generally ranged, in 1883 from 5 to 7 per cent.; in 1884 from $5\frac{1}{2}$ to 7 per cent.; in 1885 and 1886 from 6 to 7 per cent.; in 1887 from $5\frac{1}{2}$ to $7\frac{1}{2}$ per cent.; in 1888 from $5\frac{1}{4}$ to 7 per cent.; and in 1889 from $5\frac{1}{2}$ to 7 per cent. In the last few years, some societies have allowed as much as 5 per cent. on the daily balance on deposit in current account.

Deposits
with
building
societies.

907. The sums deposited with building societies at the end of 1889 amounted in the aggregate to £5,062,328, or £230,136 less than was on deposit at the end of 1888. These deposits exceeded the advances during the year by £1,797,344.

Total
moneys on
deposit.

908. The following is a statement of the total amount of moneys on deposit at or about the end of each of the last five years with banks of issue, savings banks, and building societies. Other institutions, such as deposit banks, and some of the insurance companies, also receive deposits; but of these no returns are furnished:—

MONEYS ON DEPOSIT AT END OF YEARS 1885 TO 1889.

Amount deposited with—	1885.	1886.	1887.	1888.	1889.
	£	£	£	£	£
Banks ...	30,593,564	31,239,472	35,215,547	37,570,838	38,768,936
Savings banks ...	3,409,266	3,589,916	3,696,699	4,669,541	5,021,517
Building societies	2,466,256	2,910,792	4,216,758	5,292,364	5,062,328
Total ...	36,469,086	37,740,180	43,129,004	47,532,743	48,852,781

* If the advances of the Premier Permanent Building Society, now in liquidation, were included, the amount would be £3,570,200.

909. According to the table, the moneys on deposit about the close of the last year amounted in the aggregate to nearly 49 millions sterling, or $1\frac{1}{3}$ million more than in the previous year, and $12\frac{1}{3}$ millions more than in 1885, four years previously. There is no doubt, however, that in all the years some of the savings banks' money, and a small portion of that deposited with building societies, is re-deposited with the banks, and thus counted twice over; but considering there are many institutions for the receipt of deposits from which no returns are obtained, it is not at all likely that the whole amount at deposit is less than that stated in the table.

Moneys on deposit, 1889.

910. A falling-off of about 40 millions, or one-eighth, took place in the amounts passed through the Melbourne Clearing House in 1889, as compared with 1888, which will be memorable as a year of unusual speculation and inflation. Particulars respecting the clearances during the five years ended with 1889 are given in the following table:—

Melbourne Clearing House.

MELBOURNE CLEARING HOUSE.—TRANSACTIONS, 1885 TO 1889.
(000's omitted).

Year.	Clearances.				Amount cleared.	
	By Exchange of Instruments.			By Payments in Coin.	Total.	Weekly Average
	Notes.	Cheques, Bills, etc.	Total.			
	£	£	£	£	£	£
1885	16,776,	129,213,	145,989,	21,097,	167,086,	3,213,
1886	17,431,	134,566,	151,997,	20,842,	172,839,	3,324,
1887	19,086,	157,614,	176,700,	25,508,	202,208,	3,889,
1888	28,293,	261,698,	289,991,	37,128,	327,119,	6,291,
1889	26,554,	231,180,	257,744,	30,672,	288,416,	5,546,

NOTE.—In this table the two sides of the clearance are considered as one transaction. If the receipt and the payment should each be considered as a separate transaction, the amounts would obviously have to be doubled.

911. The property left by deceased persons affords an indirect means of ascertaining approximately the wealth of the population, for it may be supposed that the average amount left by each person dying is equivalent to the average amount possessed by each person living. The result of such a calculation for three periods of five years and one period of three years is as follows:—

Wealth of the population.

WEALTH OF THE POPULATION, 1872 TO 1889.

Years.	Property of Deceased Persons Sworn under.	Total Number of Deaths.	Average Amount left by each Person Dying.	Average Number of Persons Living.	Total Wealth of the Population.
	£		£		£
1872-1876	11,699,757	63,402	185	776,052	143,569,620
1877-1881	13,732,848	61,552	223	836,677	186,578,971
1882-1886	21,175,159	69,461	305	936,157	285,527,885
1887-1889	23,480,210	51,684	454	1,062,016	482,155,264

Total wealth
and wealth
per head.

912. The national wealth is shown in the last column. It will be noticed that this amounted to nearly 144 millions sterling, or £185 per head, in the five years 1872 to 1876 ; to nearly 187 millions sterling, or £223 per head, in the five years 1877 to 1881 ; to nearly 286 millions sterling, or £305 per head, in the five years 1882 to 1886 ; and to 482 millions sterling, or £454 per head, in the three years ended with 1889. It should, however, be mentioned that several large estates have been entered for probate in the last three years, and it is possible that this may partly account for the very large increase shown by the figures for the latest period.

Public
wealth not
estimated.

913. It should be explained that the figures given represent only the property possessed by private individuals, no estimate being made of the value of Crown lands, Government or municipal buildings, churches, hospitals, libraries, museums, mechanics' institutes, State schools, forts, artillery, lighthouses, war vessels, railways, telegraphs, etc. ; also that the figures no doubt understate the truth, as a considerable amount of property is taken over by relatives without any declaration of value, or issue of probate or letters of administration, and that, in order to reduce as much as possible the amount to be paid as succession duty, the properties are frequently declared at less than their full value.

Wealth as
compared
with in-
debtedness.

914. In the middle of 1889 the national debt amounted to £37,627,382, equal to little more than 10 per cent. of the value of property as above estimated ; but it must not be forgotten that, as a set-off to the debt, there is public property of immense value which is not included in the above estimate, and that the amount which could be realized by the sale of the State railways alone—the original cost of which was about 33 millions—would probably be amply sufficient to extinguish the whole debt.

915. During the five years ended with 1888, according to the amounts left by persons dying in the two colonies, the private wealth of the people of Victoria exceeded that of the people of New South Wales by 39 millions sterling. The amount per head was £348 in the former and £314 in the latter colony, the excess being thus £34 in favour of Victoria :—

Wealth in
Victoria
and New
South
Wales.

WEALTH OF THE POPULATION IN VICTORIA AND NEW SOUTH WALES
DURING THE FIVE YEARS ENDED WITH 1888.

Colony.	Property of Deceased Persons sworn under.	Total Number of Deaths.	Average amount left by each Person Dying.	Average Number of Persons Living.	Total Wealth of the Population.
	£		£		£
Victoria ...	26,171,991	75,113	348	992,279	345,313,092
New South Wales	22,621,703	71,945	314	975,698	306,369,172
Victoria in excess of New South Wales	3,550,288	3,168	34	16,581	38,943,920

916. For the whole of Australasia, the Government Statist of New South Wales* estimates the private wealth to amount to £1,129,000,000, or £300 per head. The way in which these amounts were arrived at is not stated.

Wealth of
Australasia.

917. Subjoined, is an estimate† made quite recently by Dr. Robert Giffen, the head of the Statistical Department of the Imperial Board of Trade, of the wealth of the population of the United Kingdom at the present time, and at two previous periods :—

Wealth in
the United
Kingdom.

WEALTH‡ OF THE UNITED KINGDOM, 1865 TO 1890.

Year.	Population in Millions.	Wealth in Millions of Pounds Sterling.	Wealth in Pounds Sterling per Head.
1865	30,	6,000,	200,
1875	33,	8,500,	260,
1890	37,	10,000,	270,

* *Wealth and Progress of New South Wales*, 1888-9, page 644. Potter, Sydney, 1889.
† *Journal of the Royal Statistical Society* for March, 1890, page 23. Stamford, Cockspur-street, London.
‡ Dr. Giffen includes public as well as private wealth. The former he computed to amount to 500 millions in 1890, or 5 per cent. of the whole.

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APPENDIX A.

REVENUE AND EXPENDITURE OF VICTORIA, 1888-9
TO 1890-91.(Taken from a preliminary statement presented to Members of the Legislative Assembly on the
31st July, 1890.)

I.—REVENUE.

REVENUE RECEIVED 1888-9 AND 1889-90, AND ESTIMATED
REVENUE 1890-91.

	Net Revenue.		
	1888-9.	1889-90. (Approximate)	1890-91. (Estimated.)
	£	£	£
CUSTOMS.			
Spirits	664,439	661,129	660,800
Wine	53,146	51,409	52,000
Beer and Cider	55,580	56,830	59,000
Tobacco and Snuff	235,564	249,746	250,000
Cigars	61,194	58,244	60,000
Tea	103,402	57,939	34,500
Sugar and Molasses	123,575	127,527	134,000
Coffee, Chicory, Cocoa, and Chocolate	17,524	11,355	3,500
Opium	19,275	17,443	17,000
Rice	23,358	21,437	22,500
Hops	15,621	9,602	10,000
Malt	3,172	1,626	2,500
Dried and Preserved Fruits and Vegetables	59,846	58,830	63,000
Import Duty on Live Stock	76,891	47,591	49,800
Articles subject to <i>ad valorem</i> Duties	788,361	663,668	687,000
All other Articles	523,839	516,825	519,200
Wharfage	55,043	46,810	50,000
Total Customs	2,879,830	2,658,011	2,674,800
EXCISE AND INLAND REVENUE.			
Spirits Distilled in Victoria	88,867	98,712	100,000
Auctioneers' Licences	18,075	15,527	15,000
Licences—Tobacco and Cigars	1,138	1,275	1,500
All other Licences	3,672	3,845	3,500
Percentage—Act 566	10	4	...
Duties on Estates of Deceased Persons	236,449	400,148	350,000
Duties on Bank Notes	34,023	32,173	32,000
Land Tax	123,025	121,606	126,000
Stamp Duty	*	*	*
Tobacco Duties	57,687	38,621	42,000
Total Excise and Inland Revenue	562,946	711,911	670,000

* Included under "Fees." The amount derived from this duty was roughly estimated at £260,000 in 1888-9 and £230,000 in 1889-90. It is not possible, however, to state the amount with any degree of certainty.

REVENUE RECEIVED 1888-9 AND 1889-90, AND ESTIMATED
REVENUE 1890-91—*continued.*

	Net Revenue.		
	1888-9.	1889-90. (Approximate)	1890-91. (Estimated.)
	£	£	£
TERRITORIAL.			
Sales by Auction	120,902	88,599	100,000
„ Interest on Balances	4,228	4,704	310,250
Alienation otherwise than by Auction	371,120	350,134	47,000
Licences and Leases other than Agricultural	43,960	50,912	60,300
Pastoral Occupation, etc.	55,814	65,234	
Harbour Trust Contributions—Rents and			
Licences	1,595	1,995	1,000
Miners' Rights	5,896	5,705	5,623
Business Licences	264	230	227
Leases, Auriferous and Mineral Land	9,317	9,702	9,634
Water-right and Searching Licences, etc.	1,172	1,140	1,503
Rents under Act 796— <i>Mining on Private</i>			
<i>Property Act</i> 1884	1,759	1,429	1,576
Total Territorial	616,027	579,784	537,113
PUBLIC WORKS.			
Railway Income	3,104,907	3,134,066	3,350,000
Water Supply—Yan Yean	181,814	190,679	200,000
„ „ On the Gold Fields	21,344	21,279	21,000
„ „ Geelong	9,009	9,582	8,400
Alfred Graving Dock and Patent Slip	3,429	2,353	2,800
Ferry Fares and Crane	733	874	320
Total Public Works	3,321,236	3,358,833	3,582,520
PORTS AND HARBOURS.			
Tonnage and Pilotage at Outports	45,884	29,789	17,000
POST AND TELEGRAPH OFFICES.			
Postage	*	*	*
Post Office—Private Boxes, etc.	8,195	7,852	7,000
Commission on Money Orders	13,334	12,574	15,500
Electric Telegraph—Messages	*	*	*
„ Telephone Exchange, etc.	24,510	36,260	36,000
Total Post and Telegraph Offices	46,039	56,686	58,500
STAMP REVENUE †	875,314	797,893	796,600
FEES (exclusive of Stamps)	59,936	55,728	51,793
FINES	7,521	8,507	7,400

* The revenues from postage and telegraph stamps are included under the heading of "Fees." The revenue from postages is not known, but it is estimated roughly at £381,000 in 1888-9, and at £331,500 in 1889-90; whilst the actual revenue from telegrams was £125,458 in 1888-9, and about £128,000 in 1889-90.

† Including postage, telegraph, duty, and fee stamps.

REVENUE RECEIVED 1888-9 AND 1889-90, AND ESTIMATED
REVENUE 1890-91—continued.

	Net Revenue.		
	1888-9.	1889-90. (Approximate)	1890-91. (Estimated.)
	£	£	£
MISCELLANEOUS.			
Rents, exclusive of Lands	3,224	4,019	3,700
Government Printer	29,450	34,027	33,250
Penal Establishments	7,749	7,838	8,000
Education	5,650	450	500
Defence Department	2,092	4,970	4,000
Industrial and Reformatory Schools	1,926	1,804	1,800
Sale of Produce, Aboriginal Stations	936	322	900
Sale of Government Property	5,697	4,417	3,350
Master-in-Lunacy	13,484	13,733	13,000
Mint Charges	10,051	11,317	10,000
Interest on Public Account, etc.	106,468	65,569	55,000
Interest on Loans to Local Bodies... ..	19,395	18,279	18,000
„ „ Water Trusts	14,015	20,282	22,000
„ from Bungaree Loan Liquidation Account	156	137	117
„ from Municipalities— <i>Prince's Bridge Act 1885</i>	1,644	1,621	1,597
Surplus Mint Subsidy	3,642	4,478	4,760
Contributions, Public Gardens	3,312	3,150	3,300
Contribution towards Falls Bridge ... ..	...	1,018	1,112
Contributions, <i>Marine Board Act, No. 965</i> ... ..	...	2,645	2,500
Inebriate Asylum, Beaconsfield ... ..	...	359	850
All other Receipts	32,365	41,528	32,883
Repayments towards Loans— <i>Vermin Act No. 1,028</i> ... ..	...	...	15,000
Centennial International Exhibition ... ..	...	12,000	...
Total Miscellaneous	261,256	253,963	235,619
Total	8,675,989	8,511,105*	8,631,345

II.—EXPENDITURE.

EXPENDITURE 1888-9 AND 1889-90, AND ESTIMATED EXPENDITURE
1890-91.

Heads of Expenditure.	Net Expenditure.		
	1888-9.	1889-90. (Approximate)	1890-91. (Estimated.)
	£	£	£
His Excellency the Governor	10,000	10,000	10,000
The Ministers of the Crown	15,344	15,425	15,500
Clerk and Expenses of the Executive Council	1,490	1,400	1,500

* The accounts have since been closed, but not yet audited, and the actual result was £8,519,160.

EXPENDITURE 1888-9 AND 1889-90, AND ESTIMATED EXPENDITURE 1890-91—continued.

Heads of Expenditure.	Net Expenditure.		
	1888-9.	1889-90. (Approximate)	1890-91. (Estimated.)
	£	£	£
Legislature :—			
Legislative Council	6,528	7,000	7,100
Legislative Assembly	11,087	11,208	11,800
Parliament Library	2,997	3,000	3,165
Refreshment Rooms	1,242	1,963	1,216
Victorian <i>Hansard</i>	2,219	2,305	2,275
Expenses of Members of the Legislative Assembly	21,709	25,300	25,500
Electoral Expenses	27,270	17,000	20,000
	73,052	67,776	71,056
Civil Establishments :—			
Chief Secretary's Office	9,091	9,609	9,501
Government Statist	6,666	7,003	31,080
Shorthand Writer	2,093	2,366	2,387
Inspection of Officers in Charge of Stores	668	890	980
Inspection of Factories and Shops ...	2,375	2,580	2,678
Medical	500	500	1,500
Quarantine, etc.	7,315	11,225	13,444
Vaccination	5,500	5,500	5,500
Commissioners of Audit and Office ...	11,260	11,993	12,963
Treasury	30,656	31,086	31,588
Premier	11,800	15,937	13,588
Agent-General and Office	6,030	6,000	6,000
Public Service Board	7,086	7,806	8,063
Government Printer	78,180	94,712	100,338
Scab Prevention and Diseases in Stock ...	8,230	7,776	8,673
	187,450	214,983	248,283
Judicial and Legal :—			
Their Honors the Judges	24,355	27,318	26,750
Law Officers of the Crown	20,357	29,891	29,273
Crown Solicitor	6,983	7,722	7,279
Prothonotary	2,282	2,615	2,886
Master in Equity and Lunacy	6,223	7,774	7,920
Registrar-General and Registrar of Titles	45,961	55,447	{ 53,087
Patents ... ..	...	...	{ 3,061
Deputy Registrars	6,498	8,850	7,250
Sheriffs	27,170	30,794	30,857
County Courts, Court of Insolvency, Courts of Mines, and General Sessions ...	25,987	27,562	32,228
Police Magistrates and Wardens ...	18,091	19,681	19,614
Clerks of Courts and Interpreters ...	20,407	19,676	22,730
Coroners	7,145	7,400	7,675
Curator of Estates of Deceased Persons ...	1,648	1,621	1,594
Expenses of carrying out the <i>Land Tax Act</i>	1,060	1,400	1,310
Miscellaneous	12,658	6,821	...
	226,825	254,572	253,514

EXPENDITURE 1888-9 AND 1889-90, AND ESTIMATED EXPENDITURE 1890-91—continued

Heads of Expenditure.	Net Expenditure.		
	1888-9.	1889-90. (Approximate)	1890-91. (Estimated.)
Public Instruction, Science, etc. :—	£	£	£
Education	637,470	688,543	720,089
University of Melbourne	20,000	16,500	16,500
Working Men's College	8,000	15,000	6,000
The Observatory	6,166	5,162	5,382
Public Library, Museums, and National Gallery	25,971	26,594	28,008
Free Libraries, etc.	17,000	16,000	20,000
Schools of Mines	12,400	15,900	23,500
Government Botanist	2,703	2,821	2,865
Schools of Design	3,693	4,235	3,500
Miscellaneous	9,685	11,553	15,957
	743,088	802,308	841,801
Charitable Institutions :—			
Hospitals for the Insane	106,168	114,367	125,248
Industrial and Reformatory Schools	41,429	42,699	44,476
Inspection of ditto	1,517	1,550	2,105
Charitable Institutions	120,000	130,000	120,000
Inebriate Asylum ... ..	...	9,790	4,049
	269,114	298,406	295,878
Mining :—			
Mining Department	20,951	23,961	24,365
Mining Boards	3,500	3,500	3,500
Prospecting	83,981	99,639	89,000
Miscellaneous	10,705	11,054	9,826
	119,137	138,154	126,691
Police	261,329	270,308	287,187
Gaols and Penal	66,118	71,422	70,405
Crown Lands and Survey :—			
Survey, Sale, and Management	68,533	68,862	71,912
Extirpation of Rabbits, etc.	25,314	184,600*	40,105
Botanic and Domain Gardens	9,017	10,303	10,616
Parliament Gardens	402	483	1,090
Experimental Cultivation	167	100	300
Agriculture	2,831	3,235	3,284
Vine Diseases	645	6,060	1,000
Forests and Industries... ..	8,783	14,740	17,678
Agricultural Societies, etc.	34,597	37,107	24,000
Public Parks, etc.	6,991	8,272	9,484
Miscellaneous	7,045	10,200	10,063
To promote the Agricultural and Wine Industries	3,729	10,000	42,000
	168,054	353,962	231,532

* Includes £150,000, loans under *Vermin Act*, No. 1028.

EXPENDITURE 1888-9 AND 1889-90, AND ESTIMATED EXPENDITURE
1890-91—continued.

Heads of Expenditure.	Net Expenditure.		
	1888-9.	1889-90. (Approximate)	1890-91. (Estimated.)
	£	£	£
Railways :—			
Railways	1,796,950	2,503,000	2,177,500
Commissioners' Salaries	6,000	8,000	6,000
Miscellaneous and Pensions, etc....	35,142	26,844	29,703
	1,838,092	2,537,844	2,213,203
Water Supply :—			
Melbourne	23,862	28,834	30,069
Country, including Water Trusts ...	46,955	38,598	44,779
	70,817	67,432	74,848
Public Works :—			
Department	51,778	56,280	55,440
Works and Buildings	354,402	694,887	573,635
Defence Works	174,841	140,000	58,000
Telegraph Lines	28,123	45,450	65,200
Road Works and Bridges	80,202	104,634	20,610
Endowment to Municipalities	340,853	450,000	450,000
	1,030,199	1,491,251	1,222,885
Customs :—			
Department	74,145	79,266	80,671
Distilleries, Immigration, Mercantile } Marine, etc.	13,778	16,097	15,706
Licensing Act	2,146	6,400	5,610
Marine Board	502	1,435	1,533
Miscellaneous			
	90,571	103,198	103,520
Harbours and Lights, and Marine Survey ...	34,595	37,044	40,368
Defences	171,782	214,642	236,227
Post and Telegraphs :—			
Gratuities to Masters of Vessels... ..	4,384	4,500	3,000
Post and Telegraph Offices	365,331	424,195	465,145
Mail Service—Inland	106,840	120,320	128,500
„ Foreign	42,356	47,950	41,000
Duplicate Telegraph Cable	13,162	13,873	14,000
Miscellaneous... ..	1,741	2,958	557
	533,814	613,796	652,202

EXPENDITURE 1888-9 AND 1889-90, AND ESTIMATED EXPENDITURE 1890-91—continued.

Heads of Expenditure.	Net Expenditure.		
	1888-9.	1889-90. (Approximate)	1890-91. (Estimated.)
	£	£	£
Aborigines	10,949	9,763	8,882
Pensions, Compensations, Gratuities, etc.:—			
Under <i>Constitution Act</i>	7,133	6,853	6,667
„ <i>Civil Service Act</i>	46,018	53,870	55,000
„ Other Acts	30,070	33,746	35,997
Contribution to Police Superannuation Fund	9,000	9,000	10,600
Voted Annually (exclusive of Railways) ...	20,604	18,365	17,855
	112,825	121,834	126,119
Redemption of Loan, 25 Vict., No. 150 ...	...	276,100	...
Interest :—			
On Loans	1,449,921	1,539,635	1,633,539
On Melbourne and Hobson's Bay Railway			
Debentures	9,360	9,360	9,360
On Post Office Savings Banks Deposits ...	57,091	63,762	65,000
<i>Public Buildings Protection Act.</i> ...	3,003	3,000	3,000
	1,519,375	1,615,757	1,710,899
The Royal Mint	20,000	20,000	20,000
Railway Construction Account	120,873	88,590	100,000
Miscellaneous Services :—			
Transport	2,405	3,000	4,000
Advertising	5,000	6,500	6,500
Exhibitions	190,076	14,806	6,500
Contribution towards New Guinea ...	4,784	5,000	5,000
Contribution towards Imperial Institute ...	...	...	...
Imperial Pensions	391	400	400
Commissions of Inquiry	2,911	8,241	6,000
Reward for Apprehension of Offenders ...	15	20	300
Friendly Societies	401	444	420
Powder Magazines	1,625	1,924	3,088
Unforeseen Expenditure	4,223	5,000	5,000
All other	13,178	8,902	30,291
	225,009	54,237	67,499
Total	7,919,902	9,750,204*	9,029,999

* On closing the accounts the actual result (subject to audit) was found to be £9,645,860.

III.—REVENUE AND EXPENDITURE, UNDER THE HEADS OF AND REPRODUCTIVE PUBLIC WORKS

REVENUE.

	1888-9.	1889-90. (Approximate)	Estimate for 1890-91.
	£	£	£
1. Taxation :—			
Customs	2,879,830	2,658,011	2,674,800
Excise and Inland Revenue, including Land Tax	562,946	711,911	670,000
Ports and Harbours	45,884	29,789	17,000
Fees (exclusive of Lands and Mining Departments)*	898,881	821,414	821,680
Fines	7,521	8,507	7,400
Miscellaneous Receipts	209,041	182,699	177,559
	4,604,103	4,412,331	4,368,439
2. Public Estate :—			
Territorial	616,027	579,784	537,113
Fees, Lands Department	35,244	31,428	25,000
„ Mines „	1,125	779	1,713
Contribution by the Melbourne Corporation for Maintenance of Public Gardens within the City Boundaries	3,312	3,150	3,300
	655,708	615,141	567,126
3. Commercial Services and Reproductive Public Works :—			
Railways	3,104,907	3,134,066	3,350,000
Waterworks	212,167	221,540	229,400
Post and Telegraphs*	46,039	56,686	58,500
Interest on Loans to Local Bodies	21,195	20,037	18,000
Interest on Loans to Water Trusts	14,015	20,282	22,000
Alfred Graving Dock, Patent Slip, Fifty- ton Crane, and Ferry Fares	4,162	3,227	3,120
Mint, Returned Subsidy	3,642	4,478	4,760
„ Earnings	10,051	11,317	10,000
Centennial International Exhibition ... ..	...	12,000	...
	3,416,178	3,483,633	3,695,780
Grand Total	8,675,989	8,511,105†	8,631,345

* Owing to the amalgamation of all stamps, the revenue from postage stamps is included under "Fees." It is estimated by the Government Statist that, of the amount received in 1888-9 for "Fees, etc.," as above stated (viz., £898,881), £260,000 was for stamp duty; £381,305 for postage, etc.; £125,458 for telegraph duty, and the remainder for fee stamps. See also footnotes on page 487 and 488 *ante*.

† See footnote on page 489.

TAXATION, PUBLIC ESTATE, AND COMMERCIAL SERVICES,
FOR THE YEARS 1888-9, 1889-90, AND 1890-91.

EXPENDITURE.

	1888-9.	1889-90 (Approximate)	Estimate for 1890-91.
	£	£	£
1. Taxation—			
Public Instruction, etc. ...	743,088	802,308	841,801
Judicial and Legal ...	226,825	254,572	253,514
Treasury ...	30,656	31,086	31,588
Defences, except Works ...	171,782	214,642	236,227
Public Works—			
Establishments ...	51,778	56,280	55,440
Works and buildings ...	382,525	694,887	573,635
Defence Works ...	174,841	140,000	58,000
Roads and Bridges ...	80,202	104,634	20,610
Trade and Customs ...	125,166	140,242	143,888
All others not enumerated ...	1,026,024	1,426,018*	1,235,921
	3,012,887	3,864,669	3,450,624
2. Public Estate— ...			
Railway Construction Account ...	120,873	88,590	100,000
Subsidies to Municipalities ...	340,853	450,000	450,000
Lands and Agriculture ...	168,054	†353,962	231,532
Mining ...	119,137	138,154	126,691
	748,917	1,030,706	908,223
3. Commercial Services and Reproductive Public Works—			
Interest on Loans,‡ etc. ...	1,519,375	1,615,757	1,710,899
Railway Department ...	1,838,092	2,537,844	2,213,203
Waterworks ...	70,817	67,432	74,848
Post and Telegraphs ...	533,814	613,796	652,202
Mint ...	20,000	20,000	20,000
Centennial International Exhibition ...	176,000	...	...
	4,158,098	4,854,829	4,671,152
Grand Total ...	7,919,902	9,750,204§	9,029,999

* Includes redemption of Loan 25 Vict. No. 150—£276,100.

† Includes £150,000, Loans under *Vermin Act*, No. 1028.

‡ Mostly for Railways, but in a smaller degree for Waterworks, Public Buildings, etc.

§ See footnote on page 493.

APPENDIX B.

LABOUR REPORTS.

(Supplied by the Municipal Authorities in February and March, 1890.)

TOWN DISTRICTS.*

Name of City, Town, or Borough, and distance from Melbourne.			Remarks.
		Miles.	
Ararat	...	157	Fair demand for miners and female servants.
Ballarat	...	100½	} The supply of labour is about equal to the demand.
Ballarat East	...	100	
Brighton	...	8	No demand, except for female servants, who could readily find employment.
Browns and Scarsdale	...	115	No demand.
Brunswick	...	3	No demand, except for female servants.
Buninyong	...	96	No demand.
Carisbrook	...	107½	No demand.
Castlemaine	...	78	No demand, except for female servants.
Chewton	...	75	No demand.
Clunes	...	120	No demand.
Collingwood	...	2	No demand, except for female servants.
Creswick	...	111	No demand.
Daylesford	...	76	No demand, except for female servants.
Dunolly	...	98¼	No demand.
Eaglehawk	...	105	No demand.
Echuca	...	156	No demand, except for female servants.
Essendon	...	4	Large demand for domestic servants.
Fitzroy	...	2	No demand at present, with the exception of female servants, who can readily meet with engagements.
Footscray	...	3¾	No demand.
Geelong	...	50	No demand.
Geelong, West...	...	45	Limited demand for female servants.
Hawthorn	...	4¼	No demand, except for female servants.
Heathcote	...	75	No demand.
Horsham	...	229	Great demand for female servants ; about 200 could find ready employment.
Inglewood	...	130	Good demand for farm labourers and good female servants.
Kew	...	5	Good demand for female servants.
Koroit	...	175	Good demand for farm labourers during the harvest ; good demand for female servants.
Majorca	...	111	No demand.
Malmsbury	...	65	No demand.
Maryborough	...	112	The supply is equal to the demand.
Newtown and Chilwell	...	45	Great demand for builders' labourers.
Northcote	...	3½	No demand, except for female servants.
Portland	...	227	No demand.
Port Melbourne	...	2½	There is always a steady demand for labour of all kinds in this municipality.
Prahran	...	3½	No demand, except for female servants.

* The officer supplying the information was the Town Clerk in every instance.

TOWN DISTRICTS—continued.

Name of City, Town, or Borough, and distance from Melbourne.			Remarks.
		Miles.	
Queenscliff—By rail	...	60	} No demand.
„ By sea	...	30	
Raywood	...	120	Fair demand for farm labourers during the harvest ; good demand for female servants.
Richmond, adjoins Melbourne			Fair demand for labourers ; good demand for female servants.
Rutherglen	...	176	No demand, except for female servants.
St. Arnaud	...	158½	Good demand for female servants.
St. Kilda	...	3½	The only labour for which there is any demand is that of female servants, which is likely to continue.
Sale	...	127	Female domestic servants very scarce.
Sebastopol	...	102	No demand.
Smythesdale	...	116	No demand.
Stawell	...	176	No demand.
Talbot	...	130	No demand.
Tarnagulla	...	136	No demand.
Wangaratta	...	146	No demand.
Warrnambool	...	160	No demand, except for good female servants.
Williamstown	...	9	No demand.
Wood's Point	...	109	No demand.

COUNTRY DISTRICTS.*

Name of Shire, and distance (in miles) of Chief Town from Melbourne.			Remarks.
		Miles.	
Alberton	...	180	No demand.
Alexandra	...	100	Farm labourers, miners, and domestic servants wanted.
Arapiles (chief town, Nati-muk)	...	244	Skilled farm labourers and household servants in constant demand.
Ararat	...	158	Farm labourers in demand at seed time and harvest ; female servants always wanted.
Avon (chief town, Stratford)	...	137	No demand except for female servants.
Bacchus Marsh	...	31	Skilled farm labourers wanted at 20s. per week ; also domestic servants. Steady men soon become employers of labour themselves.
Bairnsdale	...	170	Farm labourers, builders and stonemasons ; also domestic servants wanted.
Ballan	...	45	Female servants and practical farm labourers in great demand.
Ballarat	...	115	Good steady domestic servants can command constant employment.
Bannockburn	...	55	Female servants in great demand ; one hundred at least are wanted.
Barrabool	...	15	No demand.
Beechworth	...	171½	About 50 farm labourers and 100 female servants are required.
Belfast (chief town, Crossley)	...	180	No demand.
Bellarine (chief town, Drysdale)	...	57½	Demand for female general servants.

* Shires.—The officer supplying the information was the Shire Secretary in every instance

COUNTRY DISTRICTS—*continued*.

Name of Shire, and distance (in miles) of Chief Town from Melbourne.				Remarks.
		Miles.		
Berwick	...	28		Demand for female servants.
Bet Bet	...	125		No demand.
Boroondara (chief town, Camberwell)		6		No demand.
Braybrook (chief town, Maidstone)		5		No demand.
Bright	...	199		No demand.
Broadford	...	50		No demand.
Broadmeadows	...	14		Good farm labourers, hay trussers, and domestic servants can find employment.
Bulla	...	15		No demand.
Bulleen (chief town, Templestowe)		11		Moderate demand for agricultural and horticultural labour, also domestic servants.
Buln Buln (chief town, Drouin)		56		Demand for farm labourers and bushmen.
Bungaree	...	110		Large demand for farm labourers, ploughmen, etc.; also 100 domestic servants used to country life.
Buninyong	...	96		No demand.
Caulfield	...	6		Female domestic servants in great demand.
Chiltern	...	168		No demand for labour.
Coburg	...	5		No demand, except for female servants.
Colac	...	96		Good demand for farm labourers and domestic servants.
Corio (chief town, Lara)	...	35		No demand except for female servants.
Cranbourne	...	27½		No demand.
Creswick (chief town, Kingston)		94		Large demand for labourers and female servants.
Dandenong	...	19½		No demand except for female servants.
Darebin (chief town, Epping)		13		No demand.
Dimboola	...	251		Fair demand for labourers and general female servants.
Dundas (chief town, Ha- milton)		220		No demand.
Dunmunkle (chief town, Rupanyup)		211		Good demand for farm labourers and female servants.
East Loddon (chief town, Serpentine)		130		Good demand for farm labourers; large demand for female servants.
Echuca (chief town, Roch- ester)		139		Good demand for farm labourers and general female servants.
Eltham	...	14		No demand.
Euroa	...	97		Fair demand for farm labourers and female servants.
Fern Tree Gully	...	21		Fair demand for farm labourers.
Flinders (chief town, Shore- ham)		57		Fair demand for farm labourers.
Gisborne	...	41		Good demand for labourers and female servants.
Glenelg (chief town, Cas- terton)		271		Fair demand for farm labourers and female servants.
Glenlyon	...	70		No demand.
Gordon (chief town, Boort)		165		Limited demand for farm labourers.
Goulburn (chief town, Na- gambie)		78		No demand.
Grenville (chief town, Linton)		123		No demand.

COUNTRY DISTRICTS—*continued.*

Name of Shire, and distance (in miles) of Chief Town from Melbourne.	Remarks.
Miles.	
Hampden (chief town, 123½ Camperdown)	Fair demand for labourers; good demand for female servants.
Healesville 37	No demand.
Heidelberg 8	Fair demand for farm labourers and female servants.
Howqua (chief town, 170 Jamieson)	No demand.
Huntly 17	No demand.
Kara Kara (chief town, St. 157 Arnaud)	Good demand for farm labourers during harvest time.
Keilor 10	Limited demand for labourers.
Kilmore 42	No demand.
Korong (chief town, Wed- 150 derburn)	Limited demand for skilled farm labourers, and fair demand for female servants.
Kowree (chief town, Eden- 280 hope)	Good demand for female servants.
Kyneton 65	Good demand for farm labourers and female servants.
Leigh (chief town, Tees- 65 dale)	No demand, except for female servants.
Lexton 120	Good demand for farm labourers and female servants.
Lilydale 23¾	No demand, except for female servants.
Lowan (chief town, Nhill) 274	Good demand for farm labourers and female servants.
Maffra 131	Good demand for labourers and female servants.
Malvern 5	No demand.
Mansfield 136	Fair demand for farm labourers; good demand for female servants.
Marong (chief town, Kan- 96 garoo Flat)	Good demand for farm labourers and female servants.
Melton 23	No demand.
Meredith 74½	Limited demand for farm labourers and female servants.
Merriang (chief town, 29 Wallan Wallan)	Fair demand for farm labourers.
Metcalf (chief town, Tara- 67 dale)	No demand.
Minhamite (chief town, 200 Macarthur)	No demand, except for female servants.
Moorabbin (chief town, 10 South Brighton)	No demand, except for female servants.
Mornington 40	No demand.
Mortlake 151	No demand, except for female servants.
Mount Alexander (chief 86 town, Fryerstown)	No demand, except for female servants.
Mount Franklin (chief 84½ town, Hepburn)	No demand.
Mount Rouse (chief town, 160 Penshurst)	Fair demand for farm labourers; good demand for female servants.
McIvor (chief town, Heath- 75 cote)	Good demand for farm labourers and female servants.
Narracan (chief town, Moe) 80	No demand.
Newham (chief town, 49 Woodend)	No demand, except for female servants.
Newstead 92	Good demand for farm labourers and female servants.
North Ovens (chief town, 147 North Wangaratta)	No demand.

COUNTRY DISTRICTS—*continued*.

Name of Shire, and distance (in miles) of Chief Town from Melbourne.			Remarks.
		Miles.	
Numurkah ... ..	...	133	Limited demand for farm labourers.
Nunawading (chief town, Box Hill)	...	9½	No demand.
Oakleigh ... ..	...	10	No demand.
Omeo ... ..	...	245	Good demand for farm labourers and female servants.
Oxley ... ..	...	153	Good demand for farm labourers and female servants.
Phillip Island (chief town, San Remo), steamer and railway	...	65	No demand.
Portland ... ..	...	227	No demand.
Preston ... ..	...	5½	No demand.
Pyalong ... ..	...	50	No demand.
Ripon (chief town, Beaufort)	...	128	No demand.
Rodney (chief town, Tatura)	...	110	Fair demand for farm and competent road labourers.
Romsey ... ..	...	37	Good demand for farm labourers and female servants.
Rosedale ... ..	...	111	No demand except for female servants.
Seymour ... ..	...	61	Good demand for farm labourers and female servants.
Shepparton ... ..	...	112	Good demand for farm labourers and female servants.
South Barwon (chief town, Belmont)	...	52	No demand except for female servants.
Springfield ... ..	...	30	Fair demand for farm labourers and dairymaids.
St. Arnaud (chief town, Donald)	...	182	Good demand for farm labourers and female servants.
Stawell ... ..	...	178	Good demand for farm labourers and female servants.
Strathfieldsaye ... ..	...	105	Fair demand for labourers and female servants.
Swan Hill (chief town, Kerang)	...	179½	Good demand for general labourers and female servants.
Talbot ... ..	...	133	No demand.
Tambo (chief town, Bru- then)	...	201	Fair demand for farm labourers and female servants.
Towong (chief town, Tal- langatta)	...	213	No demand except for female servants.
Traralgon ... ..	...	97	Fair demand for farm labourers.
Tullaroop (chief town, Maryborough)	...	98	No demand.
Upper Yarra (chief town, Warburton)	...	35	Good demand for good axemen.
Walhalla ... ..	...	107	No demand.
Wannon (chief town, Coleraine)	...	250	No demand except for female servants.
Waranga (chief town, Rushworth)	...	120	Large demand for labourers and female servants.
Warragul ... ..	...	61	No demand except for female servants.
Warrnambool ... ..	...	160	Good demand for farm labourers, pick and shovel men, and female servants.
Whittlesea ... ..	...	24	No demand.
Wimmera (chief town, Horsham)	...	230	Fair demand for farm labourers; good demand for female servants.
Wodonga ... ..	...	187	No demand.
Wyndham (chief town, Werribee)	...	20	No demand.
Yackandandah ... ..	...	200	No demand.
Yarrawonga (chief town, Tungamah)	...	156	Large demand for farm labourers and female servants.

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END OF VOLUME I.

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BY

HENRY HEYLYN HAYTER, C.M.G.,

GOVERNMENT STATIST OF VICTORIA;

OFFICER OF THE FRENCH ORDER OF PUBLIC INSTRUCTION;

CHEVALIER OF THE ORDER OF THE CROWN OF ITALY;

Honorary Member of the Royal Statistical Society of London, of the Statistical and Social Inquiry Society of Ireland, of the Statistical Association of Tokio, of the Royal Society of Tasmania, and of the Intercolonial Medical Congress of Australasia; Honorary Corresponding Member of the Society for the encouragement of Arts, Manufactures, and Commerce, London, of the Statistical Society of Manchester, of the American Statistical Association (Boston), of the Commercio-Geographical Society of Berlin, of the Geographical Society of Bremen, of the Central Statistical Commission of Belgium, and of the Royal Society of South Australia; Honorary Foreign Member of the Société de Statistique of Paris; Fellow and Honorary Corresponding Secretary for Victoria of the Royal Colonial Institute; Representative Member for Victoria of the International Statistical Institute.

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MDCCCXC.

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ERRATUM TO VOLUME II.

Page 146, table following paragraph 201, last line, *transpose* figures in second and third columns, and *read* "38,831," *instead* of "18,833."

VICTORIAN YEAR-BOOK, 1889-90.

PART VI.—LAW, CRIME, ETC.

1. The system whereby persons acquiring possession of land, *Transfer of Land Statute.* either by transfer, inheritance, or other means, may receive a title thereto direct from the Crown, was introduced into Victoria in the year 1862, and continues in force to the present period.*

2. All lands alienated from the Crown since the introduction of the system have come at once under its provisions; and lands alienated prior to its inauguration can be brought under them by application, provided a clear title be produced, or a title containing only a slight imperfection. In the latter case the title is given subject to such imperfection, which is noted on the deed. *Lands under the Statute.*

3. The assurance and indemnity fund established under the *Transfer of Land Statute*, to secure the Government against possible losses, is formed chiefly by the payment of an amount equal to one half-penny in the pound of the value of all lands which become subject to its operation. The balance to the credit of this fund on the 30th June, 1889, was £66,425,† of which £34,823 had been invested in Government stock. Fifteen claims upon the fund, of which two—for £50 and £30 respectively—were satisfied in 1888-9, have been substantiated since its first formation, and sums amounting in the aggregate to £3,630 have been paid to claimants. *Assurance fund.*

4. In 1889, as compared with 1888, a large falling off took place in the number of applications to bring the land under the *Transfer of Land Statute* (29 Vict. No. 301); also a large decrease in the extent, but a considerable increase in the value of land actually brought thereunder. A decrease took place in the number of certificates of title issued, of transfers, mortgages, leases, etc., and of miscellaneous transactions, as well as in the fees received. The following were the transactions in the two years:— *Transactions under the Land Statute, 1888 and 1889.*

* This system was originated by the late Sir R. R. Torrens, whence it is commonly known as "Torrens's system." He first introduced it into South Australia, but it has since been adopted by all the Australasian colonies.

† During the last four years the Assurance Fund has been reduced by £79,423; that amount having been advanced towards the purchase of land adjoining the Titles Office (under Act 49 Vict. No. 835). On this advance the fund receives 4 per cent. per annum from the general revenue.

TRANSFER OF LAND STATUTE, 1888 AND 1889.

		1888.	1889.
Applications to bring land under the Act	... number	1,863 ...	1,176
Extent of land included	... acres	72,647 ...	82,592
Land brought under the Statute—			
By application	... acres	47,248 ...	86,384
By grant and purchase from the Crown	... value	£3,336,978 ...	£5,286,463
	... acres	439,490 ...	258,233
	... purchase money	£644,112 ...	£330,054
Certificates of title issued*	... number	21,539 ...	19,395
Transfers, mortgages, leases, releases, surrenders, etc.	..	57,850 ...	51,833
Registering proprietors	... ..	11 ...	6
Other transactions†	... ..	63,278 ...	56,301
Forms and extras	... ..	655 ...	758
Fees received	... value	£70,213 ...	£66,807

5. The total quantity of land under the *Transfer of Land Statute* at the end of 1889 was 12,422,302 acres, the declared value of which, at the time it was placed under the Act, was £45,275,864. The land granted and sold up to the end of 1889 was 15,842,312 acres. It, therefore, follows that at that period nearly four-fifths of the alienated land in the colony was subject to the provisions of this Statute.

6. Of the whole extent of land under the Statute, 1,350,283 acres, valued at about 31 millions sterling, were brought thereunder by application, and the remainder, amounting to 11,072,019 acres, valued at about 14¼ millions sterling, came under its provisions by virtue of its having been purchased from or granted by the Crown since the Act was passed.‡

7. Since the passing of the *Judicature Act* 1883 (47 Vict. No. 791), which, with certain exceptions, came into operation on the 1st July, 1884, the business in Equity has fallen off materially, as will be seen by the following figures :—

TRANSACTIONS IN EQUITY, 1883 TO 1889.

Number of—	1883.	1884.	1885.	1886.	1887.	1888.	1889.
Suits by bill	81	38	1	2	...	...	...
Petitions filed	15	8	5	1	...	...	...
Commissions issued	4	4	...	...	...	...	...
Decrees issued	38	37	14	3	4	...	3
Orders issued	132	106	71	51	22	24	27
Reports issued	20	20	10	9	7	6	6
Recognizances entered into	5	2	...	...	...	...	...
Rolls filed	40	29	2	1	...	...	...

8. In 1889, as compared with 1888, there was an increase of 28 per cent. in the number of probates and letters of administration

* Including 3,456 to Friendly Societies in 1888, and 2,292 in 1889.
† Not including copies of documents supplied.
‡ See paragraph 2 ante.

issued, and of 60 per cent. in the value of property bequeathed. The average value of each estate in 1888 was £3,087, and in 1889, £3,869. The following are the figures for those years:—

PROBATES AND LETTERS OF ADMINISTRATION, 1888 AND 1889.

Year.	Probates.		Letters of Administration.*		Both.	
	Number.	Property sworn under—	Number.	Property sworn under—	Number.	Property sworn under—
		£		£		£
1888 ...	1,400	6,006,984	876	1,020,000	2,276	7,026,984
1889 ...	1,752	10,077,568	1,156	1,174,528	2,908	11,252,096
Increase	352	4,070,584	280	154,528	632	4,225,112

9. During the twenty-five years ended with 1889, the value of the property respecting which probates and letters of administration were issued amounted to fully seventy-six millions sterling (£76,052,608). During the same period the total number of deaths in the colony was 321,614, so that the average value of property left by each person who died was £236. The average value in 1886 was £303; in 1887, £325; in 1888, £431; and in 1889, £580; or an average of £410 in the last four years.†

10. According to the present law,‡ duties are levied in Victoria on the net value of real and personal estates of deceased persons within the colony upon the following scale. It is now provided that all estates of the net value of under £1,000 shall be exempt from duty, and that estates of the net value of under £5,000 shall be exempt from the payment of duty upon £1,000 of such net value; § also that half duty only shall be paid by widows, children, or grandchildren:—

SCALE OF DUTIES ON ESTATES OF DECEASED PERSONS.

Estates of less than	£1,000 in value	...	Exempt.
„ £1,000 to	£5,000	...	|| 2 per cent.
„ £5,000 to	£10,000	...	3 „
„ £10,000 to	£20,000	...	4 „
„ £20,000 to	£30,000	...	5 „
„ £30,000 to	£40,000	...	6 „
„ £40,000 to	£60,000	...	7 „
„ £60,000 to	£80,000	...	8 „
„ £80,000 to	£100,000	...	9 „
„ £100,000 and upwards	„	...	10 „

89 Including those granted to the Curator of Intestate Estates.
† See paragraphs 911 to 916, Vol. I.
‡ The Acts relating to estates of deceased persons are 34 Vict. No. 388, 35 Vict. No. 403, 36 Vict. No. 427, 39 Vict. No. 523, 53 Vict. Nos. 1,035 and 1,053.
§ Exempted by the *Duties on Estates Amendment Act* 1889 (53 Vict. No. 1,053), which came into force on the 1st January, 1890.
|| The first £1,000 of the value of these estates exempted from duty.

Amount of
probate, etc.,
duties.

11. The amount realized by the State in 1889 from duties on estates of deceased persons was exceptionally high, being more than in 1888 by £172,164, more than in 1887 by £240,396, and more than three times as much as in any other previous year. The amounts fluctuate considerably from year to year, as will be observed by the following figures for the last nineteen years:—

DUTIES ON ESTATES OF DECEASED PERSONS, 1871 TO 1889.

		£			£
1871	...	17,069	1881	...	78,914
1872	...	37,643	1882	...	78,547
1873	...	39,026	1883	...	96,427
1874	...	67,998	1884	...	125,697
1875	...	50,057	1885	...	85,979
1876	...	33,638	1886	...	129,479
1877	...	82,201	1887	...	151,268
1878	...	45,470	1888	...	219,500
1879	...	47,607	1889	...	391,664
1880	...	48,697			

Intestate
estates.

12. The new intestate estates dealt with by the Curator in 1888 numbered 301; those in 1889 numbered 359.* The sums received by the Curator on these estates and on others remaining from former years were £53,031 in 1888 and £54,924 in 1889. In the nineteen years ended with 1889, the number of intestate estates dealt with was 4,548. The amount received by the Curator in respect to these estates during the nineteen years was £841,664.

Divorce and
matri-
monial.

13. Under the head of Divorce and Matrimonial Causes there were 22 decrees for dissolution of marriage in 1889 as against 28 in 1888. Three decrees for judicial separation were pronounced in 1889, and one such decree in 1888. The following was the business done in the two years:—

DIVORCE AND MATRIMONIAL, 1888 AND 1889.

			1888.	1889.
Petitions for dissolution of marriage	...	number	38	38
„ judicial separation	...	„	4	7
Decrees for dissolution of marriage	...	„	28	22
„ judicial separation	...	„	1	3
„ alimony	...	„	1	...

Divorces in
twenty-
eight years.

14. Since the Act 25 Vict. No. 125—which first conferred upon the Supreme Court of Victoria jurisdiction in matters matrimonial—came into operation in 1861, 308 decrees for dissolution of marriage and 71 decrees for judicial separation have been made.

* These numbers are included in those given in the table following paragraph 8 *ante*.

15. As the marriages in 1889 numbered 9,194, the petitions for dissolution of marriage were in the proportion of 1 to every 242 marriages, and the decrees for dissolution of marriage were in the proportion of 1 to every 418 marriages. In the 18 years ended with 1888, the marriages numbered 107,824, the petitions for dissolution of marriage numbered 417, and the decrees for dissolution of marriage numbered 210. Thus, during the 18 years referred to, there was 1 petition to dissolve marriage to every 257 marriages celebrated, and 1 marriage was dissolved to every 513 marriages celebrated.

Proportion
of divorces
to mar-
riages.

16. An Act to amend the law of divorce* was passed in Victoria in November, 1889, and received the Royal assent on the 13th May, 1890. Under this Statute it was provided that divorce might be granted to persons who had been domiciled in Victoria for two years or upwards on one or more of the following grounds:—

Divorce Act
1889,
principal
provisions.

(a) That the respondent has, without just cause or excuse, wilfully deserted the petitioner, and, without any such cause or excuse, left him or her continuously so deserted during three years and upwards.

(b) That the respondent has, during three years and upwards, been an habitual drunkard, and either habitually left his wife without the means of support, or habitually been guilty of cruelty towards her, or, being the petitioner's wife, has for a like period been an habitual drunkard and habitually neglected her domestic duties or rendered herself unfit to discharge them.

(c) That at the time of the presentation of the petition the respondent has been imprisoned for a period of not less than three years and is still in prison under a commuted sentence for a capital crime, or under sentence to penal servitude for seven years or upwards, or being a husband has within five years undergone frequent convictions, and been sentenced in the aggregate to imprisonment for three years or upwards and left his wife habitually without means of support.

(d) That within one year previously the respondent has been convicted of having attempted to murder the petitioner, or of having assaulted him or her with intent to inflict grievous bodily harm, or on the ground that the respondent has repeatedly during that period assaulted and cruelly beaten the petitioner.

(e) That the respondent being a husband has since the celebration of his marriage and the date of this Act been guilty of adultery in the conjugal residence, or coupled with circumstances or conduct of aggravation or of a repeated act of adultery.

17. The new *Divorce Act* further provides for simplifying and cheapening the modes of procedure in divorce cases; for the hearing and trying of divorce suits in chambers at the discretion of the Court; for forbidding the publication of evidence in divorce cases if, in the opinion of the Court, it would be prejudicial to public morals for it to be published; and for the abolition of applications or decrees for the restitution of conjugal rights.

Further
provisions
of new
Divorce
Act.

* *Divorce Act* 1889 (53 Vict. No. 1,056).

Divorces in
Victoria
and Eng-
land.

18. In proportion to the number of marriages, the petitions for dissolution of marriage are about twice as numerous in Victoria as in England and Wales, the annual average per thousand marriages over a series of years being 3·79 in the former and 1·88 in the latter. The decrees for the dissolution of marriage are also, in proportion to the number of marriages, much more numerous in Victoria, the number per 10,000 being 18·21 as against 9·5 in England and Wales. The proportion of decrees to petitions is, however, somewhat higher in England and Wales than in Victoria, being 50 per cent. in the former, but not quite 48 per cent. in the latter.

Divorces in
France and
the United
States.

19. The divorce law of France dates from the latter part of 1884. In the three years ended with 1887 there were 10,863 divorces, the marriages in the same three years being 844,434. There was thus 1 divorce to about 77 marriages. In some of the American States the proportions are much higher. It is stated that in Rhode Island 1 divorce takes place to every 12 marriages; in Massachusetts 1 to every 21 marriages; and in Ohio 1 to every 26 marriages; whilst in the city of San Francisco, during the 21 years ended with 1887 there was 1 divorce to every 10 marriages, and in the last eight years of that period there was 1 to every 6 marriages.

Fees in
Equity, etc.

20. The fees in Equity amounted in the aggregate to £136 in 1888, and to £281 in 1889; those on Probates amounted to £1,901 in 1888, and to £2,353 in 1889; those in Divorce amounted to £84 in 1888, and to £94 in 1889. The total amount of these fees was thus £2,121 in 1888, and £2,728 in 1889.

Collections
in Lunacy.

21. The moneys collected and appropriated in the department of the Master-in-Lunacy, on behalf of patients (including "percentage" and fees) decreased from £31,363 in 1888, to £28,094 in 1889. It may be mentioned that the total expenditure in 1888-9 on Hospitals for the Insane was £106,276, so that, after allowing for moneys collected from private sources, the net cost to the State on account of lunatic patients in that year was about £78,182.

Insolven-
cies.

22. In the twenty-two years ended with 1889, 15,355 insolvencies took place in Victoria, with liabilities amounting to over 15 millions sterling, as against which assets were declared amounting to over 10 millions sterling. The following is a statement of the number of insolvencies in each year, also of the declared liabilities and assets of the estates, and of the amounts by which the latter were exceeded by the former:—

INSOLVENCIES, 1868 TO 1889.

Year.	Number of Insolvencies.	As shown by the Insolvent's Schedules.		
		Liabilities.	Assets.	Deficiency.*
		£	£	£
1868	863	617,764	167,226	450,538
1869	818	653,614	194,251	459,363
1870	996	479,491	150,170	329,321
1871	631	444,117	217,841	226,276
1872	804	696,868	222,770	474,098
1873	672	330,337	188,351	141,986
1874	776	543,157	269,130	274,027
1875	773	641,390	389,330	252,060
1876	712	551,814	280,962	270,852
1877	715	462,651	272,720	189,931
1878	781	677,364	408,677	268,687
1879	1,007	1,655,485	1,204,051	451,434
1880	768	526,130	298,384	227,746
1881	620	303,892	161,386	142,506
1882	500	536,194	311,186	225,008
1883	603	782,116	423,528	358,588
1884	495	479,700	264,686	215,014
1885	467	591,957	282,502	309,455
1886	559	830,176	570,867	259,309
1887	619	563,894	1,009,385	+ 445,491
1888	479	347,658	185,871	161,787
1889	697	2,389,731	2,627,182	+ 237,451
Total... ..	15,355	15,105,500	10,100,456	5,005,044

23. According to the table, insolvencies in 1889 were more numerous by 218 than in 1888, and were also more numerous than in any other year since 1880. The assets and liabilities in 1889, as shown by the insolvents' schedules, were largely in excess of those in any other year.

Insolvencies
1889 and
previous
years.

24. In 1889 and 1887 it will be noticed that the assets apparently exceeded the liabilities. This resulted in the year under review from the high, and doubtless in many instances fictitious, value placed upon land, which formed the principal portion of the assets of a number of the insolvents, but which at the time of their insolvency was almost unsaleable. The surplus shown by the returns of 1887 resulted from the fact that the declared assets of that year were largely made up of a debt of £570,597 set down as due by the Crown to the estate of Mr. W. R. Merry. Had this not been included, the declared assets, as compared with the declared liabilities, would have shown an apparent deficiency of £125,106.

Apparent
surplus on
two occa-
sions.

* The plus sign (+) indicates a surplus.

Occupations
of insol-
vents.

25. The following table shows the occupations or callings of the persons who became insolvent in Victoria during the last three years :—

OCCUPATIONS OF INSOLVENTS, 1887, 1888 AND 1889.

Occupations.	1887.	1888.	1889.
GOVERNMENT, PROFESSIONS, ARTS, EDUCATION, LITERATURE—			
Artist ... ..	...	1	...
Chemist	2	1	...
Civil engineer ... ..	...	...	1
Civil servant	2	1	4
Clerk of works ... ..	...	...	1
Comedian, tragedian	1	2	1
Dentist	1	...	...
Draughtsman ... ..	...	...	2
Equestrian ... ..	...	...	1
Herbalist ... ..	...	...	2
Journalist	2	1	2
Medical man ... ..	...	...	1
Musician, music teacher ... ..	...	2	1
News agent	1	...	...
Photographer	1	1	2
Phrenologist ... ..	...	...	1
Police constable ... ..	...	...	1
Printer	1	1	4
Reporter ... ..	...	...	1
Schoolmaster, teacher	1	3	1
Solicitor	1	...	...
Theatrical manager	1	2	1
BOARD AND LODGING, DOMESTIC DUTIES, ATTEND- ANCE—			
Billiard-room keeper	1	...	...
Boarding-house keeper	11	12	14
Caterer	1	...	...
Charwoman ... ..	...	...	1
Coffee-stall keeper	1	...	...
Hotel-broker	2	...	...
Hotel-keeper	21	17	40
Married woman	5	1	8
Odd Job Help Company	1	...	...
Public entertainer	1	...	...
Restaurant-keeper	2	2	3
Servants' registry office keeper	1	...	...
Spinster	1	...	...
Widow	6	1	3
COMMERCIAL PURSUITS—			
Accountant	1	4	6
Agent, commission agent	16	10	27
Auctioneer	1	...	9
Bellman ... ..	...	1	...
Bookkeeper, clerk	11	3	13

OCCUPATIONS OF INSOLVENTS, 1887, 1888 AND 1889—*continued*.

Occupations.	1887.	1888.	1889.
COMMERCIAL PURSUITS—<i>continued</i>—			
Commercial traveller, canvasser ...	5	2	4
Dealer (undefined) ...	10	3	10
Debt collector ...	1	...	...
Financier ...	1	...	...
Hawker ...	4	1	...
Mercantile, stock and share broker ...	...	...	5
Merchant ...	3	4	...
Salesman ...	2	...	4
Sewing machine importer ...	1	...	...
Storekeeper (undefined) ...	12	13	15
Warehouseman ...	1	...	1
CARRIERS—			
Bullock driver ...	1	1	...
Cabman ...	3	4	2
Carrier, carter ...	10	12	14
Mail contractor ...	...	...	1
Mariner ...	1	...	1
Omnibus driver ...	1	1	...
Railway employé ...	1	...	1
Stationmaster ...	1	...	...
Stoker ...	...	2	...
AGRICULTURAL PURSUITS AND LAND—			
Farmer ...	53	62	58
Freeholder ...	1	...	1
Gardener ...	5	2	3
Nurseryman ...	...	1	...
Seedsman ...	...	...	1
Surveyor ...	1	1	...
Vinegrower ...	...	1	...
PASTORAL PURSUITS AND ANIMALS—			
Boundary rider ...	1	...	...
Cattle dealer ...	1	2	5
Drover... ...	...	...	1
Fisherman ...	...	1	...
Grazier ...	14	6	12
Groom... ...	1	...	1
Horse proprietor, dealer, trainer, breaker ...	2	2	4
Livery-stable keeper ...	1	1	3
Overseer sheep station ...	...	...	1
Rabbit trapper ...	1	...	1
Stock and station agent ...	1	1	2
ARTIZANS, MECHANICS, LABOURERS—			
Bellows-maker ...	...	1	...
Bricklayer ...	4	3	2
Builder, contractor, architect ...	55	45	73
Carpenter ...	14	12	10
Chairmaker ...	...	...	1
Coachbuilder ...	8	1	7

OCCUPATIONS OF INSOLVENTS, 1887, 1888 AND 1889—*continued*.

Occupations.	1887.	1888.	1889.
ARTIZANS, MECHANICS, LABOURERS—<i>continued</i>—			
Cooper...	1	1	...
Dyer ...	1	...	...
Engraver ...	1	1	1
Fancy-goods maker ...	1	...	...
Fire-kindler maker ...	1	...	...
Furniture maker, dealer, warehouseman ...	3	1	3
House decorator...	...	...	1
Labourer (undefined) ...	75	57	52
Manufacturer (undefined) ...	...	1	3
Mason ...	1	1	4
Monumental mason ...	1	...	...
Organ-builder ...	...	...	1
Painter ...	6	3	11
Pile-driver ...	...	...	1
Plasterer ...	4	2	4
Plumber ...	7	3	4
Saddler ...	4	4	9
Shipwright ...	1	...	...
Sign writer ...	...	...	1
Slater ...	...	1	1
Turner...	1	...	...
Upholsterer ...	1	...	4
Venetian blind maker ...	1	...	...
Watchmaker, jeweller ...	6	6	9
Wheelwright ...	1	1	...
Works overseer ...	...	...	1
DRESS—			
Boot—Shoe-maker, dealer ...	21	14	14
Draper—Assistant to ditto ...	5	3	5
Dressmaker ...	2	...	...
Hairdresser ...	3	7	5
Hatter ...	...	1	...
Laundress ...	1	...	1
Laundry proprietor ...	...	...	1
Seamstress ...	...	1	...
Shirtmaker ...	...	1	...
Tailor ...	6	3	3
Underclothing manufacturer ...	...	...	1
FIBROUS MATERIALS—			
Flock manufacturer ...	1	...	...
Tent-maker ...	...	1	...
ANIMAL FOOD—			
Butcher ...	18	13	19
Dairyman ...	...	...	1
Fishmonger ...	2	...	...
Ham and beef-shop keeper ...	1	...	...
Milk-seller ...	1	...	...
Poulterer ...	...	1	...

OCCUPATIONS OF INSOLVENTS, 1887, 1888 AND 1889—continued.

Occupations.	1887.	1888.	1889.
VEGETABLE FOOD—			
Baker ...	5	4	10
Confectioner ...	1	1	3
Fruiterer ...	6	8	5
Greengrocer ...	...	...	4
Miller ...	1	1	...
DRINKS AND STIMULANTS—			
Aërated water, cordial manufacturer ...	4	...	1
Brewer ...	2	...	...
Cellarman ...	...	...	1
Grocer—Assistant to ditto ...	12	7	10
Tea merchant ...	...	...	3
Tea packer ...	...	1	...
Tobacconist ...	3	1	...
Wine-hall keeper ...	...	...	1
Wine-seller ...	...	...	1
ANIMAL MATTERS—			
Currier ...	1	...	...
Hide merchant ...	...	...	1
Leather merchant ...	1	...	...
Tanner ...	1	...	2
Wool and skin merchant ...	...	...	1
Wool presser ...	...	1	...
VEGETABLE MATTERS—			
Chaff cutter ...	1	...	1
French-polisher ...	...	1	...
Hay, corn and produce dealer ...	6	3	6
Saw-mill owner, sawyer ...	7	3	6
Stationer—Assistant to ditto ...	2	...	...
Timber merchant ...	2	...	1
Wood, coal merchant ...	3	3	2
Wood splitter ...	...	5	3
MINING, ENGAGED IN—			
Miner ...	22	20	23
Mining explorer ...	...	...	1
Mining manager ...	1	1	1
Mining speculator ...	2	1	1
Quartz-crusher ...	...	1	...
Stamper-feeder ...	1	...	...
COAL, STONE, CLAY, ETC.—			
Brickmaker ...	2	5	2
Charcoal burner ...	...	...	1
Chimney-sweeper ...	...	1	...
Nightman ...	1	...	...
Quarryman ...	1	...	...
Tile-maker ...	1	...	...

OCCUPATIONS OF INSOLVENTS, 1887, 1888 AND 1889—continued.

Occupations.	1887.	1888.	1889.
MINERALS AND METALS—			
Blacksmith	5	10	10
Boilermaker	1	...	...
Engine-driver (undefined)...	3	3	1
Engineer	1	4	4
Gold-broker ... ..	...	...	1
Ironfounder, dresser	1	1	4
Ironmonger	2	...	2
Machinery merchant	1	...	...
Pyrites works, owner of	2	...	...
Tinsmith ... ..	...	...	3
INDEFINITE AND NON-PRODUCTIVE—			
Gentleman	3	3	12
Gentlewoman	1	...	...
Manager (undefined) ... ..	...	...	1
Out of business	14	12	9
Overseer (undefined) ... ..	...	...	1
Speculator (undefined) ... ..	...	...	3
Total	619	479	697

26. It will be noticed that the occupations which contributed most largely to the list of insolvents in the three years were those of labourers, numbering 184; farmers or selectors, 173; builders, contractors, and architects, 173; hotelkeepers, 78; miners, 65; commission agents, etc., 53; butchers, 50; boot and shoe makers, 49; storekeepers, 40; boarding-house keepers, 37; and carpenters and carriers, etc., 36 each.

27. In the last seven years insolvencies have been much more numerous in New South Wales than in Victoria; and in 1886 and 1887 they were even more numerous than in the worst year (1879) named in the table following paragraph 22 ante. In 1882—which, however, was an exceptional one—the liabilities, as shown by the insolvents' schedules, were three times as high in Victoria as in New South Wales, but in all but one of the previous six years the liabilities similarly shown were much higher in New South Wales than in Victoria. The following are the figures for New South Wales:—

occupations
with most
insol-
vencies.

insolvencies
New
South
Wales.

INSOLVENCIES IN NEW SOUTH WALES, 1883 TO 1889.

Year.	Number of Insolvencies.	As shown by the Insolvents' Schedules.		
		Liabilities.	Assets.	Deficiency.
		£	£	£
1883	785	444,594	245,836	198,758
1884	918	836,165	580,195	255,970
1885	929	773,212	589,359	183,853
1886	1,221	989,262	733,127	256,135
1887	1,351	1,081,726	788,941	292,785
1888	851	659,307	459,677	199,630
1889	1,101	794,603	396,723	397,880

28. In 1888, as is shown in the following table, the insolvencies in all the Australasian colonies numbered 2,638, and the total deficiency, according to the insolvents' schedules, amounted to £744,000. It will be observed that in that year the insolvencies in New South Wales exceeded those in Victoria by 372, and the deficiency in the former exceeded that in the latter by £38,000:—

Insolvencies
in Australasian
colonies.

INSOLVENCIES IN AUSTRALASIAN COLONIES, 1888.

Colony.	Number of Insolvencies	As shown by the Insolvents Schedules.		
		Liabilities.	Assets.	Deficiency.
		£	£	£
Victoria	479	347,658	185,871	161,787
New South Wales	851	659,307	459,677	199,630
Queensland	249	258,884	122,464	136,420
South Australia	98	80,092	58,011	22,081
Western Australia	27	...	...	...
Total Australia	1,704	1,345,941	826,023	519,918
Tasmania	90	44,887	13,641	31,246
New Zealand	844	445,061	252,322	192,739
Total Australasia	2,638	1,835,889	1,091,986	743,903

29. The figures in the following table, which represent the number of failures* in the United Kingdom in the ten years ended with 1888, together with the liabilities and assets of the insolvents, and the proportion of the latter to the former have been taken from the *Bankers' Magazine* for the month of September, 1889†:—

Failures in
the United
Kingdom

* Including besides bankruptcies (proper), liquidations, and compositions.

† Page 1,137, Waterlow & Sons, London.

FAILURES* IN THE UNITED KINGDOM, 1879 TO 1888.

Year.	Number of Cases.	Total Amounts of—		Percentage— Assets to Liabilities.
		Liabilities.	Assets.	
		£	£	
1879	13,132	29,678,193	10,193,617	34·3
1880	10,298	16,188,636	4,701,504	29·0
1881	9,727	17,679,345	4,890,898	27·6
1882	9,041	19,108,060	5,492,919	28·7
1883	8,555	21,268,151	5,987,544	28·1
1884†	4,170	13,989,995	4,015,998	28·7
1885	4,333	9,037,789	3,093,151	34·2
1886	4,816	7,913,871	2,855,160	36·1
1887	4,839	8,935,825	2,667,162	29·8
1888	4,826	7,110,948	2,242,747	31·5

30. It will be noticed that by far the largest number of failures occurred in 1879, but since then a considerable falling-off has taken place in each year, but most especially in the last five years, when the numbers were fewer by about 50 per cent. than that in any of the five preceding years. It will be noticed that the falling-off mainly dates from the year in which the bankruptcy law was changed (1884), and it is possible there may be some connexion between the two events.

31. Important duties in connexion with the registration of deeds and other documents, public companies, bills and contracts for sale; births, deaths, and marriages; and patents, copyrights, and trade-marks, are performed by the Registrar-General. In 1889, as compared with 1888, there was a considerable decrease in the number of transactions and in the fees received under most of these heads, the chief decrease being under the *Companies Statute*. The following are the returns for the two years:—

REGISTRAR-GENERAL'S TRANSACTIONS AND FEES, 1888 AND 1889.

Nature of Transaction.	Transactions.		Fees.	
	1888.	1889.	1888.	1889.
			£	£
Registry	21,044	19,828	6,836	5,595
<i>Companies Statute</i>	36,149	10,318	10,096	2,856
Bills and contracts of sale	6,392	7,318	319	366
Births, deaths, and marriages certificates	4,297	5,326	1,065	1,296
Patents	883	1,972	1,891	2,203
Copyrights	617	683	88	90
Trade-marks	506	880	413	523
Searches in connexion with the above	26,252	24,361	1,818	1,617
Miscellaneous fees ... ..	...	3	56	40
Total	96,140	70,689	22,582	14,586

* See footnote (*) on page 13 ante.
† In 1884 the *Bankruptcy Act* of 1869 was repealed, and the Act of 1883 has since been in force.

32. The number of offences reported to the police or magistrates during 1888 and 1889 is given in the following table; those offences being distinguished:—1. In respect to which persons were brought before magistrates on summons, but were never in custody. 2. In respect to which arrests were made by the police. 3. In respect to which no person had been arrested or brought before magistrates up to the end of the month of March of the year following that in which the offence was reported.* An increase will be observed under all the heads, resulting in a total increase during the year of 4,531 offences, or about 7 per cent.:—

OFFENCES REPORTED, 1888 AND 1889.

Offences in respect to which—	1888.	1889.	Increase.
1. Persons were brought before magistrates on summons	22,967	26,678	3,711
2. „ „ apprehended by the police	37,309	37,321	12
3. The offenders were still at large† ...	6,474	7,282	808
Total ...	66,750	71,281	4,531

33. Forty-one per cent. of the offences dealt with consist of those in respect to which persons are brought before magistrates on summons but are not taken into custody. These must obviously be of a lighter character than those for which arrests are made, and therefore do not demand lengthened consideration. The offences in this category classed as against the person are principally assault cases resulting from petty quarrels; those against property are chiefly cases of wilful damage to or illegal detention of property; and the remainder consist for the most part of breaches of the *Education Act*, the clause in the *Public Works Statute* relating to railways and water supply, the *Local Government Act* or municipal by-laws, the *Masters and Servants* or *Wines and Spirits Statutes*, etc. Comparing 1889 with 1888, an increase is shown under all the heads except offences against property, under which there was a slight decrease. The following are the figures for the two years:—

* It does not follow that in these instances the offender escaped altogether. He may have been arrested after the date at which the returns were made up, or on other charges, even prior to that period.

† It should be pointed out that the offences for which arrests have and have not been made are not strictly comparable. They are reckoned in the former case according to the individual arrests effected, in the latter according to the offences reported, although in the perpetration of many of these more than one person may have been concerned.

OFFENCES DEALT WITH BY SUMMONS, 1888 AND 1889.*

	1888.	1889.	Increase.
Offences against the person	1,216	1,485	269
" " property	463	431	- 32†
Minor offences	21,288	24,762	3,474
Total	22,967	26,678	3,711‡
Cases dismissed by magistrates	5,220	6,815	1,595
Offender summarily convicted or held to bail...	17,747	19,863	2,116

34. Very full details are given of the offences which gave occasion for the apprehensions made by the police ; but, in making up the returns, a person arrested more than once during the year, or arrested at one time on several charges, is counted as a separate individual in respect to each arrest or charge, and this, except where the contrary is stated, must be borne in mind by those consulting the following paragraphs and tables.§

35. The persons|| who were taken in charge by the Victorian police in 1889 numbered 37,321, as against 37,309 in 1888; the figures for the two years being thus almost identical.

36. The arrests in 1889, and in the first year of each of the two previous quinquennia, were as follow :—

PERSONS¶ ARRESTED, 1879, 1884 AND 1889.**

Number of Persons.	1879.	1884.	1889.
Taken into custody	24,625	27,503	37,321
Discharged by magistrates	7,227	8,900	13,000
Summarily convicted or held to bail	16,770	17,908	23,298
Committed for trial	628	695	1,023

* This table does not embrace cases in which the offender was sentenced to imprisonment or was committed for trial. Although he might in the first instance have appeared before the magistrates on summons, such disposal would place him in custody of the police, and he would therefore be included in subsequent tables.

† The minus (–) sign indicates decrease.

‡ Net figures.

§ For 1884, a table was compiled showing the number of charges on which each individual was arrested. See paragraph 62, *et seq. post.*

|| See preceding paragraph.

¶ See paragraph 34 *ante.*

** A statement showing, during a series of years, the numbers taken into custody, the numbers committed for trial, and the number convicted after commitment, will be found in the Statistical Summary of Victoria (first folding sheet) at the beginning of this volume.

37. At the last period, it will be observed, arrests were much more numerous than at either of the two previous periods. This is also the case, if the numbers of the population be taken into account. The estimated average population in 1879 was 834,030; in 1884, 933,894; and in 1889, 1,104,300. The arrests were, therefore, in the proportion of 1 to every 34 persons living at the first and second periods, and 1 to every 30 persons living at the third period.

Arrests :
proportion
to popula-
tion.

38. The persons summarily convicted, held to bail, or committed for trial, were, to the whole number arrested, in the proportion of 71 per cent. at the first period, and of 68 per cent. at the second period, but of only 65 per cent. at the third period.

Proportion
of times
charge was
sustained.

39. There was a slight increase in the prevalence of serious offences at the last as compared with the two previous periods; this may be ascertained by comparing the commitments for trial with the total arrests at the three periods. These were in the proportion of 1 to every 39 arrests at the first period, of 1 to every 40 arrests at the middle period, and of 1 to every 37 arrests at the third period.

Serious
offences.

40. The sexes of the persons arrested, and of such of them as were discharged by magistrates, summarily dealt with, or sent for trial, were as follow at the same three periods:—

Males and
females
arrested.

MALES AND FEMALES* ARRESTED, 1879, 1884 AND 1889.

—	1879.		1884.		1889.	
	Males.	Females.	Males.	Females.	Males.	Females.
Taken into custody	19,162	5,463	21,908	5,595	30,725	6,596
Discharged by magistrates ...	5,521	1,706	7,024	1,876	10,680	2,320
Summarily convicted or held to bail	13,061	3,709	14,284	3,624	19,108	4,190
Committed for trial	580	48	600	95	937	86

41. The males and females summarily convicted, held to bail, or committed for trial, were, to the whole numbers of the same sexes arrested, in the proportions respectively of 71 per cent. and 70 per cent. in 1879; of 68 per cent. and 66 per cent. in 1884; and of 69 per cent. and 65 per cent. in 1889.

Cases in
which
charge was
sustained.

42. The next table shows the relative proportions of males and females arrested, and of those of them who were discharged, summarily dealt with, or committed for trial at the same three periods:—

Relative
proportions
of male and
female
criminals.

* See paragraph 34 ante.

MALES AND FEMALES.—RELATIVE PROPORTIONS ARRESTED,
1879, 1884 AND 1889.

	Number of Females to 100 Males.		
	1879.	1884.	1889.
Taken into custody	28·51	25·54	21·47
Discharged by magistrates	30·90	26·70	21·72
Summarily convicted or held to bail... ..	28·40	25·37	21·93
Committed for trial	8·28	15·83	9·18

43. It will be observed that, relatively to the males taken into custody or summarily convicted, the proportion of females similarly dealt with was at the last period much lower than at either of the former periods; but the proportion of females committed for trial at the last period was somewhat larger than at the first period, but was not nearly so large as at the middle period. At all the periods, the proportion of female to male criminals was much lower than the proportion that females bore to males in the total population; at the first and second periods the females in the colony were in the proportion of about 90, and at the third period of about 88, to every 100 males.

44. A condensed statement of the offences for which arrests were made in the same three years, together with the numbers arrested for each offence, will be found in the following table :—

CAUSES OF ARREST, 1879, 1884 AND 1889.

Offence.	1879.	1884.	1889.
Murder and attempt at murder	15	23	34
Manslaughter	14	16	8
Shooting at or wounding with intent to do bodily harm	46	71	70
Assault... ..	1,682	1,809	2,141
Rape and indecent assault on females	60	70	74
Unnatural offence, and assault with intent to commit	8	17	10
Minor offences against the person	140	93	134
Robbery with violence, burglary, etc.	203	205	409
Horse, sheep, and cattle stealing, etc.	154	130	163
Other offences against property	3,508	3,090	4,097
Forgery and offences against the currency	100	74	141
Drunkenness	10,861	12,938	18,068
Other offences against good order	6,041	7,330	10,139
Offences relating to carrying out laws	420	228	216
Smuggling and other offences against the revenue	129	80	167
Offences against public welfare	1,244	1,329	1,450
Total	24,625	27,503	37,321

45. The causes in respect to which more arrests were made at the last period than at either of the former ones were murder and attempts to murder, assaults, rape and indecent assaults on females, robbery with violence or burglary, horse, sheep, and cattle stealing, etc., miscellaneous offences against property, forgery, drunkenness, and other offences against good order; smuggling and other offences against the revenue, and offences against public welfare. But, for manslaughter, and offences relating to carrying out laws, there were fewer arrests at the last than at either of the former periods; and for minor offences against the person than at the first period. The most marked increases in 1889, as compared with previous periods, have occurred in the arrests for robbery and burglary, murder, miscellaneous offences against property, and drunkenness and other offences against good order—most especially the first and last-named offences. Offences at last period.

46. The number of arrests for drunkenness affords ample evidence that the efforts of those who are seeking to suppress or mitigate the evil are not uncalled for. In many cases, no doubt, the same individual was arrested over and over again; but, supposing each arrest had represented a distinct individual, there would have been taken into custody for drunkenness :— Drunkenness.

In 1874, one person in every 71 living in Victoria.

„ 1875,	„	„	68	„	„
„ 1876,	„	„	69	„	„
„ 1877,	„	„	65	„	„
„ 1878,	„	„	69	„	„
„ 1879,	„	„	77	„	„
„ 1880,	„	„	85	„	„
„ 1881,	„	„	79	„	„
„ 1882,	„	„	76	„	„
„ 1883,	„	„	74	„	„
„ 1884,	„	„	73	„	„
„ 1885,	„	„	72	„	„
„ 1886,	„	„	68	„	„
„ 1887,	„	„	65	„	„
„ 1888,	„	„	57	„	„
„ 1889,	„	„	61	„	„

47. It will be observed that in 1879, 1880, and 1881, embracing the year in which the colony was in a depressed condition, as already stated, and the two following years, drunkenness was less rife than at any preceding or subsequent period. Since 1880, however, as the colony became more prosperous, arrests for drunkenness, in proportion to the population, have been steadily increasing, and on this basis were a third more numerous in 1888 than in 1880; but in the following year, 1889, which was one in which there was a certain amount of depression, they again decreased, but were still higher than in any of the years prior to 1888. Increase of drunkenness.

Minor
offences.

48. Drunkenness, "other offences against property," "other offences against good order," and "offences against public welfare," although they may, and probably do—especially the first named—lead to more serious offences, may be considered as being, in themselves, comparatively speaking, minor offences, hardly amounting to crimes. Arrests for these numbered 21,654 in 1879, 24,687 in 1884, and 33,754 in 1889; and to the whole number of arrests were in the proportion of 88 per cent. at the first period, and 90 per cent. at the two later periods. Thus only 12 per cent. of the arrests at the first period, and 10 per cent. at the middle and last periods, were for crimes in the strict sense of the word.

Smuggling
and other
offences
against
revenue.

49. It is worthy of remark that, notwithstanding the inducement which high import duties might be supposed to offer to smugglers, offences against the revenue have never led to many arrests in Victoria. Only 167 persons were taken into custody for such offences in 1889, which, however, is larger than the number in 1884 or in 1879.

Age and
education
of arrested
persons.

50. The ages of those taken into custody in 1889, and the degree of instruction possessed by them, are shown in the following table:—

DEGREE OF INSTRUCTION AND AGE OF PERSONS* ARRESTED, 1889.

Ages.				Superior Instruction.	Read and Write well.	Read only or Read and Write imperfectly.	Unable to Read.	Total.
Under 10 years	...	...	...	...	3	118	391	512
10 „ 15 „	...	...	...	...	35	577	98	710
15 „ 20 „	...	...	...	1	198	1,898	112	2,209
20 „ 25 „	...	...	...	6	604	4,996	253	5,859
25 „ 30 „	...	...	...	20	693	5,151	292	6,156
30 „ 40 „	...	...	...	54	926	6,717	516	8,213
40 „ 50 „	...	...	...	33	590	5,037	598	6,258
50 „ 60 „	...	...	...	20	309	3,533	520	4,382
60 years and upwards	...	...	...	11	187	2,369	446	3,013
Unspecified	...	...	...	...	...	7	2	9
Total	...	...	...	145	3,545	30,403	3,228	37,321

Education
of children
arrested.

51. The returns of those under 15 years of age taken in charge by the police embrace neglected and deserted children as well as criminals. The whole number in 1889, according to the table, was 1,222, and of these not one was possessed of superior instruction; only 38, or one in 32, could read and write well; and 489, or more than a third, were unable to read. The number of children under 15 committed for trial was 3; all were boys, only one of whom could read and write well, whilst the others could read and write more or less imperfectly.

* See paragraph 34 ante.

52. Those over 15 years arrested numbered 36,099, and of these, 3,652, or more than a tenth (including those possessed of superior instruction), could read and write well, whilst 2,739, or a thirteenth, could not read. Those over 15 years of age committed for trial numbered 1,020, of whom 250, or a little under a fourth, could read and write well, or were possessed of superior instruction, and 57, or one in 18, were unable to read. According to these figures the persons charged with offences serious enough to call for their commitment for trial were somewhat better educated than the other arrested persons. Those arrested, whether committed for trial or otherwise dealt with, were on the average not nearly so well educated as the general population, for at the last census all over 15 years of age, except about a tenth, were returned as being able to read and write, and only an eighteenth were returned as entirely illiterate.

Education
of adults.

53. The following table shows the birthplaces and religions of the persons taken into custody and of those committed for trial in 1889, also the ratio of those of each country and sect to the estimated numbers of the same country and sect in the population :—

Birthplaces
and reli-
gions of
criminals

BIRTHPLACES AND RELIGIONS OF PERSONS* ARRESTED AND COMMITTED FOR TRIAL, 1889.

Birthplace and Religion.	Persons Arrested.		Persons Committed for Trial.	
	Number.	Proportion per 1,000 living.†	Number.	Proportion per 1,000 living.†
BIRTHPLACE.				
Victoria	11,401	17·53	433	·67
Other Australasian colonies ‡	2,613	50·25	115	2·21
Australian Aborigines ...	36	...	...	...
England and Wales ...	8,447	46·04	225	1·23
Scotland	3,190	53·49	36	·60
Ireland	9,047	84·94	104	·98
China	170	14·56	12	1·03
Other countries	2,417	59·55	98	2·41
Total	37,321	33·80	1,023	·93
RELIGION.				
Protestants	20,679	26·12	581	·74
Roman Catholics	15,578	59·82	391	1·50
Jews	138	24·90	21	3·79
Buddhists, Confucians, etc....	154	14·38	10	·93
Others	772	21·55	20	·56

* See paragraph 34 ante.
† The estimated population of each birthplace and religion with which these calculations have been made will be found in the tables following paragraphs 120 and 131 of Volume I.
‡ Exclusive of aborigines.

Relative
numbers of
each birth-
place.

54. Until the last two years it had always been found that fewer Victorians have been arrested, and fewer committed for trial, in proportion to their numbers in the population, than persons of any other nationality. This, without doubt, has been mainly due to the fact of a very large proportion of children being embraced within their numbers; with the increasing ages of the Victorian-born population, however, the number of criminals is becoming larger, and in 1888, for the first time, one of the other nationalities, viz., the Chinese, showed a smaller proportion both of arrests, and commitments; whilst in 1889, the Chinese also showed a smaller proportion of arrests, but a larger proportion of commitments, and the Scotch a slightly smaller proportion of commitments. In 1879 only 5,450, and in 1884 no more than 7,386, persons of Victorian birth were taken into custody, whereas in the year under review the number had risen to 11,401; moreover, the rate per 1,000 of the Victorian-born population rose from 11 in 1879 to $13\frac{1}{2}$ in 1884, and to $17\frac{1}{2}$ in 1889. Of places outside Victoria, the country which supplies the largest number of arrested persons is Ireland. In 1889, those arrested of this nationality exceeded the English and Welsh arrested by 600, and this although natives of England and Wales in the population out-numbered the Irish by about 77,000, or over 70 per cent. The offences with which the Irish were charged, however, could not have been of so serious a nature as those in respect to which the English and Welsh were arrested, as the number of the latter committed for trial was considerably larger, in proportion to their numbers in the population, than that of the former; the proportion of Scotch arrested was also above that of the English, but that of the Scotch committed for trial was much lower in 1889 than that of any other nationality. The proportion of Chinese arrested was below that of persons of any other nationality, but the proportion committed for trial was higher than in the case of the Victorians, Scotch, or Irish. In proportion to their numbers, arrests of natives of other Australasian colonies were much more numerous than those of Victoria, and their commitments for trial were much more numerous than those of any other specified nationality.

Relative
numbers of
each
religion.

55. In proportion to their numbers in the community, the Roman Catholics supplied much more than twice as many arrested persons as the Protestants or the Jews, and over four times as many as the Buddhists, Confucians, etc. In view of a similar proportion, the Roman Catholics committed for trial were twice as numerous as the Protestants, but two and a-half times less numerous than the Jews.

A statement of the offences which formed the grounds for arrest will be found in the next table but one.

56. It is generally assumed that nearly every person sent to trial is guilty of the offence for which he was committed, and, although he may subsequently be acquitted, the probability is that a conviction would have been obtained if sufficient evidence had been available. On the other hand, it may be maintained that many of those discharged had been unjustly accused, and should not be classed as criminals. If the latter assumption be correct, it would appear by the following table—which shows the number of the various religions tried and the number convicted, together with the percentage of convictions obtained for different periods—that whilst in the year under notice a larger proportion of Roman Catholics were unjustly committed than of Protestants, in the previous year the proportions were about equal; also that, over a series of years, a smaller proportion of Jews, but a larger proportion of Pagans, Buddhists, Confucians, etc., are unjustly accused than in the case of either Protestants or Roman Catholics. It should, however, be pointed out that the number of Jews and Pagans committed for trial was so small that any proportions based thereon are but of little value:—

Religions of persons convicted and sentenced.

RELIGIONS OF PERSONS* TRIED† AND CONVICTED, 1889.

Religions.	Number tried in 1889.†	Convictions in 1889.		Percentage in Year 1838.	Seven Years, 1881-1887.
		Total Number.	Percentage of Number Tried.		
Protestants ...	537	391	72·81	70·3	63·7
Roman Catholics	358	250	69·83	70·8	62·7
Jews ...	21	17	80·95	71·4	73·1
Buddhists, Confucians, etc.	10	9	90·00	71·4	57·9
Others ...	19	13	68·42	82·3	73·1
Total ...	945	680	71·96	70·8	63·6

57. The religions of the persons* taken into custody in 1889 are given in the following table in connexion with their offences:—

Causes of arrest, and religions.

* See paragraph 34 ante.

† Exclusive of those not prosecuted, who numbered 95 in 1889. The number “tried,” moreover, differs from the number “committed for trial,” since the former is inclusive of those awaiting trial at the beginning, but exclusive of those awaiting trial at the end, of the year.

CAUSES OF ARREST, AND RELIGIONS, 1889.

Offence.	Religions.					
	Protestants.	Roman Catholics.	Jews.	Buddhists, Confucians, etc.	Others.	Total.
Murder and attempt at murder	19	11	...	1	3	34
Manslaughter	5	2	...	1	...	8
Shooting at or wounding with intent to do bodily harm	36	29	1	1	3	70
Assault	1,081	978	5	17	60	2,141
Rape and indecent assault on females	40	32	1	...	1	74
Unnatural offence, and assault with intent to commit	6	4	...	...	...	10
Other offences against the person	85	45	2	...	2	134
Robbery with violence, burglary, etc.	217	178	8	5	1	409
Horse, sheep, and cattle stealing, etc.	107	54	...	...	2	163
Other offences against property	2,457	1,478	49	36	77	4,097
Forgery and offences against the currency	82	54	4	...	1	141
Drunkenness	9,881	7,850	12	16	309	18,068
Other offences against good order	5,491	4,305	46	91	206	10,139
Offences relating to the carrying out of laws	116	92	1	1	6	216
Smuggling and other offences against the revenue	70	59	5	23	10	167
Offences against public welfare	986	407	4	8	45	1,450
Total	20,679	15,578	138	200	726	37,321

Causes of arrest of each sect compared.

58. It will be observed that 19 Protestants, 11 Roman Catholics, 1 Buddhist, etc., and 3 of other beliefs were arrested for murder and attempt at murder; 41 Protestants, 31 Roman Catholics, 1 Jew, 1 Buddhist, etc., and 3 of other beliefs were arrested for manslaughter, shooting at, or seriously wounding; 46 Protestants and 36 Roman Catholics, 1 Jew, and 1 of other beliefs, were arrested for sexual offences. Nearly 10,000 Protestants, nearly 8,000 Roman Catholics, 12 Jews, 16 Buddhists, etc., and 309 of unspecified religions were arrested for drunkenness. No Jew was arrested during the year for homicide, and only one for a sexual offence.

Religions of drunkards.

59. Arrests for drunkenness and other offences against good order were in the proportion of 74 per cent. of the total arrests of Protestants, of 78 per cent. of those of Roman Catholics, of 42 per cent. of those of Jews, of 53 per cent. of those of Buddhists, Confucians, etc., and of 71 per cent. of those of persons of other beliefs. These proportions vary but little from year to year.

60. The next table shows the occupations of the males and females taken into custody in 1889 :—

Occupations
of persons
arrested.

OCCUPATIONS OF MALES AND FEMALES* ARRESTED, 1889.

Occupations.	Males.	Females.
GOVERNMENT, PROFESSIONS, ARTS, EDUCATION, LITERATURE.		
Government officer ...	12	...
Police, penal officer ...	4	...
Officer of local body ...	1	...
Army, navy—officer, man	15	...
Clergyman, etc. ...	6	1
Lawyer ...	21	...
Law clerk, law student	3	...
Others connected with law	8	...
Medical man, student	21	...
Dentist ...	20	...
Chemist, druggist	61	...
Others connected with medicine	1	...
Author, editor, reporter	26	...
Bookseller, newsvendor	20	1
Printer ...	207	...
Science, connected with	17	...
Education, engaged in	42	2
Fine arts, engaged in	16	1
Photographer ...	14	...
Music, teacher of, musician	37	2
Theatres and exhibitions, connected with	50	2
BOARD AND LODGING, DOMESTIC DUTIES, ATTENDANCE.		
Hotelkeeper ...	56	2
Board and lodging, connected with	9	3
Domestic servant, cook	359	783
Hotel, boarding-house, etc., servant	100	3
Charitable institution, servant ...	4	...
Nurse (not servant) ...	...	15
Shoeblack ...	7	...
Opium shopkeeper	6	...
Attendance, engaged in	7	28
COMMERCIAL PURSUITS.		
Merchant ...	17	...
Auctioneer, etc. ...	9	...
Broker, agent, etc. ...	182	...
Commercial clerk, etc.	597	...
Commercial traveller, salesman	138	...
Other mercantile persons	32	...
Shopkeeper ...	59	3
Pawnbroker ...	1	...
Hawker, pedlar ...	545	9
Marine storekeeper ...	6	...
Rag, bottle gatherer, dealer	44	...
General dealer ...	321	7

* See paragraph 34 ante.

OCCUPATIONS OF MALES AND FEMALES* ARRESTED, 1889—continued.

Occupations.	Males.	Females.
CARRYING AND MESSAGES.		
Railway service	12	1
Omnibus, cab—driver, owner	291	...
Drayman, carter, carrier	490	...
Others connected with conveyance	8	...
Ship—owner, master, officer, seaman (not navy)	1,047	...
Steamship—engineer, stoker, coal trimmer	43	...
Ship—servant, steward, etc.	37	1
Boatman, waterman, etc.	12	...
Stevedore, or otherwise connected with ships	7	...
Messenger, porter, errand boy	14	...
Telegraph service	7	...
AGRICULTURAL PURSUITS AND LAND.		
Farmer, market gardener, farm servant, labourer, etc.	797	...
Land, estate—agent, proprietor, etc.	1	...
Land surveyor and assistants	28	...
Others connected with land	4	...
PASTORAL PURSUITS AND ANIMALS.		
Squatter, grazier, station servant, labourer, etc.	73	...
Horse dealer, proprietor, etc.	6	...
Veterinary surgeon, farrier	16	1
Horse-breaker, groom, jockey	381	...
Live stock salesman	3	...
Game, rabbit catcher	1	...
Fisherman	20	...
Drover and others engaged about animals	61	...
ARTIZANS, MECHANICS, LABOURERS.		
Bookbinder	5	...
Musical instrument maker, dealer	9	...
Prints and pictures, connected with	2	1
Carving and figures, connected with	20	...
Watch and clock maker, dealer	41	...
Philosophical instrument maker, dealer	2	...
Gunsmith, etc.	4	...
Mechanical or undefined engineer	273	...
Toolmaker, cutler, etc.	32	...
Carriagemaker, wheelwright	84	...
Saddle, harness, and whip maker, dealer	108	...
Shipwright, rigger, boatbuilder	21	...
Sailmaker, shipchandler, etc.	25	...
Builder, architect	100	...
Carpenter, joiner	890	...
Cooper, turner	54	...
Bricklayer, mason, plasterer, shingler, slater	838	...
Painter, paperhanger, plumber, etc.	472	...
Others connected with buildings	6	...
Cabinet, etc., maker, dealer	128	2
Chemicals, working or dealing in	14	...
Labourer (undefined)	14,869	1

* See paragraph 34 ante.

OCCUPATIONS OF MALES AND FEMALES* ARRESTED, 1889—*continued*.

Occupations.	Males.	Females.
TEXTILE FABRICS AND DRESS.		
Textile fabrics, manufacturer of, weaver	38	2
Draper and assistants	88	...
Hairdresser, wigmaker, etc.	79	...
Hat and cap maker	22	...
Tailor, tailoress, dealer in clothing	232	37
Milliner, dressmaker ... ..	...	39
Clothing, manufacture, engaged in, machinist	7	20
Boot and shoe maker	695	1
Umbrella—maker, mender	6	...
Washerwoman, laundry man ... ..	...	60
FIBROUS MATERIALS.		
Rope, mat, sack, maker	10	...
Tent, tarpaulin, maker, canvas dealer	8	...
ANIMAL FOOD.		
Cowkeeper, dairyman, woman	19	...
Butcher, etc.	290	...
Poulterer, fishmonger	31	1
Other dealers in animal food	2	...
VEGETABLE FOOD.		
Miller, grain and flour dealer, and assistants	10	...
Baker, confectioner	301	1
Greengrocer, fruiterer	16	...
Others dealing in vegetable food	4	...
DRINKS AND STIMULANTS.		
Brewing, connected with	14	...
Distiller, rectifier	1	...
Gingerbeer and sodawater maker	1	1
Grocer and assistants	67	2
Tobacco manufacture, engaged in	36	3
Tobacconist	5	...
ANIMAL MATTERS.		
Soapboiler, candlemaker, tallowmelter	3	...
Tanner, fellmonger, currier	50	...
Leather articles, maker of	10	...
Brush, broom maker	9	...
Wool classer	17	...
VEGETABLE MATTERS.		
Japanner, French polisher	46	...
Timber merchant and assistant	2	...
Firewood—dealer, chopper, splitter, fencer	62	1
Sawyer, sawmill owner, worker	47	...
Basketmaker	4	...
Papermaker	7	...
Stationer	11	...

* See paragraph 34 *ante*.

OCCUPATIONS OF MALES AND FEMALES* ARRESTED, 1889—continued.

Occupations.	Males.	Females.
VEGETABLE MATTERS—continued.		
Billsticker	7	...
Vegetable matters, others working or dealing in ...	8	...
MINING, ENGAGED IN		
Miners, etc.	756	...
COAL, STONE, CLAY, EARTHENWARE, GLASS.		
Coal and charcoal, working or dealing in	15	...
Chimney sweep	7	...
Quarryman, limeburner, etc.	47	...
Brickmaker, potter	77	...
Navvy	151	...
Nightman, scavenger	18	...
Earth, stone, glass, etc., others working or dealing in ...	34	...
MINERALS AND METALS.		
Goldsmith, silversmith, jeweller	43	...
Engine driver (undefined)	245	...
Ironfounder, blacksmith, locksmith	444	...
Ironmonger	16	...
Brassfounder, finisher, gasfitter	45	...
Other metals, working or dealing in	211	...
INDEFINITE AND NON-PRODUCTIVE.		
Manager, apprentice, etc.	7	...
Independent means	23	1
Pensioner, inmate of institution, etc.	2	...
Beggar, pauper, vagrant	3	...
Prostitute, brothel-keeper ... ..	...	1,628
Gambler, gaminghouse-keeper	2	...
No stated occupation, over 15 years of age	959	3,668
„ „ under „ „	898	262
Total	30,725	6,596

61. It will be observed that, of the males arrested, nearly half were labourers; and that of other occupations, those most frequently arrested were sailors, carpenters, bricklayers, farmers and gardeners, miners, shoemakers, clerks, and hawkers, in the order named. No occupation was returned in 1,857 cases, but of those 898 were youths or children, and of the others it is probable that most of them belonged to the criminal classes. Of the females arrested, nearly a fourth were set down as prostitutes or brothel-keepers. Nearly three-fifths, including 262 young girls, were of no specified occupation; and of the few returned as following regular occupations, three-fourths were domestic servants, and the bulk of the remainder were dress-makers, tailoresses, and washerwomen.

Chief occupations of persons arrested.

* See paragraph 34 ante.

62. It has been already stated that, in making up the returns, a person arrested more than once is counted as a separate individual in respect to each arrest or charge,* but it is possible to ascertain approximately the actual numbers passing through the hands of the police by means of a close comparison of the names, ages, birthplaces, religions, occupations, residences, etc., of the individuals in question. This is too tedious and laborious—and consequently expensive—an investigation to be attempted every year, but it was done for 1884, so far as the sexes and birthplaces of the persons arrested are concerned, and the result is given in the following table :—

Arrests of
distinct
individuals.

DISTINCT INDIVIDUALS ARRESTED, 1884.

Sex and Birthplace of Arrested Persons.	Number of Charges on which Arrests were made.	Number of Distinct Individuals Arrested	Number of Charges on which Distinct Individuals were Arrested.																									
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
SEX.																												
Males ..	21,908	16,229	12,822	2,231	698	238	110	52	33	15	11	4	3	2	1	3	2	1	..	2	1	..	..	..	..	..	..	..
Females ..	5,595	3,623	2,682	518	191	118	38	34	13	13	9	2	2	..	2	2	1	2	1	..	..	..	..	..	..	..	..	..
Total ..	27,503	19,857	15,504	2,749	889	356	148	86	46	28	20	6	5	2	3	5	3	3	1	2	1	..	..	..	..	..	..	..
BIRTHPLACE.																												
Victoria ..	7,441	5,413	4,206	764	260	92	49	18	11	7	1	1	1	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..
Other Australasian Colonies ..	1,386	1,020	801	144	48	16	4	2	..	1	1	..	1	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..
England and Wales ..	6,726	4,951	3,951	640	197	72	37	23	14	6	3	1	..	1	1	1	1	1	..	2	..	..	..	..	..	..	..	..
Scotland ..	2,607	1,883	1,460	274	82	40	10	6	1	2	4	1	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..
Ireland ..	7,538	5,180	3,931	752	250	119	46	32	20	10	10	3	1	1	1	..	..	2	1	..	..	..	..	..	..	..	..	..
Other British possessions ..	153	113	84	24	3	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
France ..	112	83	67	7	6	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Germany ..	326	277	240	30	4	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
United States ..	363	266	209	36	13	5	..	1	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
China ..	195	169	152	10	5	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Other Countries and Unknown ..	656	502	403	68	21	5	1	3	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..

63. The total number of charges shown in the table (27,503) corresponds with the number of persons set down as arrested in the returns for 1884, but it is seen that only 19,857 were distinct individuals, or nearly a fourth less than that number. Of these 15,504, or 78 per cent., were only arrested once ; 2,749, or 14 per cent., were arrested or charged twice ; 889, or 4 per cent., three times ; 356, or 2 per cent., four times ; and 359, or 2 per cent., more than four times ; 2 having been arrested or charged as many as twenty, and 1 as many as twenty-eight times.

Individuals
arrested
more than
once.

* See paragraph 34 *ante*.

Sexes of those arrested more than once.

64. It appears that the tendency of emales to be arrested over and over again, or on several charges, is greater than that of males, for whereas, in 1884, only 21 per cent. of the males who fell into the hands of the police were apprehended more than once, or were charged with more than one offence, as many as 26 per cent. of the females who fell into the hands of the police were so apprehended or charged.

Countries of those arrested more than once.

65. Twenty-six per cent. of the natives of British possessions outside of the United Kingdom and the Australasian colonies were taken into custody or charged with an offence more than once during the year, as also were 24 per cent. of the Irish, 22 per cent. of the Victorians, the other Australians, and the Scotch, 21 per cent. of the Americans, 20 per cent. of the English, 19 per cent. of the French, 13 per cent. of the Germans, and 10 per cent. of the Chinese.

Individuals arrested more than once for drunkenness.

66. The distinct persons taken into custody for drunkenness during 1884 numbered 10,287, and of these, 1,520, or 15 per cent., were apprehended more than once, viz.:—994 twice, 288 thrice, 112 four times, 51 five times, 25 six times, 19 seven times, 11 eight times, 7 nine times, 1 ten times, 4 eleven times, 1 twelve times, 2 thirteen times, 1 fourteen times, 2 fifteen times, 1 twenty times, and 1 twenty-six times.

Drunkards charged with other offences.

67. Whilst the number of individuals arrested for drunkenness was 10,287, the charges of drunkenness brought against them numbered 12,938; but these persons were charged with 2,622 other offences, so that the total number of charges of all kinds against drunkards was 15,560, as against 27,503 charges of all descriptions. Thus 57 per cent. of the offences for which persons were arrested, during 1884, were committed by persons who were arrested during the same year for drunkenness.

Results of summary disposal.

68. The results of summary disposal of cases by magistrates in the year 1889 were as follow :—

SUMMARY DISPOSAL BY MAGISTRATES OF ARRESTED PERSONS,*
1889.

Sentence.	Males.	Females.
Imprisonment for 2 years	18	1
„ 1 year and under 2 years	207	96
„ 6 months and under 1 year	346	157
„ 4 months	27	5
„ 3 months	967	378

*. See paragraph 34 ante.

SUMMARY DISPOSAL BY MAGISTRATES OF ARRESTED PERSONS,*
1889—continued.

Sentence.					Males.	Females.
Imprisonment for	2 months and under 3 months	...			269	76
"	1 month and under 2 months ..	...			1,232	392
"	15 days and under 1 month	...	...		93	5
"	8 days and under 15 days	...	...		816	198
"	7 days and under	...	...	...	5,123	1,485
Fined	...	...	...	...	8,962	1,057
Ordered to find bail	...	...	...	...	201	24
Sent to lunatic asylum	...	...	...	...	261	122
Sent to industrial school or reformatory	...	...	...	...	370	187
Otherwise dealt with	...	...	...	...	216	7
Total sentenced					19,108	4,190
Discharged					10,680	2,320
Total summarily disposed of					29,788	6,510

69. Of the persons sentenced by magistrates during 1889, 47 per cent. of the males, and 25 per cent. of the females, were fined; 31½ per cent. of the former, and 40½ per cent. of the latter, were sentenced to imprisonment for various terms under a month, and 15 and 24 per cent., respectively, for periods varying from 1 to 12 months; about 1 per cent. of the males, and 2½ per cent. of the females, were sentenced to 1 year's imprisonment or upwards; the balance, or 5½ per cent. of the males, and 8 per cent. of the females, were sent to Lunatic Asylums, Industrial and Reformatory Schools, ordered to find bail, or were otherwise disposed of.

Sentences by
magistrates.

70. Corporal punishment to males may be ordered by magistrates for certain offences. In such cases the offender, if an adult, may be sentenced to be whipped with a cat-o'-nine-tails once, twice, or thrice, at the discretion of the bench. Five offenders were so sentenced in 1889, who were ordered to receive from 20 to 30 lashes each.

Whipping
ordered by
magistrates.

71. Four offenders were sentenced to solitary confinement by magistrates in 1889, viz., a lad to 3 days for deserting his apprenticeship, and three offenders, in addition to imprisonment, to 2 and 7 days, and three periods of one week respectively, for offences against good order.

Solitary
confinement
ordered by
magistrates.

72. Under the *Juvenile Offenders Act* 1887,† magistrates are empowered to order youths under 16 years of age convicted of any offence punishable on summary conviction with imprisonment, to be

Punis
of juvenile
offenders.

* See paragraph 34 *ante*.

† 51 Vict. No. 951, section 57.

privately whipped with a cane or birch rod by a constable, either in addition to, or in lieu of, any other punishment they may be lawfully sentenced to receive. Under this Statute 53 boys were sentenced to be whipped in 1889, and to receive from nine to eighteen strokes with a cane. In 18 instances the offence was against property (undefined), in 11 instances against good order, in 2 instances horse and cattle stealing, in 1 instance burglary, and in 1 an offence against the public welfare.

Results of committals for trial.

73. The results of the commitments for trial at the three periods already referred to were as follow :—

RESULTS OF COMMITMENTS FOR TRIAL,* 1879, 1884 AND 1889.

	1879.	1884.	1889.
Number for trial	630	672	1,040
Convicted and sentenced	397	407	680
Acquitted... ..	180	226	265
Not prosecuted	53	39	95

Proportion
of convic-
tions ob-
tained.

74. Of those committed for trial, 577 were eventually tried in 1879, 633 in 1884, and 945 in 1889. At the first period 69 per cent., at the second period 64 per cent., and at the third period 72 per cent. of the trials resulted in convictions.

Sentences in
superior
courts.

75. The following are the sentences of the prisoners tried and convicted in superior courts during the year under review :—

SENTENCES OF PERSONS TRIED AND CONVICTED, 1889.

Sentence.				Males.	Females.
Death	...	...	...	14†	...
Hard labour on roads or public works for 15 years and upwards				1	...
"	"	"	10 years and under 15 years	6	...
"	"	"	7 years and under 10 years	15	...
"	"	"	4 years and under 7 years	39	2
Imprisonment for 2 years and under 4 years	...	...		176	7
"	1 year and under 2 years	...		173	4
"	6 months and under 1 year	...		120	16
"	1 month and under 6 months	...		73	13
"	under 1 month	...		8	...
Fined	...	...		2	...
Recognizances estreated	...	...		4	...
To find bail to appear when called upon				6	1
Total tried and convicted...				637	43

* Including those who were remaining for trial from the previous year, but excluding those awaiting trial at the end of the year.

† In the case of eight of these, sentence of death was only recorded.

76. Of males convicted in superior courts in 1889, as many as fourteen were sentenced to death—8 being cases in which death was merely “recorded”; all the rest except 12 were sentenced to terms of imprisonment, with or without hard labour; of those imprisoned, nearly two-thirds were sentenced for periods of less than two years, and one-tenth to more than four years. Of the females, 13 were sentenced to over one, and 29 to under one, year’s imprisonment. Seven males were sentenced to be imprisoned for a longer period than ten years. Only two females were sentenced to a longer period than four years.

Lengths of sentences in superior courts.

77. In addition to terms of imprisonment named in the foregoing table, 102* persons—of whom 2 were females—were ordered to be kept in solitary confinement for periods varying from a few days to 1 month per annum during the sentence. Of these, 2 had been convicted of murder, or attempts at murder, 2 of shooting at or wounding; 2 of assaults; 2 of rape or indecent assaults on females; 34 of robbery under arms or burglary; 3 of sheep stealing, etc.; 35 of other offences against property; 18 of forgery, etc.; 2 of offences against the carrying out of the laws; 1 of smuggling, etc.; and 1 of an offence against the public welfare.

Solitary confinement ordered by superior courts.

78. The total number of offenders sentenced by superior courts to be whipped was, in addition to terms of imprisonment in all cases, 12. Rape or indecent assaults on females were the crimes of six of these, for one of whom three whippings, for another two whippings of 20 lashes each, for three others one whipping each of 12, 15, and 15 lashes respectively, and for one—a youth of 18—one whipping of 20 strokes with a birch rod, were ordered. Unnatural offence was the crime of three males, two of whom were sentenced to receive one whipping of 10 lashes, and the third—the youth just referred to—was sentenced to receive 20 strokes with a rod. The remaining three offenders were convicted of robbery with violence, one of whom was ordered three whippings of 20 lashes, the second two whippings of 15 lashes, and the third one whipping of 20 lashes. Judges of the Supreme Court and Courts of General Sessions can sentence males to receive corporal punishment, under Act 27 Vict. No. 233, for unnatural offences,

Whippings ordered by superior courts.

* Besides these, one offender was ordered to be kept in separate confinement for six months.

for attempts to choke in order to commit an offence, for robbery under arms, and, in the case of youths under sixteen, for several other offences; also, under Act 35 Vict. No. 399, for attempts to commit rape, or for rape itself where sentence of death is commuted. The greatest number of whippings an individual can be sentenced to receive for one offence is three, and the greatest number of lashes at each whipping is 50.

Whippings
ordered,
1874-1889

79. The number of individuals sentenced to corporal punishment was 11 in 1874, viz., 6 by magistrates and 5 by superior courts; 5 in 1875, viz., 2 by magistrates and 3 by superior courts; 11 in 1876, viz., 1 by magistrates and 10 by superior courts; 11 in 1877, viz., 5 by magistrates and 6 by superior courts; 17 in 1878, viz., 2 by magistrates and 15 by superior courts; 9 in 1879, viz., 4 by magistrates and 5 by superior courts; 5 in 1880, 17 in 1881, and 8 in 1882—all by superior courts; 14 in 1883, viz., 2 by magistrates and 12 by superior courts; 17 in 1884, 6 in 1885, and 11 in 1886—all by superior courts; 10 in 1887, viz., 4 by magistrates and 6 by superior courts; 29 in 1888, viz., 19 by magistrates and 10 by superior courts; and 70 in 1889, viz., 58 by magistrates and 12 by superior courts. The total number of whippings directed to be administered in the sixteen years was thus 324, of which 112 (including 67 to juvenile offenders) were ordered by magistrates and 212 by superior courts. The number of persons sentenced to be whipped was thus much greater in 1889 than in any other year named.

Executions

80. Three criminals, being natives of Victoria, England, and the Philippine Islands, respectively, two of whom claimed to be members of the Church of England, and one of the Roman Catholic Church, were executed in 1889, for murder. Since the first settlement of Port Phillip, 145 criminals have been executed within the colony, of whom only one was a female. No execution took place in 1887 or in 1882, 1878, 1874, 1850, 1849, 1846, 1845, 1844, 1843, or any year prior to 1842, but one or more executions took place in all the other years. The following table shows the birthplaces of the persons executed, the religions they professed, and the crimes they expiated on the scaffold:—

CRIMINALS EXECUTED, 1842 TO 1889.

Birthplace, Religion, and Offence.								Number.
Total number executed								145
Birthplace—								
Victoria								5
Other Australian colonies								6
England...								60
Wales								2
Ireland								41
Scotland...								8
Belgium...								1
France								1
Switzerland								1
Germany								1
Sweden								1
Sicily								1
United States of America								5
West Indies								2
Philippine Islands								1
China								8
At sea								1
Religion—								
Church of England								34
Presbyterian								6
Wesleyan								8
Baptist								1
Lutheran								2
Protestant undefined								30
Roman Catholic								53
Buddhist, Confucian, etc.								6
No Religion								5*
Offence—								
Murder								109
Attempt to murder...								17
Rape...								9
Unnatural offence on a child								1
Robbery with violence								9

81. It is stated† that from the accession of Queen Victoria to the period of her Majesty's jubilee, 840 criminals were executed in the United Kingdom, or an average of 17 per annum. In 1837 there were no less than 13 crimes subject to capital punishment, and no fewer than 671 persons had been condemned to death in twelve months; but since the Queen's accession, a more humane code has prevailed, and few have been executed, except for murder.

Executions in United Kingdom.

82. The offences in respect to which no persons were apprehended numbered 7,282 in 1889, or 808 more than in 1888, and were much more numerous than in any of the ten years ended with 1888. Whilst there has been in the last three years a marked decrease in the offences against the person, those against property show a striking increase. The following are the undetected offences in the last eleven years:—

Undetected crime.

* Aborigines. † See *Fifty Years of National Progress*, page 107.

UNDETECTED CRIME, 1879 TO 1889.

Year.	Number of Offences.			
	Against the Person.	Against Property.	Other Offences.	Total.
1879	503	3,763	364	4,630
1880	613	3,935	350	4,898
1881	461	3,770	400	4,631
1882	572	3,980	433	4,985
1883	596	4,209	584	5,389
1884	450	3,249	350	4,049
1885	491	3,000	388	3,879
1886	523	3,160	436	4,119
1887	211	5,593	416	6,220
1888	270	5,627	577	6,474
1889	271	6,152	859	7,282

Offender perhaps arrested on other grounds.

83. With reference to the offences set down as undetected, it should be remarked that in all probability the malefactors do not in all such cases escape entirely. The returns are made up in the month of April of the year following that in which the offence is reported, and he who committed it may be arrested after that date, or may even before that date have been arrested, and perhaps punished, for other misdeeds.

Crime in-Australasian colonies.

84. The next four tables, giving details of crime in the various Australasian colonies, have been compiled in the office of the Government Statist, Melbourne, from their respective *Statistical Registers*. The first of these gives for each colony, and for the whole of Australasia, during each of the eleven years 1878 to 1888, a statement of the number of offences for which persons were apprehended or summoned, were summarily convicted or held to bail, were committed for trial, and were convicted after commitment. In the returns of the number of cases in respect to which persons were summoned, those so dealt with on account of matters coming under the head of civil jurisdiction are omitted in all the colonies :—

CRIME IN AUSTRALASIAN COLONIES, 1878 TO 1888.

Name of Colony.		Number of Offences for which Persons were—			
		Apprehended or Summoned.*	Summarily Convicted or held to Bail.	Committed for Trial.	Convicted after Commitment.
Victoria... ..	1878	44,742	29,452	658	458
	1879	43,936	28,266	628	397
	1880	41,778	26,950	680	398

* Not including civil cases.

CRIME IN AUSTRALASIAN COLONIES, 1878 TO 1888—*continued*.

Name of Colony.		Number of Offences for which Persons were—			
		Apprehended or Summoned.*	Summarily Convicted or held to Bail.	Committed for Trial.	Convicted after Commitment.
Victoria— <i>continued</i>	1881	44,730	29,131	591	332
	1882	47,234	31,542	616	402
	1883	48,974	33,480	606	350
	1884	51,397	34,456	695	407
	1885	52,566	34,180	768	444
	1886	54,361	36,599	756	492
	1887	59,036	38,742	820	506
	1888	60,276	41,054	873	557
New South Wales †	1878	53,325	37,924	1,803	959
	1879	53,870	38,828	1,743	1,090
	1880	57,784	42,205	1,717	1,148
	1881	66,600	51,130	1,626	1,058
	1882	65,936	50,126	1,724	1,065
	1883	72,231	55,463	1,606	1,008
	1884	75,680	57,897	1,550	928
	1885	77,092	59,345	1,540	785
	1886	81,503	62,268	1,594	957
	1887	72,119	53,614	1,402	854
	1888	69,052	50,876	1,423	915
Queensland †	1878	9,563	6,153	344	197
	1879	9,058	5,762	377	185
	1880	9,133	6,051	316	170
	1881	10,063	7,253	264	126
	1882	11,649	8,025	308	144
	1883	13,804	9,788	427	193
	1884	15,518	11,620	555	274
	1885	15,763	11,451	538	267
	1886	17,640	12,841	611	289
	1887	16,769	12,449	480	247
	1888	18,431	13,730	538	275
South Australia ...	1878	13,682	11,685	369	229
	1879	12,843	10,970	384	223
	1880	15,063	12,814	353	199
	1881	15,347	13,258	342	213
	1882	14,672	12,634	339	211
	1883	13,104	11,378	305	166
	1884	11,988	10,425	293	127
	1885	10,406	8,901	240	133
	1886	8,202	6,850	228	121
	1887	7,122	6,032	208	102
	1888	7,309	6,282	190	91

* Not including civil cases.

† Cases brought up for lunacy are not included in the returns of New South Wales, Queensland, and Tasmania. In New South Wales, 857 lunatics in 1888, and 4,997 in the previous ten years; and in Queensland, 357 in 1888, and 3,741 during the previous ten years; and in Tasmania, 50 lunatics in 1888, and 247 in the previous four years, were admitted to asylums. Probably four-fifths of these were apprehended by the police.

CRIME IN AUSTRALASIAN COLONIES, 1878 TO 1888—continued.

Name of Colony.				Number of Offences for which Persons were—			
				Apprehended or Summoned.*	Summarily Convicted or held to Bail.	Committed for Trial.	Convicted after Commitment.
Western Australia †	...	{	1878	6,126	4,552	102	45
			1879	6,471	4,853	85	53
			1880	5,577	4,221	50	25
			1881	5,460	4,134	109	61
			1882	5,089	3,683	90	46
			1883	4,739	3,450	72	46
			1884	4,831	3,477	64	40
			1885	4,900	3,436	86	51
			1886	5,703	3,980	95	54
			1887	5,363	3,562	121	75
			1888	4,651	3,144	104	64
Tasmania ‡	...	{	1878	6,644	5,131	113	54
			1879	7,184	5,641	110	67
			1880	6,908	5,418	117	73
			1881	6,229	4,799	90	51
			1882	7,615	5,942	93	36
			1883	8,039	5,394	88	33
			1884	6,273	4,843	70	39
			1885	5,983	4,876	71	31
			1886	6,586	5,253	76	46
			1887	5,932	4,806	89	56
			1888	6,164	4,595	99	66
New Zealand §	...	{	1878	22,237	16,370	415	292
			1879	22,492	16,088	734||	296
			1880	21,181	15,025	592	370
			1881	19,796	14,079	474	235
			1882	22,659	16,573	467	219
			1883	23,090	16,944	459	231
			1884	23,572	17,968	509	241
			1885	23,103	17,804	428	236
			1886	21,662	16,705	536	286
			1887	20,336	15,557	646	334
			1888	19,167	14,472	516	255
Australasia	...	{	1878	156,319	111,267	3,804	2,234
			1879	155,854	110,408	4,061	2,311
			1880	157,424	112,684	3,825	2,383

* Not including civil cases.

† It is stated that of those summarily convicted in Western Australia about 8 per cent. are aborigines.

‡ See footnote (†) preceding page. It is pointed out by Mr. R. M. Johnston, the Government Statistician of Tasmania, in his Report for 1886, page li., that, prior to 1884, a considerable proportion of purely civil cases, such as petty debts, non-payment of rates, etc., were improperly included in the returns of offences for which persons were apprehended or summoned in that colony.

§ Maoris are included. In 1888 the number of cases in which they were concerned was 338—in 213 of which summary convictions were obtained, in 108 cases the prisoner was discharged, and in 17 cases committed for trial.

|| This large increase appears to have been owing to Maori disturbances, as 202 of that race were committed for trial in 1879, as against only 18 in the previous year.

CRIME IN AUSTRALASIAN COLONIES, 1878 TO 1888—continued.

Name of Colony.		Number of Offences for which Persons were—			
		Apprehended or Summoned.*	Summarily Convicted or held to Bail.	Committed for Trial.	Convicted after Commitment.
Australasia—continued	1881	168,225	123,784	3,496	2,076
	1882	174,854	128,525	3,637	2,123
	1883	183,981	135,897	3,563	2,027
	1884	189,259	140,686	3,736	2,056
	1885	189,813	139,993	3,671	1,947
	1886	195,657	144,496	3,896	2,245
	1887	186,677	134,762	3,766	2,174
	1888	185,050	134,153	3,743	2,223

85. By this table it would appear that crime is so much more prevalent in New South Wales than in Victoria that, notwithstanding the smaller population,† there has been, in every year, under all the heads, larger numbers in the former colony than in the latter. This is particularly observable in regard to serious offences, the commitments for trial and convictions thereafter in New South Wales having been, prior to 1887, more than twice as numerous, and since 1887, nearly twice as numerous as in Victoria. In 1888 the apprehensions and summonses in New South Wales exceeded those in Victoria by 15 per cent., and the summary convictions by 24 per cent.

Large amount of crime in New South Wales.

86. The position of the different colonies in respect to crime will be better ascertained by means of the next table, which shows the proportion that the number of apprehensions and summons cases,* of summary convictions, of commitments for trial, and of convictions after commitment, occurring in each colony during the last eleven years, bore to the average population of the same colony; also, the proportion in each colony of summary convictions to apprehensions and summons cases, and of convictions after commitment to commitments:—

Proportion of crime in each colony.

* Not including civil cases.
† In all the years except 1887, the estimated population of New South Wales was smaller than that of Victoria.

PROPORTION OF ARRESTS, COMMITMENTS, AND CONVICTIONS IN
AUSTRALASIAN COLONIES TO POPULATION, ETC., 1878 TO 1888.

Name of Colony.		Proportion per 1,000 of the Population of—		Proportion per 10,000 of the Population of—		Proportion per Cent. of—		
		Apprehensions and Summons Cases.*	Summary Convictions	Commitments for Trial	Convictions after Commitment.	Summary Con- victions to Ap- prehensions and Summons Cases.*	Convictions after Commitment to Commitments.	
Victoria	...	1878	54.47	35.85	8.01	5.58	65.82	69.60
		1879	52.68	33.89	7.53	4.76	64.33	63.22
		1880	49.13	31.69	8.00	4.68	64.51	58.53
		1881	51.48	33.52	6.80	3.82	65.13	56.18
		1882	53.05	35.43	6.92	4.52	66.78	65.26
		1883	53.76	36.75	6.65	3.84	68.36	57.76
		1884	55.03	36.89	7.44	4.36	67.04	58.56
		1885	54.84	35.66	8.01	4.63	65.02	57.81
		1886	55.08	37.08	7.66	4.98	67.34	65.08
		1887	57.90	37.99	8.04	4.96	65.63	61.71
		1888	56.75	38.66	8.22	5.24	68.11	63.80
New South Wales	...	1878	81.07	57.66	27.41	14.58	71.12	53.19
		1879	78.00	56.23	25.24	15.78	72.08	62.54
		1880	79.63	58.16	23.66	15.83	73.04	66.86
		1881	87.60	67.25	21.39	13.92	76.77	65.07
		1882	82.96	63.07	21.69	13.40	76.02	61.77
		1883	86.59	66.48	19.25	12.08	76.79	62.76
		1884	85.92	65.73	17.60	10.53	76.50	59.87
		1885	82.81	63.75	16.54	8.43	76.98	53.51
		1886	83.17	63.91	16.27	9.77	76.84	60.04
		1887	70.54	52.44	13.71	8.35	74.34	60.91
		1888	64.88	47.90	13.37	8.59	73.68	64.30
Queensland	...	1878	46.24	29.75	16.63	9.53	64.34	57.27
		1879	42.29	26.90	17.60	8.64	63.61	49.07
		1880	41.15	27.26	14.24	7.66	66.25	53.80
		1881	45.53	32.82	11.95	5.70	72.08	47.73
		1882	49.03	33.77	12.96	6.06	68.89	46.75
		1883	51.53	36.54	15.94	7.20	70.90	45.20
		1884	52.64	39.42	18.93	9.29	74.88	49.38
		1885	51.05	37.08	17.42	8.65	72.64	49.63
		1886	53.05	38.62	18.38	8.69	72.79	47.30
		1887	47.27	35.09	13.53	6.96	74.24	51.46
		1888	48.86	36.40	14.26	7.29	74.49	51.12
South Australia	...	1878	56.34	48.12	15.20	9.43	85.40	62.06
		1879	50.50	43.17	15.11	8.77	85.48	58.07
		1880	57.16	48.63	13.40	7.55	85.07	56.43
		1881	53.18	45.94	11.81	7.38	86.39	62.28
		1882	50.61	43.58	11.69	7.28	86.11	62.24
		1883	43.82	38.05	10.20	5.55	86.82	54.43
		1884	38.83	33.78	9.49	4.11	86.96	43.34
		1885	33.23	25.84	7.67	4.25	77.76	55.42
		1886	26.20	21.88	7.28	3.86	83.52	43.07
		1887	22.73	19.25	6.64	3.26	84.70	49.04
		1888	22.99	19.76	5.98	2.86	85.94	47.89

* Not including civil cases.

PROPORTION OF ARRESTS, ETC., 1878 TO 1888—*continued.*

Name of Colony.		Proportion per 1,000 of the Population of—		Proportion per 10,000 of the Population of—		Proportion per Cent. of—	
		Apprehensions and Summons Cases.*	Summary Convictions.	Commitments for Trial.	Convictions after Commitment.	Summary Con- victions to Ap- prehensions and Summons Cases.*	Convictions after Commitment to Commitments.
Western Australia ...	1878	218·77	162·56	36·43	16·07	74·31	44·11
	1879	227·72	170·78	29·91	18·65	75·00	62·35
	1880	193·35	146·34	17·33	8·67	75·69	50·00
	1881	182·93	138·50	36·52	20·44	75·71	55·96
	1882	167·46	121·19	29·62	15·14	72·37	51·11
	1883	151·73	110·46	23·05	14·72	72·80	63·89
	1884	149·43	107·55	19·80	12·37	71·97	62·50
	1885	143·81	100·85	25·27	14·97	70·12	59·30
	1886	153·37	107·04	25·55	14·52	69·80	56·84
	1887	128·61	85·42	29·02	17·99	66·42	62·00
	1888	109·92	74·30	24·58	15·13	67·60	61·54
Tasmania † ...	1878	61·22	47·28	10·41	4·98	79·00	47·78
	1879	64·60	50·73	9·89	6·02	81·08	60·91
	1880	60·80	47·69	10·30	6·43	80·19	62·40
	1881	53·11	40·91	7·67	4·35	78·64	56·67
	1882	63·09	49·23	7·70	2·98	78·73	38·71
	1883	64·65	43·37	7·08	2·65‡	80·80	37·50
	1884	48·86	37·72	5·45	3·04	77·20	55·71
	1885	45·27	36·89	5·37	2·35	81·50	43·66
	1886	48·60	38·77	5·61	3·39	79·91	60·53
	1887	42·42	34·37	6·36	4·00	81·02	62·92
	1888	42·71	31·84	6·86	4·57	74·55	66·67
New Zealand ...	1878	52·74	38·82	9·84	6·92	73·62	70·36
	1879	50·19	35·90	16·38§	6·61	71·53	40·33||
	1880	44·66	31·68	12·48	7·80	70·94	62·50
	1881	40·11	28·52	9·60	4·76	71·12	49·58
	1882	44·49	32·54	9·17	4·30	73·14	46·90
	1883	43·62	32·01	8·67	4·36	73·38	50·33
	1884	42·94	32·73	9·27	4·39	76·23	47·35
	1885	40·80	31·45	7·56	4·17	77·06	55·14
	1886	37·21	28·53	9·21	4·91	76·67	53·63
	1887	34·10	26·08	10·83	5·60	76·50	51·70
	1888	31·66	23·91	8·52	4·21	75·50	49·42
Total Australasia ...	1878	62·73	44·73	15·29	8·98	71·32	58·73
	1879	60·39	42·77	15·73	8·94	71·06	56·91
	1880	58·77	42·07	14·28	8·89	71·73	62·30
	1881	60·52	44·53	12·57	7·46	73·68	59·38

* Not including civil cases.

† See footnote (†) on page 38 *ante*.

‡ This small proportion is in consequence of the large number of cases not prosecuted.

§ See footnote (§) on page 38 *ante*.

|| This small proportion of convictions is owing to the fact that the Maoris committed for disturbances of a political nature were leniently dealt with.

PROPORTION OF ARRESTS, ETC., 1878 TO 1888—continued.

Name of Colony.		Proportion per 1,000 of the Population of—		Proportion per 10,000 of the Population of—		Proportion per Cent. of—	
		Apprehensions and Summons Cases.*	Summary Convictions.	Commitments for Trial.	Convictions after Commitment.	Summary Con- victions to Ap- prehensions and Summons Cases.*	Convictions after Commitment to Commitments.
Total Australasia— continued.	1882	60·86	44·73	12·65	7·38	73·57	58·37
	1883	61·38	45·34	11·88	6·76	74·50	56·80
	1884	60·47	44·97	11·94	6·57	74·33	55·06
	1885	58·51	42·91	11·09	6·00	73·32	54·12
	1886	58·10	42·96	11·57	6·67	74·04	57·62
	1887	53·52	38·64	10·80	6·24	72·20	57·73
	1888	51·21	37·13	10·33	6·15	72·50	59·62

87. In regard to the proportion of offences for which apprehensions were made or summonses issued, Western Australia and New South Wales have stood at the head of the list throughout the eleven years named, and Tasmania stood next until 1884,† when Victoria and Queensland rose above that colony. New Zealand stood lowest on the list until 1884, since which year that place has been occupied by South Australia, the depression in which colony has been accompanied by a reduction in the amount of crime. The following is the order of the various colonies in this respect in 1888, the colony with the highest proportion of persons apprehended or summoned on criminal charges being placed first, and that with the lowest last:—

ORDER OF COLONIES IN REFERENCE TO NUMBERS APPREHENDED OR SUMMONED IN PROPORTION TO POPULATION, 1888.

1. Western Australia.

2. New South Wales.

3. Victoria.

4. Queensland.
5. Tasmania.

6. New Zealand.

7. South Australia.

88. As regards the persons summarily convicted, in proportion to population, Western Australia and New South Wales have always been at the top of the list. In 1887 and 1888 Victoria occupied the third place, having risen thereto from the fifth position, which it had occupied during several previous years. The following is the order in which the colonies stood in this particular, the colony with the highest proportion of summary convictions being placed first and the rest in succession :—

* Not including civil cases.
† It is stated that, prior to 1884, some petty debt cases were improperly included in the returns of offences for which persons were apprehended or summoned in Tasmania.

ORDER OF COLONIES IN REFERENCE TO SUMMARY CONVICTIONS
IN PROPORTION TO POPULATION, 1888.

1. Western Australia.	5. Tasmania.
2. New South Wales.	6. New Zealand.
3. Victoria.	7. South Australia.
4. Queensland.	

89. In every year prior to 1884, Victoria showed, relatively to population, a much smaller number of persons committed for trial than any other colony, but since then the proportion having fallen in some of the other colonies, in the years 1886 to 1888 it was higher in Victoria than in Tasmania or South Australia. Western Australia has been at the head of the list throughout the period, and New South Wales stood second until 1884, when Queensland rose above it, and has since, with one intermission, continued to occupy the second place. Tasmania occupied the lowest position in 1887, but in 1888 South Australia fell below it. In respect to the proportion of commitments for trial to population, the colonies stood in the following order in 1888 :—

Order of colonies in respect to commitments for trial.

ORDER OF COLONIES IN REFERENCE TO NUMBERS COMMITTED
FOR TRIAL IN PROPORTION TO POPULATION, 1888.

1. Western Australia.	5. Victoria.
2. Queensland.	6. Tasmania.
3. New South Wales.	7. South Australia.
4. New Zealand.	

90. In respect to convictions in superior courts, Victoria, which formerly had—with the exception of Tasmania—the smallest number in proportion to population, occupied the fourth position in 1888. Western Australia, New South Wales, and Queensland were still at the top of the list, a position they had occupied during most of the last eleven years :—

Order of colonies in respect to convictions in superior courts.

ORDER OF COLONIES IN REFERENCE TO CONVICTIONS IN SUPERIOR
COURTS IN PROPORTION TO POPULATION, 1888.

1. Western Australia.	5. Tasmania.
2. New South Wales.	6. New Zealand.
3. Queensland.	7. South Australia.
4. Victoria.	

91. Either more persons are apprehended unjustly in Victoria than in the other colonies, or punishment for minor offences does not follow their commission with such certainty in the former as in the latter, since the number of summary convictions obtained in proportion to the apprehensions is usually lower in this colony than in any of the others ; an exception, however, occurred in 1888, when Western Australia occupied the lowest position. The following is the order of the colonies in respect to convictions of this kind in 1888, the colony

Order of colonies in respect to summary convictions obtained.

in which the rate of summary convictions to apprehensions is highest being placed first, and that in which it is lowest last :—

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF SUMMARY CONVICTIONS TO ARRESTS AND SUMMONSES, 1888.

- | | |
|---------------------|-----------------------|
| 1. South Australia. | 5. New South Wales. |
| 2. New Zealand. | 6. Victoria. |
| 3. Tasmania. | 7. Western Australia. |
| 4. Queensland. | |

Order of colonies in respect to convictions obtained in superior courts.

92. In regard to the proportion of convictions to commitments for trial, Victoria was fourth on the list in 1888, New South Wales, Tasmania, and Western Australia being above her, and the other two colonies below her. In the subjoined statement the colonies are placed in order, the one in which the convictions, in 1888, bore the highest proportion to commitment being placed first :—

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF CONVICTIONS IN SUPERIOR COURTS TO COMMITMENTS FOR TRIAL, 1888.

- | | |
|-----------------------|---------------------|
| 1. Western Australia. | 5. Queensland. |
| 2. Tasmania. | 6. New Zealand. |
| 3. New South Wales. | 7. South Australia. |
| 4. Victoria. | |

Incomplete returns in some colonies.

93. It is to be regretted that the information as to the offences for which persons are arrested or summoned is very incomplete in several of the colonies. In Queensland, the only specific offence mentioned in the returns is drunkenness, the balance being grouped as offences against the person, offences against property, or as other offences. This, except that drunkenness is not separated from “ other offences,” is likewise the grouping adopted in Western Australia,* as also in Victoria in respect to the summons cases where the offender is never in custody of the police, the exact offence being entered only when an arrest takes place.

Arrests, etc., for various offences in Australasian colonies.

94. Notwithstanding New South Wales has hitherto possessed a smaller population than Victoria, arrests for most descriptions of offences have for years past been much more numerous in the former colony than in the latter. Thus, in 1888, arrests for rape and other sexual offences numbered 125 in New South Wales against 58 in Victoria; for other offences against the person 8,872 against 3,723; for horse, sheep, and cattle stealing, etc., 403 against 167; for miscellaneous offences against property 8,357 against 4,375; for drunkenness 22,331† against 18,526. An exception occurred in the three years, 1885 to

* The particulars are available in regard to the convictions, although not in regard to the arrests.

† Contrary to statements which have frequently appeared in the press of an adjacent colony, the law relating to drunkenness is the same in Victoria as in New South Wales. In both colonies a drunken person is liable to be arrested even although not guilty of disorderly conduct.

1887, in regard to arrests for robbery, burglary, etc., which then—although not in the following year—were the more numerous in Victoria; also in 1887 and 1888 in regard to arrests for homicide, which in those three years were about equal in the two colonies, and in regard to “other offences,” which were slightly the more numerous in Victoria. The following table shows the offences for which apprehensions were made or summonses issued in the various Australasian colonies during the eleven years 1878 to 1888, so far as the information can be gathered from their respective *Statistical Registers* :—

APPREHENSIONS AND SUMMONSES FOR VARIOUS OFFENCES IN THE
AUSTRALASIAN COLONIES, 1878 TO 1888.

Colony.	Year.	Number of Arrests or Summonses for—							
		Murder, Attempts at Murder, and Manslaughter.	Rape, and other Offences against Females.	Other Offences against the Person.	Robbery with Violence, Burglary, etc.	Horse, Sheep, and Cattle Stealing, etc.	Other Offences against Property.	Drunkenness.*	Other Offences.
Victoria	1878	36	54	4,456	187	173	4,274	11,825	23,737
	1879	29	60	4,174	203	154	4,160	10,859	24,297
	1880	36	81	4,376	245	171	3,880	10,056	22,933
	1881	32	71	4,526	195	153	4,383	11,065	24,305
	1882	33	66	4,340	206	169	4,853	11,749	25,818
	1883	38	52	3,785	262	158	4,146	12,408	28,125
	1884	39	70	3,539	205	130	4,038	12,938	30,438
	1885	31	57	4,071	287	149	3,797	13,580	30,594
	1886	34	51	4,105	282	154	4,340	14,528	30,867
	1887	35	59	3,923	421	131	4,468	15,578	34,421
	1888	57	58	3,723	352	167	4,375	18,526	33,018
New South Wales	1878	9,398			6,807			17,224	19,896
	1879	63	85	9,102	266	472	6,126	17,713	20,043
	1880	75	95	9,364	245	469	6,154	18,777	22,605
	1881	68	104	9,031	231	465	6,237	22,560	27,904
	1882	54	110	9,080	274	529	6,643	22,280	26,966
	1883	76	109	10,484	203	348	6,343	23,178	31,490
	1884	98	119	9,842	263	482	6,415	25,428	33,033
	1885	50	115	9,353	230	403	6,576	27,493	32,872
	1886	73	163	9,899	261	307	6,787	27,722	36,291
	1887	36	138	8,729	300	307	7,410	24,146	31,053
	1888	58	125	8,872	374	403	8,357	22,331	28,532
Queensland	1878	1,273			1,191			3,215	3,884
	1879	1,238			1,175			2,997	3,648
	1880	1,320			1,186			2,867	3,760
	1881	1,304			1,146			3,275	4,338
	1882	1,532			1,140			3,771	5,206
	1883	2,369			1,327			4,505	5,603
	1884	2,543			1,687			5,117	6,171

* See footnote (†) on page 44 ante.

APPREHENSIONS AND SUMMONSES FOR VARIOUS OFFENCES IN THE
AUSTRALASIAN COLONIES, 1878 TO 1888—*continued*.

Colony.	Year.	Number of Arrests or Summonses for—							
		Murder, Attempts at Murder, and Manslaughter.	Rape, and other Offences against Females.	Other Offences against the Person.	Robbery with Violence, Burglary, etc.	Horse, Sheep, and Cattle Stealing, etc.	Other Offences against Property.	Drunkenness.*	Other Offences.
Queensland— <i>continued</i>	1885	2,230			1,748			5,508	6,277
	1886	2,091			1,956			5,748	7,845
	1887	2,587			2,126			6,000	6,056
	1888	2,460			2,273			6,206	7,492
South Australia	1878	10	32	941	50	12	824	4,166	7,647
	1879	5	29	857	46	15	890	3,840	7,161
	1880	13	37	1,026	52	51	971	4,325	8,588
	1881	7	33	862	45	23	1,009	5,298	8,070
	1882	5	16	934	55	19	963	4,713	7,967
	1883	5	17	767	61	15	652	4,533	7,054
	1884	24	41	711	45	13	653	3,938	6,563
	1885	9	36	598	28	19	708	3,361	5,647
	1886	8	32	530	27	18	679	2,566	4,342
	1887	8	21	408	36	16	562	2,090	3,981
	1888	13	22	514	25	12	568	2,388	3,767
Western Australia †	1878	619			515			4,992	
	1879	462			387			5,622	
	1880	331			355			4,891	
	1881	418			354			4,688	
	1882	365			459			4,265	
	1883	455			372			3,912	
	1884	410			335			4,086	
	1885	403			323			4,174	
	1886	474			414			4,815	
	1887	472			532			4,359	
	1888	517			473			3,661	
Tasmania ‡	1878	6	30	693	60	35	862	1,374	3,584
	1879	2	54	616	45	35	998	1,504	3,930
	1880	2	14	651	103	37	723	1,543	3,835
	1881	5	8	528	35	17	691	1,446	3,499
	1882	5	20	621	36	27	842	1,827	4,237
	1883	2	17	701	25	28	702	1,890	4,674
	1884	3	21	533	22	25	616	1,577	3,476
	1885	3	13	544	34	22	565	1,470	3,332
	1886	4	18	489	16	20	647	1,507	3,885
	1887	3	19	449	22	18	749	1,192	3,480
	1888	2	17	422	13	20	549	1,145	3,996

* See footnote (†) on page 44 *ante*.

† The number of convictions (not arrests) for the principal offences in the last three years were as follow :—Manslaughter, 4 in 1886, *nil* in 1887, and 2 in 1888; burglary, etc., 2, 4, *nil* respectively; cattle and sheep stealing, 106, 87, and 62, almost all being aborigines; other offences against property, 163, 225, and 228; drunkenness, 1,165, 502, and 557.

‡ See footnote (†) on page 38 *ante*.

APPREHENSIONS AND SUMMONSES FOR VARIOUS OFFENCES IN THE AUSTRALASIAN COLONIES, 1878 TO 1888—continued.

Colony.	Year.	Number of Arrests or Summonses for—							
		Murder, Attempts at Murder, and Manslaughter.	Rape, and other Offences against Females.	Other Offences against the Person.	Robbery with Violence, Burglary, etc.	Horse, Sheep, and Cattle Stealing, etc.	Other Offences against Property.	Drunkenness.*	Other Offences.
New Zealand ...	1878	16	43	1,890	38	44	1,684	7,105	11,417
	1879	14	51	1,869	100	67	2,563	6,672	11,156
	1880	29	56	1,909	99	65	2,272	6,371	10,380
	1881	13	59	1,937	73	85	2,146	5,770	9,713
	1882	10	47	1,920	93	62	2,226	6,996	11,305
	1883	16	46	1,605	71	50	2,358	7,494	11,450
	1884	25	35	1,652	102	66	2,270	7,154	12,268
	1885	21	30	1,734	94	60	2,044	7,012	12,108
	1886	23	49	1,545	122	86	2,185	6,297	11,355
	1887	17	43	1,600	179	54	2,304	5,661	10,478
	1888	18	38	1,459	168	95	2,144	5,692	9,553

95. Subjoined is a statement of the proportion of the various offences, grouped under four heads, to the population of each colony during the same eleven years :—

Ratio of each group of offences to population of each colony.

PROPORTION OF VARIOUS OFFENCES TO POPULATION IN EACH AUSTRALASIAN COLONY, 1878 TO 1888.

Colony.	Year.	Arrests or Summonses per 1,000 of the Population for—			
		Offences against the Person.	Offences against Property.	Drunkenness.*	Other Offences.
Victoria ...	1878	5.53	5.64	14.40	28.90
	1879	5.11	5.42	13.02	29.13
	1880	5.28	5.05	11.83	26.97
	1881	5.33	5.44	12.73	27.97
	1882	4.99	5.87	13.20	29.00
	1883	4.25	5.01	13.62	30.87
	1884	3.91	4.68	13.85	32.59
	1885	4.34	4.42	14.17	31.92
	1886	4.24	4.84	14.72	32.28
	1887	3.94	4.92	15.28	33.75
	1888	8.61	4.61	17.44	31.09

* See footnote (†) on page 44 ante.

PROPORTION OF VARIOUS OFFENCES TO POPULATION IN EACH AUSTRALASIAN COLONY, 1878 TO 1888—continued.

Colony.	Year.	Arrests or Summonses per 1,000 of the Population for—			
		Offences against the Person.	Offences against Property.	Drunkenness.*	Other Offences.
New South Wales ...	1878	14·29	10·35	26·18	30·25
	1879	13·40	9·94	25·65	29·02
	1880	13·14	9·46	25·88	31·15
	1881	12·10	9·12	29·67	36·70
	1882	11·63	9·37	28·03	33·93
	1883	12·79	8·26	27·78	37·74
	1884	11·42	8·13	28·87	37·50
	1885	10·22	7·74	29·53	35·31
	1886	10·34	7·51	28·29	37·03
	1887	8·71	7·84	23·62	30·37
	1888	8·51	8·58	20·98	26·81
Queensland ...	1878	6·16	5·76	15·55	18·78
	1879	5·78	5·49	13·99	17·03
	1880	5·95	5·34	12·92	16·94
	1881	5·90	5·19	14·82	19·63
	1882	6·45	4·80	15·87	21·91
	1883	8·84	4·95	16·81	20·92
	1884	8·63	5·72	17·36	20·94
	1885	7·22	5·66	17·84	20·33
	1886	6·29	5·88	17·29	23·59
	1887	7·29	5·99	16·91	17·07
	1888	6·52	6·03	16·45	19·86
South Australia ...	1878	4·05	3·65	17·16	31·49
	1879	3·54	3·74	15·11	28·14
	1880	4·08	4·08	16·41	32·59
	1881	3·12	3·66	18·36	27·97
	1882	3·29	3·58	16·26	27·48
	1883	2·64	2·44	15·16	23·59
	1884	2·51	2·30	12·76	21·26
	1885	2·10	2·41	10·73	18·03
	1886	1·82	2·31	8·20	13·87
	1887	1·39	1·96	6·67	12·70
	1888	1·73	1·90	7·51	11·85
Western Australia ...	1878	22·13	18·39	178·27	
	1879	16·26	13·62	197·84	
	1880	11·48	12·31	169·57	
	1881	14·00	11·86	157·06	
	1882	12·01	15·10	140·34	
	1883	14·57	11·91	125·25	
	1884	12·68	10·36	126·39	
	1885	11·83	9·48	122·53	
	1886	12·75	11·13	129·49	
	1887	11·32	12·76	104·53	
	1888	12·22	11·18	86·50	

* See footnote (†) on page 44 ante.

PROPORTION OF VARIOUS OFFENCES TO POPULATION IN EACH AUSTRALASIAN COLONY, 1878 TO 1888—continued.

Colony.	Year.	Arrests or Summonses per 1,000 of the Population for—			
		Offences against the Person.	Offences against Property.	Drunkenness.*	Other Offences.
Tasmania† ...	1878	6·72	9·00	12·66	33·02
	1879	6·04	9·69	13·52	35·35
	1880	5·87	7·60	13·58	33·75
	1881	4·61	6·33	12·32	29·83
	1882	5·35	7·50	15·14	35·10
	1883	5·79	6·07	15·20	37·59
	1884	4·34	5·16	12·28	27·08
	1885	4·24	4·70	11·12	25·21
	1886	3·77	5·04	11·12	28·67
	1887	3·37	5·64	8·53	24·88
New Zealand	1888	3·06	4·03	7·93	27·69
	1878	4·62	4·19	16·85	27·08
	1879	4·32	6·09	14·88	24·89
	1880	4·20	5·13	13·41	21·86
	1881	4·07	4·67	11·68	19·68
	1882	3·88	4·67	13·74	22·19
	1883	3·15	4·68	14·16	21·63
	1884	3·12	4·44	13·03	22·35
	1885	3·15	3·88	12·39	21·39
	1886	2·78	4·11	10·82	19·51
	1887	2·78	4·25	9·49	17·57
	1888	2·50	3·98	9·40	15·78

96. It will be observed that, according to population, arrests or summonses for offences against the person were, in all the years, much more numerous in Western Australia and New South Wales than in any other colony ; in the former of which they were—in the year 1888—over three times, and in the latter two and a third times, as numerous as in Victoria. The following is the order of the colonies in this respect during 1888—which is the same as in the two previous years—the colony in which the proportion was highest being placed first and that in which it was lowest last :—

Order of colonies as to offences against the person.

ORDER OF COLONIES IN REFERENCE TO ARRESTS OR SUMMONSES FOR OFFENCES AGAINST THE PERSON, 1888.

1. Western Australia.

2. New South Wales.

3. Queensland.

4. Victoria.
5. Tasmania.

6. New Zealand.

7. South Australia.

97. In 1888, arrests for offences against property in Western Australia were two and a half times, and in New South Wales nearly twice as numerous, in proportion to population, as they were in Victoria, where they were fewer than in any colonies except Tasmania,

Order of colonies as to offences against property.

* See footnote (†) on page 44 ante.

† See footnote (‡) on page 38 ante.

New Zealand and South Australia. In this respect, the order of the colonies was as follows, the colony with the largest proportion of such arrests being placed first, and the rest in succession :—

ORDER OF COLONIES IN REFERENCE TO ARRESTS OR SUMMONSES
FOR OFFENCES AGAINST PROPERTY, 1888.

1. Western Australia.	5. Tasmania.
2. New South Wales.	6. New Zealand.
3. Queensland.	7. South Australia.
4. Victoria.	

Order of
colonies as
to drunken-
ness.

98. In the matter of drunkenness, although New South Wales has improved considerably since 1886, she still outstrips all the other colonies of the group in which the offence is distinguished.* Victoria, on the other hand, has apparently become more inebriate, as in 1888 arrests for drunkenness within her boundaries were, in proportion to population, only a sixth less than those in New South Wales.† In the following list, wherein the colony in which the largest proportion of inebriates was brought before magistrates in 1888 is placed first, and that in which the number was smallest last, it will be observed that Victoria stands next below New South Wales, but above the other colonies :—

ORDER OF COLONIES IN REFERENCE TO APPREHENSIONS FOR
DRUNKENNESS IN PROPORTION TO POPULATION, 1888.

1. New South Wales.	4. New Zealand.
2. Victoria.	5. Tasmania.
3. Queensland.	6. South Australia.

Order of
colonies as
to "other
offences."

99. "Other offences," which embrace breaches of corporation by-laws, *Wines and Spirit Statute*, etc., are rather violations of good order than actual crimes, and are consequently generally dealt with by summons. Relatively to population, they were formerly most numerous in New South Wales, but in 1887 and 1888 they were more numerous in Victoria than in any of the other colonies. In Western Australia drunkenness is included with these offences, and, consequently, the figures are not comparable with those of the other colonies. Omitting Western Australia, therefore, the following is the order of the colonies in respect to irregularities of this description, the colony in which the proportion was highest being placed first, and that in which it was lowest last :—

ORDER OF COLONIES IN REFERENCE TO ARRESTS OR SUMMONSES
FOR "OTHER OFFENCES," 1888.

1. Victoria.	4. Queensland.
2. Tasmania.	5. New Zealand.
3. New South Wales.	6. South Australia.

* The only colony in which drunkenness is not distinguished, so far as the total arrests are concerned, is Western Australia. The convictions for that offence, however, are given in footnote (†) on page 46 *ante*.

† Both in Victoria and New South Wales, a drunken person is liable to be arrested, even although not disorderly.

100. The statistics at hand relating to the United Kingdom give the commitments for trial and convictions in the superior courts, but do not afford any information respecting the cases dealt with in courts of petty sessions. The following table shows the number of commitments and convictions and their respective proportions to the population of each division of the United Kingdom, also the proportion of commitments to convictions during the eleven years ended with 1888 :—

● CRIME IN THE UNITED KINGDOM, 1878 TO 1888.

Colony.		Estimated Population.*	Commit- ments for Trial.	Con- victions.	Proportion of—		
					Commit- ments to Population. *	Convic- tions to Population. *	Convic- tions to Commit- ments.
					per 10,000.	per 10,000.	per cent.
England and Wales	1878	25,033,259	16,372	12,473	6·54	4·98	76·18
	1879	25,371,489	16,388	12,525	6·46	4·94	76·43
	1880	25,714,288	14,770	11,214	5·74	4·36	75·92
	1881	26,061,736	14,786	11,353	5·67	4·36	76·78
	1882	26,413,861	15,260	11,699	5·78	4·43	76·66
	1883	26,770,744	14,659	11,347	5·49	4·24	77·41
	1884	27,132,449	14,407	11,134	5·31	4·10	77·28
	1885	27,499,041	13,586	10,500	4·94	3·82	77·28
	1886	27,870,586	13,974	10,686	5·01	3·83	76·47
	1887	28,247,151	13,292	10,338	4·71	3·66	77·78
	1888	28,628,804	13,750	10,561	4·80	3·69	76·81
Scotland	1878	3,628,268	2,922	2,273	8·05	6·26	77·79
	1879	3,665,443	2,700	2,091	7·37	5·70	77·44
	1880	3,705,994	2,583	2,046	6·97	5·52	79·21
	1881	3,745,485	2,444	1,832	6·53	4·89	74·96
	1882	3,785,400	2,469	1,943	6·52	5·13	78·70
	1883	3,825,744	2,567	1,916	6·71	5·01	74·64
	1884	3,866,521	2,610	2,085	6·72	5·37	79·88
	1885	3,907,736	2,535	1,956	6·49	5·01	77·16
	1886	3,949,393	2,437	1,838	6·19	4·65	75·20
	1887	3,991,499	2,357	1,843	5·91	4·62	78·19
	1888	4,034,156	2,353	1,849	5·83	4·58	78·58
Ireland	1878	5,282,246	4,183	2,293	7·92	4·34	54·81
	1879	5,265,625	4,363	2,207	8·29	4·19	50·58
	1880	5,202,648	4,716	2,383	9·06	4·58	50·53
	1881	5,144,983	5,311	2,698	10·32	5·24	50·80
	1882	5,097,853	4,301	2,255	8·44	4·42	52·43
	1883	5,015,282	3,025	1,740	6·03	3·47	57·52
	1884	4,962,693	2,925	1,546	5·89	3·12	52·85
	1885	4,924,342	2,850	1,573	5·79	3·19	55·19
	1886	4,889,498	3,028	1,619	6·19	3·31	53·47
	1887	4,837,352	2,694	1,411	5·57	2·92	52·38
	1888	4,777,545	2,188	1,220	4·58	2·55	55·76

* Figures in several cases amended since last publication.

CRIME IN THE UNITED KINGDOM, 1878 TO 1888—continued.

Colony.		Estimated Population.*	Commit- ments for Trial.	Con- victions.	Proportion of—		
					Commit- ments to Population. *	Convic- tions to Population. *	Convic- tions to Commit- ments.
					per 10,000.	per 10,000.	per cent.
Total ...	1878	33,943,773	23,477	17,039	6·92	5·02	72·57
	1879	34,302,557	23,451	16,823	6·83	4·90	71·74
	1880	34,622,930	22,069	15,643	6·37	4·52	70·88
	1881	34,952,204	22,541	15,883	6·45	4·55	70·46
	1882	35,297,114	22,030	15,897	6·24	4·50	72·16
	1883	35,611,770	20,251	15,003	5·69	4·21	74·09
	1884	35,961,663	19,942	14,765	5·54	4·10	74·04
	1885	36,331,119	18,971	14,029	5·22	3·86	73·94
	1886	36,709,477	19,439	14,143	5·30	3·85	72·73
	1887	37,076,002	18,343	13,592	4·94	3·66	74·07
	1888	37,440,505	18,291	13,630	4·89	3·64	74·52

Crime in
United
Kingdom
and
Australasia
compared.

101. Taking the mean of the eleven years given in the table, it will be found that, in proportion to population, the commitments for trial in the United Kingdom, taken as a whole, are less than in Victoria, and considerably less than in any of the other Australasian colonies ; also, that the same holds good for England and Scotland, except that the proportion in Victoria is about equal to that in the latter ; but in Ireland the proportion has, on the whole, been slightly higher than in Victoria. Convictions after commitment are, relatively to population, generally as numerous in Victoria as in the United Kingdom or England and Wales, more numerous than in Ireland, but less numerous than in Scotland.

Convictions
in United
Kingdom
and
Australasia
compared.

102. The convictions obtained in proportion to the commitments are, according to the figures, more numerous in England and Scotland than in any of the Australasian colonies, but the proportion in Ireland in 1887 was smaller than that in Victoria, New South Wales, Western Australia, or Tasmania during the same year.

Prostitution
in Austra-
lian capitals.

103. A phase of crime, respecting which it is difficult to obtain accurate information, is female prostitution. Mr. H. M. Chomley, the Chief Commissioner of the Victorian police, however, by means of the force at his disposal and by correspondence with the police authorities of the neighbouring colonies, a few years since obtained some figures relating to the prostitution existing in Melbourne, Sydney, Brisbane, and Adelaide, which will be found in the following table :—

* Figures in several cases amended since last publication.

PROSTITUTION IN AUSTRALIAN CAPITALS.

Capital Cities.	Population (Census of 1881).	Estimated Number of Prostitutes, 1883.	Prostitutes per 10,000 of Population.
Melbourne	282,947	597	21·10
Sydney	224,211	613	27·34
Brisbane	31,109	99	31·82
Adelaide	67,954	500	73·58

104. According to the figures in the last column, Melbourne was much freer from prostitution than any one of the other metropolitan cities named. It will be observed that even in actual numbers the prostitutes in Melbourne were fewer than in Sydney, although the latter had the smaller population. An enormous amount of prostitution appears to exist in Adelaide, but the figures being given in round numbers must be regarded with suspicion.

Results compared.

105. From an estimate made in 1890, upon which Mr. Chomley states considerable care was expended, the number of prostitutes in Melbourne and suburbs was 702. At the same time the population amounted to 458,500, so that the proportion of prostitutes per 10,000 of the population appears to have fallen from 21 in 1883 to only 15 in the present year.

Prostitutes in Melbourne, 1890.

106. The Victorian police force is an admirably organized body of men, and, although smaller in numbers than the police force of New South Wales by 59, smaller also in proportion to population than the police force of either that colony or Queensland, their efficiency, combined with the orderly character of the population, is such that serious offences, as has been already shown,* are usually much less rife in Victoria than in most of the other colonies. The following figures show the number of police and their proportion to the population in each colony :—

Police in Australasian colonies.

POLICE IN AUSTRALASIAN COLONIES, 1890.†

- 1. South Australia has 389 police, or 1 to 834 persons.
- 2. Victoria „ 1,454 „ „ 770 „
- 3. New South Wales „ 1,513 „ „ 742 „
- 4. Queensland „ 902 „ „ 451 „

107. Mr. Chomley supplies the following figures to show the number of persons one policeman keeps in order and protects in each of the four Australian capitals named :—

Police in Australian capitals.

* See paragraph 89 ante.
† In 1883, the New Zealand police numbered 741, or 1 to every 783 persons living. No later returns are at hand respecting that colony.

POLICE IN AUSTRALIAN CAPITAL CITIES, 1890.

1. Sydney	has	556	police,	or	1	to	673	persons.
2. Melbourne	„	670	„	„	„	„	665	„
3. Adelaide	„	191	„	„	„	„	631	„
4. Brisbane	„	190	„	„	„	„	481	„

Supreme
Court
criminal
sittings.

108. The number of criminal cases tried in the Supreme Court at the various places throughout the colony where sittings were held in 1889 was 509, of which 429 were for felony, and 80 for misdemeanors. The convictions for felony numbered 329, and for misdemeanors 71. The number of places where sittings were held was 16, the number of sittings was 52, and the total duration of sittings was 230 days.

Supreme
Court civil
sittings.

109. Sittings may be held at the same number of places to try civil cases, but no causes were entered at 5 out of the 19 places in 1889. The number of causes entered for trial during the year was 544; but the number of causes tried was only 341, of which 46 were tried by juries of six, 10 by juries of twelve, and 285 by a judge alone. All but 16 of these were defended. The damages laid in the declarations amounted in the aggregate to £593,963. Verdicts were returned in 336 instances, and there were no nonsuits. Of the verdicts, 236, or about 70 per cent., were for the plaintiff. The aggregate amount awarded by the juries was £32,831, or 6 per cent. of the damages laid. In the ten years ended with 1888, the damages sued for in these courts amounted to £2,482,072, and the sums awarded by juries to £403,338, or to about 16 per cent. of the damages sued for.

Courts of
General
Sessions.

110. Courts of General Sessions have jurisdiction in criminal cases within certain limitations, and have also appellate jurisdiction in civil cases from petty sessions. The places at which such courts were held in 1889 numbered 28, and the number of courts held 77, extending over periods amounting in the aggregate to 152 days. The number of cases tried was 350, in 251 of which, or 72 per cent., convictions were obtained. The number of appeals heard was 59. In the ten years prior to 1889, 2,612 cases were tried in Courts of General Sessions, and 1,743 convictions were obtained; thus the latter were to the former in the proportion of 67 per cent.

County
Courts.

111. County Courts have jurisdiction in civil cases up to £250. The number of places at which they were held in 1889 was 63, and the number of courts held was 190, extending over 444 days. The total number of cases tried was 11,808, the amount sued for was £393,757; and the amount recovered £157,635, or only 40 per cent. of the amount sued for. The costs awarded to the plaintiff amounted to £16,199, and the costs awarded to the defendant to £7,168. During

the ten years prior to the year under review the aggregate amount sued for in County Courts was £2,867,735, and the aggregate amount awarded was £872,489, or 30 per cent. of the amount sued for.

112. Courts of Mines have jurisdiction concerning all questions or disputes which may arise out of mining on Crown lands. The places at which they were held in 1889 numbered 9, and the courts held numbered 26, occupying 7 days. The total number of suits was 4, and the aggregate amount or value of demand, £350. The gross amount of costs awarded to the plaintiffs was £12, and to the defendants £10. These figures do not include all the mining disputes which took place during the year, as those of minor importance are adjudicated on by the wardens of the gold-fields. In the ten years prior to 1889, the value sued for in Courts of Mines amounted in the aggregate to £19,592. The business has fallen off very considerably for several years past.

Courts of
Mines.

113. The cases of indictable offences heard at Petty Sessions during 1889 numbered 2,625, which resulted in 1,042 commitments for trial. Commitments were thus obtained in 40 per cent. of the cases. The offences summarily dealt with numbered 61,374, in 43,142 of which, or 70 per cent., the offender was convicted.

Courts of
Petty Ses-
sions :
criminal
cases.

114. Courts of Petty Sessions have jurisdiction in ordinary civil cases up to £50,* and in master and servant cases also up to £50. Such courts were held at 239 places during the year. The civil cases heard numbered 27,832, in which the total amount of debts or damages claimed was £218,900, and the total amount awarded was £130,649, or 60 per cent. of the amount claimed. The number of cases was greater by two-fifths than, and the amount of debts claimed was nearly twice as large as, in the previous year. In the ten years ended with 1888, the debts or damages claimed in these courts amounted in all to £875,719, and the sums awarded to £551,341, or to 63 per cent. of the amounts claimed.

Courts of
Petty Ses-
sions : civil
cases.

115. The net results of the civil cases tried in 1889 may be gathered from the following table, which shows the total amount of debts and damages sued for in the various courts, and the aggregate value of the awards, also the percentage of the latter to the former, in 1889 and the previous decennium. It will be noticed that the whole amount at stake was £1,207,000, and that rather over one-fourth was recovered; also that whilst the proportion recovered in the Supreme Court and Courts of Petty Sessions appears to have been

Debts sued
for and
awarded.

* Increased from £20 by the *Justices of the Peace Act* 1887.

considerably less than,* that in the County Courts was somewhat above, the average :—

DEBTS AND DAMAGES CLAIMED AND AWARDED.*

Name of Court.	Amount of Debts and Damages, 1889.		Proportion of Debts and Damages recovered.	
	Claimed.	Awarded.	1889.	Average of Previous 10 Years.
	£	£	Per cent.	Per cent.
Supreme Court	593,963	32,831	6	13
County Courts	393,757	157,635	40	37
Courts of Petty Sessions ...	218,900	130,649	60	67
Total	1,206,620	321,115	27	33

Writs.

116. The number of writs issued in 1889, in the six bailiwicks into which the colony is divided, was 2,329, or nearly twice as many as in the previous year. Of the whole number 19 were Queen’s writs against both person and property, 28 were subjects’ writs against the person alone, and 2,282 were subjects’ writs against property alone.

Gaols and penal establishments.

117. Places for the reception of prisoners in Victoria are of three kinds: ordinary gaols, police gaols, and penal establishments. The ordinary gaols and the penal establishments are houses of correction. The police gaols are used for the detention of prisoners sentenced to short periods of imprisonment, or awaiting trial or transfer to some other gaol or penal establishment, or to a lunatic asylum.

Probation system for first offenders.

118. In accordance with recommendations made by the Inspector-General of Penal Establishments, the probation system for first offenders was introduced into Victoria by the passing of the *Juvenile Offenders Act* 1887 (51 Vict. No. 951), which came into operation on 1st January, 1888. This Act gives power to a judge or chairman of the court before which, or any two or more justices before whom, the conviction has taken place, in the case of persons under the age of 21 years not previously convicted, to suspend the execution of sentences for any term of imprisonment not exceeding three years for any offence, whether indictable or punishable by summary conviction, and to release the offender from custody upon entering into recognizances, to be settled by the court, for his future good behaviour. Moreover, in the case of prisoners undergoing sentence, who had not been previously

* The amounts claimed and awarded, especially in the Supreme Court, are not strictly comparable, for whereas the amount claimed is set down for every case entered whether tried or not, the amount awarded obviously only applies to cases actually tried. In the Supreme Court, only about two-thirds of the cases entered are actually tried, whereas in 1889 only a little more than half were tried during the year.

convicted and received sentence when under the age of 25 years, the Governor in Council is empowered to extend mercy to such offenders by releasing them from custody upon entering into like recognizances. In both cases, however, a prisoner so released is liable to be re-arrested for misbehaviour, and committed to prison to undergo his sentence or the residue thereof. Under the provisions of this Act, 16 male prisoners were released on probation in 1888, and 18 (including 1 female) in 1889.

119. The gross, distinct, and average number of prisoners detained in each description of prison during 1889 will be found in the following table, males and females being distinguished :—

Gaols and prisoners.

GAOLS AND PENAL ESTABLISHMENTS, 1889.

Description of Prison.	Number of Institutions.	Prisoners detained during the Year.								
		Gross Number.*			Distinct Individuals.†			Daily Average.		
		M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
Gaols ...	9	8,099	2,612	10,711	} 8,517	1,715	10,232	{ 753	354	1,107
Penal establishments	1	1,329	...	1,329				{ 680	...	680
Police gaols ...	8	745	41	786	633	35	668‡	15	1	16
Total ...	18	10,173	2,653	12,826	9,150	1,750	10,900	1,448	355	1,803

120. According to this table, the number of individual prisoners detained during the whole or some portion of 1889 in the gaols and penal establishments of the colony was 10,900, viz., 9,150 males and 1,750 females. In the previous year, the number of distinct prisoners was 10,071, viz., 8,395 males and 1,676 females; thus showing an increase of 829 during the year under review, viz., 755 in the male, and of 74 in the female prisoners.

Increase of distinct prisoners.

121. Comparing the figures for 1889 with those showing the mean population of that year, it appears that 1 person in every 102 persons in the colony, or one male in every 65 males, and 1 female in every 300 females, passed some portion of the year in prison; whereas the proportion in 1888 was 1 person in every 105 persons in the colony, or 1 male in every 67 males, and 1 female in every 296 females. In these estimates no account is taken of persons lodged temporarily in

Proportion of distinct prisoners to population.

* Exclusive of prisoners transferred from one institution to another. The numbers here given represent imprisonments, each person being counted afresh every time imprisoned.
† See table following paragraph 124 post.
‡ Estimated.

watch-houses, etc., pending examination before magistrates, the prisoners here referred to being only those detained in regular gaols or penal establishments.

Proportion
of distinct
to gross
prisoners.

122. If a comparison be made between the gross number of prisoners (exclusive of transfers) and the distinct prisoners, it will be found that 84·98 per cent. of the prisoners dealt with in 1889—viz., 89·94 per cent. in the case of males, and 65·96 per cent. in the case of females—were distinct individuals. In the previous year the proportions were:—Total, 88·44 per cent. ; males, 89·22 per cent. ; females, 66·56 per cent.

Proportion
of prisoners
to popu-
lation.

123. If the figures in the table showing the average number of prisoners are compared with the mean population, it follows that 1 person in every 612 persons living was constantly in prison during 1889 ; or, distinguishing the sexes, that, during that year, 1 male in every 406 males living, and 1 female in every 1,456 females living were constantly in detention. By the following table, which gives the figures for the last eleven years, it will be seen that the proportion of prisoners to the population has fallen from 1 in every 534 in 1879 to 1 in every 612 in 1889, the latter proportion, however, being higher than that prevailing in any of the previous six years :—

PROPORTION OF PRISONERS TO POPULATION, 1879 TO 1889.

Year.	Of the Total Population one Person was constantly in Prison to every—		
	Males.	Females.	Both Sexes.
1879 	351	1,267	534
1880 	348	1,274	532
1881 	353	1,349	543
1882 	391	1,416	596
1883 	429	1,346	633
1884 	446	1,347	650
1885 	466	1,357	670
1886 	444	1,380	653
1887 	429	1,360	632
1888 	434	1,493	650
1889 	406	1,456	612

Number of
times
individuals
were in
prison.

124. In the Inspector General's annual reports a return appears showing the number of times each individual was imprisoned during the year. The following are the particulars for 1889,* also the proportions per cent. :—

* See Inspector General's Report for 1889, Parliamentary Paper No. 156, Session 1890.

DISTINCT PRISONERS, 1889.

(Exclusive of those in Police Gaols.)

Number of Times Imprisoned during Year.	Distinct Prisoners, 1889.					
	Number.			Percentage.		
	Males.	Females.	Total.	Males.	Females.	Total.
Once	6,101	1,051	7,152	71·64	61·28	69·90
Twice	916	283	1,199	10·75	16·50	11·72
Three times	244	104	348	2·86	6·07	3·40
Four times	79	50	129	·93	2·91	1·26
Five times	33	32	65	·39	1·87	·64
Six times and upwards	23	20	43*	·27	1·17	·42
Total received	7,396	1,540	8,936	86·84	89·80	87·34
In detention at commencement of year †	1,121	175	1,296	13·16	10·20	12·66
Grand Total	8,517	1,715	10,232	100·00	100·00	100·00

125. Adding the numbers at the commencement of the year to those in the first line of the table, it is found that 82½ per cent. of the distinct prisoners in 1889 were imprisoned only once during the year, and consequently 17½ per cent. were imprisoned more than once. In the case of males, the proportions were 85 and 15 per cent.; and in the case of females, 71 and 29 per cent. respectively. The tendency of females to be imprisoned over and over again is greater than that of males; thus, during the year, 12 per cent. of the whole number of females were imprisoned three times or upwards, and nearly 6 per cent. four times or upwards; whereas only 4½ per cent. of the males were imprisoned more than twice, and only 1½ per cent. more than three times.

Persons imprisoned more than once.

126. Out of a total of 1,801 prisoners in detention on the 31st December, 1889, 1,107, or about 62 per cent., had been previously imprisoned under sentence in the colony—viz., 227, or 13 per cent., once; 155, or 9 per cent., twice; 110, or 6 per cent., three times; and as many as 615, or 34 per cent., four times or oftener. Of the total number, 22 had also been convicted in other countries.

Prisoners previously convicted.

127. The following is a classification of the prisoners in confinement at the end of 1889, according to the grounds in respect to which they were detained. It will be noticed that 95, or 5¼ per cent., were

Grounds of imprisonment.

* Three males and five females admitted seven times; one male and four females admitted eight, and one female admitted nine times.
† Exclusive of those discharged and re-admitted during the year, who numbered 388, viz., 235 males and 153 females, they being included with the figures in the previous line.

untried ; also that more than half the males, but less than a sixth of the females, had been convicted of felony :—

GROUNDS FOR DETENTION OF PRISONERS, 1889.

Grounds for Detention.	Gaols.		Police Gaols.		Penal Establishments.	Total.		
	Males.	Females.	Males.	Females.	Males.	Males.	Females.	Total.
Felony, tried...	214	53	1	...	548	763	53	816
„ untried	38	6	5	...		43	6	49
Misdemeanors, tried	307	180	3	...	148	458	180	638
„ untried	25	4	8	...	...	33	4	37
Other offences, tried	127	98	2	...	44	173	98	271
„ untried	9	...	...	...	...	9	...	9
Total	720	341	19	...	740	1,479	341	1,820

128. The total number of prisoners (exclusive of transfers) admitted in 1889, to ordinary gaols and penal establishments, was 10,388, and of these, 635, viz., 489 males and 146 females, were imprisoned on charges of vagrancy, but really for medical attention, and 781, viz., 316 males and 465 females, were received for shelter. There were thus 1,416 persons, as against 1,230 in 1888, who were admitted on account of their destitute condition, and went to swell the ranks of the prison population, instead of being otherwise provided for as objects of charity. If these destitute prisoners be deducted from the total number of admissions, the balance, viz., 8,972, as compared with 8,426 in 1888, will more correctly represent the criminal admissions during the year.*

129. The cases in which prisoners were absent from work during the year on account of sickness, which numbered 2,030, were in the proportion of one case to every 5.5 individual prisoners. The daily average number of prisoners incapacitated from labour by reason of sickness was 132, or 1 in every 10 of the average number constantly employed. The total number of cases of sickness at any one time was 171.

130. Sixty-seven deaths from natural causes occurred in prisons during 1888, and 89 deaths in 1889. These deaths were in the proportion of 1 to every 150 in the former year, and one to every 122 in the latter year, of the estimated individual prisoners ; or in the proportion of one to every 24 in the former year, and one to every 20 in

* See Inspector-General's Report, page 3.

the latter year, of the daily average number of prisoners detained. The death-rate was thus considerably higher in the year under review than in the previous one.

131. In the last four years no permanently successful attempt to escape from prison has taken place. In the first of those years one prisoner escaped from the custody of the police whilst being transferred, but was retaken, and two others made unsuccessful attempts to escape from prison; in 1887, one prisoner absconded, and was recaptured during the year; in 1888 no instance is reported of any prisoner having attempted to escape from custody; and in 1889 four prisoners, of whom one was unconvicted, absconded, but were recaptured.

Prisoners absconding.

132. Of prisoners who had been sentenced to imprisonment for life, there have been 36 altogether in the colony, and of these, 18 have been discharged under the operation of regulations in force since February, 1878, as to prisoners under commuted sentences to terms of life, 1 by special commutation, 1 to a lunatic asylum, and 2 by death; whilst 14—viz., 10 males and 4 females—still remain in custody.

Prisoners under life sentences.

133. An abstract of the estimated population at various ages, of the average number of prisoners at the same age, and the proportion of the latter to the former, will be found in the following table:—

Ages of prisoners.

AGES OF PRISONERS, 1889.

Ages.	Estimated Population.	Average number of Prisoners constantly detained.	Prisoners per 10,000 of the Population.
Under 20 years	491,902	123	2·50
20 to 30 „	244,378	676	27·66
30 „ 40 „	129,925	392	30·17
40 „ 50 „	88,341	261	29·54
50 „ 60 „	86,359	180	20·83
60 years and upwards	63,395	171	26·96
Total	1,104,300	1,803	16·32

134. It appears from this table that, in 1889, the proportion of prisoners constantly detained to the population was greatest between the ages of 20 and 50. Of persons over 20 living in Victoria, 1 in every 365; of those between 20 and 40, 1 in every 350; of those over 40, 1 in every 389; and of those over 60, 1 in every 371, were constantly in prison throughout the year.

Proportion of prisoners at various ages.

Birthplaces
and reli-
gions of
prisoners.

135. The birthplaces and religions of the prisoners constantly detained during the year, deduced from the total numbers of each nationality and religion returned as passing through the institutions, also the estimated totals of the same nationality and religion, are compared in the following table :—

BIRTHPLACES AND RELIGIONS OF PRISONERS, 1889.

Native Country and Religion.	Estimated Population.	Average number of Prisoners constantly detained.	Prisoners per 10,000 of the Population.
NATIVE COUNTRY.			
Australasian Colonies ...	702,365	758	10·79
England and Wales ...	183,464	417	22·73
Scotland ...	59,673	120	20·11
Ireland ...	106,532	354	33·23
China... ..	11,679	20	17·13
Other countries ...	40,587	134	33·02
Total ...	1,104,300	1,803	16·32
RELIGION.			
Protestants ...	791,815	1,031	13·02
Roman Catholics ...	260,404	728	27·96
Jews ...	5,542	16	28·87
Buddhists, Confucians, etc.	10,710	17	15·87
Others ...	35,829	11	3·07

Relative
numbers
of each
country
and sect.

136. It will be observed that, in view of their respective numbers in the population, natives of the Australasian colonies contributed much less than their share to the number of inmates of prisons ; but the natives of Scotland contributed 24 per cent. more, natives of England and Wales 39 per cent more, and natives of Ireland 104 per cent. more, than their share to that number ; whilst the proportion of Chinese was smaller than that of any other nationality except the Australians. Also that of the religious denominations shown, Protestants contributed much less, and Buddhists, etc., slightly less, than their share ; but Roman Catholics contributed 71 per cent., and Jews 78 per cent., more than their share to the number of such inmates. In the previous year, however, the proportion of Jews was below the average of all the sects.

Education of
prisoners.

137. According to the following figures, which show the state of education of prisoners at various periods since 1873, the proportion of those able to read and write has considerably increased, and the proportion of the entirely illiterate has largely diminished of late years :—

EDUCATION OF PRISONERS, 1873 TO 1889.

Period.	Numbers in every 100—		
	Able to Read and Write.	Able to Read only.	Unable to Read.
1873 to 1876	64	18	18
1877 to 1880	74	8	18
1881 to 1883	83	6	11
1884 to 1886	84	6	10
1887	84	4	12
1888	87	4	9
1889	87	4	9

138. The following cases of punishment for offences committed within the prison took place in 1889. It will be observed that solitary confinement, which is said to be more dreaded by prisoners than any other punishment, was prescribed in more than half the cases. The “other punishments” include “separate confinement,” which is gradually taking the place of solitary confinement ; but do not include whipping, as corporal punishment is not administered in Victoria for any breach of prison regulations :—

Gaol punishments.

PUNISHMENTS FOR OFFENCES WITHIN PRISONS, 1889.

Nature of Punishment.	Gaols:			Penal Establish-ment.	Total.		
	Males.	Females.	Total.	Males.	Males.	Females.	Total.
Hard labour	9	2	11	25	34	2	36
Solitary confinement ..	315	117	432	352	667	117	784
Other punishments	99	62	161	458	557	62	619
Total	423	181	604	835	1,258	181	1,439

139. The punishments for offences within the prison, as detailed in the last table, were in the proportion of 1 to every 7 individual prisoners, 1 punishment of a male to every 7 individual male prisoners, 1 punishment of a female to every 9 individual female prisoners. According to the daily average number of prisoners, there was not quite 1 punishment to every prisoner; or very

Proportion of prisoners punished.

nearly 1 punishment to every male, and about 1 punishment to every 2 females.

Trades of
prisoners.

140. Of the prisoners discharged in 1889, 223 were mechanics or skilled workmen, and of these 88 were set down as having a thorough, and 135 only an imperfect knowledge of their trade. As many as 157, or 70 per cent., had acquired such knowledge as they possessed during the term of their imprisonment. The following is a statement of the handicrafts followed, and of the number of prisoners who pursued each handicraft whilst under detention :—

MECHANICS AND SKILLED WORKMEN DISCHARGED FROM PRISON
IN 1889.

Trades.	Knowledge of Trade on Discharge.				Total.
	Good.		Imperfect.		
	Learnt Outside.	Learnt in Prison.	Learnt Outside.	Learnt in Prison.	
Bakers	1	...	...	3	4
Blacksmiths and moulders ...	9	...	4	3	16
Bookbinders ... ..	...	...	...	5	5
Carpenters and turners	2	4	2	3	11
Hat and bag makers ... ..	...	12	...	14	26
Matting and mat makers ... ..	...	...	1	40	41
Masons and bricklayers	2	...	1	...	3
Painters	4	...	1	4	9
Printers ... ..	...	1	2	6	9
Shoemakers	6	8	10	15	39
Stonecutters	2	...	...	4	6
Tailors	10	4	...	7	21
Tanners ... ..	...	1	...	...	1
Tinsmiths and plumbers	2	...	...	...	2
Weavers	5	15	2	8	30
Total	43	45	23	112	223

Cost and
earnings of
prisoners.

141. In the following statement of the cost* and earnings of prisoners in detention during the year 1889, the value of prison labour—so far as it was utilized for prison requirements—is added to the cost, as well as accounted for in the earnings of prisoners :—

* Including the cost of the head office, but exclusive of any allowance for cost of prisoners in Police Gaols, for interest on the cost of gaol buildings, or for such repairs to gaol buildings as were effected by the Public Works Department.

COST OF PRISONERS.*

Salaries and wages	...	...	...	...	£38,926	12	5
Contingencies	...	...	...	...	27,699	12	7
Extra guard for municipal and other bodies	...				175	7	0
Value of prison labour utilized in making up clothing, materials, implements, and other gaol requirements					35,286	16	0
Total cost	...	...	...	...	£102,088	8	0

EARNINGS OF PRISONERS.

Work for other departments, municipalities, etc.—Paid for in cash†	...	...	...	...	£7,719	19	9
Value of time not paid for	...	...	...	...	1,267	18	7
Value of work in connexion with prison buildings					5,250	16	4
Manufacture of clothing, implements, etc., for gaol purposes	...	...	...	...	13,040	9	8
Other gaol requirements	...	...	...	...	16,995	10	0
Total earnings	...	...	...	...	£44,274	14	4

142. The gross cost of prisoners in 1889 (£102,088) was in the proportion of £57 2s. 6d. per head of the average number of prisoners detained (1,787). The difference between the gross cost and the earnings of prisoners, *i.e.*, the net cost, was £57,814, or £32 7s. per head. The earnings of prisoners in the year (£44,275) amounted to £32 14s. 6d. per head of the average number of prisoners employed (*viz.*, 1,353), which is equivalent to 2s. 1d. per head per diem for the 308 working days the year contained.

143. By the following comparative statement of the number of prisoners detained in the gaols and penal establishments of Victoria and New South Wales at the end of each of the seven years ended with 1889, it appears that in proportion to the population the average number of prisoners in the mother colony exceeds that in Victoria by over 50 per cent. :—

Prisoners in
Victoria
and New
South
Wales.

* See footnote (*) on page 64.

† This was the amount paid into the Treasury.

PRISONERS IN VICTORIA AND NEW SOUTH WALES,
1883 TO 1889.

Year.	On the 31st December.					
	Estimated Population.		Number of Prisoners.		Prisoners per 10,000 of the Population.	
	Victoria.	New South Wales.	Victoria.	New South Wales.	Victoria.	New South Wales.
1883 ...	921,743	857,744	1,442	2,168	15·64	25·28
1884 ...	946,045	903,958	1,428	2,464	15·09	27·26
1885 ...	971,145	957,914	1,444	2,559	14·87	26·71
1886 ...	1,003,043	1,001,966	1,550	2,501	15·45	24·96
1887 ...	1,036,119	1,042,919	1,608	2,380	15·52	22·82
1888 ...	1,090,869	1,085,740	1,698	2,353	15·57	21·68
1889 ...	1,118,028	1,122,200	1,820	2,370	16·28	21·12
Means ...	1,012,427	996,063	1,570	2,399	15·51	24·08

Expenditure on police, gaols, etc. 144. The following table shows the total amounts and the amounts per head expended in connexion with the police and the penal establishments and gaols of Victoria during the 25½ years ended with 1889-90. The cost of buildings is not included:—

EXPENDITURE ON POLICE, GAOLS, ETC., 1865 TO 1889-90.

Year.	Amount Expended* on—			Amount per head of Proportion.	
	Police.	Gaols and Penal Establishments.	Total.		
	£	£	£	s.	d.
1865 ...	187,962	62,629	250,591	8	2
1866 ...	194,189	72,522	266,711	8	6
1867 ...	138,226	52,972	191,198	5	11
1868 ...	201,000	71,285	272,285	8	2
1869 ...	157,563	50,913	208,476	6	1
1870 ...	198,027	56,503	254,530	7	2
1871 (six months) ...	95,363	27,101	122,464	3	4
1871-2 ...	190,711	57,855	248,566	6	8
1872-3 ...	187,101	56,017	243,118	6	5
1873-4 ...	194,329	61,787	256,116	6	8
1874-5 ...	198,312	60,469	258,781	6	7
1875-6 ...	199,738	61,051	260,789	6	7
1876-7 ...	197,371	60,008	257,379	6	5
1877-8 ...	207,119	58,132	265,251	6	6
1878-9 ...	209,041	58,442	267,483	6	5

* Exclusive of the cost of buildings, which in 1888-9 amounted to £43,190.

EXPENDITURE ON POLICE, GAOLS, ETC., 1865 TO 1889-90—
continued.

Year.	Amount Expended* on—			Amount per head of Population.	
	Police.	Gaols and Penal Establishments.	Total.		
	£	£	£	s.	d.
1879-80 ...	233,732	56,636	290,368	6	11
1880-81 ...	207,674	53,565	261,239	6	1
1881-2 ...	201,063	53,032	254,095	5	9
1882-3 ...	204,561	57,128	261,689	5	9
1883-4 ...	216,973	55,836	272,809	5	10
1884-5 ...	217,684	57,311	274,995	5	9
1885-6 ...	224,237	60,644	284,881	5	9
1886-7 ...	233,173	59,894	293,067	5	10
1887-8 ...	240,840	65,385	306,225	5	11
1888-9 ...	261,329	66,163	327,492	6	1
1889-90 ...	270,308	71,422	341,730	6	1
Total ...	5,267,626	1,524,701	6,792,328	6	3

145. By the figures in the last column it will be observed that the police and gaols expenditure ranged from 8s. 6d. per head in 1866 to about 5s. 9d. in the five years 1881-2 to 1885-6. In 1888-9 and 1889-90 it was 6s. 1d., or 3d. more than the average during the previous 8 years. Expenditure
per head.

146. The inquests held in 1889 numbered 1,795, as against 1,669 in 1888. In 841 instances the death was found to have resulted from disease or natural causes; in 22 cases, from intemperance; in 888 cases, from violence; in 38 cases, from doubtful causes; and in 6 cases a verdict of “still-born” was returned. Of the deaths set down to violence, the verdict in 591 cases was to the effect that the death had resulted from accident; in 18 from homicide; in 150, from suicide; 3 from execution; and in 126 that the cause of the violent death was doubtful. The practice of holding inquests in cases of other than violent deaths was not so common in 1888 and 1889 as in the previous nine years. In 1879, the proportion which verdicts of “death from disease or natural causes” bore to the total number of verdicts given was 50 per cent.; in 1880, 52 per cent.; in 1881, 51 per cent.; in 1882, 53 per cent.; in 1883, 49 per cent.; and in 1884 and 1885, 55 per cent.; in 1886, 51 per cent.; in 1887, 49 per cent.; in 1888, 46 per cent.; and in 1889, 47 per cent. Inquests in cases of death occurring under suspicious circumstances are held at the discretion of the coroner of the district within which the death takes place, subject to Inquests.

* Exclusive of the cost of buildings, which in 1888-9 amounted to £43,190.

instructions issued by the Governor in Council under the 3rd section of the *Coroners Statute* 1865 (28 Vict. No. 253).

Fire
inquests.

147. Six fire inquests were held in 1889, as against none in 1888, 5 in 1887, 4 in 1886, and 9 in both 1885 and 1884. The verdicts returned in 1889 were to the effect that one fire was caused purposely, and 2 accidentally; whilst there was not sufficient evidence to show how the other three took place. Under the *Amending Coroners Statute* (33 Vict. No. 338), which came into operation on the 19th August, 1869, fire inquests may be held at the request of any individual who lodges with his application a fee of £5 5s., or in pursuance of Ministerial authority, which is only given when circumstances appear sufficiently suspicious to warrant action being taken.

PART VII.—INTERCHANGE.

148. The weights and measures used in Victoria are in every respect similar to those in use in the United Kingdom. Weights and measures.

149. In converting the weights and measures of foreign countries into their English equivalents, which is often necessary in the progress of this work, the operation is performed by using the scale adopted by the Imperial Board of Trade, which is as follows:— Foreign weights and measures.

FOREIGN WEIGHTS AND MEASURES, WITH THEIR ENGLISH EQUIVALENTS.

Countries.	Foreign Weights and Measures.	English Equivalents.
Austria, Belgium, France, Germany, Holland, Italy, Norway, Portugal, Spain, Sweden, and Switzerland	Kilomètre ...	·621 of a mile
	Square kilomètre ...	·386 of a square mile
	Are ...	·0247 of an acre
	Hectare ...	2·47 acres
	Cubic mètre ...	1·308 cubic yard
	Mètre ...	1·094 yard or 3·28 feet
	Kilogramme ...	2·204 lbs. avoirdupois
	Quintal métrique ...	220·4 lbs. avoirdupois
	Tonneau (coal) ...	2,204 lbs. avoirdupois
	Hectolitre (liquid measure)	22 Imperial gallons
Austria ...	„ (cereals, etc.) ...	2·75 Imperial bushels
	Zoll. Centner ...	110 lbs. avoirdupois
China and Japan	Ts'un ...	1·41 inch
	Ch'ih ...	1·175 foot
	Chang ...	11·75 feet
	Li ...	2,115 feet
	Tael ..	12 ounces
	Catty ...	1·33 lb. avoirdupois
	Picul ..	133½ lbs. avoirdupois
Denmark ...	Dansk mil ...	4·68 miles
	Geo. mil ...	4·61 miles
	Geo. sq. mil	21·195 square miles
	Töndeland ...	1·36 acre
	Tönde (corn) ...	3·8 Imperial bushels
	„ (coal) ...	4·6775 bushels
	Pund ...	1·102 lb. avoirdupois
Greece ...	Ocque ...	2·84 lbs. avoirdupois
	Quintal ...	123·2 lbs. avoirdupois
	Livre ...	1·1 lb. avoirdupois
	Drachme ...	⅓ ounce

FOREIGN WEIGHTS AND MEASURES, WITH THEIR ENGLISH EQUIVALENTS—continued.

Countries.		Foreign Weights and Measures.			English Equivalents.	
Russia	...	{	Verste	...	...	·663 mile
	...		Sq. verste	...	...	·44 square mile
	...		Desiatine	...	...	2·7 acres
	...		Pood	...	...	36 lbs. avoirdupois
	...		Berkovet	...	...	360 lbs. avoirdupois
	...		Tchetvert	...	...	5·77 Imperial bushels
	...		Vedro	...	..	2·7 Imperial gallons
Sweden	...	{	Tunnland	...	...	1·22 acre
	...		Centner	...	...	93·7 lbs. avoirdupois
	...		Kubikfot	...	...	·72 of an Imperial bushel
	...		Tunna	...	..	4·5 Imperial bushels

Imports and exports classified.

150. The returns of imports and exports, as given in the following pages, are arranged according to a system of classification recommended by the Statistical Conference of representatives of the Australasian colonies held in Tasmania in 1875,* the principle kept in view being that articles of a like nature should be classed together, and the form adopted that employed in the tabulation of the Victorian Census Return of Occupations, means thus being thereby afforded of making calculations in respect to the number of persons in the colony working at the various trades in connexion with which articles are manufactured similar to those imported into and exported from the colony. The year under review is the twelfth in which this mode of classification has been used in Victoria. It has met with the approval of eminent statisticians in Europe and elsewhere, but up to the present time has only been adopted by one of the other colonies represented at the Conference.

Mode of valuing imports and exports.

151. The Customs valuations are made upon the following principle. In the case of the imports, goods on which *ad valorem* duties are payable are by law appraised at their fair market value at the principal markets of the country whence they were exported, with

* See report of Conference, with introductory letter by the Government Statist of Victoria (Parliamentary Paper, No. 11, Session 1875), page 6, paragraph 16; page 9, resolution 6; and page 12, Appendix A.; also *Victorian Year-Book*, 1875, paragraphs 96 to 99 and footnotes.

10 per cent. added.* Valuations of other goods may be practically said to be their cost price on landing, *i.e.*, their invoice values with the addition of freight and charges. In the case of the exports, the valuations are presumed to be the actual values in the local markets at the time of shipment. In the case of both imports and exports, the values are carefully checked by officers of the Customs Department and returned to the merchants for amendment if found incorrect.

152. In the following table, the rates of import duty†—which were considerably altered by an Act (53 Vict. No. 1,019) which came into force on the 31st July, 1889—are given, also the amount collected in connexion with each article. The quantities of the various articles are also given where possible, as well as the values, and, in addition, the excess of imports over exports, or the contrary, of each article.

Table of imports and exports.

153. The table of imports and exports is preceded by the following summary of the headings adopted for the classification of articles; also by an alphabetical index, which will still further facilitate the discovery of the position of any article:—

Classification and index of imports and exports.

CLASSIFICATION OF ENTRIES OF ARTICLES IMPORTED AND EXPORTED.

CLASS I.—ART AND MECHANIC PRODUCTIONS.		CLASS II.—TEXTILE FABRICS AND DRESS.	
Order	1. Books, etc.	Order	15. Wool and worsted manufactures.
„	2. Musical instruments.	„	16. Silk manufactures.
„	3. Prints, pictures, etc.	„	17. Cotton and flax manufactures.
„	4. Carving, figures, etc.	„	18. Drapery and haberdashery.
„	5. Tackle for sports and games.	„	19. Dress.
„	6. Watches, philosophical instruments, etc.	„	20. Manufactures of fibrous materials.
„	7. Surgical instruments.	CLASS III.—FOOD, DRINKS, ETC.	
„	8. Arms, ammunition, etc.	Order	21. Animal food.
„	9. Machines, tools and implements.	„	22. Vegetable food.
„	10. Carriages, harness, etc.	„	23. Drinks and stimulants.
„	11. Ships and boats, and matters connected therewith.	CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES.	
„	12. Building materials.	Order	24. Animal substances.
„	13. Furniture.	„	25. Vegetable substances.
„	14. Chemicals.	„	26. Oils.‡

* This has been assumed by the Victorian authorities to be the average rate at which goods increase in value *in transitu* by reason of freight and other charges.
 † A complete set of the Australasian Tariffs were published in an Appendix to the second volume of the *Victorian Year-Book*, 1888-9. References to subsequent amendments therein will be given in an Appendix to this volume.
 ‡ It being undesirable to separate the different kinds of oil, mineral as well as animal and vegetable oils are included under this heading.

CLASSIFICATION OF ENTRIES OF ARTICLES IMPORTED AND
EXPORTED—*continued.*

CLASS V.—MINERALS AND METALS.		CLASS VI.—LIVE ANIMALS AND PLANTS.	
Order 27. Articles connected with mining.		Order 33. Animals and birds.	
„ 28. Coal, etc.		„ 34. Plants.	
„ 29. Stone, clay, earthenware, and glass.			
„ 30. Water.		CLASS VII.—MISCELLANEOUS MATTERS.	
„ 31. Gold, silver, specie, and precious stones.		Order 35. Miscellaneous articles of trade, etc.	
„ 32. Metals other than gold and silver.		„ 36. Indefinite articles.	

INDEX.

Entries.	Order.	Entries.	Order.	Entries.	Order.
Acid—acetic, other ...	14	Bitters ...	23	Caps, percussion ...	8
Aërated waters ...	23	Black oil ...	26	Carbolic acid ...	14
Agricultural — imple-		„ sand ...	32	Cards, playing ...	1
ments, machinery ...	9	Blankets ...	15	Carpeting ...	15
Air-bricks ...	12	Blasting powder ...	8	Carriages, carriage ma-	
Ale and porter ...	23	Blue ...	25	terials ...	10
Alkali ...	14	Boats ...	11	Cartridges, cartridge	
Almond oil ...	26	Boilers, steam ...	9	cases ...	8
Almonds ...	22	Bolts and nuts ...	32	Carts, waggons, etc. ...	10
Alum ...	14	Bone-dust ...	24	Carving, figures, etc....	4
Anchors ...	11	Bones ...	24	Casks ...	25
Animal food ...	21	Bonnets ...	19	Castor oil ...	26
„ substances ...	24	Books, printed ...	1	Cattle ...	33
Animals and birds ...	33	Boots ...	19	Cement ...	12
Antimony—crude, ore,		Boot-webbing ...	20	Chaff ...	25
regulus ...	32	Borax ...	14	Chain cables ...	11
Apparel ...	19	Bottled fruit ...	22	Chandeliers & gasaliers	13
Arms and ammunition ...	8	Bottles ...	29	Cheese ...	21
Arrowroot ...	22	Bran ...	25	Chemicals ...	14
Arsenic ...	14	„ bags ...	20	Chicory ...	23
Artificial flowers ...	19	Brandy ...	23	China matting ...	20
Asphalte ...	14	Brassware ...	32	„ ware ...	29
Axle—arms, boxes ...	10	Bricks—air, clay, fire	12	Chinese oil ...	26
Axles ...	10	„ bath ...	29	Chocolate ...	23
		Bristles ...	24	Cider ...	23
Bacon ...	21	Broadcloths, etc. ...	15	Cigars, cigarettes ...	23
Bagging ...	20	Broom corn... ..	25	Clay tobacco pipes ...	4
Bags, sacks... ..	20	Brooms—hair, brush-		Clocks ...	6
„ paper... ..	25	ware ...	35	Clover seed... ..	25
Bark ...	25	Brownware... ..	29	Coal ...	28
Barley ...	22	Brushware, brooms ...	35	Cocoa beans ...	23
Basket and wicker ware	25	Buckets and tubs, iron	32	Cocoanut fibre ...	25
Bass ...	25	Building materials ...	12	Cocoanut oil ...	26
Bath bricks ...	29	Butter, butterine ...	21	Cocoanuts ...	22
Beans ...	22			Cod, cod-liver oil ...	26
Bêche de mer ...	21	Canary seed ...	25	Coffee ...	23
Beef—salted ...	21	Candles ...	24	Coir and other matting	20
Beer ...	23	Canes ...	25	Coke ...	28
Beeswax ...	24	Cannons ...	8	Colours ...	14
Benzine ...	26	Canvas ...	20	Colza oil ...	26
Birds ...	33	Caps and hats — felt,		Combs ...	24
Biscuits ...	22	silk, straw, etc. ...	19	Confectionery ...	22

INDEX—continued.

Entries.	Order.	Entries.	Order.	Entries.	Order.
Copper — ore, regulus,		Flax ...	25	Hardware ...	35
sheet, ware,		„ manufactures ...	17	Hares ...	33
wire ...	32	Flock ...	24	Harmoniums ...	2
„ specie ...	31	Floorcloth ...	20	Harness ...	10
Copra ...	25	Flour ...	22	Hats and caps—felt,	
Cordage ...	20	„ sacks ...	20	silk, straw, etc. ...	19
„ iron, steel ...	32	Flowers, artificial ...	19	Hatters' materials ...	19
Cordials ...	23	Food, animal ...	21	Hay ...	25
Cork and corks cut ...	25	„ vegetable ...	22	Hemp ...	25
Cornsacks ...	20	Fresh fish, meat ...	21	Hides ...	24
Cotton and flax manu-		Fruit — bottled, dried,		Holloware ...	35
factures ...	17	green, currants, rai-		Honey ...	21
Cotton seed oil ...	26	sins ...	22	Hoofs ...	24
Cotton — piece goods,		Fuel ...	28	Hops ...	23
waste, wick ...	17	Furniture, furniture		Horned cattle ...	33
„ raw ...	25	springs ...	13	Horns ...	24
Curiosities ...	36	Furs ...	19	Horses ...	33
Currants ...	22	Fuse ...	8	Hosiery ...	19
Cutlery ...	9				
Dogs ...	33	Galvanized iron—cord-		Implements, agricul-	
Doors ...	12	age, buckets, tubs,		tural ...	9
Drake ...	25	guttering, sheet,		Indefinite articles ...	36
Drapery ...	18	ware ...	32	Indiarubber goods ...	25
Dress ...	19	Gasaliers & chandeliers	13	Ink—printing, coloured	
Dried fruit ...	22	Gasoline oil... ..	26	and writing ...	14
Drinks and stimulants	23	Gelatine, blasting ...	8	Instruments, musical... ..	2
Druggeting... ..	15	Gin ...	23	„ optical ..	6
Drugs ...	14	Ginger, ground ...	23	„ scientific	6
Dyes ...	14	Glass—bottles, plate,		„ surgical ...	7
Dynamite ...	8	window, ware ...	29	Iron—bar, castings, gal-	
		Gloves ...	19	vanized, hoop, ores,	
Earthenware ...	29	Glucose ...	22	pig, pipes, plate, rod,	
Eggs ...	21	Glue, glue pieces ...	24	scrap, sheet, ware,	
Electro-plated ware ...	32	Glycerine ...	14	wire, etc....	32
Emus ...	33	Goat skins ...	24	Ironmongery ...	35
Engine-packing ...	20	Goats ...	33	„ saddlers' ...	10
Engines, steam ...	9	Gold—leaf, plate, specie	31	Isinglass ...	21
Engravings... ..	3	Goods manufactured,		Ivory ..	24
Essences and essential		unenumerated ...	36		
oils ...	14	Grain ...	22	Jaconet frilling and	
Explosives ...	8	Gram ...	22	ruffling, etc. ...	19
		Grass seeds... ..	25	Jams and preserves ...	22
Fancy goods ...	35	Grates and stoves ...	32	Jewellery ...	31
Feathers ...	24	Grease ...	24	Jute ...	25
„ ornamental ...	19	Greasy wool ...	24	„ piece goods ...	20
Felt—sheathing, etc....	20	Grindery ...	35		
„ hoods ...	19	Grindstones... ..	29	Kangaroo skins ...	24
Fencing wire ...	32	Guano ...	14	Kerosene oil ...	26
Fibre ...	25	Gum ...	25	„ shale ...	28
Firearms ...	8	Gun caps ...	8		
Firebricks ...	12	Gun cotton... ..	8	Lamps and lampware	13
Fireworks ...	5	Gunny bags ...	20	Lard ...	21
Firewood ...	25	Gunpowder ...	8	„ oil ...	26
Fish—fresh, preserved,		Gutta-percha goods ...	25	Lead — ore, pig, pipe,	
salted shell ...	21			sheet ...	32
„ ova ...	33	Haberdashery ...	18	Leather, leatherware... ..	24
Flannels—piece ...	15	Hair—curled, seating	24	Leeches ...	33
		Hams ...	21	Lime ...	12

INDEX—continued.

Entries.	Order.	Entries.	Order.	Entries.	Order.
Limejuice ...	23	Mustard ...	23	Picric acid ...	2
Linen piece goods ...	17	Mutton-bird oil ...	26	Pianofortes ...	23
Linseed meal ...	25	Nails ...	32	Pickles ...	14
„ oil ...	26	Naphtha ...	14	Pigs ...	33
Liquorice ...	22	Natural history, speci-		Pine oil ...	26
Lithofracteur ...	8	mens of ...	36	Pipes—iron, lead ...	32
Live animals ...	33	Neatsfoot oil ...	26	„ tobacco ...	4
Lubricating oil ...	26	Nets and netting ...	20	Pistols ...	8
Macaroni ...	22	Nut oil ...	26	Pitch ...	25
Machinery—agricultu-		Nuts ...	22	Plants ...	34
ral, weaving		Oakum ...	25	Plaster of paris ...	29
and spinning	9	Oars ...	11	Platedware ...	32
Machines, tools, and		Oatmeal ...	22	Plumbago ...	32
implements ...	9	Oats ...	22	Pollard ...	25
Maize ...	22	Oilcake ...	25	Porcelain ...	29
Maizena and corn flour	22	Oilcloth ...	20	Pork, salted ...	21
Malt ...	22	Oilmen's stores ...	35	Potatoes ...	22
Manufactured articles		Oils of all kinds ...	26	Poultry ...	33
of cotton, woollens,		„ in bottles ...	26	Powder — blasting,	
silks, etc. ...	18	Olive oil ...	26	sporting ...	8
Manufactures of fibrous		Onions ...	22	Precious stones ...	31
materials ...	20	Opium ...	14	Preserved fish, meats ...	21
Manufactures of mixed		Opossum skins ...	24	„ milk ...	23
metals ...	32	Optical instruments ...	6	„ vegetables ...	22
Manures ...	14	Ordinance stores ...	35	Preserves ...	22
Marble ...	29	Ore—antimony, copper,		Printing ink ...	14
Matches ...	14	iron, lead, tin ...	32	„ materials ...	35
Materials, building ...	12	„ bags ...	20	„ paper ...	25
„ carriage ...	10	Ores, mineral earths,		Prints, pictures, etc. ...	3
„ hatters' ...	19	clays, etc. ...	32	Provisions, preserved	
„ printing ...	35	Organs ...	2	and salted ...	21
„ telegraphic ...	35	Ornamental feathers ...	19	Pulse ...	22
„ watchmakers' ...	6	Ova ...	33	Pulu ...	25
Mats ...	20	Oxalic acid ...	14	Pumice stone ...	29
Matting—China, coir ...	20	Paintings ...	3	Putty ...	29
Meal, linseed ...	25	Paints ...	14	Quartz ...	31
„ oat ...	22	Palm oil ...	26	Quicksilver ...	32
Meats—fresh, preserved	21	Paper—bags, hangings,		Rabbit skins ...	24
Medicinal oil ...	26	patterns, printing,		Rags ...	25
„ roots ...	14	wrapping, writing ...	25	Railway rails, chairs,	
Medicines, patent ...	14	Parasols ...	19	etc. ...	32
Meerscham pipes ...	4	Patent leather ...	24	Raisins ...	22
Metals, other than gold		„ medicines ...	14	Rape oil ...	26
and silver ...	32	Peanuts ...	22	Rattans ...	25
Methylated spirits ...	14	Pearl barley ...	22	Raw cotton ...	25
Milk, preserved ...	23	„ shell ...	24	„ sugar ...	22
Millet ...	25	Pease ...	22	Refined sugar ...	22
Millinery ...	19	Peel, drained ...	22	Regulus ...	32
Millstones ...	29	Pepper ...	23	Resin ...	25
Mineral earths, clays, etc.	32	„ ground ...	23	Ribbons ...	16
„ oil, undefined ...	26	Perfumed spirits ...	23	Rice ...	22
Miscellaneous articles of		Perfumery ...	23	Rock salt ...	23
trade ...	35	Personal effects ...	36	Roots, medicinal ...	14
Molasses ...	22	Phormium, N.Z. ...	25	Rope ...	20
Mouldings ...	4	Photographic goods ...	35	Rugs ...	15
Musical instruments ...	2				
Muslins ...	17				

INDEX—continued.

Entries.	Order.	Entries.	Order.	Entries.	Order.
Rum ...	23	Sperm oil ...	26	Turpentine ...	14
Rye ...	22	Spices ...	23	Turtles ...	33
Saccharum ...	22	Spinning and weaving		Tweeds ...	15
Sacks, bags ...	20	machinery ...	9	Twine ...	20
Saddlery ...	10	Spirits, methylated ...	14	Umbrellas ...	19
Saddler's ironmongery	10	„ other ...	23	Unserviceable cordage	20
Saddle-trees ...	10	Split pease ...	22	Upholstery ...	13
Sago ...	22	Sponges ...	24	Utensils ...	9
Salad oil ...	26	Starch ...	25	Varnish ...	25
Salt ...	23	Stationery ...	1	Vegetable food ...	22
Salted beef, pork, fish	21	Steam boilers, engines	9	„ oil ...	26
Saltpetre ...	23	Stearine ...	24	„ substances ...	25
Sashes ...	12	Steel, cordage ...	32	Vegetables—fresh, pre-	
Sauces ...	23	Stimulants ...	23	served ...	22
Sausage skins ...	24	Stone, clay, earthen-		Vermicelli ...	22
Scientific instruments	6	ware, and glass ...	29	Vestas ...	14
Scoured wool ...	24	„ grind, mill, ware,		Vinegar ...	23
Screws ...	32	etc. ...	29	Waggon ...	10
Seal oil ...	26	Stoves ...	32	Walnuts ...	22
„ skins ...	24	Straw ...	25	Washed wool ...	24
Seeds—canary, clover,		„ hats ...	19	Watches ...	6
grass ...	25	Sugar—candy, raw, re-		Watchmakers' materials	6
Seed oil ...	26	fined ...	22	Weaving and spinning	
Sewing machines ...	9	Sulphur ...	14	machinery ...	9
Shale ...	28	Surgical instruments ...	2	Whalebone ...	24
Sheep ...	33	Tackle for sports and		Wheat ...	22
„ skins ...	24	games ...	5	Whiskey ...	23
Shell—pearl, tortoise	24	Tallow ...	24	Whiting ...	29
Shellfish ...	21	„ oil ...	26	Wicker and basketware	25
Ships, boats, etc. ...	11	Tanks, iron ...	32	Wine ...	23
Shoes ...	19	Tapioca ...	22	„ spirits of ...	23
Shot ...	8	Tar ...	25	Wire netting ...	32
Silk—manufactures,		Tares ...	25	Wooden tobacco pipes	4
mixtures; silks ...	16	Tarpaulins, linen	17	Woodenware ...	25
Silver—plate, specie ...	31	Tea ...	23	Wool ...	24
Skins ...	24	Telegraphic materials	35	„ and worsted manu-	
Slate slabs ...	29	„ wire ...	32	factures ...	15
Slates, roofing ...	12	Tents, linen ...	17	Woollen piece goods ...	15
Slops ...	19	Timber, all kinds ...	25	Woolpacks ...	20
Snuff ...	23	Tin—block, foil, ore,		Works of art ...	3
Soap ...	24	plates, ware ...	32	Writing paper ...	25
Soda—ash, bicarbonate,		Tobacco ...	23	Yarn ...	15
caustic, crystals, ni-		„ pipes ...	4	Zinc—ingots, sheet, per-	
trate, silicate ...	14	Tools ...	9	forated ...	32
Specie ...	31	Tortoise shell ...	24		
Specimens of natural		Toys ...	5		
history ...	36	Travellers' samples ...	35		
Spelter ...	32	Turnery ...	4		

IMPORTS, 1889.

* * For the position of any article, see Index *ante*.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£
CLASS I.—ART AND MECHANIC PRODUCTIONS.				
Order 1.—Books, etc.				
Free ...	...	Books, printed ...	...	260,494
3s. per doz. packs	1,994	Cards, playing ... doz. packs	12,527	3,258
20 per cent. and free	13,781	Stationery* ...	...	121,861
Order 2.—Musical Instruments.				
25 per cent.	73	Harmoniums No.	46	262 }
£3 each† ...	60	„ „	20	124 }
25 per cent.	2,177	Organs ...	930	11,275 }
£3 each† ...	870	„ „	322	3,967 }
25 per cent.	17,069	Pianofortes ...	3,798	82,174 }
£15 each†...	550	„ Grand „	36	2,161 }
£5 each† ...	6,909	„ Upright „	1,336	30,633 }
25 per cent.†	11	Pianoforte actions, etc.	...	44
Free ...	...	Others, undescribed	...	20,721
Order 3.—Prints, Pictures, etc.				
Free ...	...	Paintings and engravings ...	...	75,173
„ ...	...	Works of art ...	...	28,161
Order 4.—Carving, Figures, etc.				
25 per cent.	38	Mouldings, gilt ...	...	154
Free ...	...	„ picture frame ...	...	12,089
25 per cent.	153	Pipes, tobacco—clay ... gross	9,554	806 }
1s. ♂ gross†	75	„ „ „ „	1,493	301 }
25 per cent.	327	„ „ meerschaum ...	...	1,498
12s. ♂ gross	2,228	„ „ wooden ... gross	4,552	17,512 }
25 per cent.†	2,372	„ „ „ „	2,899	12,073 }
„ ...	330	„ „ other ...	...	1,518
„ †...	18	Pipe cases ...	...	117
„ †...	108	Turnery ...	...	431
Order 5.—Tackle for Sports and Games.				
20 per cent.	176	Fireworks ...	...	744
Free ...	...	Toys ...	...	26,922
Order 6.—Watches, Philosophical Instruments, etc.				
20 per cent.	3,527	Clocks ...	...	18,439
Free ...	...	Instruments, optical ...	...	12,243
„ ...	...	„ scientific ...	...	24,741
20 per cent.	11,402	Watches ...	...	60,373
Free ...	...	Watchmakers' materials ...	...	4,554

* See also "Paper," Order 25. † After 30th July, 1889.

EXPORTS, 1889.

*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (–).	
Quantity.	Value.		Quantity.	Value.
	£			£
CLASS I.—ART AND MECHANIC PRODUCTIONS.				
<i>Order 1.—Books, etc.</i>				
...	59,745	Books, printed ...	...	+ 200,749
1,330	400	Cards, playing ... doz. packs	+ 11,197	+ 2,858
...	29,145	Stationery* ...	...	+ 92,716
<i>Order 2.—Musical Instruments.</i>				
4	55	Harmoniums ... No.	+ 62	+ 331
151	2,249	Organs ... „	+ 1,101	+ 12,993
372	12,444	Pianofortes ... „	+ 4,798	+ 102,524
...	...	Pianoforte actions, etc. ...	...	+ 44
...	1,963	Others, undescribed ...	...	+ 18,758
<i>Order 3.—Prints, Pictures, etc.</i>				
...	15,333	Paintings and engravings ...	...	+ 59,840
...	2,298	Works of art ...	...	+ 25,863
<i>Order 4.—Carving, Figures, etc.</i>				
...	439	Mouldings, gilt ...	...	– 285
...	...	„ picture frame ...	...	+ 12,089
1,139	208	Pipes, tobacco—clay ... gross	+ 9,908	+ 899
...	687	„ „ meerschaum ...	...	+ 811
2,167	9,053	„ „ wooden ... gross	+ 5,284	+ 20,532
...	57	„ „ other ...	...	+ 1,461
...	...	Pipe cases ...	...	+ 117
...	429	Turnery ...	...	+ 2
<i>Order 5.—Tackle for Sports and Games.</i>				
...	639	Fireworks ...	...	+ 105
...	421	Toys ...	...	+ 26,501
<i>Order 6.—Watches, Philosophical Instruments, etc.</i>				
...	1,505	Clocks ...	...	+ 16,934
...	2,125	Instruments, optical ...	...	+ 10,118
...	2,099	„ scientific ...	...	+ 22,642
...	17,287	Watches ...	...	+ 43,086
...	102	Watchmakers' materials ...	...	+ 4,452

* See also “Paper,” Order 25.

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS I.—ART AND MECHANIC PRODUCTIONS—continued.

		Order 7.—Surgical Instruments.				
Free	...	Instruments, surgical	...	...	...	18,983
		Order 8.—Arms, Ammunition, etc.				
Free	...	Arms, pistols, etc.	...	No.	883	643
"	...	" sporting	...	"	9,050	23,043
		Ammunition, etc.—	...			
"	...	" caps	...	...	...	814
"	...	" cartridges	...	...	...	4,942
"	...	" cartridge cases	...	...	...	2,822
4d. per lb....	4,437	" dynamite	...	lbs.	276,765	23,244
1½d. per coil	748	" fuse	...	coils	125,442	3,465
5d. per lb....	165	" gelatine, blasting	...	lbs.	26,725	2,562
4d. per lb.*	122	" " "	...	"	5,050	505
1d. per lb.†	25	" " "	...	"	6,000	600
" †	108	" dynamite	...	"	26,000	2,600
...	...	" gun cotton	...	"	...	...
1d. per lb....	6,544	" powder, blasting	...	"	1,756,160	34,296
3d. per lb....	1,527	" " sporting	...	"	182,918	14,901
Free	...	" " fine	...	"	39,585	1,809
1d. per lb....	788	" shot	...	"	188,451	1,571
5d. per lb....	1	" tonite	...	"	...	...
4d. per lb.*	8	" " "	...	"	...	...
		Order 9.—Machines, Tools, and Imple- ments.				
25 per cent.	438	Boilers, steam	...	No.	36	3,297
35 per cent.‡	533	" " "	...	"	33	1,284
Free	...	Cutlery	...	...	...	36,249
25 per cent.	5,582	Engines, steam	...	No.	280	49,345
35 per cent.‡	1,609	" " "	...	"	3	3,111
25 per cent.‡	1,530	" " portable	...	"	18	3,042
20 per cent.	4,452	Implements, agricultural, undescribed	...	...	...	23,405
Free	...	Machinery, agricultural	...	...	...	67,279
"	...	" spinning and weaving	...	...	...	9,588
"	...	" undescribed	...	...	...	84,497
25 per cent.	35,659	" " "	...	...	...	192,561
35 per cent.‡	8,062	" " "	...	...	...	34,366
Free	...	Sewing machines	...	No.	17,962	61,906
"	...	Tools and utensils	...	...	...	64,206
"	...	Cream separators	...	...	...	4,107

* After 30th July, 1889. † After 24th September, 1889. ‡ After 17th September, 1889.

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (–).	
Quantity.	Value.		Quantity.	Value.
	£			£
CLASS I.—ART AND MECHANIC PRODUCTIONS— <i>continued</i> .				
<i>Order 7.—Surgical Instruments.</i>				
...	162	Instruments, surgical ...	...	+ 18,821
<i>Order 8.—Arms, Ammunition, etc.</i>				
4	10	Arms, pistols, etc.... No.	+ 879	+ 633
625	1,463	„ sporting ... „	+ 8,425	+ 21,580
Ammunition, etc.—				
...	18	„ caps ...	...	+ 796
...	262	„ cartridges ...	...	+ 4,680
...	9	„ cartridge cases ...	...	+ 2,813
118,750	10,239	„ dynamite lbs.	+ 158,015	+ 13,005
70,332	2,332	„ fuse ... coils	+ 55,110	+ 1,133
...	...	„ gelatine, blasting lbs.	+ 37,775	+ 3,667
...	...	„ dynamite „	+ 26,000	+ 2,600
1,000	75	„ gun cotton „	– 1,000	– 75
1,778	62	„ powder, blasting „	+ 1,754,382	+ 34,234
6,949	844	„ „ sporting „	+ 175,969	+ 14,057
...	...	„ „ fine „	+ 39,585	+ 1,809
31,372	445	„ shot ... „	+ 157,079	+ 1,126
300	21	„ tonite ... „	– 300	– 21
<i>Order 9.—Machines, Tools, and Imple- ments.</i>				
13	2,068	Boilers, steam ... No.	+ 56	+ 2,513
...	1,833	Cutlery ...	...	+ 34,416
101	13,101	Engines, steam ... No.	+ 182	+ 39,355
...	...	„ portable ... „	+ 18	+ 3,042
...	23,709	Implements, agricultural, undescribed	...	– 304
...	28,863	Machinery, agricultural ...	...	+ 38,416
...	...	„ spinning and weaving ...	...	+ 9,588
...	82,034	„ undescribed ...	...	+ 229,390
4,428	17,782	Sewing machines ... No.	+ 13,534	+ 44,124
...	2,481	Tools and utensils...	...	+ 61,725
...	...	Cream separators ...	...	+ 4,107

IMPORTS, 1889—continued.

*** For the position of any article, see Index *ante*.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS I.—ART AND MECHANIC PRODUCTIONS—continued.

Order 10.—Carriages, Harness, etc.						
10s. per arm	1,282	Axles and arms	...	No.	2,735	1,967
7s. per arm	864	„ „ mail patent	...	„	2,616	1,384
4s. 6d. p. arm	912	„ „ „	...	„	3,958	1,545
4s. 6d. p. arm	59	„ „ common nut	...	„	536	226
3s. per arm	1,962	„ „ „	...	„	16,148	3,124
25 per cent.	1,618	„ „ common dray	...	„	8,861	6,533
„ ...	119	Axle-boxes	...	„	4,530	471
35 per cent.*	8	„ „	...	„	276	24
Carriages and carts—						
£50 each ...	1,600	Barouches, broughams, mail phaetons, drags, etc.	...	„	45	8,193
20 per cent.	128	All carts and waggons without springs	...	„	54	1,121
£40 each ...	80	Omnibuses and coaches	...	„	2	660
£20 each ...	820	Hansom cabs, etc.	...	„	47	3,227
£15 each ...	54	Express waggons, etc.	...	„	40	1,683
£10 each ...	420	Dog carts, etc.	...	„	43	1,637
Free ...	...	Used in border traffic	...	„	28	1,435
25 per cent. †	394	Unenumerated	...	...	...	1,721
„ †	1,434	Bicycles, tricycles, etc.	...	...	...	6,922
25 per cent.	795	Carriage materials	...	...	...	3,441
35 per cent.*	86	„ „	...	...	...	229
Various ...	1,422	„ wheels, poles, shafts, and bars. undergear	...	...	...	2,833
25 per cent.	1,624	Saddlery and harness	...	...	...	7,330
Free ...	...	Saddlers' ironmongery	...	...	...	17,918
10s. per doz.	18	Saddle-trees (harness)	...	doz.	41	89
20s. per doz.	175	„ (riding)	...	„	190	712
Order 11.—Ships and Boats, and matters connected therewith.						
Free ...	...	Anchors	...	No.	119	366
„ ...	...	Boats	...	„	24	719
„ ...	...	Chain cables	...	tons	32	421
„ ...	...	Oars, ash	...	No.	1,187	271
Order 12.—Building Materials. (See also Order 29, <i>post</i>).						
25 per cent.	47	Bricks, air	...	No.	11,292	187
35 per cent.*	26	„ „	...	„	4,200	74
Free ...	...	„ clay	...	„	191,350	395
20s. per 1,000	339	„ fire	...	„	338,490	2,332
Free ...	...	Cement	...	cwt.	1,080,384	223,052
5s. to 10s. each	543	Doors	...	No.	2,090	1,562

*After 17th September, 1889. † After 30th July 1889.

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (–).	
Quantity.	Value.		Quantity.	Value.
	£			£

CLASS I.—ART AND MECHANIC PRODUCTIONS.—*continued*.*Order 10.—Carriages, Harness, etc.*

1,450	760	Axles and arms ... No.		
		„ „ mail patent „		
		„ „ „ „ „	+ 33,404	+ 14,019
		„ „ common nut „		
		„ „ „ „ „		
		„ „ common dray „		
4	1	Axle-boxes ... „	+ 4,802	+ 494
		Carriages and carts—		
		Barouches, broughams, mail „		
		phaetons, drags, etc.		
		„ „ „ „ „		
		Omnibuses and coaches ... „		
208	8,822	All other kinds... „	+ 51	+ 10,855
		Express waggons, etc. ... „		
		Dog carts, etc. ... „		
		Used in border traffic ... „		
		Unenumerated ... „		
...	...	Bicycles, tricycles, etc. ...	...	+ 6,922
		Carriage materials ...		
...	1,690	„ wheels, poles, shafts, and bars	...	+ 4,813
...	8,222	Saddlery and harness ...	...	– 892
...	608	Saddlers' ironmongery ...	...	+ 17,310
...	1	Saddle-trees (harness) ... doz.	+ 41	+ 88
55	293	„ (riding) ... „	+ 135	+ 419

Order 11.—Ships and Boats, and matters connected therewith.

35	85	Anchors ... No.	+ 84	+ 281
30	461	Boats ... „	– 6	+ 258
64	242	Chain cables ... tons	– 32	+ 179
84	25	Oars, ash ... No.	+ 1,103	+ 246

Order 12.—Building Materials.
(See also Order 29, *post*.)

...	...	Bricks, air ... No.	+ 15,492	+ 261
119,000	258	„ clay ... „	+ 72,350	+ 137
5,966	49	„ fire ... „	+ 332,524	+ 2,283
7,605	1,868	Cement ... cwt.	+ 1,072,779	+ 221,184
339	360	Doors ... No.	+ 1,751	+ 1,202

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS I.—ART AND MECHANIC PRODUCTIONS—continued.

Order 12.—Building Materials. —continued.					
5s. each* ...	44	Frames, door and window ...	No.	175	204
Free ...	...	Lime ...	tons	79	248
2s. per pair	12	Sashes, window ...	pairs	123	94 }
3s. per pair*	1	„ „ glazed ...	„	9	7 }
Free ...	...	Slates, roofing ...	No.	8,219,417	67,714
Order 13.—Furniture.					
25 per cent.	30,486	Furniture and upholstery ...	...	...	127,430 }
35 per cent.†	7,596	„ „ „ ...	...	...	22,308 }
10 per cent.	100	Furniture springs ...	...	...	1,514
25 per cent.	564	Gasaliers and chandeliers ...	...	...	2,405 }
35 per cent.‡	69	„ „ „ ...	...	...	488 }
25 per cent.	951	Lamps and lampware ...	...	...	4,699
Order 14.—Chemicals.					
3d. per lb....	552	Acid, acetic ...	lbs.	59,705	1,786
6d. per gal.§	31	„ carbolic, crude ...	galls.	1,309	337 }
6d. per lb.§	71	„ „ pure ...	lbs.	3,177	329 }
2d. per lb.§	159	„ oxalic... ..	„	14,659	249 }
3d. per lb.§	7	„ picric... ..	„	524	44 }
5s. per cwt.*	59	„ sulphuric, muriatic, and nitric	cwt.	234	240 }
Free ...	...	„ undescribed ...	lbs.	443,576	27,795 }
Free ...	...	Alkali, soda ash ...	cwt.	19,997	7,357
„ ...	...	„ „ bicarbonate ...	„	8,029	2,837
„ ...	...	„ „ caustic ...	„	24,033	12,023
40s. per ton	40	„ „ crystals ...	tons	18	97
Free ...	...	Alum ...	cwt.	3,298	982
„ ...	...	Arsenic ...	„	713	454
„ ...	...	Asphalte ...	„	15,359	3,983
25 per cent.	427	Blacking ...	...	...	1,570
Free ...	...	Borax ...	cwt.	231	485
Various & free	1,230	Drugs and chemicals—miscellaneous	...	...	101,919
Free ...	...	Nitrate of soda ...	cwt.	6,491	3,967
„ ...	...	Silicate of soda ...	„	6,297	1,962
„ ...	...	Dyes ...	...	...	20,325
„ ...	...	Essences and essential oils	...	...	7,230
3d. per lb....	226	Glycerine, pure ...	lbs.	35,527	1,116 }
1d. per lb....	6	„ crude ...	„	1,526	15 }
Free ...	...	Guano ...	tons	706	3,645
„ ...	...	Ink, printing ...	lbs.	322,940	6,651
6d. per lb....	264	„ coloured ...	„	10,577	1,066

* After 30th July, 1889.

† After 17th September, 1889.

‡ After 19th September, 1889.

§ To 30th July, 1889.

EXPORTS, 1889—*continued.**** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (—).	
Quantity.	Value.		Quantity.	Value.
	£			£

CLASS I.—ART AND MECHANIC PRODUCTIONS—*continued.**Order 12.—Building Materials—
continued.*

...	...	Frames, door and window ...	No.	+ 175	+ 204
203	645	Lime ...	tons	— 124	— 397
609	287	Sashes, window ...	pairs	— 477	— 186
6,800	73	Slates, roofing ...	No.	+ 8,212,617	+ 67,641

Order 13.—Furniture.

...	25,720	Furniture and upholstery ...	...	...	+ 124,018
...	...	Furniture springs ...	...	...	+ 1,514
...	...	Gasaliers and chandeliers ...	...	.	+ 2,893
...	665	Lamps and lampware ...	...	...	+ 4,034

Order 14.—Chemicals.

18,995	621	Acid, acetic ...	lbs.	+ 40,710	+ 1,165
91,972	2,658	„ carbolic, crude ...	}	+ 371,507	+ 26,336
		„ „ pure ...			
		„ oxalic ...			
		„ picric ...			
		„ undescribed ...			
217	99	Alkali, soda ash ...	cwt.	+ 19,780	+ 7,258
116	59	„ „ bicarbonate ...	„	+ 7,913	+ 2,778
1,100	586	„ „ caustic ...	„	+ 22,933	+ 11,437
18	157	„ „ crystals ...	tons	...	— 60
37	28	Alum ...	cwt.	+ 3,261	+ 954
23	26	Arsenic ...	„	+ 690	+ 428
420	204	Asphalte ...	„	+ 14,939	+ 3,779
...	...	Blacking ...	...	...	+ 1,570
21	69	Borax ...	cwt.	+ 210	+ 416
...	21,598	Drugs and chemicals—miscellaneous ...	...	...	+ 80,321
6	6	Nitrate of soda ...	cwt.	+ 6,485	+ 3,961
687	346	Silicate of soda ...	„	+ 5,610	+ 1,616
...	2,861	Dyes ...	...	...	+ 17,464
...	2,256	Essences and essential oils ...	...	...	+ 4,974
40,238	650	Glycerine, pure ...	lbs.	— 3,185	+ 481
		„ crude ...	„		
157	968	Guano ...	tons	+ 549	+ 2,677
45,622	955	Ink, printing ...	lbs.	+ 277,318	+ 5,696
...	...	„ coloured ...	„	+ 10,577	+ 1,066

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS I.—ART AND MECHANIC PRODUCTIONS—continued.

		Order 14.—Chemicals—continued.				
Free	...	Ink, writing	...	...	...	2,300 }
10 per cent.*	205	" "	...	...	...	2,121 }
Free	...	Manures, undescribed	...	tons	176	996
1s. & 1s. 3d.	13,459	Matches and vestas (wax)	...	gross	258,259	39,902 }
per gross		" wooden	...	"	108,162	8,340 }
6d. per gross	2,270	Medicines, patent	...	...	...	38,639
25 per cent.	9,750	Medicinal roots	...	...	...	407
Free	...	Naphtha	...	galls.	3,389	766
"	...	Opium, prepared	...	lbs.	20,045	39,986
20s. per lb.	18,303	Paints and colours	...	cwt.	18,269	27,916 }
Free	...	" " mixed for use	...	"	4,592	8,488 }
80s. per ton	790	" " ground in oil	...	"	63,095	78,564 }
40s. per ton	6,257	Spirits, methylated	...	galls.	3,958	834
1s. per gal.	210	Sulphur	...	cwt.	17,734	4,620
Free	...	Turpentine	...	galls.	104,170	12,916
"	...					

CLASS II.—TEXTILE FABRICS AND DRESS.

		Order 15—Wool and Worsted Manufactures.				
20 per cent.	10,135	Blankets	...	pairs	113,167	54,743 }
25 per cent.*	1,598	"	...	"	15,358	6,695 }
20 per cent.	22,120	Carpeting and druggeting	...	...	...	124,951
"	6,435	Flannels, piece	...	...	...	31,341 }
25 per cent.*	577	"	...	...	...	2,725 }
30 per cent.†	451	"	...	...	...	2,701 }
20 per cent.	1,806	Rugs, woollen	...	...	...	10,599 }
25 per cent.*	823	"	...	...	...	2,823 }
		Woollen piece goods—				
20 per cent.	76,163	Broad and narrow cloths, tweeds, etc.	...	...	...	367,380 }
25 per cent.*	15,994	" " " "	...	...	...	61,051 }
30 per cent.†	12,967	" " " "	...	...	...	56,072 }
7½ per cent.	25,061	Dress goods, containing wool	...	...	...	348,211
...	...	" women's	...	...	...	...
20 per cent.	487	Shirtings	...	...	...	3,237 }
25 per cent.*	93	"	...	...	...	369 }
30 per cent.†	121	"	...	...	...	387 }
Free	...	Undescribed	...	...	...	19,397
Free	...	Woollen manufactures unenumerated	...	...	...	1,681
"	...	Yarn	...	lbs.	671,569	9,731
		Order 16.—Silk Manufactures.				
20 per cent.	65,113	Silks and satins, dress	...	...	...	325,700
"	1,156	" dress goods, mixed with other material	...	...	...	5,086

* After 30th July, 1889. † After 19th September, 1889.

EXPORTS, 1889—*continued.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value.		Quantity.	Value.
	£			£
CLASS I.—ART AND MECHANIC PRODUCTIONS— <i>continued.</i>				
Order 14.— <i>Chemicals</i> — <i>continued.</i>				
...	80	Ink, writing ... ..	...	+ 4,341
2,448	23,910	Manures, undescribed ... tons	- 2,272	- 22,914
34,165	4,811	Matches and vestas (wax) ... gross	+ 332,256	+ 43,431
...	6,857	„ wooden		
...	7	Medicines, patent ... ..	...	+ 31,782
...	...	Medicinal roots ... ..	...	+ 400
52	12	Naphtha galls.	+ 3,337	+ 754
577	1,100	Opium, prepared lbs.	+ 19,468	+ 38,886
3,499	6,250	Paints and colours ... cwt.	+ 82,457	+ 108,718
...	...	„ „ mixed for use „		
...	...	„ „ ground in oil „	+ 3,586	+ 767
372	67	Spirits, methylated ... galls.		
2,962	1,532	Sulphur cwt.	+ 14,772	+ 3,088
2,821	413	Turpentine galls.	+ 101,349	+ 12,503
CLASS II.—TEXTILE FABRICS AND DRESS.				
Order 15.— <i>Wool and Worsted Manufactures.</i>				
7,587	4,171	Blankets pairs	+ 120,938	+ 57,267
...	5,209	Carpeting and druggetting ... ..	...	+ 119,742
...	1,586	Flannels, piece ... ..	...	+ 35,181
...	1,475	Rugs, woollen ... ..	...	+ 11,947
Woollen piece goods—				
...	30,337	Broad and narrow cloths, tweed, etc.	...	+ 454,166
...	...	Dress goods, containing wool ...	...	+ 348,211
...	40,084	„ women's ... ..	...	- 40,084
...	...	Shirtings ... ..	...	+ 3,993
...	...	Undescribed ... ..	...	+ 19,397
...	290	Woollen manufactures unenumerated	...	+ 1,391
37,872	381	Yarn lbs.	+ 633,697	+ 9,350
Order 16.— <i>Silk Manufactures.</i>				
...	45,771	Silks and satins, dress ... ..	...	+ 279,929
...	...	„ dress goods, mixed with other material	...	+ 5,086

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS II.—TEXTILE FABRICS AND DRESS—continued.

		<i>Order 16—Silk Manufactures—continued.</i>				
10 per cent.	182	Silk pongees	...	...	...	2,005 }
20 per cent.*	251	„ „	...	...	...	1,336 }
20 per cent.	4,578	„ ribbons	...	...	...	24,135
„ ...	149	„ velvets and crapes	...	...	...	434
Free ...	...	„ other manufactures of	...	...	...	27,062 }
20 per cent.	1,639	„ „ „	...	...	...	9,570 }
		<i>Order 17.—Cotton and Flax Manufactures.</i>				
Free ...	...	Cotton piece goods (all cotton)	...	...	...	892,566
„ ...	...	„ manufactures, such as counter-panes, etc.	...	...	...	59,696
„ ...	...	„ waste ... lbs.	...	740,986	...	9,013
„ ...	...	„ wick „	...	51,608	...	2,605
„ ...	...	Linen piece goods	...	...	...	39,076
„ ...	...	„ manufactures, such as table linen, towels, etc.	...	...	...	4,801
20 per cent.	38	„ tents and tarpaulins	...	...	...	231
		<i>Order 18.—Drapery and Haberdashery.</i>				
Free ...	...	Haberdashery	...	...	...	383,837
25 per cent.*	417	Bags—Fancy	...	...	...	2,196
20 per cent.*	22	Quilts	...	...	...	195 }
30 per cent.†	106	„ „	...	...	...	655 }
		<i>Order 19.—Dress.</i>				
25 per cent.	92,535	Apparel and slops	...	...	...	382,825 }
30 per cent.	16,554	„ „	...	...	...	55,832 }
35 per cent.*	5,549	„ „	...	...	...	17,080 }
Free ...	...	„ „	...	...	...	18,247 }
25 per cent.	798	Bonnets, fancy and trimmed	...	...	...	3,220
4s. to 33s. p.‡	22,585	Boots and shoes	...	...	584,314	106,464 }
doz. pairs						
4s. to 45s. p.‡	11,372	„ „	...	...	143,755	42,771 }
doz. pairs*						
20 per cent.*	2	Clogs and pattens	...	...	...	11
Free ...	...	Feathers, ornamental	...	...	...	4,915 }
25 per cent.*	1,167	„ „	...	...	...	4,585 }
Free ...	...	Flowers, artificial	...	...	...	16,224
25 per cent.	1,439	Frillings and rufflings	...	...	...	5,696
„ ...	60	Furs, dressed	...	...	...	257 }
2d. per lb.*	6	„ „	...	...	1,572	645 }

* After 30th July, 1889. † After 10th September, 1889. ‡ Infants Nos. 0-3 are free.

EXPORTS, 1889.—*continued.**** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (–).	
Quantity.	Value.		Quantity.	Value.
	£			£
CLASS II.—TEXTILE FABRICS AND DRESS— <i>continued.</i>				
<i>Order 16—Silk Manufactures—continued.</i>				
...	174	Silk pongees ...	...	+ 3,167
...	102	„ ribbons ...	...	+ 24,033
...	...	„ velvets and crapes ...	...	+ 434
...	1,601	„ other manufactures of ...	...	+ 35,031
<i>Order 17.—Cotton and Flax Manufactures.</i>				
...	62,291	Cotton piece goods (all cotton) ...	...	+ 830,275
...	8,819	„ manufactures, such as counter-panes, etc.	...	+ 50,877
30,664	466	„ waste ... lbs.	+ 710,322	+ 8,547
7,931	598	„ wick ... „	+ 43,677	+ 2,007
...	3,224	Linen piece goods ...	...	+ 35,852
...	298	„ manufactures, such as table linen, towels, etc.	...	+ 4,503
...	...	„ tents and tarpaulins ...	...	+ 231
<i>Order 18.—Drapery and Haberdashery.</i>				
...	37,460	Haberdashery ...	...	+ 346,377
...	...	Bags—Fancy ...	...	+ 2,196
...	...	Quilts ...	...	+ 850
<i>Order 19.—Dress.</i>				
...	154,467	Apparel and slops ...	}	+ 319,517
...	...	„ „ ...		
...	...	„ „ ...		
...	...	„ „ ...		
...	457	Bonnets, fancy and trimmed ...	...	+ 2,763
155,314	39,402	Boots and shoes ... pairs	+ 572,755	+ 109,833
...	...	Clogs and pattens ...	...	+ 11
...	431	Feathers, ornamental ...	...	+ 9,069
...	578	Flowers, artificial ...	...	+ 15,646
...	915	Frillings and rufflings ...	...	+ 4,781
...	1,402	Furs, dressed ...	...	– 500

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS II.—TEXTILE FABRICS AND DRESS—continued.

Order 19.—Dress—continued.				
Free ...	...	Furs, undressed ...	...	2,428
25 per cent.*	87	„ hatters... ..	...	860
20 per cent.	27,382	Gloves ... ..	...	138,804
10 per cent.†	1,243	Handkerchiefs ... ..	...	12,738
		Hat and caps—		
48s. per doz.	675	Dress No.	3,089	1,787
60s. per doz.‡	294	„ „	2,028	740
30s. per doz	20	With calico frame and covered, etc. „	159	47
15s. per doz.	9,968	Men's felt, etc. „	136,143	20,913
„ †	1,952	Men's, women's, boys', etc., felt „	34,322	5,794
20s. per doz.‡	4,355	Men's, boys', etc., felt „	74,456	11,520
8s. per doz.	233	Boys' and youths', etc. „	5,299	788
„ †	353	Cloth, sewn, etc. „	54,567	1,959
5s. per doz.	781	Felt hoods „	62,688	2,489
Free	...	Straw, untrimmed „	1,208,751	65,949
25 per cent.	4,499	Others unenumerated „	160,726	16,724
	23,130	Total hats and caps „	1,742,228	128,710
Free ...	...	Hatters' materials ... ..	...	14,932
„ ...	...	Hosiery ... ..	...	77,980
20 per cent.	14,097	„ ... ..	...	69,546
25 per cent.§	2,112	„ ... ..	...	8,651
6d. & 1s. each	32	Millinery ... ..	...	...
2s. 6d. each	1,608	Umbrellas and parasols, cotton... No.	642	162
1s. each ...	6	„ „ silk „	12,969	6,541
„ † ...	77	„ „ fancy „	112	42
„ † ...	1	„ „ cotton & fancy „	1,254	224
		Umbrella sticks „	12	2
Order 20.—Manufactures of Fibrous Materials.				
Free ...	...	Bagging yards	...	...
„ ...	...	Bags and sacks, bran bags ... No.	1,764,049	35,110
„ ...	...	„ „ corn and flour sacks „	2,092,736	49,200
„ ...	...	„ „ gunny bags „	110,130	1,910
3s. per doz.	2,877	„ „ woolpacks „	189,184	19,495
6d. per doz.	15	„ „ undescribed „	21,192	226
Free	...	„ „ „ „	376,876	6,073
„ ...	...	Boot webbing ... ..	...	2,863
„ ...	...	Canvas ... ..	...	25,707

* After 5th September, 1889.

† After 30th July, 1889.

‡ After 10th September, 1889.

§ After 4th September, 1889.

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value.		Quantity.	Value.
	£			£

CLASS II.—TEXTILE FABRICS AND DRESS—*continued*.*Order 19.—Dress—continued.*

...	...	Furs, undressed ...	...	...	+ 2,428
...	...	„ hatters ...	...	...	+ 860
...	27,256	Gloves ...	...	...	+ 111,548
...	...	Handkerchiefs ...	...	...	+ 12,738
135,859	16,277	Hats and caps —			
		Dress ...	No.		
		„ ...	„		
		With calico frame and covered, etc.	„		
		Men's felt, etc. ...	„		
		Men's, women's, boys', etc., felt	„		
		Men's, boys', etc., felt	„	+ 1,606,369	+ 112,433
		Boys' and youths', etc.	„		
		Cloth, sewn, etc.	„		
		Felt hoods ...	„		
		Straw, untrimmed ...	„		
		Other unenumerated ...	„		

...	1,240	Hatters' materials...	...	...	+ 13,692
...	8,673	Hosiery ...	...	...	+ 147,504
...	582	Millinery ...	...	...	- 582
10,886	3,298	Umbrellas and parasols, cotton	No.		
		„ „ silk	„	+ 4,091	+ 3,671
		„ „ fancy	„		
...	...	„ „ cotton & fancy	„		
...	...	Umbrella sticks...	„	+ 12	+ 2

Order 20.—Manufactures of Fibrous Materials.

11,637	232	Bagging...	yards	- 11,637	- 232
194,930	3,518	Bags and sacks, bran bags ...	No.	+ 1,569,119	+ 31,592
1,389,802	34,770	„ „ corn and flour sacks „		+ 702,934	+ 14,430
6,250	125	„ „ gunny bags	„	+ 103,880	+ 1,785
287,038	28,983	„ „ woolpacks...	„	- 97,854	- 9,488
122,261	1,473	„ „ undescribed	„	+ 275,807	+ 4,826
...	528	Boot webbing ...	...	...	+ 2,335
...	1,996	Canvas ...	...	...	+ 23,711

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS II.—TEXTILE FABRICS AND DRESS—continued.

		Order 20.—Manufactures of Fibrous Materials—continued.			
5s. per cwt.	52	Cordage, coir	... cwt.	356	577
11s.3d.p.cwt.	311	„ hempen	... „	680	2,351
12s. per cwt.*	175	„ „	... „	376	1,576
28s. per cwt.	461	„ white lines	... „	347	2,686
12s. per cwt.*	64	„ „	... „	100	732
Free	...	„ unserviceable	... tons	154	835
11s.3d.p.cwt.	20	Engine packing	... cwt.	33	124
12s. per cwt.*	88	„ „	... „	147	693
Free	...	Felt, sheathing	... „	...	3,209
¼d. & ½d. per yard	2,981	Jute piece goods	... yards	2,094,482	30,185
25 per cent.	743	Mats	... „	...	4,425
20 per cent.	708	{ Matting, China	... „	...	} 5,985
Free	...	„ coir and other	... „	...	
20 per cent.	15,197	Nets and netting	... cwt.	128	1,342
2¼d. per lb.	1,736	Oil and other floor cloths	... „	...	89,100
8s. per cwt. †	1,220	Twine and lines	... lbs.	179,530	6,454
Free	...	„ reaper and binder	... „	346,192	9,466
		„ sewing or seaming	... „	512,725	16,324

CLASS III.—FOOD, DRINKS, ETC.

		Order 21.—Animal Food.			
Free	...	Bêche de mer	... cwt.	2	7
2d. per lb. ...	513	Butter	... lbs.	81,227	3,777
„ ...	949	Cheese	... „	157,310	4,794
Free	...	Eggs	... No.	5,093,382	21,935
2s. per gross*	3,884	„	... „	5,621,102	18,141
Free	...	Fish, fresh	... „	...	5,078
2d. per lb. ...	34,025	„ preserved	... lbs.	4,725,933	137,439
Free	...	„ salted...	... cwt.	18,484	26,242
„	...	„ shell...	... „	...	30,014
2d. per lb. ...	21	Honey	... lbs.	2,752	76
10 per cent.	114	Isinglass	... „	3,881	988
Free	...	„	... „	10,426	1,692
„	...	Lard	... „	3,128	73
„	...	Meats, fresh	... cwt.	3,162	3,686
2d. per lb. ...	2,211	„ preserved	... lbs.	439,627	16,257
„	162	„ bacon	... „	19,935	694
5s. per cwt.	137	„ beef, salted	... cwt.	1,382	2,214
2d. per lb. ...	1,767	„ hams	... lbs.	218,370	10,178
5s. per cwt.	367	„ pork, salted	... cwt.	1,517	3,988
20 per cent.*	441	„ potted, etc.	... „	...	2,135

* After 30th July, 1889.

† After 24th September, 1889.

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (–).	
Quantity.	Value.		Quantity.	Value.
	£			£

CLASS II.—TEXTILE FABRICS AND DRESS—*continued*.*Order 20.—Manufactures of Fibrous
Materials—continued.*

1,993	5,916	Cordage, coir ... cwt.	}	–134	+ 2,006
		„ hempen ... „			
		„ „ ... „			
		„ white lines ... „			
328	375	„ „ ... „	}	–174	+ 460
		„ unserviceable ... tons			
44	220	Engine packing ... cwt.			
...	102	Felt, sheathing ...			+ 3,107
...	6,670	Jute piece goods ...			+ 23,515
...	662	Mats ...			+ 3,763
...	803	Matting, China ...	}	...	+ 5,182
		„ coir and other ...			
...	9	Nets and netting ...			
...	3,715	Oil and other floor cloths ...			
182,401	6,721	Twine and lines ... lbs.	}	+ 856,046	+ 25,523
		„ reaper and binder ... „			
		„ sewing or seaming ... „			

CLASS III.—FOOD, DRINKS, ETC.

Order 21.—Animal Food.

...	...	Bêche de mer ... cwt.	+ 2	+ 7
1,029,742	37,799	Butter ... lbs.	– 948,515	– 34,022
312,469	8,610	Cheese ... „	– 155,159	– 3,816
45,256	169	Eggs ... No.	+ 10,669,228	+ 39,907
...	206	Fish, fresh ...	...	+ 4,872
470,643	16,532	„ preserved ... lbs.	+ 4,255,290	+ 120,907
726	1,292	„ salted ... cwt.	+ 17,758	+ 24,950
...	67	„ shell ...	...	+ 29,947
31,024	819	Honey ... lbs.	– 28,272	– 743
6,400	1,111	Isinglass ... „	+ 7,907	+ 1,569
17,999	429	Lard ... „	– 14,871	– 356
1,382	1,489	Meats, fresh ... cwt.	+ 1,780	+ 2,197
904,795	18,921	„ preserved ... lbs.	– 465,168	– 2,664
117,655	4,854	„ bacon ... „	– 97,720	– 4,160
2,471	2,880	„ beef, salted ... cwt.	– 1,089	– 666
26,224	1,243	„ hams ... lbs.	+ 192,146	+ 8,935
543	1,835	„ pork, salted ... cwt.	+ 974	+ 2,153
...	...	„ potted, etc. ...	...	+ 2,135

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (–).	
Quantity.	Value.		Quantity.	Value.
	£			£
CLASS III.—FOOD, DRINKS, ETC.— <i>continued.</i>				
Order 22.— <i>Vegetable Food.</i>				
31,454	679	Arrowroot lbs.	+ 102,437	+ 1,455
1,136,936	20,653	Biscuit, fancy „	– 1,123,763	– 20,313
2,340	15	Cocoanuts No.	+ 420,140	+ 1,806
106,491	3,909	Confectionery lbs.	+ 486,659	+ 21,380
...	...	„ sugar candy „	+ 2,305	+ 38
40,043	1,468	Fruit, bottled „	+ 49,664	+ 887
...	...	„ „ (over a quart and up to a gallon) doz.	+ 110	+ 51
...	...	„ „ (pints and over half a pint) „	+ 27,531	+ 1,642
235,267	4,685	„ dried lbs.	+ 685,195	+ 13,427
775,245	11,302	„ „ currants „	+ 4,056,195	+ 49,292
384,253	7,164	„ „ raisins „	+ 1,736,721	+ 25,557
30,646	14,212	„ fresh bushels	+ 256,493	+ 84,456
...	...	„ „ bananas „	+ 83,872	+ 24,888
...	...	„ „ oranges and lemons „	+ 89,290	+ 34,171
...	...	„ pulp lbs.	+ 45,462	+ 429
6,345	2,608	Grain and pulse, barley ... centals	+ 214,346	+ 94,528
1,577	1,282	„ „ beans and peas „	+ 5,965	+ 1,996
...	...	„ „ gram „	+ 1,656	+ 617
326	147	„ „ maize „	+ 111,378	+ 38,961
15,620	5,730	„ „ malt bushels	– 3,149	– 1,149
6,158	2,758	„ „ oats centals	+ 739,184	+ 296,207
...	...	„ „ peanuts „	+ 1,967	+ 1,439
18,327	12,676	„ „ rice „	+ 147,103	+ 64,876
120	45	„ „ rye „	– 120	– 45
244,461	84,064	„ „ wheat „	– 113,790	– 35,036
Grain prepared—				
109	109	Barley, pearl „	+ 1,179	+ 829
526,812	299,285	Flour „	– 514,220	– 292,284
35,458	28,467	Oatmeal „	– 35,376	– 28,395
294	277	Peas, split „	+ 2,014	+ 991

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS III.—FOOD, DRINKS, ETC.—continued.

<i>Order 22.—Vegetable Food—continued.</i>				
Grain, prepared—				
2s. p. cental	17	Semolina centals	172	223
5s. p. cental*	23	„ „	90	110
2d. per lb...	2,133	Jams and preserves lbs.	285,280	6,806
3d. per lb†	1,459	„ „ „	123,773	2,970
Free ...	...	„ „ peel, drained „	124,117	2,363
2d. per lb†	701	„ „ „ „ „	170,796	3,458
Free† ...	...	„ „ „ dried „	1,541	30
2d. per lb...	380	Liquorice „	69,942	1,904
„ ...	1,146	Macaroni and vermicelli „	145,963	2,849
„ ..	3,899	Maizena and corn flour „	408,482	9,326
Free ...	...	Molasses cwt.	21,841	2,617
3s. per cwt.	90	„ refined „	4,626	1,108
2s. per cwt.	750	„ Victorian refined ... .. „	...	...
3s. per cwt.	...	„ saccharum „	97	96
2d. per lb...	845	Nuts lbs.	96,838	1,737
„ ...	2,106	„ almonds „	281,598	8,320
„ ...	594	„ walnuts „	71,462	1,625
20s. per ton	45	Onions tons	44	893
10s. per ton	975	Potatoes „	1,950	10,889
Free ...	...	Sago lbs.	174,558	1,467
Sugar—				
3s. per cwt.	57,629	Cane, raw cwt.	536,985	516,948
2s. per cwt.	33,685	Cane, raw, refined in Victoria „	276,165	145,908
3s. per cwt.	40,792	Cane, refined „	278,490	320,848
6s. per cwt.	321	Beet „	1,051	921
3s. per cwt.	774	Glucose „	5,010	4,277
	133,201	Total Sugar „	1,097,701	988,902
Free ...	...	Tapioca lbs.	2,212,955	19,269
18s. p. doz.†	5	Vegetables, bottled (over a quart and up to a gallon) doz.	6	8
3s. per doz.†	223	„ bottled (pints and over half a pint) „	2,064	772
Free ...	...	„ fresh cwt.	6,918	3,456
2d. per lb...	229	„ preserved lbs.	25,640	1,220
5s. per cwt.	58	„ salted cwt.	227	332
<i>Order 23.—Drinks and Stimulants.</i>				
10 per cent.	197	Aërated and mineral waters ... doz.	7,773	2,057
9d. per gal.	54,800	Beer (ale and porter)... .. galls.	1,643,236	337,648
1s.6d.p.doz.ptst‡	1,168	„ lager „	44,049	8,397
3d. per lb...	1	Chicory lbs.	73,099	450
„ ...	5,419	Chocolate and cocoa „	511,812	39,752

* After 24th September, 1889. † After 30th July, 1889. ‡ After 19th September, 1889.

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (—).	
Quantity.	Value.		Quantity.	Value.
	£			£
CLASS III.—FOOD, DRINKS, ETC.— <i>continued</i> .				
<i>Order 22.—Vegetable Food—continued.</i>				
...	...	Grain, prepared— Semolina centals	+ 262	+ 333
293,184	5,812	Jams and preserves ... lbs.	+ 412,323	+ 9,815
8,365	280	Liquorice "	+ 61,577	+ 1,624
17,852	554	Macaroni and vermicelli ... "	+ 128,111	+ 2,295
53,365	1,418	Maizena and corn flour ... "	+ 355,117	+ 7,908
2,840	2,434	Molasses... .. cwt.	+ 23,627	+ 1,291
...	...	„ Victorian, refined ... "	...	...
...	...	„ saccharum ... "	+ 97	+ 96
20,843	402	Nuts lbs.	+ 75,995	+ 1,335
28,934	1,209	„ almonds "	+ 252,664	+ 7,111
...	...	„ walnuts "	+ 71,462	+ 1,625
2,774	35,308	Onions tons	— 2,730	— 34,415
9,145	57,612	Potatoes... .. "	— 7,195	— 46,723
67,193	604	Sago lbs.	+ 107,365	+ 863
...	...	Sugar—		
...	...	Cane, raw cwt.	+ 536,985	+ 516,948
...	...	Cane, Victorian refined ... "	+ 276,165	+ 145,908
113,190	124,823	Cane, refined "	+ 165,300	+ 196,025
90	106	Beet "	+ 961	+ 815
892	893	Glucose "	+ 4,118	+ 3,384
114,172	125,822	Total Sugar "	983,529	863,080
137,888	1,442	Tapioca lbs.	+ 2,075,067	+ 17,827
...	...	Vegetables, bottled (over a quart and up to a gallon) doz.	+ 6	+ 8
...	...	„ bottled (pint and over half a pint) .. "	+ 2,064	+ 772
10,212	3,028	„ fresh cwt.	— 3,294	+ 428
39,466	951	„ preserved lbs.	— 13,826	+ 269
...	...	„ salted... .. cwt.	+ 227	+ 332
<i>Order 23.—Drinks and Stimulants.</i>				
12,469	1,885	Aërated and mineral waters... doz.	— 4,696	+ 172
153,100	21,019	Beer (ale and porter) ... galls.	+ 1,490,136	+ 316,629
...	...	„ lager "	+ 44,049	+ 8,397
47,884	573	Chicory lbs.	+ 25,215	— 123
68,941	5,059	Chocolate and cocoa "	+ 442,871	+ 34,693

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS III.—FOOD, DRINKS, ETC.—continued.

		Order 23.—Drinks and Stimulants— continued.				
9d. per gal.	95	Cider and perry	...	galls.	2,207	462
Free	...	Cocoa beans	...	cwt.	1,975	6,477
3d. per lb...	13,603	Coffee	...	lbs.	1,288,996	58,314
2d. per lb...	1	Ginger, ground	...	"	4,310	79 }
Free	...	" other	...	"	123,340	1,949 }
6d. per lb...	14,187	Hops	...	"	608,005	44,063 }
8d. per lb*	1,792	"	...	"	176,649	8,517 }
20 per cent.	39	Limejuice	...	galls.	1,495	196 }
Free	...	"	...	"	16,620	1,454 }
"	...	Milk, preserved	...	lbs.	2,234,127	50,096 }
2d. per lb.†	730	"	...	"	465,066	9,691 }
2d. per lb.	3,151	Mustard	...	"	387,574	20,990
Free	...	Pepper	...	"	472,340	17,795 }
2d. per lb.	11	" ground	...	"	1,536	59 }
10 per cent.	560	Perfumery‡...	...	...	...	5,694 }
20 per cent.†	460	"	...	...	...	2,125 }
2s. 9d. p. doz.	4	Pickles (quarts)	...	doz.	481	93 }
3s. per doz.†	19	"	...	"	267	167 }
1s. 9d. p. doz.	1,993	" (pints)	...	"	20,138	6,732 }
2s. per doz.†	72	"	...	"	1,532	574 }
2s. 6d. per doz.§	457	"	...	"	5,455	1,842 }
1s. per doz.	2	" (half-pints)	...	"	7	3
10 per cent.†	...	" other	...	...	...	3
20s. per ton.	10,037	Salt	...	tons	11,013	44,276
Free	...	" rock	...	"	1,360	4,271
"	...	Saltpetre	...	cwt.	2,015	2,212
20 per cent.	1,034	Sauces (quarts)	...	doz.	10,948	6,271
2s. per doz.†	665	" (pints)	...	"	5,561	2,476
10 per cent.†	1	" other	...	...	...	14
Free	...	Spices unenumerated...	...	lbs.	195,407	8,565
2d. per lb.	80	" ground	...	"	9,777	483
12s. per gal.	157,326	Spirits, brandy	...	galls.	380,412	187,805
"	2,792	" cordials and bitters	...	"	6,206	6,135
"	75,286	" gin	...	"	148,756	34,504
"	655	" of wine	...	"	3,648	331
24s. per gal.	3,209	" perfumed	...	"	2,780	9,532
12s. per gal.	58,366	" rum	...	"	109,116	19,598
"	319,673	" whisky	...	"	587,176	208,992
"	34,356	" other, undescribed	...	"	55,368	32,686
3d. per lb.	111,504	Tea	...	lbs.	12,983,508	596,385
3s. per lb....	213,988	Tobacco (manufactured)	...	"	2,602,443	192,002
1s. per lb....	23,863	" (unmanufactured)	...	"	684,228	41,710

* After 23rd October, 1889.
† See also Spirits, perfumed.

‡ After 30th July, 1889.
§ After 10th September, 1889.

EXPORTS, 1889—*continued.**** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (—).	
Quantity.	Value.		Quantity.	Value.
	£			£

CLASS III.—FOOD, DRINKS, ETC.—*continued.*

		<i>Order 23.—Drinks and Stimulants— continued.</i>				
105	29	Cider and perry ...	...	galls.	+ 2,102	+ 433
23	102	Cocoa beans ...	...	cwt.	+ 1,952	+ 6,375
325,909	15,926	Coffee ...	...	lbs.	+ 963,087	+ 42,388
16,147	476	Ginger ...	...	„	+ 111,503	+ 1,552
309,525	13,724	Hops ...	...	„	+ 475,129	+ 38,856
8,647	1,453	Limejuice ...	...	galls.	+ 9,468	+ 197
72,647	1,732	Milk, preserved ...	...	lbs.	+ 2,626,546	+ 58,055
40,354	1,729	Mustard... ..	...	„	+ 347,220	+ 19,261
65,280	2,897	Pepper ...	...	„	+ 408,596	+ 14,957
...	1,178	Perfumery* ...	...	...	...	+ 6,641
1,808	1,561	Pickles (quarts) ...	...	doz.	— 1,060	— 1,301
...	...	„ (pints) ...	...	„	+ 27,125	+ 9,148
...	...	„ (half-pints) ...	...	„	+ 7	+ 3
...	...	„ other ...	...	...	...	+ 3
499	1,873	Salt ...	...	tons	+ 10,514	+ 42,403
99	341	„ rock ...	...	„	+ 1,261	+ 3,930
75	80	Saltpetre ...	...	cwt.	+ 1,940	+ 2,132
3,021	2,588	Sauces (quarts) ...	...	doz.	+ 7,927	+ 3,683
...	...	„ (pints) ...	...	„	+ 5,561	+ 2,476
...	...	„ other ...	...	...	...	+ 14
37,249	2,071	Spices, unenumerated ...	...	lbs.	+ 158,158	+ 6,494
...	...	„ ground ...	...	„	+ 9,777	+ 483
60,341	23,662	Spirits, brandy ...	...	galls.	+ 320,071	+ 164,143
19,130	15,035	„ cordials and bitters ...	...	„	— 12,924	— 8,900
13,195	3,828	„ gin ...	...	„	+ 135,561	+ 30,676
1,952	337	„ of wine ...	...	„	+ 1,696	— 6
244	659	„ perfumed ...	...	„	+ 2,536	+ 8,873
15,638	3,869	„ rum ...	...	„	+ 93,478	+ 15,729
85,790	32,963	„ whisky ...	...	„	+ 501,386	+ 176,029
4,439	4,293	„ other, undescribed ...	...	„	+ 50,929	+ 28,393
6,435,222	355,157	Tea ...	...	lbs.	+ 6,548,286	+ 241,228
1,006,787	75,886	Tobacco (manufactured) ...	...	„	+ 1,595,656	+ 116,116
25,408	1,994	„ (unmanufactured) ...	...	„	+ 658,820	+ 39,716

* See also Spirits, perfumed.

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS III.—FOOD, DRINKS, ETC.—continued.

		Order 23.—Drinks and Stimulants— continued.				
6s. per lb....	50,945	Tobacco, cigars	...	...	lbs.	249,678 116,635
”	10,540	” cigarettes	...	...	”	44,337 19,171
3s. per lb....	728	” snuff	...	...	”	5,733 1,206
6d. per gal.	2,488	Vinegar	...	...	galls.	122,491 12,184
6s. per gal.	38,085	Wine, in wood and bottled	...	...	”	197,770 82,704
8s. per gal.	16,701	” sparkling	...	...	”	42,090 76,066

CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES.

		Order 24.—Animal Substances.				
Free	...	Beeswax	...	...	cwt.	4 17
”	...	Bones	...	...	tons	71 202
”	...	Bonedust	...	...	”	... ..
”	...	Bristles	...	...	lbs.	30,571 4,694
2d. per lb.	7,735	Candles	...	...	”	1,010,736 32,139
10 per cent.	832	Combs	...	...	...	... 8,605
Free	...	Flock	...	...	tons	10 152
2d. per lb.	1,261	Glue	...	...	lbs.	153,696 5,657
20 per cent.*	128	” liquid...	...	...	...	... 663
Free	...	” pieces	...	...	tons	... ..
10 per cent.	167	Grease	...	...	”	180 1,759)
60s. per ton†	31	”	...	...	”	18 320)
Free	...	Hair	...	...	lbs.	47,550 2,264
2d. per lb.	1,369	” curled	...	...	”	172,441 6,258
Free	...	” seating	...	...	...	... 2,542
”	...	Hides	...	...	No.	94,957 92,031
”	...	Horns and hoofs	...	...	cwt.	39 86
”	...	Ivory	...	...	”	17 3,618
”	...	Leather	...	...	...	... 7,222)
20 per cent.	3,261	”	...	...	cwt.	1,191 17,852)
6d. per lb.*	1,610	”	...	...	lbs.	95,369 15,464)
7½ per cent.	4,229	” calf and kid	...	...	cwt.	2,346 53,070)
6d. per lb.*	1,640	”	...	...	lbs.	77,944 15,266)
7½ per cent.†	717	” kid, calf kid, mock kid, and patent calf	...	...	cwt.	575 15,701)
20 per cent.	306	” cut into shapes	...	...	...	... 1,413)
25 per cent*	199	”	...	...	...	... 766)
10 per cent.	2,743	” fancy, patent, etc.	...	...	...	... 29,562)
6d. per lb.*	1,030	”	...	...	lbs.	39,248 9,595)
Free	...	” imitation	...	...	...	... 5,383
1s. per lb.*	108	” laces	...	...	lbs.	2,450 368
” †	339	” morocco, roan, skiver, etc.	...	...	”	6,534 1,587
24s. p.dz.prs*	63	” uppers, closed, men’s...	...	...	pairs	3,926 433

* After 30th July, 1889.

† After 24th September, 1889.

EXPORTS, 1889—*continued*.

*** For the position of any article, see Index ante.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (—).	
Quantity.	Value.		Quantity.	Value.
	£			£

CLASS III.—FOOD, DRINKS, ETC.—*continued*.

		<i>Order 23.—Drinks and Stimulants— continued.</i>			
69,786	29,466	Tobacco, cigars ...	lbs.	+ 179,892	+ 87,169
12,521	5,114	„ cigarettes ...	„	+ 31,816	+ 14,057
254	73	„ snuff ...	„	+ 5,479	+ 1,133
13,221	1,589	Vinegar ...	galls.	+ 109,270	+ 10,595
230,674	57,524	Wine, in wood and bottled ...	„	— 32,904	+ 25,180
4,528	8,759	„ sparkling ...	„	+ 37,562	+ 67,307

CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES.

		<i>Order 24.—Animal Substances.</i>			
243	865	Beeswax ...	cwt.	— 239	— 848
68	539	Bones ...	tons	+ 3	— 337
1,932	11,057	Bonedust ...	„	— 1,932	— 11,057
2,583	372	Bristles ...	lbs.	+ 27,988	+ 4,322
265,610	6,251	Candles ...	„	+ 745,126	+ 25,888
...	591	Combs ...	...	...	+ 8,014
34	706	Flock ...	tons	— 24	— 554
7,804	258	Glue ...	lbs.	+ 145,892	+ 5,399
...	...	„ liquid ...	...	...	+ 663
89	988	„ pieces ...	tons	— 89	— 988
35	530	Grease ...	„	+ 163	+ 1,549
135,826	1,571	Hair ...	lbs.	— 88,276	+ 693
3,234	249	„ curled ...	„	+ 169,207	+ 6,009
...	17	„ seating ...	...	...	+ 2,525
33,689	25,000	Hides ...	No.	+ 61,268	+ 67,031
4,000	2,691	Horns and hoofs ...	cwt.	— 3,961	— 2,605
...	...	Ivory ...	„	+ 17	+ 3,618
...
...
...
46,344	209,984	Leather ...	„	— 40,684	— 85,409
...
...	146	„ cut into shapes ...	...	...	+ 2,033
...	2,246	„ fancy, patent, etc. ...	...	+ 39,248	+ 36,911
...	6	„ imitation ...	...	...	+ 5,377
...	...	„ laces ...	lbs.	+ 2,450	+ 368
...	...	„ morocco, roan, skiver, etc. ...	„	+ 6,534	+ 1,587
...	...	„ uppers, closed, men's ...	pairs	+ 3,926	+ 433

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES—continued.

Order 24.—Animal Substances—contd.				
18s. p.dz.prs*	2	Leather, uppers, closed, women's	pairs	24
6s. p.dz.prs.*	40	„ „ wellington	„	1,608
		fronts and grafts		
3s. p. dz. prs.*	283	„ „ cashmere	„	28,917
25 per cent.	11,972	Leatherware	...	48,414
Free	...	Sausage skins	lbs.	327,445
„	...	Skins, kangaroo	No.	273,734
„	...	„ opossum	„	118,891
„	...	„ rabbit	„	1,172,082
„	...	„ sheep, with wool	„	173,405
„	...	„ „ without wool	„	23,631
„	...	„ undescribed	„	34,884
2d. per lb.	273	Soap, common	lbs.	26,792
4d. per lb.	3,746	„ fancy, perfumed	„	273,234
Free	...	Sponges	„	11,484
2d. per lb.	...	Stearine	cwt.	...
Free	...	Tallow	tons	281
„	...	Whalebone	lbs.	2,240
„	...	Wool,† greasy	„	70,232,062
„	...	„ scoured	„	10,001,332
„	...	„ washed	„	157,364
„	...	„ Angora	„	896
				42
Order 25.—Vegetable Substances.				
Free	...	Bark	tons	3,422
„	...	Bass	„	59
2d. per lb.	776	Blue	lbs.	94,705
2s. p. cental	44	Bran	centals	1,759
5s. p. cental‡	58	„	„	1,831
Free	...	Canes and rattans	bundles	20,269
25 per cent.	80	Casks	No.	631
Free	...	„ empty	„	18,136
„	...	Copra	tons	1
„	...	Cork	cwt.	460
4d. per lb....	4,605	„ cut	lbs.	365,268
Free	...	Cotton, raw	„	11,484
2s. p. cental	14	Dholl	centals	256
Free	...	Fibre, cocoanut	tons	109
„	...	„ undescribed	„	750
„	...	Firewood	„	9,696
„	...	Flax, “ Phormium,” N.Z.	„	380
„	...	Gum	„	104

* After 30th July, 1889.

† The quantity of wool imported amounted to 80,391,654 lbs., valued at £3,595,449, of which all but 25,653,494 lbs., valued at £986,706, was brought overland from New South Wales.

‡ After 24th September, 1889.

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (−).	
Quantity.	Value.		Quantity.	Value.
	£			£

CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES—*continued*.*Order 24.—Animal Substances—contd.*

...	...	Leather, uppers, closed, women's pairs	+ 24	+ 4
...	...	" " wellington	+ 1,608	+ 354
...	...	fronts and grafts		
...	...	" " cashmere	+ 28,917	+ 1,366
...	5,177	Leatherware		+ 43,237
148,569	6,986	Sausage skins	+ 178,876	+ 8,260
51,285	8,460	Skins, kangaroo	+ 222,449	+ 20,582
323,418	8,385	" opossum	− 204,527	− 6,625
3,429,015	12,303	" rabbit	− 2,256,933	− 7,101
990,846	173,563	" sheep, with wool	− 817,441	− 154,930
211,823	4,126	" " without wool	− 188,192	− 3,433
2,378	123	" undescribed	+ 32,506	+ 4,363
1,217,678	8,884	Soap, common	− 1,190,886	− 8,259
149,985	8,538	" fancy, perfumed	+ 123,249	+ 10,584
180	54	Sponges	+ 11,304	+ 1,983
43	85	Stearine	− 43	− 85
7,491	149,429	Tallow	− 7,210	− 144,476
...	...	Whalebone	+ 2,240	+ 436
113,699,150	4,560,861	Wool,* greasy	− 43,467,088	− 1,627,872
19,872,048	1,224,686	" scoured	− 9,870,716	− 570,024
2,035,352	143,300	" washed	− 1,877,988	− 135,544
820	85	" Angora	+ 76	− 43

Order 25.—Vegetable Substances.

4,454	45,666	Bark	tons	− 1,032	− 13,249
3	187	Bass	"	+ 56	+ 2,340
67,650	1,628	Blue	lbs.	+ 27,055	+ 1,576
10,655	2,989	Bran	centals	− 7,065	− 2,157
469	199	Canes and rattans	bundles	+ 19,800	+ 4,055
...	...	Casks	No.	+ 631	+ 364
9,548	7,673	" empty	"	+ 8,588	− 4,867
2	62	Copra	tons	− 1	− 46
8	22	Cork	cwt.	+ 452	+ 758
38,891	4,218	" cut	lbs.	+ 326,377	+ 28,178
...	...	Cotton, raw	"	+ 11,484	+ 297
12	6	Dholl	centals	+ 244	+ 133
7	111	Fibre, cocoanut	tons	+ 102	+ 1,369
67	4,458	" undescribed	"	+ 683	+ 18,758
...	...	Firewood	"	+ 9,696	+ 2,789
38	789	Flax, "Phormium," N.Z.	"	+ 342	+ 7,314
16	727	Gum	"	+ 88	+ 4,060

* The quantity of wool exported amounted to 135,607,370 lbs., valued at £5,928,932, of which 16,789,497 lbs., valued at £734,989, was entered as the produce of places outside Victoria.

IMPORTS, 1889.

* * For the position of any article, see Index *ante*.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

ORDER IV.—ANIMAL AND VEGETABLE SUBSTANCES—*continued*.

		Order 25.—Vegetable Substances— continued.			
Free	...	Gutta-percha goods	...	...	426
"	...	Hay and chaff	...	tons	2,549 9,866
"	...	Hemp	...	"	1,174 50,992
"	...	Indiarubber goods	...	...	... 64,402
"	...	Jute	...	tons	66 1,165
"	...	Meal, linseed	...	lbs.	2,800 13
"	...	Millet, broom corn, etc.	...	tons.	351 8,222
"	...	Oakum	...	cwt.	8 9
"	...	Oilcake	...	tons	5 50
2d. per lb.*	122	Paper, advertising matter	...	lbs.	15,859 666 }
4d. per lb.†	1,148	" "	...	"	68,572 3,061 }
10s. per cwt.	274	" bags...	...	cwt.	848 2,123 }
15s. p. cwt. ‡	140	" " ...	...	"	215 445 }
25 per cent.	184	" boxes, cardboard	...	...	... 1,084
" §...	507	" " glove, etc.	...	...	... 1,984
Free	...	" printing, uncut	...	cwt.	164,420 239,761 }
4s. per cwt.*	139	" " coloured	...	"	696 907 }
4s. per cwt.	2,585	" wrapping	...	"	15,228 14,637 }
6s. per cwt.†	1,072	" " ...	...	"	3,534 3,703 }
2d. per lb....	177	" writing	...	lbs.	24,509 1,280 }
Free	...	" " uncut	...	"	2,959,712 65,109 }
2d. per lb....	248	" undescribed, cut	...	"	28,654 2,028
4s. per cwt.	1,717	" " uncut	...	cwt.	8,909 20,990 }
6s. per cwt.†	530	" " "	...	"	1,713 4,540 }
4s. per cwt.†	269	" cardboard	...	"	1,367 2,376
Free	...	Paperhangings	...	...	... 36,280
2d. per lb....	...	Paper patterns	...	...	... ..
Free	...	Pitch and tar	...	cwt.	13,390 3,992
2s. p. cental	70	Pollard	...	centals	1,201 294 }
5s. p. cental‡	...	" " ...	...	"	1 1 }
Free	...	Rags	...	tons	993 5,352
"	...	Resin	...	cwt.	35,978 10,921
10 per cent.	185	Seeds, canary	...	centals	3,048 1,905
Free	...	" clover	...	"	833 2,530
"	...	" grass	...	"	15,180 16,271
"	...	" undescribed	...	...	... 14,961
2d. per lb....	5,936	Starch	...	lbs.	802,620 11,338
2s. p. cental	31	Tares	...	centals	309 185
25 per cent.§	70	|| Timber, bent and finished	...	...	... 279
6d. p. cub.ft.§	113	" cut into shapes	...	cub. ft.	6,554 873
Free	...	" deals	...	sup. ft.	24,535,700 223,770

* From 31st July to 10th September, 1889.
† After 10th September, 1889.
‡ After 24th September, 1889.
§ After 30th July, 1889.

|| See also Order 13 *ante*.

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (—).	
Quantity.	Value.		Quantity.	Value.
	£			£

ORDER IV.—ANIMAL AND VEGETABLE SUBSTANCES—*continued*.*Order 25.—Vegetable Substances—
continued.*

...	...	Gutta-percha goods	...	...	...	+ 426
23,185	129,390	Hay and chaff	...	tons	— 20,636	— 119,524
37	1,199	Hemp	...	„	+ 1,137	+ 49,793
...	3,776	Indiarubber goods	...	...	...	+ 60,626
...	...	Jute	...	tons	+ 66	+ 1,165
19,236	156	Meal, linseed	...	lbs.	— 16,436	— 143
29	753	Millet, broom corn, etc.	...	tons	+ 322	+ 7,469
17	18	Oakum	...	cwt.	— 9	— 9
...	...	Oilcake	...	tons	+ 5	+ 50
...	...	Paper, advertising matter	...	lbs.	+ 84,431	+ 3,727
818	1,685	„ bags	...	cwt.	+ 245	+ 883
...	...	„ boxes' cardboard	...	...	...	+ 1,084
...	...	„ „ glove, etc.	...	...	...	+ 1,984
4,608	8,072	„ printing	...	cwt.	+ 160,508	+ 232,596
4,071	5,924	„ wrapping	...	„	+ 14,691	+ 12,416
31,920	1,101	„ writing	...	lbs.	+ 2,952,301	+ 65,288
...	...	„ undescribed, cut	...	„	+ 28,654	+ 2,028
...	...	„ „ uncut	...	cwt.	+ 10,622	+ 25,530
...	...	„ cardboard	...	...	+ 1,367	+ 2,376
...	1,658	Paperhangings	...	...	...	+ 34,622
...	1,880	Paper patterns	...	...	...	— 1,880
1,257	495	Pitch and tar	...	cwt.	+ 12,133	+ 3,497
3,359	1,021	Pollard	...	centals	— 2,157	— 726
62	1,460	Rags	...	tons	+ 931	+ 3,892
712	343	Resin	...	cwt.	+ 35,266	+ 10,578
80	88	Seeds, canary	...	centals	+ 2,968	+ 1,817
141	498	„ clover	...	„	+ 692	+ 2,032
1,262	1,765	„ grass	...	„	+ 13,918	+ 14,506
...	4,033	„ undescribed	...	...	...	+ 10,928
100,889	1,966	Starch	...	lbs.	+ 701,731	+ 9,372
...	...	Tares	...	centals	+ 309	+ 185
...	...	Timber, bent and finished	...	...	...	+ 279
...	...	„ cut into shapes	...	cub. ft.	+ 6,554	+ 873
55,839	630	„ deals	...	sup. ft.	+ 24,479,861	+ 223,140

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES—continued.

		Order 25.—Vegetable Substances—con.		
2/6 p. 100 s. f.	7,707	Timber, other, of sizes less than sup. ft.	6,166,100	78,796
		7in. x 2½in.		
1/6 p. 100 s. f.*	587	„ „ „ 7in. x 2½in. „	782,600	6,212
		to 12in. x 12in.		
1s. p. 100 s. f.	6,139	„ undressed, hardwood ...	12,570,500	78,888
2s. p. 100 s. f.†	4,994	„ „ „ „ „	4,994,100	34,041
Free	...	„ „ other ...	60,592,500	437,808
1/6 p. 100 s. f.	34,008	„ flooring boards ...	45,344,900	396,463
„	811	„ lining boards ...	1,076,700	9,502
„	819	„ weatherboards ...	1,091,400	8,853
4s. & 7s. p. 100 l. f.	600	„ mouldings ... lin. ft.	323,674	2,197
7s. p. 100 l. f.	2	„ skirtings ... „	650	16
5s. per 1,000	2,990	„ laths ... No.	11,960,200	20,619
Free	...	„ logs ... sup. ft.	6,478,800	48,560
9d. per 100	199	„ palings ... No.	529,200	3,350
6/6 per 100	148	„ pickets, dressed ... „	45,300	690
6d. per 100	483	„ „ undressed ... „	1,932,300	14,055
Free	...	„ posts and rails ... „	38,005	1,275
9d. per 1,000	2	„ shingles ... „	58,000	70
Free	...	„ shooks and staves ... „	142,344	4,407
„	...	„ spars and piles ... „	1,862,986	14,327
6d. per 100	44	„ spokes and felloes ... „	175,568	2,839
Free	...	„ „ „ undressed „	10,405	200
„	...	„ other unenumerated ...	...	1,946
	59,716	Total timber ...	...	1,390,036
2s. per gal.	4,808	Varnish ... galls.	37,579	23,325
25 per cent.	1,676	Wicker and basket ware ...	...	6,792
„	17,678	Woodenware ...	...	77,352
		Order 26.—Oils.‡		
6d. per gal.	...	Almond ... galls.	7	4
Free	...	Black ... „	14,651	1,572
6d. per gal.	6,559	Castor ... „	259,097	36,764
1s. doz.	355	„ (pints) ... doz.	4,456	1,613
12s. per doz.§	1	„ (over a quart and up to „	1	4
		a gallon)		
2s. per doz.§	90	„ (pints and over half a pint) „	1,441	497
6d. per gal.	648	Chinese ... galls.	27,100	3,778
Free	...	Cocoanut ... „	29,324	3,233
„	...	Cod ... „	70,619	8,320
6d. per gal.	30	Codliver ... „	1,356	311
Free	...	„ ... „	217	34

* From 31st July to 19th September, 1889.

† After 19th September, 1889.

‡ It being undesirable to separate the different kinds of oil, mineral as well as animal and vegetable oils are included under this head. For essential oils, see Order 14 ante.

§ After 30th July, 1889.

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (–).	
Quantity.	Value.		Quantity.	Value.
	£			£
CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES— <i>continued</i>				
<i>Order 25.—Vegetable Substances—con.</i>				
894,966	10,319	Timber, dressed, other ... sup. ft.	+ 6,053,734	+ 74,689
1,281,120	11,200	„ undressed ... „	+ 76,875,980	+ 539,537
4,930	72	„ flooring boards ... „	+ 45,339,970	+ 396,391
...	...	„ lining boards ... „	+ 1,076,700	+ 9,502
...	...	„ weatherboards ... „	+ 1,091,400	+ 8,853
44,259	778	„ mouldings and skirtings lin. ft.	+ 280,065	+ 1,435
83,654	137	„ laths ... No.	+ 11,876,546	+ 20,482
14,541	185	„ logs ... sup. ft.	+ 6,464,259	+ 48,375
37,806	274	„ palings ... No.	+ 491,394	+ 3,076
300	2	„ pickets ... „	+ 1,977,300	+ 14,743
1,076	54	„ posts and rails ... „	+ 36,929	+ 1,221
200	1	„ shingles ... „	+ 57,800	+ 69
5,598	74	„ shooks and staves ... „	+ 136,746	+ 4,333
...	...	„ spars and piles ... „	+ 1,862,986	+ 14,327
12,351	410	„ spokes and felloes ... „	+ 163,217	+ 2,429
...	...	„ „ „ undressed „	+ 10,405	+ 200
...	32	„ other unenumerated ...	...	+ 1,914
...	24,168	Total timber ...	...	+ 1,365,868
2,883	1,908	Varnish ... galls.	+ 34,696	+ 21,417
...	863	Wicker and basket ware ...	...	+ 5,929
...	10,331	Woodenware ...	...	+ 67,021
<i>Order 26.—Oils.*</i>				
...	...	Almond ... galls.	+ 7	+ 4
4,115	367	Black ... „	+ 10,536	+ 1,205
18,653	3,112	Castor ... „	+ 240,444	+ 33,652
...	...	„ (pints) ... doz.	+ 4,456	+ 1,613
...	...	„ (over a quart and up to a gallon) „	+ 1	+ 4
...	...	„ (pints and over half a pint) „	+ 1,441	+ 497
4,669	854	Chinese ... galls.	+ 22,431	+ 2,924
388	57	Cocanut ... „	+ 28,936	+ 3,176
2,347	303	Cod ... „	+ 68,272	+ 8,017
58	29	Codliver ... „	+ 1,515	+ 316

* It being undesirable to separate the different kinds of oil, mineral as well as animal and vegetable oils are included under this head. For essential oils, see Order 14 *ante*.

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES—continued.

Order 26.—Oils*—continued.					
1s. doz. ...	39	Codliver (pints) ...	doz.	773	1,453
12s. per doz.†	1	„ (over a quart and up to a gallon)	„	1	3
2s. per doz.†	20	„ (pints and over half a pint)	„	184	244
6d. per gal.	808	Colza ...	galls.	33,051	4,354
1s. doz. pts.	...	Dugong ...	doz. pints	3	5 }
2s. doz. pts.†	1	„ ...	„	6	11 }
6d. per gal.	...	„ ...	galls.	2	2
„ ...	41,003	Kerosene ...	„	1,300,334	63,718
„ ...	341	Lard ...	„	13,803	2,450
„ ...	9,579	Linseed ...	„	440,278	50,637
1s. doz. pts.	1	„ ...	doz. pts.	23	6
6d. per gal.	97	Lubricating... ..	galls.	3,191	473 }
Free ...	...	„ ...	„	61,793	5,802 }
1s. doz. ...	213	„ (pints) ...	doz.	4,221	806
12s. per doz.†	2	„ (over a quart and up to a gallon)	„	3	3
2s. per doz.†	201	„ (pints and over half a pint)	„	2,005	362
1s. per doz.	2	Medicinal (pints) ...	„	35	31
2s. per doz.†	3	„ (pints and over half a pint)	„	25	26
6d. per gal.	2	Mineral ...	galls.	98	12
1s. doz. pts.	5	„ ...	doz. pints.	100	31
Free ...	...	„ unrefined ...	galls.	141,378	9,437
6d. per gal.	15	Neatsfoot ...	„	325	56
„ „ ...	338	Olive ...	„	15,556	3,185
Free ...	...	Palm ...	„	17,451	1,977
6d. per gal.	...	Pine ...	„	...	...
„ ...	39	Resin ...	„	1,577	135
1s. doz. pints	1,223	Salad (pints) ...	doz.	20,648	8,138
12s. per doz.†	12	„ (over a quart and up to a gal.)	„	20	56
2s. per doz.†	613	„ (pints and over half a pint)	„	9,557	3,952
6d. per gall.	13	Seed ...	galls.	1,460	213
1s. per doz.	...	Sperm (pints) ...	doz.	250	31
2s. per doz.†	...	„ (pints and over half a pint)	„	25	5
Free ...	...	„ (in bulk) ...	galls.	243	72
6d. per gal.	21	„ „ ...	„	1,060	211
„ ...	...	Tallow ...	„	...	...
„ ...	114	Vegetable ...	„	5,107	1,159 }
1s. doz. pints	1	„ (pints) ...	doz.	14	6 }
Free ...	...	Oils undescribed ...	galls.	16,106	1,554 }
6d. per gal.	62	„ „ ...	„	2,276	519 }
62,452		Total Oils ...	galls.	2,523,183	217,265

* It being undesirable to separate the different kinds of oil, mineral as well as animal and vegetable oils are included under this head. For essential oils see Order 14 ante.
† After 30th July, 1889.

EXPORTS, 1889—continued.

*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (—).	
Quantity.	Value.		Quantity.	Value.
	£			£
CLASS IV.—ANIMAL AND VEGETABLE SUBSTANCES—continued.				
Order 26.—Oils*—continued.				
...	...	Codliver (pints) ... doz.	+ 773	+ 1,453
...	...	„ (over a quart and up to a gallon) „	+ 1	+ 3
...	...	„ (pints and over half a pint) „	+ 184	+ 244
1,761	314	Colza ... galls.	+ 31,290	+ 4,040
...	...	Dugong ... doz. pints	+ 9	+ 16
...	...	„ ... galls.	+ 2	+ 2
182,746	11,275	Kerosene ... „	+ 1,117,588	+ 52,443
758	176	Lard ... „	+ 13,045	+ 2,274
19,440	3,062	Linseed ... „	+ 420,838	+ 47,575
...	...	„ ... doz. pints	+ 23	+ 6
26,560	3,086	Lubricating ... galls.	+ 38,424	+ 3,189
...	...	„ (pints) ... doz.	+ 4,221	+ 806
...	...	„ (over a quart and up to a gallon) „	+ 3	+ 3
...	...	„ (pints and over half a pint) „	+ 2,005	+ 362
...	...	Medicinal (pints) ... „	+ 35	+ 31
...	...	„ (pints and over half a pint) „	+ 25	+ 26
16,084	1,674	Mineral ... galls.	— 15,986	— 1,662
...	...	„ ... doz. pints	+ 100	+ 31
...	...	„ unrefined ... galls.	+ 141,378	+ 9,437
2,113	279	Neatsfoot ... „	— 1,788	— 223
1,853	392	Olive ... „	+ 13,703	+ 2,793
2,629	286	Palm ... „	+ 14,822	+ 1,691
35	5	Pine ... „	— 35	— 5
168	12	Resin ... „	+ 1,409	+ 123
2,299	1,382	Salad (pints) ... doz.	+ 18,349	+ 6,756
...	...	„ (over a quart and up to a gallon) „	+ 20	+ 56
...	...	„ (pints and over half a pint) „	+ 9,557	+ 3,952
...	...	Seed ... galls.	+ 1,460	+ 213
...	...	Sperm (pints) ... doz.	+ 250	+ 31
...	...	„ (pints and over half a pint) „	+ 25	+ 5
...	...	„ (in bulk) ... galls.	+ 243	+ 72
100	61	„ ... „	+ 960	+ 150
23,288	1,706	Tallow ... „	— 23,288	— 1,706
121	44	Vegetable ... „	+ 5,007	+ 1,121
1,905	324	Oils undescribed ... „	+ 16,477	+ 1,749
313,239	28,800	Total Oils ... galls.	+ 2,209,944	+ 188,465

* It being undesirable to separate the different kinds of oil, mineral as well as animal and vegetable oils are included under this head. For essential oils, see Order 14 *ante*.

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS V.—MINERALS AND METALS.

Order 27.—Articles connected with Mining.*

		Order 28.—Coal, etc.				
Free	...	Coal	...	tons	758,315	753,048
"	...	Coke, charcoal	...	"	4,906	12,263
"	...	Kerosene shale	...	"	4,434	12,346
"	...	Paraffine	...	"	166	4,188
Order 29.—Stone, Clay, Earthenware, and Glass.—(See also Order 12 ante.)						
Free	...	Bricks, bath	...	No.	80,400	343
20 per cent.	2,683	Brownware	...	...	...	13,121
2s.6d. per c.ft.	2,722	Chinaware and porcelain	...	cub. feet	22,196	29,447
10 per cent. †	247	"	"	"	1,758	2,489
15 per cent. †	2,288	"	"	"	10,860	15,258
1s.4d. per c.ft.	6,783	Earthenware	...	"	101,475	64,022
8d. per c. ft. †	4,028	"	...	"	120,994	23,114
6d. per c. ft.	1,956	Glass bottles, for aërated waters and medicines	...	"	81,869	22,458
1s. per c. ft. †	1,557	" for aërated waters	...	"	32,314	4,516
6d. per c. ft. §	604	"	...	"	25,874	3,872
4d. per c. ft. †	73	" for medicines	...	"	4,277	773
6d. per c. ft. §	244	"	...	"	12,614	1,991
6d. per doz.	26,098	" containing spirits	...	doz.	431,208	21,545
3d. per doz.	341	" pickles	...	"	14,334	368
Free	...	Glass, plate	...	sup. feet	442,185	42,168
"	...	" window	...	"	4,627,852	64,262
20 per cent. †	129	" bent	...	...	...	645
2s.6d. per c.ft.	1,445	Glassware, cut	...	cub. feet	11,951	13,888
1s.6d. p.c.ft. †	1,230	"	...	"	17,481	6,801
1s. per c. ft.	3,039	" uncut	...	"	61,420	37,196
8d. per c. ft. †	472	"	...	"	18,653	4,053
6d. per c. ft. §	1,513	"	...	"	63,336	10,655
Free †	...	" sodawater syphons	...	...	...	1,773
20 per cent.	2,187	Marble, wrought	...	...	...	11,467
Free	...	" unwrought	...	tons	2,114	14,845
"	...	Plaster of paris	...	cwt.	8,805	1,551
"	...	" American	...	"	52,421	11,310
"	...	Putty	...	"	4,684	2,218
40s. per ton †	146	"	...	"	1,460	617
Free	...	Slate slabs	...	No.	19,610	5,605
"	...	Stones, grind	...	"	4,063	1,221

* The Customs returns do not distinguish mining materials. No doubt machinery, tools, etc., specially intended for use in mining operations, were landed during the year, and possibly some such articles were exported ; but their connexion with mining was not shown by the entries.

† After 30th July, 1889. ‡ After 3rd September, 1889. § After 10th September, 1889.

EXPORTS, 1889—*continued*.** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (-).	
Quantity.	Value.		Quantity.	Value.
	£			£

CLASS V.—MINERALS AND METALS.

*Order 27.—Articles connected with Mining.***Order 28.—Coal, etc.*

427	537	Coal	tons	+ 757,888	+ 752,511
439	507	Coke, charcoal	„	+ 4,467	+ 11,756
...	...	Kerosene shale	„	+ 4,434	+ 12,346
29	1,198	Paraffine	„	+ 137	+ 2,990
<i>Order 29.—Stone, Clay, Earthenware, and Glass.—(See also Order 12 ante.)</i>					
3,000	15	Bricks, bath	No.	+ 77,400	+ 328
...	582	Brownware ... ..	...	...	+ 12,539
...	4,784	Chinaware and porcelain ... ..	...	...	+ 42,410
...	8,052	Earthenware ... ..	...	...	+ 79,084
...	...	Glass bottles	cub. ft.	+ 156,948	+ 33,610
28,974	2,290	„	doz.	+ 416,568	+ 19,623
14,683	1,605	Glass, plate	sup. feet	+ 427,502	+ 40,563
131,444	1,944	„ window	„	+ 4,496,408	+ 62,318
...	...	„ bent	„	...	+ 645
...	8,720	Glassware ... ..	...	...	+ 65,646
...	2,419	Marble, wrought ... ..	...	...	+ 9,048
3	67	„ unwrought	tons	+ 2,111	+ 14,778
428	105	Plaster of paris	cwt.	+ 8,377	+ 1,446
846	194	„ American	„	+ 51,575	+ 11,116
62	52	Putty	„	+ 6,082	+ 2,783
...	...	Slate slabs	No.	+ 19,610	+ 5,605
101	81	Stones, grind	„	+ 3,962	+ 1,140

* The Customs returns do not distinguish mining materials. No doubt machinery, tools, etc., specially intended for use in mining operations, were landed during the year, and possibly some such articles were exported; but their connexion with mining was not shown by the entries.

IMPORTS, 1889—continued.

*** For the position of any article, see Index *ante*.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS V.—MINERALS AND METALS—continued.

<i>Order 29.—Stone, Clay, Earthenware, and Glass—continued.</i> (See also Order 12 <i>ante</i> .)						
Free	...	Stones, mill	No.	5	87	
"	...	" unwrought	tons	2,887	5,078	
20 per cent.	1,512	" wrought	"	389	7,754	
Free	...	Whiting	"	2,545	7,170	
<i>Order 31.—Gold, Silver, Specie, and Precious Stones.</i>						
Free	...	Gold, bullion	ozs.	128,592	502,818	
"	...	" specie	...	...	217,166	
"	...	Silver, bullion	ozs.	20,886	3,923	
"	...	" specie	...	...	1,218	
"	...	" ore	tons	242	3,243	
...	...	" amalgam and gold	"	...	...
Free	...	Copper, specie	...	...	3,503	
10 per cent.	636	Gold-leaf	No.	2,984,250	6,350	}
20 per cent.*	268	"	"	1,079,700	1,341	
8s. per oz....	5	Gold, plate of	ozs.	13	63	
20 per cent.	11,707	Jewellery	...	...	66,436	}
4s. per dwt.	17	" rings of gold	dwts.	87	19	
3s. per dwt.	68	" unenumerated	"	3	1	
10 per cent.	2	Silver leaf	No.	37,000	24	
2s. per oz....	1,621	Silver, plate of	ozs.	16,724	8,634	
Free	...	Precious stones, cameos, etc., unset	...	...	8,110	
"	...	Quartz	tons	129	1,602	
<i>Order 32.—Metals other than Gold and Silver.</i>						
Free	...	Antimony, ore	ton	1	50	
...	...	" regulus	...	...	...
25 per cent.	1,616	Brassware	...	...	6,534	}
35 per cent.†	536	"	...	...	1,448	
Free	...	"	...	...	37,452	
"	...	Copper	tons	187	9,907	
"	...	" ore	...	...	10	
"	...	" sheet	cwt.	5,349	19,496	
"	...	" wire	"	1,613	7,844	
"	...	Copperware	...	...	8,408	}
25 per cent.	208	"	...	...	835	
35 per cent.†	16	"	...	...	45	
25 per cent.	1,170	Grates and stoves	No.	7,153	4,399	}
35 per cent.†	423	"	"	1,448	1,208	
Free	...	Iron, bar and rod	tons	26,407	197,870	

* After 30th July, 1889.

† After 17th September, 1889.

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (—).	
Quantity.	Value.		Quantity.	Value.
	£			£
CLASS V.—MINERALS AND METALS— <i>continued</i> .				
<i>Order 29.—Stone, Clay, Earthenware and Glass—continued.</i> (See also Order 12 <i>ante</i> .)				
2	23	Stones, mill No.	+ 3	+ 64
169	119	„ unwrought tons	+ 2,718	+ 4,959
1,782	7,282	„ wrought „	— 1,393	+ 472
39	203	Whiting... .. „	+ 2,506	+ 6,967
<i>Order 31.—Gold, Silver, Specie, and Precious Stones.</i>				
72,622	296,413	Gold, bullion ozs.	+ 55,970	+ 206,405
...	1,983,913	„ specie „	...	— 1,766,747
28,447	5,550	Silver, bullion ozs.	— 7,561	— 1,627
...	17,810	„ specie „	...	— 16,592
39	429	„ ore tons	+ 203	+ 2,814
72	3,573	„ amalgam and gold „	— 72	— 3,573
...	230	Copper, specie „	...	+ 3,273
39,500	133	Gold-leaf No.	+ 4,024,450	+ 7,558
...	...	Gold, plate of ozs.	+ 13	+ 63
...	10,775	Jewellery „	...	+ 55,681
...	...	Silver leaf No.	+ 37,000	+ 24
2,520	1,588	Silver, plate of ozs.	+ 14,204	+ 7,046
...	100	Precious stones, cameos, etc., unset „	...	+ 8,010
...	1,600	Quartz „	...	+ 2
<i>Order 32.—Metals other than Gold and Silver.</i>				
6	155	Antimony, ore tons	— 5	— 105
...	11	„ regulus „	...	— 11
...	726	Brassware „	...	+ 44,708
16	546	Copper tons	+ 171	+ 9,361
100	106	„ ore cwt.	...	— 96
160	457	„ sheet „	+ 5,189	+ 19,039
3	21	„ wire „	+ 1,610	+ 7,823
...	523	Copperware „	...	+ 8,765
225	572	Grates and stoves No.	+ 8,376	+ 5,035
487	5,172	Iron, bar and rod tons	+ 25,920	+ 192,698

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS V.—MINERALS AND METALS—continued.

		Order 32.—Metals other than Gold and Silver—continued.			
25 per cent.	3,483	Iron, bolts and nuts ...	tons	882	14,128 }
35 per cent.*	1,620	„ „ „ ...	„	295	4,500 }
25 per cent.	4,798	„ castings ...	„	2,358	19,304 }
35 per cent. *	700	„ „ ...	„	96	1,998 }
60s. per ton *	354	„ „ sash weights ...	„	116	558
25 per cent.	43	„ galvanized buckets and tubs	No.	4,760	176
Free ...	...	„ „ cordage ...	tons	99	3,705
25 per cent.	...	„ „ guttering ...	...	...	...
Free ...	...	„ „ sheet ...	tons	18,457	304,136
60s. per ton *	2,527	„ girders ...	„	792	4,091
Free ...	...	„ hoop ...	„	1,980	17,941
„ ...	...	„ ore ...	„	383	1,148
„ ...	...	„ pig ...	„	24,986	99,895
40s. per ton	12,387	„ pipes, cast ...	„	6,262	31,483 }
60s. per ton*	3,047	„ „ „ ...	„	981	4,379 }
Free ...	...	„ „ wrought... ..	„	5,322	89,498
„ ...	...	„ plate ...	„	10,248	81,191
„ ...	...	„ railway rails, etc.	„	79,826	436,184
„ ...	...	„ scrap ...	„	1,897	6,940
„ ...	...	„ sheet ...	„	2,283	23,202
„ ...	...	„ tanks ...	No.	3,740	11,374
„ ...	...	„ wire, fencing and undescribed	tons	11,253	100,578 }
60s. per ton†	489	„ „ barbed ...	„	173	2,623 }
Free ...	...	„ „ telegraphic	„	6	80
„ ...	...	Lead, ore ...	„	14	134
„ ...	...	„ pig ...	„	2,290	30,068
2s.6d.p.cwt.	9	„ pipe ...	cwt.	65	62
„	1,505	„ sheet ...	„	13,670	10,047
25 per cent.	66,979	Metal, manufactures of	...	...	277,393 }
35 per cent.*	20,197	„ „	...	...	63,037 }
Free ...	...	„ yellow	cwt.	660	2,136
„ ...	...	Metals, undescribed	„	660	2,311
20 per cent.	3,824	Metalware, mixed	...	...	19,561
3s. per cwt.	9,613	Nails ...	cwt.	61,983	36,418 }
5s. per cwt.‡	2,101	„ „	„	11,417	6,891 }
12s. per cwt.	959	„ horseshoe	„	1,619	3,488
Free ...	...	Ores, mineral earths, clays, etc.	tons	1,517	9,086
20 per cent.	14,437	Platedware ...	...	...	74,944
Free ...	...	Plumbago ...	cwt.	665	549
„ ...	...	Quicksilver ...	lbs.	58,575	6,988
„ ...	...	Screws ...	cwt.	4,389	8,358
„ ...	...	Spelter ...	„	40	52
„ ...	...	Steel ...	tons	4,836	53,179

* After 17th September, 1889. † After 19th September, 1889. ‡ After 30th July, 1889.

EXPORTS, 1889—*continued*.*** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (—).	
Quantity.	Value.		Quantity.	Value.
	£			£
CLASS V.—MINERALS AND METALS— <i>continued</i> .				
<i>Order 32.—Metals other than Gold and Silver—continued.</i>				
5	166	Iron, bolts and nuts ... tons	+ 1,172	+ 18,462
31	811	„ castings ... „	+ 2,423	+ 20,491
...	...	„ „ sash weights ... „	+ 116	+ 558
1,589	260	„ galvanised buckets and tubs No.	+ 3,171	- 84
13	752	„ „ cordage ... tons	+ 86	+ 2,953
...	1,520	„ „ guttering ... „	...	- 1,520
504	10,346	„ „ sheet ... tons	+ 17,953	+ 293,790
...	...	„ girders ... „	+ 792	+ 4,091
44	479	„ hoop ... „	+ 1,936	+ 17,462
...	...	„ ore ... „	+ 383	+ 1,148
76	264	„ pig ... „	+ 24,910	+ 99,631
147	1,215	„ pipes, cast ... „	+ 7,096	+ 34,647
168	4,101	„ „ wrought ... „	+ 5,154	+ 85,397
34	440	„ plate ... „	+ 10,214	+ 80,751
123	1,150	„ railway rails, etc. ... „	+ 79,703	+ 435,034
...	...	„ scrap ... „	+ 1,897	+ 6,940
26	320	„ sheet ... „	+ 2,257	+ 22,882
271	954	„ tanks ... No.	+ 3,469	+ 10,420
848	10,076	„ wire, fencing and undescribed tons	+ 10,578	+ 93,125
21	341	„ „ telegraphic ... „	- 15	- 261
...	1	Lead, ore ... „	+ 14	+ 133
26	357	„ pig ... „	+ 2,264	+ 29,711
793	841	„ pipe ... cwt.	- 728	- 779
3,481	3,229	„ sheet ... „	+ 10,189	+ 6,818
...	31,486	Metal, manufactures of ... „	...	+ 308,944
1	4	„ yellow ... cwt.	+ 659	+ 2,132
3	14	Metals, undescribed ... „	+ 657	+ 2,297
...	1,318	Metalware, mixed ... „	...	+ 18,243
3,640	3,929	Nails ... cwt.	+ 69,760	+ 39,380
...	...	„ horseshoe ... „	+ 1,619	+ 3,488
248	4,112	Ores, mineral earths, clays, etc. tons	+ 1,269	+ 4,974
...	7,318	Platedware ... „	...	+ 67,626
12	12	Plumbago ... cwt.	+ 653	+ 537
5,667	739	Quicksilver ... lbs.	+ 52,908	+ 6,249
33	72	Screws ... cwt.	+ 4,356	+ 8,286
3,160	2,165	Spelter ... „	- 3,120	- 2,113
77	1,403	Steel ... tons	+ 4,759	+ 51,776

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS V.—MINERALS AND METALS—continued.

		Order 32.—Metals other than Gold and Silver—continued.				
Free	...	Steel cordage	...	tons	798	32,952
"	...	Tin, block	...	cwt.	4,080	16,665
"	...	" foil	...	lbs.	73,597	1,604
"	...	" ore	...	tons	23	446
"	...	" " black sand	...	cwt.	...	...
"	...	" plate	...	boxes	36,501	30,084
25 per cent.	1,440	Tinware	...	...	...	6,058
35 per cent.*	323	"	...	...	...	913
Free	...	Wire netting	...	...	...	29,915
"	...	Zinc, ingots	...	cwt.	171	171
25 per cent.	146	" perforated	...	...	...	632
35 per cent.*	36	" "	...	...	...	104
Free	...	" sheet	...	cwt.	4,583	4,988

CLASS VI.—LIVE ANIMALS AND PLANTS.

		Order 33.—Animals and Birds.				
Free	...	Birds	...	No.	5,249	574
"	...	Deer	...	"	20	400
"	...	Dogs	...	"	46	442
5s. each	794	Horses, overland	...	"	3,752	143,608
"	...	" seaward	...	"	453	21,759
"	17,644	Horned cattle, overland	...	"	76,181	458,314
"	...	" seaward	...	"	192	4,555
Free	...	Calves, overland	...	"	776	1,132
6d. each	22,965	Sheep, overland	...	"	1,018,515	422,473
"	...	" seaward	...	"	11,947	18,684
2s. each	604	Pigs, overland	...	"	3,379	4,447
"	...	" seaward	...	"	3,119	5,934
Free	...	Poultry	...	"	6,966	2,571
"	...	Other	...	"	87	475
		Order 34.—Plants.				
Free	...	Plants	...	...	...	7,185

CLASS VII.—MISCELLANEOUS MATTERS.

		Order 35.—Miscellaneous Articles of Trade, etc.				
25 per cent.	3,513	Brushware and brooms, hair	...	...	...	13,081
30 per cent.†	470	" " "	...	...	...	1,356
35 per cent.‡	1,691	" " "	...	...	...	4,604
25 per cent.	66	" undescrbed	...	...	...	1,645
30 per cent.†	...	" "	...	...	...	101
35 per cent.‡	51	" "	...	...	...	260

* After 17th September, 1889. † After 30th July, 1889. ‡ After 3rd September, 1889.

EXPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (—).	
Quantity.	Value.		Quantity.	Value.
	£			£

CLASS V.—MINERALS AND METALS—continued.

		Order 32.—Metals other than Gold and Silver—continued.				
4	298	Steel cordage	...	tons	+ 794	+ 32,654
500	2,316	Tin, block	...	cwt.	+ 3,580	+ 14,349
3,014	95	„ foil	...	lbs.	+ 70,583	+ 1,509
6	221	„ ore	...	tons	+ 17	+ 225
140	147	„ „ black sand	...	cwt.	— 140	— 147
1,059	1,120	„ plate	...	boxes	+ 35,442	+ 28,964
...	1,873	Tinware	...	...	...	+ 5,098
...	5,422	Wire netting	...	...	...	+ 24,493
...	...	Zinc, ingots	...	cwt.	+ 171	+ 171
...	...	„ perforated	...	...	...	+ 736
235	219	„ sheet	...	cwt.	+ 4,348	+ 4,769

CLASS VI.—LIVE ANIMALS AND PLANTS.

		Order 33.—Animals and Birds.				
...	...	Birds	...	No.	+ 5,249	+ 574
...	...	Deer	...	„	+ 20	+ 400
19	78	Dogs	...	„	+ 27	+ 364
2,825	103,236	Horses, overland	...	„	+ 927	+ 40,372
3,574	66,833	„ seaward	...	„	— 3,121	— 45,074
22,998	100,424	Horned cattle, overland	...	„	+ 53,183	+ 357,890
1,141	12,354	„ seaward	...	„	— 949	— 7,799
...	...	Calves	...	„	+ 776	+ 1,132
560,308	217,523	Sheep, overland	...	„	+ 458,207	+ 204,950
66,579	37,455	„ seaward	...	„	— 54,632	— 18,771
792	1,065	Pigs, overland	...	„	+ 2,587	+ 3,382
3	5	„ seaward	...	„	+ 3,116	+ 5,929
3,026	330	Poultry	...	„	+ 3,940	+ 2,241
301	54	Other	...	„	— 214	+ 421
		Order 34.—Plants.				
...	6,948	Plants	...	...	...	+ 237

CLASS VII.—MISCELLANEOUS MATTERS.

		Order 35.—Miscellaneous Articles of Trade, etc.				
...	4,037	Brushware and brooms, hair	...	...	...	+ 15,004
...	1,360	„ „ undescribed	...	...	...	+ 646

IMPORTS, 1889—continued.

*** For the position of any article, see Index ante.

Duty.		Articles.	Total Imports.	
Rate.	Amount Collected.		Quantity.	Value.
	£			£

CLASS VII.—MISCELLANEOUS MATTERS—continued.

		Order 35—Miscellaneous Articles of Trade, etc.—continued.			
Free	...	Fancy goods	...	...	64,356 }
10 per cent.*	2,315	”	...	...	23,885 }
Free	...	Grindery	...	...	31,400
”	...	Hardware and ironmongery, undescribed	...	...	267,053
”	...	Holloware	...	...	16,187
20 and 10 per cent.	4,679	Oilmen’s stores, unenumerated...	...	...	30,065
Free	...	Ordnance stores	...	...	207,001
”	...	Photographic goods	...	...	9,621
”	...	Printing materials	...	...	32,152
”	...	Telegraphic materials (except wire)	...	...	16,759
”	...	Travellers’ samples	...	...	67,087
Order 36.—Indefinite Articles.					
Free	...	Curiosities	...	...	557
”	...	Exhibits undescribed	...	...	...
”	...	Goods, manufactured...	...	...	75,930 }
10 per cent.	22	”	...	...	224 }
Free	...	Personal effects	...	...	53,430
”	...	Specimens of natural history	...	...	2,407
...	2,890,719 †	Total	...	...	24,402,760

NOTE.—The value of the overland imports included in this table was £4,071,041, consisting chiefly of wool and live stock. The imports of exhibits for the Melbourne Centennial Exhibition, valued at £303,546, are also included.

Imports, exports, and trade.

154. In 1889, the total declared value of the imports having been £24,402,760, and that of the exports £12,734,734, the excess of imports over exports was £11,668,026, and the whole value of external trade was £37,137,494.

Imports and exports last two years.

155. The value of imports was higher in 1889 than in 1888 by £430,626, or by not quite 2 per cent., but the value of exports was lower than in that year by £1,119,029, or by 8 per cent. The value of the total trade was thus lower than in the previous year by £688,403.

Imports and exports latest and former years.

156. The imports in 1889, as indicated by their values, were higher than in any other year of the colony’s history ; the exports, however, according to the same standard, were exceeded in all but five of the previous 34 years.‡

* After 30th July, 1889.

† Inclusive of duty collected and afterwards refunded, amounting to £148,510.

‡ For value of imports and exports in each year, see Statistical Summary of Victoria (first folding sheet) ante.

EXPORTS, 1889—*continued.**** For the position of any article, see Index *ante*.

Total Exports.		Articles.	Excess of— Imports over Exports (+). Exports over Imports (—).	
Quantity.	Value.		Quantity.	Value.
	£			£

CLASS VII.—MISCELLANEOUS MATTERS—*continued.*

		<i>Order 35.—Miscellaneous Articles of Trade, etc.—continued.</i>				
...	14,335	Fancy goods	...	...	...	+ 73,906
...	4,983	Grindery	...	...	...	+ 26,417
...	33,545	Hardware & ironmongery, undescribed	...	...	...	+ 233,508
...	77	Holloware	...	...	...	+ 16,110
...	14,577	Oilmen's stores, unenumerated	...	...	...	+ 15,488
...	2,383	Ordnance stores	...	...	...	+ 204,618
...	1,374	Photographic goods	...	...	...	+ 8,247
...	10,531	Printing materials	...	...	...	+ 21,621
...	5,813	Telegraphic materials (except wire)	...	...	...	+ 10,946
...	64,006	Travellers' samples	...	...	...	+ 3,081
		<i>Order 36.—Indefinite Articles.</i>				
...	1,131	Curiosities	...	...	...	- 574
...	30,225	Exhibits undescribed	...	...	...	- 30,225
...	10,136	Goods, manufactured	...	...	...	+ 66,018
...	29,452	Personal effects	...	...	...	+ 23,978
...	57	Specimens of natural history	...	...	...	+ 2,350
...	12,734,734	Total	...	...	...	+ 11,668,026

NOTE.—The value of the overland exports included in this table was £1,350,950. Exports for drawback, valued at £845,065, are also included.

157. In the year under review, the value per head of imports was lower by 9s. 5d., and the value per head of exports was lower by £1 10s. 3d. than in 1888. The following table shows the value of imports and exports per head in each of the thirty-nine years ended with 1889:—

IMPORTS AND EXPORTS PER HEAD, 1851 TO 1889.

Year.	Value per Head of the Population* of—								
	Imports.			Exports.			Both.		
	£	s.	d.	£	s.	d.	£	s.	d.
1851	12	3	4	16	7	9	28	11	1
1852	30	12	5	56	1	4	86	13	9
1853	81	1	9	56	12	4	137	14	1
1854	66	0	11	44	0	10	110	1	9
1855	35	9	10	39	17	8	75	7	6

* For the estimated mean population used in making these calculations, see table of Breadstuffs available for consumption in Part "Production," *post*.

IMPORTS AND EXPORTS PER HEAD, 1851 TO 1888—
continued.

Year.			Value per Head of the Population * of—								
			Imports.			Exports.			Both.		
			£	s.	d.	£	s.	d.	£	s.	d.
1856	...	...	39	5	6	40	13	3	79	18	9
1857	...	...	40	2	0	35	0	10	75	2	10
1858	...	...	31	4	6	28	18	3	60	2	9
1859	...	...	30	4	1	26	16	3	57	0	4
1860	...	...	28	5	3	22	5	5	50	10	8
1861	...	...	25	1	4	25	12	5	50	13	9
1862	...	...	24	12	2	23	15	7	48	7	9
1863	...	...	25	1	6	24	1	11	49	3	5
1864	...	...	25	10	8	23	13	11	49	4	7
1865	...	...	21	13	9	21	10	3	43	4	0
1866	...	...	23	9	7	20	9	9	43	19	4
1867	..	...	18	2	4	19	15	0	37	17	4
1868	...	..	20	1	9	23	10	4	43	12	1
1869	...	...	20	4	11	19	11	10	39	16	9
1870	...	...	17	9	3	17	9	8	34	18	11
1871	...	...	16	14	11	19	15	1	36	10	0
1872	...	...	18	3	6	18	8	4	36	11	10
1873	...	...	21	12	0	19	19	10	41	11	10
1874	...	...	21	16	0	19	17	2	41	13	2
1875	...	...	21	3	11	18	15	1	39	19	0
1876	...	...	19	14	4	17	16	6	37	10	10
1877	...	...	20	4	9	18	14	11	38	19	8
1878	...	...	19	13	6	18	3	5	37	16	11
1879	...	...	18	0	7	14	18	8	32	19	3
1880	...	...	17	2	5	18	15	3	35	17	8
1881	...	...	19	4	10	18	14	1	37	18	11
1882	...	...	21	1	2	18	3	9	39	4	11
1883	...	...	19	9	7	18	0	0	37	9	7
1884	...	...	20	11	3	17	3	9	37	15	0
1885	...	...	18	16	6	16	4	6	35	1	0
1886	...	...	18	15	5	11	19	0	30	14	5
1887	...	...	18	13	1	11	2	8	29	15	9
1888	...	...	22	11	5	13	0	11	35	12	4
1889	...	...	22	2	0	11	10	8	33	12	8

† For the estimated mean population used in making these calculations, see table of Breadstuffs available for consumption in Part "Production," *post*.

Imports and exports per head.

158. It will be observed that in 1889 the value of imports per head, although slightly lower than in 1888, was with that exception the highest in the last 23 years, but except 1865, was lower than in any year prior to that period since 1851; also that the value of exports per head in 1889 was higher than in 1887, but no other year since the separation of Victoria from New South Wales.

Imports and exports of Australasian colonies.

159. The total value and value per head of imports and exports are given in the following table for the different Australasian colonies; the returns being for each of the eleven years ended with 1888:—

IMPORTS AND EXPORTS OF AUSTRALASIAN COLONIES.

Colony.	Year.	Imports.		Exports.	
		Total Value.	Value per Head.	Total Value.	Value per Head.
		£	£ s. d.	£	£ s. d.
Victoria ...	1878	16,161,880	19 13 6	14,925,707	18 3 5
	1879	15,035,538	18 0 7	12,454,170	14 18 8
	1880	14,556,894	17 2 4	15,954,559	18 15 3
	1881	16,718,521	19 4 10	16,252,103	18 14 1
	1882	18,748,081	21 1 2	16,193,579	18 3 9
	1883	17,743,846	19 9 7	16,398,863	18 0 0
	1884	19,201,633	20 11 3	16,050,465	17 3 9
	1885	18,044,604	18 16 6	15,551,758	16 4 6
	1886	18,530,575	18 15 5	11,795,321	11 19 0
	1887	19,022,151	18 13 1	11,351,145	11 2 8
	1888	23,972,134	22 11 5	13,853,763	13 0 11
Mean of 11 years	...	17,975,987	19 9 1	14,616,494	16 0 7
New South Wales...	1878	14,768,873	22 9 0	12,965,879	19 14 3
	1879	14,198,847	20 11 2	13,086,819	18 18 11
	1880	13,950,075	19 4 6	15,525,138	21 7 11
	1881	17,409,326	22 18 0	16,049,503	21 2 3
	1882	21,281,130	26 15 5	16,716,961	21 0 8
	1883	20,960,157	25 2 6	19,886,018	23 16 9
	1884	22,826,985	25 18 4	18,251,506	20 14 5
	1885	23,365,196	25 2 0	16,541,745	17 15 4
	1886	20,973,548	21 8 1	15,556,213	15 17 6
	1887	18,806,236	18 7 10	18,496,917	18 1 10
	1888	20,885,557	19 12 6	20,859,715	19 12 0
Mean of 11 years	...	19,038,721	22 9 11	16,721,492	19 16 6
Queensland ...	1878	3,436,077	16 12 4	3,190,419	15 8 7
	1879	3,080,889	14 7 8	3,434,034	16 0 8
	1880	3,087,296	13 18 2	3,448,160	15 10 8
	1881	4,063,625	18 7 9	3,540,366	16 0 4
	1882	6,318,463	26 11 10	3,534,452	14 17 6
	1883	6,233,351	23 5 5	5,276,608	19 14 0
	1884	6,381,976	21 12 11	4,673,864	15 17 1
	1885	6,422,490	20 16 0	5,243,404	16 19 7
	1886	6,103,227	18 7 1	4,933,970	14 16 9
	1887	5,821,611	16 8 2	6,453,945	18 3 10
	1888	6,646,738	17 12 5	6,126,362	16 4 10
Mean of 11 years	...	5,235,977	18 18 2	4,532,326	16 6 9
South Australia* ...	1878	5,719,611	23 11 1	5,355,021	22 1 0
	1879	5,014,150	19 14 7	4,762,727	18 14 10
	1880	5,581,497	21 3 7	5,574,505	21 3 1
	1881	5,244,064	18 3 5	4,407,757	15 5 6
	1882	6,707,788	23 2 9	5,359,890	18 9 9
	1883	6,310,055	21 2 1	4,883,461	16 6 8
	1884	5,749,353	18 12 7	6,623,704	21 9 2

* Exclusive of the Northern Territory ; also of the overland traffic.

IMPORTS AND EXPORTS OF AUSTRALASIAN COLONIES—*continued.*

Colony.	Year.	Imports.			Exports.				
		Total Value.	Value per Head.			Total Value.	Value per Head.		
		£	£	s.	d.	£	£	s.	d.
South Australia* <i>continued</i>	1885	5,548,403	17	14	5	5,636,255	18	0	0
	1886	4,852,750	15	10	0	4,489,008	14	6	9
	1887	5,096,293	16	5	3	5,330,780	17	0	3
	1888	5,413,638	17	0	7	6,984,098	21	19	5
Mean of 11 years	...	5,567,055	19	5	6	5,400,655	18	12	5
Western Australia..	1878	379,050	13	10	9	428,491	15	6	0
	1879	407,299	14	6	8	494,884	17	8	3
	1880	353,669	12	5	3	499,183	17	6	1
	1881	404,831	13	12	9	502,770	16	18	9
	1882	508,755	16	14	9	583,056	19	3	8
	1883	516,847	16	11	0	447,010	14	6	3
	1884	521,167	16	2	5	405,693	12	11	0
	1885	650,391	19	1	9	446,692	13	2	2
	1886	758,013	20	7	9	630,393	16	19	1
	1887	666,344	15	19	7	604,655	14	10	0
	1888	786,250	18	11	8	680,346	16	1	7
Mean of 11 years	...	541,147	16	2	2	520,288	15	15	8
Tasmania ...	1878	1,324,812	12	4	2	1,315,695	12	2	5
	1879	1,267,475	11	7	11	1,301,097	11	14	0
	1880	1,369,223	12	1	0	1,511,931	13	6	2
	1881	1,431,144	12	4	0	1,555,576	13	5	2
	1882	1,670,872	13	16	10	1,587,389	13	3	0
	1883	1,832,637	14	14	9	1,731,599	13	18	6
	1884	1,656,118	12	18	0	1,475,857	11	9	11
	1885	1,757,486	13	5	11	1,313,693	9	18	10
	1886	1,756,567	12	19	3	1,331,540	9	16	6
	1887	1,596,817	11	8	4	1,449,371	10	7	3
	1888	1,610,664	11	3	3	1,333,865	9	4	10
Mean of 11 years	...	1,570,347	12	11	3	1,446,147	11	13	4
New Zealand ...	1878	8,755,663	20	15	3	6,015,525	14	5	4
	1879	8,374,585	18	13	9	5,743,126	12	16	4
	1880	6,162,011	12	19	10	6,352,692	13	7	10
	1881	7,457,045	15	2	3	6,060,876	12	5	7
	1882	8,609,270	16	18	1	6,658,008	13	1	5
	1883	7,974,038	15	1	4	7,095,999	13	8	2
	1884	7,663,888	13	19	0	7,091,667	12	18	4
	1885	7,479,921	13	4	3	6,819,939	12	0	11
	1886	6,759,013	11	12	3	6,672,791	11	9	3
	1887	6,245,515	10	9	5	6,866,169	11	10	3
	1888	5,941,900	9	16	4	7,767,325	12	16	7
Mean of 11 years	...	7,402,077	14	8	4	6,649,465	12	14	7

NOTE.—For the imports and exports of the different colonies during 1889, see General Summary of Australasian Statistics (third folding sheet) *ante* ; also Appendix A. *post*.

* Exclusive of the Northern Territory ; also of the overland traffic.

160. In 1888, as in the previous year, the imports were above the average in all the colonies except South Australia and New Zealand, and the exports were above the average in all except Victoria and Tasmania. The imports in Victoria, Queensland, and Western Australia, and the exports in New South Wales, South Australia, Western Australia, and New Zealand were of greater value in the last than in any of the previous years named. In only one colony—New Zealand—did the imports, and in only two—Queensland and Tasmania—did the exports, show a falling off as compared with the previous year.

Gross im-
ports and
exports of
colonies.

161. Per head of the population, the imports in 1888 were below the average in all the colonies except Victoria and Western Australia; and the exports were only slightly below the average in Queensland and New South Wales, but considerably below it in Victoria and Tasmania. In all the colonies, except Victoria in the case of imports, both imports and exports per head were higher in some of the other years named than in 1888. But in all except Tasmania and New Zealand, the imports per head in 1888 exceeded those in 1887; and the exports per head were also higher in 1888 than in 1887 in all the colonies except Queensland and Tasmania.

Imports and
exports of
colonies per
head.

162. In 1881, and the five years ended with 1886, the total value of imports, and in 1879, and the seven years ended with 1888, the total value of exports was higher in New South Wales than in Victoria, but in all the other years the values were higher in Victoria than in New South Wales or any other Australasian colony. The following is the order of the colonies in regard to the total value of imports and exports in 1888 and in the eleven years 1878 to 1888:—

Order of
colonies in
respect to
imports and
exports.

ORDER OF COLONIES IN REFERENCE TO TOTAL VALUE OF IMPORTS AND EXPORTS.

Order in 1888.	Order in a Series of Years.
1. New South Wales.	1. New South Wales.
2. Victoria.	2. Victoria.
3. New Zealand.	3. New Zealand.
4. Queensland.	4. South Australia.
5. South Australia.	5. Queensland.
6. Tasmania.	6. Tasmania.
7. Western Australia.	7. Western Australia.

163. In regard to the comparison of the trade of New South Wales with that of Victoria, it should be remembered that the Victorian returns of imports and exports are each year largely swelled

New South
Wales wool
passing
through
Victoria.

by the value of wool brought to Melbourne from the neighbouring colonies for convenience of shipment.

164. The value of imports per head in 1888 was greatest in Victoria, but that of exports per head was greatest in South Australia, Victoria being as low as fifth in regard to exports. Over a series of years Victoria stood second in the case of imports and fourth in the case of exports per head; whilst in both cases New South Wales was at the head of the list. Tasmania usually stands at the bottom of the list as regards both imports and exports per head, but in the three years ended with 1888 New Zealand was below it in regard to imports per head. The following lists show the order of the colonies in regard both to the imports and the exports per head during the year 1888, and in the whole period of eleven years:—

ORDER OF COLONIES IN REFERENCE TO VALUE OF IMPORTS
PER HEAD.

Order in 1888.	Order in a Series of Years.
1. Victoria.	1. New South Wales.
2. New South Wales.	2. Victoria.
3. Western Australia.	3. South Australia.
4. Queensland.	4. Queensland.
5. South Australia.	5. Western Australia.
6. Tasmania.	6. New Zealand.
7. New Zealand.	7. Tasmania.

ORDER OF COLONIES IN REFERENCE TO VALUE OF EXPORTS
PER HEAD.

Order in 1888.	Order in a Series of Years.
1. South Australia.	1. New South Wales.
2. New South Wales.	2. South Australia
3. Queensland.	3. Queensland.
4. Western Australia.	4. Victoria.
5. Victoria.	5. Western Australia.
6. New Zealand.	6. New Zealand.
7. Tasmania.	7. Tasmania.

165. The imports and exports of the colonies on the Australian continent, taken as a whole, also the imports and exports of those colonies with the addition of Tasmania and New Zealand, will be found in the following table for each of the eleven years ended with 1888:—

IMPORTS AND EXPORTS OF AUSTRALIA AND AUSTRALASIA, 1878 TO 1888.
(Inclusive of the Intercolonial Trade.)

	Year.	Imports.			Exports.				
		Total Value.	Value per Head.			Total Value.	Value per Head.		
			£	£	s.		d.	£	£	s.	d.
Continent of Australia... ..	1878	40,465,491	20	13	7	36,865,517	18	16	9
	1879	37,736,723	18	13	4	34,232,634	16	18	8
	1880	37,529,431	17	19	9	41,001,545	19	12	4
	1881	43,840,367	20	4	4	40,752,499	18	16	0
	1882	53,564,217	23	17	8	42,387,938	18	17	11
	1883	51,764,256	22	0	11	46,891,960	20	0	2
	1884	54,681,114	22	6	3	46,005,232	18	15	6
	1885	54,031,084	21	4	6	43,419,854	17	1	2
	1886	51,218,113	19	6	7	37,404,905	14	2	4
	1887	49,412,635	17	19	1	42,237,442	15	7	0
	1888	57,704,317	20	3	0	48,504,284	16	18	9
Mean of 11 years	...	48,358,886	20	8	1	41,791,255	17	15	2
Continent of Australia, with Tasmania and New Zealand ...	1878	50,545,966	20	6	6	44,196,737	17	15	5
	1879	47,378,783	18	7	2	41,276,857	15	19	11
	1880	45,060,665	16	16	6	48,866,168	18	4	10
	1881	52,728,556	18	19	5	48,368,941	17	8	0
	1882	63,844,359	22	4	6	50,633,335	17	12	6
	1883	61,570,931	20	10	11	55,719,558	18	18	6
	1884	64,001,120	20	9	3	54,572,756	17	8	11
	1885	63,268,491	19	10	1	51,553,486	15	17	10
	1886	59,733,693	17	14	9	45,409,236	13	9	8
	1887	57,254,967	16	8	3	50,552,982	14	9	10
	1888	65,256,881	18	1	2	57,605,474	15	18	10
Mean of 11 years	...	57,331,310	19	0	9	49,886,866	16	13	1

166. In regard to the Australian continent, also in regard to that continent combined with Tasmania and New Zealand, it will be observed that whilst the imports were exceptionally low in 1887, and the exports in both 1886 and 1887, both imports and exports were considerably higher in 1888 than in any of the previous years named in the table; also that, in continental Australia, the imports per head were less by 5s. 1d., and the exports per head were less by 16s. 5d. than the average of eleven years, and, in continental and insular Australia combined, the imports per head were less by 19s. 7d., and the exports per head were less by 14s. 3d. than the average of eleven years.

Australian and Australasian trade in 1888.

167. It must be borne in mind that in the last table the total imports and exports of each colony are dealt with; therefore the trade the colonies carry on with each other is included, as well as that with places outside the Australasian group. Hence the same merchandise may form part of the imports and exports of several colonies. The

Intercolonial trade

following table shows the extent of the intercolonial trade of each of the colonies during 1887 and 1888 :—

INTERCOLONIAL TRADE OF AUSTRALASIAN COLONIES, 1887 AND 1888.*

Colony.	Imports.		Exports.	
	1887.	1888.	1887.	1888.
	£	£	£	£
Victoria ...	7,389,676	8,561,938	4,519,376	4,318,631
New South Wales ...	8,651,954	8,741,847	8,968,491	9,554,200
Queensland ...	2,938,151	3,072,371	4,349,998	4,069,793
South Australia ...	2,657,229	2,434,619	1,973,992	2,572,394
Western Australia ...	382,363	413,998	166,041	176,521
Total ...	22,019,373	23,224,773	19,977,898	20,691,539
Tasmania ...	1,110,899	1,081,684	1,098,902	1,111,753
New Zealand ...	1,030,094	1,218,593	1,457,782	1,563,130
Grand Total ...	24,160,366	25,525,050	22,534,582	23,366,422

168. From the figures in the last two tables it is ascertained that the intercolonial import trade of the colonies on the Australian continent amounted in 1887 to 45 per cent., and in 1888 to 48 per cent. of the whole import trade, and their intercolonial export trade amounted in the same years respectively to 47 and 50 per cent. of the whole export trade ; but if the continental colonies be combined with Tasmania and New Zealand, these proportions would be respectively 43 and 45 per cent. for 1887, and 45 and 47 per cent. for 1888.

169. In 1888, as compared with the previous year, the intercolonial import trade showed an increase of nearly £1,365,000, and the intercolonial export trade an increase of nearly £832,000. The increase in the intercolonial import trade occurred chiefly in Victoria, but there was some increase in all the colonies except South Australia and Tasmania ; whilst the increase in the intercolonial export trade was chiefly in New South Wales, South Australia, and New Zealand, there having been only slight increases in Western Australia and Tasmania, and a considerable falling off in Victoria and Queensland.

170. With reference to the returns of imports, it may be remarked that there is strong reason to believe the values are considerably overstated in some, if not all, the colonies. This probably arises from the fact that the price set down in the merchant's invoice is that upon which the Customs valuation is based, whereas the invoice price, on the basis of which sales are effected in the colony, is often purposely

* For later information, see Appendix A. *post*.

entered much above the actual value. It is believed that the exports are also over-valued, especially so far as the article wool is concerned, but that the total is not affected to the same extent as that of the imports. It may be remarked that, from the indefinite manner in which many articles are returned in the various colonies, *e.g.*, cotton, linen, silk, or woollen “manufactures”; “haberdashery and millinery”; “drapery,” etc.; also from the fact of the number of packages being often given instead of the number, weight, or measurement of the articles, considerable difficulties lie in the way of arriving at accurate conclusions.*

171. The following table shows the imports and exports during 1888 of the United Kingdom and its various dependencies throughout the world. The figures have been taken from recent official documents and the calculations have been made in the office of the Government Statist, Melbourne:—

External
trade of
British
dominion:

IMPORTS AND EXPORTS OF BRITISH DOMINIONS, 1888.

(Including bullion and specie, except where daggers (†) are marked).

Country or Colony.	Imports.			Exports.		
	Total Value.	Value per Head.		Total Value.	Value per Head.	
	£	£	s. d.	£	£	s. d.
EUROPE.						
United Kingdom† ...	387,635,743	10	7 1	297,885,236	7	19 1
Gibraltar ...	763,408	41	6 11	149,119	8	1 6
Malta† ...	930,511	5	14 7	192,030	1	3 8
Heligoland‡ ...	30,805	14	0 1	5,400	2	9 1
ASIA.						
India§ ...	79,830,468	0	7 7	92,148,279	0	8 9
Ceylon ...	4,145,519	1	7 8	2,789,638	0	18 7
Straits Settlements|| ...	22,028,848	39	18 2	18,506,939	33	10 6
Protected Malay States ...	2,055,860	4	11 4	1,189,277	2	12 10
Labuan ...	74,574	12	8 7	87,405	14	11 4
British North Borneo ...	178,782	0	16 3	74,498	0	6 9
Hong Kong ...	1,296,690	6	0 2	3,003,379	13	18 0
Sarawak ...	184,206	0	12 3	213,635	0	14 3
Cyprus ...	232,807	1	3 3	210,297	1	1 0
AFRICA.						
Mauritius ...	2,660,695	6	18 1	3,305,908	8	11 7
Natal ...	2,890,468	6	0 1	1,417,871	2	18 9
Cape of Good Hope ...	7,013,855	4	18 2	8,964,449	6	5 6
St. Helena ...	37,606	7	7 6	4,161	0	16 4
Lagos ...	442,063	4	8 5	508,238	5	1 8
Gold Coast ...	432,112	0	5 9	381,619	0	5 1
Sierra Leone ...	250,147	3	6 8	339,043	4	10 5
Gambia ...	103,067	6	8 10	118,188	7	7 9

* See *Victorian Year-Book*, 1885-6, paragraph 760.

† The figures for the United Kingdom are exclusive of bullion and specie. In other cases where daggers (†) occur the imports and exports of bullion and specie were not specified in the returns. In 1888 the United Kingdom imported bullion and specie to the value of £22,001,528, and exported it to the value of £22,559,571.

‡ Exclusive of Frontier trade.

§ Ceded to Germany in 1890.

|| Exclusive of the trade between the Settlements.

IMPORTS AND EXPORTS OF BRITISH DOMINIONS.—*continued.*
(Including bullion and specie, except where daggers (†) are marked).

Country or Colony.	Imports.			Exports.		
	Total Value.	Value per Head.		Total Value.	Value per Head.	
AMERICA.	£	£	s. d.	£	£	s. d.
Canada ...	22,786,568	4	11 8	18,534,863	3	14 5
Newfoundland ...	1,562,769	7	16 3	1,372,103	6	17 3
Bermuda† ...	299,990	19	6 3	99,650	6	8 4
Honduras... ..	206,450	6	17 8	213,020	7	2 0
British Guiana ...	1,586,056	5	13 11	2,024,733	7	5 5
West Indies—						
Bahamas ...	190,405	3	17 7	121,530	2	9 6
Turk's Island ...	28,268	5	8 9	26,027	5	0 1
Jamaica ...	1,695,605	2	14 11	1,828,590	2	19 3
St. Lucia ...	140,858	3	6 3	122,229	2	17 6
St. Vincent † ...	79,777	1	14 0	81,836	1	14 11
Barbados† ...	1,058,491	5	17 0	1,074,584	5	18 9
Grenada † ...	162,437	3	5 10	229,263	4	12 11
Tobago † ...	28,847	1	7 11	38,900	1	17 7
Virgin Islands † ...	2,969	0	11 11	3,472	0	13 11
St. Christopher † ...	173,916	3	18 10	237,099	5	7 6
Nevis † ...						
Antigua † ...	157,792	4	10 2	198,961	5	13 6
Montserrat ...	21,359	1	18 10	27,875	2	10 8
Dominica † ...	49,161	1	13 11	42,221	1	9 1
Trinidad ...	1,943,789	10	5 1	2,132,761	11	5 0
AUSTRALASIA AND SOUTH SEAS.						
Australia, Tasmania, and New Zealand *	65,256,881	18	1 2	57,605,472	15	18 10
Fiji† ...						
Falkland Islands† ...						
Total ...	610,887,852	2	5 6	517,975,521	1	18 7

* Including intercolonial trade. For imports and exports of the different Australasian Colonies see tables following paragraphs 159 and 167 *ante*
† See footnote (†) on page 125.

172. On comparing the totals in this table with the corresponding ones for the previous year, an increase is observed in the total value of the imports of Great Britain and her dependencies to the extent of over thirty-eight millions sterling, or over 6½ per cent., and an increase in the value of the exports of nearly fifteen and a half millions sterling, or over 3 per cent. The increase in the import trade was made up of an increase of over twenty-five millions—or about 7 per cent.—in that of the United Kingdom, and an increase of thirteen millions—or over 6 per cent.—in that of other British possessions; whilst the increase in the export trade was seventeen millions—or 5½ per cent.—in the trade of the United Kingdom,

External trade of British possessions 1876-88.

and of over eight millions—or 4 per cent.—in that of her various possessions. From a comparison of the figures in the following table, it appears that, although the total trade of the British Dominions has fallen off considerably since 1882 and 1883, in 1888 it revived considerably, and was higher than in any of the previous twelve years, except 1882 and 1883, as will be seen by the following table:—

IMPORTS AND EXPORTS OF THE UNITED KINGDOM AND OTHER BRITISH POSSESSIONS, 1876 TO 1888 (000's OMITTED).

Year.	Value of Imports from all places to—			Value of Exports to all places from—		
	The United Kingdom.*	Other British Possessions.	Total.	The United Kingdom.*	Other British Possessions.	Total.
	£	£	£	£	£	£
1876	375,155,	158,507,	533,662,	256,777,	166,074,	422,851,
1877	394,420,	164,360,	558,780,	252,346,	171,645,	423,991,
1878	368,770,	185,009,	553,779,	245,484,	179,760,	425,244,
1879	362,992,	172,866,	535,858,	248,783,	177,984,	426,767,
1880	411,229,	172,636,	583,865,	286,414,	188,191,	474,605,
1881	307,022,	201,669,	508,691,	297,083,	199,889,	496,972,
1882	413,020,	223,580,	636,600,	306,661,	222,148,	528,809,
1883	426,892,	225,466,	652,358,	305,437,	228,096,	533,533,
1884	390,019,	216,257,	606,276,	295,968,	217,901,	513,869,
1885	370,968,	215,886,	586,854,	271,404,	211,767,	483,171,
1886	349,863,	206,732,	556,595,	268,667,	198,336,	467,003,
1887	362,227,	210,320,	572,547,	280,763,	211,836,	492,599,
1888	387,636,	223,252,	610,888,	297,885,	220,091,	517,976,

173. The total value of the external trade of Victoria is greater than that of any other British possession except British India, Canada, New South Wales, Straits Settlements, and the United Kingdom itself.

Victorian trade compared with other British possessions.

174. The total value of the external trade of the Australasian colonies, taken as a whole, is less than that of the United Kingdom and of India, but nearly three times as large as that of Canada, and also much larger than that of any other possession.

Australasian trade compared with other British possessions.

175. The total value and value per head of the general imports and general exports of the principal Foreign countries during 1888 is given in the following table, which has been compiled in the office of the Government Statist, Melbourne, chiefly from official documents:—

External trade of foreign countries.

* Exclusive of bullion and specie.

GENERAL IMPORTS AND EXPORTS OF FOREIGN COUNTRIES, 1888.
(Including bullion and specie.)

Countries.	Imports.		Exports.	
	Total Value (000's omitted).	Value per Head.	Total Value (000's omitted).	Value per Head.
EUROPE.	£	£ s. d.	£	£ s. d.
Austria-Hungary ...	46,684,*	1 2 11	61,750,†	1 10 4
Belgium... ..	125,667,	20 16 10	113,736,	18 17 3
Denmark	15,464,	7 7 6	10,846,	5 3 5
France	219,849,	5 15 0	185,726,	4 16 8
German Empire ...	253,685,	5 8 3	243,010,	5 3 9
Greece	4,976,	2 10 3	4,126,	2 1 8
Holland	106,008,*	23 10 6	92,900,†	20 12 4
Italy	51,790,	1 13 7	40,821,	1 6 9
Portugal... ..	12,213,	2 16 9	7,555,	1 14 1
Roumania	12,415,	2 6 3	10,272,	1 18 3
Russia	43,667,*	0 10 8‡	85,569,†	1 1 0‡
Spain	28,643,	1 12 9	30,524,	1 14 10
Sweden and Norway	26,861,	4 0 1	22,471,	3 7 0
Turkey§	18,633,||	0 17 0	11,437,||	0 10 5
ASIA.				
China §	29,791, ¶	0 1 7	22,185, ¶	0 1 2
Japan	11,128,	0 5 8	11,031,	0 5 8
Persia**... ..	1,000,	0 2 8	500,	0 1 4
AFRICA.				
Egypt	10,184,*	1 9 11	13,605,†	2 0 0
Morocco	1,515,	0 5 1	1,129,	0 3 9
AMERICA.				
Argentine Confederation	25,682,*	6 14 11	20,022,†	5 5 2
Brazil	29,362,	2 1 11	23,917,	1 14 2
Chile	13,672,	4 7 9	15,639,	5 0 5
Mexico	9,276,	0 16 2	12,533,	1 1 10
United States ...	163,186,	2 18 9	154,661,	2 15 8
Uruguay	6,141,*	10 0 0	5,835,†	9 10 1
Total	1,267,492,	1 10 2	1,201,800,	1 8 8

NOTE.—In the cases of the Argentine Confederation, Chile, and Uruguay, the official values are given, which are said to be 25 per cent. below the real values.

Trade in
Australasia
and other
countries
compared.

176. By comparing the figures in this with those in a previous table†† it will be at once seen that the imports and exports of the United Kingdom, even exclusive of bullion and specie, represent a much

* Imports for home consumption only. † Export of home produce only.
‡ These calculations are based upon the population of Russia in Europe, exclusive of Finland.
§ Exclusive of bullion and specie.
|| Figures for 1887.
¶ Inclusive of that portion of the trade with Hong Kong carried on in native vessels—previously excluded.
** The figures for Persia are only estimates. †† See table following paragraph 171 ante.

higher value than those of any other country in the world, and that those of Germany and France come next, in this respect; then follow in succession, according to their total trade, the United States, Belgium, Holland, India, and Russia, which are the only other countries possessing a larger external trade than the Australasian colonies taken collectively, where such trade, including that between the colonies, is larger by 30 millions than in Italy, and by 14 millions than in Austria-Hungary. The external commerce of Victoria* is much larger than that of Denmark, Greece, Portugal, Roumania, or Turkey, but is not so extensive as that of Spain or Sweden and Norway; it is also somewhat less than that of the Argentine Confederation, Brazil, or China, but it is larger than that of the other extra-European countries shown in the table.

177. The external trade of the United Kingdom,† as expressed by the value of imports and exports per head of the population, is larger than that of any Foreign country named except Holland, Belgium, and Uruguay. The external trade of every one of the Australasian colonies,* as similarly expressed, is much larger than that of the United Kingdom; whilst that of Victoria, Queensland, and South Australia, is usually nearly as large as that of Belgium, and that of New South Wales is nearly as large as that of Holland.

178. The value of the imports into Victoria of articles entered as being the produce or manufacture of the United Kingdom, of other British dominions, and of Foreign states, and the value of the exports from Victoria of articles entered as the produce or manufacture of the same countries and of the colony itself, also the percentage of such values to the total values of imports and exports in 1889, will be found in the following table:—

IMPORTS AND EXPORTS THE PRODUCE OF DIFFERENT COUNTRIES, 1889.

Articles the Produce or Manufacture of—	Imports.		Exports.	
	Value.	Percentage.	Value.	Percentage.
	£		£	
Victoria ... ..	...	...	9,776,670	76·77
The United Kingdom ...	11,186,806	45·84	1,085,998	8·53
Other British possessions ...	9,324,971	38·21	1,262,149	9·91
Foreign States	3,890,983	15·95	609,917	4·79
Total	24,402,760	100·00	12,734,734	100·00

* See table following paragraph 159 *ante*.

† See table following paragraph 171 *ante*.

Exports of
Victorian
produce.

179. The following table gives the total value and value per head of articles of Victorian produce exported, and their proportion to the total exports, in each of the last twenty-three years :—

EXPORTS OF VICTORIAN PRODUCE, 1867 TO 1889.

Year.			Exports of Articles Produced or Manufactured in Victoria.		
			Total Value.	Value per Head of the Population.	Percentage of Total Exports.
			£	£ s. d.	
1867	...	...	9,972,333	15 9 7	78·37
1868	...	...	11,697,893	17 12 10	75·02
1869	...	...	9,539,816	13 17 8	70·85
1870	...	...	9,103,323	12 15 3	73·00
1871	...	...	11,151,622	15 2 7	76·60
1872	...	...	10,758,658	14 5 8	77·56
1873	...	...	11,876,707	15 10 4	77·61
1874	...	...	11,352,515	14 12 0	73·52
1875	...	...	10,571,806	13 8 6	71·59
1876	...	...	10,155,916	12 15 0	71·54
1877	...	...	11,269,086	13 18 9	74·35
1878	...	...	10,676,499	12 19 11	71·53
1879	...	...	8,069,857	9 13 6	64·80
1880	...	...	11,220,467	13 3 11	70·33
1881	...	...	12,480,567	14 7 3	76·79
1882	...	...	12,570,788	14 2 5	77·63
1883	...	...	13,292,294	14 11 9	81·06
1884	...	...	13,155,484	14 1 9	81·96
1885	...	...	12,452,245	12 19 10	80·06
1886	...	...	9,054,687	9 3 5	76·77
1887	...	...	8,502,979	8 6 9	74·91
1888	...	...	10,356,633	9 15 0	74·76
1889	...	...	9,776,670	8 17 1	76·77

Decrease of
exports of
Victorian
products.

180. It should be pointed out that the returns of articles set down as produced or manufactured in Victoria are not always reliable, there being no other evidence as to the origin of such articles than the statements of the shippers, which, it is known, are sometimes made very loosely. It will be seen that the total value of exports of local productions shows a considerable falling off during the last four years as compared with previous ones. The worst year was 1887, when such value was lower than in any of the previous twenty years, except 1879, and the value of such exports per head was absolutely the lowest in the whole period; but since then the local export trade has somewhat revived, although it is still considerably below the standard of the earlier years. The proportion of exports of home products to the total exports was higher in 1889 than in the great majority of previous years.

181. The following are the values of goods entered as the produce or manufacture of Victoria during each of the years forming the septennial period ended with 1889, the names of all the most important articles being given:—

Exports of
Victorian
products,
1883 to
1889.

EXPORTS OF ARTICLES ENTERED AS THE PRODUCE OR MANUFACTURE
OF VICTORIA, 1883 TO 1889.*
(See Index following paragraph 153 *ante*.)

Order.	Articles.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
		£	£	£	£	£	£	£
1	Stationery ...	23,387	22,113	17,949	14,395	13,231	15,420	16,097
9	Agricultural im- plements	14,119	10,347	11,017	11,732	15,613	22,076	19,915
„	Machinery ...	138,407	98,468	73,227	48,034	90,403	56,562	62,167
10	Saddlery and harness	22,417	14,260	13,105	9,866	7,147	10,018	6,882
13	Furniture and upholstery	46,832	43,734	39,143	24,109	20,286	22,558	17,614
14	Manure ...	27,869	21,987	19,780	24,579	25,431	24,033	23,910
„	Drugs and chemicals	15,400	12,398	17,144	13,164	10,647	7,522	4,711
15	Woollens and woollen piece goods	12,546	10,633	4,189	2,751	1,820	9,439	2,609
19	Apparel & slops	245,998	257,269	242,617	155,358	117,858	121,801	98,367
„	Boots and shoes	39,958	36,916	25,482	20,926	23,137	20,937	16,254
20	Cordage... ..	27,613	29,312	20,695	9,195	5,398	4,012	4,683
21	Butter & cheese	117,835	145,484	103,365	90,221	43,123	68,862	45,274
„	Hams, bacon, and lard	15,422	17,232	13,061	10,343	8,817	7,756	5,455
„	Beef and pork, salted	26,901	33,072	18,905	9,951	4,077	4,931	3,550
„	Preserved meats	76,015	116,903	99,861	88,187	41,561	16,115	16,156
22	Confectionery ...	15,712	13,062	11,290	6,703	3,798	2,883	2,751
„	Biscuit	27,663	40,370	45,015	37,689	26,870	20,962	20,653
„	Flour	250,674	277,556	303,305	313,709	408,434	380,387	270,499
„	Grain & pulse—							
„	Wheat	353,309	1,426,905	407,668	165,391	410,524	502,275	70,147
„	Other†	17,275	23,316	8,307	10,387	13,317	8,535	5,581
„	Fruit	18,573	38,021	23,662	21,967	10,105	18,719	15,147
„	Jams and pre- serves	23,276	28,515	15,932	14,678	6,563	6,497	4,638
„	Oatmeal... ..	22,512	28,540	29,550	25,222	17,978	27,159	28,467
„	Onions	31,599	38,710	31,868	34,696	33,482	40,678	35,308
„	Potatoes	110,885	148,929	103,644	120,532	37,861	94,301	57,612
„	Sugar, refined, and molasses	216,501	106,483	52,048	32,462	41,130	50,617	38,647
„	Vegetables ...	30,706	99,031	17,480	4,436	12,423	4,911	3,292
23	Wine	11,493	13,450	15,362	27,094	29,345	33,273	33,240
24	Bones	1,287	1,951	1,211	500	541	559	539
„	Bone-dust	8,900	11,380	14,458	9,674	5,270	11,328	11,057
„	Candles	341	3,655	7,163	5,561	1,629	551	298
„	Glue pieces ...	667	1,055	1,400	1,783	1,780	1,657	988
„	Hides	4,118	8,696	10,284	9,581	15,250	17,136	25,000
„	Horns and hoofs	1,673	1,174	678	1,005	633	1,691	2,691
„	Leather	359,870	338,029	342,252	254,597	207,606	181,886	190,322
„	Skins—sheep, etc.	117,538	139,942	92,149	98,763	104,543	185,272	206,931

* Including all articles partly or wholly made up of imported materials.

† Not including malt.

EXPORTS OF ARTICLES ENTERED AS THE PRODUCE OR MANUFACTURE OF VICTORIA, 1883 TO 1889*—continued.

(See Index following paragraph 158 ante.)

Order.	Articles.	1883.	1884.	1885.	1886.	1887.	1888.	1889.
		£	£	£	£	£	£	
24	Soap	12,709	15,559	18,189	13,354	10,485	10,375	9,856
„	Stearine... ..	13,486	6,247	...	5	96	553	85
„	Tallow	232,400	256,686	155,918	121,900	85,640	157,601	149,429
„	Wool†	5,213,198	5,707,668	4,428,231	4,306,352	4,508,105	3,755,265	5,193,858
25	Bark and timber	50,239	33,472	32,782	37,481	23,470	51,813	53,610
„	Bran and pollard	11,487	16,102	9,598	23,010	4,323	9,727	2,101
„	Hay and chaff...	125,919	194,393	84,825	174,139	63,660	134,971	129,390
„	Seeds	2,083	13,722	9,699	6,227	4,412	3,713	4,855
26	Oil—neatsfoot and ex tallow	8,209	9,016	7,634	7,478	3,625	2,207	1,816
31	Gold—bullion ...	1,569,819	760,875	353,362	336,874	243,425	166,877	296,375
„	„ specie	2,251,278	1,249,420	3,956,173	1,610,829	1,011,121	3,523,642	1,983,913
32	Minerals, metals, etc., exclusive of gold	75,846	31,858	25,716	32,393	14,733	12,731	14,619
33	Horned cattle ...	193,188	235,019	101,935	57,604	71,833	56,662	83,971
„	Horses	268,911	171,732	170,926	133,691	148,018	116,732	99,848
„	Sheep	327,598	307,609	426,149	101,232	191,246	94,571	119,742
34	Plants	8,736	7,561	7,343	5,664	5,920	6,447	6,948
35	Hardware and manufactures of metals	28,057	24,911	19,405	20,834	16,440	15,800	15,528
„	Oilmen's stores	13,133	15,421	14,400	11,898	13,622	11,211	9,284
...	All other articles	410,707	439,315	375,694	324,481	265,174	222,416	233,990
	Total ...	13,292,294	13,155,484	12,452,245	9,054,687	8,502,979	10,356,633	9,776,670

NOTE.—The Border traffic is included in all the years.

Increase or decrease of exports of articles of home produce.

182. It has been already stated that in 1889, as compared with 1888, the decrease in the total exports amounted in value to £1,119,029, of which decrease £579,963 was in exports of home produce or manufactures. The decrease in the exports of such products was spread over 37 articles, the total value of which was set down as £2,264,700; but as against this there was an increase in the exports of 18 articles, amounting in all to a value of £1,684,700, so that the net increase in the value of exports of home produce was as stated. The chief decrease was in exports of gold specie, amounting to about £1,540,000, and wheat and flour (£542,000), in comparison with which other decreases were but slight, the chief being potatoes (£36,700), butter and cheese (£23,600), apparel and slops (£23,400), horses (£16,900), and sugar (£12,000). The chief articles of home produce of which the exports increased were wool (£1,438,600), gold bullion (£129,500), cattle and sheep (£52,500), and skins (£21,700). The following table gives the names of the articles and the amount of increase or falling-off in the exports of each article:—

* Including all articles partly or wholly made up of imported materials.
† It is believed a portion of this wool was produced outside Victoria.

INCREASE OR DECREASE OF EXPORTS OF ARTICLES OF HOME PRODUCE, 1889.

Increase 1889, as compared with 1888.			Decrease 1889, as compared with 1888.		
Articles.		Amount of Increase.	Articles.		Amount of Decrease.
		£			£
Stationery ...	...	677	Agricultural implements ...	...	2,161
Machinery ...	...	5,605	Saddlery and harness ...	...	3,136
Cordage ...	...	671	Furniture and upholstery ...	...	4,944
Preserved meats ...	...	41	Manure ...	...	123
Oatmeal ...	...	1,308	Drugs and chemicals ...	...	2,811
Hides ...	...	7,864	Woollens and woollen piece goods	...	6,830
Horns and hoofs ...	...	1,000	Apparel and slops ...	...	23,434
Leather ...	...	8,436	Boots and shoes ...	...	4,683
Skins—sheep, etc. ...	...	21,659	Butter and cheese ...	...	23,588
Wool ...	...	1,438,593	Hams, bacon and lard ...	...	2,301
Bark and timber ...	...	1,797	Beef and pork, salted ...	...	1,381
Seeds ...	...	1,142	Confectionery ...	...	132
Gold—bullion ...	...	129,498	Biscuit ...	...	309
Minerals, metals, etc., exclusive of gold	...	1,888	Flour ...	...	109,888
Horned cattle ...	...	27,309	Grain and pulse—Wheat ...	...	432,128
Sheep ...	...	25,171	„ „ Other ...	...	2,954
Plants ...	...	501	Fruit ...	...	3,572
All other articles ...	...	11,574	Jams and preserves ...	...	1,859
			Onions ...	...	5,370
			Potatoes ...	...	36,689
			Sugar—refined, and molasses	...	11,970
			Vegetables ...	...	1,619
			Wine ...	...	33
			Bones ...	...	20
			Bone-dust ...	...	271
			Candles ...	...	253
			Glue pieces ...	...	669
			Soap ...	...	519
			Stearine ...	...	468
			Tallow ...	...	8,172
			Bran and pollard ...	...	7,626
			Hay and chaff ...	...	5,581
			Oil—neatsfoot and ex tallow	...	391
			Gold—specie ...	...	1,539,729
			Horses ...	...	16,884
			Hardware and manufactures of metals	...	272
			Oilmen's stores ...	...	1,927
			Total decrease ...	...	2,264,697
			Deduct increase ...	...	1,684,734
Total increase ...	...	1,684,734	Net decrease...	...	579,963

183. The next table shows the total value and value per head of the exports of home produce or manufacture from each of the Australasian colonies during the eleven years 1878 to 1888, also Exports of home produce from Australasian colonies.

the proportion of the value of such articles to that of the total exports:—

EXPORTS OF HOME PRODUCE FROM AUSTRALASIAN COLONIES,
1878 TO 1888.

Colony.	Year.	Export of Articles Produced or Manufactured in each Colony.		
		Total Value.	Value per Head of the Population.	Percentage of Total Exports.
		£	£ s. d.	
Victoria ...	1878	10,676,499	12 19 11	71·53
	1879	8,069,857	9 13 6	64·80
	1880	11,220,467	13 3 11	70·33
	1881	12,480,567	14 7 3	76·79
	1882	12,570,788	14 2 5	77·63
	1883	13,292,294	14 11 9	81·06
	1884	13,155,484	14 1 8	81·96
	1885	12,452,245	12 19 10	80·06
	1886	9,054,687	9 3 6	76·77
	1887	8,502,979	8 6 9	74·91
	1888	10,356,633	9 15 0	74·76
New South Wales ...	1878	10,716,511	16 5 9	82·65
	1879	10,775,644	15 12 0	82·34
	1880	12,679,782	17 9 5	81·67
	1881	12,895,493	16 19 2	80·35
	1882	13,208,459	16 12 4	79·01
	1883	16,129,867	19 6 8	81·11
	1884	14,595,736	16 11 4	79·97
	1885	12,957,881	13 18 5	78·33
	1886	12,884,200	13 3 0	82·82
	1887	15,472,361	15 2 8	83·65
	1888	17,289,487	16 4 11	82·88
Queensland ...	1878	3,083,441	14 18 2	96·65
	1879	3,259,613	15 4 5	94·92
	1880	3,150,151	14 3 10	91·36
	1881	3,289,253	14 17 8	92·91
	1882	3,183,947	13 8 0	90·01
	1883	5,156,835	19 5 1	97·73
	1884	4,553,477	15 8 11	97·43
	1885	5,116,293	16 11 5	97·58
	1886	4,813,092	14 9 6	97·55
	1887	6,338,205	17 17 4	98·21
	1888	6,012,722	15 18 10	98·15
South Australia ...	1878	4,198,034	17 5 9	78·39
	1879	3,957,854	15 11 6	83·10
	1880	4,829,577	18 6 6	86·64
	1881	3,643,402	12 12 6	82·66
	1882	4,187,840	14 8 11	78·13
	1883	3,487,827	11 13 3	71·42
	1884	5,292,222	17 2 11	79·90
	1885	4,385,599	14 0 2	77·81
	1886	2,822,138	9 0 3	62·87
	1887	3,348,561	10 13 9	62·82
	1888	4,670,773	14 13 10	66·88

EXPORTS OF HOME PRODUCE FROM AUSTRALASIAN COLONIES
1878 TO 1888—*continued*.

Colony.	Year.	Exports of Articles Produced or Manufactured in each Colony.		
		Total Value.	Value per Head of the Population.	Percentage of Total Exports.
		£	£ s. d.	
Western Australia ...	1878	427,268	15 5 2	99·71
	1879	492,707	17 6 9	99·56
	1880	496,408	17 4 2	99·44
	1881	498,634	16 14 1	99·18
	1882	580,765	19 2 2	99·61
	1883	444,764	14 4 10	99·50
	1884	404,000	12 9 11	99·58
	1885	445,208	13 1 4	99·67
	1886	626,524	16 17 0	99·40
	1887	601,656	14 8 7	99·50
	1888	673,519	15 18 4	99·00
Tasmania ...	1878	1,288,011	11 17 4	97·90
	1879	1,289,395	11 11 11	99·10
	1880	1,481,330	13 0 9	97·98
	1881	1,548,116	13 3 11	99·52
	1882	1,578,517	13 1 6	99·44
	1883	1,698,334	13 13 2	98·08
	1884	1,448,714	11 5 8	98·16
	1885	1,299,011	9 16 7	98·88
	1886	1,312,416	9 13 8	98·57
	1887	1,425,457	10 3 10	98·35
	1888	1,303,908	9 0 8	97·75
New Zealand ...	1878	5,780,508	13 14 2	96·09
	1879	5,563,455	12 8 4	96·87
	1880	6,102,400	12 17 4	96·06
	1881	5,762,250	11 13 5	95·07
	1882	6,253,350	12 5 7	93·94
	1883	6,855,244	12 19 0	96·61
	1884	6,942,486	12 12 10	97·90
	1885	6,591,911	11 12 10	96·66
	1886	6,386,682	10 19 5	95·71
	1887	6,551,081	10 19 8	95·41
	1888	7,255,128	11 19 8	93·41

184. According to its total value and its value per head, the home produce exported in 1888 was less than in 1887 in Queensland and Tasmania, but more than in 1887 in the other five colonies—the greatest increase per head being in South Australia; moreover, in 1888, as compared with 1887, the proportion of exports of home produce to the total exports was lower in all the colonies except South Australia, but only slightly so in the case of Victoria, Queensland, and Western Australia. It should be mentioned that the same circumstance which

Exports of home produce, 1887 and 1888.

makes the returns of Victorian home produce exported not absolutely reliable, as has been already stated,* may probably also operate against the truthfulness of the returns of the other colonies; consequently, some caution should be exercised in drawing deductions from the figures.

Order of colonies in respect to exports of home produce.

185. New South Wales being a coal-producing country, and being, moreover, from the extent of her territory, able to raise a very large quantity of wool and other pastoral produce, which is only partially counterbalanced by the larger quantities of grain and gold produced in Victoria, the value of home products exported from the former has generally, of late years, been in excess of that from the latter. This was the case in all the years shown; the difference in favour of New South Wales being greatest in 1887 and 1888, in each of which it amounted to close upon 7 millions sterling, and next greatest in 1886, when it amounted to 3 $\frac{4}{5}$ millions sterling. Victoria is, however, far in advance of every Australasian colony except New South Wales in regard to the value of home produce exported. The following is the order in which the colonies stood in this respect according to the returns of 1888 :—

ORDER OF COLONIES IN REFERENCE TO TOTAL VALUE OF EXPORTS OF HOME PRODUCE, 1888.

- | | |
|---------------------|-----------------------|
| 1. New South Wales. | 5. South Australia. |
| 2. Victoria. | 6. Tasmania. |
| 3. New Zealand. | 7. Western Australia. |
| 4. Queensland. | |

Order of colonies in respect to exports of home produce per head.

186. In respect to the value of exports of domestic produce per head of the population in 1888, Victoria stood lowest but one on the list, at the top of which stood New South Wales, Queensland standing second. The following was the order of the colonies in this particular :—

ORDER OF COLONIES IN REFERENCE TO VALUE PER HEAD OF EXPORTS OF HOME PRODUCE, 1888.

- | | |
|-----------------------|-----------------|
| 1. New South Wales. | 5. New Zealand. |
| 2. Queensland. | 6. Victoria. |
| 3. Western Australia. | 7. Tasmania. |
| 4. South Australia. | |

* See paragraph 180 *ante*.

187. In Victoria during the same year, the value of articles of domestic produce bore a much larger proportion to that of the total exports than in South Australia, but a much smaller proportion than in any other colony. It is probable, however, that the proportion in Victoria would have been larger but for the total exports being so much swelled by the exportation of wool produced in the adjacent colonies and imported over the frontiers. The colonies in this respect stood in the following order in 1888:—

Order of colonies in respect to proportion of home products to total exports.

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF EXPORTS OF HOME PRODUCE TO TOTAL EXPORTS, 1888.

1. Western Australia.	5. New South Wales.
2. Queensland.	6. Victoria.
3. Tasmania.	7. South Australia.
4. New Zealand.	

188. The aggregate value of the exports of home produce from all the Australasian colonies amounted in 1888 to £47,562,170, or over 82½ per cent. of the total exports, as compared with £42,240,300, or 83½ per cent. of the total exports in 1887. During the last eleven years the exports of home produce have varied from 33 millions in 1879 to 47½ millions in 1888; and the proportion to the total exports has ranged from 81 to 85 per cent.

Exports of Australasian produce.

189. In 1889, according to value, 47 per cent. of the Victorian imports were from, and 55 per cent. of the Victorian exports were to, the United Kingdom. About 35 per cent. of the former, and 32 per cent. of the latter, were conveyed between Victoria and the neighbouring colonies, chiefly New South Wales. In regard to British possessions out of Australia, the imports therefrom amounted to about 5 per cent. and the exports thereto to about 4 per cent. of the totals; whilst in regard to Foreign countries the imports therefrom amounted to about 13 per cent., and the exports thereto to about 9 per cent. of the totals. The value of the imports from and the exports to the principal British and Foreign countries, and the percentage of such values to the total imports and exports, are given in the following table:—

Trade with various countries 1889.

VICTORIAN IMPORTS FROM AND EXPORTS TO DIFFERENT COUNTRIES,
1889.

Countries.	Imports therefrom.		Exports thereto.	
	Value.	Percentage.	Value.	Percentage.
BRITISH COUNTRIES.	£		£	
The United Kingdom ...	11,414,682	46·78	7,036,585	55·25
Australasia—				
New South Wales ...	6,326,440	25·93	2,114,034	16·60
Queensland ...	189,072	·77	358,272	2·81
South Australia ...	633,035	2·59	616,097	4·84
Western Australia ...	90,654	·37	83,673	·66
Tasmania ...	418,053	1·71	493,766	3·88
New Zealand ...	882,600	3·62	356,212	2·80
Fiji ...	65,789	·27	17,430	·14
Mauritius ...	390,185	1·60	32,826	·26
Hong Kong ...	353,873	1·45	71,233	·56
India ...	252,860	1·04	400,145	3·14
Ceylon ...	77,313	·31	17,810	·14
Straits Settlements ...	45,519	·19	1,618	·01
Canada ...	21,994	·09	...	...
Other British Possessions ...	71,276	·29	3,142	·02
Total ...	21,233,345	87·01	11,602,843	91·11
FOREIGN COUNTRIES.				
Belgium ...	111,053	·46	597,641	4·69
France ...	181,490	·74	133,513	1·05
Germany ...	606,673	2·49	218,652	1·72
Sweden and Norway ...	512,165	2·10	...	...
Java ...	239,154	·98	1,317	·01
Philippine Islands ...	10,483	·04	17,045	·13
China ...	444,529	1·82	8	...
United States ...	991,009	4·06	153,563	1·21
Others ...	72,859	·30	10,152	·08
Total ...	3,169,415	12·99	1,131,891	8·89
Grand Total ...	24,402,760	100·00	12,734,734	100·00

Increase or decrease of imports from various countries, 1889.

190. Comparing the imports of 1889 with those of 1888, an increase is shown in the values of those from all the British countries named, except New South Wales, India, Canada, Fiji, and the Straits Settlements, the first two showing a falling off of £283,000 and £235,000 respectively, the third of £58,000, and the last two of smaller amounts. The principal increases were from the United Kingdom (£563,000) and New Zealand (£172,000). As regards Foreign countries, there was a large decrease in the imports from China and the United States, amounting to £154,000 and £121,500 respectively, and a decrease from most of the other Foreign states,

the only Foreign countries which showed increase being Germany (£215,000), Sweden and Norway, and Java. There was a net increase in the value of imports from British countries of about £463,000, but a net decrease in that from Foreign countries of about £32,000. The following table shows the value of goods imported from each country in the last two years, and the increase or falling off of such value in the last year:—

INCREASE OR DECREASE IN IMPORTS FROM DIFFERENT COUNTRIES,
1889.

Countries.	Imports therefrom.		Increase.	Decrease.
	1888.	1889.		
BRITISH COUNTRIES.	£	£	£	£
The United Kingdom ...	10,851,667	11,414,682	563,015	...
Australasia—				
New South Wales ...	6,609,621	6,326,440	...	283,181
Queensland ...	159,335	189,072	29,737	...
South Australia ...	584,878	633,035	48,157	...
Western Australia ...	25,438	90,654	65,216	...
Tasmania ...	394,544	418,053	23,509	...
New Zealand ...	710,743	882,600	171,857	...
Fiji ...	77,379	65,789	...	11,590
Mauritius ...	383,738	390,185	6,447	...
Hong Kong ...	282,225	353,873	71,648	...
India ...	488,008	252,860	...	235,148
Ceylon ...	51,898	77,313	25,415	...
Straits Settlements ...	54,345	45,519	...	8,826
Canada... ..	79,979	21,994	...	57,985
Other British Possessions ...	16,608	71,276	54,668	...
Total ...	20,770,406	21,233,345	*462,939	...
FOREIGN COUNTRIES.				
Belgium ...	115,803	111,053	...	4,750
France ...	197,111	181,490	...	15,621
Germany ...	391,992	606,673	214,681	...
Sweden and Norway ...	450,678	512,165	61,487	..
Java ...	220,857	239,154	18,297	...
Philippine Islands ...	10,600	10,483	...	117
China ...	598,520	444,529	...	153,991
United States ...	1,112,520	991,009	...	121,511
Others ...	103,647	72,859	...	30,788
Total ...	3,201,728	3,169,415	...	*32,313
Grand Total ...	23,972,134	24,402,760	*430,626	...

*. Net figures.

increase or
decrease in
exports to
various
countries.

191. In 1889, as compared with 1888, the exports to the United Kingdom fell off by £1,013,000. The only countries to which the exports increased were New Zealand, Fiji, Hong Kong, India, Straits Settlements, "other British Possessions," Belgium, France, and Germany. The net decrease in the exports to British countries, taken as a whole, was £1,188,000, as against which there was a net increase to Foreign countries, taken as a whole, of about £69,000. The following table shows the amount by which the exports to each country increased or decreased in the year :—

INCREASE OR DECREASE IN EXPORTS TO DIFFERENT COUNTRIES, 1889.

Countries.	Exports thereto.		Increase.	Decrease.
	1888.	1889.		
BRITISH COUNTRIES.	£	£	£	£
The United Kingdom ...	8,050,056	7,036,585	...	1,013,471
Australasia—				
New South Wales ...	2,200,531	2,114,034	...	86,497
Queensland ...	501,144	358,272	...	142,872
South Australia ...	642,573	616,097	...	26,476
Western Australia ...	132,594	83,673	...	48,921
Tasmania ...	514,956	493,766	...	21,190
New Zealand ...	315,219	356,212	40,993	...
Fiji ...	11,614	17,430	5,816	...
Mauritius ...	36,042	32,826	...	3,216
Hong Kong ...	43,647	71,233	27,586	...
India ...	309,796	400,145	90,349	...
Ceylon ...	28,896	17,810	...	11,086
Straits Settlements ...	1,150	1,618	468	...
Other British Possessions ...	2,527	3,142	615	...
Total ...	12,790,745	11,602,843	...	1,187,902*
FOREIGN COUNTRIES.				
Belgium ...	393,448	597,641	204,193	...
France ...	96,038	133,513	37,475	...
Germany ...	115,813	218,652	102,839	...
Sweden and Norway ...	...	...	...	...
Java ...	1,361	1,317	...	44
Philippine Islands ...	70,150	17,045	...	53,105
China ...	425	8	...	417
United States ...	361,380	153,563	...	207,817
Others ...	24,403	10,152	...	14,251
Total ...	1,063,018	1,131,891	68,873	...
Grand Total ...	13,853,763	12,734,734	...	1,119,029*

trade with
various
countries
at three
periods.

192. The next table shows the value of the Victorian imports from and exports to different countries in 1889 and in the first year of each of the two previous quinquennia :—

* Net figures.

IMPORTS FROM AND EXPORTS TO DIFFERENT COUNTRIES, 1879, 1884
AND 1889.

Countries.	Imports therefrom.			Exports thereto.		
	1879.	1884.	1889.	1879.	1884.	1889.
BRITISH COUNTRIES.	£	£	£	£	£	£
The United Kingdom	6,069,405	9,149,076	11,414,682	5,901,351	7,745,415	7,036,585
Australasia—						
New South Wales ...	4,494,386	4,646,303	6,326,440	1,977,138	3,754,467	2,114,034
Queensland ...	26,137	141,747	189,072	37,339	9,584	358,272
South Australia ...	193,967	553,590	633,035	636,244	686,896	616,097
Western Australia ...	10,752	1,913	90,654	82,377	110,518	83,673
Tasmania ...	304,097	323,613	418,053	536,925	573,190	493,766
New Zealand ...	1,101,651	808,749	882,600	914,091	692,171	356,212
Fiji ...	21,686	25,407	65,789	19,002	36,014	17,430
Mauritius ...	639,181	613,744	390,185	26,476	39,005	32,826
Hong Kong ...	121,811	266,245	353,873	932	1,603	71,233
India ...	316,348	339,704	252,860	52,686	78,386	400,145
Ceylon ...	299,346	55,919	77,313	2,012,006	880,161	17,810
Straits Settlements ...	21,868	32,368	45,519	1,408	111	1,618
Canada ...	24,364	28,755	21,994	...	...	...
Other British possessions	22,668	60,468	71,276	9,153	2,151	3,142
Total ...	13,667,667	17,047,601	21,233,345	12,207,128	14,609,672	11,602,843
FOREIGN COUNTRIES.						
Belgium ...	...	77,828	111,053	...	523,100	597,641
France ...	72,457	135,042	181,490	...	260,635	133,513
Germany ...	16,137	125,549	606,673	420	65,785	218,652
Sweden and Norway	87,918	260,427	512,165	...	...	...
Java ...	277,668	256,832	239,154	20,768	1,571	1,317
Philippine Islands ...	20,678	35,749	10,483	14,344	509,638	17,045
China ...	388,335	578,657	444,529	...	...	8
United States ...	484,876	617,933	991,009	169,003	62,717	153,563
Others ...	19,802	66,015	72,859	42,507	17,347	10,152
Total ...	1,367,871	2,154,032	3,169,415	247,042	1,440,793	1,131,891
Grand Total ...	15,035,538	19,201,633	24,402,760	12,454,170	16,050,465	12,734,734

NOTE.—Border traffic is included in all the years.

193. It will be observed that the imports from the Mauritius, India, Canada, Java, and the Philippine Islands represented a higher value at both former periods than in the year under review, as also did those from New Zealand and Ceylon at the first period, and those from China at the second period. From all the other countries the value represented was much larger at the latest than at either of the former periods, the increase in imports from British countries taken as a whole being over £7,500,000 as compared with the first, and about £4,200,000 as compared with the second period; and the increase in imports from Foreign countries taken as a whole being £1,800,000 as compared with the first, and over £1,000,000 as compared with the second period.

Imports at
three
periods
compared.

Exports at
three
periods
compared.

194. In regard to the exports it will be noticed that the value of those to the United Kingdom, New South Wales, Western Australia, Mauritius, and the Philippine Islands, although higher than at the first period, were considerably lower than at the second period. The only countries to which the exports were greater at the last than at either former period were Queensland, Hong Kong, India, the Straits Settlements, Belgium, and Germany; whilst on the other hand the exports were lowest at the last period to South Australia, Tasmania, New Zealand, Fiji, Ceylon, France, and Java. The exports to British countries, taken as a whole, showed a falling-off of £600,000 as compared with the first, and of £3,000,000 as compared with the second period; whilst those to Foreign countries, taken as a whole, showed a falling-off of about £310,000 as compared with the second period, but an increase of nearly £900,000 as compared with the first period. The great falling-off in the exports to Ceylon is partly explained by the fact that the mail steamers leaving Australia, now go right through to England, instead of transshipping to other steamers at Ceylon; and therefore the gold shipped in these vessels which was formerly entered for the latter, although intended to be sent in to the former country, is now entered at the Customs as for England direct.

Trade with
neighbour-
ing colo-
nies, 1879
to 1889.

195. The value in 1889 of imports to Victoria from the neighbouring colonies was slightly higher than in 1888, but considerably higher than in any other of the previous ten years. The value of the exports from Victoria to the neighbouring colonies, which had been steadily increasing up to 1884, has since shown a considerable falling off, and was lower in 1889 than in any of the previous ten years, as will be seen by the following figures:—

TRADE BETWEEN VICTORIA AND THE OTHER AUSTRALASIAN
COLONIES,* 1879 TO 1889.

Year.	Imports from the Neighbouring Colonies.	Exports to the Neighbouring Colonies.	Excess in favour of	
			Imports.	Exports.
	£	£	£	£
1879 ...	6,130,990	4,184,114	1,946,876	...
1880 ...	6,299,597	4,567,982	1,731,615	...
1881 ...	5,949,730	4,736,442	1,213,288	...
1882 ...	5,914,327	5,225,839	688,488	...
1883 ...	5,658,854	5,744,780	...	85,926
1884 ...	6,475,915	5,826,826	649,089	...
1885 ...	5,652,169	5,633,247	18,922	...
1886 ...	6,254,393	4,108,757	2,145,636	...
1887 ...	7,327,467	4,496,504	2,830,963	...
1888 ...	8,484,559	4,307,017	4,177,542	...
1889 ...	8,539,854	4,022,054	4,517,800	...

* Exclusive of Fiji.

196. It will be observed that Victoria imported from the other colonies more than she exported thereto in all the years named except 1883, and that the excess of imports in 1889 was very much larger than in any other year shown. The figures in the last two columns show the net excess in favour of imports during the eleven years to have amounted to £19,834,293, or an average of over £1,800,000 per annum.

197. In 1889, 82 per cent. of the imports were landed, and 84 per cent. of the exports were shipped, at the port of Melbourne. Nearly a sixth of the imports entered the colony at the Murray ports, but only about a tenth of the exports were sent away therefrom. The chief of these ports is Echuca, at which $9\frac{1}{2}$ per cent. of the total imports were landed. The only important port of shipment in Victoria, except Melbourne, is Geelong, from which, in 1889, 4 per cent. of the total exports were sent away. The following table gives the names of the various ports and the value and percentage of the goods imported and exported at each during the year:—

IMPORTS AND EXPORTS AT EACH PORT, 1889.

Ports.	Imports.		Exports.	
	Value.	Percentage.	Value.	Percentage.
	£		£	
Melbourne	20,034,980	82·10	10,702,876	84·05
Geelong	241,357	·99	510,618	4·01
Portland	13,050	·05	140,964	1·11
Port Fairy (Belfast)	1,329	...	27,000	·21
Warrnambool	40,808	·17	2,326	·02
Bairnsdale	195	...	...	...
Murray ports and places—				
Echuca	2,340,363	9·59	172,293	1·35
Koondrook	8,585	·04	5,910	·04
Mildura	19,670	·08	21,900	·17
Narung	225	...	...	...
Swan Hill	38,737	·16	22,480	·18
Tocumwall	21,045	·09	19,979	·16
Wahgunyah	341,289	1·40	115,539	·91
Gooramadda	26,955	·11	15,747	·12
Yarrawonga	33,741	·14	6,310	·05
Wodonga	1,079,922	4·42	306,590	2·41
Tintaldra	46,597	·19	15,473	·12
Ports unspecified . . . . .	...	...	*607,956	4·77
Stations, Border, etc.	113,912	·47	40,773	·32
Total	24,402,760	100·00	12,734,734	100·00

* The goods represented by this value were entered in Melbourne for export overland across the Border, and were consequently not credited to the various Murray ports.

Imports of
principal
articles at
three
periods.

198. The values of sixty-six of the principal articles imported in 1889 and in the first year of each of the two previous quinquennia are placed side by side in the following table:—

IMPORTS OF PRINCIPAL ARTICLES, 1879, 1884, AND 1889.

(See Index following paragraph 153 *ante*.)

Order.	Articles.	Value of Imports.		
		1879.	1884.	1889.
		£	£	£
1	Books	193,235	248,216	260,494
	Stationery	69,339	95,915	121,861
2	Musical instruments	56,968	110,013	151,361
6	Watches, clocks, and watchmakers' materials	54,075	99,067	83,366
9	Cutlery	20,298	29,258	36,249
	Machinery	86,264	249,925	448,370
	Sewing machines	67,962	87,533	61,906
	Tools and utensils	31,476	35,423	64,206
12	Building materials	46,715	111,328	295,869
13	Furniture and upholstery	36,161	73,719	149,738
14	Drugs and chemicals	62,237	96,694	103,050
	Matches and vestas	38,367	34,073	48,242
	Opium	68,806	52,294	39,986
	Paints and colours	51,121	81,659	117,803
15	Carpeting and druggeting	43,214	79,685	124,951
	Woollens and woollen piece goods	701,292	923,072	969,412
16	Silks	200,996	266,040	395,328
17	Cottons	534,124	946,305	952,262
	Linen piece goods	35,228	44,825	39,076
18	Haberdashery	210,938	362,319	383,837
19	Apparel and slops	282,298	315,903	473,984
	Boots and shoes	179,830	100,756	149,235
	Gloves	70,140	95,672	138,804
	Hats, caps, and bonnets	116,880	120,684	126,212
	Hosiery	107,232	111,961	156,177
20	Bags and sacks (including wool-packs)	181,269	270,772	112,014
21	Butter and cheese	8,488	1,665	8,571
	Fish	121,436	159,338	198,773
	Meats—fresh, preserved and salted	9,516	8,337	39,152
22	Fruit(including currants and raisins)	139,434	188,672	273,631
	Flour and biscuit	3,734	18,774	7,341
	Grain—wheat	17,029	9,194	49,028
	„ oats	104,348	52,082	298,965
	„ other (including malt and rice)	459,169	94,423	226,241
	Sugar and molasses	1,082,130	1,292,246	992,761
23	Beer, cider, and perry	193,498	218,294	346,507
	Coffee	46,830	41,957	58,314
	Hops	35,084	20,486	52,580
	Spirits	386,526	433,203	500,417
	Tea	513,271	667,800	596,385
	Tobacco, cigars, and snuff	177,792	217,309	370,724
	Wine	91,600	102,042	158,770

IMPORTS OF PRINCIPAL ARTICLES, 1879, 1884, AND 1889—*continued*.
(See Index following paragraph 153 *ante*.)

Order.	Articles.	Value of Imports.		
		1879.	1884.	1889.
		£	£	£
24	Hides, skins and pelts ...	55,352	164,265	151,847
	Leather, leatherware, and leathern cloth	138,657	191,969	173,249
	Wool* ...	2,494,573	2,575,905	3,595,449
25	Paper (including paper bags) ...	179,505	253,420	361,626
	Timber ...	318,187	733,766	1,390,036
	Woodenware ...	34,420	50,604	77,352
26	Oil of all kinds ...	219,006	208,922	217,265
28	Coal ...	354,924	412,697	753,048
29	Earthenware, brownware, and chinaware	61,103	105,656	147,451
	Glass and glassware ...	102,487	155,318	236,964
31	Gold (exclusive of specie) ...	983,048	718,817	502,818
	Specie—gold ...	157,000	549,798	217,166
	„ other ...	104,417	4,962	4,721
	Jewellery ...	47,505	63,602	66,456
32	Iron and steel (exclusive of railway rails, telegraph wire, etc.)	357,729	664,945	1,002,840
	Lead—ore, pig, pipe, sheet ...	11,901	19,061	40,311
	Manufactures of metal ...	70,315	102,043	340,430
	Tin ...	26,371	60,217	48,799
	Nails and screws ...	31,692	49,439	55,155
	Plated ware ...	18,302	25,180	74,944
33	Live stock ...	890,126	1,333,154	1,081,348
35	Fancy goods ...	33,609	94,658	88,241
	Hardware and ironmongery ...	98,142	191,441	267,096
	Oilmen's stores ...	15,649	17,680	30,065
	Total ...	13,740,370	17,316,452	21,106,630
	All other articles ...	1,295,168	1,885,181	3,296,130
	Total Imports...	15,035,538	19,201,633	24,402,760

199. Of all the articles named in the table the most important, according to the values in 1889, are wool—including that brought overland from New South Wales—timber, live stock, iron and steel, sugar, woollens, cottons, coal, gold, and tea, in the order named, the values of which varied in 1889 from £3,600,000 for wool to £596,400 for tea. The aggregate value of these ten items amounted in 1889 to over £12,050,000, or to nearly half the total value of all the articles imported. It may be mentioned that the value in 1879 of these articles was £8,386,000, in 1884 £10,819,000, and in 1888 £12,500,000, so that the value in 1889 was not quite so high as in 1888, but much higher than in the earlier years named.

Ten chief articles of import, 1889.

* Including the value of wool imported into Victoria across the Murray.

Imports of
three
periods
compared.

200. The total imports show an increased value in 1889, as compared with 1884, of over five millions, and as compared with 1879, of nearly nine and a half millions; while the imports of the articles named in the table have increased by over three and three-quarters millions and over seven and a quarter millions respectively. Nearly all the items show very considerable increase at the last period as compared with either of the former periods, and of these the more important are musical instruments, tools and utensils, machinery, building materials and timber, iron and steel, furniture, apparel and slops, gloves, fish, meats, fruit, oats, beer, spirits, tobacco, wine, wool, paper, coal, plated ware, metal manufactures, and hardware and ironmongery. The imports of wool show an increase as compared with 1884 of £1,000,000, timber of £6,600,000, coal and iron of £340,000 each, machinery of £198,000, building materials of £184,000, and apparel of £160,000. The items of import which showed decrease at the last period as compared with either of the former ones were few in number, the chief being sewing machines, opium, bags and sacks, sugar and molasses, gold, and specie other than gold. Imports of bags and sacks fell off as compared with 1884 by nearly £160,000, and of sugar by £300,000. The large falling-off in the imports of sugar is attributable to the temporary cessation of refining operations in the colony, a considerable proportion of refined sugar having been formerly exported.

Exports of
principal
articles at
three
periods.

201. The exports of fifty of the principal articles are in like manner given for the same three years:—

EXPORTS OF PRINCIPAL ARTICLES, 1879, 1884, AND 1889.
(See Index following paragraph 153 *ante*.)

Order.	Articles.	Value of Exports.		
		1879.	1884.	1889.
		£	£	£
1	Books	76,798	87,053	59,745
	Stationery	43,652	49,525	29,145
9	Machinery	75,640	136,819	126,066
15	Woollens and woollen piece goods ...	101,910	91,358	77,943
16	Silks	16,670	29,459	47,648
17	Cottons	37,884	71,328	72,174
18	Haberdashery	68,396	78,358	37,460
19	Apparel and slops	247,717	311,617	154,467
	Boots and shoes	128,217	57,467	39,402
20	Bags and sacks	58,560	64,102	69,101
21	Butter and cheese	59,714	145,545	46,409
	Meats—fresh and preserved... ..	70,721	118,812	20,410
	„ salted (including hams and bacon)	29,119	48,099	10,812
22	Fruits (including currants and raisins)	32,115	18,833	75,085

EXPORTS OF PRINCIPAL ARTICLES, 1879, 1884, AND 1889—*continued.*(See Index following paragraph 153 *ante.*)

Order.	Articles.	Value of Imports.		
		1879.	1884.	1889.
		£	£	£
22	Flour and biscuit	140,124	339,811	319,938
	Grain—wheat	132,314	1,429,715	84,064
	„ oats	12,172	15,833	2,758
	„ other (including malt and rice)	88,218	88,136	22,880
	Onions	7,433	38,710	35,308
	Potatoes	59,895	148,929	57,612
	Sugar and molasses	236,598	232,474	128,256
23	Coffee	28,577	19,329	15,926
	Spirits	118,254	112,023	84,713
	Tea	258,675	359,325	355,157
	Tobacco, cigars and snuff	152,871	115,473	112,533
	Wine	47,935	46,563	66,283
24	Bones and bone dust	7,991	13,331	11,596
	Candles	13,859	13,055	6,251
	Horns and hoofs	2,806	1,174	2,691
	Hides	20,217	8,696	25,000
	Skins and pelts	30,685	139,942	206,960
	Leather, leatherware and leathern cloth	241,766	371,497	217,559
	Soap	10,857	16,186	17,422
	Tallow	150,867	256,686	149,429
	Wool*	5,269,634	6,342,887	5,928,932
	Bark	14,999	21,807	45,666
25	Hay, straw and chaff	15,695	194,393	129,390
	Timber	47,616	33,989	24,168
26	Oil of all kinds	68,414	51,272	28,800
31	Gold (exclusive of specie)	1,224,538	760,875	296,413
	Specie—gold	1,352,883	1,249,420	1,983,913
	„ silver	32,950	1,237	17,810
32	Antimony ore, regulus, etc.	13,176	3,796	166
	Copper ore, regulus, etc.	29,158	269	1,130
	Iron, etc.	76,413	57,435	38,367
	Manufactures of metals	50,510	47,969	31,486
	Tin, tin ore, black sand	2,299	6,668	2,684
33	Live stock	321,296	762,988	538,973
35	Hardware and ironmongery	69,750	45,944	35,325
	Travellers' samples	72,390	77,502	64,006
	Total	11,470,948	14,789,966	11,919,178
	All other articles	983,222	1,260,499	815,556
	Total Exports	12,454,170	16,050,465	12,734,734

202. It appears from this table that the chief articles of Victorian export are wool—of which the value in 1889 was £5,929,000, and gold (inclusive of specie) valued at £2,280,300—which two articles alone contributed 64 per cent. to the total value of exports of all articles; next in order in 1889 were live stock, £539,000; breadstuffs, £404,000; then tea, hides and skins, leather, apparel and slops,

Twelve chief
articles of
export,
1889.

* Including wool from across the Murray, which is also included in the returns of imports *ante.*

tallow, hay, straw and chaff, sugar, and machinery, in the order named—the values of which varied in 1889 between £335,000 and £126,000. It will be noticed, however, that, of these, sugar (excepting so far as the process of refining is concerned), and tea are not produced in Victoria, but are merely re-exports. The value of the twelve articles just named amounted in 1889 to £10,644,500, which leaves the balance of £2,090,200 distributed over all the other heads.

203. The value of the total exports in 1889 shows a slight increase as compared with the first period, but a very large falling-off as compared with the second period, it being only £280,000 higher than the value in 1879, but nearly $3\frac{1}{3}$ millions lower than the value in 1884. As against the two former periods, the articles showing decrease are numerous, the most important being wool and tallow, grain of all kinds, especially wheat, potatoes, sugar, butter and cheese, meats, candles, leather, apparel and slops, boots and shoes, and antimony ore. On the other hand there was more or less increase, as compared with both the previous periods, in the exports of silks, cottons, wine, hides, skins and pelts, and bark. The exports of gold were not so high at the last as at the first, but higher than at the middle period; whilst those of live stock were much highest at the middle period. In reference to the falling-off in the total exports in 1889 it should be borne in mind that the quantities of agricultural and pastoral products raised in that year were considerably below the average in consequence of the drought.

204. With reference to the falling-off in the declared values of sugar and wool exported, it should be pointed out that this has partially arisen from the reduced value of those articles, and not altogether from a diminution of the quantities. This is made plain by the following figures:—

QUANTITY AND VALUE OF EXPORTS OF SUGAR AND WOOL, 1879-1889.

Year:		Refined Sugar and Molasses.			Wool.		
		Quantity.	Declared Value.		Quantity.	Declared Value.	
			Total.	Per cwt.		Total.	Per lb.
		cwt.	£	£	lbs.	£	d.
1879	...	148,841	231,605	1·56	95,628,281	5,269,634	13·2
1884	...	169,247	230,675	1·36	119,542,407	6,342,887	12·8
1885	...	154,443	172,062	1·11	106,278,038	5,028,011	11·4
1886	...	139,364	143,618	1·03	107,984,839	4,999,662	11·1
1887	...	140,282	140,163	1·00	115,461,606	5,073,491	10·5
1888	...	140,785	141,444	1·00	118,453,968	5,170,930	10·5
1889	...	116,030	127,257	1·10	135,607,370	5,928,932	10·5

205. It will be noticed that whilst the declared value of sugar exported was greater in 1879 than in 1889 by £104,348, or by 82 per cent., the quantity exported was less by only 32,811 cwt., or about 28 per cent.; also, that although the declared value of wool exported in 1884 exceeded that in 1889 by over £400,000, the quantity of such wool in the latter exceeded that in the former year by over 16 million pounds weight. The figures show that the average price of sugar has fallen off 30 per cent., and that of wool by nearly 20 per cent., since 1879.

Falling-off
more in
value than
quantity.

206. With reference to the wool, however, it should be pointed out that lately a much larger proportion of greasy wool has been exported than formerly,* showing a reduced value, it is true, but one of much less extent than when the wool is considered as a whole without reference to its condition when exported. The following table shows the quantity and declared value of greasy wool exported in the same seven years†:—

Exports
of greasy
wool, 1889.

QUANTITY AND VALUE OF EXPORTS OF GREASY WOOL,
1879-1889.

Year.	Quantity.	Declared Value.	
		Total.	Per lb.
	lbs.	£	d.
1879 ...	60,622,578	2,788,385	11·0
1884 ...	93,226,346	4,353,578	11·2
1885 ...	83,927,788	3,478,404	9·9
1886 ...	82,473,370	3,324,839	9·7
1887 ...	91,635,136	3,538,195	9·3
1888 ...	99,685,415	4,022,032	9·7
1889 ...	113,699,150	4,560,861	9·6

207. The quantity of greasy wool, it will be observed, exported in 1884 was less than in 1889 by over 20 million pounds weight; yet, at the same time, the declared value was higher by only £210,000. Had greasy wool continued to fetch the price per pound at which it was quoted in 1884, the increase in value would have amounted to over £900,000 sterling.

Falling-off
in value of
greasy
wool.

* The proportion of greasy to all kinds of wool exported was 63 per cent. in 1879, 78 per cent. in 1884, 79 per cent. in 1885, 76 per cent. in 1886, 80 per cent. in 1887, 84 per cent. in 1888 and 1889.

† For average prices of different classes of wool in Melbourne and London, see Part "Production" post.

Excess of imports over exports, etc., 1837 to 1889.

208. In thirty-four out of the fifty-three years ended with 1889, the value of imports to Victoria exceeded that of exports therefrom, but in the other nineteen years the value of exports was the greater. The following is a statement of the amounts by which the imports exceeded the exports in those years in which the excess was in favour of the former, and the amounts by which the exports exceeded the imports in those years in which the excess was in the opposite direction; also the net excess of imports during the whole period :—

IMPORTS IN EXCESS OF EXPORTS, AND THE CONTRARY, 1837 TO 1889.

Year.	Imports in Excess of Exports.	Exports in Excess of Imports.	Year.	Imports in Excess of Exports.	Exports in Excess of Imports.
	£	£		£	£
1837 ...	103,201	...	1867 ...	...	1,050,347
1838 ...	45,232	...	1868 ...	...	2,273,328
1839 ...	127,038	...	1869 ...	444,636	...
1840 ...	306,507	...	1870 ...	...	14,256
1841 ...	164,094	...	1871 ...	...	2,215,825
1842 ...	78,644	...	1872 ...	...	179,873
1843 ...	...	66,446	1873 ...	1,231,402	...
1844 ...	...	105,785	1874 ...	1,512,876	...
1845 ...	...	215,304	1875 ...	1,918,900	...
1846 ...	...	109,640	1876 ...	1,508,867	...
1847 ...	...	230,815	1877 ...	1,204,617	...
1848 ...	...	301,683	1878 ...	1,236,173	...
1849 ...	...	275,495	1879 ...	2,581,368	...
1850 ...	...	296,871	1880 ...	...	1,397,665
1851 ...	...	366,472	1881 ...	466,418	...
1852 ...	...	3,381,807	1882 ...	2,554,502	...
1853 ...	4,781,093	...	1883 ...	1,344,983	...
1854 ...	5,883,847	...	1884 ...	3,151,168	...
1855 ...	...	1,485,399	1885 ...	2,492,846	...
1856 ...	...	527,491	1886 ...	6,735,254	...
1857 ...	2,176,697	...	1887 ...	7,671,006	...
1858 ...	1,119,040	...	1888 ...	10,118,371	...
1859 ...	1,755,032	...	1889 ...	11,668,026	...
1860 ...	2,131,026	...			
1861 ...	...	296,154	Total ...	80,579,045	14,790,656
1862 ...	448,365	...			
1863 ...	552,431	...	Deduct excess of exports	14,790,656	...
1864 ...	1,076,431	...			
1865 ...	106,789	...	Net excess of imports	65,788,389	...
1866 ...	1,882,165	...			

Balance of trade in fifty-three years.

209. It will be observed that in the fifty-three years of which mention is made in the table the imports exceeded the exports by £66,000,000, or an average of over £1,240,000 per annum, which excess, it should

be mentioned, would be added to if the value of the British and Foreign built ships placed on the register of Victoria were included with the imports, but diminished if freight, which is included in the value of imports, were also added to the exports.

210. In 1889 the imports exceeded the exports by a much larger amount than in any previous year, such excess being greater than that in 1888 by £1,550,000, than that in 1887 by about £4,000,000, and greater than that in 1886 by nearly £5,000,000, which years follow next in order in respect to excess of imports over exports. The excess of exports over imports was greatest in 1852, next in 1868, next in 1871, next in 1855, next in 1880; the last mentioned year being the only one during the last 17 years in which the exports were in excess of the imports. In connexion with the large excess of imports in the last six, and especially in the last four years, it will be remembered that a new loan of nearly £1,400,000 was raised in London in 1884,* £819,000 in 1885,† £1,500,000 in 1886, £3,000,000 in 1887, £1,500,000 in 1888, and £3,000,000 in 1889; and, besides that, numerous municipal and private loans, and very large amounts of other capital, have been remitted for investment in Victoria as well as in the neighbouring colonies. These sums must either gradually find their way into the imports, or act as a temporary check on the exports by restricting the export of gold, etc., which would otherwise naturally leave our shores; in like manner the annual interest payable on these sums must find its way into the exports. The Melbourne Exhibition, moreover, must, to a certain extent, have stimulated the imports in 1888.

Years in which excess of imports or exports was highest.

211. In 1888 the imports exceeded the exports in Victoria (largely), New South Wales, Queensland, Western Australia, and Tasmania, but the reverse was the case in South Australia and New Zealand. The imports were in excess of the exports in Victoria and New South Wales in each of the last eleven years, with one exception; also in Queensland, Tasmania, and New Zealand, with three exceptions; in South Australia, with four exceptions; and in Western Australia with five exceptions. The following table shows the amounts by which the imports exceeded the exports, or the contrary, in the different colonies during the eleven years ended with 1888, and the net result for each colony over the whole period:—

Excess of imports, etc., in Australasian colonies.

* Not including a redemption loan of £2,636,600.

† Not including a redemption loan of £3,180,620.

IMPORTS IN EXCESS OF EXPORTS, AND THE CONTRARY, IN
AUSTRALASIAN COLONIES, 1878 TO 1888.

Colony.	Year.	Imports in Excess of Exports.	Exports in Excess of Imports.	Net Excess in 11 Years of Imports over Exports.
		£	£	£
Victoria	1878	1,236,173	...	36,954,424
	1879	2,581,368	...	
	1880	...	1,397,665	
	1881	466,418	...	
	1882	2,554,502	...	
	1883	1,344,983	...	
	1884	3,151,168	...	
	1885	2,492,846	...	
	1886	6,735,254	...	
	1887	7,671,006	...	
	1888	10,118,371	...	
New South Wales	1878	1,802,994	...	25,489,516
	1879	1,112,028	...	
	1880	...	1,575,063	
	1881	1,359,823	...	
	1882	4,564,169	...	
	1883	1,074,139	...	
	1884	4,575,479	...	
	1885	6,823,451	...	
	1886	5,417,335	...	
	1887	309,319	...	
	1888	25,842	...	
Queensland	1878	245,658	...	7,740,159
	1879	...	353,145	
	1880	...	360,864	
	1881	523,259	...	
	1882	2,784,011	...	
	1883	956,743	...	
	1884	1,708,112	...	
	1885	1,179,086	...	
	1886	1,169,257	...	
	1887	...	632,334	
	1888	520,376	...	
South Australia	1878	364,590	...	1,830,396
	1879	251,423	...	
	1880	6,992	...	
	1881	836,307	...	
	1882	1,347,898	...	
	1883	1,426,594	...	
	1884	...	874,351	
	1885	...	87,852	
	1886	363,742	...	
	1887	...	234,487	
	1888	...	1,570,460	

IMPORTS IN EXCESS OF EXPORTS, AND THE CONTRARY, IN
AUSTRALASIAN COLONIES, 1878 TO 1888—*continued*.

Colony.	Year.	Imports in Excess of Exports.	Exports in Excess of Imports.	Net Excess in 11 Years of Imports over Exports.
		£	£	£
Western Australia	1878	...	49,441	229,445
	1879	...	87,585	
	1880	...	145,514	
	1881	...	97,939	
	1882	...	74,301	
	1883	69,837	...	
	1884	115,474	...	
	1885	203,699	...	
	1886	127,620	...	
	1887	61,689	...	
	1888	105,906	...	
Tasmania	1878	9,117	...	1,366,202
	1879	...	33,622	
	1880	...	142,708	
	1881	...	124,432	
	1882	83,483	...	
	1883	101,038	...	
	1884	180,261	...	
	1885	443,793	...	
	1886	425,027	...	
	1887	147,446	...	
	1888	276,799	...	
New Zealand	1878	2,740,138	...	8,278,742
	1879	2,631,459	...	
	1880	...	190,681	
	1881	1,396,179	...	
	1882	1,951,262	...	
	1883	878,039	...	
	1884	572,221	...	
	1885	659,982	...	
	1886	86,222	...	
	1887	...	620,654	
	1888	...	1,825,425	
Total	92,367,407	10,478,523	81,888,884
Deduct excess of exports	...	10,478,523
Net excess of imports	...	81,888,884	...	81,888,884

212. It will be observed that during the eleven years to which the table relates goods to the value of 37 millions sterling were received by Victoria, nearly $25\frac{1}{2}$ millions by New South Wales, nearly 8 millions by Queensland, nearly 2 millions by South Australia, £230,000 by Western Australia, over $1\frac{1}{3}$ million by Tasmania, and $8\frac{1}{4}$ millions by New Zealand, in excess of the values of the goods sent away.

Colonies in
which
imports
exceed ex-
ports, and
contrary.

Imports in excess of exports, etc., in Australia and Australasia.

213. During the period alluded to it will be found that the Australian continent, taken as a whole, received goods to the value of over 72 millions more than it exported, whereas the surplus received by the continent, with the addition of Tasmania and New Zealand, amounted to nearly 82 millions.

Effects of borrowings on imports and exports.

214. In regard to this large balance of imports, it will be borne in mind that the colonies borrow largely from London; thus, the Government debt of Australasia at the end of 1888, amounting to close upon 168* millions sterling, nearly all represents English capital. As a set-off against this, however, an annual return has to be made, as interest, which averages about 4·1 per cent. This item alone would be represented in the annual exports at the present time by a value amounting to about £6,880,000 annually.

Excess of imports in United Kingdom.

215. The imports of the United Kingdom have always largely exceeded the exports, and, in the twenty years ended with 1875, this excess is calculated to have amounted in the aggregate to no less than 1,200 millions sterling.† In the five years ended with 1880, the total excess of imports over exports was 626 millions; in the five years ended with 1885 it was 518 millions; in the year 1886 it was 95 millions; in the year 1887 it was 90 millions; and in 1888, 89 millions. In all these cases bullion and specie are included.‡

British possessions in which imports exceed exports, etc., 1888.

216. The following are the British possessions in which in 1888 the imports exceeded the exports, and the contrary:—

BRITISH POSSESSIONS IN WHICH IMPORTS, 1888, EXCEEDED EXPORTS, AND THE CONTRARY.

Imports exceeded Exports in—		Exports exceeded Imports in—	
United Kingdom,	St. Helena,	India,	St. Vincent,
Gibraltar,	Gold Coast,	Labuan,	Barbados,
Malta,	Canada,	Hong Kong,	Grenada,
Heligoland,	Newfoundland,	Sarawak,	Virgin Islands,
Ceylon,	Bermuda,	Mauritius,	Tobago,
Straits Settlements,	Bahamas,	Cape of Good Hope,	St. Christopher,
Malay States,	Turk's Island,	Lagos,	Nevis,
North Borneo,	St. Lucia,	Sierra Leone,	Antigua,
Cyprus,	Dominica,	Gambia,	Montserrat,
Natal,	Australasia.	Honduras,	Trinidad,
		British Guiana,	Fiji,
		Jamaica,	Falkland Islands.

* This shows an increase, as compared with 1884, of 27 millions. By the end of 1889, the debt had increased to over 175 millions.

† See the paper of Mr. Stephen Bourne, F.S.S.; Journal of the Statistical Society, vol. xl, part i., p. 28. London: Stanford, 55 Charing Cross, S.W. 1877.

‡ For this reason the excess of imports over exports, as here shown, differs from figures derived from subtracting the one from the other, as given in table following paragraph 171 *ante*. See first footnote to that table.

217. Taking the British dominions as a whole, the imports in 1888 exceeded the exports in the same year by about 92½ millions sterling; if, however, the United Kingdom be omitted, the excess will be found to have been only about 3 millions sterling. It should be mentioned that in making up these figures, bullion and specie are included in the returns of the United Kingdom, and are generally also included in the returns of other British dominions. Excess of imports over exports in British dominions.

218. During 1888, the imports of all the European countries respecting which particulars are given in a previous table,* with the exceptions of Austro-Hungary, Russia, and Spain, exceeded the exports; but in Egypt, Chile, and Mexico the exports preponderated. The aggregate imports of Foreign countries exceeded the exports by nearly 66 millions sterling, or by 5½ per cent. Excess of imports over exports in Foreign countries.

219. The following table shows the value of goods transhipped in Victorian ports without being landed during the twenty years ended with 1889. These goods are not included in the lists of imports and exports:— Transshipments, 1870 to 1889.

TRANSHIPMENTS IN VICTORIAN PORTS, 1870 TO 1889.†

Value of Transshipments.			Value of Transshipments.		
1870	...	£1,145,882	1880	...	£1,432,327
1871	...	1,191,169	1881	...	1,946,804
1872	...	1,292,656	1882	...	1,334,137
1873	...	1,827,842	1883	...	1,059,427
1874	...	3,527,461	1884	...	876,527
1875	...	4,280,798	1885	...	861,427
1876	...	3,193,644	1886	...	724,792
1877	...	3,398,207	1887	...	1,159,080
1878	...	3,318,219	1888	...	1,346,568
1879	...	1,914,884	1889	...	1,874,338

220. It will be observed that the transshipments fell off considerably in the three years ended with 1886. This is attributed to the falling-off in the quantities of gold coin and bullion received from New South Wales for transshipment, consequent upon the mail steamers on the Suez route, the terminus of which had previously been Melbourne, going on to Sydney. Since 1886, however, there has been a recovery, and the value of transshipments in 1889 was larger than in any previous year since 1879, except 1881. Falling-off of transshipments.

221. The countries from which goods were received for transshipment, and to which they were transhipped, in 1889, also the value of the goods received from and transhipped to each country in the same year, are given in the following table:— Transshipments to various countries.

* See table following paragraph 175 *ante*.

† In 1887 and previous years the full values of the transshipments are not represented by the figures given, in consequence of a number of packages not having any values assigned to them. It is understood that since then values have been assigned to all the packages.

TRANSHIPMENTS FROM AND TO DIFFERENT COUNTRIES, 1889.

Countries or Settlements.	Value of Goods.	
	Received therefrom for Transhipment.	Transhipped thereto.
	£	£
United Kingdom	544,066	745,546
Australasia—		
New South Wales	263,991	313,006
New Zealand	120,835	192,037
Queensland	16,063	45,026
South Australia	202,460	237,027
Tasmania	364,586	221,188
Western Australia	3,882	26,064
Other British Possessions—		
Fiji	13,368	4,325
Malta ... ..	...	13
Mauritius	74,190	612
Aden ... ..	...	8
Hong Kong	40,451	855
India	69,064	2,434
Ceylon	611	467
Straits Settlements—Singapore	3,222	325
Malden Island ... ..	...	4
Gibraltar	10	...
Cape Town	244	856
Seychelles ... ..	...	9
Foreign States—		
Europe—		
Belgium	1,348	4,527
France	24,402	18,178
Germany	72,844	34,553
Holland	100	..
Italy	85	798
Norway	752	...
Portugal	12	...
Sweden	183	...
Asia—		
China	5,639	2
Japan	405	...
Java	104	2,064
Philippine Islands ... ..	...	818
Siam ... ..	...	804
South America—Peru	1,860	...
United States	49,453	6,970
Africa—Port Said	108	...
South Seas—		
New Britain ... ..	...	191
Noumea ... ..	...	975
Guam ... ..	...	14,656
Total	1,874,338	1,874,338

222. The Customs revenue was larger in 1889 than in 1888 by over £106,000. The receipts from import duties alone increased by £92,000, in addition to which there was an increase of £21,000 in those from excise duty on spirits, as well as smaller increases under the head of wharfage and harbour rates, licences, tonnage, fees, and miscellaneous receipts. On the other hand there was a decrease of £11,600, under the head of excise duties on tobacco, and of £500 from fines and forfeitures. It should be stated that a revised tariff came into force on the 31st July 1889, but the alterations in the rates of duty on several articles did not take effect until the latter part of the year.* The following are the amounts received under the different heads in the last two years:—

GROSS CUSTOMS REVENUE, 1888 AND 1889.

Heads of Revenue.	Year ended 31st December.	
	1888.	1889.
	£	£
Import duties	2,798,491	2,890,719
Wharfage and harbour rates†	48,550	52,897
Excise duties on—		
Spirits	74,695	95,825
Tobacco, cigars, and snuff ‡	62,545	50,937
Licences, other than tobacco licences	909	968
Tonnage §	41,923	42,449
Fees	7,040	7,095
Fines and forfeitures	1,506	1,005
Miscellaneous	12,009	12,023
Total	3,047,668	3,153,918

NOTE.—In 1889, the net revenue, after deduction of drawbacks and repayments £148,752, was £3,005,166.

223. The import duties received both in 1888 and 1889 amounted to nearly 12 per cent. of the total value of imports. ||

224. The pilotage rates, formerly payable over to the Pilot Board, but latterly to the newly constituted Marine Board, amounted in 1888 to £37,034, and in 1889 to £38,752. These rates, although collected by the Customs, are not included in the Customs revenues.

* For full particulars see table following paragraph 153 *ante* ; also Appendix C, to Vol. II. of the *Victorian Year-Book*, 1888-9.

† Including the proportion of wharfage rates received from the Melbourne Harbor Trust, amounting to £43,834 in 1888, and to £46,223 in 1889.

‡ Including licences to sell and manufacture tobacco, returning £1,200 in each year.

§ The tonnage rate was 1s. per ton. It has, however, been reduced to 6d. since 1st January, 1890.

|| See also paragraph 347 *ante*.

225. The following is a statement of the total revenue and revenue per head received from the import and excise duty on spirits, wine, and beer, during the last $24\frac{1}{2}$ years:—

REVENUE FROM SPIRITS, WINE, AND BEER,* 1865 TO 1889.

Year.	Revenue received from—					Total Amount.	Amount per Head.		
	Import duties on—			Spirits distilled in Victoria.	Beer made in Victoria.				
	Spirits.	Wine.	Beer.						
	£	£	£	£	£	£	£	s.	d.
1865	503,346	46,509	34,847	16,821	...	601,523	0	19	8
1866	452,439	40,493	30,621	29,147	...	552,700	0	17	7
1867	596,294	40,886	31,474	28,603	...	697,257	1	1	8
1868	353,899	40,355	28,429	48,180	...	470,863	0	14	2
1869	445,220	38,250	28,170	43,176	...	554,816	0	16	2
1870	455,925	28,107	23,209	34,877	...	542,118	0	15	2
1871 (six months)	224,700	17,574	12,283	14,445	...	269,002	0	7	4
1871-2	476,408	34,890	26,723	32,479	...	570,500	0	15	3
1872-3	476,859	26,048	28,954	31,036	...	562,897	0	14	10
1873-4	501,044	32,235	32,729	32,869	...	598,877	0	15	6
1874-5	507,631	36,012	32,100	32,475	...	608,218	0	15	6
1875-6	520,557	37,716	27,096	33,437	...	618,806	0	15	8
1876-7	499,568	39,139	30,352	34,768	...	603,827	0	15	1
1877-8	489,236	37,893	29,346	36,309	...	592,784	0	14	6
1878-9	455,157	31,462	27,143	36,088	...	549,850	0	13	3
1879-80	420,872	34,095	27,372	41,230	...	523,569	0	12	5
1880-81	430,909	43,171	29,721	52,232	62,557	618,590	0	14	5
1881-2	443,431	45,112	29,770	52,620	98,955	669,888	0	15	3
1882-3	468,746	44,100	32,372	52,522	11,256	608,996	0	13	6
1883-4	472,259	39,096	33,845	53,638	...	598,838	0	12	11
1884-5	518,370	42,101	35,210	68,930	...	664,611	0	14	0
1885-6	545,170	41,086	37,904	67,250	...	691,410	0	14	2
1886-7	566,134	41,335	41,126	56,557	...	705,152	0	14	0
1887-8	611,256	44,688	46,047	65,603	...	767,594	0	14	9
1888-9	664,438	53,147	55,580	88,867	...	862,032	0	15	11

NOTE.—The duty on imported spirits is 12s. per gallon; on wine, 8s. for sparkling, and 6s. for other kinds; on beer, 9d. per gallon; and on spirits distilled in Victoria, from 8s. to 10s. per gallon, according to the material from which made.

Total and average receipts from spirits, wine, and beer.

226. The total amount received during the $24\frac{1}{2}$ years was £15,104,718, or an annual average of 15s. 3d. per head of the population. It will be noticed that the amounts per head vary from £1 1s. 8d. in 1867 to 12s. 5d. in 1879-80; also that the amount per head received in 1888-9 was 1s. 2d. more than in the preceding year, and more also than in any previous year since 1869.

Drawbacks.

227. The system of allowing drawbacks on the re-export of imported goods on which duty has been paid was first introduced in 1872.

* Exclusive of receipts for publicans' and other licences for the sale of fermented or spirituous liquors. These amount to about £110,000 per annum, nearly three-fourths of which is paid over to the municipalities. The approximate revenue from spirits, etc., in 1889-90 was £368,000.

Such re-exports are included in the returns of general exports. In 1889, as in the previous year, although the value of the goods was exceeded in several previous years, the amount paid as drawback was larger than in any previous year except 1885. This will be seen by the following figures:—

EXPORTS FOR DRAWBACK, 1872 TO 1889.

Year.	Value of Goods Exported for Drawback.	Amount Paid as Drawback.	Year.	Value of Goods Exported for Drawback.	Amount Paid as Drawback.
	£	£		£	£
1872 ...	461,559	29,083	1881 ...	725,957	92,412
1873 ...	522,752	43,685	1882 ...	784,806	93,414
1874 ...	753,033	62,895	1883 ...	765,342	95,241
1875 ...	831,799	79,055	1884 ...	863,163	113,087
1876 ...	832,292	81,915	1885 ...	934,620	122,342
1877 ...	854,509	87,021	1886 ...	748,135	114,646
1878 ...	573,454	69,168	1887 ...	791,871	115,938
1879 ...	493,816	59,933	1888 ...	743,394	116,479
1880 ...	606,055	68,018	1889 ...	845,065	119,404

228. Drawbacks are paid not only on goods exported in the same condition as when imported, but upon imported goods which have been subjected to some process of manufacture in Victoria. In 1889, goods to the value of £35,500, or 4 per cent. of the exports for drawback, had undergone some such process. The amount paid as drawback on such goods was £2,582, or 2 per cent. of the whole. The following are the goods referred to, also the values and amounts paid:—

Drawbacks on Victorian manufactured goods.

DRAWBACKS ON EXPORT OF GOODS MANUFACTURED IN VICTORIA FROM IMPORTED MATERIALS, 1889.

Articles.	Value.	Amount paid as Drawback.*
	£	£
Apparel and slops ...	26,782	2,081
Boots and shoes ...	922	19
Confectionery ...	1,408	32†
Jams and preserves ...	4,034	142
Paints ...	242	7
Paper bags ...	531	74
Rice (Victorian dressed) ...	277	66
Saddles and harness ...	1,132	135
Sugar (Victorian refined) ...	203	26†
Total ...	35,531	2,582

* Includes amounts paid on account of 1888.

† Approximate.

Stocks in
bond.

229. The following is a statement of the goods in the various bonded warehouses of the colony at the end of 1889. It is to be regretted that in so many instances the weight or quantity of the articles is not given, but merely the number of cases, bales, packages, etc., also that the values are not given :—

STOCKS IN BOND.

Article.	Quantity.
Brandy	4,176 hhds., 27,427 cases.
Rum	855½ hhds., 1,054 cases.
Geneva	11 hhds., 7,963 cases (4-gal.), 766 cases (2-gal.)
Gin, sweetened	46 hhds., 3,978 cases.
Whisky	4,270¾ hhds., 49,418 cases.
Cordials	1,574 cases.
Spirits of wine	188 casks.
Other spirits	2½ hhds., 6,490 cases.
Wine	2,311¾ hhds., 18,651 cases.
Beer	678 hhds., 37,977 cases and casks.
Tobacco, manufactured ...	20 half-tierces, 12 qr.-tierces, 9 kegs, 661 ¾-boxes and boxes, 5,114 cases.
„ unmanufactured ...	380 tierces, hhds., and casks, 978 cases, 601 bales, 602 boxes.
Cigars	1,599 cases.
Candles	489 chests and cases, 13 boxes.
Kerosene	79,337 cases.
Cocoa and chocolate ...	608 packages.
Coffee	1,483 bags, 109 tierces, 29 casks, 151 cases, 228 barrels.
Chicory	796 packages.
Opium	92 packages.
Oats	4,133 bags.
Hops	800 packages.
Rice	33,739 bags, 114 tons.
Salt	35,510 bags.
Vinegar	1,634 casks, 2,540 cases.
Tea	7,747 chests, 178,670 half-chests, 130,541 boxes.
Sugar, Mauritius	7,214 bags, 93 pockets.
„ other	12,925 bags, 1,517 mats.
„ refinery	345 tons.
„ Java	1,585 bags, 183 mats, 17,289 baskets.
„ cases and casks ...	1,345 No.

Vessels
inwards
and out-
wards.

230. The number and tonnage of vessels entering and leaving Victorian ports was greater in 1889 than in any former year. The excess over the preceding year was 387 vessels, or over 7 per cent., and 291,295 tons, or about 7 per cent. The following table contains a statement of the number, tonnage, and crews of vessels inwards and outwards during the twenty-two years ended with 1889 :—

VESSELS ENTERED AND CLEARED, 1868 TO 1889.

Year.	Vessels Entered.			Vessels Cleared.			Total Entered and Cleared.	
	Number.	Tons.	Men.	Number.	Tons.	Men.	Number.	Tons.
1868 ...	2,067	653,362	33,613	2,172	685,207	35,332	4,239	1,338,569
1869 ...	2,320	721,274	35,628	2,334	730,961	35,696	4,654	1,452,235
1870 ...	2,093	663,764	32,838	2,187	681,098	33,836	4,280	1,344,862
1871 ...	2,137	663,002	33,789	2,257	692,023	35,050	4,394	1,355,025
1872 ...	2,104	666,336	33,551	2,234	694,426	35,353	4,338	1,360,762
1873 ...	2,187	756,103	36,307	2,226	762,912	36,216	4,413	1,519,015
1874 ...	2,100	777,110	36,834	2,122	792,509	36,472	4,222	1,569,619
1875 ...	2,171	840,386	38,681	2,223	833,499	38,454	4,394	1,673,885
1876 ...	2,086	810,062	38,960	2,150	847,026	39,600	4,236	1,657,088
1877 ...	2,192	939,661	43,928	2,219	935,324	43,786	4,411	1,874,985
1878 ...	2,119	951,750	43,082	2,173	961,677	43,391	4,292	1,913,427
1879 ...	2,084	963,087	43,676	2,083	977,135	43,648	4,167	1,940,222
1880 ...	2,076	1,078,885	51,585	2,115	1,101,014	52,153	4,191	2,179,899
1881 ...	2,125	1,219,231	54,792	2,123	1,192,671	54,521	4,248	2,411,902
1882 ...	2,089	1,349,093	55,814	2,079	1,341,791	54,855	4,168	2,690,884
1883 ...	2,023	1,464,752	61,630	2,064	1,499,579	61,969	4,087	2,964,331
1884 ...	1,986	1,569,162	64,488	1,989	1,582,425	64,546	3,975	3,151,587
1885 ...	2,154	1,631,266	66,624	2,119	1,628,892	66,201	4,273	3,260,158
1886 ...	2,307	1,848,058	73,949	2,324	1,887,329	73,908	4,631	3,735,387
1887 ...	2,435	1,920,180	80,918	2,418	1,938,063	79,888	4,853	3,858,243
1888 ...	2,724	2,182,071	85,879	2,630	2,125,812	84,233	5,354	4,307,883
1889 ...	2,855	2,270,827	89,187	2,886	2,328,351	89,489	5,741	4,599,178

231. Some idea of the extension of Victorian commerce may be formed from the circumstance that, although the population of the colony increased by not quite 66 per cent. during the twenty-two years ended with 1889, the tonnage of vessels entered and cleared in the last as compared with the first year of that period increased more than threefold; also, that whilst the population in the nine years ended with 1889 increased only 27 per cent., the tonnage in 1889 as compared with that in 1880 more than doubled. Increase in shipping.

232. Of the vessels inwards and outwards during 1889, 77 per cent., embracing 52 per cent. of the tonnage, were Colonial; 15 per cent., embracing 36 per cent. of the tonnage, were British; and 8 per cent., embracing 12 per cent. of the tonnage, were Foreign. Of the crews entering and leaving Victorian ports in that year, 54 per cent. were attached to Colonial, 35 per cent. to British, and 11 per cent. to Foreign vessels. The following are the figures from which these proportions have been derived:— Nationality of vessels.

NATIONALITY OF VESSELS ENTERED AND CLEARED, 1889.

Nationality.	Vessels Entered.			Vessels Cleared.		
	Number.	Tons.	Men.	Number.	Tons.	Men.
Colonial ...	2,218	1,197,655	48,419	2,200	1,193,934	48,276
British ...	428	807,444	31,267	461	860,917	31,616
Foreign ...	209	265,728	9,501	225	273,500	9,597
Total ...	2,855	2,270,827	89,187	2,886	2,328,351	89,489

Foreign
vessels.

233. Of Foreign vessels visiting Victorian ports in the last three years, the greatest number have been German, the next Norwegian, the next American, the next French, and the next Swedish. The following are the nationalities of such vessels, the numbers entered and cleared of each nationality during 1889 being shown :—

FOREIGN VESSELS ENTERED AND CLEARED, 1889.

Country.	Vessels Entered.	Vessels Cleared.	Both.
Germany	76	75	151
Norway	34	52	86
United States	41	40	81
France	30	32	62
Sweden	16	15	31
Holland	3	2	5
Italy	2	3	5
Austria	2	1	3
Bolivia	1	1	2
Belgium	1	1	2
Denmark	1	1	2
Russia	1	1	2
Hawaii	1	1	2
Total	209	225	434

Crews, and
proportion
to tonnage.

234. The following figures show the proportion of crews to tonnage in Colonial, British, and Foreign vessels during the last five years. It will be observed that Colonial vessels are, numerically, the best manned, and Foreign vessels usually the worst. In 1887 and 1888 there was in this respect no difference between British and Foreign vessels. With reference to the comparatively small number of hands in Foreign vessels in former years, it will be remembered that, whilst most of the Colonial and many of the British vessels were steamers, until the French and German lines of steamers were running, most of the Foreign vessels were sailing vessels; and as steamers must have

one crew to attend to the engines and another to look after the sails and cargo, they necessarily carry more hands in the aggregate than sailing vessels :—

	1885.	1886.	1887.	1888.	1889.
Colonial vessels had 1 man to	23 tons	24 tons	23 tons	24 tons	25 tons
British „ „	26 „	26 „	25 „	27 „	27 „
Foreign „ „	28 „	29 „	25 „	27 „	28 „
All „ „	25 tons	25 tons	24 tons	25 tons	26 tons

235. The steamers and sailing vessels which entered and left Victorian ports in 1889, together with their tonnage and crews, were as follow :—

Steam and sailing vessels.

STEAMERS AND SAILING VESSELS ENTERED AND CLEARED, 1889.

Description of Vessels.	Vessels.	Tons.	Crews.
INWARDS.			
Steamers	2,090	1,772,897	79,479
Sailing vessels	765	497,930	9,708
Total	2,855	2,270,827	89,187
OUTWARDS.			
Steamers	2,084	1,790,931	79,693
Sailing vessels	802	537,420	9,796
Total	2,886	2,328,351	89,489

236. By means of the figures in the foregoing table, it is ascertained that, whilst steamers had one man to every 22 tons, sailing vessels had but one man to every 53 tons.

Crews in steam and sailing vessels.

237. Ninety-six per cent. of the vessels, embracing 99 per cent. of the tonnage, in 1889, arrived with cargoes. In the same year 62 per cent. of the vessels, embracing 68 per cent. of the tonnage, left with cargoes. The latter proportion has shown a gradual falling-off since 1884, when as many as 81 per cent. of the vessels, embracing 85 per cent. of the tonnage, left with cargoes. The following are the numbers and percentages of the vessels and of their tonnage which arrived and departed with cargoes and in ballast during the year :—

Vessels with cargoes and in ballast.

VESSELS WITH CARGOES AND IN BALLAST, 1889.

State of Vessels.	Vessels.		Tons.	
	Number.	Percentage.	Number.	Percentage.
INWARDS.				
With cargoes ...	2,751	96·36	2,254,242	99·27
In ballast ...	104	3·64	16,585	·73
Total ...	2,855	100·00	2,270,827	100·00
OUTWARDS.				
With cargoes ...	1,798	62·30	1,593,586	68·44
In ballast ...	1,088	37·70	734,765	31·56
Total ...	2,886	100·00	2,328,351	100·00

Vessels at
each port.

238. In the same year, 74 per cent. of the vessels inwards, embracing 92 per cent. of the tonnage, were entered at Melbourne, and 76 per cent. of the vessels outwards, embracing 93 per cent. of the tonnage, were cleared at the same port. Next to Melbourne, the largest number of vessels was entered and cleared at Mildura, Echuca, and Swan Hill, on the River Murray, but the largest amount of tonnage was that of vessels entered and cleared at Geelong. The following table shows the number and tonnage of vessels entered and cleared at each port in Victoria during the year :—

SHIPPING AT EACH PORT, 1889.

Ports.	Inwards.		Outwards.	
	Vessels.	Tons.	Vessels.	Tons.
Melbourne ...	2,126	2,082,044	2,199	2,168,977
Geelong ...	147	111,513	121	81,054
Portland ...	15	5,642	17	9,631
Port Fairy ...	9	628	9	2,474
Warrnambool ...	24	6,829	17	5,122
Bairnsdale ...	1	59	1	57
Murray ports—				
Mildura ...	195	13,444	193	13,125
Echuca ..	177	27,858	168	25,101
Swan Hill ...	161	22,810	161	22,810
Total ...	2,855	2,270,827	2,886	2,328,351

Shipping at
Murray
ports.

239. Taking the Murray ports as a whole, it will be observed that 1,055 vessels, or over a sixth of the total number, were entered and cleared thereat; but the burden of these vessels amounted in the aggregate to only 125,148 tons, or a thirty-seventh part of the total tonnage entered and cleared.

240. The following table shows the number and tonnage of vessels entered and cleared in each Australasian colony during the years named * :—

Shipping in
Austral-
asian
colonies.

SHIPPING IN AUSTRALASIAN COLONIES.

Colony.	Year.	Inwards.		Outwards.		Both.	
		Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Victoria	1874	2,100	777,110	2,122	792,509	4,222	1,569,619
	1878	2,119	951,750	2,173	961,677	4,292	1,913,427
	1882	2,089	1,349,093	2,079	1,341,791	4,168	2,690,884
	1883	2,023	1,464,752	2,064	1,499,579	4,087	2,964,331
	1884	1,986	1,569,162	1,989	1,582,425	3,975	3,151,587
	1885	2,154	1,631,266	2,119	1,628,892	4,273	3,260,158
	1886	2,307	1,848,058	2,324	1,887,329	4,631	3,735,387
	1887	2,435	1,920,180	2,418	1,938,063	4,853	3,858,243
	1888	2,724	2,182,071	2,630	2,125,812	5,354	4,307,883
New South Wales†	1874	2,217	1,016,369	2,168	974,525	4,385	1,990,894
	1878	2,469	1,267,374	2,307	1,192,130	4,776	2,459,504
	1882	2,437	1,686,620	2,340	1,610,045	4,777	3,296,665
	1883	2,587	1,935,189	2,774	2,071,048	5,361	4,006,237
	1884	2,935	2,284,517	3,010	2,376,441	5,945	4,660,958
	1885	2,601	2,088,307	2,583	2,044,770	5,184	4,133,077
	1886	2,684	2,114,618	2,755	2,143,986	5,439	4,258,604
	1887	2,815	2,142,457	2,906	2,180,301	5,721	4,322,758
	1888	2,955	2,414,750	2,972	2,350,669	5,927	4,765,419
Queensland‡	1874	713	302,825	657	269,925	1,370	572,750
	1878	1,111	541,850	1,117	524,908	2,228	1,066,758
	1882	1,492	962,600	1,467	917,991	2,959	1,880,591
	1883	936	455,985	867	426,506	1,803	882,491
	1884	1,042	572,124	1,061	579,988	2,103	1,152,112
	1885	920	496,277	967	532,904	1,887	1,029,181
	1886	918	557,026	977	563,453	1,895	1,120,479
	1887	838	468,180	879	456,052	1,717	924,232
	1888	928	478,517	936	517,712	1,864	996,229
South Australia ...	1874	720	265,899	720	268,651	1,440	534,550
	1878	1,026	452,738	1,035	453,535	2,061	906,273
	1882	1,113	675,441	1,099	661,777	2,212	1,337,218
	1883	1,062	748,926	1,074	755,839	2,136	1,504,765
	1884	1,120	909,335	1,111	925,197	2,231	1,834,532
	1885	1,072	893,092	1,091	913,950	2,163	1,807,042
	1886	859	770,922	878	787,554	1,737	1,558,476
	1887	907	841,422	905	836,461	1,812	1,677,883
	1888	969	973,479	1,019	1,000,172	1,988	1,973,651

* For later information, and information respecting other years, see Appendix A. *post*, and third folding sheet *ante*.

† In consequence of vessels with cargoes on board which call at Sydney and Newcastle being counted at both ports, the earlier figures for New South Wales somewhat overstate the truth. It is understood that this practice has been discontinued since 1884.

‡ The figures of Queensland for the last six years named are not comparable with those for previous years, inasmuch as since 1882 the ships arriving from abroad and calling at several ports of the colony have been counted at one port, viz., the final port of arrival and departure, instead of at each port, as in previous years.

SHIPPING IN AUSTRALASIAN COLONIES—continued.

Colony.	Year.	Inwards.		Outwards.		Both.	
		Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Western Australia	1874	144	65,351	153	67,476	297	132,827
	1878	155	80,655	161	82,098	316	162,753
	1882	202	172,698	201	171,549	403	344,247
	1883	219	194,273	212	194,829	431	389,102
	1884	231	227,881	211	215,005	442	442,886
	1885	232	231,761	229	236,274	461	468,035
	1886	287	260,286	255	237,222	542	497,508
	1887	255	249,813	185	214,824	440	464,637
	1888	263	402,807	266	409,586	529	812,393
Tasmania	1874	607	119,706	620	119,801	1,227	239,507
	1878	693	159,063	688	156,791	1,381	315,854
	1882	733	208,934	718	208,484	1,451	417,418
	1883	657	230,092	648	241,630	1,305	471,722
	1884	676	304,574	664	309,624	1,340	614,198
	1885	689	342,745	669	335,061	1,358	677,806
	1886	690	343,656	715	348,773	1,405	692,429
	1887	677	360,404	714	374,895	1,391	735,299
	1888	770	385,650	795	390,628	1,565	776,278
New Zealand	1874	856	399,296	822	385,533	1,678	784,829
	1878	926	456,490	886	428,493	1,812	884,983
	1882	795	461,285	769	438,551	1,564	899,836
	1883	805	494,926	851	507,565	1,656	1,002,491
	1884	852	529,188	872	534,242	1,724	1,063,430
	1885	786	519,700	780	513,000	1,566	1,032,700
	1886	725	502,572	707	488,331	1,432	990,903
	1887	653	489,754	675	493,583	1,328	983,337
	1888	683	526,435	701	531,478	1,384	1,057,913

Shipping in colonies in 1888 and former years.

241. It will be noticed that in all the colonies except Queensland and New Zealand, the tonnage of vessels inwards and outwards was greater in the last than in any other year named, but a falling-off, as compared with some previous years, took place in the last-named colonies. The increase in the case of Western Australia was especially noticeable. In consequence mainly of the larger size of the vessels now employed in the Australian trade, the number of vessels in all the colonies, except Victoria and Tasmania, was exceeded in some of the years.

Order of colonies in respect to shipping.

242. The vessels trading to New South Wales exceed those to Victoria, both in number and aggregate tonnage, which is no doubt chiefly owing to the large amount of shipping engaged in the coal trade of the former colony, but also to the fact that the mail steamers coming from the westward now go on from Melbourne to Sydney, whilst the San Francisco mail steamers do not come on from Sydney

to Melbourne ; but, with this exception, Victoria is in advance of all the Australasian colonies. The following is the order in which the colonies stand in regard to the amount of shipping trading to and from their ports in the last year named in the table. The ships stand in the same order in regard to their numbers as they do in regard to their tonnage, except in the case of New Zealand and Queensland, and of Western Australia and Tasmania, which respectively change places:—

ORDER OF COLONIES IN REFERENCE TO TONNAGE OF SHIPPING
ENTERED AND CLEARED, 1888.

1. New South Wales.

2. Victoria.

3. South Australia.

4. New Zealand.
5. Queensland.

6. Western Australia.

7. Tasmania.

243. The number and tonnage of the vessels entered at and cleared from the ports of the colonies situated upon the Australian continent taken as a whole, and of those colonies with the addition of Tasmania and New Zealand, are given in the following table for the years named:—

Shipping in
Australia
and Aus-
tralasia.

SHIPPING* IN AUSTRALIA AND AUSTRALASIA.

Year.	Vessels Entered and Cleared in—			
	Australia.		Australia with Tasmania and New Zealand.	
	Number.	Tons.	Number.	Tons.
1874 ...	11,714	4,800,640	14,619	5,824,976
1878 ...	13,673	6,508,715	16,866	7,709,552
1882 ...	14,519	9,549,605	17,534	10,866,859
1883 ...	13,818	9,746,926	16,779	11,221,139
1884 ...	14,696	11,242,075	17,760	12,919,703
1885 ...	13,968	10,697,493	16,892	12,407,999
1886 ...	14,244	11,170,454	17,081	12,853,786
1887 ...	14,543	11,247,753	17,262	12,966,389
1888 ...	15,662	12,855,575	18,611	14,689,766

244. An increase in the aggregate tonnage of the vessels trading to the Australasian colonies is usually observable from year to year. Both as regards the Australian continent and that continent combined with Tasmania and New Zealand the number and tonnage of vessels were larger in 1888 than in any of the years named.

Increase in
tonnage
and vessels
to Australia
and Aus-
tralasia.

* Including vessels engaged in the intercolonial trade, but not those engaged in the coasting trade of any particular colony.

Shipping in
British
possessions.

245. The following is the tonnage of vessels entered at and cleared from British possessions throughout the world in the year 1888. The information is derived entirely from official documents :—

SHIPPING IN BRITISH POSSESSIONS, 1888.
(Exclusive of Coasting Trade.)

Country or Colony.	Burden of Vessels Entered and Cleared.	Country or Colony.	Burden of Vessels Entered and Cleared.
EUROPE.	Tons.	AMERICA—continued.	Tons.
United Kingdom* ...	68,519,145	British Guiana ...	558,274
Gibraltar ...	11,986,032	West Indies—	
Malta ...	10,545,957	Bahamas ...	198,478
		Turk's Island ...	193,078
ASIA.		Jamaica ...	1,084,657
India ...	7,189,465	St. Lucia ...	504,074
Ceylon ...	4,453,418	St. Vincent ...	239,157
Straits Settlements ...	8,136,605	Barbados ...	1,126,335
Labuan ...	74,930	Grenada ...	329,636
Hong Kong ...	9,006,677	Tobago ...	111,992
		Virgin Islands ...	9,122
AFRICA.		St. Christopher ...	} 410,941
Mauritius ...	622,344	Nevis ...	
Natal ...	727,057	Dominica ...	274,471
Cape of Good Hope ...	2,080,677	Montserrat ...	313,344
St. Helena ...	127,163	Antigua ...	366,489
Lagos ...	525,857	Trinidad ...	1,271,383
Gold Coast ...	560,025		
Sierra Leone ...	517,681	AUSTRALASIA AND SOUTH	
Gambia ...	193,511	SEAS.	
AMERICA.		Australia, Tasmania, and	14,689,766
Canada ...	9,197,803	New Zealand†	
Newfoundland ...	596,528	Fiji ...	101,127
Bermuda ...	228,385	Falkland Islands ...	54,960
Honduras ...	253,152	Total ...	157,379,696

Shipping
compared
with that
of other
British
possessions.

246. The tonnage of vessels trading to Victoria exceeds that to any British possession outside Australasia except the United Kingdom, Gibraltar, Malta, India, Ceylon, the Straits Settlements, Hong Kong, and Canada. Excluding the United Kingdom, the tonnage to Australasia far exceeds that to any other British possession, being more than half as much again as that to Canada, and twice as much as that to India.

Shipping in
Foreign
countries.

247. In the next table a statement is given of the tonnage of vessels trading to the principal Foreign countries, by means of which and the previous table it will be seen that in Austria, France, Germany, Russia

* The coasting trade in addition amounted to 89,500,000 tons. In 1889 the tonnage entered and cleared was 71,889,895 tons.

† Including vessels engaged in the intercolonial trade. For figures relating to each Australasian colony, see table following paragraph 240 ante.

(slightly), Spain, and the United States, the tonnage is greater than in Australasia.. The information has been derived from the most reliable sources available :—

SHIPPING IN FOREIGN COUNTRIES, 1888.

Country.	Inwards.	Outwards.	Both.
	Tons.	Tons.	Tons.
Argentine Confederation ...	4,885,777	4,319,439	9,205,216
Austria* ...	7,545,655	7,536,882	15,082,537
Belgium ...	4,912,601	4,907,498	9,820,099
Chile ...	2,073,902	1,811,453	3,885,355
China ...	2,820,262	2,775,664	5,595,926
Denmark ...	3,379,336	3,368,618	6,747,954
France ...	14,032,567	14,459,098	28,491,665
Germany ...	9,441,813	9,434,353	18,876,166
Holland ...	5,108,164	5,093,169	10,201,333
Italy ...	6,669,236	6,401,017	13,070,253
Japan† ...	1,338,570	1,336,590	2,675,160
Portugal ...	3,958,245	3,919,715	7,877,960
Russia in Europe ...	7,413,144	7,370,954	14,784,098
Spain ...	11,443,457	10,880,251	22,323,708
Sweden ...	5,022,278	4,982,587	10,004,865
Norway ...	2,303,225	2,422,056	4,725,281
United States (30th June)‡ ...	12,956,159	13,252,197	26,208,356
Uruguay ...	1,624,928	1,589,546	3,214,474
Total ...	106,929,319	105,861,087	212,790,406

248. Two vessels were built in Victoria during the year 1889. These were small, their aggregate burden being only 89 tons. The vessels registered numbered 25, of an average burden of 391 tons. The following were the classes and sizes of the vessels :—

VESSELS BUILT AND REGISTERED, 1889.

Vessels Built.			Vessels Registered.			
Description.	No.	Tons.	Description.	No.	Tons.	Men.
Steamers ...	1	44	Steamers ...	10	5,729	139
Sailing vessels ...	1	45	Barques ...	3	2,073	31
			Brig ...	1	232	2
			Schooner ...	1	61	6
			Ketches ...	3	147	11
			Cutter ...	1	23	4
			Hopper Barges ...	3	779	3
			Steam Dredge ...	1	363	10
			Steam Hopper Barge	2	366	4
Total ...	2	89	Total ...	25	9,773	210

* Including coasting trade, exclusive of Hungary.

† The tonnage of Japanese vessels is that of vessels of foreign type only.

‡ Exclusive of the Lake trade between the United States and Canada.

249. The vessels on the Victorian register, and, therefore, presumably Victorian owned, were as follow on the 31st December, 1889, the ports of their registration being distinguished:—

VESSELS OWNED IN VICTORIA, 1889.

Port.	Steamers.		Sailing Vessels.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
Melbourne	129	38,437	259	45,424	388	83,861
Geelong ... ..	...	...	4	358	4	358
Port Fairy	3	303	3	72	6	375
Portland	1	328	1	22	2	350
Warrnambool... ..	1	344	...	...	1	344
Total	134	39,412	267	45,876	401	85,288

250. The following is a statement of the number and net tonnage of vessels on the registers of all the Australasian colonies and Fiji on the 30th June, 1890* :—

VESSELS OWNED IN AUSTRALASIAN COLONIES, 30TH JUNE, 1890.

Colony.	Steamers.		Sailing Vessels.		Total.	
	Number.	Tons.	Number.	Tons.	Number.	Tons.
Victoria	134	38,930	269	42,701	403	81,631
New South Wales	496	52,606	607	72,101	1,103	124,707
Queensland	93	12,101	104	9,877	197	21,978
South Anstralia	92	10,688	231	26,272	323	36,960
Western Australia	6	682	108	4,993	114	5,675
Tasmania	45	6,223	171	12,338	216	18,561
New Zealand	173	33,841	345	33,031	518	66,872
Total	1,039	155,071	1,835	201,313	2,874	356,384
Fiji ... ..	...	...	13	579	13	579

251. The next table † shows the tonnage and estimated value of British, Colonial, and Foreign owned vessels which entered the Port of Melbourne during the year 1885 :—

* Figures kindly furnished by the Merchant Shipping and Underwriters' Association Limited.
† Compiled in the Department of Trade and Customs.

VALUE OF BRITISH, COLONIAL, AND FOREIGN VESSELS TRADING TO
PORT OF MELBOURNE, 1885.

Ownership of Vessels.				Tons.	Estimated Value.
					£
British	...	...	...	614,371	15,422,040
Colonial	..	...	...	695,502	20,071,330
Foreign	...	...	...	203,691	4,462,680
Total	...	...	...	1,513,564 *	39,956,050

252. The licences issued in 1889 to lighters numbered 80, and to boats 528. The former were to be employed in the conveyance of goods, and the latter for ferry, passengers, and other purposes. Lighters and boats.

253. An Act† for the establishment of a Harbor Trust for the Port of Melbourne was passed in 1876, and came into force on the 1st January, 1877. This Statute was afterwards amended by an Act‡ which came into operation in April, 1883. Melbourne Harbor Trust.

254. To carry out the more important of the designs of the Harbor Trust, the services of Sir John Coode, C.E., were secured from England, and this eminent engineer submitted a general and comprehensive scheme for the permanent improvement of the port. For the purpose of enabling vessels of a large class to come to Melbourne, he recommended that the channel of the River Yarra be widened and deepened throughout, with the exception of a portion called the Fisherman's Bend, and that this should be avoided by cutting through the bank a deep water canal which re-unites with the river lower down. This materially straightens the river's course, and reduces the distance from the wharves at Melbourne to its mouth from $7\frac{3}{4}$ to $6\frac{3}{4}$ miles. It was originally estimated that the quantity of dredgings it would be necessary to remove from the river for this purpose would amount to 4,194,130 cubic yards, and the quantity of earth to be excavated to 1,597,079 cubic yards, making a total of 5,791,209 cubic yards, which would be available for raising the low-lying lands bordering upon the river, as also would a further quantity of silt and earth, estimated at about 6,000,000 cubic yards Harbour Improvements recommended.

* This represented over 92 per cent. of the tonnage of vessels trading to Victoria.

† *The Melbourne Harbor Trust Act 1876* (40 Vict. No. 552).

‡ *The Melbourne Harbor Trust Amendment Act 1883* (46 Vict. No. 749).

to be raised from the Bay, which it was proposed in parts to deepen extensively by dredging. Sir John Coode's scheme also contemplates the construction of a dock at Melbourne, admitting of extension by the formation of additional basins if required.

Fisherman's
Bend
cutting.

255. The canal at Fisherman's Bend is of a total length of 6,006 feet, or 1 mile and 11 chains, having a total width at the upper level of the paved slope of 308 feet, a surface width at low water of 266 feet, a depth at low water of 20 feet and at high water of 22 feet, and a width in bottom of 146 feet. The work was first commenced on the 31st March, 1880, and was carried on by either the Trust or the Government—the latter of which required material for raising low-lying lands—until the 19th February, 1884, when the Trust accepted a contract for the completion of the work (excepting a length of 400 feet at each end) within 18 months at a cost of £65,060. This contract, however, was not completed until August, 1886, on the 11th of which month the ceremony of letting the water into the canal was performed by His Excellency the Governor. The canal was finally opened for the passage of vessels on the 27th July, 1887.

Excava-
tions, etc.,
and cost of
canal.

256. The total quantity of excavation made in constructing the canal was 1,325,000 cubic yards, and 200,000 cubic yards more in opening the ends, or 1,525,000 cubic yards in all. Moreover, 24,750 tons of stone pitching, covering a surface of 45,000 square yards, were used upon the slopes; there were also used 19,000 lineal feet of timber piles in rings, and 40,000 feet of sawn red-gum timber in sheet piling. The total cost of the cutting was £96,000.

Total cost of
works
recom-
mended.

257. The estimated total cost of the works recommended by Sir John Coode, including a fair margin for contingencies and superintendence, is, if the river be deepened to 20 feet, £1,163,200; or, if it be deepened to 25 feet, £1,246,000. At present, vessels of 1,500 tons, drawing 19 feet 6 inches, commonly get to the Melbourne wharves at ordinary tides, and those drawing over 20 feet at spring tides; whilst one steamer, in 1889, came to the wharf, drawing as much as 21 feet 8 inches. The depth of the river has been altogether increased by 6 feet since the formation of the Trust, and the minimum depth at low water spring tides is now 19 feet in a channel 180 feet wide.

Dredges.

258. In 1889, the Trust possessed twelve dredges, seven of which are able to lift 600, 280, 280, 170, 170, 170, and 150 tons of silt per

hour respectively. The latest addition was the dredge *Willunga*, capable of lifting 150 tons of silt per hour, which was purchased in 1889 from the South Australian Government. One of the dredges in the possession of the Trust, *The Melbourne*, has, probably, the largest dredging capacity of any dredge existing, but not being a hopper dredge, is not the largest in size. The length of this dredge is 151 feet; its burden 356 tons; it has two pairs of engines each of 90 horse power nominal, but capable, when combined, of working up to 500 horse power; each of the 38 buckets has a capacity of 21 cubic feet; and the dredge can, under ordinary circumstances, lift about 600 tons per hour from a depth of 35 feet; it has twin screws and can steam 7 knots per hour; besides the main engines, it has 8 subsidiary engines for performing work which in other dredges is done by the main engine. This dredge, which arrived in the colony on the 5th November, 1885, was constructed by Messrs. W. Simons and Company, of Renfrew, Scotland, at a cost of £31,250.*

259. The total quantity of dredgings actually raised in 1889 amounted to 1,976,541 cubic yards, viz., 279,060 cubic yards from the Bay, and 1,697,481 from the River. Since the establishment of the Trust the River dredgings have amounted to 8,557,453 cubic yards, and the Bay dredgings to 4,293,388 cubic yards, together making a total of 12,850,841 cubic yards. Of the dredgings, 6,892,275 cubic yards were deposited at sea, and 5,958,566 cubic yards were landed for roads and reclamation works. The average cost of dredging in 1889 was 4·15d. per cubic yard, and the average cost of landing silt was 15·60d. per cubic yard.

260. The following is a brief summary of the cost of improvements (exclusive of maintenance) completed and in progress at the end of 1889 :—

				Cost to 31st December, 1889.
Wharves and approaches ...	...	...	...	£796,681
Harbor improvements ...	...	...	..	266,507
Reclamations ...	...	...	...	93,542
Dredging and disposal of silt ...	...	...	...	444,943
Plant ...	...	...	...	524,572

261. The following figures show the number of post offices throughout the colony, and the number of letters, packets, and newspapers which passed through them in the last two years :—

* In addition to the dredges here mentioned, a dredge capable of lifting 280 tons of silt per hour, belonging to the Otago Harbor Board, was chartered for 12 months, from the 9th September, 1889.

POSTAL RETURNS,* 1888 AND 1889.

Year.	Number of Post Offices.	Number Despatched and Received of—			
		Letters.†	Newspapers.	Packets and Parcels.	Total.
1888 ...	1,585	47,700,776	21,702,876	9,090,362	78,494,014
1889 ...	1,640	48,097,268	20,662,732	6,959,508	75,719,508
Increase	55	396,492	...	...	...
Decrease	...	...	1,040,144	2,130,854	2,774,506

Falling-off in correspondence explained.

262. In consequence of the International Exhibition having caused a large increase in the number of letters, newspapers and packets sent through the post in 1888, the newspapers and packets in 1889 show a serious falling-off, whilst the letters show only a small increase, as compared with the numbers in the former year. The three items combined show a falling-off of $2\frac{3}{4}$ millions.

Proportion of letters per head.

263. The letters despatched and received in proportion to each head of population were 45 in 1888, and $43\frac{1}{2}$ in 1889.

Registered letters.

264. The number of registered letters in 1889 was 849,827, or 1 in 56 of all the letters posted, as compared with 823,029, or 1 in 57, in the previous year.

Dead letters, etc.

265. The dead and irregularly-posted letters numbered, in 1888, 378,624 or 1 in every 107; and in 1889, 473,231, or about 1 in every 102 of the total number posted. In the former year 3,893, and in the latter year 3,783, contained articles of value. The total value of notes, cheques, cash, etc., included, in 1888, was £34,543, for £33,147 of which, or 96 per cent., owners were found during the year; and in 1889, £26,718, for £25,796 of which, or 97 per cent., owners were found. In 1888, 11,288, or 1 in every 4,226 letters posted, and in 1889, 12,646, or 1 in every 3,803, were without addresses or were imperfectly addressed. Of these, 414 in 1888, and 379 in 1889, were envelopes without correspondence, covering cash, cheques, etc., to the value of over £7,000 and £5,500 respectively. Fifty-one letters in 1888, but only 7 letters in 1889 bore obscene or libellous addresses, and were detained for that reason. In 1888, 3,122 letters, and in 1889, 4,264 letters, were refused by the persons to whom addressed, chiefly

* The paragraphs relating to postal matters have been revised under the direction of Mr. J. Smibert, the Deputy Postmaster-General.

† Including post cards. These were first issued on the 1st April, 1876. The number issued was 3,573,180 in 1888, and 3,611,334 in 1889.

on account of postal charges, which were, however, subsequently recovered in most cases from the senders. In compliance with the provisions of the *Post Office Act* 1883, 2,639 letters in 1888, and 4,016 in 1889, having been unclaimed at hotels to which they were addressed, were forwarded to the Dead Letter Office. Under the powers given by the same Act, 39 letters in 1888, and 7 letters in 1889, intended for promoters of lotteries, etc., were detained during the year. Ten letters in 1888 and 19 letters in 1889, bore obliterated or defaced stamps. Besides letters, packets and newspapers were received at the Dead Letter Office during the year 1889; most of the former were returned, delivered, etc., but most of the latter were destroyed.

266. The dead and irregularly-posted letters were dealt with as follow in the two years : —

Disposal
of dead
letters.

DISPOSAL OF DEAD AND IRREGULARLY-POSTED LETTERS,
1888 AND 1889.

			1888.		1889.
Returned, delivered, etc.	...	...	356,115	...	445,853
Destroyed or on hand	...	...	22,509	...	27,378
Total	...	...	378,624	...	473,231

267. Of the total number of letters, newspapers, and packets which passed through the Victorian Post Office in 1889, 79 per cent. were posted for delivery within the colony, 13 per cent. were despatched for or received from the neighbouring colonies, and 8 per cent. were despatched for or received from British or Foreign countries. The following table shows the number under each of these heads :—

Inland and
Foreign
corre-
spondence.

INLAND, INTERCOLONIAL, AND FOREIGN CORRESPONDENCE, 1888.

Nature of Correspondence.	Inland (Posted.)	Intercolonial.		British and Foreign.	
		Despatched.	Received.	Despatched.	Received.
Letters and Post Cards	40,515,531	2,546,122	3,110,613	914,741	1,010,261
Newspapers ...	13,853,256	1,693,211	1,983,979	1,115,079	2,017,207
Packets ...	5,355,462	413,359	498,889	106,509	585,289
Total ...	59,724,249	4,652,692	5,593,481	2,136,329	3,612,757

268. Within the colony of Victoria, on the 1st January, 1890, the postage on letters was reduced from 2d. to 1d. per $\frac{1}{2}$ oz. or fraction thereof; whilst to the other Australasian colonies it remains at 2d. per oz. To the United Kingdom, *viâ* Italy, France, or America, or to any country on the continent of Europe, the postage on letters is now 6d. per $\frac{1}{2}$ oz. or fraction thereof, but to the United Kingdom by

Rates of
postage.

the long sea route the rate is only 4d. per $\frac{1}{2}$ oz. Post cards available for transmission to places within Victoria, also, since the 1st July, 1887, to places in every other Australasian colony, except New Zealand and Fiji, are issued at 1d. each, but to frank such post cards to the two colonies named it is necessary to affix thereon a penny stamp. The postage on newspapers is $\frac{1}{2}$ d. to places in Victoria or any of the other Australasian colonies, and 1d. to the United Kingdom.

269. The postal returns of the various Australasian colonies during the year 1888 are given in the following table :—

Postal Returns of Australasian Colonies, 1888.*

Colony.	Number of Post Offices.	Letters Despatched and Received.		Newspapers Despatched and Received.	
		Total Number.	Number per Head.	Total Number.	Number per Head.
Victoria ...	1,585	47,700,776	44·91	21,702,876	20·43
New South Wales ..	1,203	48,986,000	46·03	33,755,400	31·72
Queensland ...	766	12,897,102	34·19	10,347,451	27·43
South Australia ...	594	17,012,577	53·52	7,884,453	24·83
Western Australia ...	78	2,104,500	49·74	1,545,327	36·52
Total ...	4,226	128,700,955	44·94	75,235,507	26·27
Tasmania ...	278	4,716,244	32·68	4,319,394	29·93
New Zealand ...	1,145	42,052,117	69·47	16,202,849	26·77
Grand Total ...	5,649	175,469,316	48·56	95,757,750	26·50

270. Although the letters despatched and received in New South Wales exceed those in Victoria by nearly 3 per cent., the post offices in the latter exceed those in the former by 382, or nearly a fourth. Indeed, Victoria, so far as the establishment of post offices is concerned, appears to afford much greater facilities to correspondents than any other colony in the group. This is made plain by the following figures :—

Victoria has a post office to every 55 square miles.			
New Zealand	„	91	„
Tasmania	„	95	„
New South Wales	„	257	„
Queensland	„	872	„
South Australia	„	1,521	„
Western Australia	„	12,512	„

271. In regard to the number of letters per head, Victoria stands above Tasmania and Queensland, but below all the other colonies ; but in regard to newspapers per head, Victoria is very much below any

* For later information, see Appendix A. post.

of the others which furnish the information. The following is the position of the colonies in these respects :—

ORDER OF THE COLONIES IN REFERENCE TO PROPORTION OF LETTERS AND NEWSPAPERS TO THE POPULATION.

Order according to Letters per Head.	Order according to Newspapers per Head.
1. New Zealand.	1. Western Australia.
2. South Australia.	2. Tasmania.
3. Western Australia.	3. Queensland.
4. New South Wales.	4. New Zealand.
5. Victoria.	5. South Australia.
6. Queensland.	6. Victoria.
7. Tasmania.	

272. In making the returns of newspapers despatched and received, it is probable that some of the neighbouring colonies have included packets, and this may to a certain extent account for the extremely low position Victoria occupies in regard to the number per head. Should packets be combined with newspapers in the Victorian returns, the total number in 1888 would be 30,800,000, or nearly 29 per head, which proportion is higher than in any of the other colonies, for which the particulars are available, except New Zealand and Tasmania. It may be remarked, moreover, that in consequence of the facilities existing in Victoria for communication with the interior by means of railways, newspapers are to a large extent transmitted by rail in parcels, in preference to being posted. It must also be remembered that in this colony there is a postage fee on newspapers, whereas, subject to certain exceptions and restrictions, newspapers posted in New South Wales, Queensland, and Tasmania, for places within the Australasian colonies, and in Western Australia for places within its own boundaries, are carried free. The fact of a fee being charged no doubt acts as a check on the posting of newspapers, and is probably the chief reason why the number here compares unfavourably with the numbers in those colonies in which they are carried free of charge.

Small number of newspapers posted in Victoria.

273. The following are the postal returns of the United Kingdom for the year 1888-9 :—

Postal returns of United Kingdom.

POSTAL RETURNS OF THE UNITED KINGDOM, 1888-9.

Country.	Millions delivered in 1888-9 of—		
	Letters.	Newspapers and Packets.	Total.
England and Wales ...	1,326½,	471,	1,797½,
Scotland ...	136,	57,	193,
Ireland ...	95½,	36,	131½,
Total United Kingdom	1,558,†	564,	2,122,

* The postal year referred to commenced with the second quarter of 1888, and ended with the first quarter of 1889.

† Exclusive of 201 millions of post cards.

Proportion
of letters to
population
of United
Kingdom.

274. Per head of population, 46·33 letters (exclusive of post cards) were delivered in England and Wales, 33·71 in Scotland, and 19·93 in Ireland, during 1888-9. Taking the United Kingdom as a whole, the letters delivered in that year were in the proportion of 41·61 to each inhabitant, or with post cards, in the proportion of 46·99 to each inhabitant.

Letters per
head in
various
countries

275. By the following table, showing the number of letters per head in the principal countries in the world, it appears that Australasia, in regard to the extent of her correspondence, heads the list with a proportion slightly higher than that in Great Britain, but more than twice as high as that in any other country named—except Switzerland :—

LETTERS PER HEAD IN VARIOUS COUNTRIES, 1884-5.*

Country.	Number of Letters† per Head.	Country.	Number of Letters† per Head.
Australasia ... (1888)	48·6	Algeria ...	3·3
United Kingdom (1888-9)	47·0	Argentine Republic ...	3·3
Switzerland ...	29·5	Brazil ...	3·0
United States ...	21·8	Uruguay ...	2·4
Belgium ...	21·1	Roumania ...	2·1
Germany ...	19·3	Japan ...	2·0
Holland ...	18·8	Greece ...	2·0
Luxemburg ...	17·5	Finland ...	1·9
France ...	16·7	Peru ...	1·8
Denmark ...	16·0	Russia ...	1·7
Canada ... (1887)	15·2	Egypt ...	·8
Austria-Hungary ...	10·7	British India ...	·7
Norway ...	9·3	Servia ...	·7
Sweden ...	9·2	Bulgaria ...	·6
Italy ...	5·3	Mexico ...	·4
Spain ...	5·0	Turkey ...	·4
Hawaii ...	4·8	Netherlands-India ...	·2
Chile ...	4·5	Columbia ...	·2
Portugal ...	4·2	Persia ...	·05

New mail
Contracts.

276. The contract entered into between Victoria and the Peninsular and Oriental Company for the conveyance of fortnightly mails between Melbourne and Ceylon having expired on the 31st January, 1888, arrangements were made by the British Postal authorities, with the concurrence of Victoria, New South Wales, and South Australia, for the performance of a weekly service for a period of seven years, by

* The figures, except those for Australasia, the United Kingdom, and Canada, have been taken from the *Almanach de Gotha*, 1887, page 1063, Justus Perthes, Gotha.
† Including post cards in the case of Australasia and the United Kingdom, but it is not stated whether post cards are included in the other countries.

means of alternate fortnightly voyages by vessels of the Peninsular and Oriental and Orient Companies, between Adelaide and Brindisi in the former case, and Adelaide and Naples in the latter. The total annual subsidy was fixed at £85,000 to each company, or £175,000 in all, of which £95,000 is to be contributed by the Imperial Government, and £75,000 by such of the Australasian colonies as may give their adhesion to the contract. The duration of the passage between Adelaide and Naples by the Orient steamers is not to exceed 32 days (768 hours) at all seasons; and the duration of the passage between Adelaide and Brindisi by the Peninsular and Oriental steamers is not to exceed 32½ days (780 hours), except during the prevalence of the south-west monsoon, when one day extra is allowed on the passage towards Europe. The companies have no claim for any postage or payment for mails beyond the amount of the subsidy, and a reduction of £100 is made for every day's delay beyond the contract time, unless it can be shown that such delay was due to circumstances beyond their control.

277. All the Australasian colonies, except New Zealand, have now joined in the contracts, and contribute to the subsidy in proportion to their estimated yearly populations. Queensland, which was the last to join, did so on the 1st April, 1889. The non-contributing colony is required to pay for conveyance of its mails despatched by the contract vessels—for letters, 25s. 4d. per lb.; packets, 1s. per lb.; newspapers, 6d. per lb.; the amount received from this source being divided rateably between the contributing colonies. It may be remarked that so far as Victoria is concerned the subsidy is more than counterbalanced by the amount of postages, etc., collected.* The amounts of subsidy payable for the two years ended 31st March, 1891, by each contributing colony are as follow†:—

MAIL SUBSIDY PAYABLE BY EACH CONTRIBUTING COLONY,
1889 AND 1890.

	1889-90.			1890-91.		
	£	s.	d.	£	s.	d.
Victoria ...	26,710	5	11	26,534	5	11
New South Wales ...	26,633	17	7	26,632	2	10
South Australia ...	7,643	11	3	7,574	9	5
Tasmania ...	3,523	9	3	3,571	4	1
Western Australia ...	1,028	15	9	1,037	0	11
Queensland ...	9,460	0	3	9,650	16	10
Total ...	75,000	0	0	75,000	0	0

* See table following paragraph 286 *post*.

† The amounts payable by each colony were settled at a Postal Conference, at which all the Australasian colonies were represented, held at Sydney, in January, 1888. For full account of this Conference, see Report of the Victorian Post Office, 1887, page 47 *et seq.* (Parliamentary Paper No. 73, Session 1888).

Reduction
in mail
charges in
connexion
with
European
mails.

278. The transit charges for train service through France and Italy have been reduced from about 14 francs 81 centimes hitherto charged to 10 francs 80 centimes per kilogramme of letters; and from about 79 centimes to 72½ centimes per kilogramme of other matter; besides which, liberty has been resumed to send correspondence by other routes than through the countries named, in which case any charge may be made for postage on letters, but the rates for newspapers, books, and packets so sent must not be lower than those on such articles forwarded *viâ* Brindisi. Consequent upon these concessions, the postage on letters to any part of Europe has been fixed at 6d. per half ounce, and letters to the United Kingdom by the long sea route may be sent for 4d. as already stated.*

Ocean mail
services.

279. The following information respecting the various lines conveying mails between Australia and Europe has been supplied for this work by Mr. James Smibert, Deputy Postmaster-General of Victoria:—

- (a.) The weekly service conducted, since the 1st February, 1888, by means of alternate fortnightly trips made by vessels of the Peninsular and Oriental and Orient Companies respectively between Adelaide and Italy. These companies are subsidized to the extent of £170,000 per annum, towards which £95,000 is contributed by the Imperial Government, and the balance by Victoria, New South Wales, Queensland, South Australia, Tasmania, and Western Australia according to population, the amount payable by Victoria in 1889-90 being £26,710. The contracts with these companies will continue until the 31st January, 1895.
- (b.) The monthly service *viâ* Torres Straits, carried out between Queensland and Great Britain by the British-India Company, which receives a subsidy of £55,000 per annum from Queensland, but is required—in consideration of the subsidy—to carry immigrants for £16 per head.
- (c.) The monthly service between Sydney and San Francisco, undertaken by the Union Steamship Company of New Zealand, between Sydney and Honolulu, and between Honolulu and San Francisco by a local company. The total subsidy is £37,000 per annum. Of this sum the United States contributes £3,000, and of the balance New Zealand pays two-thirds and New South Wales one-third. (This contract has recently expired, but negotiations are being entered into for a fresh service).
- (d.) The monthly service carried out by the Messageries Maritimes Company, subsidized by the French Government; the vessels of the company running between Marseilles and New Caledonia by way of the principal Australian ports.
- (e.) In addition to the foregoing, a four-weekly service, subsidized by the German Government, runs between Brindisi and Australia.

* See paragraph 268 *ante*.

280. According to arrangements under the old contract with the P. and O. Company, the time allowed for conveying letters from Melbourne to London was 42 days and 11 hours during the period of the south-west monsoon, and 40 days and 11 hours* at all other periods; and the time allowed from London to Melbourne was 39 days and 18½ hours at all seasons. But according to the new arrangements the time allowed for the transmission of mails is reduced by nearly 3 days in the homeward route (Melbourne to London); and by about 4 days in the outward route (London to Melbourne). The following is a statement of the times allowed each way for the two lines of mail steamers :—

Contract
time of
mail
steamers.

TIME ALLOWED FOR MAILS BETWEEN LONDON AND MELBOURNE.

Sections.	Time Allowed.			
	Outwards (London towards Melbourne).		Homewards (Melbourne towards London).	
	dys.	hrs.	dys.	hrs.
Between London and Brindisi or Naples ...	2	7½	2	9½
„ Brindisi or Naples and Adelaide ..	32	0	32	0
„ Adelaide and Melbourne ...	1	5¾	3	0
Total Orient Steamers ...	35	13½	37	9½
Extra allowance to P. and O. Steamers...	0	12	0	12
Total P. and O. Steamers ...	36	1½	37	21½*

281. It will be observed that nearly 2 days longer are occupied on the section between Melbourne and Adelaide than on that between Adelaide and Melbourne; this is owing to the homeward mail steamer being timed to leave Adelaide on Monday afternoon, and as no train for that city leaves Melbourne on Saturday or Sunday, the mail for Adelaide is necessarily closed on Friday, and the two following days are wasted.†

Delay in
homeward
service.

282. The average time and the fastest time occupied in the transmission of letters from Australia to London, and *vice versa*, by means of the various routes during 1889, were as follow :—

Time
occupied
by mail
services.

* The P. and O. Steamers were also allowed an extra day during the prevalence of the S.W. monsoon.
† This inconvenient arrangement was changed in 1890, and the steamer now leaves Melbourne on Saturday, and Adelaide on the following Wednesday. This admits of mails forwarded overland from Melbourne by the afternoon express train on Tuesday being carried by the steamer.

TIME OCCUPIED BY MAILS BETWEEN ENGLAND AND AUSTRALIA, 1889.

Service.	London to Australia.		Australia to London.	
	Average Time.	Quickest Time.	Average Time.	Quickest Time.
	dys. hrs.	dys. hrs.	dys. hrs.	dys. hrs.
Melbourne, <i>viâ</i> Brindisi and Ceylon (P. and O. steamers)	33 5½	30 9¼	36 1½	32 21⅞
Melbourne, <i>viâ</i> Brindisi or Naples (Orient steamers)	34 1	32 13⅔	35 21½	33 4
Melbourne, <i>viâ</i> Suez (French steamers)	36 20	35 0	34 18⅞	33 1¼
Sydney, <i>viâ</i> San Francisco (Pacific steamers)	40 3⅔	39 0	40 1⅝	38 0
Brisbane, <i>viâ</i> Brindisi and Torres Straits (British-India steamers)	42 23⅞	39 1⅞	44 11	42 0

Comparative speed of Orient and P. & O. mails.

283. It will be remarked that the mails *en route* to Australia were delivered in quicker time by the P. and O. than by the Orient steamers; but those *en route* to London were delivered on the average in quicker time by the latter than by the former. The quickest time in the conveyance of mails to Melbourne, in 1889, was by a P. and O. steamer, in less than 30½ days, and the quickest time to London was also by a P. and O. steamer in a fraction less than 33 days.

Time occupied 1888 and 1889 compared.

284. On comparing the times of delivery of Victorian mails by the P. and O. steamers with those in the previous year, it appears that in their conveyance from London the average time occupied in 1889 was shorter by about 5 hours, and in their conveyance to London it was shorter by 3 hours, than in 1888; whilst the average time occupied in the delivery of mails carried by the Orient steamers was longer between London and Melbourne by nearly 12 hours, and between Melbourne and London by 22½ hours in 1889 than in 1888.

Time occupied by German mail service.

285. The average time in 1889 occupied in the transit of mails from Berlin to Melbourne by the German line of steamers was 37 days and 20 hours, and the quickest time was 32 days. During the same year the average time of the mails between Melbourne and Berlin was 38 days, and the quickest time was 33 days.

Cost of various mail services with Italy, 1879 to 1889.

286. A comparison of the cost of the Victorian subsidized mail service with the United Kingdom under the four weekly contract in existence during 1879; under the the fortnightly contract which expired in January, 1888, during the last two years of its existence,

and the cost in the last two years under the weekly contract, is shown in the following table* :—

**COST TO VICTORIA OF CONTRACT MAIL SERVICES AT
THREE PERIODS.**

Items of Receipt and Payment.	Four-weekly. 1879.	Fortnightly.		Weekly.	
		1886.	1887.	1888.	1889.
PAYMENTS.					
	£	£	£	£	£
Total amount of subsidy ...	90,000	85,000	85,000	34,725†	27,595
Premiums for early arrival of mails ...	2,050	2,550	2,950	200	...
Cost of landing and shipping mails ...	242	170	23	48	156
Amount due to Great Britain ...	...	105	230	2,468	152
Amount paid to New South Wales ...	...	...	...	2,982	...
Transit, Italy and France ...	...	...	...	...	5,308
„ South Australia ...	...	...	...	...	1,161
Total ...	92,292	87,825	88,203	40,423	34,372
RECEIPTS.					
Postages collected in Victoria ...	15,261	17,893	17,986	29,383	32,255
Amount chargeable to Great Britain ...	14,741	...	...	...	} 2,890
„ „ New South Wales ...	13,236	16,352	16,793	1,915	
„ „ South Australia ...	18,321	7,290	7,115	776	
„ „ Tasmania ...	3,866	3,012	3,377	384	
„ „ Western Australia ...	2,336	3,793	4,226	420	
„ „ Queensland ...	1,602	5,257	6,410	618	
„ „ New Zealand ...	9,094	1,956	1,876	202	
„ „ Fiji ...	80	76	82	23	
„ „ Non-contributing colonies—New contracts	...	...	...	2,007	1,448
„ „ France ...	1,100	...	...	...	...
„ „ Italy ...	...	474	515	933	...
Balance on Parcels' Post Accounts ...	...	...	...	...	609
Total ...	79,637	56,103	58,380	36,661	37,202
Net Deficit ...	12,655	31,722	29,823	3,762	...
„ Surplus ...	...	...	...	...	2,830

NOTE.—In 1888 Victoria and several of the other colonies became parties to a joint contract, prior to that date Victoria had a separate contract on her own account. See paragraphs 276 and 277 *ante*.

287. The four-weekly service in the last complete year of its existence (1879) cost Victoria somewhat less than £13,000; the fortnightly service cost at first only about £20,000, but eventually about £30,000 per annum. The present weekly service is now, it will be observed, not only self-supporting, but is carried on at a profit.

Diminished
cost of con-
tract mail
service.

* See also paragraph 292 *post*.

† Viz., £7,083 under old contract to 31st January, and £27,642 proportion under new contract paid by Victoria.

Parcel post.

288. The following information relating to the Parcel Post has been furnished for this work by the Deputy Postmaster-General:—

THE INLAND PARCEL POST

Came into operation on the 1st July, 1887, and an increase of business of about 30 per cent. took place in 1889. The number of Inland Parcels posted during the year 1889 was 149,220, and the postage paid on them amounted to £7,240, as against 114,001 parcels and £5,597 postage for the year 1888.

INTERCOLONIAL PARCEL POSTS.

A Parcels Post Exchange has been established with Western Australia, South Australia, New Zealand and Tasmania; but that with New Zealand commenced only on 1st January, 1890, and that with Tasmania from 1st February, 1890. Parcels to these colonies are limited to 11lbs. weight. The number of intercolonial parcels received in 1889 was 684, and the number despatched 1,299. The charges for Intercolonial Parcel Post are 1s. 2d. for 2lbs. or under, and 7d. for each additional lb. up to limit of weight.

As soon as the necessary legal authority has been given by the Legislatures of the other Australasian colonies, the system will come into operation between them and Victoria.

THE BRITISH AND FOREIGN PARCEL POSTS.

This system came into operation on the 1st July, 1886. In 1889, the total number of parcels received was 12,412, and the number despatched was 3,366, or 15,778 in all, as compared with a total of 12,022 parcels in 1888. At first the business was almost solely confined to presents, now it is being used for mercantile purposes, and is made the medium for the consignment of watches, diamonds, jewellery, works of art, etc. The charge for parcels between Victoria and the United Kingdom is now 1s. 6d. for a 2-lb. parcel and 9d. for each extra lb.

A direct Parcel Post exchange with Germany has been established since June, 1888, and parcels are now forwarded by each German mail steamer up to 11lbs. weight.

PARCEL POST WITH INDIA AND THE EAST.

The parcels exchanged between India and the East and Victoria increased from 395 for 1888 to 528 for 1889.

Arrangements have been made for direct exchanges with Straits Settlements and Hong Kong, and for parcels to be sent through the latter colony to China, Japan, Macao, and Siam; but the business is as yet small.

The Victorian share of the postage for British, Colonial, and Foreign Parcel Posts for 1889 was £1,165, and the duty collected and paid to the Customs Department was £2,465.

Postal
revenue.

289. Since the postage stamp has been made available for payment, not only of postage and the transmission of telegraphic messages, but of fees, stamp duty, and any other charges for which payment is required to be made in stamps, it has been found impossible to ascertain the true postal revenue as apart from amounts unconnected with postal business collected by the Post Office, and the Postal Department express themselves as consequently unable to determine whether the alterations made from time to time in the rates have proved a financial success or otherwise. The following is a statement of the amounts collected by the Post Office during the last two years:—

REVENUE RECEIVED BY THE POST OFFICE IN 1888 AND 1889.

Heads of Revenue:	Amount received in—		Increase.	Decrease.
	1888.	1889.		
	£	£	£	£
Stamps on telegrams	125,343	127,720	2,377	...
Stamps for payment of postage, duties, fees, etc.*	765,931	693,964	...	71,967
Total Stamps	891,274	821,684	...	69,590†
Commission on money orders... ..	12,900	13,448	548	...
Telephone Exchange subscriptions and private wires	21,601	31,373	9,772	...
Grand Total	925,775	866,505	...	59,270†

290. It should be pointed out that no credit is taken by the Post Office for the value of Government correspondence, on which postage is not charged. In 1887 the value of Government telegrams transmitted was £6,149; and the estimated amount which would have been derived from official correspondence if charged for, was about £60,000. This information has not been furnished for any later year.

Government
corre-
spondence,
etc.,
trans-
mitted
free.

291. In 1889 the total ordinary expenditure of the Post and Telegraph Department amounted to £582,910, whilst the capital expenditure during the same year amounted to £110,663, which includes cost of erection and extension of the General Post Office, Melbourne, etc. The ordinary expenditure, which shows an increase of about £25,600 over the corresponding amount in the previous year, includes all the annual charges—paid either by the Postal Department itself or by other Government Departments—in connexion with the maintenance of the postal and telegraphic services, with the exception of interest on capital expended on buildings, or rent. The ordinary and the capital expenditure in 1888 and 1889 were made up of the following items:—

Postal ex-
penditure.

* The amounts in this line are collected by the Post Office, but a considerable proportion of the stamps sold are used for other than postal purposes. Revenue from parcels post is included, viz., £5,597 in 1888, and £7,240 in 1889. For numbers of stamps issued, see table following paragraph 294 post.

† Net figures.

EXPENDITURE IN CONNEXION WITH POST AND TELEGRAPHS,
1888 AND 1889.

Heads of Expenditure.	1888.	1889.	Increase.	Decrease.
ORDINARY.	£	£	£	£
Salaries and wages	269,617	277,593	7,976	...
Contingencies	105,559	116,962	11,403	...
Mail service, inland	111,140	115,100	3,960	...
„ „ British and foreign ...	40,823	43,141	2,318	...
Gratuities to masters of vessels ...	1,924	4,316	2,392	...
Duplicate cable subsidy	14,586	12,897	...	1,689
Cost of printing, books, forms, stamps, etc.*	13,653	12,901	...	752
Total	557,302	582,910	25,608†	...
CAPITAL.				
Telegraph lines‡	19,214	25,842	6,628	...
Erection and extension of offices § ...	60,950	84,821	23,871	...
Total	80,164	110,663	30,499	...
Grand Total	637,466	693,573	56,107	...

Net cost of
ocean mail
service.

292. The cost of steam postal communication with the United Kingdom payable in 1889, was £36,410, but as a set-off against this it is estimated that £34,294 was collected in Victoria for postages. || The net cost to the colony in that year was thus £2,116, as against £7,532 in 1888, £37,453 in 1887, whilst in 1883, or six years previously, it was £22,800.** The reduced cost in 1888 and 1889 arises from the favourable contracts entered into by the Australasian colonies with the P. and O. and Orient Companies. The net cost for 1889, 1888, and 1883 was distributed as follows amongst the five mail services :—

COST OF STEAM POSTAL COMMUNICATION WITH EUROPE.

Lines of Steamers.	Net Cost to Victoria.			
	1883.	1887.	1888.	1889.
	£	£	£	£
P. and O. Service { Under joint Australian {	20,256	29,823	} 3,762	Cr. 2,830
Orient „ { subsidy in 1888 {	...	4,457		
San Francisco Service	2,500	3,000	3,536	4,916
Torres Straits „	44	30	14	36
French Service (Messageries Maritimes) ...	...	143	Cr. 180	...
Total	22,800	37,453	7,532	2,116

* Figures furnished by the Government printer.
† Chiefly cost of construction, but repairs also included.
§ Expenditure defrayed by Public Works Department.
|| The cost referred to differs from that shown in the preceding statement, viz., £43,141 ; the one being the amount payable, the other that paid. The postages referred to were as follows :— Subsidized Service, £32,255 ; San Francisco Service, £2,039.
** See also table following paragraph 286 ante.

† Net figures.

293. The amount paid by the Postal Department in 1889 for the conveyance of Inland Mails was £115,100, of which £54,239 was paid to the Victorian Railways. The number of miles travelled with mails during the year was 4,519,663 by road, and 3,490,320 by rail, or 8,009,983 in all. Whence it follows that the average cost per mile of conveying mails by road was a little over 3¼d., and by rail not quite 3¾d., the average being 3½d. Moreover, if the total cost be compared with the whole number of inland letters, post cards, newspapers, and packets, it will be found that the average cost of transmitting each such item of correspondence was nearly one half-penny (·46d.). The total length of the inland mail service is 18,656 miles.

Cost of inland mail service.

294. Since the 1st January, 1884, only one kind of stamp has been used for the payment of postage, fees, and stamp duty, also—since the 1st July, 1884—for telegrams. An accurate account is kept of the value of paid telegrams transmitted; but in other respects it is impossible to say what proportion is actually used for each of the other purposes indicated.* The following are the numbers and nominal values of postal and duty stamps issued from the General Post Office, in the last two years:—

Stamps issued.

STAMPS ISSUED, 1888 AND 1889.

Description.	Number.		Nominal Value.	
	1888.	1889.	1888.	1889.
			£	£
Adhesive	67,131,664	72,952,300	803,739	764,251
Impressed on Cheques and Receipts	11,059,893	10,383,160	46,083	43,263
Impressed on Bills of Exchange, Promissory Notes, Transfers of Freeholds, Conveyances, Mortgages, Drafts, etc.	163,347	430,168	24,916	39,299
Total	78,354,904	83,765,628	874,738	846,813

NOTE.—This table contains a statement of the stamps issued in the last two years, which differ considerably from the stamps sold. The value of the latter was £891,274 in 1888, and £821,684 in 1889. See table following paragraph 289 ante.

295. The value of commission paid in stamps to bank managers and licensed vendors of duty stamps (or those they replace) was £10,844 in 1888, and £10,537 in 1889; and that to licensed vendors of freight stamps was £344 in 1888, and £336 in 1889. The total value of commission paid on the sale of stamps was thus £11,188 in 1888, and £10,873 in 1889.

Commission on sale of stamps.

* See also paragraph 289 ante.

Stamp
revenue
affected by
reduced
postage.

296. A reduction in the rate of letter postage within the colony, from 2d. to 1d., came into force on the 1st January, 1890. As was to be expected the increased demand for 1d. stamps has caused a proportionate falling-off in the sale of other stamps, and of post and letter cards, but the fact that the same stamps are used for postage as for duty prevents, as has been already stated,* any certain check being kept on the state of the postal revenue. It was estimated that the falling off in consequence of the reduced rate of postage would be £96,000 for the first year, but so far as can be judged from the returns of the first six months of 1890 the falling-off will be no more than £83,000, resulting from an estimated revenue from the sale of two-penny and penny stamps and post cards of £264,500 in 1890, as against one of £347,500 in 1889. It should be stated that on account of the increased work consequent upon the introduction of the penny post, it was found necessary to add to the Post Office staff 90 persons, at an annual cost of £9,150.

Money
orders.

297. Money order offices in Victoria in connection with the Post Office had been established in 390 places up to the end of 1889. Besides the issue and payment of money orders at these places, such orders are issued in favour of Victoria, and Victorian orders are paid not only in Great Britain and Ireland, and the various Australasian colonies, but in most of the other principal countries of the world. The following is a comparative statement of the business in the last two years:—

MONEY ORDERS,† 1888 AND 1889.

Year.	Number of Money Order Offices.	Money Orders Issued.		Money Orders Paid.	
		Number.	Amount.	Number.	Amount.
1888 ...	383	246,586	£ 762,483	226,850	£ 697,357
1889 ...	390	251,245	780,590	226,279	705,653
Increase ...	7	4,659	18,107	...	8,296
Decrease ...	...	...	...	571	...

Rates of
commission
on money
orders.

298. The commission on money orders for sums not exceeding £5 is sixpence to places in Victoria, and one shilling to places in the other Australasian colonies. For sums over £5 and under £10, the commission is one shilling to places in Victoria, and two shillings to places in the other colonies. To the United Kingdom and most other countries outside of Australasia, the scale is as follows:—Not exceeding £2, one shilling; from £2 to £5, two shillings and sixpence;

* See paragraph 289 *ante*.

† Exclusive of postal notes, for which see paragraph 305 *post*.

from £5 to £7, three shillings and sixpence; from £7 to £10, five shillings. Money orders may be made payable by telegraph either in the colony or to any of the other Australasian colonies (except New Zealand) on payment, in addition to the above rates, for a message of ten* words. Money orders are not granted for sums exceeding £10.

299. The number and value of money orders issued in favour of the United Kingdom have always been much greater than the number and value of those received therefrom; but the reverse has been the case with orders between Victoria and the neighbouring colonies. The net amount remitted to the United Kingdom by this means in 1889 was more than double that in 1879, and half as large again as in 1884; but the net amount received from the neighbouring colonies has fallen off to about a third of the amount received in the two earlier periods. The following table shows the net transactions with the United Kingdom and the neighbouring colonies during 1889 and the first year of the two previous quinquennia :—

MONEY ORDERS.—NET TRANSACTIONS WITH UNITED KINGDOM AND NEIGHBOURING COLONIES, 1879, 1884, AND 1889.

Year.	Money Orders sent to, in excess of those received from, the United Kingdom.		Money Orders received from, in excess of those sent to, the Neighbouring Colonies.	
	Number.	Amount.	Number.	Amount.
		£		£
1879 ...	12,527	39,619	24,466	95,136
1884 ..	17,337	56,995	27,841	108,094
1889 ...	27,168	86,746	7,158	32,283

300. In New South Wales the money orders issued in 1889 numbered 400,487, and were of a total value of £1,188,227; those paid numbered 390,414, and were of a total value of £1,108,086. Comparing these figures with those of Victoria, it appears that in the same year the money orders issued and paid in New South Wales exceeded those in this colony by 66 per cent. in number, and by 55 per cent. in value. It should be pointed out, however, that if, in Victoria, postal notes were included with money orders, the number would be more than doubled, and the value increased by 18 per cent.

301. The average value of money orders (exclusive of postal notes) issued in Victoria was £3 1s. 10d. in 1888, and £3 2s. 2d. in 1889. The average value of those issued in New South Wales in 1889 was

* Six words in the case of Victoria.

£2 19s. 4d., or 2s. 10d. above the average value of those in Victoria during the same year.

302. The money orders issued in each division of the United Kingdom in 1888 were of the following number and amount:—

MONEY ORDERS* IN THE UNITED KINGDOM, 1888.

Country.	Money Orders Issued.	
	Number.	Amount.
		£
England and Wales	7,630,441	19,253,924
Scotland	1,081,836	2,413,660
Ireland	592,495	1,259,727
Total United Kingdom ...	9,304,772	22,927,311

303. The average value of each money order issued during 1888 in England was £2 10s. 6d., in Scotland £2 4s. 8d., and in Ireland £2 2s. 6d., or in the United Kingdom £2 9s. 3d. By reference to a previous paragraph,† it will be found that during 1888 the average value of money orders issued exceeded by 12s. 7d. in Victoria, and by 13s. 4d. in New South Wales, the average value of those issued in the United Kingdom.

304. To every 100 of the population nearly 23 money orders were issued in Victoria during 1889, which proportion differs but little from that in the previous year. To every 100 of the population, 36 money orders were issued in New South Wales in 1889, and 27 in England, 27 in Scotland, and 12 in Ireland, in 1888.

305. Postal notes were first issued in Victoria on the 1st January, 1885. These notes are for various amounts, £1 being the maximum, and their denominations have been so arranged that any sum of shillings and sixpences up to £1 may be remitted by not more than two notes. Should it be desired to add thereto broken sums of pence, uncanceled stamps to the value of 5d. may be affixed to the back of a note, in which case the amount of the note and stamps will be paid. The notes, if left blank as issued by the Department, are payable to bearer at any money order office in Victoria; but if the sender or holder so desire, he can make them payable to any person named, at any such office, by inserting the particulars in spaces reserved for the purpose on the face of the notes. The poundage or price charged is

* Exclusive of money orders issued in the United Kingdom for payment abroad, which numbered 329,313, of the value of £887,761.

† See paragraph 301 ante.

$\frac{1}{2}$ d. for notes of the value of 1s. or 1s. 6d.; 1d. for notes from 2s. to 4s. 6d. in value; 2d. for notes of 5s. or 7s. 6d. in value; and 3d. for notes from 10s. to 20s. in value. As the charge is 6d. for money orders under £5, it may be expected that such orders will be supplanted by postal notes so far as remittances up to £2 are concerned. The number of postal notes issued in 1889 was 310,677 as compared with 256,429 in 1888, 222,047 in 1887, 140,191 in 1886, and 95,530 in 1885. The aggregate value of these notes was £132,487 in 1889, as compared with £109,964 in 1888, £95,178 in 1887, £61,074 in 1886, and £42,190 in 1885. The following are the denominations, numbers, and nominal values of postal notes paid during the year 1889:—

POSTAL NOTES PAID, 1889.

Denomination.		Number.	Nominal Value.		
s.	d.		£	s.	d.
1	0	10,179	508	19	0
1	6	7,022	526	13	0
2	0	14,531	1,453	2	0
2	6	16,979	2,122	7	6
3	0	21,389	3,208	7	0
3	6	13,531	2,367	18	6
4	0	23,966	4,793	4	0
4	6	13,159	2,960	15	6
5	0	38,133	9,533	5	0
7	6	17,293	6,484	17	6
10	0	50,547	25,273	10	0
10	6	10,866	5,704	13	0
15	0	22,130	16,597	10	0
20	0	50,952	50,952	0	0
Total	...	310,677	132,487	2	0

306. Telegraphic communication exists in Victoria between 656 stations within her own borders. Her lines are connected besides with the lines of New South Wales, and, by means of them, with Queensland and New Zealand; also with the lines of South Australia, and, by their means, with Western Australia, the Eastern Archipelago, Asia, Europe, and America; also with a submarine cable to Tasmania. During 1889, the telegraph stations were increased by 55, and the telegrams were more numerous by 142,000.* The number of stations and the amount of business done in the last two years are given in the following table:—

Electric telegraphs.

* See next paragraph.

ELECTRIC TELEGRAPHS, 1888 AND 1889.

Year.	Number of Stations.	Number of Miles of—		Number of Telegrams.		
		Line (poles.)	Wire.	Paid.	Unpaid.*	Total.
1888 ...	601	...	...	2,653,000	90,938	2,743,938
1889 ...	656	3,967	8,241	2,782,751	103,168	2,885,919
Increase ...	55	...	...	129,751	12,230	141,981

307. Besides the above, there were in operation 261 miles of line and about 4,051½ miles of wire for private wires and telephone† lines. There were also nearly 46¼ miles of aërial cable, having a length of wire of 939½ miles ; moreover, 6¾ miles of underground cable had been laid, giving a length of wire of 321½ miles.

308. The charge upon telegraphic messages to places in Victoria is 6d. for six words or less, and 1d. for each extra word ; to places in New South Wales 1s. for ten words, and 2d. for each extra word ; to places in South Australia and Tasmania 2s. for ten words, and 2d. for each extra word ; to places in Queensland and Western Australia 3s. for ten words, and 3d. for each extra word ; to places in New Zealand 10s. for ten words, and 1s. 1d. for each extra word ; to places in the United Kingdom and Europe 9s. 4d. for each word. In the case of telegrams to places on the Australian Continent, names and addresses are not charged for ; to places in Tasmania they are not charged for unless they exceed ten words, but all words above that number are charged for as part of the message. In the case of telegrams to New Zealand, the addresses United Kingdom, India, and other countries, the names and of both sender and receiver are charged for as part of the message.

309. During 1889 the number of telegrams which passed from Victoria to European and other countries outside Australasia, and *vice versa*, was 21,541, and the cost to the senders was £119,680 ; which figures shows an increase of 1,027 and £4,761 respectively as compared with 1888. Taking the Australasian colonies as a whole, the telegrams to and from the same places numbered 62,909, and were transmitted at a charge of £324,636. The revenue, which fell from £276,551 in 1885 to £256,527 in 1886, in consequence of a reduction in the rates, has since steadily increased, the amount received in 1889 being 17½ per cent. in excess of that in 1885.

* These are Government telegrams, but are exclusive of telegrams on railway service, which were formerly included.
† For an interesting account of the working of the telephone system contributed to the *Victorian Year-Book* by the Post Office Department, see that work 1887-8, Vol. II., p. 131. See also a subsequent paragraph.

310. The course of a telegram along the 13,695 miles of wire over which it travels between Melbourne and London is shown in the following table. It will be observed that the length of the portion in Australia is 2,704 miles, or about a fifth of the whole distance:—

AUSTRALIAN AND EUROPEAN TELEGRAMS—COURSE BETWEEN MELBOURNE AND LONDON.

Points of Connexion and Repetition.				Number of Miles of—		
				Cable.	Land Line.	Total.
Melbourne—Mount Gambier	...	...	...	...	300	300
Mount Gambier—Adelaide	...	...	...	...	270	270
Adelaide—Port Augusta...	...	...	...	...	200	200
Port Augusta—Alice Springs	...	...	...	...	1,036	1,036
Alice Springs—Port Darwin	...	...	...	...	898	898
*Port Darwin—Banjoewangie	...	...	...	1,150	...	1,150
Banjoewangie—Batavia	...	...	...	...	480	480
Batavia—Singapore	...	...	...	553	...	553
Singapore—Penang	...	...	...	399	...	399
Penang—Madras	...	...	...	1,280	...	1,280
Madras—Bombay	...	...	...	...	650	650
Bombay—Aden	...	...	...	1,662	...	1,662
Aden—Suez	...	...	...	1,346	...	1,346
Suez—Alexandria	...	...	...	...	224	224
Alexandria—Malta	...	...	...	828	...	828
Malta—Gibraltar	...	...	...	1,008	...	1,008
Gibraltar—Falmouth	...	...	...	1,061	...	1,061
Falmouth—London	...	...	...	...	350	350
Total	...	...	...	9,287	4,408	13,695

311. The following table shows the number of miles of electric telegraph open, with their proportion to area and population, in each of the Australasian colonies at the end of 1889:—

ELECTRIC TELEGRAPHS IN AUSTRALASIAN COLONIES, 1889.

Colony.	Number of Miles of Telegraph Open.		Miles of Line.	
	Line.	Wire.	Per 1,000 Square Miles.	Per 100,000 Inhabitants.
Victoria	3,967	8,241	45·1	355
New South Wales	10,732	22,606	34·7	956
Queensland	9,456	16,981	14·2	2,325
South Australia	5,511	9,921	6·1	1,698
Western Australia	2,961	3,330	3·0	6,776
Total	32,627	61,079	11·1	1,082
Tasmania	1,979	2,590	75·0	1,306
New Zealand	4,874	11,827	46·8	786
Grand Total	39,480	75,496	12·8	1,042

* As an alternative line to that between Port Darwin and Banjoewangie, a cable has recently been successfully laid between the latter and Roebuck Bay in Western Australia.

Order of colonies in respect to length of telegraphs.

312. The following is the order in which the respective colonies stood at the end of 1889 in regard to the number of miles of electric telegraph line open in each :—

ORDER OF COLONIES IN REFERENCE TO LENGTH OF TELEGRAPH LINE OPEN, 1889.

1. New South Wales.	4. New Zealand.	6. Western Australia.
2. Queensland.	5. Victoria.	7. Tasmania.
3. South Australia.		

Order of colonies in respect to ratio of telegraphs to area and population.

313. In proportion to area, Victoria had, in 1889, a larger extent of telegraph line than any other colony except Tasmania and New Zealand; but in proportion to population, Victoria was at the bottom of the list. The order of the colonies in regard to the proportion of telegraph line to area is almost the reverse of that to population, as will be observed by the following lists :—

ORDER OF COLONIES IN REFERENCE TO RATIO OF TELEGRAPH LINE TO AREA AND POPULATION, 1889.

Proportion to Area.	Proportion to Population.
1. Tasmania.	1. Western Australia.
2. New Zealand.	2. Queensland.
3. Victoria.	3. South Australia.
4. New South Wales.	4. Tasmania.
5. Queensland.	5. New South Wales.
6. South Australia.	6. New Zealand.
7. Western Australia.	7. Victoria.

Telephone wire in Australasian colonies.

314. In addition to the telegraph wire, the following lengths of telephone wire were in use in 1889 in the four colonies named—Victoria 5,313 miles, South Australia 1,756 miles, New Zealand 1,662 miles, and Tasmania 346 miles. No information has been received from New South Wales, but in Queensland there were 634 telephones in use. The Telephone Exchanges in Victoria had 1,988 subscribers.

Messages in Australasian colonies.

315. From the following figures, which show the extent to which electric telegraphy is made use of in the different colonies, it would appear that in 1889 most messages by far are transmitted in New South Wales, the next largest number in Victoria, and the next in New Zealand :—

TELEGRAPHIC MESSAGES IN AUSTRALASIAN COLONIES, 1889.

Number of Messages.			
1. New South Wales ...	...	...	3,433,562
2. Victoria ...	...	...	2,885,919*
3. New Zealand ...	...	...	1,802,987
4. Queensland ...	...	...	1,568,872
5. South Australia ...	...	...	984,180
6. Tasmania ...	...	...	280,559
7. Western Australia ...	...	...	197,587
Total ...	...	...	11,153,666

* Exclusive of messages on railway service.

316. The lengths of telegraph line open and number of messages transmitted in the United Kingdom and such British possessions as the information is available for are as follow, according to the latest information :—

ELECTRIC TELEGRAPHS IN BRITISH DOMINIONS, 1888.

Country or Colony.	Number of Miles of Telegraph Open.		Number of Messages Annually (000's Omitted).
	Line.	Wire.	
United Kingdom	30,726	183,502	57,765,
Australasia (1889)	39,480	75,496	11,154,
Bermuda	350*	...	...
British Guiana	260*	...	...
British Bechuanaland	200	...	...
Canada	29,245*	61,219	4,064,
Cape of Good Hope	4,339	...	1,064,
Ceylon	715	...	...
Cyprus	2,400	...	...
Gold Coast	171	...	...
Gibraltar	11	...	...
Hong Kong	323	...	...
India	31,894	93,517	2,808,
Indian Feudatory States	1,200	...	...
Malta	65	...	...
Mauritius	117	...	...
Natal	501	...	...
Newfoundland	995	...	...
Protected Malay States	360	...	...
Straits Settlements	438†	...	...
St. Helena	10½	...	...
West Indies—			
Antigua	30	...	...
Barbados	58	...	...
Grenada	50	...	...
Jamaica	611	...	81,
Trinidad	717†	...	...
Zululand	30	...	...

NOTE.—The following particulars relate to telephone lines which are not included in the table :— United Kingdom, 28 exchanges with 1,370 subscribers ; Canada, 15,448 miles ; British Guiana, 32 ; Jamaica, 87 ; Australasia, about 7,000 miles.

317. The following are the lengths of electric telegraph lines and wire open, and the number of messages sent, in some of the principal Foreign countries, according to the latest returns. The information, where possible, has been drawn from official sources :—

* Excluding cable, viz., 15 miles in Bermuda in 1886, 12 in British Guiana, 215 in Canada, and 187 miles in India.

† Including telephone lines.

ELECTRIC TELEGRAPHS IN FOREIGN COUNTRIES.

Country.	Year.	Number of Miles of Telegraph Open.		Number of Messages Annually (000's omitted).
		Line.	Wire.	
Algeria	1888	6,925	15,902	...
Argentine Confederation	1888	18,366	42,632	3,511,*
Austria-Hungary ...	1888	37,085	110,661	10,347,†
Belgium	1888	3,976	18,845	4,954,
Bolivia	1888	180	290	16,‡
Bosnia	1883	1,730	2,995	297,
Brazil	1889	6,657	11,481	568,
Bulgaria	1889	2,733	4,100	621,§
Chile	1888	10,640	15,835	572,
Cochin-China...	1888	1,840	...	...
Columbia	1887	2,800	4,970	...
Costa Rica	1888	420	850	113,
Cuba	1889	2,795	5,400	...
Denmark	1888	2,688	7,270	1,525,
Egypt	1888	3,172	5,423	667,
France	1888	65,104	240,978	22,341,
Germany	1888	57,369	204,659	17,782,
Greece	1889	4,334	5,030	937,§
Guatemala	1888	2,030	4,060	457,
Hawaii	1888	245	890	...
Holland	1888	3,094	10,877	4,060,
Honduras	1888	1,340	2,680	...
Italy	1887-8	21,020	73,592	8,140,
Japan	1889	5,880	15,609	2,565,†
Java	1885	5,746	...	378,
Luxemburg	1888	479	871	...
Mexico	1889	27,861	46,000	...
Nicaragua	1888	1,110	2,220	...
Orange Free State	1889	1,175	2,350	...
Paraguay	1888	95	190	32,†
Persia	1889	3,189	5,804	76,§
Peru	1888	2,700	5,200	...
Portugal	1889	3,191	7,420	1,730,
Roumania	1889	2,631	8,033	1,318,§
Russia	1888	88,280	172,360	10,477,†
Servia	1889	1,806	3,008	471,§
Spain	1887	13,226	33,208	3,770,
Sweden	1888	5,086	13,261	1,368,
Norway	1888	4,649	8,701	1,246,
Switzerland	1888	4,418	10,768	3,380,
Transvaal	1889	1,423	2,200	...
Turkey	1889	15,000	28,000	...
United States ...	1889	248,920	776,289	51,464,§
Uruguay	1888	1,965	3,800	148,
Venezuela	1888	2,982	5,600	409,

Telegraphs in each continent.

318. According to *L' Almanach de Gotha*, 1887,|| the number of miles of telegraph and the number of messages in each of the great

* Figures for 1889. † Figures for 1887. ‡ Figures for 1886. § Figures for 1888.
|| Page 1,061. The lengths have been reduced from kilometres to miles, on the assumption that a kilometre is equal to .621 of a mile.

continents of the world were as follow in 1884-5. To these the figures for the Australasian colonies in 1886 have been added :—

ELECTRIC TELEGRAPHS IN EACH CONTINENT.

Continent.	Miles of Line.	Messages (000's omitted).
Australasia	37,099	9,022,
Europe	326,709	138,634,
Asia	42,148	5,029,
Africa	17,981	1,221,
America	245,215	50,212,
Cables	103,096	...
The World	772,248	204,118,

319. According to Mr. McCarty* (with a correction of the figures for Australasia), the length of telegraph lines in 1888-9 throughout the principal countries of the world was 853,010 miles, and that of telegraph wire was 2,440,710 miles. It will be observed that the former exceeds the total length of line given in the table by about 80,700 miles. Telegraphs
of the
world.

320. Until September, 1887, the Telephones in Victoria were worked by a private company, but in that month the business, together with buildings and plant, was purchased by the Government. The price paid was £40,000, but a considerable amount had to be expended to place the Exchanges in thorough repair. There are now seven Telephone Exchanges in the colony—three of which were opened during the year 1889, viz., at Warrnambool, Windsor and Malvern. In the Central Exchange there are now ten sections of switch-board employed with a capacity to accommodate 2,000 subscribers; forty-six female switch-hands are employed during the day, and four male hands at night. The revenue for 1889 was £21,603; the total number of subscribers at the end of the year was 1,988, and the amount subscribed during the year was £29,203. At present only subscribers are supposed to use the lines. The establishment of public telephone offices is now under consideration. The number of subscribers at the various Exchanges in the colony at the end of each of the last three years, together with the total amount of annual subscriptions payable at the respective dates, were as follow† :— Telephones.

* *Annual Statistician*, San Francisco, 1890, page 384.

† For an account of the Victorian Telephone system, see *Victorian Year-Book*, 1887-8, Vol. II., paragraph 978.

SUBSCRIBERS TO TELEPHONE EXCHANGES, 1887, 1888 AND 1889.

	1887.	1888.	1889.
Melbourne*	864	1,339	1,608
Ballarat	140	135	137
Sandhurst	117	112	100
Geelong*	...	51	81
Warrnambool	...	...	Nil
Windsor*	...	...	26
Malvern*	...	...	36
Total	1,121	1,637	1,988
Annual Subscriptions payable	£16,647	£24,649	£29,203

321. All the railways in Victoria are the property of the State. Under *The Victorian Railway Commissioners Act* 1883 (47 Vict. No. 767), which came into force on the 1st February, 1884, the railways are vested in three commissioners, who are a body corporate, with perpetual succession and a common seal, and hold office for a term of seven years, at the expiration of which they are eligible for re-appointment, if the Governor in Council should so determine. The annual salaries appropriated to the commissioners are £3,000 for the chairman, and £1,500 for each of the other two. None of the commissioners can be removed from office unless an address praying for such removal be presented to the Governor by both Houses of Parliament in the same session of Parliament, or by the Legislative Assembly alone in two consecutive sessions. The commissioners are charged with the duty of constructing such lines of railway as are authorized by Parliament, and of maintaining, working, controlling and managing all the lines of railway, subject, in some respects, to the approval of the Governor in Council. They are required by the Act to furnish reports to the Minister of Railways quarterly; also reports of their proceedings, and of all moneys received and expended by them, to Parliament in September of each year.†

322. The number of miles of railway open on the 30th June, 1889, was 2,198½, consisting of 1,929¾ miles of single and 268¾ miles of double line; and by the 30th June, 1890, the total length open increased to 2,470 miles. The following table shows the names, lengths, and cost of construction of the different lines, and the distance travelled during the year ended 30th June, 1889 :—

* The Exchanges at Geelong, Windsor and Malvern are also connected by means of trunk lines with the Melbourne Exchange.

† The report on the Victorian Railways for the year 1889-90 which was presented to Parliament at the end of September, was received too late for the details to be carried into the main body of this work. The leading particulars will, however, be given in footnotes.

RAILWAYS.—LENGTH, COST, AND DISTANCE TRAVELLED.

Lines.	Length open on the 30th June, 1889.			Cost of Construction.*		Distance Travelled during the Year.
	Double.	Single.	Total.	Total.	Average per Mile.	
<i>Northern System.</i>	Miles	Miles.	Miles.	£	£	Miles.
Melbourne to Sandhurst (ex- clusive of Melb. Terminus)	100 $\frac{3}{4}$...	100 $\frac{3}{4}$	4,747,981†	47,126	2,603,294
Sandhurst to Echuca (includ- ing bridge over Murray at Echuca)	...	55 $\frac{1}{4}$	55 $\frac{1}{4}$	679,517‡	12,299	
Lancefield Junction to Lance- field	...	14 $\frac{1}{2}$	14 $\frac{1}{2}$	63,515	4,380	
Carlsruhe to Daylesford ...	...	22 $\frac{3}{4}$	22 $\frac{3}{4}$	162,779	7,155
Castlemaine to Dunolly ...	...	47 $\frac{1}{2}$	47 $\frac{1}{2}$	329,361	6,934
Dunolly to St. Arnaud ...	$\frac{1}{2}$	32 $\frac{1}{2}$	33	161,705	4,900	
St. Arnaud to Donald ...	...	23 $\frac{3}{4}$	23 $\frac{3}{4}$	94,786	3,991
Castlemaine to Maldon ...	...	10 $\frac{1}{4}$	10 $\frac{1}{4}$	58,692	5,726
Ballarat to Maryborough ...	...	42 $\frac{1}{2}$	42 $\frac{1}{2}$	272,194	6,405
Ballarat Racecourse Branch Line	...	2	2	7,332	3,666	
Maryborough to Avoca ...	...	15	15	61,586	4,106
Sandhurst to Inglewood ...	...	30	30	160,616	5,354
Inglewood to Charlton ...	...	42 $\frac{3}{4}$	42 $\frac{3}{4}$	169,436	3,963
Charlton to Wycheproof ...	...	16 $\frac{1}{2}$	16 $\frac{1}{2}$	84,479	5,120
Toolamba to Tatura ...	...	7	7	27,597	3,942
Tatura to Echuca ...	...	34 $\frac{3}{4}$	34 $\frac{3}{4}$	149,726	4,309
Wedderburn Junction to Wedderburn	...	4 $\frac{3}{4}$	4 $\frac{3}{4}$	17,291	3,640	
Korong Vale to Boort ...	...	18	18	72,366	4,020
Eaglehawk to Kerang ...	...	73 $\frac{3}{4}$	73 $\frac{3}{4}$	286,926	3,891
Creswick to Daylesford ...	...	23 $\frac{1}{2}$	23 $\frac{1}{2}$	161,966	6,892
Ballarat Racecourse to Waubra ...	...	13 $\frac{3}{4}$	13 $\frac{3}{4}$	60,409	4,395
Inglewood to Dunolly ...	...	24 $\frac{3}{4}$	24 $\frac{3}{4}$	93,096	3,761
Sandhurst to Heathcote (por- tion of Wandong, Heath- cote and Sandhurst line)	...	27 $\frac{3}{4}$	27 $\frac{3}{4}$	302,079	...	
Wandong to Kilmore (portion of Wandong, Heathcote and Sandhurst line)	...	9 $\frac{1}{2}$	9 $\frac{1}{2}$			
Total ...	101 $\frac{1}{4}$	592 $\frac{3}{4}$	694	8,225,435	11,852	
<i>Western System.</i>						
Footscray Junction to Wil- liamstown (including Piers and Breakwater)	6	...	6	481,219§	80,203	¶
Newport to Geelong (includ- ing line to Geelong Wharf and Williamstown Race- course Line)	1 $\frac{3}{4}$	37 $\frac{3}{4}$	39 $\frac{1}{2}$	1,146,035||	29,013	

* Exclusive of rolling stock, cost of Melbourne station, and general construction. See footnote (§) on page 201 post.

† Excluding the Melbourne and North Melbourne stations, which cost £985,532.

‡ Including a bridge over the Murray at Echuca, constructed conjointly by Victoria and New South Wales, the proportion paid by Victoria to 30th June, 1884, being £49,282.

§ Including the pier and breakwater, and western pier, which cost £179,549.

|| Including the cost of the Geelong pier.

¶ For distance travelled see next page.

RAILWAYS.—LENGTH, COST, ETC.—*continued.*

Lines.	Length open on the 30th June, 1889.			Cost of Construction.*		Distance Travelled during the Year.
	Double.	Single.	Total.	Total.	Average per mile.	
<i>Western System—contd.</i>	Miles	Miles.	Miles.	£	£	Miles.
North Geelong to Ballarat...	53½	...	53½	1,820,837	34,034	2,707,844
Geelong to Queenscliff— (Queenscliff Junction to Queenscliff)	...	20¾	20¾	111,072	5,353	
Geelong to Colac (including Geelong Racecourse Branch Line)	...	52½	52½	314,386	5,988	
Colac to Camperdown ...	...	28	28	125,437	4,480
Lal Lal Racecourse ...	...	2	2	11,332	5,666
Warrenheip to Gordons ...	...	13	13	86,941	6,688
Ballarat to Ararat ...	...	57	57	357,961	6,280
Ararat to Stawell ...	...	18¾	18¾	137,220	7,318
Stawell to Horsham ...	1	53	54	274,528	5,084	
Horsham to Dimboola ...	...	21¼	21¼	78,570	3,697
Dimboola to S.A. Border ...	...	63¼	†63¼	365,470	5,778
Ballarat Cattle Yards ...	...	3	3	12,303	4,101
Ballarat to Scarsdale ...	...	13¼	13¼	59,456	4,487
Ararat to Hamilton ...	...	66½	66½	315,661	4,747
Hamilton to Portland ...	...	54	54	279,871	5,183
Braxholme to Casterton ...	...	32	32	175,963	5,499
Lubeck to Rupanyup ...	...	9½	9½	40,633	4,277
Murtoa to Warracknabeal ...	...	31¼	31¼	133,574	4,274
Horsham to Noradjuha ...	...	20¼	20¼	76,907	3,798
Footscray to Bacchus Marsh	...	24¼	24¼	245,346	10,117	
Bacchus Marsh Junction to Newport	...	4¾	4¾	26,515	5,582	
Hamilton to Coleraine ...	...	23	23	101,976	4,434
Camperdown to Terang (por- tion of Camperdown to Warrnambool Line)	...	13¾	13¾	252,653	...	
Gordons to Ballan (portion of Bacchus Marsh to Gordons Line)	...	7¼	7¼	288,411	...	
Total ...	62¼	670	732¼	7,320,277	9,997	
<i>North-Eastern System.</i>						†
Essendon Junction to Essen- don (including Racecourse Line)	5	...	5	142,367	28,473	
Essendon to Wodonga ...	54	128	182	2,004,633	11,014	
Wodonga to Murray River...	...	2¼	2¼	36,040	16,018	
North Melbourne to Coburg	2¾	2¼	5	173,420	34,684	
Royal Park Junction to Clif- ton Hill	¾	2	2¾	146,190	53,160	
Fitzroy Branch ...	...	1	1	76,387	76,387
Tallarook to Yea ...	...	23¾	23¾	148,862	6,268

* Exclusive of rolling stock, cost of Melbourne station, and general construction. See footnote (§) on page 201 *post*.

† Includes 1¼ mile constructed on disputed territory on the border of South Australia.

‡ For distance travelled see next page.

RAILWAYS.—LENGTH, COST, ETC.—*continued.*

Lines.	Length open on the 30th June, 1889.			Cost of Construction.*		Distance Travelled during the Year.
	Double.	Single.	Total.	Total.	Average per mile.	
	Miles	Miles.	Miles.	£	£	Miles.
<i>North-Eastern System—con.</i>						
Mangalore to Shepparton	45	45	247,333	5,496	2,241,964
Shepparton to Numurkah ...	2 $\frac{1}{4}$	18 $\frac{1}{4}$	20 $\frac{1}{2}$	73,738	3,597	
Benalla to St. James ...	...	20 $\frac{1}{2}$	20 $\frac{1}{2}$	75,004	3,659
St. James to Yarrawonga ...	...	19 $\frac{3}{4}$	19 $\frac{3}{4}$	89,090	4,511
Wangaratta to Beechworth ...	...	23	23	158,256	6,881
Everton to Myrtleford ...	...	16 $\frac{1}{2}$	16 $\frac{1}{2}$	75,105	4,552
Springs to Wahgunyah ...	...	14	14	67,970	4,855
Numurkah to Nathalia ...	...	14	14	47,319	3,380
Numurkah to Cobram ...	...	21 $\frac{1}{2}$	21 $\frac{1}{2}$	75,736	3,522
Shepparton to Dookie ...	...	15	15	49,342	3,289
Total ...	64 $\frac{3}{4}$	366 $\frac{3}{4}$	431 $\frac{1}{2}$	3,686,792	8,544	
<i>Eastern and South Suburban Systems.</i>						
Spencer to Flinders-street Junction	$\frac{3}{4}$	$\frac{3}{4}$	26,680	35,573	2,107,573
South Yarra to Oakleigh ...	6 $\frac{3}{4}$	...	6 $\frac{3}{4}$	261,058	38,675
Oakleigh to Sale ...	...	118 $\frac{1}{4}$	118 $\frac{1}{4}$	870,807	7,364
Caulfield to Frankston ...	9 $\frac{1}{2}$	10 $\frac{1}{2}$	20	168,965	8,448	
Moe to Thorpedale ...	...	10 $\frac{3}{4}$	10 $\frac{3}{4}$	112,392	10,455
Morwell to Mirboo ...	...	20	20	149,434	7,472
Traralgon to Heyfield ...	...	23 $\frac{1}{4}$	23 $\frac{1}{4}$	119,710	5,149
Heyfield to Bairnsdale ...	...	50 $\frac{3}{4}$	50 $\frac{3}{4}$	244,083	4,810
Sale to Stratford ...	...	9 $\frac{1}{4}$	9 $\frac{1}{4}$	40,787	4,409
Hawthorn to Lilydale ...	5 $\frac{3}{4}$	14 $\frac{1}{2}$	20 $\frac{1}{4}$	260,367	12,858	
Hawthorn to Kew ...	...	1 $\frac{1}{4}$	1 $\frac{1}{4}$	69,463	55,570
Brighton to Picnic Point ...	2	...	2	69,352	34,676	
Lilydale to Healesville ...	...	15 $\frac{1}{4}$	15 $\frac{1}{4}$	194,088	12,727
Dandenong to Tooradin (portion of Dandenong to Leongatha Line)	...	16	16	213,731	...	
Frankston to Mornington Junction (portion of Frankston to Crib Point Line)	...	4 $\frac{1}{2}$	4 $\frac{1}{2}$	76,896	...	
Collingwood to Heidelberg...	...	5 $\frac{1}{4}$	5 $\frac{1}{4}$	172,769†	32,908	1,020,068
Hobson's Bay Lines (includ- ing the Port Melbourne Pier)	16 $\frac{1}{2}$	...	16 $\frac{1}{2}$	1,792,978‡	108,665
Total ...	40 $\frac{1}{2}$	300 $\frac{1}{4}$	340 $\frac{3}{4}$	4,843,560	14,214	...
Grand Total ...	268 $\frac{3}{4}$	1,929 $\frac{3}{4}$	2,198 $\frac{1}{2}$	24,076,064§	10,951	10,680,743

* Exclusive of rolling stock, cost of Melbourne station, and general construction. See footnote (§) *infra*. † Including junction station, Alphington, £49,918.

‡ Including expenditure on works, etc., between Prince's-bridge station (Melbourne) and Windsor, not yet apportioned, amounting to £207,701.

§ The total cost of the railways opened to the 30th June, 1889, was £29,125,280, viz., £24,076,064 as shown above, £3,066,701 on rolling-stock, £985,532 on the Melbourne and North Melbourne stations, £920,373 on general construction (such as sheds, workshops, machinery, etc.), and £76,610 cost of floating loans. To the 30th June, 1890, the total cost was £31,800,515. See paragraphs 333 and 334 *post*.

Railways in progress.

323. Under the *Railway Construction Act* 1884 (48 Vict. No. 821), which came into operation on the 12th December, 1884, 62 new lines, of an aggregate length of about 1,200 miles, were authorized, at a total estimated cost of nearly 6 millions sterling. Of these lines, 54, of a total length of about 1,172 miles, were country, and 8, of a total length of 28 miles, were suburban lines. The expenditure authorized for country lines, including stations, but not including permanent-way materials or rolling-stock, was £3,960 per mile; and for suburban lines, including stations and permanent-way material, but not including rolling-stock, £14,294 per mile. The gross additional amount authorized for rolling-stock is £178,000, and for permanent-way material (on country lines only) £415,000. Of the 1,200 miles authorized under the Act, 501 had been completed and opened for traffic on the 30th June, 1889, whilst $683\frac{3}{4}$ miles were in progress, and $15\frac{1}{4}$ miles had not been commenced. The following is a statement of the proposed lengths of the railways in progress at the 30th June, 1889:—

RAILWAYS IN PROGRESS, 30TH JUNE, 1889.

Names of Lines.						Approximate Length.
COUNTRY LINES.						Miles.
Avoca to Ararat	...	...	...	...	...	$38\frac{3}{4}$
Bacchus Marsh and Gordons (section Ballan to Maddingley)	...	...	...	...	...	$17\frac{1}{2}$
Ballarat East and Buninyong	...	...	...	...	...	$6\frac{3}{4}$
Birregurra and Cape Otway Forest	...	...	...	...	...	$19\frac{3}{4}$
Camperdown and Curdie's River	...	...	...	...	...	$22\frac{1}{2}$
Coburg and Somerton	...	...	...	...	...	7
Dandenong and Leongatha (section Tooradin to Leongatha)	...	...	...	...	...	$53\frac{3}{4}$
Fitzroy and Whittlesea	...	...	...	...	...	22
Frankston and Crib Point (section Mornington Junction to Crib Point)	...	...	...	...	...	$14\frac{1}{4}$
Hamilton and Penshurst	...	...	...	...	...	18
Kerang and Swan Hill	...	...	...	...	...	35
Koroit Railway <i>via</i> Penshurst	...	...	...	...	...	49
Koroit and Belfast	...	...	...	...	...	11
Koroit and Warrnambool	...	...	...	...	...	9
Kyneton and Redesdale	...	...	...	...	...	$16\frac{1}{4}$
Lancefield and Kilmore	...	...	...	...	...	$17\frac{3}{4}$
Leongatha and Port Albert	...	...	...	...	...	$47\frac{1}{4}$
Maffra and Briagolong	...	...	...	...	...	$11\frac{3}{4}$
Mornington	...	...	...	...	...	$7\frac{3}{4}$
Mount Moriac and Forest	...	...	...	...	...	11
Murchison and Rushworth	...	...	...	...	...	$12\frac{3}{4}$
Myrtleford and Bright	...	...	...	...	...	$18\frac{1}{2}$
Ondit and Beeac	...	...	...	...	...	$8\frac{3}{4}$
Ringwood and Fern Tree Gully	...	...	...	...	...	$7\frac{1}{2}$
Scarsdale and Lintons	...	...	...	...	...	8

RAILWAYS IN PROGRESS, 30TH JUNE, 1889—continued.

Names of Lines.						Approximate Length.
COUNTRY LINES.						Miles.
Terang and Mortlake ...	..	...	...	...	...	12
Camperdown and Warrnambool (section Terang and Warrnambool) ...						30
Wandong, Heathcote and Sandhurst (section Heathcote to Kilmore) ...						30
Warragul and Neerim ...	...	...	...	...	...	10
Wodonga and Tallangatta ...	...	...	...	...	...	26
Yackandandah and Beechworth ...	...	...	...	...	...	13
Yea and Mansfield ...	...	...	...	...	...	55½
Total ...	...	...	...	...	...	668
SUBURBAN LINES.						
Burnley to Junction with Outer Circle ...	...	...	...	...	...	5¼
Outer Circle Railway—Oakleigh <i>via</i> Camberwell to Richmond and Alphington						10½
Total ...	...	...	...	...	...	15¾
Grand Total ...	...	...	...	...	...	683¾

NOTE.—For expenditure on lines in progress see paragraph 333 *post*.

324. The following is a list of the lines, or sections of lines, authorized but not commenced up to the 30th June, 1889, together with a statement of their proposed lengths :—

Railways authorized, but not commenced

RAILWAYS AUTHORIZED BUT NOT COMMENCED, 30TH JUNE, 1889.

Names of Lines.						Approximate Length.
						Miles.
Frankston Cemetery ...	...	...	...	...	...	¾
Maldon and Laanecoorie ...	...	...	...	...	...	14½*
Total ...	...	...	...	...	...	15¼

NOTE.—A Bill is now (September, 1890) under the consideration of Parliament for the further construction of about 800 miles of railway.

325. According to the following table a considerable increase took place in 1889 as compared with the previous year in all descriptions of rolling-stock, especially locomotives, and sheep and cattle and goods trucks, etc. The increase in the total expenditure in rolling-stock was £336,000 :—

Rolling-stock.

* About 2½ miles over the authorized length. The contract was let in July, 1889, for this line.

ROLLING-STOCK, 1888 AND 1889.*

Year ended 30th June.	Number of—						Total Cost of Rolling- stock.
	Loco- motives.	First Class and Composite Carriages.	Second Class Carriages.	Sheep and Cattle Trucks.	Goods Trucks, Waggon, etc.	Guard Vans and other Vehicles.	
1888	397	517	303	408	5,786	434	£ 3,259,490
1889	461	538	337	595	7,469	552	3,595,323
Increase ...	64	21	34	97	1,683	118	335,833

Passenger
rates.

326. The passenger rates are higher on country lines than on the lines connecting Melbourne with its suburbs, which are now defined to be those within a radius of 15 miles from the heart of the city. The following are the respective rates per mile:—

PASSENGER RATES (SINGLE) PER MILE.

First class, country lines ...	2d.	Second class, country lines ...	1½d.
„ suburban lines ...	1d.	„ suburban lines ...	0¾d.

Miles
open and
travelled.

327. By the following statement of the number of miles open and the number of train miles travelled, and of the passengers and goods carried during the financial years 1887-8 and 1888-9, it is shown that a considerable increase took place in all the items, the train mileage having increased by 18 per cent., the passenger traffic by 23 per cent., and the goods traffic by 16 per cent. The increases referred to were, no doubt, partly due to the traffic which took place in connexion with the late Melbourne Centennial International Exhibition:—

RAILWAYS.—MILES OPEN AND TRAVELLED, AND PASSENGERS AND GOODS CARRIED, 1887-8 AND 1888-9.†

Year.		Average Extent Opened.	Train Mileage.	Passengers. ‡	Goods and Live Stock.
		Miles.	Miles.	No.	Tons.
1887-8		1,947	9,082,312	55,911,394	3,564,043
1888-9		2,144	10,680,743	68,904,427	4,160,126
Increase ...		197	1,598,431	12,993,033	596,083

* Including rolling-stock in course of construction at the end of each year. In 1889, the amount expended thereon was £528,622.

† During the year 1889-90, the train mileage was 11,773,152; the passengers carried numbered 71,058,940; and the quantity of goods and live stock carried was 4,170,436 tons.

‡ In order to compute the number of passengers, the single tickets sold have been added to 720 for each yearly, 360 for each half-yearly, and 60 for each monthly ticket issued to adults; 120 for each quarterly, and 40 for each monthly ticket issued to youths; 90 for each quarterly, and 30 for each monthly ticket issued to boys; and 2 for each day-return ticket issued; an addition of 138,380 has also been made each year for the estimated number of free journeys made.

328. The following were the railway receipts and working expenses during the financial years 1887-8 and 1888-9 :—

Receipts and
working
expenses.

RAILWAYS.—RECEIPTS AND WORKING EXPENSES, 1887-8 AND 1888-9.*

Year ended 30th June.	Receipts.				Working Expenses.	Net Income.	Proportion of Working Expenses to Receipts.
	Passenger Fares.	Freight on Goods and Live Stock.	Sundries.	Total.			
	£	£	£	£	£	£	Per cent.
1888 ...	1,200,046	1,358,999	197,004	2,756,049	1,753,019†	1,003,030	63·61
1889 ...	1,456,037	1,441,600	212,503†	3,110,140	1,945,837	1,164,303	62·56
Increase	255,991	82,601	15,499	354,091	192,818	161,273	...
Decrease	...	...	...	...	...	...	1·05

329. It will be observed that, whilst the average extent of lines open for traffic in 1888-9 was 10 per cent. above that in 1887-8, the net income increased by over £161,000,—resulting from an increase of £354,000 in the gross receipts, less one of £193,000 in the working expenses. It should, however, be remembered that the revenue of 1888-9 was considerably augmented by the large traffic induced by the late International Exhibition held in Melbourne during that year, also that the expenses of 1887-8 were swelled to the extent of £128,988 by the cost of the railway accident. On the other hand, the Railway Commissioners point out that certain reductions were made in the rates of freights in favour of agricultural interests, which practically reduced the revenue during the year by £50,000; also that the following exceptional items appear amongst the working expenses for the year :—£37,828 increased expenditure necessitated by the Newcastle coal strike, £23,682 for special renewal of rails—“ properly chargeable to capital ”—to meet growing requirements of traffic as well as to secure more rapid communication on some of the principal lines. The proportion of working expenses to receipts was $62\frac{1}{2}$ per cent. in 1888-9, as compared with an average of $60\frac{4}{5}$ per cent. during the previous five years, and an average of 55 per cent. during the five years ended with 1882. An explanation of this increase is partly to be found in the policy of the department in reducing passenger fares and merchandize rates, whenever the net revenue reaches an amount which is more than sufficient to meet the interest on the railway loans. The Railway Commissioners estimate that the aggregate amount of

Increase in
railway
income.

* During the year 1889-90, the Railway receipts amounted to £3,131,866, and the working expenses to £2,132,158. The net income was thus £999,708; and the proportion of working expenses to receipts 68 per cent.

† This amount is made up of parcels, etc., £82,382; horses, carriages, and dogs, £19,322; mails, £55,153; rents, £28,371; miscellaneous, £17,275.

‡ The whole cost of the Windsor accident, which occurred in 1886-7, amounting to £128,988, is here included.

concessions so made during the last five years was not less than £600,000; and that had no such concessions been made the railway revenue of 1888-9 would have been increased by £200,000, and the proportion of working expenses to receipts in these years would have been as low as $58\frac{3}{4}$ per cent.*

330. The following table shows the average extent of Government railways open, the gross earnings and expenses, and the net profits per mile open, in each of the last sixteen years:—

EARNINGS AND EXPENSES OF RAILWAYS PER MILE OPEN,
1873-4 to 1888-9.†

Year.	Average Number of Miles Open.	Gross Earnings per Mile.	Expenses per Mile.	Net Profits per Mile.
		£	£	£
1873-4 ...	414	2,056	905	1,151
1874-5 ...	541	1,701	890	811
1875-6 ...	608	1,636	821	815
1877 ...	787	1,443	753	690
1878 ...	967	1,258	647	611
1879 ...	1,091	1,120	587	533
1880 ...	1,194	1,250	682	568‡
1881 ...	1,215	1,371	752	619‡
1882 ...	1,300	1,370	845	525
1883 ...	1,432	1,326	890	436
1884 (6 months)	1,598	701	425	276
1884-5 ...	1,655	1,318	772	546
1885-6 ...	1,691	1,377	775	602
1886-7 ...	1,791	1,370	797	573
1887-8 ...	1,947	1,415	900§	515
1888-9 ...	2,144	1,451	908	543

331. It will be observed that in 1873-4, when only 400 miles were open, the net profits averaged over £1,100 per mile, but they fell off as the lines were extended to £533 in 1879, and to as low as £436 in 1883. Since the latter year the proportion has ranged between £500 and £600 per mile. In 1888-9, when the length of line open was over five times as great as in 1873-4, the net profits per mile were only £543, or lower than in any previous year shown in the table except 1887-8, 1883, 1882, or 1879.

332. The total amount borrowed by the Government for railway construction to the end of June, 1889, inclusive of the debentures of the late Melbourne and Hobson's Bay Railway Company, was

* See Report of the Victorian Railway Commissioners for the year ending 30th June, 1889, pages xiv. and xv.
† During the year 1889-90, the average number of miles open was 2,330; the gross earnings averaged £1,344 per mile; the expenses per mile £915; and the net profit per mile £429.
‡ The increases in these years were in consequence of the transactions of the late Melbourne and Hobson's Bay Company's lines—on which the net profits per mile are naturally larger than on the country lines—being included for the first time in those years.
§ Including expenses of the Windsor accident.

£29,099,619, of which £2,673,913 was raised during the year 1888-9. As, however, the gross proceeds exceeded the nominal amount by £204,958,* whilst on the other hand the expenses of floating the loans amounted to £281,568, the net amount available for railway construction was only £29,023,009.

333. In addition to the amount derived from loans, certain other sums, amounting in the aggregate to £2,936,662, have also been available for railway construction, viz., £2,568,562 derived from the alienation of Crown lands† and £368,100 from the consolidated revenue. The total expenditure on the construction of railways had amounted at the end of June, 1889, to £31,266,126, and at the same period the balance at credit was £770,155. The following is a statement of the railway capital account to that date:—

CAPITAL ACCOUNT OF VICTORIAN RAILWAYS TO 30TH JUNE, 1889.

RECEIPTS.			
Total amount of loans, exclusive of redemption loans	£29,099,619		
Railway loan liquidation and construction account†	2,200,000		
Railway construction account†	368,562		
From consolidated revenue	368,100‡		
Total receipts		£32,036,281	
EXPENDITURE.			
Construction of completed lines—			
Permanent way	£24,076,064§		
Rolling-stock, general construction, etc.	5,049,216||		
Construction of lines in progress, and rolling-stock	2,140,846§		
Preliminary surveys			
Total expenditure		£31,266,126	
Balance available		£770,155	

334. The first two items of expenditure in the above statement, amounting to £29,125,280, represent the capital cost of the lines open for traffic at the end of the year 1888-9, whilst the mean for the year may be set down at £27,853,130. The net income of the Victorian Railways in 1888-9 has already been stated¶ to have been £1,164,303. A short calculation based upon these two amounts will show that the railways in that year made a return upon their capital cost of 4·180 per cent., equal to £4 3s. 7d. per £100, as compared with a proportion

* Including £12,193 increase of debt on conversion of debentures into stock at a lower rate of interest.

† See footnote (†) on page 168 in Vol. I.

‡ Viz., £68,100 loan paid off, and £300,000 under Act 879 for rolling-stock.

§ For the particulars of the expenditure, see tables following paragraphs 322 and 323 ante.

|| Includes net cost of floating the loans, etc., £76,610; and cost Melbourne and North Melbourne station, £985,532. See also footnote (§) on page 201 ante. For cost of rolling-stock only, see paragraph 325 ante.

¶ See table following paragraph 328 ante.

of 3·888,* or £3 17s. 9d. per £100 in 1887-8.† The nominal rate of interest payable on the borrowed capital now averages 4·14 per cent; or £4 2s. 10d. per £100.‡ In 1883 the average rate was as high as 5 per cent., but owing to the redemption of 6 per cent. debentures and the issue during subsequent years of 4 per cent. debentures in lieu thereof, a reduction of £161,684, upon a total of £485,052, was effected in the annual interest payable.

Proportion
of income to
capital cost.

335. The following is a statement of the proportion which the net earnings of the railways have borne to their capital cost during each of the last eight full financial years:—

PROPORTION OF EARNINGS TO COST OF RAILWAYS, 1881 TO 1889.†

		Per cent.			Per cent.
1881	...	4·083	1885-6	...	4·373*
1882	...	3·512	1886-7	...	4·196*
1883	...	2·958	1887-8	...	3·888*
1884-5	...	4·081*	1888-9	...	4·180

Purchase by
the State of
private
railways.

336. The late Melbourne and Hobson's Bay Company's railways, formerly consisting of $6\frac{3}{4}$ miles of single and $9\frac{3}{4}$ miles of double line—or $16\frac{1}{2}$ miles in all—between Melbourne and the principal suburbs on the south side of the Yarra, were purchased by the Government on the 1st July, 1878. For the first twelve months after the purchase they were worked by the company for the State, but have since been under immediate Government control. The lines now are double throughout. The cost to the 30th June, 1889, including rolling-stock, was £2,047,978. This amount includes expenditure on rolling-stock in course of construction, also about £200,000 for additions and improvements to the permanent way, a portion of which is properly chargeable to other lines.

Rates of
interest on
debentures
of pur-
chased
railways.

337. Six per cent. Hobson's Bay Railway debentures of the value of £281,200, and $3\frac{1}{2}$ per cent. debentures of the value of £200, were redeemed prior to the 30th June, 1888. The debentures now outstanding bear 5 per cent. interest, and represent a total value of £183,900.

Hobson's
Bay lines
before and
after
purchase.

338. Dating from the period at which the Hobson's Bay lines were purchased by the State, there had been until the end of 1883 a large falling-off in the net income derivable therefrom, whilst in one year (1882) the working expenses actually exceeded the receipts by nearly £72,000. After the railways were placed under the control of Commissioners there was a marked improvement, and in the financial

* Figures revised and amended since last publication.

† During the year 1889-90, the net income, which amounted to £999,708, was equivalent to 3·28 per cent. on the mean capital cost (£30,462,900) of the lines opened for traffic.

‡ See table on page 229 of Vol. I.

years 1885-6, 1886-7, and 1888-9 the percentage of the net gain to the capital cost was apparently even higher than it was before the railways were purchased from the company. In the year 1888-9 the net gain was nearly £124,000, being equivalent to over 6 per cent. upon the capital, which was much larger than in any previous year. In 1887-8 there was a net loss—in consequence of the large amount (£128,988) paid on account of the Windsor accident—of £60,000, or 3 per cent. The following table has been designed with the object of giving a comparative view of the profits or losses on working these lines before and since their purchase, and shows for each year their capital cost and the interest payable thereon, the net income and its percentage on the capital cost, also the amount and percentage of gain or loss on the working of the lines:—

HOBSON'S BAY LINES BEFORE AND AFTER PURCHASE BY THE STATE.

Year.	Capital Cost of Lines.*	Interest payable on Capital Cost.		Net Income. (Excess of Receipts over Expenditure.)		Net Gain (+) or Loss (–) on working Lines after payment of Interest.	
		Amount.	Average annual rate per cent.†	Amount.	Percentage of Capital Cost.†	Amount.	Percentage of Capital Cost.†
1873 to 1876 (annual average)	£ 1,000,000	£ 56,500‡	5·65	£ 82,627	8·26	+ 26,127	+ 2·61
1877-8 ...	1,015,011	57,348‡	5·65	81,152	8·00	+ 23,804	+ 2·35
1878-9 ...	1,337,128	65,093	4·87	43,728	3·27	– 21,365	– 1·60
1879 (6 months) ...	1,337,128	32,546	4·87	34,700	5·18	+ 2,154	+ ·31
1880 ...	1,362,316	65,476	4·81	61,317	4·50	– 4,159	– ·31
1881 ...	1,392,975	65,660	4·71	19,414	1·39	– 46,246	– 3·32
1882 ...	1,460,195	68,085	4·66	– 71,828§	– 4·92§	– 139,913	– 9·58
1883 ...	1,576,520	72,413	4·59	23,579	1·50	– 48,834	– 3·09
1884 (6 months) ...	1,647,150	37,380	4·54	45,995	5·59	+ 8,615	+ 1·05
1884-5 ...	1,715,460	77,490	4·52	113,731	6·63	+ 36,241	+ 2·11
1885-6 ...	1,808,450	81,015	4·48	129,709	7·17	+ 48,694	+ 2·69
1886-7 ...	1,886,200	83,736	4·44	141,748	7·52	+ 58,012	+ 3·08
1887-8 ...	1,957,890	86,410	4·41	26,505||	1·35	– 59,905	– 3·06
1888-9 ...	2,020,273	88,910	4·40	212,719	10·53	+ 123,809	+ 6·13

NOTE.—The lines were purchased by the State on the 1st July, 1878. During the year 1889-90, the gross receipts amounted to £402,341, and the working expenses to £228,081. The net proceeds were thus £174,260, or 8·33 per cent. of the mean capital cost (£2,092,700).

* The figures in this column represent the capital cost about the middle of the year or period named. On the 30th June, 1888, the capital cost was £1,992,568, and on the 30th June, 1889, £2,047,978, as stated in paragraph 336 *ante*.

† Rate during periods of six months doubled for purposes of comparison with whole years.

‡ These amounts have been calculated by charging interest upon the whole capital at the same rate as the average of that payable upon the debenture capital.

§ The minus sign (–) indicates that the working expenses exceed the receipts.

|| Small net increase accounted for by the Windsor accident, on account of which £128,988 was paid as compensation during the year.

Loss on
working
Hobson's
Bay lines.

339. It will be observed that prior to their purchase by the State the net income of the lines represented a return of about 8 per cent. upon the capital (share and debenture combined), which, however, probably included the accumulated reserve funds; and if interest be allowed on the whole at the same rate as was paid upon the debenture capital, the net gain, after payment of interest on capital, will be found to have been from $2\frac{1}{3}$ to $2\frac{2}{3}$ per cent. Since the purchase, taking into account the interest upon the capital cost, there has been an actual loss on the lines during six of the years shown, but a gain in the remaining five and a half years. During the most recent financial year the net income was equivalent to $10\frac{1}{2}$ per cent. per annum on the capital cost, which was 6 per cent. higher than the average rate at which the capital was borrowed; whilst the net amount gained, after providing for interest, was £124,000. This satisfactory result is no doubt largely attributable to the increased settlement which has recently sprung up in the outlying suburbs of Melbourne. It will be borne in mind that the railways were placed under the control of the Commissioners on the 1st February, 1884.

Loss on
working
Hobson's
Bay lines
in 11 years.

340. The figures in the fifth column (net income) show that, during the 11 years between the purchase of the lines and the end of June, 1889, the receipts exceeded the working expenses by £781,317; and the figures in the last column but one show that the total loss upon working the lines in the same period amounted, after paying interest on capital, to £42,897.

Compens-
tion for
railway
accidents.

341. The falling-off in the net income of the Hobson's Bay lines during the years 1881, 1882, 1883, and 1887-8, was largely due to the heavy compensation it was necessary to pay to sufferers from accidents which occurred thereon during the years 1881, 1882, and 1886-7. During the last $10\frac{1}{2}$ years the amount of compensation so paid was no less than £321,500, equal to over a tenth of the gross receipts, which was nearly $2\frac{1}{4}$ times as much as on all the other lines of the colony put together. The following table shows the amount payable during that period, the Hobson's Bay lines being distinguished from those embraced in the other railway systems:—

COMPENSATION FOR RAILWAY ACCIDENTS, ETC.,* 1879 TO 1888-9.

Year.	Amount of Compensation payable.		
	Hobson's Bay lines.	Other lines.	Total.
	£	£	£
1879 ...	936	5,310	6,246
1880 ...	76	3,010	3,086
1881 ...	45,160	19,835	64,995
1882 ...	114,587†	17,141	131,728
1883 ...	25,802	27,737	53,539
1884 (first 6 months)	1,630	30,098	31,728
1884-5 ...	1,042	4,774	5,816
1885-6 ...	647	4,875	5,522
1886-7 ...	784	5,871	6,655
1887-8 ...	129,305	10,854	140,159
1888-9 ...	1,537	17,492	19,029
Total ...	321,506	146,997	468,503

342. The revenue returned in 1888-9 in proportion to the cost of construction (including rolling-stock) was as high as $10\frac{1}{2}$ per cent. on the Hobson's Bay lines, and $6\frac{1}{3}$ per cent. on those of the North-Eastern system—which carries the Sydney traffic, but varied from $1\frac{3}{4}$ per cent. to 4 per cent. on the other lines. In proportion to the capital cost, the net returns on all but the Northern and the Eastern systems show an improvement in 1888-9 as compared with those of the previous two years. The following are the results obtained on the working of the various systems during the three financial years ended with 1888-9, as calculated in the office of the Government Statist, Melbourne:—

PERCENTAGE OF NET REVENUE TO CAPITAL COST OF EACH RAILWAY SYSTEM, 1886-7 TO 1888-9.

	1886-7.†	1887-8.†	1888-9.
Northern system ...	2.93	3.39	2.70
Western system ...	4.10	4.04	4.08
North-Eastern system ...	6.20	6.71	6.30
Eastern system (exclusive of Hobson's Bay lines) ...	2.83	2.53	1.75
Hobson's Bay lines ...	7.52	1.35§	10.53
All lines ...	4.20	3.89	4.18

* Compensation payable on account of goods damaged, lost, etc., is included prior to 1884-5, up to which date no separate account was kept, but in 1884-5, and subsequent years, the amount paid for personal damage only is included.

† This represents the amount set down as estimated to be payable when the accounts of the year were closed. It was subsequently found, however, that the liability had been under-estimated by about £25,000, which amount is therefore included in the accounts for the succeeding year.

‡ Figures amended since last publication.

§ Low proportion due to Windsor accident.

Railways in
Austral-
asian
colonies.

343. The following table shows the number of miles of railway open, and the proportion that the extent of lines bore to area and population, in each of the Australasian colonies at the end of every fifth year from 1870 to 1885, and for the three years ended with 1888 :—

RAILWAYS IN AUSTRALASIAN COLONIES.

Colony.	Year.	Miles of Railway open on 31st December.		
		Number.	Per 10,000 Square Miles of Territory.	Per 100,000 Inhabitants.
Victoria* ...	1870	274	31	38
	1875	617	70	78
	1880	1,199	136	139
	1885	1,676	191	173
	1886	1,743	198	177
	1887	1,880	214	184
	1888	2,018	230	185
New South Wales ...	1870	335	11	67
	1875	437	14	74
	1880	850	28	115
	1885	1,777	57	186
	1886	1,935	63	193
	1887	2,081	67	200
	1888	2,206	71	203
Queensland ...	1870	206	3	178
	1875	265	4	146
	1880	633	9	280
	1885	1,434	21	455
	1886	1,555	23	455
	1887	1,765	26	481
	1888	1,931	29	498
South Australia ...	1870	133	1	72
	1875	274	3	130
	1880	667	7	249
	1885	1,063	12	339
	1886	1,382	15	442
	1887	1,420	16	441
	1888	1,518	17	477
Western Australia ...	1870	...	...	...
	1875	38	...	142
	1880	72	...	248
	1885	184	2	523
	1886	154	2	389
	1887	239	2	562
	1888	272	3	646

* The figures for Victoria since 1885 relate to the 30th June of each year.

RAILWAYS IN AUSTRALASIAN COLONIES—continued.

Colony.	Year.	Miles of Railway open on 31st December.		
		Number.	Per 10,000 Square Miles of Territory.	Per 100,000 Inhabitants.
Tasmania	1870	...	...	...
	1875	150	57	145
	1880	172	65	150
	1885	257	97	192
	1886	303	115	221
	1887	318	121	223
	1888	327	124	224
New Zealand	1870	...	...	...
	1875	542	52	144
	1880	1,258	121	259
	1885	1,654	159	288
	1886	1,809	174	307
	1887	1,841	177	305
	1888	1,865	179	307

NOTE.—For miles of railway open in each colony at the end of 1889, see Summary of Australasian Statistics (third folding sheet) *ante*, also Appendix A. *post*.

344. In 1888 the lines of Victoria extended over about 150 miles more than those of New Zealand, but nearly 200 miles less than those of New South Wales. The following is the order in which the respective colonies stood, in 1888, in regard to the length of their lines of railway :—

Order of colonies in respect to length of railways.

ORDER OF COLONIES IN REFERENCE TO LENGTH OF RAILWAYS.

1. New South Wales.

2. Victoria.

3. Queensland.

4. New Zealand.
5. South Australia.

6. Tasmania.

7. Western Australia.

345. In regard to the extent of railways open in proportion to area, Victoria was much in advance of the other colonies; but, in proportion to population, she occupied the lowest position on the list. The following is the order of the colonies in 1888 in these respects :—

Order of colonies in respect to length of railway to area and population.

ORDER OF COLONIES IN REFERENCE TO THE PROPORTION OF LENGTH OF RAILWAYS.

- To Area.

1. Victoria.

2. New Zealand.

3. Tasmania.

4. New South Wales.

5. Queensland.

6. South Australia.

7. Western Australia.
- To Population.

1. Western Australia.

2. Queensland.

3. South Australia.

4. New Zealand.

5. Tasmania.

6. New South Wales.

7. Victoria.

Railways in Australia and Australasia.

346. The progress of railway extension on the continent of Australia, and on that continent with the addition of Tasmania and New Zealand between 1870 and 1888, is shown in the following table. It will be observed that the length in 1888 in Australia was over eight times, and in Australasia nearly eleven times, as great as it was at the commencement of the period:—

RAILWAYS IN AUSTRALIA AND AUSTRALASIA.

Year.				Miles of Railway Open on the 31st December.*	
				Continent of Australia.	Australia, with Tasmania and New Zealand.
1870	...	...	...	948	948
1875	...	...	...	1,631	2,323
1880	...	...	...	3,421	4,851
1885	...	...	...	6,134	8,045
1886	...	...	...	6,769	8,881
1887	...	...	...	7,385	9,544
1888	...	...	...	7,945	10,137

Railways in Australasia in proportion to area and population.

347. In 1888, there were on the continent of Australia, an average of 2·7 miles of railway to every 1,000 square miles, or 272 miles to every 100,000 inhabitants; and on that continent, with the addition of Tasmania and New Zealand, there were 3·3 miles to every 1,000 square miles, or 276 miles to every 100,000 inhabitants.

Gauges of lines in Australasia.

348. All the Victorian lines are constructed upon a gauge of 5 feet 3 inches, which is also the national gauge in South Australia, but has not been adhered to in that colony, as over 700 out of 1,500 miles have been constructed upon a 3 feet 6 inches gauge. In New South Wales, a 4 feet 8½ inches gauge has been adopted, but the private line of railway between Moama and Deniliquin, which is connected with the Victorian line from Sandhurst to Echuca, has been constructed upon a 5 feet 3 inches gauge. In Queensland, Western Australia, Tasmania and New Zealand all the railways have been constructed upon a gauge of 3 feet 6 inches.

Length, cost, and revenue of railways in each colony.

349. The following is a statement of the length, capital cost, receipts, working expenses, and net revenue of the railways in each Australasian colony during the year 1888:—

* See footnote to table following paragraph 343 ante.

LENGTH, CAPITAL COST, RECEIPTS, AND WORKING EXPENSES OF
RAILWAYS IN AUSTRALASIAN COLONIES, 1888.*

Colony.	At end of the Year.		During the Year.†		
	Number of Miles Open.†	Capital Cost.‡	Receipts.	Working Expenses.	Net Revenue.
		£	£	£	£
Victoria ...	2,018	27,468,258	2,756,049	1,753,019	1,003,030
New South Wales ...	2,206	26,630,664	2,509,527	1,578,590	930,937
Queensland ...	1,931	§13,064,598	776,794	507,961	268,833
South Australia ...	1,518	9,666,223	948,382	453,385	494,997
Western Australia ...	272	892,243	38,371	44,080	—5,709||
Total ...	7,945	77,721,986	7,029,123	4,337,035	2,692,088
Tasmania ...	327	2,353,585	135,984	129,265	6,719
New Zealand ...	1,865	13,472,837	997,615	647,045	350,570
Grand Total ...	10,137	93,548,408	8,162,722	5,113,345	3,049,377

350. The average cost of Government railways per mile, as deduced from the figures in the above table, ranges from £13,612 in Victoria to £4,374 in Western Australia. The following are the figures for each colony :—

Cost per mile of railways in each colony.

CAPITAL COST PER MILE OF GOVERNMENT RAILWAYS IN EACH COLONY.*

(At the end of 1888.)

	£		£
1. Victoria ...	13,612	5. Queensland ...	6,766
2. New South Wales ...	12,532	6. South Australia ...	6,444
3. Tasmania ...	8,436	7. Western Australia ...	4,374
4. New Zealand ...	7,582		

351. According to the following figures, the capital cost of railways per mile has not been so high in Victoria and New South Wales, as in the United Kingdom, France, Belgium, Germany, Austria or Russia. In Tasmania the capital cost has been less than in any of the following countries except Cape Colony; whilst in the other Australasian colonies it has been lower than the capital cost in even that country :—

Cost of railways per mile in various countries.

* The figures for Victoria are for the year ended 30th June, 1888, for New Zealand for the year ended 31st March, 1889, and those for the other colonies for the year ended 31st December, 1888. For later information respecting the railways in the various colonies, see Appendix A. *post*.

† The following lengths of private railways are included, viz. :—81 miles in New South Wales; 18 miles in South Australia; 68 miles in Western Australia; 48 miles in Tasmania; and 88 miles in New Zealand.

‡ Government lines only.

§ Including expenditure on lines in progress.

|| Excess of working expenses over receipts.

CAPITAL COST PER MILE OF RAILWAYS IN VARIOUS COUNTRIES.

Cost per Mile.			Cost per Mile.		
£			£		
England and Wales	...	51,075	Russia and Austria	...	19,968
United Kingdom	...	43,645	Ireland ...	...	13,369
Scotland	...	36,855	Canada ...	...	11,930
France ...	...	27,045	United States	...	11,268
Belgium	...	25,865	India and Burma	...	9,772
British Dominions	...	21,297	Australasia	...	9,513
Germany	...	20,400	Cape Colony	...	8,004

Proportion
of railway
revenue to
cost in each
colony.

352. In 1888 the net railway revenue bore a higher proportion to the capital cost in Victoria than in any of the other colonies except South Australia, which derives a large profit from the traffic to the Broken Hill silver mines, the proportion for the year referred to being nearly $1\frac{1}{2}$ per cent. lower than in South Australia, but $\frac{1}{3}$ per cent. higher than in New South Wales. This will be observed from the following figures, which also show that the railways of Western Australia are worked at a loss; and those of Tasmania pay little more than $\frac{1}{4}$ per cent., whilst those of Queensland and New Zealand pay respectively $2\frac{1}{8}$ and $2\frac{2}{3}$ per cent. upon their capital cost:—

PROPORTION OF NET REVENUE TO CAPITAL COST OF RAILWAYS
IN EACH COLONY, 1888.*

Per Cent.			Per Cent.		
1. South Australia	...	5.26	5. Queensland	...	2.13
2. Victoria	...	3.80	6. Tasmania	...	.30
3. New South Wales	...	3.50	7. Western Australia	...	-.67
4. New Zealand	...	2.61			

Average
cost and
profits of
railways in
Australia
and Aus-
tralasia.

353. Taking the continent of Australia as a whole, the capital cost of railways averaged £9,993 per mile, and the proportion of net revenue to cost was 3.55 per cent. Combining the Australian continent with Tasmania and New Zealand, the capital cost averaged £9,513 per mile, and the proportion of net revenue to cost was 3.33 per cent.

Proportion
of railway
revenue to
cost in
various
countries.

354. The following figures compared with those relating to the Australasian colonies show the proportion of net revenue to capital cost to have been higher in South Australia than in any of the countries named except the Argentine Confederation, and Cape Colony, and higher in Victoria than in one half of the countries; whilst in all the other colonies, the proportion was lower than in most of the countries named:—

* For later information see Appendix A. *post*.

PROPORTION OF NET REVENUE TO CAPITAL COST OF RAILWAYS IN
VARIOUS COUNTRIES.

	Per Cent.		Per Cent.
Argentine Confederation ...	5.65	France ...	3.75
Cape Colony ...	5.34	Ireland ...	3.75
India and Burma ...	5.12	Scotland ...	3.64
Germany ...	5.11	Australasia (1888) ...	3.33
Holland ...	4.81	Austria-Hungary ...	3.06
Belgium ...	4.55	Sweden ...	2.75
Switzerland ...	4.25	Italy ...	2.61
England and Wales ...	4.15	Norway ...	1.86
United Kingdom ...	4.06	Canada ...	1.58
British Dominions ...	3.82		

355. Some engineers contend that the first cost of a railway should not exceed ten times its annual gross receipts, the latter being termed its "theoretical cost." The following figures show that in all the Australasian colonies, except Victoria, the theoretical cost was greatly exceeded by the actual cost. This, however, is to be expected in new and thinly peopled countries, and upon recently constructed lines where the railway traffic is not yet fully developed:—

Actual and
theoretical
cost of Aus-
tralasian
railways.

ACTUAL AND THEORETICAL COST OF RAILWAYS IN THE
AUSTRALASIAN COLONIES.

Colony.	Actual Cost of Construction.	Theoretical Cost of Construction (Ten Times the Annual receipts).	Actual in Excess of Theoretical Cost.
	£	£	£
Victoria ...	27,468,258	27,560,490	— 92,232*
New South Wales ...	26,630,664	25,095,270	1,535,394
Queensland ...	13,064,598	7,767,940	5,296,658
South Australia ...	9,666,223	9,483,820	182,403
Western Australia ...	892,243	383,710	508,533
Total ...	77,721,986	70,291,230	7,430,756
Tasmania ...	2,353,585	1,359,840	993,745
New Zealand ...	13,472,837	9,976,150	3,496,687
Grand Total ...	93,548,408	81,627,220	11,921,188

356. The actual has been less than the theoretical cost of constructing the railways in Cape Colony, British India, Germany, Russia, and the United States; but the reverse has been the case in the rest of the following countries:—

Actual and
theoretical
cost of
railways in
various
countries.

* Actual less than theoretical cost by this amount.

ACTUAL AND THEORETICAL COST OF CONSTRUCTING RAILWAYS
IN VARIOUS COUNTRIES.

Country.	Actual Cost of Construction.	Theoretical Cost of Construction (Ten times the Annual Receipts).	Actual in Excess of Theoretical Cost.	Actual less than Theoretical Cost.
	£	£	£	£
United Kingdom ...	864,695,963	728,946,650	135,749,313	...
Scotland ...	114,120,119	79,944,270	34,175,849	...
Ireland ...	36,539,273	28,946,050	7,593,223	...
Australasia (1888) ...	93,548,408	81,627,220	11,921,188	...
Cape Colony ...	14,214,308	15,144,160	...	929,852
India and Burmah ...	132,718,660	137,377,200	...	4,658,540
Canada ...	151,495,927	86,148,230	65,347,697	...
Germany ...	495,107,000	545,900,000	...	50,793,000
France ...	531,120,000	424,220,000	106,900,000	...
Italy ...	121,583,000	94,510,000	27,073,000	...
Belgium ...	71,438,000	67,860,000	3,578,000	...
Russia ...	277,860,000	282,950,000	...	5,090,000
United States ...	1,738,397,000	1,980,460,000	...	242,153,000

Railways in
United
Kingdom.

357. In 1888 the length of lines open in Ireland and Scotland together was 2,115 miles less than the length open on the Australian continent; whilst the length open in England and Wales was about 3,900 miles greater than that upon the Australian continent, combined with Tasmania and New Zealand. Taking the United Kingdom as a whole, the working expenses were in the proportion of 52 per cent. of the receipts; whilst the net receipts amounted to barely 4 per cent. of the capital cost. The following are the railway statistics of the United Kingdom for that year:—

RAILWAYS IN THE UNITED KINGDOM, 1888.

Country.	Miles of Railway open on the 31st December	Paid up Capital (Shares, Loans, etc.).	Number of Passengers (excluding Season Ticket Holders).	Traffic Receipts.	Working Expenses.
		£		£	£
England and Wales ...	13,982	714,036,571	654,172,918	62,005,633	32,391,197
Scotland ...	3,097	114,120,119	68,413,349	7,994,427	3,845,366
Ireland ...	2,733	36,539,273	19,912,897	2,894,605	1,525,544
Total United Kingdom	19,812	864,695,963	742,499,164	72,894,665	37,762,107

Daily
receipts per
mile on
Victorian
and British
railways.

358. The gross daily receipts of the Victorian railways per mile open averaged £3 17s. 7d. in 1887-8, and £3 19s. 6d. in 1888-9.* These amounts are much larger than the average receipts upon any of the British railways, except the Metropolitan, as shown by the following figures:—

* These calculations are based upon a comparison of 365 days with the total receipts, but except on the lines connecting Melbourne with its suburbs—where a limited traffic is carried on—the Victorian lines do not run on Sundays. If Sundays be excluded from the computation, the average daily receipts would be £4 10s. 5d. in 1887-8, and £4 12s. 8d. in 1888-9.

GROSS DAILY RECEIPTS OF BRITISH RAILWAYS PER MILE CONSTRUCTED.*

				Average Receipts per Mile per Day.		
				£	s.	d.
Metropolitan	...	...	...	11	9	1
London and Yorkshire	...	...	...	2	19	7
London, Chatham, and Dover	...	...	...	2	13	9
London and North-Western	...	...	...	2	4	6
London, Brighton, and South Coast	...	...	...	2	1	6
Midland	...	...	...	2	1	5
Great Northern	...	...	...	1	15	5
London and South-Western	...	...	...	1	12	11
North-Eastern	...	...	...	1	12	4
Great Eastern	...	...	...	1	7	1
Great Western	...	...	...	1	6	7
Caledonian	...	...	...	1	6	7
North British	...	...	...	1	0	1
Average				1	14	6

359. Except as regards the United Kingdom and Australasia, the figures in the following table, showing the statistics of railways in the various British possessions during 1888, have been extracted and re-arranged from a return given in the *Colonial Office List*, 1890 :—

Railways in
British
possessions.

RAILWAYS IN BRITISH POSSESSIONS, 1888.

Country or Colony.	Number of Miles Open.	Capital Cost.	Receipts.	Working Expenses.	Net Revenue.
EUROPE.					
United Kingdom† ...	19,812	£ 864,695,963	£ 72,894,665	£ 37,762,107	£ 35,132,558
Malta ...	7½	90,000	...	...	...
ASIA.					
India and Burma ...	13,581	132,718,660	13,737,720	6,848,410	6,889,310
Indian Feudatory States	872	4,099,030	262,410	143,598	118,812
Ceylon ...	181	2,636,552	244,513	108,780	135,733
Protected Malay States	43	180,000	52,225	18,670	33,555
AFRICA.					
Cape Colony ...	1,776	14,214,308	1,514,416	756,060	758,356
Natal ...	233	2,765,500	347,982	199,364	148,618
Mauritius ...	92	800,000	110,730	70,819	39,911
AMERICA.					
Canada ...	12,701	151,495,927	8,614,823	6,385,843	2,228,980
Newfoundland ...	109	2,500,000	‡46,772	‡46,974	—202
British Guiana ...	20	280,000	32,080	17,673	14,407
West Indies—					
Barbados ...	23½	200,000	11,253	13,317	—2,064
Jamaica ...	64	804,311	53,646	34,356	19,290
Trinidad and Tobago	54	602,638	54,980	55,561	—581
Australasia§ ...	10,137	93,548,408	8,162,722	5,113,345	3,049,377
Total ...	59,706	1,271,631,297	106,140,937	57,574,877	48,566,060||

* See J. S. Jeans' paper, page 122.

† For railway statistics of England, Scotland, and Ireland, see table following paragraph 357 ante.

‡ Figures for 1886.

§ For railway statistics of the different Australasian colonies, see table following paragraph 343 et seq. ante.

|| Net figures.

Railways in
India.

360. On the Indian railways (including those of the Native States), the number of passengers carried during the year 1888, was 103,156,013, and the weight of goods carried was 22,393,202 tons. The net earnings of the year 1887-8 was at the rate of £5 2s. 5d. per £100 invested.*

Railways in
Foreign
countries.

361. From the latest official statistics, the following information respecting the railways of the various Foreign countries throughout the world has been extracted. Germany and the United States are the only countries in the list which have a greater length open than the United Kingdom:—

RAILWAYS IN FOREIGN COUNTRIES.

Country.	Year.	Miles of Railway Open.	Cost of Construction (000's omitted.)	Annual Number of Passengers Carried. (000's omitted.)	Annual Receipts. (000's omitted.)	Annual Expenses. (000's omitted.)
EUROPE.			£		£	£
Austria-Hungary ...	1887	15,050	298,489,	65,440,	20,823,	11,701,
Belgium ...	1888	2,762	71,438,	73,360,	6,786,	3,539,
Denmark ...	1887-8	1,048	...	8,822,	783,	682,
France ...	1887	19,528	531,120,	218,367,	42,422,	22,427,
German Empire ...	1887-8	24,270	495,107,	315,992,	54,590,	29,318,
Greece ...	1889	364	...	...	...	...
Holland ...	1888	1,697	21,325,†	18,482,	2,291,	1,277,
Italy ...	1887	7,197	121,583,	45,519,	9,451,	6,264,
Portugal ...	1885	949	...	2,607,	856,	365,
Russia in Europe ...	1887	16,774	...	36,843,	25,217,	14,453,
Spain ...	1888	5,920	...	...	...	...
Norway ...	1887-8	970	7,072,	3,319,	419,	293,
Sweden ...	1887	4,579	27,855,	10,078,	2,087,	1,313,
Switzerland ...	1888	1,869	36,489,	27,079,	3,291,	1,754,
Turkey in Europe...	1888	904	...	...	...	...
ASIA.						
China ...	1887	118	...	...	...	...
Japan ...	1889	909	...	11,660,	635,	247,
Persia ...	1888	6	...	...	...	...
Turkey in Asia ...	1888	357	...	...	...	...
AFRICA.						
Algeria ...	1889	1,600	...	...	843,†	...
Tunis ...	1888	260	...	...	...	...
AMERICA.						
Argentine Confeder- ation	1889	6,940	20,000,§	...	4,200,||	3,063,||
Brazil ...	1889	5,582	56,109,	7,315,‡	4,391,‡	29,247,‡

* See *Burdett's Official Intelligence*, 1889, page 19.

† State railways only.

‡ Figures for 1887.

§ Figures for 1885.

|| Figures for 1888.

RAILWAYS IN FOREIGN COUNTRIES—*continued*.

Country.	Year.	Miles of Railway Open.	Cost of Construction (000's omitted.)	Annual Number of Passengers Carried. (000's omitted.)	Annual Receipts. (000's omitted.)	Annual Expenses. (000's omitted.)
AMERICA— <i>contd.</i>			£		£	£
Chile	1889	1,748	...	...	...	...
Colombia	1888	148	...	...	...	...
Costa Rica	1888	180	...	...	...	...
Cuba	1889	931	...	...	...	...
Guatemala	1888	99	...	...	...	...
Hawaii	1888	56	...	...	...	...
Honduras	1888	69	...	...	...	...
Mexico	1889	4,981	...	...	...	...
Nicaragua	1888	94	...	...	...	...
Paraguay	1888	94	...	...	...	...
Peru	1888	1,630	...	...	...	...
San Domingo	1889	71	...	...	...	...
San Salvador	1888	59	...	...	...	...
United States	1888	154,276	1,738,397,	451,354,	198,046,	135,097,
Uruguay	1888	400	...	...	...	...
Venezuela	1889	183	...	...	...	...

362. In proportion to population, all the Australasian colonies would appear to be better provided with railway accommodation than any one of the European countries named below ; but in proportion to area, worse provided than any except Russia ; Victoria, New Zealand, and Tasmania, being in this respect, however, better provided than that country :—

Australasian
and
European
railways in
proportion
to popula-
tion and
area.

RAILWAYS IN PROPORTION TO POPULATION IN AUSTRALASIAN AND EUROPEAN COUNTRIES.

Countries.	Year.	Number of Inhabitants per Mile of Railway.	Countries.	Year.	Number of Inhabitants per Mile of Railway.
Western Australia...	1888	155	Germany	1882	2,061
Queensland	"	201	France	"	2,121
South Australia	"	208	Belgium	"	2,378
New Zealand	"	326	Austria-Hungary	"	3,101
Tasmania	"	447	Spain	"	3,134
New South Wales	"	492	Portugal	"	4,427
Victoria	1887-8	525	Italy	"	5,010
Switzerland	1882	1,620	Russia in Europe	"	6,077
United Kingdom	"	1,910			

RAILWAYS IN PROPORTION TO AREA IN AUSTRALASIAN AND EUROPEAN COUNTRIES.

Countries.	Year.	Number of Square Miles of Territory per Mile of Railway.	Countries.	Year.	Number of Square Miles of Territory per Mile of Railway.
Belgium ...	1882	4·9	Victoria ...	1887·8	43·5
United Kingdom ...	„	8·5	New Zealand ...	1888	55·9
Switzerland ...	„	9·1	Tasmania ...	„	80·6
Germany ...	„	9·5	Russia in Europe	1882	136·7
France ...	„	11·5	New South Wales	1888	140·9
Italy ...	„	19·4	Queensland ...	„	346·1
Austria-Hungary ...	„	19·7	South Australia ...	„	595·1
Portugal ...	„	36·5	Western Australia	„	3,587·9
Spain ...	„	36·8			

Receipts per mile open in various countries.

363. In proportion to the mileage open, the following figures show the gross railway receipts to be higher in Victoria than in Italy, Ireland or India, and in New South Wales than in the two last-named countries, whilst all the other Australasian colonies, as well as the Cape and Canada, are below India :—

GROSS RAILWAY RECEIPTS PER MILE IN AUSTRALASIAN COLONIES AND VARIOUS EUROPEAN COUNTRIES.

Annual Receipts per mile open.			Annual Receipts per mile open.		
England ...	...	£4,435	Ireland ...	...	£1,059
United Kingdom ...	...	3,679	India and Burma ...	...	1,012
Scotland ...	...	2,581	Australia ...	...	904
Belgium ...	...	2,457	Cape Colony...	...	853
Germany ...	...	2,249	Australasia ...	...	831
France ...	...	2,172	Canada ...	...	722
Austria-Hungary ...	...	1,384	South Australia	...	632
British Dominions ...	...	1,778	New Zealand	...	561
Russia ...	...	1,503	Tasmania ...	...	487
Victoria ...	...	1,366	Queensland ...	...	402
Italy ...	...	1,313	Western Australia	...	188
New South Wales ...	...	1,181			

Receipts per train mile in various countries.

364. By the following figures it would appear that the gross receipts of the Victorian Railways per train mile are higher than those of the railways of any of the European countries named :—

GROSS RECEIPTS OF RAILWAYS OF VARIOUS COUNTRIES PER
TRAIN MILE.*

				Receipts per Train Mile.	
				s.	d.
Victoria—State lines (1888-9)	...	...	...	5	10
Austria-Hungary—Companies' lines...	...	...	...	5	1
Russia—Companies' lines	...	...	...	4	7
France—Companies' lines	...	...	...	4	3
Austria-Hungary—Private lines worked by the State	...	...	...	4	3
Italy—State lines	...	...	...	4	2
Russia—State lines	...	...	...	3	9
Austria-Hungary—State lines	...	...	...	3	6
Germany—Private lines worked by the State	...	...	...	3	6
„ Companies' lines	...	...	...	3	0
Belgium—Companies' lines	...	...	...	2	9
„ State lines	...	...	...	2	3
France—State lines	...	...	...	2	2

365. The Victorian railways received on the average about 7s. 8d. in 1887-8, and about 6s. 6d. in 1888-9, per ton of goods and live stock carried. According to the following figures, these tonnage rates are higher than those prevailing in any of the undermentioned countries except Russia, Roumania, and Italy:—

Receipts per
ton on Vic-
torian and
European
railways.

AVERAGE RECEIPTS OF RAILWAYS OF VARIOUS COUNTRIES
PER TON OF GOODS CARRIED. †

			Receipts per Ton Carried.					Receipts per Ton Carried.	
			<i>s.</i>	<i>d.</i>				<i>s.</i>	<i>d.</i>
Russia ...	...	...	11	11	Switzerland	...	...	4	7
Roumania	...	...	8	2	Norway	...	...	3	6
Italy ...	...	...	7	6	Germany	...	...	3	3
Victoria (1888)	...	...	6	6	Holland	...	...	3	1
France ...	...	...	6	3	Belgium	...	...	2	8
Austria-Hungary	...	...	6	1	Luxemburg	...	...	0	11
Denmark	...	...	4	7					

366. The following was the number of miles of railway open throughout the world at the end of decennial or quinquennial periods, from 1830 to 1885‡, and also for the latest years; also the average annual increase between each period named and the preceding one:—

Railways of
the world,
1830 to
1889.

* The figures relating to European countries have been taken from a paper entitled "The Economics of European Railways," by J. S. Jeans, *Bulletin de l'Institut International de Statistique*, tome I., 3ème et 4ème livraisons, page 117, there given in francs per kilomètre.

† See J. S. Jeans' paper, page 127, receipts there given in francs.

‡ The figures for 1885 and previous years have been derived from *l'Almanach de Gotha*, 1887, and those for subsequent years from McCarty's *Annual Statistician*. When the length was given in kilomètres it has been reduced to English miles on the assumption that a kilomètre is equivalent to .621 of a mile.

RAILWAYS OF THE WORLD, 1830 TO 1888-9.

Year.			Total Length at end of years named.	Average Annual Increase between periods named.
			Miles.	Miles.
1830	...	...	206	...
1840	...	...	5,335	513
1850	...	...	23,612	1,828
1855	...	...	42,320	3,742
1860	...	...	66,376	4,812
1865	...	...	90,116	4,748
1870	...	...	137,850	9,547
1875	...	...	183,681	9,166
1880	...	...	221,718	7,607
1885	...	...	302,778	16,212
1887-8	...	...	354,706	21,000*
1888-9	...	...	370,259	15,500

Tramways.

367. By the *Melbourne Tramway and Omnibus Company's Act* 1883 (47 Vict. No. 765), passed on the 12th October, 1883, the company were authorized to construct tramways in the streets of Melbourne and suburbs. It was provided by the fourth schedule of that Act that the option of constructing the tramways should first be given to the twelve municipalities interested,† any two of which were required to notify to the company their intention of doing so before the expiration of three months from the passing of the Act; but in case the municipalities should not elect to construct the tramways, the sole right was then to be vested in the company. All the municipalities, however, decided to exercise the power 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 property and revenues and on the tramways themselves. The Trust was required by the above-mentioned Act, as modified by the Amending Act (51 Vict. No. 952), to complete the tramways by the 31st December, 1890, 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

* Approximate.

† Their names are as follow :—The cities of Melbourne, Prahran, Richmond, Fitzroy, Collingwood, South Melbourne, Hawthorn, and St. Kilda; the towns of North Melbourne and Brunswick; and the boroughs of Port Melbourne and Kew.

their part, are 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 thorough order to the Trust at the expiration of the lease, and to pay to the Trust the annual interest on the moneys borrowed, not exceeding 5 per cent.; 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, 1892, are to be 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 to be shared rateably amongst the different municipalities, according to the cost of the tramways within their municipal limits.* The total amount the Trust is empowered to borrow is £1,650,000,† of which all but £150,000 has been raised in London by means of debentures bearing interest at $4\frac{1}{2}$ per cent.‡ The expenditure of the Trust up to the 31st December, 1889, amounted to £1,507,115. The following account of the tramways, and mode of working them, has been kindly furnished and brought on to the latest date by Mr. T. Hamilton, secretary to the Tramways Trust:—

The total length of tramways to be constructed amounts to 47 miles 3 furlongs, of which 41 miles 5 furlongs are to be worked by cables and stationary steam engines, and the remaining 5 miles 6 furlongs by horses.

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

The following short description will explain the principle of the construction and working:—

A double tunnel of Portland cement concrete extends from end to end of each line under the roadway; in these tunnels are placed, at intervals of about 4 feet apart, strong bent irons, called “yokes,” which have an opening at the top of about 4 inches. On each side of this opening, longitudinal angle-irons, $\frac{7}{8}$ inch apart, are bolted to the yokes, thus forming a continuous open groove or slot, leading into the tunnel and extending from end to end of the tramway. The rails on which the cars run are connected with these angle-irons by means of tie-rods, and are laid on a bed of concrete. In the tunnel are fixed, at intervals of 30 feet, iron pulleys, over which run the steel wire cables which are to work the cars. At the end of each line large horizontal pulleys are fixed between the two tunnels, over which the cable is placed, which thus runs up one tunnel and down the other. The motive power is supplied by stationary engines, placed in the most convenient spot available on the line.

Each passenger car is accompanied by a “dummy” car, on which the arrangements for working the car are fixed. A mechanical hand, called a “gripper,” fixed on the dummy, passes through the continuous groove above-mentioned, and on working a lever the gripper tightens on the rope, and the car proceeds on its course. To

* Owing to the machinery provided in the original Act for floating the loan being defective, the *Tramways Trust Act* 1884 (48 Vict. No. 788) was subsequently passed, making the Trust's debentures a joint and several charge on the revenues of the various municipalities represented on the Trust.

† Including £150,000 authorized on 22nd September, 1890, under Act 54 Vict., No. 1173.

‡ For further information respecting the Tramways Trust loans, see paragraphs 424 and 425 in Vol. I.

stop, the gripper is released and brakes are applied, by means of which, on level ground, the car can be brought to rest, without shock, in a few feet. The rate of travel of the cable will be about 7 miles an hour, which will give a mean rate for the cars, including stoppages, of about $6\frac{1}{2}$ miles. It will be understood that the speed will be perfectly uniform, whether on the level or ascending or descending hills. The methods of running round curves, of enabling one cable line to cross another, keeping the tension of the rope uniform, and of taking up automatically the slack caused by stretching, and by the diurnal variation of temperature, necessitate the application of various complicated and ingenious contrivances.

The cable lines are paved with red gum blocks; the horse lines are laid on wooden sleepers and are macadamized.

Great care has to be exercised in seeing that none but cement of the very highest quality is used in the tunnels. The tests prescribed are that not less than 90 per cent. shall pass through a sieve with 2,500 meshes to the square inch, and that small bricks of one inch square of pure cement shall, after having been immersed in water for 7 days, bear, without breaking, a strain of 350 lbs., applied by means of a testing machine.

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, *via* 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 three half-pence per journey. All fares will be, by Act No. 765, Section 26, subject to revision by Parliament after the lapse of 10 years from the date of 20 miles of tramway being opened for traffic, *viz.*, on the 31st December, 1897.

The extent of lines open for traffic to the end of 1889 was 35 miles, consisting of 33½ miles of cable lines and 1½ miles of horse lines.

DATES OF OPENING LINES.

The following are dates of the opening to traffic of the several lines :—

Tram Lines. (<i>(c)</i> cable ; (<i>(h)</i> horse).	Length.				Date of Opening.
	M.	F.	CHS.	FT.	
1. Richmond (<i>(c)</i>)	3	4	9	10	11th November, 1885
2. Collins-street and Fitzroy (<i>(c)</i>)... ..	3	5	4	58	2nd October, 1886
3. Victoria-street East (<i>(c)</i>)	2	0	5	59	22nd November, 1886
4. Collingwood and Clifton Hill (<i>(c)</i>)	2	1	9	33	10th August, 1887
5. Bourke-street and Nicholson-street (<i>(c)</i>)	3	2	4	53	26th August, 1887
6. Brunswick (<i>(c)</i>)	4	3	3	19	1st October, 1887
7. Carlton (<i>(c)</i>)	3	0	0	13	21st December, 1887
8. Kew (incomplete) (<i>(h)</i>)	1	5	0	0	28th December, 1887
9. St. Kilda (<i>(c)</i>)	5	0	1	20	11th October, 1888
10. Prahran (<i>(c)</i>)	3	4	7	23	26th October, 1888
11. North Carlton (<i>(c)</i>)	1	2	0	0	9th February, 1889
12. Toorak (<i>(c)</i>)	1	2	8	23	15th February, 1889
13. Hawthorn (<i>(h)</i>)	2	1	0	0	20th January, 1890
14. North Melbourne (<i>(c)</i>)	3	5	0	0	25th February, 1890
15. North and West Melbourne (<i>(c)</i>)					18th April, 1890
16. Port and South Melbourne (<i>(c)</i>)					17th June, 1890

368. From information furnished by the secretary of the Melbourne Tramway and Omnibus Co., it appears that the number of passengers carried on tramways during the year 1889 was about $44\frac{1}{2}$ millions, and the total receipts amounted to nearly £520,000. The number of persons employed by the company in September, 1890, was about

Tramway
passengers
and
receipts.

2,150. The following are the traffic returns for the last four years placed side by side with figures showing the average length open:—

TRAFFIC OF MELBOURNE TRAMWAYS, 1886 TO 1889.

Year.			Average Extent Open.	Passengers Carried.	Total Receipts.
			Miles.	No.	£
1886	...	...	4·74	6,845,141	74,340
1887	...	...	12·60	17,769,979	196,318
1888*	...	...	25·73	34,087,552	393,819
1889	...	...	34·87	44,556,404	519,617

NOTE.—The first line was opened for traffic on the 11th November, 1885.

369. During the first eighteen months the Melbourne street tramways were open, viz., from December, 1885, to June, 1887, 30 tramway accidents were recorded, resulting in the death of 7 persons, and the more or less serious injury of 23 others. In 1888, the number of fatal accidents was also 7, and in 1889 there were 3. Of the latter, 2 were run over, and one came into collision with a car. No information has been furnished respecting non-fatal cases. The company have caused a protector, made of iron, extending round the front and sides, to be fastened to the dummy cars, in consequence of which serious accidents have not of late been so frequent as they were formerly.

370. The following table contains a statement of the average rates of wages paid in respect to engagements made in Melbourne, in 1889, and in the first year of each of the two previous quinquennia. It has been compiled from statements obtained from the best authorities, and is believed to be fairly representative of a state of affairs which must always be subject to some fluctuations. Throughout Victoria, the recognised working day for artizans and general labourers is eight hours:—

WAGES IN MELBOURNE, 1879, 1884, AND 1889.

Description of Labour.		1879.	1884.	1889.
1.—DOMESTIC SERVANTS.				
<i>Males.</i>				
Coachmen, footmen, grooms, gardeners	per week, with board and lodging	15s. to 30s.	20s. to 30s.	20s. to 30s.
Butlers ...	”	20s. to 40s.	20s. to 40s.	20s. to 40s.

* A large increase of traffic occurred in this year, owing to the Melbourne Centennial International Exhibition, which was opened on the 1st August. It was virtually closed on 2nd February, 1889.

WAGES IN MELBOURNE, 1879, 1884, AND 1889—*continued.*

Description of Work.				1879.	1884.	1889.
1. DOMESTIC SERVANTS— <i>continued.</i>						
<i>Females.</i>						
Cooks	... per annum, with board and lodging			£35 to £60	£40 to £75	£40 to £75
Laundresses	... „ „			£30	£35 to £52	£40 to £52
Housemaids	... „ „			£25 to £35	£25 to £40	£30 to £40
Nursemaids	... „ „			£25 to £35	£20 to £40	£30 to £40
General servants	... „ „			£30 to £35	£25 to £40	£30 to £40
Girls	... per week, „			7s. to 10s.	7s. to 10s.	8s. to 10s.
2.—HOTEL SERVANTS.						
<i>Males.</i>						
Barmen	... per week, with board and lodging			20s. to 40s.	30s. to 45s.	30s. to 45s.
Waiters	... „ „			25s. to 35s.	20s. to 40s.	25s. to 40s.
Boots	... „ „			15s. to 20s.	15s. to 20s.	15s. to 25s.
Ostlers	... „ „			17s. 6d. to 20s.	17s. 6d. to 20s.	20s. to 25s.
Cooks	... „ „			25s. to 40s.	20s. to 65s.	20s. to 65s.
<i>Females.</i>						
Barmaids	... per week, with board and lodging			15s. to 25s.	15s. to 25s.	20s. to 30s.
Waitresses	... „ „			12s. 6d. to 15s.	15s. to 20s.	15s. to 20s.
Housemaids	... per annum, „			£30 to £35	£30 to £40	£30 to £40
Cooks	... „ „			£50 to £80	£50 to £100	£50 to £100
3.—FARM SERVANTS.						
<i>Males.</i>						
Ploughmen	... per week, and found	...		20s. to 21s.	20s. to 25s.	20s. to 25s.
Farm labourers	... „ „	...		15s. to 20s.	15s. to 20s.	15s. to 20s.
Milkmen for dairies	... „ „	...		15s. to 20s.	15s. to 20s.	15s. to 20s.
Cheesemakers	... „ „	...		...	25s. to 40s.	25s. to 40s.
Reapers*	... per acre, „	...		7s. 6d. to 15s.	10s. to 15s.	10s. to 15s.
Mowers*	... „ „	...		3s. 6d. to 7s. 6d.	4s. to 6s.	4s. to 6s.
Threshers*	... per bushel, „	...		6d.	5d. to 7d.	5d. to 7d.
Cooks	... per annum, „	...		£50	£50 to £60	£50 to £60
<i>Females.</i>						
Dairymaids	... per annum, with board and lodging			£30 to £35	£30 to £35	£30 to £35
Cooks	... „ „			£30 to £35	£30 to £35	£30 to £35
General servants	... „ „			£30 to £35	£30 to £35	£30 to £35
Hop-pickers	... per bushel	...		...	3½d. to 4½d.	3½d. to 4½d.
Maize-pickers	... per bag	...		...	6d.	6d.
Married couples (generally useful)	per annum, with board and lodging			£60 to £70	£60 to £90	£70 to £90
4.—STATION SERVANTS.						
<i>Males.</i>						
Boundary Riders	... per annum, with rations			£40 to £60	£40 to £60	£40 to £60
Shepherds	... „ „			£40 to £50	£36 to £52	£36 to £52
Stockmen...	... „ „			£40 to £60	£50 to £75	£50 to £75
Hutkeepers	... „ „			£26	£26 to £40	£30 to £40

* Of late years the greater portion of the reaping, mowing and threshing has been done by machinery

WAGES IN MELBOURNE, 1879, 1884, AND 1889—*continued.*

Description of Labour.				1879.	1884.	1889.
4.—STATION SERVANTS— <i>continued.</i>						
<i>Males.</i>						
Cooks ...	... per annum, with rations			£40 to £50	£50 to £60	£50 to £60
Labourers ...	... per week, „			15s. to 20s.	15s. to 20s.	15s. to 20s.
Drovers ...	... „ „			25s. to 40s.	25s. to 40s.	25s. to 40s.
Sheepwashers ...	... „ „			15s. to 25s.	15s. to 25s.	15s. to 25s.
Shearers ...	... per 100 sheep shorn, with rations			15s.	12s. to 15s.	15s. to 16s.
<i>Females.</i>						
Cooks ...	... per annum, with board and lodging			£45 to £55	£30 to £50	£30 to £50
General servants ...	... „ „			£18 to £40	£20 to £40	£30 to £45
Married couples ...	... per annum, with rations			£50 to £80	£60 to £90	£70 to £90
5.—WORKERS IN BOOKS, ETC.						
Printers—						
Compositors ...	... per 1,000 ...			1s.	1s. 1d.	1s. 2d.
Machinists ...	... per week ...			...	...	£3 to £4
Lithographers ...	... „ ...			£2 10s. to £3 15s.	£2 10s. to £3 15s.	£2 5s. to £3 15s.
Binders ...	... „ ...			£2 to £3	£2 to £3	£3 to £3 10s.
Paper rulers ...	... „ ...			£3 to £3 10s.	£3 to £3 10s.	£3 to £3 10s.
Sewers and folders ...	... „ ...			15s. to 25s.	15s. to 25s.	15s. to 25s.
(females)						
6.—IN WATCHES, JEWELLERY, AND PRECIOUS METALS.						
Watchmakers ...	... per week ...			£3 10s. to £5	£3 10s. to £5	£3 to £4
Manufacturing jewellers ...	... „ ...			£2 15s. to £3 15s.	£2 15s. to £3 15s.	£2 15s. to £4
Enamellers ...	... „ ...			£6 to £8	£6 to £8	£3 to £4
7.—IN METALS OTHER THAN GOLD AND SILVER.						
Blacksmiths ...	... per day ...			10s. to 13s.	10s. to 14s.	10s. to 14s.
Farriers—Firemen ...	... per week ...			£2 15s.	£2 15s.	£2 10s.
„ Floormen ...	... „ ...			30s. to 40s.	30s. to 40s.	35s. to 40s.
Hammermen ...	... per day ...			7s. to 8s.	7s. to 8s.	7s. to 8s.
Fitters ...	... „ ...			9s. to 12s.	9s. to 12s.	9s. to 13s.
Turners ...	... „ ...			10s. to 13s.	10s. to 13s.	9s. to 13s.
Boilermakers and platers ...	... „ ...			12s. to 13s.	10s. to 14s.	10s. to 14s.
Riveters ...	... „ ...			9s. to 11s.	9s. to 11s.	10s. to 11s.
Moulders ...	... „ ...			10s. to 13s.	10s. to 12s.	8s. to 12s.
Brassfinishers, copersmiths ...	... „ ...			9s. to 12s.	8s. to 12s.	8s. to 11s.
Tinsmiths ...	... per week ...			£2 to £3	£2 to £3	£2 to £3
Ironworkers ...	... „ ...			£2 10s. to £3	£2 10s. to £3	£2 2s. to £3
Galvanizers ...	... „ ...			£3	£3	£2 10s. to £3
Plumbers, gasfitters ...	... „ ...			£3	£2 10s. to £3 10s.	£3
8.—IN CARRIAGES AND HARNESS.						
Smiths ...	... per week ...			£2 10s. to £4	£2 5s. to £4	£2 10s. to £3 10s.
Bodymakers ...	... „ ...			£2 10s. to £4	£2 10s. to £4 10s.	£2 10s. to £3 10s.
Wheelers ...	... „ ...			£2 10s. to £3 10s.	£2 10s. to £3 10s.	£2 10s. to £3
Painters ...	... per day ...			8s. to 12s.	10s. to 12s. 6d.	8s. to 11s.

WAGES IN MELBOURNE, 1879, 1884, AND 1889—*continued.*

Description of Labour.	1879.	1884.	1889.
8.—IN CARRIAGES AND HARNESS— <i>continued.</i>			
Trimmers ... per week ...	£2 10s. to £3 10s.	£2 10s. to £3 10s.	£2 to £3 10s.
Vycemen ... „ ...	25s. to 40s.	30s. to 50s.	30s. to 50s.
Saddlers ... „ ...	£2 15s.	£2 to £3	£1 10s. to £3
9.—WORKERS IN SHIPS AND BOATS.			
Sailors—			
Sailing vessels ... per month, and found ...	£4 10s. to £5	£4 10s. to £5	£3 10s. to £5
Steamships ... „ „ ...	£6	£6	£7
Ship carpenters, ship- per day ...	13s.	12s. to 13s.	13s.
wrights			
Stevedores' men, per hour ...	12s.	10s. to 12s.	1s.
lumpers			
10.—IN HOUSES AND BUILDINGS.			
Masons ... per day ...	10s. to 11s.	10s. to 12s.	10s. to 12s.
Plasterers ... „ ...	10s.	10s. to 12s.	10s. to 13s.
Bricklayers ... „ ...	10s.	10s. to 12s.	10s. to 12s.
Slaters ... „ ...	10s.	12s.	10s. to 12s.
Carpenters ... „ ...	10s.	10s. to 12s.	10s.
Labourers ... „ ...	6s. 6d. to 7s.	6s. 6d. to 7s. 6d.	7s. to 8s.
Painters and glaziers „ ...	9s.	9s. to 10s.	8s. to 10s.
11.—IN FURNITURE, ETC.			
Cabinetmakers ... per week ...	£2 10s. to £3 10s.	£2 to £3 10s.	£2 to £3 15s.
Upholsterers ... „ ...	£2 10s. to £4	£2 to £4	£2 5s. to £3
Polishers ... „ ...	£2 to £3	£2 to £3	£2 to £3
Coopers ... per day ...	10s.	10s.	9s. to 10s.
12.—IN DRESS.			
Tailors ... per hour ...	10d. to 1s.	10d.	10d.
„ ... per week ...	£2 10s. to £3	£2 10s. to £3	£2 10s. to £3
„ in factories „ ...	£2	£2 to £2 10s.	£2 to £2 10s.
Mantlemakers ... „ ...	15s. to 20s.	15s. to 30s.	12s. to 25s.
Milliners—			
First class ... „ ...	£3 10s.	£3 10s.	£3 to £4
Second class ... „ ...	35s.	35s.	£1 to £2
Dressmakers ... „ ...	15s. to 20s.	15s. to 35s.	12s. to 25s.
Needlewomen ... „ ...	15s. to 20s.	15s. to 35s.	10s. to 20s.
Bootmakers ... riveting children's boots, per pair	6d.	6d.	6d.
„ ... riveting boys' boots, per pair	10d.	10d.	10d.
„ ... riveting women's boots, per pair	1s.	1s. to 1s. 6d.	1s. to 1s. 6d.
„ ... riveting men's boots, per pair	1s. 3d.	1s. 3d.	1s. 3d.
„ ... making wellingtons to order	10s.	10s.	10s.
„ ... making elastics to order...	7s. 6d.	7s. 6d.	7s. 6d.
„ Machinists per week ...	15s. to 35s.	15s. to 30s.	15s. to 30s.
Hatters—			
Bodymakers ... per dozen ...	12s. to 20s.	12s. to 22s.	10s. to 22s.
Finishers ... „ ...	12s. to 24s.	12s. to 24s.	12s. to 24s.

WAGES IN MELBOURNE, 1879, 1884, AND 1889—*continued.*

Description of Labour.					1879.	1884.	1889.
12.—IN DRESS— <i>continued.</i>							
Hatters—							
Shapers	... per dozen	...	...	...	4s. to 12s.	4s. to 12s.	4s. to 12s.
Crown sewers	...	„	...	...	3s. 6d. to 5s.	3s. 6d. to 5s.	3s. 6d. to 5s.
Trimmers	...	„	...	...	6s.	6s.	6s. to 9s.
Clothing Factories—							
Tailoresses	... per week	...	...	...	20s. to 35s.	12s. 6d. to 35s.	20s. to 35s.
Pressers	...	„	...	...	£2 to £2 15s.	£2 to £2 15s.	£2 to £3
Shirtmakers	...	„	...	...	12s. to 20s.	12s. to 25s.	12s. to 25s.
Machinists	...	„	...	...	15s. to 30s.	20s. to 35s.	20s. to 35s.
Drapers' assistants, carpet salesmen	„	...	...	...	£2 10s. to £4	£2 5s. to £4 10s.	£2 10s. to £5
13.—IN FOOD AND DRINK.							
Bakers—							
Foremen	... per week	...	...	...	£3	£3	£3
Second hands	...	„	...	...	£2 to £2 2s.	£2 10s.	£2 10s.
Butchers—							
Shopmen	... per week	...	...	...	35s. to 40s.	30s. to 40s.	30s. to 40s.
Slaughtermen	...	„	...	...	£2 to £2 10s.	£2 to £2 10s.	£2 to £2 10s.
Boys	...	„	with board	...	12s. 6d. to 20s.	15s. to 20s.	15s. to 20s.
Small-goods men	...	„	„	...	£1 10s. to £2	£1 10s. to £2	£1 10s. to £2
Maltsters	...	„	...	...	...	£2 5s. to £3	£2 5s.
14.—IN ANIMAL SUBSTANCES.							
Curriers	... per week	...	...	...	£2 10s. to £3 10s.	£2 10s. to £3 10s.	£2 10s. to £3 10s.
Tanners	...	„	...	...	38s. to 45s.	38s. to 45s.	38s. to 40s.
Beamsmen	...	„	...	...	£2 to £2 10s.	£2 to £2 10s.	38s. to 45s.
Shedsmen	...	„	...	...	£2 2s. to £2 5s.	£2 2s. to £2 5s.	38s. to 50s.
Fellmongers	...	„	...	...	36s. to 60s.	36s. to 60s.	36s. to 50s.
15.—IN STONE, CLAY, ETC.							
Brickmakers	... per 1,000	...	...	...	18s. to 20s.	18s. to 20s.	18s. to 20s.
Navvies	... per day	...	...	...	6s. 6d.	6s. to 7s.	6s. 6d. to 7s. 6d.
Quarrymen	...	„	...	...	8s. to 12s.	8s. to 12s.	8s. to 12s.
Labourers	...	„	...	...	6s. to 7s.	6s. 6d. to 7s. 6d.	6s. 6d. to 7s. 6d.
Stonebreakers	... per cubic yard	...	...	...	1s. 6d. to 3s. 6d.	1s. 6d. to 3s. 6d.	1s. 6d. to 3s. 6d.
16.—IN MINES.							
General managers	... per week	...	...	...	£2 10s. to £12	£2 10s. to £12	£2 10s. to £10
Legal	...	„	...	...	10s. to £5	10s. to £5	10s. to £5
Mining	...	„	...	...	£2 5s. to £8	£2 5s. to £7	£2 to £7
Engineers	...	„	...	...	£2 to £6	£2 to £5	£2 to £5
Engine-drivers	...	„	...	...	£2 to £3 10s.	£2 to £3 10s.	£2 to £3 10s.
Pitmen	...	„	...	...	£1 16s. to £4	£2 to £4	£2 to £4
Blacksmiths	...	„	...	...	£2 to £4	£1 15s. to £3	£2 5s. to £3 10s.
Carpenters	...	„	...	...	£2 2s. to £4	£2 to £3 10s.	£2 8s. to £3 12s.
Foremen of shift	...	„	...	...	£2 2s. to £3 10s.	£2 to £3	£2 to £3
Miners	...	„	...	...	£2 to £2 10s.	£2 to £2 10s.	£2 to £2 10s.
Surfacemen (labourers)	...	„	...	...	£1 to £2 10s.	£1 10s. to £2 10s.	£1 10s. to £2 10s.
Boys	...	„	...	...	10s. to £2	15s. to £1 16s.	15s. to £1 16s.
Chinese	...	„	...	...	10s. to £2	12s. to 36s.	12s. to £2

Prices.

371. Prices in Melbourne were quoted as follow at the same three periods. In country districts, the cost of groceries, tobacco, imported wines, coal, etc, is naturally somewhat higher, and that of agricultural and grazing produce, firewood, etc., naturally somewhat lower, than in Melbourne :—

PRICES IN MELBOURNE, 1879, 1884, AND 1889.

Articles.	1879.	1884.	1889.
AGRICULTURAL PRODUCE.			
Wheat per bushel	4s. 7d. to 6s. 1d.	3s. 7½d. to 4s. 3d.	3s. 6d. to 5s. 9d.
Barley „	3s. 6d. to 7s. 6d.	3s. 6d. to 4s. 7d.	3s. 4d. to 5s. 10d.
Oats „	2s. 6d. to 4s. 6d.	2s. 6d. to 3s. 9d.	2s. 9d. to 4s. 7d.
Maize „	2s. 10d. to 5s. 2d.	4s. 4d. to 5s.	3s. 6d. to 4s. 10d.
Bran „	11½d. to 1s. 4d.	10½d. to 1s. 2d.	8½d. to 1s. 4d.
Hay per ton	£3 to £6 15s.	£3 10s. to £6	£3 to £8
Flour, first quality „	£9 17s. 6d. to £12 15s.	£8 to £10	£10 to £13 15s.
Bread per 4lb. loaf	6d. to 7d.	5d. to 6½d.	5d. to 7d.
GRAZING PRODUCE.			
Horses—			
Draught each	£20 to £45	£21 to £46	£10 to £43
Saddle and harness .. „	£5 to £52	£10 to £28	£6 10s. to £13
Cattle—			
Fat each	£4 10s. to £11 10s.	£6 to £19	£4 10s. to £16 15s.
Milch cows „	£5 to £8 15s.	£5 to £10	£3 to £15
Sheep, fat... .. „	4s. 6d. to 16s.	7s. 6d. to 22s. 6d.	6s. to 18s. 6d.
Lambs, fat „	3s. 6d. to 13s.	4s. to 14s.	3s. 6d. to 14s. 6d.
Butchers' Meat—			
Beef, retail per lb.	2d. to 7d.	3d. to 8d.	3d. to 10d.
Mutton „ „	1½d. to 4d.	2d. to 5d.	1½d. to 5d.
Veal „ „	4d. to 7d.	5d. to 8d.	5d. to 8d.
Pork „ „	6d. to 9d.	6d. to 10d.	6d. to 8d.
Lamb „ per quarter	2s. to 3s.	2s. to 3s. 6d.	2s. to 3s. 6d.
DAIRY PRODUCE.			
Butter per lb.	8d. to 2s. 2d.	8d. to 2s.	6d. to 2s. 6d.
Cheese „	7d. to 1s. 2d.	5d. to 1s.	4d. to 1s.
Milk per quart	4d. to 6d.	4d. to 6d.	5d. to 6d.
FARM-YARD PRODUCE.			
Geese per couple	7s. to 10s.	6s. to 12s.	4s. to 8s. 6d.
Ducks „	4s. 6d. to 7s.	4s. 6d. to 8s.	3s. 6d. to 7s.
Fowls „	4s. to 6s. 6d.	4s. 6d. to 7s.	3s. to 5s. 6d.
Rabbits „	1s.	9d. to 2s.	6d. to 1s. 4d.
Pigeons „	1s. 6d. to 3s.	1s. 6d. to 3s.	1s. to 2s. 6d.
Turkeys each	6s. to 15s.	4s. to 12s. 6d.	5s. to 19s.
Sucking pigs „	8s. to 10s.	10s. to 14s.	10s. to 14s.
Bacon per lb.	8d. to 1s.	8d. to 1s.	8d. to 1s.
Ham „	11d. to 1s. 3d.	10d. to 1s. 1d.	10d. to 1s. 1d.
Eggs per doz.	10d. to 2s. 6d.	10d. to 2s. 4d.	11d. to 2s. 6d.

PRICES IN MELBOURNE, 1879, 1884, AND 1889—*continued*.

Articles.	1879.	1884.	1889.
GARDEN PRODUCE.			
Potatoes—			
Wholesale ... per ton	£2 10s. to £7 10s.	£2 7s. to £6 15s.	£3 to £15 10s.
Retail ... per cwt.	4s. 6d. to 14s.	4s. 6d. to 9s.	3s. to 18s.
Onions, dried ... „	4s. 6d. to 14s.	3s. 6d. to 18s.	6s. to 37s. 4d.
Carrots ... per dozen bunches	6d. to 1s. 6d.	6d. to 1s.	6d. to 1s. 6d.
Turnips ... „	3d. to 1s. 6d.	5d. to 1s.	6d. to 2s.
Radishes ... „	4d. to 6d.	4d. to 6d.	4d. to 6d.
Cabbages ... per doz.	6d. to 6s.	6d. to 3s.	6d. to 7s.
Cauliflowers ... „	6d. to 4s.	6d. to 4s.	6d. to 10s.
Lettuces ... „	3d. to 1s. 6d.	3d. to 1s.	3d. to 1s. 6d.
Green peas ... per lb.	1l. to 5d.	1d. to 3d.	1d. to 2½d.
MISCELLANEOUS ARTICLES.			
Tea ... per lb.	1s. 6d. to 2s. 6d.	1s. 6d. to 2s. 6d.	6d. to 1s. 11d.
Coffee ... „	10d. to 1s. 6d.	7d. to 10d.	8d. to 1s. 2d.
Sugar ... „	3d. to 5d.	3d. to 4d.	2½d. to 4d.
Rice ... „	3d. to 4d.	2½d. to 4d.	3d. to 4d.
Tobacco ... „	3s. 4d. to 6s.	3s. to 6s.	3s. to 6s.
Soap—Colonial ... „	2d. to 3½d.	2½d. to 4d.	3d. to 4d.
Candles—			
Sperm ... „	6¾d. to 1s. 3½d.	7½d. to 10½d.	5d. to 11d.
Salt ... „	1d.	1d.	1d.
Coals ... per ton	29s. to 35s.	25s. to 36s.	26s.
Firewood ... „	9s. to 12s.	9s. 6d. to 13s. 6d.	10s. to 14s. 6d.
WINES, SPIRITS, ETC.			
Ale ... per doz.	8s. to 11s.	8s. to 12s.	8s. to 11s.
Porter ... „	7s. to 10s. 6d.	8s. to 12s.	8s. to 10s. 6d.
Brandy ... per gall.	21s. to 33s.	22s. 6d. to 35s.	22s. 6d. to 35s.
Rum ... „	15s. to 18s.	15s. to 18s.	15s. to 18s.
Whisky ... „	17s. 6d. to 27s. 6d.	18s. to 28s.	18s. to 28s.
Geneva ... per case 15 bottles	60s. to 62s. 6d.	60s. to 62s. 6d.	60s. to 62s. 6d.
Port wine ... per doz.	35s. to 70s.	33s. to 72s.	...
Sherry ... „	35s. to 70s.	35s. to 75s.	...
Claret ... „	30s. to 65s.	32s. 6d. to 70s.	15s. to 87s.
Champagne ... „	75s. to 100s.	70s. to 105s.	33s. to 95s.
Colonial wine ... „	12s. to 28s.	12s. to 30s.	12s. to 30s.

372. The price of gold in 1889 ranged from £2 15s. to £4 3s. 8d. Price of gold.
per oz. Its purity, and consequently its value, varies in different districts. In the last quarter of 1889 the lowest price quoted (£2 15s. per oz.) was in the Beechworth district, but the great bulk of the gold was stated to have realized from £3 15s. to as much as £4 2s. 6d. per oz. The highest average was in the Ballarat district, in which the prices ranged from £3 17s. 3d. to £4 3s. 8d.

373. The returns of live stock imported overland, made by the Imports of live stock overland
inspectors of stock, always differ more or less from those of the

officers of the Customs. In 1889, the former showed larger numbers in regard to horses and cattle, but smaller numbers in regard to sheep and pigs than the latter. The following are the imports of these descriptions of stock, according to the returns of both authorities :—

IMPORTS OF LIVE STOCK OVERLAND, 1889.

	Horses.	Cattle.	Sheep.	Pigs.
According to returns of the stock inspectors	... 4,345 ...	77,669 ...	1,009,156 ...	2,687
According to returns of the Customs	... 3,752 ...	76,957 ...	1,018,515 ...	3,379

Value of
live stock
overland

374. According to the Customs returns, the value of live stock (inclusive of pigs), imported overland in 1889 was £1,029,974. The import duty payable on such stock in 1889 was £45,783, equivalent to not quite $4\frac{1}{2}$ per cent. of the value; the rate of duty is 5s. each for horses and cattle (calves being free), 6d. for sheep, and 2s. for pigs.

PART VIII.—PRODUCTION.

375. The mode of disposing of Crown lands in Victoria has undergone numerous changes. At first it was necessary that all lands should be offered at auction before passing into the hands of private individuals, an upset price, according to its value, being placed upon it by the Government. Until 1840 the minimum upset price was 12s. per acre, it was then raised to 20s. Land which had passed the auctioneer's hammer without being bid for was open to be bought by any one at the upset price. Large blocks of land, called special surveys, and a block of a square mile in extent upon each squatting run, were, under certain Orders in Council, exempted from auction, and were permitted to be purchased at £1 per acre.

*Alienation
of Crown
lands.*

*Special
surveys.*

376. In 1860 the system was changed, and a law was passed permitting surveyed country lands to be selected at a uniform upset price of £1 per acre, the only exception being where two or more selectors applied simultaneously for one block, in which case a limited auction, confined only to such applicants, was to take place. The successful selector had the option of either paying for the whole of his block in cash or only for half; in the latter case, renting the other half at 1s. per acre per annum, with the right to purchase at the same rate per acre as he paid for the first moiety.

*Land Act
1860 (24
Vict. No.
117).*

377. Another change was made in 1862. Large agricultural areas were proclaimed open for selection, within which land could be selected, at a uniform price of £1 per acre, lot being substituted for limited auction in the event of there being more than one applicant for an allotment. For one-half of the allotment it was necessary to pay at once; but for the remainder the purchase-money was allowed to be paid by instalments of 2s. 6d. each, extending over eight years. No more than 640 acres could be selected by one person in twelve months. Three alternative conditions to be complied with within twelve months of the date of selection, were imposed upon selectors under this Act:—Either that the selections be enclosed with a substantial fence; or that a habitable dwelling be erected on the land; or that one acre out of every 10 acres selected be cultivated.

*Land Act
1862 (25
Vict. No.
145).*

378. The next change was made in 1865, when an Act was passed providing that agricultural land could be acquired by payment of 2s. per acre per annum during three years, and by effecting improvements

*Amending
Land Act
1865 (28
Vict. No.
237).*

to the extent of 20s. per acre within two years of the commencement of the lease. These conditions having been complied with, the lessee might, at the expiration of three years, if he resided upon the land, purchase his holding at £1 per acre; or, if not, he could require his leasehold to be offered at auction at the uniform price of 20s. per acre, with the value of improvements added in his favour. There was also a clause* whereby land adjacent to gold fields could be occupied in blocks of 20 acres each without having been previously surveyed. This clause was originally framed to meet the demand for the occupation of land adjacent to gold fields, but its operation was gradually extended by regulation to a circuit of 30 miles around gold fields, and the same individual was allowed to hold several 20-acre licences for the occupation of adjacent land to the total extent of 160 acres. The licensee, in all cases, was bound either to reside on his holding or to fence and cultivate a certain portion.

Land Act
1869 (33
Vict. No.
360).

379. The operation of the last-mentioned clause was so successful in leading to the occupation of the land that free selection before survey was the main principle of the next *Land Act*, which was passed in 1869, and came into operation on the 1st February, 1870. Under it, the area allowed to be selected by one person was limited to 320 acres; and it was further provided that the selection should be held under licence during the first three years, within which period the licensee was obliged to reside on his selection at least two and a half years, to enclose it, to cultivate 1 acre out of every 10, and generally to effect substantial improvements to the value of 20s. per acre. The rent payable during this period was 2s. per acre per annum, which was credited to the selector as part payment of the principal, viz., 20s. per acre without interest.† At the expiration of the three years' licence, the selector, if he obtained a certificate from the Board of Land and Works that he had complied with these conditions, could either purchase his holding at once, by paying up the balance of 14s. per acre, or might convert his licence into a lease extending over seven years, at an annual rental of 2s. per acre, which was also credited to the selector as part payment of the fee-simple. On the expiry of such lease, and due payment of the rent, the land became the freehold of the selector. The Statute also contained provision for the sale of Crown lands by auction at an upset price of £1 per acre, or such higher sum as the Governor in Council may direct, the whole extent to be sold in any one year not to exceed 200,000 acres.

* The 42nd clause.

† See paragraph 411 *post*.

380. The *Land Act* of 1869, just described, was amended by the *Amending Land Act* 1878 (42 Vict. No. 634), which came into operation at the beginning of 1879. The principal alterations made by this amending Act, as regards selection for agricultural purposes, was to increase the period during which the land was held under licence from three to six years, and the time of compulsory residence from two and a half years to five years, and to reduce the annual rental per acre for a licence or lease from 2s. to 1s., which thereby allowed the payments to extend over a period of twenty years instead of ten years as formerly.* It also contained a provision for selection by persons who did not desire to reside on their selections. In such cases, however, the rent was 2s. per acre, and the total price to be paid for the land £2 per acre. Improvements to the value of £2 per acre, moreover, had to be made during the six years' licence, of which at least half were to be made before the expiration of the third year. Such licences are not to be issued in any one year for an aggregate area of more than 200,000 acres. Both these Acts expired by effluxion of time on the 31st December, 1884.

381. According to the *Land Act* 1869, the unalienated and unselected Crown lands† were occupied for pastoral purposes either as “runs” under licence or lease, or as “grazing rights.” Runs were of two kinds: those in existence at the time of the passing of the *Land Act* 1869 (viz., on 29th December, 1869), and not since forfeited—described in the Act as “Existing runs;” and those created since that date—described in the Act as “New runs.” The former kind, which were by far the more numerous and extensive, were held under pastoral licence renewable annually, and were unlimited as to size. The latter, which were but few in number, were held under lease for any term not exceeding 14 years—the right to the lease having, in the first instance, been purchased at auction—and were not permitted to be of larger extent than sufficient to carry 4,000 sheep or 1,000 head of cattle. An important privilege enjoyed by lessees of “new runs” was that they were entitled to the pre-emption of 320 acres on which their improvements were situated at the rate of £1 per acre.‡ The annual rent payable for both descriptions of runs was assessed in accordance with the grazing capability of the land licensed or leased, on the basis of 1s. for every sheep and 5s. for every head of cattle the run was capable of carrying.

* See paragraph 411 *post*.

† Since the 1st December, 1883, the Crown lands situated in the Mallee country have been dealt with under a special Act.—See next paragraph.

‡ Under an Order of Her Majesty's Council, the lessees of the old or “existing” runs had been allowed a “pre-emptive right” to 640 acres.

Grazing
rights.

As, however, the right of pre-emption to 320 acres at £1 per acre, without conditions as to residence, cultivation, etc., was considered too great a sacrifice of the public estate, the occupation of "new runs" was discouraged by the Government; but, in order to allow of the waste lands of the Crown being used for pastoral purposes, advantage was taken of a provision embodied in sub-section 7 of the 47th section of the Act, whereby the Governor in Council was empowered to grant a licence—known as a "grazing right"—to depasture live stock upon any park lands, reserves, or other Crown lands not forming part of any run or common. Under this provision, the unoccupied pastoral lands were divided up into blocks and offered for tender under annual licence.

Mallee
Pastoral
Leases Act
1883.

382. An Act dealing with the unalienated lands situated in the north-western portion of the colony, comprising about one-fifth of its extent, or some $11\frac{1}{2}$ million acres wholly or partially covered with the various species of stunted trees of which the "Mallee scrub" is composed, was passed in 1883. This Act, entitled the *Mallee Pastoral Leases Act* 1883 (47 Vict. No. 766), came into force on the 1st December, 1883. It divides the country just described into two main divisions—the larger division containing about ten million acres, being known as the "Mallee country"; and the other containing about one and a half million acres, and situated along the southern and eastern borders of the Mallee country, being called the "Mallee border."

Mallee
blocks.

383. The Act directs that the "Mallee country" be divided into blocks of various sizes, each block to be subdivided into two parts. For either of these, at the option of the applicant, a lease may be granted under certain conditions, the lessee being also bound to occupy the other division. The principal conditions are that the lessee destroy all vermin (native dogs, rabbits, etc.) upon the whole block within the first three years, surrender to the Crown the unleased portion at the end of five years, and keep in good condition and repair all improvements made upon the land. A lease for a Mallee block may be granted for any term of years not longer than 20 from the commencement of the Act, at the end of which term (viz., on the 1st December, 1903) the land, with all improvements, reverts to the Crown. Every person who had occupied under pastoral or grazing licence any portion of the Mallee country for two years prior to the 1st December, 1883, was entitled to take up one Mallee block comprising the whole or any portion of the area occupied by him; but, in the event of his not applying for this privilege within one month

of the passing of the Act, the right of lease was to be sold by auction to the highest bidder. The annual rent to be charged for the leased portion of the block was fixed at 2d. for each sheep, or 1s. for each head of cattle depastured during the first five years, 4d. for each sheep or 2s. for each head of cattle during the second five years, and 6d. for each sheep or 3s. for each head of cattle during the remainder of the term; and for the unleased portion of the block 2d. for each sheep or 1s. for each head of cattle; but in no case is the annual rent for the whole block to be less than 2s. 6d. per square mile. No lessee of a Mallee block can acquire any portion thereof in fee-simple.

384. The “Mallee border” subdivided into “Mallee allotments,” varying in size but not in any case exceeding 20,000 acres. Mallee allotments. These are available for lease on the same terms and conditions as in the case of the leased portions of a Mallee block; but the annual rent is fixed by regulations issued by the Governor in Council. On the 25th November, 1889, an Act* was passed, providing that, at any time within three years of the passing thereof, a lessee of a Mallee allotment might select out of such allotment an area, the total extent of which, together with that of any other land previously selected by him, should not exceed 320 acres; the land so selected to be subject to the same conditions as selections under the *Land Act* 1884. In case of this provision being taken advantage of, however, the Crown reserves to itself the right to resume as much of the leased portion as is in excess of 1,000 acres.

385. A measure entitled the *Land Act* 1884, replacing the *Land Act* 1869, and subsequent Land Acts, except the *Mallee Pastoral Leases Act* 1883, came into operation on the 29th December, 1884. *Land Act* 1884 (48 Vict. No. 812). Its main features are to restrict the further alienation of the public estate by limiting the extent which may be sold by auction, and by substituting for the previously existing method of selecting agricultural land a system of leasing such lands in certain defined areas, at the same time conserving to the lessee the privilege of acquiring from his leasehold the fee-simple of 320 acres under deferred payments. The Act classifies the whole of the unalienated Crown lands—exclusive of the “Mallee country,” dealt with under the *Mallee Pastoral Leases Act* 1883, as follows:—Pastoral lands, grazing and agricultural lands, auriferous lands, lands which may be sold by auction, swamp lands, State forest reserves, timber reserves, and water reserves. The area of land comprised within each of the above classes respectively is

* *The Mallee Act* 1889 (53 Vict. No. 1,040).

delineated by projections bearing a distinguishing colour or shading on maps of the several counties in which such land is situated. These maps are deposited with the Clerk of Parliaments. The Governor in Council may, however, by proclamation increase or diminish the area comprised in any of the above-mentioned classes, except those relating to lands which may be sold by auction.

Pastoral
occupation.

386. Under the *Land Act* 1884, the pastoral lands are to be leased in "pastoral allotments," capable of carrying from 1,000 to 4,000 sheep, or from 150 to 500 head of cattle, for any term not exceeding 14 years,* at the end of which the land, together with all improvements thereon—taken at a valuation as below mentioned—reverts to the Crown, the right to the lease to be granted to the first person who applies for the land after it has been first publicly notified as available, but if there should be two or more applicants, the lease is to be offered at auction. The annual rent payable for pastoral allotments is to be computed according to the grazing capability of the land, at the rate of 1s. per head of sheep and 5s. per head of cattle, upon a basis of not more than 10 acres to a sheep, and the equivalent number of acres for cattle. The principal conditions of the lease are that all "vermin" (rabbits, native dogs, etc.) upon the land shall be destroyed within the first three years, and that all buildings and improvements shall be kept in good condition and repair. Upon the expiration of the lease, the lessee is to be paid by any in-coming tenant the value of all improvements effected and calculated to increase the carrying capability of the land, at a price not exceeding the sum expended thereon, but in no case to exceed 2s. 6d. per acre. Alienation of pastoral lands is not permitted, except in the case of a lessee of a pastoral allotment, who has the right to purchase, at any time during the currency of his lease, 320 acres as a homestead.

Agricultural
and grazing
lands.

387. The agricultural and grazing lands are also to be leased in "grazing areas," varying in size, but not exceeding 1,000 acres, for any term not exceeding 14 years,* at the end of which term the land, together with all improvements—to be allowed for at a valuation limited to 10s. per acre—reverts to the Crown. The annual rent of a grazing area is to be appraised by valuers, but is in no case to be less than 2d. or more than 4d. per acre, any improvements that may

* No lease is to be granted for a longer term than 14 years from the commencement of the Act.

happen to be on the land at the commencement of the lease to be charged for in addition at the rate of 5 per cent. per annum on the capital value thereof. The only important conditions imposed on the lessee of a grazing area are that he shall, within the first three years, fence the land and destroy all “vermin” thereon. Any person over the age of 18 years is entitled to take up a grazing area; selectors, under former Acts, however, being limited to an area, which, together with the land previously selected, must not exceed 1,000 acres. Residence is not required of the holder of a grazing lease, unless he should select portion of his holding under the terms and conditions specified in the next paragraph.

388. The lessee of a grazing area is at liberty, after the issue of his lease, to select out of the area leased a block or “agricultural allotment” not exceeding 320 acres in extent; but should he have selected under a previous Act or Acts, he is only entitled to increase his selection to such an extent as not to exceed 320 acres in all. A licence is then issued to occupy the agricultural allotment (which is thereafter no longer considered portion of the grazing area), under the same terms and conditions as are allowed to selectors under the *Land Acts* of 1869 and 1878, as detailed in previous paragraphs;* but persons desirous of selecting an agricultural allotment cannot do so without first taking up a grazing area. Provision is also made for grazing area lessees to take up agricultural allotments as non-residence licensees under similar conditions as under the *Land Act* 1878.† The area for which licences may be issued during any year for non-resident selections is limited to 50,000 acres. Other important features of the Act are that every selector—subject to certain conditions and restrictions—is entitled to a Crown grant of portion of his allotment not exceeding 20 acres, if planted as a vineyard or an orchard, upon payment of the balance of the purchase-money due in respect of such portion;‡ that the licensee of an agricultural allotment may, after the expiration of two years, obtain an advance of money (by giving a “licence lien”) secured up to one-half of the improvements effected;§ that married women are permitted to take up land as pastoral or grazing lessees, but are not allowed to select an agricultural allotment

Selection of
agricultural
allotments

Non-resi-
dence
selections,

* See paragraphs 379 and 380 *ante*.

† See paragraph 380 *ante*.

‡ These privileges, although not previously enacted, are also to be allowed to selectors under previous Acts.

out of the grazing area leased to them; and that facilities are given to allow of a non-resident selector becoming a resident selector, and *vice versa*.*

Only one
selection
may be
made.

389. Under this Act, only one grazing area can be taken up by one person, and, consequently, if the area so taken up should be less than 1,000 acres in extent, the lessee is not allowed by any further selection to make up this quantity. In like manner, if the agricultural allotment he selects from his grazing area is less than 320 acres, he cannot by any further selection add to it or make it up to 320 acres. This provision does not, however, apply to selectors under former Acts, who if they have not selected as much as 320 acres, may, out of a new leasehold, convert into an agricultural allotment, and eventually into a freehold as much as will, with their old selection, make up 320 acres.

Auriferous
Lands.

390. Auriferous lands, not required for mining purposes, and not situated within a city, town, or borough, may be occupied under annual licence for purposes of residence or cultivation in areas not exceeding 20 acres; and, for purely pastoral purposes, under licences renewable annually for periods not exceeding five years, in blocks not exceeding 1,000 acres. No auriferous land is permitted to be alienated in fee-simple.

Swamp
lands.

391. Swamp lands are to be first drained, and may then be leased in areas not exceeding 160 acres for a term of twenty-one years.

Systems of
land selec-
tion in
Austral-
asian
colonies.

392. The laws and regulations under which land for agricultural purposes passes from the Crown into the hands of private individuals differ in the various Australasian colonies.† In almost all, however, provision is made for any person of 18 years of age or over, and not a married woman,‡ desirous of settling on the land to select a certain limited area, and to pay the purchase-money by instalments, the compliance with certain conditions of residence and improvement being also required before the selector becomes entitled to a Crown grant.§ The principal features of this portion of each system, corrected to date, is detailed under nine heads in the following table:—

* See footnote (†) on page 241.

† A complete account of the land system of each colony was published in an Appendix to the *Victorian Year-Book*, 1884-5.

‡ In Tasmania and Western Australia married women may select land.

§ In all the colonies, as soon as the purchase-money is paid in full, the residence clause is no longer enforced.

CONDITIONS OF LAND SELECTION IN AUSTRALASIAN COLONIES,
1889-90.

Conditions of Selections.	Victoria.	New South Wales.	Queensland.		South Australia.	Western Australia.	Tasmania.	New Zealand.
			Home-steads.	Other Selections.				
1. Maximum area allowed Acres	320	640 and 2,560	160	320 to 1,280	..	1,000	320	640 and 2,000
2. Price per acre	£1	£1	2s. 6d.	£1 upwards	*	10s.	£1	10s. to £2
3. Time over which purchase may extend Years	20	33	5	†	*	20	14	14
4. Minimum time in which fee-simple may be acquired Years	6	5	5	10	6	5	anytime	6†
5. Annual payment per acre ..	1s.	1s.	6d.	†	*	6d.	2s.	6d. to 4s.
6. Value of necessary improvements per acre	20s.	10s.	10s.	Fencing	Fencing.	10s. and Fencing	..	20s.
7. Time allowed for making improvements Years	6	5	5	5	5	20	..	6
8. Acres in every 100 to be cultivated	10	..	..	..	..	..	..	20
9. Period of residence necessary § Years	5	5	5	†	..	5	14	6†

393. In Victoria the land is taken up in the first instance in blocks not exceeding 1,000 acres, under lease for a term not exceeding 14 years, at a rental of from 2d. to 4d. per acre, out of which leasehold a “selection,” not exceeding 320 acres, may be taken up under the conditions named in the preceding table. The right of selection has now been extended to the Mallee District. See also paragraphs 387 to 389 *ante*.

Land system of Victoria.

394. In New South Wales a territorial division of the colony is made into three zones, viz., the eastern, the central, and the western division. The maximum area allowed in the eastern division is 640, and in the central 2,560 acres. In addition to the selection, a leasehold of an additional area, limited to three times that of the selection (the area of the selection and lease together not to exceed 1,280 acres in the eastern, or 2,560 acres in the central division), may be granted to the selector at an annual rental of not less than 2d. per acre, with the right of conditional purchase at any time during the currency of the lease. The price per acre does not include interest, for which 4 per cent. per annum is charged and collected out of the annual instalments paid. The first payment is 2s. per acre in advance, with an

Land system of New South Wales.

* See account of South Australian land system, following paragraph 396 *post*.
† See paragraph 395 *post*.
‡ In New Zealand, the fee simple may be acquired, and residence may be dispensed with, on double the quantity of improvements being effected.
§ See footnote (§) on page 242.

interval of 3 years before the next instalment of 1s. is payable. On non-residential land purchases the deposit is 4s. per acre, and the instalments 2s. per acre. Upon certain lands proclaimed "special areas," higher prices are payable, and the deposits and instalments are increased in proportion.

Land
system of
Queensland.

395. In Queensland, within the limits named in the table, the maximum area allowed to be selected may be varied in any district by the Government. In that colony the system of leasing has partly supplanted that of alienating the fee-simple of the land by means of deferred payments. The selector first occupies the land under licence, at an annual rental of not less than 3d. per acre, and subsequently, if the condition as to fencing (or improvements of equal value) has been complied with, may obtain a lease for 50 years; the annual rental for the first 10 years being not less than 3d. per acre, but for every succeeding period of 5 years to be fixed by the Land Board. The selector has the right to purchase at not less than 20s. per acre, at any time during the currency of the lease on proving personal residence for 5 years. Rents paid during periods of personal occupation are reckoned as purchase-money. The foregoing remarks relate to agricultural farms; in the case of grazing farms, leases of areas up to 20,000 acres are granted for 30 years at a minimum rental of $\frac{3}{4}$ d. per acre per annum for the first 10 years, but liable to be increased every subsequent 5 years.

Land
system of
South
Australia.

396. In South Australia credit selection was abolished by the *Crown Lands Act* 1888, and in lieu thereof "leases with right to purchase" are now issued for periods of 21 years at certain gazetted rentals, with right of renewal for a further period of 21 years at freshly assessed rentals. The right to purchase may be exercised at any time after the first six years, at a price fixed by the Land Board of not less than 5s. per acre. The following account of the new system has been kindly furnished for this work by Mr. G. S. Wright, Secretary for Crown Lands, South Australia:—

LAND SYSTEM OF SOUTH AUSTRALIA.

On the passing of the *Crown Lands Act* of 1888, the system of credit selection was abolished, and the following mode of obtaining land introduced. Crown lands can be taken up on leases with right of purchase or perpetual leases. Small blocks not exceeding 20 acres in area, for working men, are also taken up on leases with right of purchase, or on perpetual leases. The province has been divided into four land districts, and a Land Board appointed for each, by which the lands are classified and allotted, and the rents and prices fixed, subject to the approval of the Commissioner of Crown Lands. Lands are gazetted open to lease at rents and prices fixed, and applications for same, accompanied by a deposit of 20 per cent. of

the first year's rent, are made to the Commissioner, who refers them to the Land Boards for the districts in which the lands applied for are situated. Upon the successful applicants receiving their leases for signature, they are to forward the balance of the first year's rent and the lease fees to the Land Office. Leases with a right of purchase are allotted for a term of 21 years, with a right of renewal for a further term of 21 years, and with a right of purchase exercisable at any time after the first 6 years of the term, at the price fixed by the Land Board, the minimum price being five shillings per acre. The annual rent for the first term of 21 years is as gazetted, and the annual rent for the renewed term will be fixed by the Land Board at least twelve months before the expiration of the first term. Perpetual leases will be revalued every 14 years. The rent for the first 14 years is as gazetted, and for subsequent terms of 14 years will be fixed by the Land Board at least twelve months before the expiration of every period of 14 years. The lands allotted are to be fenced within five years from the date of lease, and in the case of working men's blocks the condition of personal residence by the lessee, or any member of his family, is enforced.

397. In Western Australia, the particulars given in the table Land system of Western Australia. relate to the South-Western (or Home) District only. In the five other land divisions of the colony, land may be taken up in specially declared areas only by selectors, who need not reside upon the land, in areas of from 100 to 5,000 acres at not less than 10 shillings per acre, payable in 10 yearly instalments, the conditions required being fencing and the expenditure on improvements of an amount equal to purchase-money. Besides selections under the system of deferred payments, with residence, in the south-west division selections may be made, *without residence*, by paying double the amount of purchase-money, *i.e.*, 1 shilling per acre per annum, the other conditions remaining the same, and there is also a method of selecting land by *direct payment* under certain conditions, the extent of a selection being limited to 1,000 acres in a declared area, and to 5,000 acres outside such area, at a price of not less than 10 shillings per acre; the conditions being fencing within 3 years, and an expenditure of 5 shillings per acre on improvements within 7 years from date of survey. Moreover, pastoral lessees, excepting those in the eastern division, have the privilege of selecting a certain proportion of their leasehold adjoining the Homestead prior to the 1st March, 1892, under similar conditions, except in regard to residence, as in the case of other selectors in the respective districts; thus, in the south-western division, the proportion allowed to be selected is 5 per cent. with a maximum of 3,000 acres, and in the other divisions, excepting the eastern, 1 per cent. with a maximum of 5,000 acres; provided also, in the latter case, the runs are stocked with 10 sheep or 1 head of large stock to every 1,000 acres leased.

398. In Tasmania, $33\frac{1}{3}$ per cent. is added to the price named in the table (£1 per acre) as interest for the period of 14 years. In Land system of Tasmania. mining districts in Tasmania selection is allowed in lots ranging from

10 to 100 acres, the price being £1 per acre, with one-fourth in addition added for credit for a term of 7 years. Residence and improvement is compulsory, and fee-simple cannot be obtained until the expiration of 7 years. These lots are sold, reserving to the Crown the right of mining at a distance of not less than 50 feet from the surface. During the first half of 1889, a consolidated *Land Act* was proposed with clauses providing more effectually for residence and improvement, and limiting selection so as to prevent as much as possible monopoly and speculation.

Land
system of
New
Zealand.

399. In New Zealand, the price per acre varies with the quality of the land. There is besides a system of "perpetual leasing" in that colony, under which as much as 640 acres of first-class or 2,000 acres of second-class land may be leased with the right to acquire the freehold as soon as the prescribed improvements are effected at an annual rental equal to 5 per cent. of the value of the land. The first lease is for 30 years, with the option of renewal for succeeding periods of 21 years, the rent being assessed afresh at each renewal. The lessee may acquire the freehold at any time after the required improvements are effected, if the land is not within a proclaimed gold-field. The conditions as regards residence and improvement are the same as under the deferred payment system. The "Homestead system" is also in force throughout the colony to a limit of 30,000 acres in any one year. Under this system no payment is made for the land. After 5 years' residence and the cultivation of one-third of the selection if open land, and one-fifth if bush land, the selector can claim his Crown grant. No family or household can hold more than 200 acres of first-class land or 300 acres of second-class land under this system. Owing however to the liberal provisions of the Amending Acts of 1887 and 1888 under which lands are opened for cash, or a perpetual lease, or deferred payments at the option of the applicant, the Homestead system has fallen generally into disuse. In the case of bush land personal residence is not necessary.

Ambiguity
of the term
"aliena-
tion," as
applied to
Crown
lands.

400. In dealing with the figures relating to the alienation of the public estate, it is customary in Victoria to consider Crown lands as sold or alienated—only when the right to the title in fee-simple has been acquired. Consequently a large proportion of the land set down as alienated in any year, having been originally selected with right of purchase under certain conditions, the purchase-money being payable by annual instalments, without interest, may have been virtually parted with many years previously. The land set down as

alienated in any year, therefore, consists of the area sold by auction, that granted without purchase, and that selected or conditionally purchased—of which the purchase had been completed during the year. Some of the neighbouring colonies, however, adopt a different principle, for, in their statements of land alienated, that sold conditionally—which, of course, is liable to revert to the Crown should the conditions of sale not be complied with—is included with that of which the fee-simple has been obtained. Both methods are useful in their way, the Victorian plan giving the more accurate account of the condition of the public estate, and the other giving the better indication of the progress of settlement. In the following paragraphs it may perhaps be sometimes necessary to use the term “alienated” in connexion with land which is only conditionally purchased, but, when this occurs, such explanation will be given as will prevent a mistake.

401. The total extent of Crown land sold and finally parted with in Victoria up to the end of 1889 was 15,827,347 acres, and the extent granted without purchase was 14,965 acres. The whole area alienated in fee-simple was thus 15,842,312 acres, of which 6,615,958 acres, or 42 per cent., were sold by auction, and nearly the whole of the remainder was originally acquired by selection under the system of deferred payments.

Crown lands
alienated
to end of
1889.

402. The selected lands, of which the purchase had not been completed up to the end of the year, amounted to 10,598,367 acres. Of this extent it is estimated that 3,979,595 acres had been forfeited or abandoned, and had reverted to the Crown. The remainder, representing approximately the whole area in process of alienation under deferred payments, amounted to 6,618,772 acres.

Crown lands
selected.

403. According to the latest computation, the total area of the colony is 56,245,760 acres; and if from this be deducted the sum of the lands granted, sold, and selected, amounting—less the extent forfeited—to 22,461,084 acres, it will follow that the residue, representing the Crown lands neither alienated nor in process of alienation, amounted at the end of 1889 to 33,784,676 acres.

Crown lands
unalien-
ated.

404. The whole of this residue, however, is not available for settlement, for it embraces lands occupied by roads, the unsold portions of the sites of towns, and beds of rivers and lakes; the State forests; water, timber, education, and other reserves. Deducting these lands—amounting in the aggregate to 7,591,267 acres, also

Public
estate,
1889.

that portion of the colony known as the Mallee country, containing 11,572,000 acres, leased for pastoral purposes under a special Act, and 6,320,841 acres occupied under lease or licence for various terms of years—from the extent unalienated and unselected, already stated to have been 33,784,676 acres, it will be found that the available area is narrowed to 8,300,568 acres. This will be at once seen by the following table, which shows the position of the public estate at the end of 1889:—

PUBLIC ESTATE OF VICTORIA ON 31ST DECEMBER, 1889.

Condition of Land.	Approximate Number of Acres.
Land alienated in fee-simple	15,842,312
Land in process of alienation under deferred payments ..	6,650,000
Roads in connexion with the above	1,322,000*
Water reserves	288,160
Reserves for agricultural colleges and experimental farms ...	146,008†
Timber reserves and State forests	2,063,750
Other reserves	2,126,200‡
Unsold land in towns, beds of rivers, etc., etc.	1,613,921
Mallee country §	11,577,000
Land in occupation under—	
Pastoral leases	1,711,710
Grazing area leases	4,241,227
Grazing licences for auriferous lands	367,904
Available for settlement at end of 1889	8,300,568||
Total area of Victoria	56,245,760

Crown lands
available
for settle-
ment.

405. The area of the colony, exclusive of the Mallee country, is 44,673,760 acres, of which, at the end of 1889, 22,492,312 acres, or 50 per cent., were already alienated or in process of alienation; 7,560,039 acres, or 17 per cent., were occupied by reserves, etc.; 6,320,841 acres, or 14 per cent., were occupied under lease¶ for pastoral purposes; and 8,300,568|| acres, or 19 per cent., were available for settlement.

* Calculated at 5 per cent. of the gross extent sold and selected up to the end of 1889.
† Only 13,393 acres of this area is for the sites of colleges and experimental farms, the balance being intended as an endowment in aid. Of this balance 126,074 acres were leased for agricultural and grazing purposes, and return an annual revenue of £5,806.
‡ In 1889, the area of pastoral lands available for occupation was reduced by nearly 2 million acres, which was reserved as an endowment to State education; hence the area under “Other Reserves” shows a considerable increase, and that available for occupation a considerable decrease as compared with the previous year.
§ Occupied for pastoral purposes, under the *Mallee Pastoral Leases Act* 1883, for terms not exceeding 20 years. See paragraph 424 *post*. It has recently been thrown open to selection.
|| Of this area 4,924,383 acres is temporarily held under grazing licences, renewable annually; only 90,148 acres of it may be sold by auction.
¶ Including a small proportion under licence for periods of five years.

406. Following the classification provided for under the existing *Land Act*, the estimated area of Crown lands, exclusive of the Mallee country, available, under the *Land Act* 1884, at the end of 1889 may be divided as follows :—

Classifica-
tion of
available
land.

CLASSIFICATION OF LAND AVAILABLE AT END OF 1889.

Pastoral lands	...	...	...	2,439,842*
Agricultural and grazing lands	...	...	...	4,574,244
Auriferous lands	...	...	...	1,108,682
Swamp lands	...	...	...	87,652
May be sold by auction	...	...	...	90,148
Total	...	...	...	<u>8,300,568</u>

407. The land finally alienated from the Crown in fee-simple during 1889 amounted to 258,233 acres, of which 257,702 acres were sold, and 531 acres were granted without purchase. The total extent was less by 181,257 acres than in 1888, and was also much smaller than in any other of the previous eleven years, during which period the extent alienated annually usually exceeded 400,000 acres, and only once did it fall below 300,000 acres.

Crown lands
alienated,
1889.

408. Of the area sold, 13,681 acres, or 5 per cent., were disposed of by auction, and 1,959 acres under pre-emptive rights, private contracts, etc., whilst the remainder had been in the first instance selected in previous years under the system of deferred payments. The extent sold by auction in 1889 was from 5,500 to 6,500 acres less than in any of the three preceding years, and also far less than in any of the sixteen years ended with 1885, during which period the annual average extent so sold was 63,700 acres, and the maximum over 150,000 acres.

Crown land
sold by
auction.

409. The amount realized for Crown lands finally alienated in 1889 was £330,054, or at the rate of £1 5s. 7d.† per acre. Of this sum, only part was received during the year, nearly all the remainder having been paid in former years as rents and licence fees. The proportion sold by auction realized £73,662, or an average of £5 7s. 8d. per acre; and the proportion sold otherwise than at auction realized £256,392, or an average of £1 1s. 1d. per acre.

Amount
realized on
Crown land
alienated
in 1889.

410. The principle of deferred payments in connexion with sales of Crown lands by auction was introduced for the first time in the

Deferred
payments
on lands
sold by
auction.

* See footnote (†) on page 248.

† In view of the fact that payment for the greater portion extended over a term of years without interest, the actual average price was much less than this. See paragraph 411 *post*.

Land Act 1884,* it being necessary to pay one-fourth of the price bid at the time of sale, the remaining three-fourths being, at the option of the purchaser, spread over three years, payable quarterly, in instalments of equal amounts, bearing interest at the rate of 6 per cent. per annum. The majority of purchasers do not avail themselves of this concession, as only £125,928, out of a total of £595,459 during the last five years was left unpaid at the time, the amount received being £469,531, as well as £13,923 for interest.

411. From the period of the first settlement of the colony to the end of 1889 the amount nominally realized by the sale of Crown lands was £24,311,585, or at the rate of £1 10s. 9d. per acre. It must, however, be remembered that payment of a considerable portion of this amount extended over a series of years without interest, allowance for which, at the current rate, would, it is evident, materially reduce the amount the State actually obtained for the land. It may be calculated that, with interest at 5 per cent., if the payment of the £1 per acre by equal annual instalments be extended over 10 years without interest, the amount of purchase-money is really equivalent to only 15s. 6d. per acre, and if it be extended over 20 years, it is reduced to 12s. 6d. per acre.

412. During the year 1889, 461 applications were granted for the selection of 71,251 acres under the deferred payment system.† The whole of this area, excepting 6 acres, was selected out of grazing areas leased in allotments limited to 320 acres, nominally for agricultural purposes; and the remaining 6 acres were taken up in parcels of 3 acres each, for the purpose of residence. Except in regard to the latter, which were under the *Land Act* 1878, these transactions were all under the *Land Act* 1884. The following is a summary of the selectors, the number of acres selected, and the amount of purchase-money payable under each authority during the year 1889:—

SELECTORS AND EXTENT SELECTED, 1889.

Selections of Crown Lands, 1889, for purpose of—	Legalization.	Number of Selectors.	Area Selected.	Purchase money payable. (Nominal.)
			Acres.	£
Agriculture, with residence	<i>Land Act</i> 1884, sec. 42	418	65,862	65,862
„ without resi- dence }	<i>Land Act</i> 1884, sec. 49	41	5,383	10,766
Residence ...	<i>Land Act</i> 1878, sec. 10	2	6	30
Total ...	... ..	461	71,251	76,658

* 48 Vict. No. 812, Section 71.

† See paragraphs 379 and 380 *ante*.

Amount realized, 1836 to 1889.

Selection of public lands, 1889.

413. The number of selectors approximates closely to the number of approved applications. The following are the numbers in each of the years named in the last table, those under the different sections of the *Land Acts* 1869, 1878, and 1884 being distinguished:—

APPROVED APPLICATIONS (SELECTORS), 1870 TO 1889.

Year.			Number of Selectors of Land.				Total.
			For Purposes of Cultivation.		For Residence and Cultivation near Goldfields. (Section 49, Act No. 360.)	For Residence. (Section 10, Act No. 634.)	
			With Residence. (Sec. 19, Act No. 360; and Sec. 42, Act No. 812.)	Without Residence. (Section 11, Act No. 634.; and Sec. 49, Act No. 812.)			
1870	...	...	3,017	...	131	...	3,148
1871	...	...	4,575	...	673	...	5,248
1872	...	...	7,771	...	1,408	...	9,179
1873	...	...	6,689	...	1,455	...	8,144
1874	...	...	9,578	...	1,493	...	11,071
1875	...	...	6,320	...	771	...	7,091
1876	...	...	5,785	...	697	...	6,482
1877	...	...	6,240	...	777	...	7,017
1878	..	...	7,524	...	1,534	...	9,058
1879	...	...	5,726	75	887	...	6,688
1880	...	...	4,036	67	1,054	56	5,213
1881	...	...	3,110	42	1,151	106	4,409
1882	...	...	4,383	51	837	47	5,318
1883	...	...	4,453	58	1,070	22	5,603
1884	...	...	3,918	71	1,002	11	5,002
1885	...	...	3,930	68	714	83	4,795*
1886	...	...	943	25	173	49	1,190*
1887	...	...	147	...	39	15	201
1888	...	...	317	...	...	10	327
1889	...	...	418	41	...	2	461
Total			88,880	498	15,866	401	105,645

414. The extent of Crown lands absolutely or conditionally alienated during each year since the passing of the *Land Act* 1869 is shown in the following table, which distinguishes the extent sold by auction and that granted without purchase from that conditionally alienated or selected:—

* The great majority of the applications approved in the years 1835 to 1886 were lodged in 1884, under the provisions of the *Land Act* 1869.

Progress of settlement on public lands, 1870 to 1889.

CROWN LANDS ABSOLUTELY AND CONDITIONALLY ALIENATED,
1870 TO 1889.

Year.				Area, Granted, Sold, and Selected.			Total.
				Granted without Purchase.	Sold by Auction.*	Conditionally alienated.† (Selected).	
				Acres.	Acres.	Acres.	Acres.
1870	...	...	...	21	148,685	322,592	471,298
1871	...	...	...	118	118,440	487,436	605,994
1872	...	...	...	320	146,611	797,176	944,107
1873	...	...	...	1,575	19,929	1,063,066	1,084,570
1874	...	...	...	44	49,655	1,831,698	1,881,397
1875	...	...	...	...	83,395	1,183,520	1,266,915
1876	...	...	...	546	150,628	1,040,356	1,191,530
1877	...	...	...	260	76,006	1,126,498	1,202,764
1878	...	...	...	57	47,376	1,415,129	1,462,562
1879	...	...	...	503	56,430	1,032,214	1,089,147
1880	...	...	...	461	27,272	752,639	780,372
1881	...	...	...	3,237	24,753	588,922	616,912
1882	...	...	...	666	31,386	851,402	883,454
1883	...	...	...	159	20,085	843,971	864,215
1884	...	...	...	74	35,446	734,092	769,612
1885	...	...	...	3,099	26,900	723,523	753,522
1886	...	...	...	1,120	19,281	188,196	208,597
1887	...	...	...	487	19,565	23,092	43,144
1888	...	...	...	522	22,413*	53,738	76,673
1889	...	...	...	531	15,639*	71,251	87,421
Total				13,800	1,139,895	15,130,511	16,284,206

Average size of selections.

415. Dividing the total number of acres selected by the total number of selectors, as shown in the last two tables, it is found that throughout the whole period of twenty years the average number of acres taken up by each selector has been 154.

Selected land forfeited, 1889.

416. Of the land which had been selected in former years, 118,291 acres during 1889 were abandoned or forfeited to the Crown in consequence of non-fulfilment of conditions, resulting in a gain to the Treasury of £2,352.

Leases of grazing areas, 1889.

417. The present *Land Act* prescribes that anyone wishing to select for agricultural purposes must first acquire the lease of a grazing area.‡ The number of applications for such leases received in 1889 was 5,868; but the number approved during that year was only 2,348, the extent for which approval was granted being 925,939 acres, at an annual rental of £9,749.

* Including 2,389 acres in 1888, and 1,959 acres in 1889 sold by private contract.
† A large proportion of the land referred to in this column may revert, and, as a matter of fact, a considerable quantity has reverted, to the Crown in consequence of non-fulfilment of conditions, etc., and may subsequently be included in re-adjustments of selections, re-licensed, sold by auction or retained by the Crown. "Gold-fields" selections are included in this column. See paragraph 402 ante.
‡ See paragraphs from 387 to 389 ante.

418. The number of lessees of “grazing areas” who made application during the year 1889 for the issue of licences of agricultural allotments (selections) was 724, for an area of 121,672 acres. The number of approved applications, however, was 459, and the area licensed 71,245 acres, as compared with 50,758 acres in 1888. The annual fees, which form part of the purchase-money, payable on these selections amount in the aggregate to £3,831.

Selections
under the
Land Act
1884.

419. Licensees of agricultural allotments (or selectors) under the *Land Acts* 1869 and 1884 are empowered to register licence liens for advances of money up to half the value of improvements effected. The number of such licence liens registered, the extent of land on which such liens were granted, and the amount secured were as follow in the last four years :—

Licence liens

LICENCE LIENS, 1886 TO 1889.

Year.	Liens Registered.		
	Number.	Area on which Lines were granted.	Amount Secured.
		Acres.	£
1886 	326	79,099	38,924
1887 	305	68,968	34,634
1888 	405	95,294	48,098
1889 	267	58,705	30,039

420. Under the present *Land Act* it was intended that the purely pastoral lands of the colony, the whole of which have been marked off as “pastoral allotments,” should be occupied under lease for periods not exceeding fourteen years from the commencement of the Act. But it is provided, in case all the allotments should not be applied for, that temporary grazing licences, renewable annually, may be granted for the occupation of such lands and of unoccupied agricultural lands, so long as they may not be required for leasing under the principal sections of the Act. Moreover, agricultural lands, which are not occupied for agricultural purposes, are leased in grazing areas as already stated* ; and auriferous lands, in blocks not exceeding 1,000 acres, may be licensed for grazing purposes for periods of five years. The following table shows the area of Crown lands under the *Land Act* 1884, held under lease or licence for pastoral or grazing purposes at the end of 1889, also the number of leases and licences, and the annual rental payable :—

Pastoral
occupation,
1889.

* See paragraph 387 ante.

PASTORAL OCCUPATION, 1889.
(Under *Land Act* 1884.)

Description of Tenure.	Number of Licences or Leases.	Extent of Crown Lands.	Annual Rental.
		Acres.	£
Pastoral leases (sec. 21)	94	1,711,710	6,283
Grazing area leases (sec. 32) ...	10,478	4,241,227	26,189
Grazing licences (secs. 3 and 119)...	2,336	4,924,383	} 36,417
„ „ (auriferous lands, secs. 65 and 67)*	2,075	367,904	
Total	14,983	11,245,224	68,889

Average
area of runs
and grazing
rights.

421. By these figures it may be ascertained that the average extent of land embraced in a pastoral lease was 18,210 acres, in a grazing area lease 405 acres, and in a grazing licence (secs. 3 and 119) 2,108 acres. The areas are exclusive of those of any purchased land attached thereto.

Rent of runs
and grazing
rights.

422. According to the table, the average rent per acre of pastoral allotments was something less than a penny (.88d.), and of land held under grazing licence—a penny and two-thirds (1.65d.).

Assessment
of pastoral
lands.

423. The rental of pastoral lands (exclusive of agricultural lands used for pastoral purposes, and of the Mallee pastoral lands) available at the end of 1885, viz., 7,078,100 acres, was assessed in 1886 at £24,717 per annum. Since 1885, however, the area has been considerably reduced which will naturally reduce the assessment referred to.

Mallee
pastoral
leases.

424. The Mallee country is, as already stated, subject to the provisions of a special Act.† It is divided into blocks and allotments. The number of leases and of lessees of these, together with their approximate area, and the annual rental payable therefor, are shown in the following table :—

MALLEE PASTORAL LEASES ON 31ST DECEMBER, 1889.

Description of Leaseholds.	Number of Leases.	Number of Lessees.	Area.	Annual Rental.‡
			Acres.	£
Mallee blocks	58	40	7,043,770	2,517
„ allotments	1,011	1,011	2,405,066	4,426
Total	1,069	1,051	9,448,836	6,943

* Including licences for residences or cultivation limited to 20 acres each. At the end of 1889 the number of these was 1,288, but the area was only 24,077 acres.
† See paragraphs 382 to 384 *ante*.
‡ Approximate only. The amount actually received in 1889 was £6,072, viz., £2,460 for blocks and £3,612 for allotments ; but arrears are included in these figures.

425. On the 1st January, 1889, the occupied portions of most of the blocks were surrendered to the Crown.* The greater number of these were re-leased for the remainder of the duration of the Act, but some were subdivided into allotments and made available for selection with others which were subsequently surrendered. In all ten blocks have thus been subdivided into 500 allotments, each having an area of about 640 acres. Not only will the revenue be very substantially increased by this means (as the annual rental will range from £2 to £4 for each allotment), but the settlement of the country will much more rapidly progress and the destruction of vermin be more effectual than was possible when it was, as previously, held under ten leases and was practically unsettled. The water resources of the Mallee have been tested with very gratifying results. Good water has been struck on two blocks and wells sunk thereon, which yield a plentiful supply of fresh water.

Surrender
and re-
leasing of
Mallee
blocks

426. At the end of 1889 the following areas were still available for occupation in the Mallee country:—Mallee blocks, 951,680 acres; Mallee allotments, 225,964 acres.

Mallee areas
still unoc-
cupied,
1889.

427. In 1883, prior to the passing of the *Mallee Pastoral Leases Act*, the Mallee country was held under pastoral licences or grazing rights. The number of such licences and rights was 147, held by 58 individual occupiers; the area over which the right of occupation was given was 7,727,360 acres, and the annual rental payable was £8,076. From a comparison of these figures with those in the above table, it appears that since 1883, whilst the occupiers of the Mallee country have increased eighteen times, and the extent occupied by nearly one-fourth, the annual rental has fallen off by £1,100, or by 14 per cent. As a set-off against this reduced rental, however, it should be pointed out that the present lessees have to comply with certain conditions* to which the licensees under the former Act were not subject.†

Past and
present
occupation
of Mallee
country.

428. According to the figures in the last table, the average rental per 100 acres payable for the Mallee country is 1s. 5½d., or 8½d. for the Mallee blocks, and 3s. 8¼d. for the Mallee allotments. In 1883, prior to passing of the present Act, the average rental in the Mallee country was 2s. 1d. per 100 acres.

Average
rental of
Mallee
country.

429. The revenue from the sale and occupation of Crown lands may be divided into—(1) receipts from the alienation of land in fee-simple, including the price realized from land sales and from rents

Land
revenue.

* See paragraph 383 *ante*.

† Mallee lands may now be selected. See paragraph 384 *ante*.

which count towards the purchase-money; (2) receipts on account of temporary occupation, which include payments for pastoral leases and grazing licences, rents for business, factory, and hotel sites, etc., and rents of land which do not count towards the purchase-money; (3) penalties, interest, and fees for grants, leases, licences, etc. The gross receipts show a falling-off of about £125,000, as compared with the previous year, chiefly under the head of land sales and selection, as will be seen by the following figures:—

LAND REVENUE, 1888 AND 1889.

Heads of Land Revenue.	Amounts Received.		Increase (+). Decrease (-).
	1888.	1889.	
	£	£	£
Alienation in fee-simple and progressive ...	585,055	461,009	-124,046
Temporary occupation ...	91,417	97,911	+6,494
Penalties, fees, etc. ...	40,277	32,846	-7,431
Total ...	716,749	591,766	-124,983

Agricultural
statistics.

430. The agricultural statistics of Victoria are collected by the municipal bodies, which, under the *Local Government Act* 1874 (38 Vict. No. 506), and the *Local Government Act Amendment Act* 1883 (47 Vict. No. 786), are required each year to furnish to the Government Statist, on or before the 1st March, such agricultural and other statistics relating to their districts on such forms and in such manner as the Governor in Council may direct. All persons are required to give correct information to the best of their knowledge and belief; and, should they fail to do so, they render themselves liable to a penalty not exceeding £10. Collectors divulging or making extracts from the information they receive, except under the special direction or authority of the Government Statist, also render themselves liable to a penalty of £10.

Bonuses for
collecting
statistics.

431. In assigning the duty of collecting statistics to the local bodies, the law did not provide that they should receive any payment therefor; and thus, although under that provision of the Act whereby the Governor in Council had power to prescribe the manner as well as the form of the statistics, elaborate instructions for the guidance of the persons employed had each year been supplied them, the Government had practically but little control over the work, and hence many of the returns were not sent in until long after the appointed time, and some were generally furnished in anything but

a satisfactory condition. This being the case it was decided by the Government—for the first time in 1883-4—to offer bonuses, ranging, according to the nature of the country, from £6 to £3 per 100 schedules collected, to such municipalities as should furnish authentic and complete returns punctually at the appointed time—the amount to be reduced one-half if the returns were delayed for five days, three-quarters if they were delayed for ten days, and forfeited altogether if ten days should be exceeded. These bonuses have now been given for six years with excellent effect, as the measures taken have resulted in the statistics being sent in at such a date that it has become possible to publish nearly complete returns about the 12th March, or fully two months earlier than such a result had been achieved in previous years.

432. The agricultural statistics to which reference will now be made are those for the year ended 1st March, 1890.* Tables embodying the final results of these statistics will be found in the *Government Gazette* of the 28th May last,† and these, with additional tables, form portion of the *Statistical Register of Victoria*. Agricultural statistics, 1889-90.

433. The total number of farm holdings visited in the year under notice was 36,497, of which 35,528 were in shires, and 969 in cities, towns, or boroughs. In the previous year the number of farms visited was 35,727, the increase being thus 770. Number of cultivators.

434. The extent of land returned as under cultivation amounted to 2,627,262 acres, as against 2,564,742 acres in 1888-9. The increase shown by the figures was, therefore, 62,520 acres. Land under tillage.

435. The average area returned as in cultivation to each person in the colony was about $2\frac{1}{3}$ acres in the year under review as against nearly $2\frac{1}{2}$ acres five years previously, and 2 acres 10 years previously. The exact proportions at the three periods were as follow:— Area cultivated per head of population

AVERAGE AREA CULTIVATED TO EACH PERSON IN THE COLONY.

						Acres.
1879-80	...	...	...	...	...	2·01
1884-5	...	...	...	...	...	2·46
1889-90	...	...	...	...	...	2·35

436. The following table shows the area per head cultivated in each Australasian colony during the nine seasons ended with that of 1888-9, also the mean of those seasons, the colonies being placed in Area cultivated per head in Australasian colonies.

* A summary of the agricultural statistics of each year, since the first settlement of the colony, is published at the commencement of this volume (second folding sheet).

† This year tables containing a statement of the extent of land under crop, and yield of wheat, oats, potatoes, and hay, were published in the Melbourne daily journals of the 13th March.

order according to the average extent of land per head that each cultivates :—

CULTIVATION PER HEAD IN AUSTRALASIAN COLONIES, 1880 TO 1889.*

Colony.	Acres under Tillage per Head of Population.									
	1880-81.	1881-2.	1882-3.	1883-4.	1884-5.	1885-6.	1886-7.	1887-8.	1888-9.	Mean.
1. S. Australia† ...	9·62	8·91	8·08	9·05	8·91	...	...	...	8·77	8·87
2. Tasmania ...	3·25	3·15	3·08	3·12	3·26	3·12	3·25	3·21	3·29	3·20
3. New Zealand...	2·12	2·63	2·68	2·61	2·39	2·20	2·33	2·39	2·41	2·44
4. Victoria ...	2·32	2·06	2·25	2·38	2·42	2·42	2·41	2·49	2·35	2·31
5. W. Australia ..	2·20	1·78	1·84	1·94	2·42	2·19	2·18	2·49	2·52	2·18
6. N. S. Wales ...	·96	·83	·90	·91	·92	·90	1·02	1·01	·92	·93
7. Queensland ...	·53	·56	·64	·58	·64	·66	·65	·56	·55	·59

437. It will be observed that South Australia cultivates much more, and New South Wales and Queensland cultivate much less, per head than any of the other colonies ; also that over a series of years Victoria has in this respect occupied a middle place, being below South Australia, Tasmania, and New Zealand, but above the other three colonies, viz., Western Australia, New South Wales and Queensland. In the four years ended with 1887-8, however, and in one previous year, Victoria, in proportion to population, had more land in cultivation than New Zealand.

438. The principal crops grown in Victoria are wheat, oats, barley, potatoes, hay, and green forage. In 1889-90, the area under wheat was less by 38,500 acres than in 1888-9, also less by 54,000 acres than in 1887-8, but was larger than in any previous year ; the area under oats was larger by 39,000 acres, and that under barley larger by over 7,000 acres, than in 1888-9, and both were also larger than in any previous year ; the area under potatoes, although larger than in 1888-9 by 4,000 acres, was exceeded in 1887-8 and in 1886-7 ; that under hay was larger by 40,000 acres than that in 1888-9, and was also larger than in any other year ; the area returned under green forage was smaller by 37,000 acres than that in 1888-9, and was also less than that returned in any previous year since 1871-2. The large falling-off since 1886-7 is accounted for by the fact that in the last

* For the population and number of acres under tillage in each Australasian colony during the seventeen years ended with 1889, see Summary of Australasian Statistics (third folding sheet) *ante* ; also Appendix A *post*.

† The colony of South Australia did not collect agricultural statistics in the three years ended with 1887-8, the mean is, therefore, for six years.

three years the collectors have been instructed not to visit holdings on which there was no other cultivated land than that laid down under permanent artificial grass, which is included under the head of green forage. The following table shows the extent of land under each of these crops in the last two seasons :—

LAND UNDER PRINCIPAL CROPS, 1889 AND 1890.

Year ended March.	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Green Forage.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1889 ...	1,217,191	197,518	83,483	43,074	411,332	192,515
1890 ...	1,178,735	236,496	90,724	47,139	451,546	155,596
Increase ...	...	38,978	7,241	4,065	40,214	...
Decrease ...	38,456	...	...	...	...	36,919

439. As was naturally to be expected from the break-up of the drought which prevailed in 1888-9, a large increase occurred in 1889-90 in the gross yield of all the principal crops. Thus the yield of wheat and oats each increased by nearly 3,000,000 bushels, the yield of the latter being more than twice as large as in the previous year; the yield of hay was also more than doubled; whilst that of barley increased by 60 per cent. and that of potatoes by 20 per cent. The wheat crop in 1889-90—11,500,000 bushels—was the fourth largest ever raised in the colony; still it was 4,000,000 bushels below the crop produced in 1883-4. The gross yield of oats, barley, and hay were much larger in the year under review than in any previous one, but that of potatoes was exceeded in six other years. The following is a statement of the gross produce of each of the principal crops in 1888-9 and 1889-90 :—

GROSS PRODUCE OF PRINCIPAL CROPS, 1889 AND 1890.

Year ended March.	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
1889 ...	8,647,709	2,803,800	1,131,427	131,149	308,117
1890 ...	11,495,720	5,644,867	1,831,132	157,104	666,385
Increase ...	2,848,011	2,841,067	699,705	25,955	358,268

440. The following table shows the area under and gross produce of wheat in each county during the year ended 1st March, 1890, also the average produce of wheat per acre in each county during that year and the two preceding years :—

WHEAT IN EACH COUNTY.—AREA UNDER CROP AND GROSS AND AVERAGE PRODUCE.

Counties.	Year 1889-90.		Average Produce per Acre.		
	Area under Crop.	Gross Produce.	1889-90.	1888-9.	1887-8.
	Acres.	Bushels.	Bushels.	Bushels.	Bushels.
Anglesey	766	8,696	11·35	13·12	11·88
Benambra	1,456	21,557	14·81	17·01	13·57
Bendigo	61,319	867,758	14·15	7·29	12·84
Bogong	17,008	112,098	6·59	7·82	7·60
Borong	305,374	3,122,711	10·23	6·34	10·72
Bourke	585	6,655	11·38	19·58	18·17
Buln Buln	297	5,379	18·11	19·11	14·35
Croajingolong	48	847	17·65	12·98	7·64
Dalhousie	1,896	23,933	12·62	13·68	12·38
Dargo	41	270	6·59	14·20	22·77
Delatite	6,762	59,018	8·73	9·39	6·85
Dundas	7,028	69,684	9·92	16·19	16·64
Evelyn	30	411	13·70	17·88	6·83
Follett	1,620	16,722	10·32	14·49	14·89
Gladstone	71,615	730,594	10·20	5·95	12·37
Grant	1,608	24,984	15·54	15·63	16·29
Grenville	1,013	14,901	14·71	12·31	16·83
Gunbower	49,403	581,119	11·76	5·40	7·14
Hampden	448	7,069	15·78	13·52	17·26
Heytesbury	310	5,222	16·85	19·59	21·83
Kara Kara	111,454	1,066,397	9·57	6·65	10·94
Karkarooc	16,122	171,488	10·64	2·74	7·88
Lowan	207,451	1,312,320	6·33	8·21	10·39
Moirra	184,200	1,673,578	9·09	8·29	10·91
Mornington	10	160	16·00	13·85	17·35
Normanby	2,521	30,775	12·21	16·06	15·33
Polwarth	714	20,723	29·02	19·53	23·01
Ripon	4,151	65,277	15·73	12·48	17·63
Rodney	71,023	853,939	12·02	6·51	12·17
Talbot	8,893	110,716	12·45	11·39	15·44
Tambo	42	1,045	24·88	12·87	9·70
Tanjil	2,767	42,388	15·32	7·48	10·41
Tatchera	38,280	424,921	11·10	1·88	9·02
Villiers	2,410	41,485	17·21	20·87	21·13
Wonnangatta	70	880	12·57	38·25	5·74
Total	1,178,735	11,495,720	9·75	7·10	10·81

441. A reference to the table will show that ten and three-quarter million out of the eleven and a half million bushels of wheat raised in Victoria in the year under notice were raised in ten counties, which, for the most part, lie between the 36th and 37th parallels of south latitude, and which have been mentioned in previous issues of this work as, above all others, the wheat producing counties of Victoria. The reaction after the drought of 1888 is specially marked by the

Wheat-yield in ten counties 1888-9 and 1889-90 compared.

increased wheat yield in all but three of these counties, in some of which the yield has doubled, and in one (Tatchera) it was more than five times as high in the year under review as in the previous one. In the following table these counties are arranged in order, according to the yield of wheat in 1889-90; the increase or falling-off, as compared with the previous year, being also shown :—

YIELD IN TEN WHEAT PRODUCING COUNTIES, 1889 AND 1890.

Counties.				Bushels of Wheat Produced.		
				1888-9.	1889-90.	Increase + Decrease -
Borong	...	...	...	1,770,819	3,122,711	+ 1,351,892
Moirā	...	...	...	1,870,978	1,673,578	— 197,400
Lowan	...	...	...	1,697,170	1,312,320	— 384,850
Kara Kara	...	...	...	790,525	1,066,397	+ 275,872
Bendigo	...	...	...	450,376	867,758	+ 417,382
Rodney	...	...	...	455,328	853,939	+ 398,611
Gladstone	...	...	...	454,202	730,594	+ 276,392
Gunbower	...	...	...	311,016	581,119	+ 270,103
Tatchera	...	...	...	75,048	424,921	+ 349,873
Bogong	...	...	...	187,226	112,098	— 75,128
Total	...	...	...	8,062,688	10,745,435	* + 2,682,747

442. As regards the acreable yield of wheat, it will be noticed that in 1889-90, taking the colony as a whole, it was about $2\frac{2}{3}$ bushels higher than in 1888-9, but about 1 bushel less than in 1887-8. In 17 of the 35 counties, however, the yield per acre was less in 1889-90 than in the previous year, viz.:—Anglesey, Benambra, Bogong, Bourke, Buln Buln, Dalhousie, Dargo, Delatite, Dundas, Evelyn, Follett, Grant, Heytesbury, Lowan, Normanby, Villiers, and Wonnangatta; but, with the exception of Bogong and Lowan, only a very small quantity of the wheat grown in Victoria is obtained from these counties.

443. It will be observed that in several of the countries in which the average yield of wheat is high a very small quantity is grown, which is probably raised on a patch of choice land, and does not afford an indication of the general productiveness of the county. Thus, in 1889-90 only 10 acres were placed under wheat in

* Net increase.

Mornington, 30 in Evelyn, 42 in Tambo, 48 in Croajingolong, and 714 in Polwarth; and in all these counties the yield per acre was much above the average of the colony.

444. The following table gives a statement of the number of acres under oats, barley, potatoes, and hay, in each county during 1889-90 :—

Area under other principal crops in each county.

OATS, BARLEY, POTATOES AND HAY IN EACH COUNTY.
AREA UNDER CROP.

Counties.	Area under Crop, 1889-90.			
	Oats.	Barley.	Potatoes.	Hay.
	Acres.	Acres.	Acres.	Acres.
Anglesey	1,955	205	403	2,060
Benambra	1,606	28	267	1,718
Bendigo	17,529	1,976	14	33,702
Bogong	8,196	408	455	11,704
Borong	3,731	1,485	54	51,332
Bourke	9,325	2,357	5,795	27,203
Buln Buln	3,561	88	2,973	4,700
Croajingolong	242	8	83	260
Dalhousie	16,408	699	3,873	10,648
Dargo	246	62	241	939
Delatite	10,272	230	882	6,631
Dundas	3,899	727	105	3,856
Evelyn	531	64	763	4,821
Follett	1,285	134	122	886
Gladstone	13,123	1,587	16	21,028
Grant	12,613	2,205	6,912	28,195
Grenville	8,272	3,197	884	9,996
Gunbower	4,439	1,561	2	18,681
Hampden	2,077	916	659	2,591
Heytesbury	2,271	308	1,380	1,616
Kara Kara	9,903	1,691	103	30,182
Karkarooc	122	51	1	1,602
Lowan	4,484	1,117	12	36,994
Moir	26,341	43,082	26	42,225
Mornington	908	41	764	5,214
Normanby	3,654	437	739	3,729
Polwarth	3,074	2,301	1,815	2,183
Ripon	10,831	306	1,169	12,405
Rodney	16,488	13,674	10	21,308
Talbot	26,626	1,872	7,339	38,097
Tambo	134	14	137	456
Tanjil	4,915	2,689	886	3,274
Tatchera	475	385	3	5,977
Villiers	6,045	4,811	8,052	4,627
Wonnangatta	915	8	200	706
Total	236,496	90,724	47,139	451,546

445. By the next table, which shows the gross produce of oats, barley, potatoes, and hay in each county, it will be seen that in 1889-90 most oats was grown in Talbot, Bendigo, and Moira, in the order named; most barley in Moira, Rodney, and Villiers; most potatoes in Villiers, Grant, and Bourke; and most hay in Talbot, Borung, Grant, Bourke, Bendigo, and Moira:—

Gross produce of other principal crops in each county.

OATS, BARLEY, POTATOES, AND HAY, IN EACH COUNTY.
GROSS PRODUCE.

Counties.	Gross Produce, 1889-90.			
	Oats.	Barley.	Potatoes.	Hay.
	Bushels.	Bushels.	Tons.	Tons.
Anglesey ...	36,515	3,491	1,031	3,168
Benambra ...	49,870	625	1,033	2,539
Bendigo ...	524,179	44,688	34	49,764
Bogong ...	119,411	5,435	1,095	10,534
Borong ...	79,334	24,350	188	63,362
Bourke ...	229,142	61,673	20,702	53,709
Buln Buln ...	97,491	2,459	14,476	9,076
Croajingolong ...	7,235	272	304	387
Dalhousie ...	352,446	16,131	8,635	15,763
Dargo ...	6,366	1,622	972	1,964
Delatite ...	172,768	3,662	1,839	7,151
Dundas ...	78,613	15,509	251	6,091
Evelyn ...	11,087	790	2,769	8,214
Follett ...	29,920	3,289	340	1,391
Gladstone ...	329,221	28,837	43	28,569
Grant ...	368,611	72,579	20,978	58,697
Grenville ...	239,779	117,242	1,964	17,552
Gunbower ...	136,303	31,507	4	27,019
Hampden ...	53,665	32,243	2,675	4,911
Heytesbury ...	53,237	11,435	4,586	2,772
Kara Kara ...	190,898	23,463	178	38,122
Karkarooc ...	1,912	1,010	5	2,895
Lowan ...	70,566	9,624	37	31,815
Moira ...	519,094	638,733	28	48,004
Mornington ...	21,698	759	3,750	8,271
Normanby ...	82,190	11,228	2,179	6,420
Polwarth ...	93,267	86,415	8,781	4,998
Ripon ...	272,996	6,285	2,447	23,442
Rodney ...	393,848	249,597	9	30,592
Talbot ...	695,522	45,960	17,658	71,583
Tambo ...	4,970	329	640	930
Tanjil ...	126,620	87,095	3,358	6,749
Tatchera ...	12,259	6,407	4	9,402
Villiers ...	167,584	186,165	33,443	9,602
Wonnangatta ...	16,250	223	668	927
Total ...	5,644,867	1,831,132	157,104	666,385

Average
yield of
other prin-
cipal crops
in each
county.

446. The average produce per acre of oats, barley, potatoes, and hay in each county during the last two seasons is given in the following table :—

AVERAGE PRODUCE OF OATS, BARLEY, POTATOES, AND HAY IN EACH COUNTY, 1888-9 AND 1889-90.

Counties.	Average Produce per Acre of—							
	Oats. (Bushels.)		Barley. (Bushels.)		Potatoes. (Tons.)		Hay. (Tons.)	
	1888-9.	1889-90.	1888-9.	1889-90.	1888-9.	1889-90.	1888-9.	1889-90.
Anglesey ...	17·79	18·68	20·79	17·03	2·51	2·56	1·00	1·54
Benambra ...	22·97	31·05	24·30	22·32	4·81	3·87	1·01	1·48
Bendigo ...	11·25	29·90	8·25	22·62	1·50	2·43	·49	1·48
Bogong ...	14·24	14·57	12·02	13·32	3·22	2·41	·66	·90
Borong ...	12·41	21·26	8·32	16·40	2·71	3·48	·55	1·23
Bourke ...	18·50	24·57	23·11	26·17	3·54	3·57	·79	1·97
Buln Buln ...	20·92	27·38	21·13	27·94	4·52	4·87	1·59	1·93
Croajingolong	24·10	29·90	16·00	34·00	4·20	3·66	1·43	1·49
Dalhousie ...	17·90	21·48	16·74	23·08	2·95	2·23	·98	1·48
Dargo ...	42·81	25·88	·45	26·16	4·42	4·03	·82	2·09
Delatite ...	12·83	16·82	21·45	15·92	2·48	2·09	·82	1·08
Dundas ...	18·80	20·16	23·17	21·33	2·22	2·39	1·27	1·58
Evelyn ...	17·19	20·88	20·00	12·34	3·24	3·63	1·17	1·70
Follett ...	17·46	23·28	22·05	24·54	2·43	2·79	1·23	1·57
Gladstone ...	11·81	25·09	8·70	18·17	1·00	2·69	·52	1·36
Grant ...	16·46	29·22	17·99	32·92	3·23	3·04	·94	2·08
Grenville ...	16·40	28·99	19·68	36·67	2·38	2·22	·85	1·76
Gunbower ...	11·84	30·71	10·94	20·18	1·00	2·00	·48	1·45
Hampden ...	19·24	25·84	27·67	35·20	3·06	4·06	1·51	1·90
Heytesbury...	17·47	23·44	32·50	37·13	2·73	3·32	1·10	1·72
Kara Kara ...	12·75	19·28	9·66	13·88	1·92	1·73	·59	1·26
Karkarooc ...	4·78	15·67	7·25	19·80	2·00	5·00	·23	1·81
Lowan ...	13·87	15·76	11·05	8·62	1·50	3·08	·73	·86
Moir ...	11·39	19·71	10·45	14·83	·61	1·08	·55	1·14
Mornington	18·77	23·90	21·57	18·51	4·48	4·91	·83	1·59
Normanby ...	16·59	22·50	20·27	25·69	2·74	2·95	1·09	1·72
Polwarth ...	19·97	30·34	31·69	37·56	2·81	4·84	1·48	2·29
Ripon ...	16·75	25·21	19·93	20·54	1·76	2·09	1·16	1·89
Rodney ...	7·81	23·89	8·05	18·25	...	·90	·44	1·44
Talbot ...	14·90	26·12	16·12	24·55	2·66	2·41	1·01	1·88
Tambo ...	21·08	37·09	19·43	23·50	4·64	4·67	1·37	2·04
Tanjil ...	10·29	25·76	7·59	32·39	3·22	3·79	·76	2·06
Tatchera ...	7·95	25·81	4·70	16·64	...	1·33	·36	1·57
Villiers ...	17·90	27·72	36·17	38·70	2·71	4·15	1·32	2·08
Wonnangatta	17·73	17·76	30·00	28·00	4·10	3·34	1·13	1·31
Total ...	14·20	23·87	13·55	20·18	3·04	3·33	·75	1·48

Yield of oats,
barley,
potatoes,
and hay,
1889-90.

447. It will be noticed that in the year ended 1st March, 1890, the highest acreable yield of oats was in Tambo, Benambra, Gunbower, Polwarth, Croajingolong, Bendigo, Grant, and Grenville, in the order named; that the average yield of barley was highest in Villiers, Polwarth, Heytesbury, Grenville, Hampden and Croajingolong; that

potatoes yielded the largest crop per acre in Karkarooc, Mornington, Buln Buln, Polwarth, Tambo, Villiers, Hampden, and Dargo, where the average was over 4 tons; that the highest yields of hay were in Polwarth, Dargo, Grant, Villiers, Tanjil, and Tambo, in which this crop averaged over 2 tons to the acre; and in Bourke, Buln Buln, Hampden, Ripon, Talbot, Karkarooc, and Grenville, in which it exceeded $1\frac{3}{4}$ tons to the acre.

448. Comparing the averages of 1889-90 with those of the previous season, an increase is observed in the yield per acre of oats in all the counties except Dargo; of barley in all except Anglesey, Benambra, Delatite, Dundas, Evelyn, Lowan, Mornington, and Wonnangatta; of potatoes in all except Benambra, Bogong, Croajingolong, Dalhousie, Dargo, Delatite, Grant, Grenville, Kara Kara, Talbot, and Wonnangatta; and of hay in every one of the counties.

449. In the past season, over the colony as a whole, the acreable yield of wheat and potatoes was below, but that of the other crops was above, the average; the yield per acre of wheat was exceeded in all but six of the eighteen other years named in the following table; but that of oats was higher than in any of those years except four, and that of hay was higher than in any previous year:—

AVERAGE PRODUCE OF PRINCIPAL CROPS, 1872 TO 1890.

Year ended March.			Average Produce per Acre of—				
			Wheat.	Oats.	Barley.	Potatoes.	Hay.
			Bushels.	Bushels.	Bushels.	Tons.	Tons.
1872	...	...	13·45	18·76	20·00	3·22	1·40
1873	...	...	16·51	19·55	20·86	3·45	1·32
1874	...	...	13·58	15·69	19·84	2·86	1·27
1875	...	...	14·57	18·46	21·01	3·53	1·32
1876	...	...	15·49	21·92	22·20	3·37	1·33
1877	...	...	13·15	19·91	21·18	3·31	1·22
1878	...	...	12·41	19·39	19·81	3·11	1·17
1879	...	...	8·76	17·60	18·24	2·71	1·21
1880	...	...	13·29	24·00	24·67	4·04	1·45
1881	...	...	9·95	17·62	15·57	2·81	1·20
1882	...	...	9·40	24·57	19·07	3·43	1·13
1883	...	...	9·03	26·17	17·35	3·78	1·06
1884	...	...	14·10	25·07	22·84	4·01	1·43
1885	...	...	9·52	23·40	17·38	4·16	1·09
1886	...	...	8·99	21·72	17·58	3·83	1·05
1887	...	...	11·49	22·91	22·36	3·41	1·09
1888	...	...	10·81	22·92	23·34	4·11	1·41
1889	...	...	7·10	14·20	13·55	3·04	·75
1890	...	...	9·75	23·87	20·18	3·33	1·48
Mean	...	...	11·65	20·93	19·84	3·45	1·23

Yield of other principal crops in past two seasons.

Yield of principal crops, 1872 to 1890.

Malting and other barley.

450. In the last six years the statistics of malting barley were distinguished from those of other descriptions of the same cereal. The following is the result of this division for the year under review:—

MALTING AND OTHER BARLEY, 1889 TO 1890.

Description of Barley.			Area under Crop.	Gross Produce.	Average per Acre.
			Acres.	Bushels.	Bushels.
Malting	...	...	70,693	1,217,416	17·22
Other	...	...	20,031	613,716	30·64
Total			90,724	1,831,132	20·18

Yield of malting smaller than of other barley.

451. Of the total area under barley 78 per cent. was under malting barley; and of the produce of barley, 66 per cent. was of malting barley. In the previous year these proportions were respectively 76 per cent. and 64 per cent. It will be noticed that this description of barley is by far the less prolific of the two kinds, the average in 1889-90 being only 17¼ bushels to the acre, as against 30½ bushels of the other barley.

Average produce in Australasian colonies.

452. In the following table the average yield of wheat, oats, barley, potatoes, and hay in Victoria is placed side by side with the average of the same crops in the other Australasian colonies* during each of the seventeen years ended with 1889:—

AVERAGE PRODUCE PER ACRE OF THE PRINCIPAL CROPS IN AUSTRALASIAN COLONIES, 1873 TO 1889.

Year ended March.	Victoria.	New South Wales.	Queensland.*	South Australia.*	Western Australia.	Tasmania.	New Zealand.
WHEAT.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1873	16·51	16·32	...	11·50	6·02	18·62	24·19
1874	13·58	13·43	...	7·87	13·44	16·17	25·61
1875	14·57	12·87	...	11·75	12·00	18·51	28·15
1876	15·49	14·66	...	11·95	11·00	16·38	31·54
1877	13·15	16·43	...	5·40	12·00	19·30	28·63
1878	12·41	13·84	10·63	7·76	11·00	18·12	26·03
1879	8·76	14·74	13·56	7·15	9·97	16·10	22·94
1880	13·29	15·48	8·11	9·78	14·94	23·22	28·16
1881	9·95	14·69	20·40	4·96	14·94	14·99	25·07
1882	9·40	15·35	8·41	4·57	7·00	18·88	22·69
1883	9·03	16·35	13·89	4·21	11·00	20·27	26·28
1884	14·10	15·00	4·34	7·94	13·00	17·74	26·02
1885	9·52	15·27	16·17	7·53	13·00	19·20	25·43
1886	8·99	10·32	5·11	...	11·50	17·32	24·40
1887	11·49	17·38	3·13	...	12·00	17·91	24·89
1888	10·81	12·06	22·10	...	9·14	16·67	26·37
1889	7·10	4·76	·89	3·85†	10·50	20·16	24·22
Mean	11·66	14·06	10·56	7·59	11·32	18·21	25·92

* The produce of crops in Queensland was not given prior to 1878. No agricultural statistics were collected in South Australia in the four years ended with 1888-9.
† Estimated.

AVERAGE PRODUCE PER ACRE OF THE PRINCIPAL CROPS IN
AUSTRALASIAN COLONIES, 1873 TO 1889—*continued.*

Year ended March.	Victoria.	New South Wales.	Queens- land.*	South Australia.*	Western Australia.	Tasmania.	New Zealand.
OATS.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1873 ...	19.55	19.94	...	16.39	13.24	25.85	27.00
1874 ...	15.69	18.71	...	10.61	19.22	20.98	29.81
1875 ...	18.46	16.31	...	14.61	16.00	26.82	35.22
1876 ...	21.92	18.72	...	16.69	15.00	25.40	37.79
1877 ...	19.91	21.16	...	10.65	15.00	24.21	31.24
1878 ...	19.39	19.31	10.11	11.96	14.00	22.32	31.68
1879 ...	17.60	20.24	9.65	12.01	18.02	24.82	30.11
1880 ...	24.00	21.64	24.74	15.02	19.00	28.61	36.53
1881 ...	17.62	19.87	17.94	11.50	19.00	22.13	32.05
1882 ...	24.57	21.81	12.74	10.66	10.00	28.44	28.45
1883 ...	26.17	24.88	16.58	11.13	15.00	27.34	32.89
1884 ...	25.07	21.15	8.90	14.65	17.00	27.39	35.11
1885 ...	23.40	21.87	15.17	12.20	18.00	28.65	34.84
1886 ...	21.72	19.77	4.84	...	14.50	26.82	26.11
1887 ...	22.91	25.09	10.42	...	16.14	25.95	30.92
1888 ...	22.92	20.35	24.26	...	15.05	18.20	31.24
1889 ...	14.20	13.77	5.65	...	23.42	27.97	29.89
Mean ...	20.89	20.27	13.42	12.93	16.33	25.41	31.82
BARLEY.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1873 ...	20.86	18.96	...	14.31	14.00	22.44	21.25
1874 ...	19.84	18.61	...	10.69	17.22	19.33	27.41
1875 ...	21.01	17.33	...	15.18	16.00	24.46	29.39
1876 ...	22.20	20.46	...	14.12	14.00	27.84	35.91
1877 ...	21.18	23.69	...	10.64	15.00	23.58	28.95
1878 ...	19.81	19.68	16.86	11.97	13.00	20.28	25.40
1879 ...	18.24	21.47	15.87	11.82	12.23	24.22	24.77
1880 ...	24.67	21.46	24.68	13.38	18.00	27.91	30.47
1881 ...	15.57	20.35	20.97	11.62	18.00	20.39	26.05
1882 ...	19.07	21.04	12.53	11.47	10.00	22.29	22.28
1883 ...	17.35	20.55	17.82	11.03	14.00	27.79	26.19
1884 ...	22.84	20.96	13.24	14.01	16.00	25.57	29.31
1885 ...	17.38	21.16	24.73	13.48	16.50	29.58	30.37
1886 ...	17.58	16.16	24.20	..	14.50	25.83	25.92
1887 ...	22.36	21.87	24.07	...	15.97	22.40	25.94
1888 ...	23.34	19.20	27.03	...	11.75	13.87	27.26
1889 ...	13.55	11.08	22.94	...	14.70	23.55	31.15
Mean ...	19.81	19.65	20.41	12.59	14.76	23.61	27.53
POTATOES.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1873 ...	3.45	2.98	...	3.28	2.34	3.92	4.92
1874 ...	2.86	2.98	...	3.41	2.67	3.16	4.46
1875 ...	3.53	2.83	...	3.72	3.00	3.75	5.24
1876 ...	3.37	2.98	...	4.52	3.00	3.54	4.89
1877 ...	3.31	3.03	...	2.84	3.00	3.43	5.36
1878 ...	3.11	2.52	1.91	2.51	2.00	3.25	5.38
1879 ...	2.71	3.20	2.33	2.67	2.49	3.37	4.98

* The produce of crops in Queensland was not given prior to 1878. No agricultural statistics were collected in South Australia in the four years ended with 1888-9.

AVERAGE PRODUCE PER ACRE OF THE PRINCIPAL CROPS IN AUSTRALASIAN COLONIES, 1873 TO 1889.—continued.

Year ended March.	Victoria.	New South Wales.	Queensland.*	South Australia.*	Western Australia.	Tasmania.	New Zealand.
POTATOES.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1880 ...	4·04	3·23	3·03	3·80	3·50	3·18	5·62
1881 ...	2·81	2·73	2·65	2·89	3·50	3·12	4·94
1882 ...	3·43	2·78	2·36	2·96	2·00	3·47	5·41
1883 ...	3·78	3·00	2·90	3·05	2·50	3·88	5·10
1884 ...	4·01	2·47	2·60	4·22	3·00	3·59	5·36
1885 ...	4·16	2·52	2·92	4·10	3·00	4·37	5·78
1886 ...	3·83	2·55	2·82	...	2·50	4·83	4·58
1887 ...	3·41	2·64	3·74	...	3·01	4·71	4·88
1888 ...	4·11	2·94	3·52	...	2·38	2·59	5·45
1889 ...	3·04	2·39	2·84	...	4·10	4·88	5·08
Mean ...	3·47	2·81	2·80	3·38	2·82	3·71	5·14
HAY.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1873 ...	1·32	1·61	...	1·21	1·51	1·39	1·25
1874 ...	1·27	1·54	...	1·02	2·00	1·08	1·43
1875 ...	1·32	1·37	...	1·26	1·50	1·35	·84
1876 ...	1·33	1·15	...	1·21	1·00	1·42	1·46
1877 ...	1·22	1·43	...	1·95	1·00	1·21	1·31
1878 ...	1·17	1·22	1·30	1·13	1·00	1·13	1·30
1879 ...	1·21	1·66	1·33	·97	1·00	1·19	1·22
1880 ...	1·45	1·45	1·96	1·12	1·25	1·52	1·51
1881 ...	1·20	1·33	1·95	·96	1·25	1·13	1·27
1882 ...	1·13	1·35	1·16	·72	·75	1·29	1·30
1883 ...	1·06	1·35	1·67	·75	1·00	1·30	1·24
1884 ...	1·43	1·28	1·39	1·06	1·00	1·29	1·39
1885 ...	1·09	1·24	1·40	·93	1·00	1·24	1·41
1886 ...	1·05	·88	1·06	...	1·00	1·24	1·14
1887 ...	1·09	1·57	1·92	...	1·00	1·06	1·36
1888 ...	1·41	1·35	2·02	..	·94	1·14	1·49
1889 ...	·75	·64	1·54	...	1·00	1·11	1·41
Mean ...	1·21	1·32	1·56	1·10	1·13	1·24	1·31

NOTE.—All the calculations in this table were made in the office of the Government Statist, Melbourne. For the land under and total produce of each crop in the respective colonies during the seventeen years ended with 1889-90, see summary of Australasian Statistics (third folding sheet ante; and for average yields per acre in 1889-90, see Table XVI. of Appendix A. post.

Colonies with highest and lowest average yields. 453. It will be observed that, according to the mean of the whole period, the average produce of wheat, oats, barley, and potatoes is much the highest in New Zealand, and that of hay is highest in Queensland. The lowest average yield of wheat, oats, barley, and hay is in South Australia; and the yield of potatoes is lowest in Queensland, New South Wales, and Western Australia, in which

* The produce of crops in Queensland was not given prior to 1878. No agricultural statistics were collected in South Australia during the four years ended with 1888-9.

the difference in the average yield is very slight. Victoria stands third in regard to the average per acre of oats and potatoes, fourth in regard to wheat and barley, and fifth in regard to hay.

454. It will further be noticed that in 1888-9 the average produce of all the crops named in Victoria, New South Wales, and South Australia, and of wheat and oats in Queensland, was very much below the mean of the seventeen years to which reference is made; but that the average produce of all the crops in Western Australia, Tasmania, and New Zealand, and of barley, potatoes, and hay in Queensland, was either above, or only slightly below the average of the same period.

455. The next table shows the acreage under various crops in the United Kingdom, Australasia, British North America, the Cape of Good Hope, the principal countries on the continent of Europe and the United States of America. All the information has been taken from official documents :—

LAND UNDER CERTAIN CROPS IN SOME BRITISH AND FOREIGN COUNTRIES (000's OMITTED).

Country.	Year.	Number of Acres under—				
		Wheat.	Oats.	Barley.	Rye.	Potatoes.
The United Kingdom ...	1889	2,545,	4,140,	2,316,	85,	1,377,
Australasia ...	1888-9	3,570,	616,	158,	...	112,
Canada—						
Ontario ...	1888	1,194,	1,850,	895,	...	154,
Quebec, Nova Scotia, and New Brunswick	1881	305,	...	...	...	235,
Manitoba ...	1888	518,*	171,*	70,*	...	11,
Prince Edward Island, British Columbia, and the Territories	1885	67,	35,	12,	...	4,
Cape of Good Hope ...	1875	188,	115,	29,	...	9,
Austria ...	1887	2,875,	4,631,	2,798,	4,985,	2,758,
Belgium ...	1883	811,	616,	99,	686,	492,
Denmark ...	1881	138,	991,	781,	660,	110,
France ...	1887	17,210,†	9,189,	2,308,	4,012,	3,675,
Germany ...	1888	4,775,	9,466,	4,256,	14,361,	7,213,
Holland ...	1887	210,	285,	111,	504,	364,
Hungary ...	1888	6,842,	2,581,	2,424,	2,731,	1,085,
Italy ...	1883	11,700,	1,100,	856,	397,	173,
Norway ...	1875	11,	224,	138,	37,	86,
Russia in Europe ...	1881	28,947,	34,890,	12,454,	64,609,	3,713,
Sweden ...	1887	1,089,‡	2,742,§	...	...	384,
United States ...	1887-8	37,336,	26,998,	2,902,	2,053,	2,357,

* Estimated.

† Including spelt (*Triticum spelta*).

‡ Including also rye.

§ Including also barley and mixed corn.

Gross yield
of crops in
British and
Foreign
countries.

456. The official returns of the various countries contain statements of produce, and these are given in the following table. The produce of potatoes is not returned in tons, as in the Australasian colonies, but in bushels:—

GROSS PRODUCE OF CERTAIN CROPS IN SOME BRITISH AND FOREIGN COUNTRIES (000'S OMITTED).

Country.	Year.	Number of Bushels* of—				
		Wheat.	Oats.	Barley.	Rye.	Potatoes.
The United Kingdom	1889	75,884,	164,079,	74,704,	...	257,416,
Australasia ...	1888-9	26,206,	14,926,	2,872,	...	16,096,
Canada—						
Ontario ...	1888	20,284,	65,467,	23,367,	...	22,274,
Quebec, Nova Scotia, and New Brunswick	1881	3,070,	25,161,	2,064,	...	29,213,
Manitoba ...	1887-8	7,000,†	7,265,	1,925,	...	2,640,
Prince Edward Island, British Columbia, and the Territories	1885	1,147,	1,046,	257,	...	480,
Cape of Good Hope ...	1888	3,812,†	1,230,†	747,†	...	749,†
Austria ...	1887	50,737,	101,844,	56,563,	88,462,‡	327,483,
Belgium ...	1887	16,504,	23,601,	3,588,	17,622,	116,491,
Denmark ...	1888	3,663,	32,401,	22,608,	15,098,	11,038,
France ...	1887	309,254,‡	220,312,	46,497,	65,111,	460,701,
Germany ...	1888	92,966,	256,082,	99,647,	243,442,	862,354,
Holland ...	1887	6,677,	11,750,	5,077,	13,350,	74,393,
Hungary ...	1888	131,670,	54,772,	43,721,	40,894,	103,258,
Italy ...	1888	101,033,	13,722,	6,567,	3,536,	24,613,
Norway ...	1875	276,	8,896,	4,285,	1,016,	19,591,
Russia in Europe ...	1887	269,085,	599,420,	162,498,	721,247,	305,224,
Sweden ...	1888	3,672,	60,884,	13,107,	19,347,	41,292,
United States ...	1887-8	403,162,	680,295,	55,076,	20,061,	130,006,

Average
yield of
wheat in
United
Kingdom.

457. Until 1884 no official return was made of the produce of crops in the United Kingdom. Estimates more or less reliable have frequently been made by private persons, especially of the wheat yield. The London *Statist's* Annual Supplement of the 31st January, 1885, gives a statement originally taken from *The Times*, and evidently prepared with great care, of the assumed yield per acre of this crop in the eighteen years ended with 1883, and this has been supplemented by the official figures for the six years ended with 1889, published by the Agricultural Department of the Privy Council Office§:—

* The produce was originally given in Imperial bushels, except in the case of Germany, where it was stated in cwts, and the United States in Winchester bushels. Moreover, the potato crop of Belgium, France, and Italy was stated in cwts., and that of Australasia in tons. All these have been converted into Imperial bushels upon the assumption that 60 lbs. of wheat, 40 lbs. of oats, 50 lbs. of barley or rye, and 56 lbs. of potatoes are in each case equal to an Imperial bushel; also that a Winchester bushel is equivalent to '969,447 of an Imperial bushel.

† Estimated. ‡ Including also spelt (*Triticum spelta*).

§ *Agricultural Produce Statistics of Great Britain, 1889*: Eyre and Spottiswoode, London.

AVERAGE PRODUCE PER ACRE OF WHEAT IN THE UNITED
KINGDOM, 1866 TO 1889.

Bushels per Acre.			Bushels per Acre.		
1866	...	27	1878	...	30
1867	...	25	1879	...	18
1868	...	34	1880	...	26
1869	...	27	1881	...	27
1870	...	32	1882	...	28
1871	...	27	1883	...	26
1872	...	23	1884	...	30
1873	...	25	1885	...	31
1874	...	31	1886	...	27
1875	...	23	1887	...	32
1876	...	27	1888	...	28
1877	...	22	1889	...	30

458. The average produce in the 24 years was about 27 bushels per acre, which is much above the yield in any of the Australasian colonies except in New Zealand. The yield in 1889 (30 bushels to the acre) was, it will be observed, exceeded in five previous seasons.

Wheat yield
in United
Kingdom
and colonies

459. The acreable produce during several years in the countries named in a previous table has been calculated in the office of the Government Statist, Melbourne, and is given in the following table:—

Average
yield of
crops in
British and
Foreign
countries.

AVERAGE PRODUCE PER ACRE OF SOME BRITISH AND FOREIGN
COUNTRIES.

Country.	Bushels* per Acre of—				
	Wheat.	Oats.	Barley.	Rye.	Potatoes.
The United Kingdom	29·9	39·7	32·4	...	186·9
Australasia	11·0	28·7	22·2	...	155·7
Canada—					
Ontario	17·0	35·4	26·1	...	144·6
Quebec, Nova Scotia and New Brunswick	9·9	...	...	...	124·3
Manitoba	13·5	42·5	27·5	...	240·0
Prince Edward Island, British Columbia, and the Territories	17·1	29·9	21·4	...	120·0
Cape of Good Hope	20·3	10·7	25·8	...	83·2
Austria	17·6	22·0	20·2	17·7	118·7
Belgium	20·4	38·3	36·2	25·7	236·8
Denmark	26·5	32·7	28·9	22·9	100·3
France	18·0	24·0	20·1	16·2	125·4
Germany	19·5	27·1	23·4	17·0	119·6
Holland	31·8	41·2	45·7	26·5	204·7
Hungary	19·2	21·2	18·0	15·0	95·2
Italy	8·6	12·5	7·7	8·9	142·3
Norway	25·1	39·7	31·0	27·5	227·8
Russia in Europe	9·3	17·2	13·0	11·2	82·2
United States	10·8	25·2	19·0	9·8	55·2

* See footnote (*) to table following paragraph 456 *ante*.

Yield of wheat in Foreign countries and Australasia.

460. It will be observed that the yield of wheat per acre was 32 bushels in Holland, 30 bushels in the United Kingdom, 26 bushels in Denmark, 25 bushels in Norway, 20 bushels in Belgium and the Cape of Good Hope, 19 bushels in Germany and Hungary, 18 bushels in France and Austria, 17 bushels in British Columbia and Ontario, and 13½ bushels in Manitoba, all of which were above the average of Australasia; but the wheat yields of the United States (slightly), Quebec, Italy, and European Russia were below the average of that group of colonies.

Yield of oats, barley, and potatoes in Foreign countries and Australasia.

461. According to the figures, the yield per acre of oats is higher in Australasia than in the Cape of Good Hope, Austria, France, Germany, Hungary, Italy, European Russia, or the United States, but lower than in any other of the countries named. The yield of potatoes in Australasia is above that in any of the other countries named except the United Kingdom, Manitoba, Belgium, Holland, and Norway.

Wheat crop of the world.

462. The following table contains a statement of the wheat crop in various countries of the world in 1888 and 1889, and the estimated wheat crop in the European countries in 1890. The figures have been taken from a carefully prepared paper on “The World’s Wheat Crop and Wheat Values,” read by Mr. J. W. Rush before the National Association of British and Irish Millers at the convention held in Edinburgh, on the 30th July, 1890* :—

WHEAT CROP OF THE WORLD, 1888, 1889, AND 1890.
(000’s OMITTED).

Countries.				Bushels.		
				1888.	1889.	1890. (Estimated.)
EUROPE.						
Austria ...	...	...	...	49,584,	36,400,	44,000,
Hungary	...	...	...	137,664,	91,856,	136,000,
Belgium	...	...	...	16,000,	18,000,	20,000,
Bulgaria	...	...	...	36,000,	35,200,	32,000.
Denmark	...	...	...	3,840,	5,000,	6,000,
France	...	...	...	275,344,	314,000,	280,000,
Germany	...	...	...	92,024,	85,000,	96,000,
Greece ...	...	...	...	10,000,	11,000,	12,000,
Holland	...	...	...	4,800,	6,000,	6,000,
Italy ...	...	...	...	101,040,	100,640,	109,200.
Portugal	...	...	...	6,800,	8,000,	8,000,
Roumania	...	..	...	56,480,	43,496,	56,000,

* See *The Miller* (London Journal) of the 4th August, 1890, page 219.

WHEAT CROP OF THE WORLD, 1888, 1889, AND 1890.
(000'S OMITTED)—continued.

Countries.	Bushels.		
	1888.	1889.	1890. (Estimated.)
EUROPE—continued.			
Russia (including Poland) ...	312,000,	190,000,	240,000,
Servia ...	8,600,	6,000,	10,000,
Spain ...	65,760,	73,600,	80,000,
Sweden...	3,696,	3,704,	4,000,
Norway ...	400,	400,	
Switzerland ...	2,000,	2,400,	2,400,
Turkey (Europe) ...	40,000,	36,000,	32,000,
United Kingdom...	74,488,	75,880,	72,000,
Total for Europe ...	1,296,520,	1,142,576,	1,245,600,
Algeria ...	21,960,	15,760,	...
Argentine Republic ...	12,000,	24,000,	...
Australasia ...	26,200,	42,200,	...
Asia Minor ...	36,000,	36,000,	...
Canada ...	32,000,	30,000,	...
Cape Colony ...	4,000,	4,400,	...
Chile ...	12,000,	15,000,	...
Egypt ...	8,000,	7,000,	...
India ...	260,368,	237,144,	...
Persia ...	22,400,	22,000,	...
Syria ...	14,000,	12,000,	...
United States ...	415,864,	490,560,	...
Total out of Europe ...	864,792,	935,264,*	...
Grand Total ...	2,161,312,	2,077,840,	...

463. Supposing these figures to be correct, and the wheat to be worth four shillings per bushel, the total value of the world's wheat crop would be over four hundred and thirty-two millions sterling in 1888, and over four hundred and fifteen millions sterling in 1889.

Value of world's wheat crop.

464. 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, as well as 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 a Government Experimental Farm.† The following account of the present state of the farm has

Experimental farm, Dookie.

* This total is 800 greater than the sum of the above figures.
† For further particulars relating to the establishment and development of the farm, see *Victorian Year-Book*, 1888-9, Vol. II., paragraph 448.

been furnished for this work by Mr. D. Martin, Secretary for Agriculture:—

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.

The total receipts for the year 1889 were £2,958 6s. 4d., and the expenditure £2,272 8s. 3d. Of the amount expended £511 19s. 1d. was paid for additional plant, £52 for horses, £321 14s. 3d. for sheep, and £93 for building. So far as possible, the provisions necessary for the students at the Agricultural College and the staff thereof, were obtained from the farm.

Since the erection of the new dairy, and the use of the De Laval Cream Separator, there has been no trouble in obtaining a sufficient supply of good butter. The farm is now fairly equipped as regards implements and machinery.

During the year the rain-fall recorded was 32·31 inches.

40 acres of Lucerne are doing well.

40	„	Ensilage	...	yielded	270 tons.
40	„	Chevalier barley	...	„	18 bus. per acre.
80	„	Hay	...	„	120 tons.
50	„	Steinwedel wheat	...	„	16 bus. per acre.
40	„	Port McDonnell wheat	...	„	12 „ „

The balance of the cultivation paddocks was too wet for sowing, and the whole of the crops suffered from excessive wet.

Numerous experiments were conducted with varieties of wheat, barley and oats, grasses, clovers, sorghums, millets, mangolds, beets, turnips, etc.

Various manures were tested at their monetary value, as compared with stable, cow, pig, and sheep manure; also various methods of putting a crop of wheat in and sowing at different depths, and quantity of seed per acre.

There are 25 acres under vines, and the vintage of this year promises to be good, but the vines suffered for want of rain early in the year. Of the above there are 5 acres of various wine grapes, planted in 1880; 7 acres of various table grapes, planted in 1887; 5 acres of Gordo Blanco and Zante Currants, planted in 1888; and 8 acres of Red Hermitage, planted in 1889.

A variety of medicinal and other plants is also grown on the farm for educational purposes.

The valuation of the farm and its belongings at the end of 1889 was as follows:—

Farm and improvements	...	...	£20,900	0	0
Buildings	...	...	2,187	12	7
Horse stock	...	...	571	10	0
Cattle, Shorthorn	...	...	465	0	0
„ Hereford	...	...	304	0	0
„ Ayrshire	...	...	105	0	0
„ Common	...	...	300	0	0
Pigs	...	...	199	0	0
Sheep	...	...	1,086	0	0
Implements and machinery	...	...	1,720	16	7
Bees	...	...	46	0	0
Wine, etc.	...	...	411	0	0
Furniture, etc.	...	...	85	14	6
Dairy	...	...	125	0	0
			£28,506 13 8		

The average cost of maintenance of 40 students per head per annum is £25 2s. 6d.

465. An Act for the establishment of Agricultural Colleges* was passed towards the close of 1884. The following particulars respecting this Act and its operations have been supplied by Mr. D. Martin, the Secretary for Agriculture :—

Agricultural colleges.

This Act provides for the permanent reservation from sale of 150,000 acres of Crown lands by way of endowment of State Agricultural Colleges and Experimental Farms, which, together with other lands reserved as sites for such institutions prior to the passing of the Act, are to be vested in three trustees to be appointed by the Governor in Council. The Act also provides for the appointment of a Council of Agricultural Education, consisting of eleven members, three of whom are to be the trustees just mentioned, one to be the Secretary for Agriculture (who is to be the treasurer of the council), five to be elected annually by the governing bodies of Agricultural Societies in Victoria, and two to be appointed by the Governor in Council. The trustees, subject to regulations made by the Council of Agricultural Education, may lease lands for building purposes for periods not exceeding 33 years, and for other purposes for periods not exceeding 14 years, and upon a requisition of the same council may dedicate, as sites for Agricultural Colleges and Experimental Farms, any lands purchased by them or described in the Act. All moneys received by the council from the sale of stock or farm produce, or as fees from students at Agricultural Colleges and Experimental Farms, together with all other money coming to the council, are to form a fund to be called the Agricultural College Fund, which is to be expended in providing instruction for students, or in purchasing stock, seed, agricultural implements, and all other necessities for the education of the students and the proper working of the Experimental Farms, etc. The council, subject to Ministerial approval, have the appointment of professors, teachers, officers, and servants for the Colleges and Experimental Farms. Most of the proceedings of the trustees and of the council have to be approved by the Governor in Council before coming into effect. The Act was amended in 1885,† so as to provide for five members being elected by members of Agricultural Societies in lieu of by the governing bodies of such societies; also for the elections to be held once in every three years, instead of being held annually.

Of the land intended as endowment, 132,236 acres have been reserved and vested in the trustees, and 125,226 acres of the land so vested have been leased for agricultural and grazing purposes. The total of the annual rents payable amount to £5,686 15s. 9d. The areas reserved under section 4 of Act No. 825, as sites for Colleges and Experimental Farms, amounted to 13,393 acres.

The first school was erected on the Dookie Experimental Farm Reserve. The buildings comprise lecture hall, dining hall, class rooms, teachers' quarters, sleeping accommodation for forty pupils, baths, out offices, etc. The school was opened on the 1st October, 1886. The full number of pupils for which there is accommodation is forty.

The course of instruction comprises chemistry, botany, entomology, geology, advanced English, arithmetic, mensuration, surveying, book-keeping, practical work on the farm, instruction in field operations, the use of farm implements and machinery, and the management of live stock.

No fee is charged for instruction, but a payment of £25 per annum has to be made for each pupil to cover the cost of maintenance.

A second school has been erected on the Longerenong Experimental Farm Reserve near Horsham, and was opened on the 1st March, 1889. It contains accommodation for thirty-five students. The course of instruction is the same as at Dookie.

* The *Agricultural Colleges Act* 1884 (48 Vict. No. 825).

† By the *Agricultural Colleges Act* 1885 (49 Vict. No. 871).

Breadstuffs
available
for con-
sumption.

466. The following table shows, for 1840 and each subsequent year, the quantity of wheat grown in Victoria, and the quantity of wheat, flour and biscuit imported after deducting exports, or exported after deducting imports ; also the residue of breadstuffs left for consumption during each of those years :—

BREADSTUFFS AVAILABLE FOR CONSUMPTION, 1840 to 1889.

Year.			Wheat, Flour, and Biscuit.*		
			Wheat grown in Victoria.	Imported after deducting Exports.	Exported after deducting Imports.
			Bushels.	Bushels.	Bushels.
1840	...	...	12,600	57,771	...
1841	...	...	50,420	116,350	...
1842	...	...	47,840	119,004	...
1843	...	...	55,360	58,616	...
1844	...	...	104,040	98,581	...
1845	...	...	138,436	74,699	...
1846	...	...	234,734	43,928	...
1847	...	...	345,946	36,871	...
1848	...	...	349,730	64,726	...
1849	...	...	410,220	76,092	...
1850	...	...	525,190	55,564	...
1851	...	...	556,167	216,811	...
1852	...	...	733,321	1,208,006	...
1853	...	...	498,704	1,499,994	...
1854	...	...	154,202	1,385,465	...
1855	...	...	250,091	1,985,496	...
1856	...	...	1,148,011	2,236,406	...
1857	...	...	1,858,756	1,958,905	...
1858	...	...	1,808,439	1,504,760	...
1859	...	...	1,563,113	1,957,610	...
1860	...	...	2,296,157	1,565,423	...
1861	...	...	3,459,914	1,522,517	...
1862	...	...	3,607,727	183,106	...
1863	...	...	3,008,487	191,107	...
1864	...	...	1,338,762	1,868,990	...
1865	...	...	1,899,378	1,800,932	...
1866	...	...	3,514,227	1,754,699	...
1867	...	...	4,641,205	15,190	...
1868	...	...	3,411,663	162,038	...
1869	...	...	4,229,228	719,589	...
1870	...	...	5,697,056	...	95,654
1871	...	...	2,870,409	1,179,583	...
1872	...	...	4,500,795	389,963	...
1873	...	...	5,391,104	...	138,088
1874	...	...	4,752,289	...	40,714
1875	...	...	4,850,165	200,369	...
1876	...	...	4,978,914	258,931	...
1877	...	...	5,279,730	...	384,118
1878	...	...	7,018,257	...	1,005,968

NOTE.—In 1889 the imports of breadstuffs amounted to 246,060 bushels, valued at £56,369, but the exports of breadstuffs amounted to 1,603,394 bushels, valued at £404,002. The balance in favour of exports was, therefore, 1,357,334 bushels, valued at £347,633.

* The quantities of flour and biscuit imported and exported are reduced to their equivalent in bushels, on the assumption that 1 bushel of wheat produces 45 lbs. of either of those articles.

BREADSTUFFS AVAILABLE FOR CONSUMPTION, 1840 TO 1889—*contd.*

Year.	Wheat grown in Victoria.	Wheat, Flour, and Biscuit.*		
		Imported after deducting Exports.	Exported after deducting Imports.	Available for Consumption.
	Bushels.	Bushels.	Bushels.	Bushels.
1879	6,060,737	...	957,384	5,103,353
1880	9,398,858	...	3,578,733	5,820,125
1881	9,727,369	...	3,892,974	5,834,395
1882	8,714,377	...	3,321,532	5,392,845
1883	8,751,454	...	2,376,530	6,374,924
1884	15,570,245	...	8,232,605	7,337,640
1885	10,433,146	...	3,745,985	6,687,161
1886	9,170,538	...	2,226,907	6,943,631
1887	12,100,036	...	3,897,987	8,202,049
1888	13,328,765	...	4,373,959	8,954,806
1889	8,647,709	...	1,357,334	7,290,375

467. It will be observed that in the last thirteen years and three previous ones, viz., 1870, 1873, and 1874, the colony has raised enough breadstuffs for the consumption of its own inhabitants. In each of these sixteen years there was a surplus of Victorian-grown wheat remaining for export, the quantity in 1884, however, being more than twice as large as that in any of the other years, except 1888, whilst, owing to the drought, the quantity in 1889 was much less than in any other year since 1879. The following table shows, for each year, the mean population of Victoria, the quantity of breadstuffs available for consumption, and the probable manner of consumption, distinguishing the estimated quantity of wheat used for seed, or for the feeding of live stock, poultry, etc., from the wheat, flour, and biscuit used for food, the total quantity of the latter being shown as well as the quantity per head :—

POPULATION AND BREADSTUFFS, 1840 TO 1889.

Year.	Mean Population.	Wheat, Flour, and Biscuit.*			
		Quantity Available for Con- sumption.	Probable Manner of Consumption.		
			For Seed, etc.	For Food.	
				Total.	Per Head.
		Bushels.	Bushels.	Bushels.	Bushels.
1840	8,056	70,371	3,880	66,491	8·25
1841	15,353	166,770	3,404	163,366	10·64
1842	22,107	166,844	4,864	161,980	7·33
1843	23,951	113,976	9,348	104,628	4·37
1844	25,418	202,621	13,839	188,782	7·43

* The quantities of flour and biscuit imported and exported are reduced to their equivalent in bushels, on the assumption that 1 bushel of wheat produces 45 lbs. of either of those articles

POPULATION AND BREADSTUFFS, 1840 TO 1889—*continued*.

			Wheat, Flour, and Biscuit.*			
Year.	Mean Population.		Quantity Available for Consumption.	Probable Manner of Consumption.		
				For Seed. etc.	For Food.	
					Total.	Per Head.
			Bushels.	Bushels.	Bushels.	Bushels.
1845	...	29,007	213,135	22,933	190,202	6·56
1846	...	34,807	278,662	31,604	247,058	7·10
1847	...	40,635	382,817	35,359	347,458	8·55
1848	...	47,163	414,456	38,775	375,681	7·97
1849	...	58,805	486,312	48,494	437,818	7·45
1850	...	71,191	580,754	57,020	523,734	7·36
1851	...	86,825	772,978	59,247	713,731	8·22
1852	...	132,905	1,941,327	33,646	1,907,681	14·35
1853	...	195,378	1,998,698	15,107	1,983,591	10·15
1854	...	267,371	1,539,667	25,654	1,514,013	5·66
1855	...	338,315	2,235,587	85,372	2,150,215	6·36
1856	...	380,942	3,384,417	160,310	3,224,107	8·46
1857	...	430,347	3,817,661	174,460	3,643,201	8·47
1858	...	483,827	3,313,199	156,468	3,156,731	6·52
1859	...	517,390	3,520,723	214,185	3,306,538	6·39
1860	...	534,055	3,861,580	322,503	3,539,077	6·62
1861	...	539,824	4,982,431	393,844	4,588,587	8·50
1862	...	548,080	3,790,833	324,018	3,466,815	6·33
1863	...	562,960	3,199,594	298,784	2,900,810	5·15
1864	...	586,450	3,207,752	250,080	2,957,672	5·04
1865	...	611,218	3,700,310	357,256	3,343,054	5·47
1866	...	629,038	5,268,926	417,176	4,851,750	7·71
1867	...	644,276	4,656,395	433,978	4,222,417	6·55
1868	...	663,092	3,573,701	519,608	3,054,093	4·61
1869	...	687,202	4,948,817	577,028	4,371,789	6·36
1870	...	713,195	5,601,402	568,334	5,033,068	7·06
1871	...	737,005	4,049,992	669,218	3,380,774	4·59
1872	...	753,198	4,890,758	653,128	4,237,630	5·63
1873	...	765,511	5,253,016	699,952	4,553,064	5·95
1874	...	777,656	4,711,575	665,872	4,045,703	5·20
1875	...	787,337	5,050,534	642,802	4,407,732	5·60
1876	...	796,558	5,237,845	802,834	4,435,011	5·57
1877	...	808,605	4,895,612	1,129,128	3,766,484	4·66
1878	...	821,466	6,012,289	1,383,244	4,629,045	5·64
1879	...	834,030	5,103,353	1,414,376	3,688,977	4·42
1880	...	850,343	5,820,125	1,954,570	3,865,555	4·55
1881	...	868,942	5,834,395	1,853,458	3,980,937	4·58
1882	...	890,220	5,392,845	1,938,724	3,454,121	3·88
1883	...	910,982	6,374,924	2,208,784	4,166,140	4·57
1884	...	933,894	7,337,640	2,192,708	5,144,932	5·51
1885	...	958,595	6,687,161	2,040,164	4,646,997	4·85
1886	...	987,094	6,943,631	2,105,370	4,838,261	4·90
1887	...	1,019,700	8,202,049	2,465,886	5,736,163	5·62
1888	...	1,062,050	8,954,806	2,434,382	6,520,424	6·14
1889	...	1,104,300	7,290,375	2,357,470	4,932,905	4·47

* The quantities of flour and biscuit imported and exported are reduced to their equivalent in bushels, on the assumption that 1 bushel of wheat produces 45 lbs. of either of those articles.

468. The figures in the last column but two (For Seed, etc.) are intended to represent the whole quantity of wheat used otherwise than for the food of human beings. This is estimated arbitrarily at 2 bushels per acre of land returned as being under wheat in the year following that to which the figures in any line relate. It is known that the proportion actually sown is generally much less than this; but as a certain quantity of wheat is used for feeding swine, poultry, etc., and some is wasted or becomes spoilt, the allowance made has been thought not too high. If $1\frac{1}{2}$ bushel per acre be considered a sufficient allowance for seed, the quantity in 1889 left for consumption, waste, etc., would be 5,522,280 bushels, equal to 5 bushels per head; or, if only 1 bushel per acre be allowed for seed, the residue would amount to 6,111,640 bushels, or $5\frac{1}{2}$ bushels per head.

Allowance
for seed,
waste, etc.

469. The estimated average quantity of breadstuffs available for food to each individual of the population is shown in the last column of the table. This will be found to vary in different years, ranging from over 14 bushels in 1852, and between 10 and 11 bushels in 1841 and 1853, to between 4 and 5 bushels in 1843, 1868, 1871, 1877, and in seven of the eleven years since 1878; but in only one year, viz., 1882, to less than 4 bushels per head. The proportion per head reached $5\frac{1}{2}$ bushels in 1884, which was the year of an exceedingly bountiful harvest, and to as high as $5\frac{2}{3}$ bushels and $6\frac{1}{7}$ bushels in 1887 and 1888 respectively, the low price of wheat in England having, probably, acted as a check upon exportations in those two years; but in 1889 it fell, owing to the drought, to less than $4\frac{1}{2}$ bushels.

Consump-
tion of
breadstuffs
per head.

470. The quantity of breadstuffs available for annual food-consumption per head has averaged $5\frac{2}{3}$ bushels over the whole period of fifty years, but during the last ten years it averaged not quite 5 bushels, or two-thirds of a bushel less. In the present state of the Victorian population, it may be fair to assume that from $4\frac{1}{2}$ bushels to 5 bushels per head, irrespective of the quantity required for seed, is amply sufficient to supply the wants of any given year.

Average con-
sumption of
breadstuffs.

471. In the United Kingdom, animal food, in consequence of its high price, is used much more sparingly than it is in this country, especially by the working classes, and therefore, as a natural consequence, the consumption of breadstuffs in proportion to the numbers of the population is, on the average, somewhat higher than it is here. The following table shows the estimated mean population of the United Kingdom during each of the twenty-two harvest years (or periods extending from 1st September to the 31st August) ended

Breadstuffs
available
for con-
sumption
in United
Kingdom

with 1887-8; also the total number of bushels, and number of bushels per head, of grown and imported wheat available for consumption, after deducting seed, in each of the same years:—

BREADSTUFFS AVAILABLE FOR CONSUMPTION IN THE UNITED
KINGDOM, 1867 to 1888.

Year ended 31st August.	Mean Population.	Bushels of Wheat* available for Food.	
		Total number (000's omitted).	Number per Head.
1867	30,248,936	152,320,	5·03
1868	30,523,478	155,200,	5·08
1869	30,814,914	189,360,	6·14
1870	31,108,133	176,560,	5·68
1871	31,410,776	176,400,	5·61
1872	31,728,316	170,320,	5·37
1873	32,028,317	174,640,	5·45
1874	32,325,778	174,240,	5·39
1875	32,641,568	202,720,	6·21
1876	32,978,682	184,512,	5·59
1877	33,329,099	174,568,	5·24
1878	33,681,904	191,480,	5·68
1879	34,036,546	209,936,	6·17
1880	34,364,077	179,120,	5·21
1881	34,775,970	201,992,	5·81
1882	35,410,040	210,592,	5·95
1883	35,517,510	241,568,	6·80
1884	35,838,516	191,520,	5·37
1885	36,179,000	208,000,	5·75
1886	36,519,700	206,887,	5·67
1887	36,900,486	204,000,	5·53
1888	37,453,574	206,000,	5·50

Average consumption of wheat in United Kingdom.

472. As a result of calculations derived from the figures in the table, it appears that in the twenty-two years named the average quantity of wheat available for consumption in the United Kingdom was 5·65 bushels per head, or about a bushel per head more than is apparently found sufficient for the requirements of the Victorian population.

Consumption of wheat in New South Wales.

473. According to the Government Statistician of New South Wales,† the consumption of wheat per head is considerably greater in that colony than in Victoria, and even greater than in the United Kingdom, the quantity consumed per head being in 1887 as much as 7·6, in 1888, 7·4 bushels, but in 1889 only 5·3, the average quantity

* The total number of bushels of wheat available for consumption has been taken from articles in the Supplement to the *Statist*, London Journal. The calculations have been made in the office of the Government Statist, Melbourne.

† See *Statistical Register of New South Wales* for 1889, Part IV. Production: Potter, Sydney, 1890.

in the five years ended with 1889 being 6·7 bushels. According to the same authority, New South Wales has never grown nearly enough wheat for her own consumption, the quantity imported in 1889, after deducting the exports, being about 5,080,400 bushels, whilst only 1,450,503 bushels were grown in the colony. It should be noted, however, that the latter quantity was unusually low, in the previous year the quantity received exceeded $4\frac{1}{2}$ million bushels.

474. From somewhat similar calculations taken from the official returns of the United States, the estimated consumption of wheat per head of the population of that country averaged, during the five years ended with 1887-8, 5·48 Winchester bushels,* or about 531 Imperial bushels. As no deduction has been made for the wheat required for seed in the United States returns, the quantity available for food consumption is considerably less than that shown by the figures, and is probably about the same as in Victoria.

Consumption of breadstuffs per head in United States.

475. The quantity and declared value of the Victorian imports and exports of breadstuffs during the fifty-three years, 1837 to 1889, are set down in the following table:—

Imports and exports of breadstuffs, 1837 to 1889.

IMPORT AND EXPORTS OF BREADSTUFFS,† 1837 TO 1889.

Wheat, Flour, and Biscuit.	Quantity.	Value.
	Bushels.	£
Imported, 1837 to 1889	33,659,692	14,043,264
Exported, „ „ „ „ „ „	46,473,626	11,355,830
Imports in excess of exports ... ..	...	2,687,434
Exports in excess of imports	12,813,934	...

476. It will be observed that the quantity of breadstuffs exported from the colony from the period of its first settlement to the end of 1889 exceeded that imported during the same period by over $12\frac{3}{4}$ million bushels; but, in consequence of the prices of wheat and flour during the earlier years, in which the imports invariably exceeded the exports, being much higher than in the later years, in which the exports exceeded the imports, the declared value of the breadstuffs received has exceeded that of those sent away by over $2\frac{2}{3}$ millions sterling.

Excess of quantity exported, of value imported.

477. The following are the values of the net imports—i.e., the values of imports after the values of the exports have been deducted—

Net imports of agricultural products.

* The Winchester bushel is smaller than the Imperial bushel by one thirty-second ($\frac{1}{32}$) part.

† The quantity and value of breadstuffs imported and exported during each year will be found in the Statistical Summary of Victoria (first folding sheet) *ante*.

of certain vegetable productions during each of the six years ended with 1889. All the articles named are capable of being produced, and all, or nearly all, are to a certain extent now produced in the colony:—

NET IMPORTS* OF CERTAIN ARTICLES OF AGRICULTURAL PRODUCE, 1884 TO 1889.

Articles.	Balance of Imports over Exports in—					
	1884.	1885.	1886.	1887.	1888.	1889.
	£	£	£	£	£	£
Oats	36,249	86,474	69,669	126,990	147,989	296,207
Barley and pearl barley ...	...	15,359	4,183	44,564	29,148	95,357
Malt ... ..	...	...	9,903	2,056	7,565	...
Maize	7,232	13,853	18,956	1,500	10,118	38,961
Maizena and corn flour	8,599	5,289	13,642	7,498	8,801	7,908
Beans, pease, and split pease	...	...	1,667	1,843	415	2,987
Arrowroot	2,183	2,790	558	1,105	1,872	1,455
Macaroni and vermicelli	1,298	2,441	2,066	686	2,271	2,295
Starch	9,176	8,544	14,517	3,569	6,070	9,372
Fruit—fresh, bottled, dried, currants, and raisins	113,587	152,967	146,678	226,888	212,868	234,800
Jams, jellies, and preserves	...	...	...	3,068	...	3,964
Nuts, almonds, walnuts	4,582	9,429	7,033	6,076	8,973	10,071
Peanuts ... ..	...	474	689	2,129	1,615	1,439
Ginger	2,347	3,845	3,322	2,286	3,064	1,552
Opium	37,850	28,728	32,713	29,955	33,493	38,886
Hops ... ..	...	6,185	13,500	28,579	18,557	38,856
Chicory ... ..	...	2,269	...	...	...	...
Pickles	4,688	5,570	9,386	7,620	7,005	7,853
Mustard	8,304	9,789	17,920	13,872	16,160	19,261
Oil, olive, and salad ...	11,427	18,496	15,204	8,953	18,642	13,557
„ linseed	31,121	31,484	31,404	31,144	38,040	47,581
„ castor	24,238	10,797	31,700	34,485	24,445	35,766
Linseed meal	888	446	...	459	602	...
Tobacco, cigars, and snuff	101,836	116,212	179,955	128,618	233,221	258,191
Flax (Phormium) ...	6,756	8,312	5,215	3,595	8,752	7,314
Hemp	36,208	29,927	17,994	33,098	43,636	49,793
Jute	9,716	3,449	1,126	...	2,636	1,165
Broom corn and millet	6,240	6,959	7,447	4,632	4,932	7,469
Bark	6,492	20,905	2,287	2,955	...	...
Cork	19,193	13,867	19,811	1,403	935	758
Vegetables (preserved)	...	427	897	...	1,063	269
Canary seed	1,449	2,008	1,314	1,571	2,181	1,817
Grass and clover seed	7,063	14,667	11,333	13,390	10,901	16,538
Seeds, undescribed ...	...	...	11,310	15,402	8,831	10,928
Tares	114	109	31	81	267	185
Total	498,836	632,071	703,430	790,070	915,068	1,262,555

* The total imports and total exports of these articles during 1889 will be found in the first table in Part VI. "Interchange," *ante*, under Orders 14, 22, 23, 25, and 26.

478. It will be observed that malt and linseed meal are absent from the list for the last year ; also that bark is absent from the list in the last two years, and chicory in the last four years, the latter having appeared only once, viz., in the column for 1885.

Decreased imports of agricultural products.

479. In addition to the articles named in the above table, eggs, of which it might reasonably be supposed that Victoria would produce sufficient for her own consumption, were imported in 1889 to the number of 10,714,484, and to the value of £40,076 ; and exported to the number of only 45,256, and the value of only £169, the difference in favour of the former being 10,669,228 in number, and £39,907 in value. The value of the imports of eggs in 1888 exceeded that of the exports by £34,745, in 1887 by £30,498, in 1886 by £15,020, in 1885 by £10,200, and in 1884 by £3,958.

Net import of eggs.

480. Of every thousand acres cultivated during the past season, 449 acres were placed under wheat, 90 under oats, 35 under barley, 18 under potatoes, 172 under hay, and 237 under other tillage. The following table shows the proportion that the land under different crops has borne to the total area under tillage during each of the last ten years :—

Proportion of land under each crop.

PROPORTION OF LAND UNDER EACH CROP TO TOTAL UNDER CULTIVATION, 1881 TO 1890.

Year ended March.	Proportion to the Total Land under Tillage of that under—					
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Tillage.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1881	48·97	6·72	3·43	2·25	12·51	26·12
1882	50·87	8·07	2·67	2·15	11·65	24·59
1883	47·50	8·32	2·14	1·68	15·16	25·20
1884	49·84	8·49	2·11	1·81	13·67	24·08
1885	47·19	8·08	2·68	1·66	14·62	25·77
1886	42·41	8·98	3·08	1·77	17·51	26·25
1887	43·49	7·67	1·53	2·07	18·39	26·85
1888	47·86	7·72	1·59	1·87	17·15	23·81
1889	47·46	7·70	3·26	1·68	16·04	23·86
1890	44·87	9·00	3·45	1·79	17·19	23·70

481. In addition to the principal crops of which mention has been made, various descriptions of minor crops are also raised. It is not, however, presumed that the whole of such crops, or the full measure to which they are grown, is recorded by the collectors. It is certain that they are often raised in gardens, in which case the different kinds would not be distinguished in the returns. It is also probable that they may be sometimes grown upon allotments of one acre in extent or even less, which are not taken account of. The following list must, therefore, be looked upon as indicating the nature of certain

Minor crops

minor crops grown in Victoria rather than the extent to which those crops have been cultivated during the last six years :—

MINOR CROPS,* 1885 to 1890.

Nature of Crop.			1884-5.	1885-6.	1886-7.	1887-8.	1888-9.	1889-90.
Amber cane	{	acres ...	...	...	...	12	34	3
		cane, tons ...	...	...	...	90	104	...
		seed, lbs. ...	...	...	...	280	120	750
Arrowroot	{	acres ...	6	3	...	...	...	...
		tons (root) ...	127	41	...	...	...	...
Artichokes	{	acres ...	2	...	...	3	...	...
		tons ...	20	...	...	55	...	...
Beet, carrots, parsnips	{	acres ...	455	386	467	485	269	396
		tons ...	3,872	4,300	4,411	4,672	2,250	4,111
Broom-millet	{	acres ...	5	3	...	5	12	7
		fibre, cwt. ...	29	5	...	72	72	41
		seed, bush. ...	48	20	...	28	384	64
Buckwheat	{	acres ...	2	3	...	...	...	2
		bushels ...	58	30	...	...	...	40
Canary seed	{	acres ...	63	...	9	...	...	...
		bushels ...	724	...	124	...	...	...
Cauliflowers and cabbages	{	acres ...	7	27	114	164	133	27
		dozens ...	4,300	18,500	27,360	68,345	62,830	11,800
Chicory	{	acres ...	219	216	204	249	148	229
		tons ...	1,309	1,239	1,472	1,375	811	1,376
Durrah	{	acres ...	...	...	2	...	...	...
Flax	{	acres ...	11	7	...	1	3	138
		fibre, cwt. ...	7	9	...	5	...	3,550
		linseed, bush. ...	73	18	...	7	5	507
French beans	{	acres ...	...	...	...	2	2	7
		tons ...	...	...	...	3	4	4
Garden seeds	{	acres ...	45	7	43	83	46	...
		cwt. ...	74	14	215	196	66	...
Gooseberries	{	acres ...	...	3	2	4	4	14
		cwt. ...	...	28	23	140	135	130
Grass and clover seeds	{	acres ...	2,329	2,942	4,667	4,638	1,541	3,390
		bushels ...	35,559	39,793	61,490	61,177	17,444	54,547
Green pease	{	acres ...	108	92	80	152	85	11
		tons ...	36	141	98	234	117	7
Hops	{	acres ...	1,737	896	730	685	761	829
		lbs. ...	1,573,936	616,112	562,576	605,360	618,128	639,632
Kail (thousand headed)	{	acres ...	...	...	...	...	...	9
		tons ...	...	...	...	...	...	225
Maize	{	acres ...	3,854	4,530	4,901	6,031	5,789	8,447
		bushels ...	176,388	181,240	231,447	318,551	267,155	357,047
Mangel-wurzel	{	acres ...	1,413	1,346	1,257	1,191	897	984
		tons ...	21,935	24,129	19,142	20,590	13,974	15,604
Medicinal herbs	{	acres ...	...	...	3	...	...	3
Melons, vegetable marrows, cucumbers, etc.†	{	acres ...	...	...	...	...	10	6
		dozens ...	...	...	...	...	3,040	560
		etc.†	...	...	...	...	...	...
Mulberry trees	{	acres ...	...	4	1	1	1	1
		number ...	...	...	...	1,000	1,000	1,000

* Exclusive of those grown in gardens.

† Previous to the year 1889, pumpkins, melons, vegetable marrows, and cucumbers were shown in one line.

MINOR CROPS,* 1885 to 1890—continued.

Nature of Crop.			1884-5.	1885-6.	1886-7.	1887-8.	1888-9.	1889-90.
Mustard	{ acres	...	61	7	20	16	34	28
	{ cwt.	...	287	15	100	80	112	105
Olives	...	acres	13	14	1	18	17	17
Onions	{ acres	...	1,750	1,740	1,996	2,437	1,768	1,957
	{ tons	...	11,816	10,209	11,625	11,774	4,430	10,815
Opium poppies	{ acres	...	10	16	11	11	8	10
	{ lbs. of opium	...	190	200	139	178	86	169
Oranges and lemons†	{ acres	...	2	6	2	34	7	33
	{ cases	...	...	...	...	...	...	270
Osiers	{ acres	...	3	5	8	...	6	5
	{ tons	...	3	...	5	...	11	13
Pease and beans	{ acres	...	35,288	35,460	28,672	26,692	31,222	22,784
	{ bushels	...	846,859	761,351	583,269	732,060	361,724	528,074
Pumpkins‡	{ acres	...	119	153	69	107	158	252
	{ tons	...	837	1,447	536	850	959	1,251
Pyrethrum cineraria folium	{ acres	...	...	...	...	...	...	6
	{ cwt.	...	...	...	...	...	...	12
Rape for seed	{ acres	...	47	...	44	70	42	1
	{ bushels	...	...	...	...	940	597	14
Raspberries	{ acres	...	261	271	239	218	224	179
	{ cwt.	...	6,307	6,470	4,499	5,384	5,249	3,337
Red currants	{ acres	...	...	...	...	...	...	9
	{ cwt.	...	...	...	...	...	...	30
Rhubarb	{ acres	...	8	11	20	10	22	3
	{ tons	...	18	31	169	85	132	20
Rumax	...	acres	...	...	...	...	...	8
Rye	{ acres	...	939	654	762	1,069	1,109	1,089
	{ bushels	...	15,505	8,278	11,286	14,900	10,744	16,707
Seeds (agricultural & garden)	{ acres	...	...	...	...	...	...	71
	{ cwt.	...	...	...	...	...	...	252
Strawberries	{ acres	...	76	55	35	68	66	40
	{ cwt.	...	1,468	941	243	616	613	267
Sunflowers for seed	{ acres	...	2	...	6	8	...	...
	{ bushels	...	...	...	140	128	...	...
Teazles	{ acres	...	2	...	...	...	...	...
	{ number	...	4,000	...	...	...	...	...
Tobacco	{ acres	...	1,402	1,866	2,031	1,966	1,685	955
	{ cwt.	...	7,893	13,734	12,008	11,853	13,355	4,123
Tomatoes	{ acres	...	21	34	26	45	42	28
	{ cwt.	...	1,278	4,800	2,280	6,914	3,240	960
Turnips	{ acres	...	209	253	443	303	379	424
	{ tons	...	1,600	2,179	2,767	4,102	4,560	4,984
Vetches and tares for seed	{ acres	...	26	1	...	1	3	11
	{ bushels	...	700	40	...	20	45	116
Vines	{ acres	...	9,042	9,775	10,310	11,195	12,886	15,662
	{ wine, galls.	...	760,752	1,003,827	986,041	1,167,874	1,209,442	1,578,590
	{ brandy, „	...	3,623	3,875	3,233	3,352	2,994	5,285
Walnuts	...	acres	...	...	...	4	2	7

* Exclusive of those grown in gardens.

† It is estimated there are over 100 acres planted with oranges and lemons, but such plantations are seldom distinguished separately, being included under orchards.

‡ Previous to the year 1889, pumpkins, melons, vegetable marrows, and cucumbers were shown in one line.

Minor crops
not fully
returned.

482. In 1888-9 a falling-off took place in the cultivation of most of the minor crops in consequence of the drought which occurred in that year. A recovery took place in the year under review, but this is not fully shown by the figures, the reason being that a column for market gardens was for the first time inserted in the column used in the collection of the agricultural statistics of 1889-90, and this has in some instances led the collectors to believe it was only necessary to return the garden as a whole, not to distinguish the particular crops grown therein.

Hops.

483. Hops but little inferior to Kentish are grown in Victoria, and the comparative failure for several successive seasons of this crop in the United Kingdom gave a considerable stimulus to that industry, commencing about 1882-3. The maximum was reached in the following year, when 1,760,000 lbs. were produced, but in 1884-5 there was a slight, and in 1885-6 a further considerable decline, both in the area under hops and the quality produced; a gradual improvement, however, has taken place since 1887-8, both in the area under, and produce of the crop referred to.

Raspberries.

484. Raspberries as a field crop are extensively grown in the more elevated parts of the colony, especially about the ranges in which the River Yarra and its tributaries have their source. The quantity returned as raised in 1889-90 was 3,337 cwt., or about 1,912 cwt. less than in 1888-9, and also considerably less than in any of the previous five years. Since the establishment of jam factories, the fruit is in great demand, and much more would be purchased were it forthcoming.

Tobacco.

485. At a very early period of the colony's history it was the custom of the pastoral occupiers of the soil to cultivate tobacco in small quantities for the purpose of making a decoction wherein to dip their sheep for the cure of the disease called "scab." That complaint has ceased to exist amongst the Victorian flocks; but of late years tobacco has been grown for the purpose of manufacture into an article suitable for the use of man; 955 acres were placed under it in 1889-90, and the yield amounted to 4,123 cwt. The land placed under tobacco was less than in the previous year by 730 acres, and the quantity raised less than in that year by 9,232 cwt. A considerable falling-off has taken place in the area under this crop since 1886-7.

Tobacco
crop in
various
countries.

486. In 1888, the tobacco crop of the United States is estimated to have amounted to 5 million cwt., which, with the exception of the crop of 1885, which slightly exceeded it, is the largest tobacco crop

ever raised in that country. The average crop during the five years ended with 1887 was 4,418,862 cwt., which figures, together with the figures for several European countries and for Australasia during the latest year for which information is obtainable, were as follow :—

TOBACCO CROP IN VARIOUS COUNTRIES.

	cwt.		cwt.
United States ...	4,418,862	Italy ...	120,748
Austria-Hungary ...	1,277,218	Holland (1884) ...	58,583
Russia (1881) ...	930,797	Australasia (1889-90) ...	*34,480
Germany ...	758,373	Turkey ...	17,553
France... ...	421,731		

487. The annual consumption of tobacco in Victoria ranges from 2·61 lbs. to 3·55 lbs. per head of the population, the average during a series of years being nearly 3 (2·93) lbs.† This is a larger average than that obtaining in twelve of the following countries, the information respecting which, except that relating to the Australasian colonies, has been derived from a paper read by Dr. O. J. Broch before the Statistical Society of Paris, on the 15th June, 1887.‡ Attention is called to the very high average consumption of tobacco in Holland and the United States of America :—

Consumption of tobacco in Victoria and other countries.

AVERAGE ANNUAL CONSUMPTION OF TOBACCO PER HEAD IN VARIOUS COUNTRIES.

	lbs.		lbs.
Holland ...	6·92	Norway ...	2·29
United States ...	4·40	Canada ...	2·11
Austria-Hungary ...	3·77	France ...	2·05
Denmark ...	3·70	Sweden ...	1·87
New South Wales ...	3·53	Tasmania ...	1·85
Queensland ...	3·49	New Zealand ...	1·75
Western Australia ...	3·26	Spain ...	1·70
Switzerland ...	3·24	United Kingdom ...	1·41
Belgium ...	3·15	Italy ...	1·34
Germany ...	3·00	South Australia ...	1·32
Victoria ...	2·93	Russia ...	1·23
Finland ...	2·73		

488. Beet for the manufacture of sugar has been as yet only grown in Victoria experimentally, and upon a small scale; but ordinary beet, mangolds, and root crops generally, which have for years past been cultivated to a considerable extent, succeed so well that there is every reason to believe sugar beet could be grown to advantage, did not the low price of sugar, consequent upon the heavy subsidies by which the industry is fostered in several European

Beet sugar.

* In the previous year the yield was 70,486 cwt.
† In 1887, the proportion was 2·61 lbs., in 1888, 3·31 lbs., and in 1889, 3·55 lbs. per head.
‡ See *Journal de la Société de Statistique de Paris*, vingt-huitième année, page 237; Berger-Levrault, Paris, 1887. The consumption is there given in kilogrammes, which have been turned into lbs., on the assumption that 1 of the former is equal to 2·204 of the latter.

countries, prevent sugar-making from being carried on at a profit. The following statement, however, of the average quantity of beet sugar made annually during the five years 1880 to 1884 in the different countries in which that product is manufactured may be useful and interesting at the present time :—

BEET-ROOT SUGAR PRODUCED ANNUALLY IN VARIOUS COUNTRIES.

Tons of Beet Sugar made annually.			Tons of Beet Sugar made annually.		
Germany	...	656,674	Holland	...	19,679
Austria-Hungary	...	470,318	Other countries	...	9,839
France	...	399,471			
Russia	...	279,436	Total	...	1,909,212
Belgium	...	73,795			

Cane sugar.

489. The following is a statement of the world's production of cane sugar in each of the five years ended with 1885 ; the countries in which this description of sugar was grown being also indicated :—

CANE SUGAR PRODUCED IN VARIOUS COUNTRIES, 1881 TO 1885.

Countries.			1881.	1882.	1883.	1884.	1885.
			tons.	tons.	tons.	tons.	tons.
Australia	...	...	26,475	34,500	51,500	59,869	87,245
Barbados	...	...	45,067	46,360	45,836	53,722	56,200
Brazil	...	...	194,516	131,397	226,709	268,335	190,000
Cuba	...	...	449,067	538,388	412,890	560,934	631,967
Egypt	...	...	32,000	26,377	21,597	37,587	45,035
Guadeloupe	...	...	42,275	57,511	51,619	55,257	41,131
Guiana (British)	...	...	92,311	124,102	116,636	125,322	96,058
„ (French and Dutch)	...	...	8,988	9,794	10,193	7,228	5,430
India (British)	...	...	32,710	72,479	72,489	82,749	54,349
Jamaica	...	...	18,166	38,968	26,558	29,868	25,361
Java	...	...	249,393	295,083	301,970	338,886	396,372
Louisiana	...	...	121,867	71,373	137,327	128,443	94,375
Manilla	...	...	210,160	153,780	212,719	122,925	203,490
Martinique	...	...	42,090	47,888	46,857	49,370	38,786
Mauritius	...	...	118,210	117,722	116,612	120,539	127,540
Natal	...	...	8,718	8,000	9,783	17,172	16,000
Porto Rico	...	...	61,715	80,066	77,632	98,665	70,000
Réunion	...	...	27,373	25,059	33,020	37,800	37,973
Trinidad	...	...	44,375	56,265	55,420	61,875	64,634
Other countries*	...	...	35,000	80,972	76,705	290,985	310,701
Total	...	...	1,860,476	2,016,084	2,104,072	2,547,531	2,592,647

Sugar crop
of the
world,
1886-7.

490. The following is a statement of the sugar crop of the world in 1886 and 1887, cane sugar, whether grown in British possessions or foreign countries, being distinguished from beet sugar, all of which is obtained from the latter :—

* China, Peru, and Hawaii.

SUGAR CROP OF THE WORLD, 1886 AND 1887.

Description of Sugar.	1886.	1887.
	tons.	tons.
Cane sugar from British possessions ...	572,000	542,000
„ „ „ Foreign countries ...	2,021,000	2,161,000
Beet sugar	2,506,000	2,137,000
Total	5,099,000	4,840,000

491. According to the following figures, Victoria, although not consuming so much sugar per head as three of the other Australasian colonies, would appear to consume much more per head than any European country, the average quantity being 90¾ lbs., or nearly 22 lbs. more per head than the United Kingdom, which consumes more than twice as much per head as any country on the European Continent. It must, however, be remembered that in Victoria 15 million pounds of sugar annually, or nearly 15 lbs. per head, are used in the manufacture of beer, which is very much more than many countries consume altogether :—

Consump-
tion of
sugar in
Victoria
and other
countries.

AVERAGE ANNUAL CONSUMPTION OF SUGAR (CANE AND BEET) PER HEAD IN VARIOUS COUNTRIES.*

	lbs.		lbs.
New Zealand	118·77	Sweden	17·52
South Australia	102·11	Belgium	15·74
Western Australia	93·51	Germany	15·01
Victoria	90·75	Austria-Hungary	13·23
Tasmania	90·49	Norway	11·37
United Kingdom	68·99	Finland	11·22†
Queensland	62·93	Portugal	9·56
New South Wales	60·95	Roumania	7·71
Argentine Republic	50·04	Russia	7·69
Denmark	29·69	Spain	5·11
Holland	28·37	Servia	4·41
Switzerland	22·81	Italy	3·20
France	22·61		

492. In 1889-90 the area under vines (15,662 acres) exceeded that returned in 1888-9 by 2,776 acres, and was much larger than in any previous year. The quantity of wine returned was 1,578,590 gallons, or more than that in 1888-9 by nearly 370,000 gallons, and was also much larger than that in any previous year. The wine industry received

Vines.

* See Dr. Broch's paper, page 233, there given in kilogrammes, each equal to 2·204 lbs.
† Mr. K. F. Ignatius, of Helsingfors, in the *Statistical Journal of Paris* for February, 1889, page 72, points out that Dr. Broch has understated the consumption of sugar in Finland, by assuming that a leiviskâ is the equivalent of a kilogramme ; whereas the former is equal to 8½ times the latter. Therefore the average consumption of sugar per head in Finland is 11·22 lbs. as here stated, instead of 1·32 lbs. as stated by Dr. Broch and quoted in the last issue of this work.

a temporary check some years since, in consequence of an outbreak of the disease called *phylloxera vastatrix*, but this was found to be confined to one district in the colony (Geelong), where it was promptly stamped out by the eradication of all vines for a distance ranging from 20 to 30 miles from the centre of that district. An account of the visitation of the phylloxera in Victoria, and of the measures taken for its suppression, will be found in the last issue of this work.*

Phylloxera
in New
South
Wales.

493. Several years since an outbreak of phylloxera occurred in the Camden district of New South Wales. The disease soon spread and extended into the district of Seven Hills. At an early period the Government of Victoria urged the Government of New South Wales to take steps to prevent the phylloxera from spreading, and an Act was accordingly passed with that object. This Act having been found to be ineffective, an amending Act was passed, with the result that the work of destruction of the diseased vineyards was proceeded with. The total area found to be infected was 54a. 0r. 34p., viz.:—31a. 2r. 33p. in the Camden district, and 22a. 2r. 1p. in the Seven Hills district. The vines have been cut down and burnt, and the roots have been taken out and also burnt; the ground has been trenched and any particles of root found were destroyed by fire. It is alleged that no trace of phylloxera can now be found in the vineyards dealt with.

Phylloxera
in France
and other
countries.

494. The phylloxera undoubtedly came originally from the United States, where it was first discovered in 1854 by Mr. Asa Fitch upon some vines in the State of New York. It did not, however, spread much until 1863, when it made its appearance in France, and rapidly extended over the vineyards of that country. It is calculated by M. François Bernard that vineyards covering 1,000,000 hectares (2,470,000 acres) have been entirely destroyed by it, and that 200,000 hectares (494,000 acres) in addition are doomed to a like fate; moreover, large areas not yet invaded by the disease are in imminent danger of being so. The disease reached Austria-Hungary in 1875, Australia in 1877, Italy in 1879, the Crimea and Bessarabia in 1880, Turkey and Algeria in 1885, and the Cape of Good Hope in 1886. In the United States the ravages of the phylloxera were for a long time

* *Victorian Year-Book*, 1888-9, Volume II., paragraph 478.

confined to the country situated to the east of the Rocky Mountains, but the insect has now penetrated to the westward, and attacked the vineyards of California. Persistent efforts have been made in France to cope with the evil, and numerous so-called "specifics" have been tried. Vines, moreover, have been extensively uprooted and replaced by vines of other species, which it is hoped may prove impervious to the attacks of the insects. These measures appear to have been attended with some success, as the wine-crop which, from an average of 1,200,000,000 gallons prior to the advent of the phylloxera, had fallen to 600,000,000 gallons in 1885, rose to 800,000,000 gallons in 1889.

495. The following is a statement of the area under vines, and the quantity of wine produced annually in the various wine producing countries of the world. The figures have been partly taken from a paper entitled *Statistique Vinicole Universelle*, read before the Statistical Society of Paris,* on the 10th August, 1889, by M. François Bernard :—

Wine
production
in various
countries.

ANNUAL PRODUCTION OF WINE IN VARIOUS COUNTRIES.

Country.	Year.	Area under Vines.	Wine Produced. (000's omitted.)
		Acres.	Gallons.
Algeria	1888	217,716	72,073,
Australasia	1888-9	27,046	2,692,
Austria-Hungary...	1888	1,562,127	277,379,
Azores, Canaries, Madeira ... ..	...	...	3,300,
Cape of Good Hope	1888	...	4,491,
Chile and La Plata ... ..	...	...	44,000,
France	1889	4,801,680	809,512,
Germany	1886	180,310	99,000,
Greece	1888	185,250	38,720,
Holland	1885	...	81,994,
Italy	1882-1888	4,759,275	607,838,
Portugal	1887	503,880	94,160,
Roumania	1886	253,629	33,000,
Russia ... ..	...	...	66,000,
Servia ... ..	...	...	44,000,
Spain ... ..	...	4,310,404	350,000,
Switzerland ... ..	...	110,656	24,200,
Tunis	1888	8,151	308,
Turkey and Cyprus ... ..	...	222,300	57,200,
United States	1887	98,800	33,000,
Total ... ..	...	...	2,742,867,

* See Journal of that Society for 1889, page 257. The figures are there given in hectares and hectolitres, the former of which have been reduced to acres on the assumption that 1 hectare is equivalent to 2.47 acres, and the latter to gallons, on the assumption that 1 hectolitre is equivalent to 22 gallons.

Wine con-
sumed in
various
countries.

496. The wine made in Victoria, added to that imported after deducting that exported, amounts on the average to rather over a gallon annually per head. This shows a larger consumption of wine in this colony than in the United Kingdom, where it is less than half a gallon per head, but smaller than that in Germany, Switzerland, Austria-Hungary, and France, the wine consumption in the last named of which amounts to as much as 16½ gallons per head. The following are the figures for these and some other countries:—

ANNUAL CONSUMPTION OF WINE PER HEAD IN VARIOUS COUNTRIES.

	Gallons.		Gallons.
France ...	16·52	Queensland ...	·69
Austria-Hungary ...	4·84	Holland ...	·49
Western Australia ...	2·52	United Kingdom ...	·43
Switzerland ...	2·11	United States ...	·39
South Australia ...	1·47	New Zealand ...	·27
Germany ...	1·32	Tasmania ...	·24
Victoria ...	1·01	Sweden ...	·20
New South Wales ...	·83	Canada ...	·14

Consump-
tion of tea
in various
countries.

497. No attempt has yet been made to grow tea in Victoria for commercial purposes, although the tea plant flourishes in gardens around Melbourne, and the Government Botanist has given it as his opinion that many parts of the colony—especially the fern tree gullies—are well suited for its cultivation. The following is a statement of the quantity of tea consumed annually per head in various countries:—

ANNUAL CONSUMPTION OF TEA PER HEAD IN VARIOUS COUNTRIES.

	Annual Consumption of Tea per Head. lbs.		Annual Consumption of Tea per Head. lbs.
Australia ...	7·66	Portugal ...	·12
New Zealand ...	7·23	Switzerland ...	·10
Tasmania ...	5·35	Norway ...	·09
United Kingdom ...	4·70	Germany ...	·07
Canada ...	3·69	Belgium ...	·03
United States ...	1·40	Sweden ...	·03
Holland ...	1·16	France ...	·03
Russia ...	·61	Austria-Hungary ...	·02
Denmark ...	·37	Spain... ...	·01
Persia ...	·13		

Consump-
tion of tea
in Aus-
traliasia and
elsewhere.

498. From these figures it appears that the average consumption of tea is much larger in British than in Foreign Countries, and that Australia stands at the head of the list with an annual consumption

of 7 $\frac{2}{3}$ lbs. per head of the population. It will also be observed that after British dominions the United States is the largest tea consumer, and next to it Holland, after which no country has so large a consumption as 1lb. per head.

499. No return is made of the nature of the crops grown or the quantity of produce raised in gardens and orchards. The following, however, is the extent of land returned under this description of culture in the last two years:—

LAND UNDER GARDENS AND ORCHARDS, 1889 AND 1890.

					Acres.
1888-9	...	...	...	...	27,533
1889-90	...	...	...	...	29,243
					<hr/>
Increase	...	...	...	...	1,710
					<hr/>

500. Ensilage was returned as having been made on 231 farms situated in 78 shires in 1889-90, the principal crops used being maize, oats, and grass, but returns were obtained besides of ensilage made from rye, pease, beans, lucerne, carrots, cabbage, thistles, weeds, and "orchard rubbish." The total quantity made was set down as 8,294 tons; it is probable there was much more, but no returns of ensilage having been asked for in previous years the enquiry was new to the farmers, and was perhaps sometimes overlooked by the collectors. The largest returns of ensilage were obtainable from the following shires:—Marong, where 1,383 tons were made on 13 farms; Lowan, 404 tons on 13; Hampden, 388 tons on 11; Buln Buln, 368 tons on 8; Goulburn, 300 tons on 3; Dundas, 285 tons on 3; Warragul, 242 tons on 10; Numurkah, 236 tons on 10; and Euroa, 226 tons on 4 farms. The number and capacity of the silos was not given.

501. Land in fallow is included in the area under tillage. The number of acres in this condition in 1890 was 379,701, or 47,115 more than in the previous year.

Irrigation,
1885 to 1890.

502. The extent of land subjected to irrigation in 1889-90 was only about a twelfth of that in the previous year. The year before that (1887-8) was also a year of abundant rainfall, but as the rain was not so general over the whole colony as it was in the year under review, the extent of land it was found necessary to irrigate was more than four times as large as that irrigated in 1889-90. The following table contains a statement of the acreage under the various crops returned as under irrigation in each of the last six years:—

IRRIGATION, 1885 TO 1890.

Crops subjected to Irrigation.	Number of Acres subjected to Irrigation.					
	1884-5.	1885-6.	1886-7.	1887-8.	1888-9.	1889-90.
Wheat	3,322	8,109	14,034	7,206	16,403	60
Oats	187	502	1,416	297	1,899	58
Barley	41	237	349	...	863	27
Maize	19	10	1	...	75	37
Pease and Beans	3	11	3	1	2	...
Potatoes	29	22	93	12	46	98
Turnips ... ..	...	5	7	1	...	5
Mangel-wurzel	11	13	6	1	9	3
Beet, Carrots, etc.	18	15	11	...	7	11
Onions ... ..	...	...	1	1	...	...
Chicory	30	28	30	20	30	31
Hay	1,924	3,939	4,633	1,172	4,004	58
Green Forage	33	89	155	37	483	123
Artificial Grasses	1,003	206	251	108	171	570
Hops	357	254	60	48	116	387
Tobacco ... ..	...	...	52	...	...	...
Pumpkins ... ..	...	...	4	...	...	...
Tomatoes	1	2	2	1	...	...
Vines	20	...	56	37	55	34
Gardens and Orchards	48	37	178	51	411	596
Total	7,046	13,479	21,342	8,993	24,574	2,098

Irrigation.

503. In consequence of the copious rainfall which took place in 1889, irrigation was but little practised in that year. In 51 municipalities, however, certain crops covered 271,766 acres, of which 2,098 acres, or less than 1 per cent., were subjected to irrigation. The following table shows the extent of land under these crops, and their gross and average produce; the tillage and produce on unirrigated and on irrigated land being distinguished:—

IRRIGATION IN CERTAIN MUNICIPALITIES, 1889-90.

Crops.	In Municipalities practising Irrigation.					
	Extent under Crop on Land—		Gross Produce on Land—		Produce per Acre on Land—	
	Unirrigated.	Irrigated.	Unirrigated.	Irrigated.	Unirrigated.	Irrigated.
GRAIN CROPS.	acres.	acres.	bushels.	bushels.	bushels.	bushels.
Wheat	218,578	60	2,562,645	800	11·72	13·33
Oats	7,355	58	211,919	1,360	28·81	23·45
Barley, malting ...	398	24	8,724	288	21·92	12·00
„ other ...	429	3	10,338	180	24·10	60·00
Maize	2,859	37	97,825	1,790	34·21	48·38
ROOT CROPS.	acres.	acres.	tons.	tons.	tons.	tons.
Potatoes	3,316	98	10,529	487	3·18	4·97
Mangel-wurzel ...	8	3	130	40	16·25	13·33
Carrots	6	11	172	220	28·67	20·00
Chicory	69	31	444	310	6·43	10·00
Turnips	422*	5	4,981*	60	11·80	12·00
HAY, GRASS, ETC.	acres.	acres.	tons.	tons.	tons.	tons.
Hay	17,025	58	26,670	83	1·57	1·43
Green Forage ...	850	123	...	...	...	...
Artificial Grasses	10,955	570	...	...	...	...
OTHER TILLAGE.	acres.	acres.	cwt.	cwt.	cwt.	cwt.
Hops	302	387	2,026	2,998	6·71	7·75
Grapes	366	34	4,878	933	13·33	27·44
Gardens	758	86	...	...	...	...
Orchards	5,972	510	...	...	...	...

504. An examination of the last two columns will show that irrigation was attended with beneficial results in the case of all the crops named in the table except oats, malting barley, mangel-wurzel, carrots and hay. The improved yield of all the other crops was considerable ; thus, whilst in certain shires the yield per acre of wheat was $11\frac{3}{4}$ bushels, barley (not malting) 24 bushels, potatoes 3 tons, chicory $6\frac{1}{2}$ tons, and hops $6\frac{3}{4}$ cwt. on unirrigated land, in the same shires on irrigated land the yield per acre of wheat was $13\frac{1}{3}$ bushels, barley (not malting) 60 bushels, potatoes 5 tons, chicory 10 tons, and hops $7\frac{3}{4}$ cwt. The yield per acre of grapes was $13\frac{1}{3}$ cwt. on unirrigated, and $27\frac{1}{2}$ cwt. on irrigated land, and with reference to this crop it may be remarked that although the quantity of wine would undoubtedly be increased

Yield of crops on irrigated land.

* There being no turnips returned as grown on unirrigated land in the shires in which irrigation was practised, these figures relate to other parts of the colony.

by the larger quantity of grapes available, the proportion of wine to a given quantity of grapes is but slightly, if at all, affected by irrigation, the proportion in the past season being 5·51 gallons to the cwt. of grapes grown on unirrigated land. and 6·05 gallons to the cwt. of grapes grown on irrigated land.

Statute for
promoting
irrigation.

505. Towards the close of 1883, a measure* was passed in which express provision was made, for the first time, for the construction of irrigation works on a large scale. To accomplish this object, it was provided that certain areas might, at the request of the residents, be proclaimed "Irrigation Areas," to which Trusts (the members of which were to be elected by the ratepayers) might be appointed to carry out the irrigation schemes proposed for the various districts and approved of by the Governor in Council. The commissioners of these Trusts were granted power, under certain restrictions, to borrow money, in the open market,† for the purpose of constructing the works included in the scheme, for the repayment of which a sinking fund was to be provided; also to levy rates upon all lands capable of irrigation within the area under their jurisdiction, in order to provide the annual interest on the loan and the necessary payment to the sinking fund, and to defray the current expenses attendant upon the operations of the trust. These trusts were essentially private corporations, having no direct connexion with, or responsibility to, the Government, and not being in any respect under State control. By the *Water Conservation Act* 1885, however, the Government was authorized to advance moneys by way of loan to these bodies.

Irrigation
Act 1886.

506. These measures were repealed, so far as the irrigation clauses were concerned, on the 16th December, 1886, by "an Act to make better provision for the supply of water for irrigation, and also for mining, manufacturing, and other purposes." The principal provisions of this Act, which is entitled *The Irrigation Act* 1886 (50 Vict. No. 898), have been described as follow by an officer of the Water Supply Department:—

* *Victorian Water Conservation Act* 1883 (47 Vict. No. 778).

† The aggregate amount borrowed was never to exceed 70 per cent. of the gross value of the land within the area.

THE IRRIGATION ACT 1886.

This measure repeals all previous legislation dealing with the question of irrigation, except as to acts done and irrigation trusts heretofore constituted.

It also contains the important declaration that the right to use the waters of the rivers, streams, etc., of the colony shall be deemed to be vested in the Crown until the contrary is proven by establishing any other right.

Provision is likewise made for the construction of "national works" by the Government.

National works are declared to be such by the special Act authorizing their being proceeded with. They are defined as works that, in the opinion of the Minister of Water Supply, "are of such magnitude, affect such sources of water supply, and command such large areas of country, that it is advisable that they should be constructed by and retained under the direct control of the State."

Some important enlargements have been made in the powers which may be exercised by trusts under this Act as compared with those given to trusts previously constituted.

To enable the necessary funds to be raised to carry out schemes of supply, the issue of debentures by trusts is provided for, whilst loans of Government moneys for a like purpose may, with the approval of Parliament, be granted.

507. On the 14th December, 1888, *The Irrigation Act 1888* (52 Vict., No. 983), was passed. This Act provides for the extension of the right of voting at the election of Commissioners of Irrigation and Water Supply Trusts under *The Irrigation Act 1886*, to lessees entitled to acquire the freehold in leased land within the district of the Trust for which the election is held, makes some further provision as to the election of Commissioners, and deals with riparian rights as regards streams improved by National Works. *Irrigation Act 1888.*

508. On the 25th November, 1889, *The Irrigation Amendment Act 1889* (53 Vict., No. 1,047), was passed. This Act is entitled *An Act to amend the Irrigation Act 1886, and to extend the provisions of the same, and for other purposes*. It is divided into six parts:— *Irrigation Amendment Act 1889.*

Part I. deals with Urban Divisions. Section 13 of Part I. provides that Trusts in their discretion may use the powers of *The Waterworks Conservation Act 1887*, within its Urban Divisions.

Part II. provides for the creation of special Irrigation and Water Supply Districts for Trust areas of not more than 10,000 acres, and enlarges the franchise in the election of commissioners to such districts.

Part III. deals further than in the principal Act with the interest upon public loans to Irrigation and Water Supply Trusts, and payment by Trusts for water supply from National Works.

Part IV. provides for the drainage of lands for the purpose of its improvement.

Part V. refers to miscellaneous matter. It gives general power to the Governor to make Orders in Council for the purposes of the Act, and provides for the Board of Land and Works carrying out repairs to works neglected by Trusts.

Part VI. relates to penalties and procedure, with respect to the illegal diversion of water and the neglect of municipal officers to supply a copy of municipal roll to Trusts.

Irrigation
and Water
Supply
Trusts.

509. Under this Act there were, on the 30th June, 1890, 27 Irrigation and Water Supply Trusts, having jurisdiction over 2,683,557 acres of land, having an irrigable area of 1,716,983 acres, of which 503,438 acres are capable of being irrigated annually. The present value of the irrigable lands, on a low basis of calculation, was set down as £6,554,305, and the annual rateable value of the same was £282,973. The aggregate borrowing power of the Trusts is limited to £1,677,360, of which the Government have agreed to advance £1,240,858, the balance to be obtained in the open market; whilst the amount actually advanced to the 30th June, 1890, was £457,145.

National
Irrigation
Works.

510. The more important works connected with irrigation or those connected with the principal rivers which will 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. The total expenditure from loans on such works to the 30th June, 1889, was £111,378. The following is an account of such works, and of the progress already made in their construction, as furnished by the Victorian Water Supply Department:—

GOULBURN DISTRICT NATIONAL WORKS.—The chain of works by which the water of the Goulburn River will be impounded and conveyed for the irrigation of this district, is the most important of the schemes contemplated by the Government, and is as follows:—

Goulburn River Weir.—This will constitute the headwork with off-takes on the west and east sides of the river, for the maximum quantities of 100,000 and 20,000 cubic feet of water per minute respectively. It is situate about 8 miles south of the township of Murchison.*

The contract for the weir was signed in April, 1887, and was to have been completed by the 30th of June, 1889. But the construction was delayed by the unusually high and protracted floods of the winters of 1887 and 1889, whilst further delay has been due to the difficulties attending the construction of a work of such magnitude in a river, the flow of which is considerable even in its lowest state. The catchment basin of the river above the weir is nearly 4,000 square miles, or $2\frac{1}{2}$ million acres. The masonry work is now almost completed, and the ironwork of flood-gates, piers, bridging, and gearing in great part erected. The floods of the present winter season have been over the weir, a depth of $3\frac{1}{2}$ feet, flowing over the crest for a considerable time, but no damage has been caused. The work still to be done should be completed about the middle of September should no interruption be occasioned by further floods. The contract amount will be somewhat exceeded by reason of it having been considered advisable:—

- 1st. To provide additional passage way for floods.
- 2nd. To lower and widen the off-takes.
- 3rd. To provide hydraulic as well as hand power for the working of the flood-gates; and
- 4th. To supply a small electric lighting plant to facilitate the proper regulation and management of the gates at night time.

The claims for land submerged by the weir and resumed, have been much in excess of anticipations. They are, however, in process of settlement.

* For a further description of the Weir, see *Victorian Year-Book*, 1888-9, Vol. II., paragraph 496.

Besides the main object of the weir, raising the level of the river to supply the off-take by gravitation, it will to some extent, by means of the flood gates, serve the purpose of equalizing the summer flow of the river. About 550 million cubic feet of the storage will be available for dry seasons.

Works West of the River.—These comprise 24 miles of main channel, from the weir to the proposed reservoir at Waranga Swamp, to convey 100,000 cubic feet of water per minute; the proposed Waranga Reservoir to contain a total of 9,000 million cubic feet, whereof about 7,750 million cubic feet, or 48,000 million gallons, will be available; 60 miles of main channel thence to the Campaspe River, to carry about 50,000 cubic feet of water per minute at the off-take from the reservoir.

Contracts for the construction of 14 miles of the main Western Irrigation Channel from the weir, are in progress; and it is believed that these will be completed by the date stipulated, viz., 30th November, 1890. The first 7 miles down to the pumping station of the Echuca and Waranga Waterworks Trust should be so far completed as to be able to give a supply of water by September next. The first off-take of the Rodney Trust is near the 8th mile, and the regulator and works necessary to give a supply at this point are expected to be completed by November. A contract for the 15th mile of the main channel has just been arranged, and as the off-take for the principal supply to the Rodney Trust is situate on this section, the time for its completion has been fixed for the 31st December next, in order to give the Trust their full supply by that date. Generally, the progress made with channel contracts has been satisfactory.

Contracts for further sections of works in this district would have been in progress had sufficient guarantees been given by the landholders, that the stored water would be utilized and paid for to such an extent as to warrant the construction. The scheme is being re-considered with a view to arrange a modification to meet the wants of those who have proved their readiness to avail themselves of it; at the same time keeping in view the carrying out of the works on the larger scale designed, as soon as the Government have evidence that it will be justified.

The Waranga Reservoir on the scale for which tenders were received, will cost about £26 per million cubic feet of available storage. It included lower channel works at inlet and outlets, particularly the main outlet, which is through a spur about 2 miles across, with a view of saving about 16 miles of main channel and the consequent loss of elevation. Omitting this, the actual cost of reservoir, including all necessary works, would be under £20 per million cubic feet of available capacity. The cost in relation to capacity as compared with that of reservoirs generally is extremely low, thus showing the unusual advantages of the site.

The trial surveys for the main channel from the proposed Waranga Reservoir to the Campaspe River have been carried forward about 30 miles. They will be completed so that the construction may be proceeded with whenever it may be necessary. A trial survey is being made of Reedy Lake, a natural basin lying to the west of the river, some miles above the weir, and having a considerable local drainage area. The object is to ascertain whether it would be possible to raise the level of the lake, store therein the water discharged from the drainage area in winter, and hold it in reserve to supplement that available from the weir, in summer.

Works East of the River.—These are 31 miles of main channel, from the weir to the Broken River, near Shepparton, to convey 20,000 cubic feet of water per minute. The course for the main channel on the east side of the river is determined, and the permanent survey has been carried forward nearly as far as it is proposed to make it a national work. The construction will be commenced as soon as possible after the landowners' petition has been received and the necessary guarantee provided by the constitution of the East Goulburn Irrigation Trust.

BROKEN RIVER WORKS.—These consist of a weir on the Broken River, at a point about two miles north from Benalla; a channel thence to the Mokoan Swamp; a reservoir at the Swamp to store about 2,700 millions of cubic feet for the summer supply of the Broken River and Broken Creek districts; and the clearing, sectioning, and grading of the Stockyard Creek, so that it may act as a supply channel from the

Reservoir to the Broken River at Goorambat. The general character of the works has been determined. The total cost, including land, is estimated at £86,000. Negotiations are in progress with the various Trusts interested, relative to the quantities of water to be taken by each, and price to be paid for same. When these are completed the work will be proceeded with.

CAMPASPE NATIONAL WORK.—This is intended to be a storage and regulating reservoir on the Campaspe River, near Langwornor. The proposed weir, 80 feet high in the centre and 900 feet long at the top, is to be immediately below the junction of that river with the Coliban. It will probably be of concrete masonry, or of concrete combined with rubble; and the reservoir will have a capacity of 785 millions of cubic feet. Its purpose will be to maintain a constant and nearly uniform flow in the river, so as to provide for the service of the Irrigation Trusts lower down. The permanent surveys are complete, and two designs have been prepared for the weir, one of solid concrete, the other of concrete and rubble combined. No decision has yet been come to as to what design shall be adopted; nor can anything be said as to when the work is likely to be undertaken. Only one Irrigation Trust has yet been formed in the Campaspe Valley, and the use of stored water is not at present contemplated in connection with its scheme.

LODDON NATIONAL WORK.—This work will consist of a regulating reservoir on the Loddon River, the weir and dam being situated about half-a-mile above Laanecoorie. It will be a compound structure, the portion in the river channel being a weir of concrete masonry, with automatic tilting gates for the discharge of excessive floods; with an extension on the left bank in the form of an earthen dam, protected in rear from erosion by flood waters by a heavy berm or banquette of materials not liable to scour. The face of the bank will be protected, up to six feet below the permanent water level by broken stone, and above that by pitchers of cement concrete. The capacity of the reservoir will be 576 millions of cubic feet. The work is now under contract; two-thirds of the concrete is completed, and the outlets are nearly so. Not much has been done towards the earth bank owing to the frequency and duration of floods since the commencement of the work. It is expected that the whole will be finished by the end of the ensuing summer.

KOW SWAMP NATIONAL WORKS.—These will consist of a direct cut, from the head of the Gunbower Creek to the Kow Swamp, advantage being taken as far as possible of the creek channel; a reservoir with outlet and regulating weir at the Kow Swamp, and a channel and branch thence to the Loddon. It is intended for the service of the lands in the lower part of the Loddon Valley. 12 miles of the channel and the regulating headworks have been let, and tenders are about to be called for the remainder. It is anticipated that the whole work will be completed by June, 1891.

EAST WIMMERA WORKS.—Further survey and examinations have been made during the year. The project for a reservoir at Hall's Gap has been abandoned on the ground of its inordinate cost. The proposed National works are a reservoir at Lake Lonsdale, channels thereto from Fyan's, Mokepilly, and Pleasant Creeks, channel from the reservoir to Glenorchy and Glenorchy Weir.

WEST WIMMERA WORKS.—Surveys for a work for the supply of the Western Wimmera have been carried out. The site and character of the work is under consideration.

WERRIBEE NATIONAL WORKS.—Surveys have been made for a reservoir on the Werribee above Ballan, and a channel thence to the distribution areas. The design of the works is in preparation.

*Water Con-
servation
Acts.*

511. About the end of 1887 an Act was passed (51 Vict. No. 946) consolidating the various *Water Conservation Acts* 1881-86, so far as they relate to domestic and stock supply. Of these there were five:—No. 716 of 1881, No. 778 of 1883, No. 829 of 1884, No. 859 of 1885, and No. 893 of 1886. So much of each of these as had not been already repealed was repealed by the new Act, and all Waterworks Trusts formerly constituted were brought under the provisions of this

Act. By this consolidation the legislation affecting Water Trusts has been much simplified; the *Irrigation Act*, No. 898 of 1886, already referred to, deals with Trusts formed for irrigation purposes, and the Act above referred to (No. 946) deals with Trusts formed to secure domestic and stock supplies. On the 25th November, 1889, Act 53 Vict. No. 1049, was passed. This Act is cited as *The Water Conservation Act* 1889, and read as one with the 1887 Act. The 1889 Act provides for one or more ridings of any municipal council being constituted a waterworks district, and for the power to postpone the operations of Act No. 946 with regard to sinking fund formed to liquidate loans to Waterworks Trusts.

512. Under the *Water Conservation Acts* just referred to 41 Waterworks Trusts have been formed and were in existence on the 30th June, 1890, of which 16 had works in progress, whilst the remaining 25 had control of 12 rural water supply works, and 25 urban supplies. Several of these trusts are almost identical with the municipal councils. The amount of loans authorized to be advanced to these bodies was £916,958, of which £762,380 had been paid up to the 30th June, 1890. The rural schemes have numerous weirs, dams, and tanks, supplying an area of 4,034,200 acres, of an annual rateable value of £534,054; whilst the estimated cost of the works was £466,765. The urban works have a storage capacity of over 288 million gallons, and were estimated to cost £350,547; they supply a population of 33,800, who possess property of the annual rateable value of £275,588. The works in process of construction will supply water to 17 towns containing about 12,000 inhabitants, who occupy property of an annual rateable value of £63,360; their estimated cost is about £95,100. There are 11 urban schemes—which will cost about £228,500—at present under consideration, by means of which it is proposed to supply a population of about 35,300 persons, who occupy property valued at about £280,000 per annum.

513. Prior to the constitution of the Waterworks Trusts extensive works for the storage and supply of water for domestic, mining, and, to a limited extent, for irrigation purposes, had been constructed by the Government and by Local Bodies in various parts of the colony. The most important of these is the Yan Yean reservoir, together with the subsidiary reservoirs at Jack's Creek, Morang, Preston, Essendon, Caulfield and Kew, by means of which Melbourne is provided with a supply of fresh water at a high pressure. The Yan Yean is an artificial lake situated 22 miles from the city, and 595 feet above its level, which covers an area of 1,360 acres, or rather more than two square miles.

Waterworks
and water-
works
trusts.

Waterworks
under Go-
vernment.

To meet the increased demand for water consequent upon the growth of the city and suburbs, a new channel has been formed for the purpose of turning into the reservoir other considerable streams of pure water, by which means all fear of the supply becoming exhausted in seasons of drought will be at an end. The following table contains a list of such of these works as are under Government control; also a statement of the estimated storage capacity, and the total cost of each scheme:—

WATERWORKS UNDER GOVERNMENT CONTROL.

Scheme—Name of Town or District supplied.	Reservoir or Source of Supply.		Cost.
	Where situated.	Storage Capacity.	
		Gallons.	£
Melbourne and Suburbs	Yan Yean ...	6,400,000,000	3,000,000
	Jack's Creek ...	60,000,000	
	Morang (pipe head) ...	3,000,000	
	Preston (storage) ...	15,000,000	
	Essendon (storage 1) ...	6,000,000	
	" (" 2) ...	1,000,000	
	Caulfield (") ...	10,000,000	
	Kew ...	3,000,000	
COLIBAN SCHEME.			
Taradale ...	Malmsbury ...	3,255,000,000	1,069,255
	Taradale ...	65,000	
Castlemaine and Chewton	Expedition Pass ...	120,000,000	
	Red Hill ...	1,250,000	
	Old Post Office Hill ...	2,000,000	
	Barker's Creek ...	629,135,000	
Fryerstown ...	Specimen Gully ...	2,618,000	
	Crocodile Gully ...	5,407,000	
Maldon ...	Green Gully ...	1,500,000	
	Big Hill ...	68,000,000	
Sandhurst ...	Big Hill Tank ...	300,000	
	Crusoe Valley ...	320,000,000	
	New Chum Tank ...	23,000	
	Solomon's Gully ...	1,250,000	
Sandhurst District	Spring Gully ...	150,000,000	
	Upper Grassy Flat ...	58,860,000	
	Lower Grassy Flat ...	26,800,000	
Eaglehawk ...	Sparrow Hawk ...	1,500,000	
Raywood ...	Lightning Hill ...	7,000,000	
	Raywood ...	2,500,000	
Sebastian ...	Sebastian ...	239,200	
Lockwood and Marong ...	Green Gully ...	3,500,000	
Geelong and suburbs	Upper Stony Creek ...	354,000,000	357,338
	Lower Stony Creek ...	143,000,000	
	Anakie (pipe head) ...	900,000	
	Lovely Banks ...	6,000,000	
	Newtown Tank ...	500,000	
Total ...		11,659,347,200	4,426,593

514. The total expenditure to the 30th June, 1890, on the construction of the Melbourne Water Works was £3,104,747. The gross revenue received since the opening of the works at the end of 1857* has amounted to £2,949,310, whilst the expenses of maintenance and management amounted to only £393,260. During 1889-90 the revenue of the waterworks amounted to £193,274 as against £188,212 in the previous year; and the expenditure on maintenance and management to £26,128, as against £22,643 in the previous year. The net revenue in 1889-90 was thus £167,146, being equivalent to 5·73 per cent. of the mean capital cost;† as compared with £165,569, or 6·40 per cent. in 1888-9. A reference to a previous table‡ will show that the loans borrowed for the construction of the works now bear an average nominal rate of only 4·05 per cent.

Revenue and expenditure of Melbourne Water-works.

515. The following interesting account of the progress of the works of the Melbourne Water Supply was prepared, in May of the present year (1890), by Mr. W. Davidson, C.E., the Inspector-General of Public Works:—

Progress of Melbourne Water Supply Works.

MELBOURNE WATER SUPPLY.

The sources of the water supply for the City of Melbourne and its suburbs are in the section of the Main Divide, known as the Plenty Ranges. The central mass of these ranges is Mount Disappointment, situated nearly due north of Melbourne, and distant therefrom about 33 miles. It rises to an altitude of 2,700 feet, and is plainly visible from any elevated part of the city. On the south-eastern slopes of Mount Disappointment the eastern or main branch of the Plenty River and its tributaries, the principal of which is the Running Creek, take their rise, while from the long low saddle extending east from the base of the mount proceed Jack's Creek, the Joey, and Yellow Creeks. These are the sources from the southern slopes, within the watershed of the Yarra, which are at present drawn upon for Melbourne use. The other streams from the southern side of Mount Disappointment, as the western branch of the Plenty, Bruce's Creek, etc., which, in connexion with the creeks previously mentioned, were formerly diverted into Yan Yean reservoir, are now abandoned so far as city purposes are concerned.

The northern slopes of the Plenty Ranges are in the Goulburn watershed. Two permanent creeks, tributaries or head waters of the King Parrot Creek, and known as the Wallaby and Silver Creeks, have been diverted into the southern or Yarra watershed, their waters commingling with those of the utilized creeks therein, and passing along with them to Yan Yean reservoir.

The water-gathering areas are in extent as follow:—

	Acres.
Southern slopes, including the watersheds of the Plenty (eastern branch), Running Creek, Jack's Creek, etc.	10,500
Northern slopes, being the watershed of the Wallaby and Silver Creeks...	11,500
Total	22,000

* Although the works were commenced in 1853, they were not opened until the 31st December, 1857. The information in this paragraph is compiled from a Return furnished by the Yan Yean Water Supply Department.

† Or the mean of the capital cost at the beginning and end of the year.

‡ See table following paragraph 376, in Volume I.

This does not include the immediate catchment area of the Yan Yean reservoir, to be hereafter referred to.

In addition to actual watersheds, a number of reservations have from time to time been made in the Plenty Ranges for the preservation of timber and other reasons in the interests of Melbourne Water Supply. These extend both over the southern and northern slopes for several miles, and are of an aggregate area of 54,000 acres.

The whole of the watersheds, excepting part of the reservoir catchment basin, and of course the timber reservations, are unalienated Crown lands, totally unoccupied or settled upon in any way. In fact, but for operations of paling-splitters and timber-cutters, many years ago, they might be said to be in their primeval condition.

Mount Disappointment and its main spurs extending northwards are of granite, overlaid for the most part with a rich volcanic chocolate soil. The southern spurs and the eastern saddle are almost entirely silurian country, with poor soil.

The timber ranges from the mountain ash (*Eucalyptus Amagdalina*) in the greater altitudes and volcanic soil, to blue gum (*Eucalyptus Globulus*) and messmate in soils less rich, and stunted gums and stringy-barks on the poor silurian spurs.

The works for the diversion of the northern streams into the southern watershed consist of a series of weirs and open aqueducts. The most remote of these is the weir on Silver Creek. Its object is merely to raise the water level sufficiently to command an outlet in the southern end of the work and forming the head of the Silver Creek aqueduct. The weir is 125 feet long on the crest, and 11 feet high at creek bed. It is built of granite rubble masonry in cement mortar. The bed of the creek being composed of granite detritus and silt, the foundations of the weir consist of sheet piling and concrete. Silver Creek aqueduct is a contour channel, with an inclination of 3 feet per mile, designed to carry 12,000,000 gallons of water per day. Its top width is 7 feet 1 inch, and its depth in the centre is 2 feet 7 inches. It is eight miles long, lined throughout with granite pitchers, set in cement mortar. In its course there are two tunnels of 29 chains and 6 chains length respectively. The Silver Creek water is delivered by this channel into the pool formed by the Wallaby Creek weir.

The objects to be served by this weir are similar to those of the Silver Creek weir. The construction is similar, excepting that in the latter case the foundations are on rock.

The Wallaby Creek aqueduct conveys the combined waters of the Wallaby and Silver creeks. Its carrying capacity is 33,000,000 gallons per day. The gradient is also 3 feet per mile; width on top, 12 feet; depth in centre, 4.5 feet; lined as is Silver Creek, with granite pitchers, in cement. It follows a long spur from Mount Disappointment for a distance of five and a half miles, and delivers over the Dividing Range, by a series of cascades, into the head of Jack's Creek, in the southern watershed. Excepting during actual rainfall, the volume of Jack's Creek is infinitesimal, but the average quantity derivable from Wallaby and Silver Creeks amounts to about 10,000,000 gallons per day, and rises in wet weather to 33,000,000 gallons. The northern water being delivered into Jack's Creek is allowed to find its way down the bed thereof for a distance of four miles to Toorourrong Flat, in which it joins with the eastern branch of the Plenty.

Formerly, water for the replenishment of Yan Yean reservoir was taken from the Plenty River, at a point about two miles south of Whittlesea township; and there is no doubt the streams converging on such point were much polluted by the drainage of the township and from 14,000 acres of country devoted to agriculture and stock-raising of all kinds.

To obviate this state of things the "clear water channel" was constructed about six years ago. Its object is to intercept the combined Wallaby, Silver, and Jack's Creeks and the Plenty waters before they entered on alienated or settled or cultivated lands, and to carry them in their unpolluted condition to Yan Yean reservoir. This has been effected by the construction of a dam across the Plenty Valley, a few chains below its confluence with Jack's Creek. This dam is 15 chains long, and impounds water covering an area of about 36 acres, and forming "Toorourrong reservoir." Again is the object of the dam to raise to a proper level and divert into an aqueduct

the combined waters. The aqueduct commencing at the southern end of the dam is known as the "clear water channel." Its carrying capacity is 120,000,000 gallons per day, being 13·5 feet wide on top, by a depth in centre of 4·75 feet, with a gradient of 7 feet 6 inches per mile. It is four and three-quarter miles long, lined throughout with pitchers, as in the other aqueducts. In it are introduced numerous drops or artificial waterfalls, the highest being 17 feet. The clear water channel terminates by joining the old inlet-channel to Yan Yean. It is constructed entirely through alienated and settled land, but side or local drainage is guarded against and provided for. Where the clear water channel passes through the outskirts of the small township of Whittlesea, it is roofed over with galvanized iron for a distance of half-a-mile.

From the junction of the clear water channel the water proceeds by the old inlet-aqueduct and tunnel for a distance of two and a half miles to Yan Yean reservoir.

The site of Yan Yean reservoir was originally a lagoon, formed by the dispersion over 800 acres of flat land, of the drainage waters from the southern slopes of Sherwin's Range. A dam of 49 chains in length and 30 feet in height, with a top-water or by-wash level of 25 feet above the lowest point in the bottom—the by-wash being 602 feet above low water, Hobson's Bay—impounds 6,400,000,000 gallons of water, covering an area of 1,360 acres, and of a mean depth of 17 feet. Of this quantity, which the reservoir contains when full, 5,400,000,000 gallons are available for being drawn off, the balance is below "draw-off" level. The longest straight line on the reservoir is from north to south, it is two and a half miles. The water margin at top-water level is ten and a half miles in length.

Yan Yean reservoir is situated within an immediate drainage area, known as the catchment basin, of about 4,500 acres, of which 700 acres are alienated and in occupation, while a great portion of the balance is utilized for commonage purposes.

On the 700 acres of alienated land, which are situated north of Cades Lane, at from a quarter of a mile to one and a half mile distant from the reservoir, a combined system of cultivation and grazing is practised, and the drainage from this land in time of rain can only pass to the reservoir. This is the only area not absolutely within the control of the Water Supply Department, and affords the only source of doubt that can exist as to the purity of the Yan Yean water.

The commonage area can be resumed by the Department when considered necessary. It is at present leased to the Whittlesea Shire Council at a nominal rent, but under very stringent conditions for its care and the maintenance of its cleanliness, for the depasturing of cattle and horses only.

From Yan Yean reservoir the water for use in Melbourne is taken in an open masonry aqueduct to the Pipe Head reservoir, at Morang: length, six and three-quarter miles; carrying capacity, 33,000,000 gallons per day; capacity of Pipe Head reservoir, 3,000,000 gallons.

From the Pipe Head the water is conveyed by three mains to Preston reservoir. Two of these are of 30-inch diameter, the third being 27-inch, and their joint delivery power is just equal to that of the aqueduct, viz., 33,000,000 gallons per day. But this does not exactly indicate the possible maximum rate of delivery to the population of Melbourne, as will be hereafter shown.

Preston reservoir is an artificial basin of 16,000,000 gallons capacity. Its altitude is 327 feet above sea-level. From it are taken to Melbourne districts water-mains, as follow:—Two of 30 inches diameter, four of 24 inches diameter, and one of 18 inches diameter. These mains are together capable of delivering water at the rate of 57,000,000 gallons per day.

From these mains the water is conveyed to the consumers by sub-mains and reticulating mains, ranging from 12 inches diameter to 3 inches diameter, of a total length of 1,150 miles.

Water is not drawn off from the mains at an uniform rate throughout the whole period of 24 hours. During the night there is invariably a surplus in the mains. To utilize this to some extent, service reservoirs have been constructed at Caulfield, Essendon, and Kew, of an aggregate holding capacity of 21,000,000 gallons.

The following figures, being the average daily consumption for each of the last five years, will indicate the rapid increase in the demand for water in Melbourne:—

1885—	$13\frac{2}{3}$	millions of gallons.
1886—	$14\frac{3}{4}$	„ „
1887—	$16\frac{1}{4}$	„ „
1888—	$20\frac{2}{3}$	„ „
1889—	$22\frac{2}{3}$	„ „

The maximum quantity of water used in one day was on the 21st January, 1890, a very hot day, the temperature on the 19th being $101\cdot2^{\circ}$, on the 20th $99\cdot5^{\circ}$, and on the 21st $99\cdot5^{\circ}$, when the consumption reached $40\frac{1}{2}$ millions of gallons, and then there were some people in the high outlying suburbs who could not obtain as much water as they required.

It thus appears that with an intake at Preston of 33 millions of gallons, and a stored surplus in Preston and the other reservoirs of 37 millions of gallons, this rate could not be maintained for more than five days, and that on the exhaustion of the stored surplus, the supply would of necessity be reduced to the capacity of the Yan Yean-Morang Aqueduct or 33 millions of gallons per day. During the exceptionally long period of very hot weather last summer it was feared that this would occur, but before the service reservoirs were quite empty the weather changed, and, the consumption falling well below the 33 millions, enabled them to be refilled.

The estimated population supplied from the Yan Yean exceeds 400,000, therefore the average daily consumption per head was 56 gallons last year, and the maximum last summer was over 100 gallons.

For the effective supply of the high suburbs to the east of Melbourne there is now being laid a main of 32 inches diameter direct from Yan Yean, which will be capable of delivering at Surrey Hills (which is the highest suburb within the Water Supply radius, being 420 feet above sea level) 10,000,000 gallons daily.

The cost of the Yan Yean system of water supply up to date amounts to about £3,000,000.

In view of the great increase in the numbers of tenements and population in Melbourne and suburbs during the past ten years, it appeared to be doubtful if an abundant supply of water of high quality would continue to be available from the neighbourhood of Mount Disappointment. To meet any possible deficiency from this source, the Watts scheme was inaugurated about four years since. The object of the scheme is to convey water from the Watts River, four miles above the township of Healesville, by an aqueduct 41 miles in length, to Preston reservoir.

The complete scheme, as designed, comprises the erection of a dam, about 100 feet high, across the valley of the Watts, to form a storage reservoir: and the construction of 41 miles of aqueduct, consisting of $25\frac{1}{2}$ miles of open channel, lined either with cement concrete or brickwork set in cement; twelve tunnels of an aggregate length of $6\frac{1}{4}$ miles; and $9\frac{1}{4}$ miles, in fourteen sections, of inverted syphons, consisting of double lines of wrought-iron pipes 4 feet 6 inches in diameter.

The aqueduct, when completed, will be capable of carrying 50,000,000 gallons per day. At present only one line of pipes is laid for each syphon, and the open channel is only lined sufficiently to carry 25,000,000 gallons per day, though the excavation is all taken out and the tunnels are completed to the full size required to deliver 50,000,000 gallons per day. A weir has also been constructed across the Watts to divert the water therefrom into the aqueduct, and supplementary channels are being formed to bring into it also the waters of the Graceburn and Coranderrk Creeks. The minimum supply to be obtained from these three streams has been ascertained by gaugings, extending over a number of years, to be never less than 25,000,000 gallons per day. The work, as now being carried out, and which will be finished in about five months, that is before next summer, will cost about £600,000. The complete scheme, including the erection of the dam above mentioned, to form the Maroondah reservoir, will cost an additional £350,000.

The Watts country is chiefly porphyritic, overlaid with rich volcanic soil, growing the largest timber known in Australia of the classes referred to in connexion with

Mount Disappointment, together with dense undergrowth, and a great profusion of treeferns, etc. The Watts water is of very high quality and of exceptional brightness. Those small areas within the watershed, which have been alienated, have been resumed, the township of Fernshaw has been bought up, and now the whole of the Watts Valley above the off-take is public property and under departmental control.

It is not anticipated that it will be necessary to proceed with the construction of the Maroondah Reservoir and the completion of the Watts Aqueduct, as designed to carry 50,000,000 gallons, for some few years to come, as the 25,000,000 gallons per day, which will be available by next summer from this source, together with the 33,000,000 now available from Yan Yean, and the 10,000,000 to be derived from the new main before described, will give 68,000,000 gallons per day in addition to what may be stored in Preston and other service reservoirs.

The water supply district, as defined by Act of Parliament, is bounded by a circle of ten miles radius, with Melbourne Post Office as a centre, outside of which it is ruled to be illegal to supply water.

Box Hill and Oakleigh are just on the margin, but inside of this boundary, while populous Mentone is hopelessly outside.

ANALYSES OF YAN YEAN WATER.

				Source of Sample.	
				Yan Yean Reservoir.	Tap in Melbourne.
Date of collection	...	...	7/9/89	...	9/9/89
Temperature of water	...	...	11·3° c.	...	13·2° c.
Appearance in 2-ft. tube	...	...	Darkish-yellow	...	Same.
Odour at 40° c.	...	...	Normal	...	Normal.
Reaction	...	...	Faintly alkaline	...	Same.
				In parts per million.	In parts per million.
Total solids	...	...	82·5	...	82·5
Hardness	...	...	18·2	...	18·2
Chlorine	...	...	20	...	20
Nitrogen as nitrates	...	...	·142	...	·161
Free ammonia	...	...	·026	...	·016
Albuminoid ammonia	...	...	·192	...	·120
Oxygen consumed in four hours	...	...	3·946	...	3·260
Nitrates	...	...	Absent	...	Absent.
Phosphates	...	...	Absent	...	Absent.

Water was turned on in Melbourne, from the Yan Yean Reservoir, on the 31st December, 1857. The population of Melbourne and suburbs was then 104,000.

The Yan Yean, Morang, and Preston reservoirs are connected with the head office by telephone, as are also the residences of the engineer and chief turncock; the head office is also connected with the general telephone system of Melbourne.

PRINCIPAL EVENTS IN THE HISTORY OF THE YAN YEAN WATERWORKS.

Year.

1853.—Yan Yean works commenced.

1857.—Yan Yean works opened, 31st December.

1862.—Meter charge reduced from 4s. to 3s. per 1,000 gallons.

1863.—Meter charge further reduced from 3s. to 1s. per 1,000 gallons.

1863.—Preston Reservoir commenced.

1863.—South Yarra Waterworks purchased.

1868.—New Main from Preston (No. 2) commenced.

1873.—New Main and Aqueduct from Yan Yean commenced.

1874.—New 18-inch Main to Coburg from Preston commenced.

1874.—Rate reduced from 1s. to 8d. in the £, 1st July.

1877.—New Main from Preston (No. 3) commenced.

1878.—Plenty River Bridge washed away; cutting off water supply from the city.

1878.—Water Supply Inquiry Board appointed.

1879.—Pipe casting industry commenced in Australia.

1881.—Essendon Service Reservoir (No. 1) commenced.

- 1882.—New Main from Preston (No. 4) commenced.
- 1882.—Wallaby Creek works commenced.
- 1883.—Clear Water Channel commenced.
- 1883.—Essendon Service Reservoir (No. 2) commenced.
- 1883.—Caulfield Service Reservoir commenced.
- 1884.—Silver Creek works commenced.
- 1886.—Watts (Maroondah) River works commenced.
- 1886.—Wrought iron pipe industry commenced in Australia.
- 1886.—New wrought iron Main from Pipe Head Reservoir to Preston commenced.
- 1886.—Kew Service Reservoir commenced.
- 1886.—New Main from Preston (No. 5) commenced.
- 1889.—Rate reduced from 8d. to 6d. in the £, 1st January.
- 1889.—New Main from Preston (No. 6) to South Melbourne commenced.
- 1890.—New High Level Main from Yan Yean Reservoir commenced.
- 1890.—Purchase of Freehold Land abutting on Yan Yean Reservoir.

Coliban
scheme.

516. The Coliban Scheme provides water for domestic and mining purposes, as well as for irrigation to a limited extent, to the Sandhurst and Castlemaine districts. The chief reservoir of this scheme, which is near Malmsbury, has a capacity of 3,255 million gallons. The cost of the works to 30th June, 1890, was £1,069,255; whilst the gross revenue during the year 1889-90 was £21,277, and the expenses of maintenance and supervision £11,637. The net revenue was thus £9,640, being equivalent to .901 per cent. of the capital cost, as compared with £9,236 or .863 per cent. in 1888-9. The deficiency in 1889-90, after allowing interest on the capital cost at the rate of $4\frac{1}{2}$ per cent., was £38,483.

Geelong
Water-
works.

517. The Geelong Waterworks provides water for domestic supply to Geelong and suburbs. The chief storage works in this scheme are the Upper and Lower Stony Creek reservoirs, having a capacity of 497 million gallons, and the whole scheme has cost, up to the 30th June, 1890, £357,338. The gross revenue for 1889-90 was £9,581, and the cost of maintenance, £3,094. The net revenue was thus £6,487, or 1.815 per cent. of the capital cost, as against £6,600, or 1.846 per cent., in 1888-9. After allowing interest on capital at $4\frac{1}{2}$ per cent., the deficiency for 1889-90 was £9,593.

Goldfields
reservoirs.

518. There are 24 goldfields reservoirs having an aggregate capacity of nearly 563 million gallons, the largest, at Beaufort, containing about 86 million gallons. These cost £62,488, and were originally constructed by the Government chiefly for mining purposes. They are for the most part leased to municipalities at a nominal rental, but it appears that many of these bodies do not keep them in proper repair. The Secretary for Water Supply in one of his recent reports suggested that such of those as are required by the municipalities should be sold absolutely to them, and that the others should be destroyed so as to prevent them becoming sources of danger by bursting in times of heavy rainfalls or floods. One of these reservoirs, Commissioner's Gully, was abandoned in the year 1889-90.

519. Prior to the establishment of Waterworks Trusts, advances were made from the Government loan account to various municipalities to enable them to construct waterworks for their respective districts—the principal to be gradually repaid into a sinking fund. The number of such municipalities was 22, which possessed 21 reservoirs, having a total capacity of nearly 1,400 million gallons, as well as other sources of supply. These works cost £688,081, nearly all of which was advanced from loans, and supply a population of about 77,600. The chief of these reservoirs are the Ballarat reservoirs, now under the Ballarat Water Commission, having an aggregate capacity of nearly 639 million gallons—the Gong Gong reservoir alone containing 427 million gallons; the Beechworth reservoir at Lake Kerferd, with 191 million gallons; the Clunes reservoir at Newlyn, with 207 million gallons; and the Talbot reservoir at Evansford, with 200 million gallons.

Waterworks
under Local
Bodies.

520. By the following summary of the total storage capacity and total cost of reservoirs or other works for the conservation of water referred to in the foregoing tables and paragraphs, it is shown that the former amounts to over fourteen thousand million gallons, and the latter to close on six millions sterling:—

Capacity
and cost of
reservoirs.

CAPACITY AND COST OF WATERWORKS.
(Exclusive of National and other Irrigation Works).

Waterworks under—	Storage Capacity.	Cost of Schemes.	Expenditure from Loans to 30th June, 1889.
	Gallons.	£	£
Government—			
Melbourne	6,498,000,000	3,000,000	1,646,455
Coliban	4,656,947,200	1,069,255	1,069,255
Geelong	504,400,000	357,338	357,338
Goldfields	563,000,000	62,488	Nil.
Local Bodies	1,500,000,000	688,081	632,573
Waterworks Trusts—			
Urban Works*	293,000,000	350,547*	} 719,497
Rural „	†	466,765	
Total	14,015,347,200	5,994,474	4,425,118

521. Intimately connected with the subject of the water supply of Melbourne is that of its sewerage. Although some years since sewers were constructed under two of the principal streets (Swanston and Elizabeth streets) for the purpose of carrying off the storm and other waters which had previously been allowed to flow along the open street channels, no complete system of sewerage for the metropolitan area has yet been adopted. Recognizing the necessity of making provision for

Sewerage of
Greater
Melbourne.

* Inclusive of works in progress. See also paragraph 512 ante.
† Rural works consist mainly of weirs, dams, and tanks.

the disposal of the sewage of Melbourne other than that afforded by the Yarra and Saltwater rivers, which had become so polluted as to be a menace to the health of the inhabitants, the Government in 1889 engaged Mr. James Mansergh, C.E., an eminent English engineer who had made the drainage of towns his special study, to make a complete examination of Greater Melbourne, and to formulate a scheme for its efficient drainage. After nearly two months' stay Mr. Mansergh returned to England, and was long engaged in considering the subject and drawing up his report thereon. That report, which was completed on the 1st August, 1890, and laid before Parliament in the following month, deals with a district around Melbourne, embracing 18 urban municipalities, viz., 8 cities, 5 towns, and 5 boroughs, besides the greater portion of 6 shires, and containing an area of 80,500 acres, with a population of 430,600 inhabitants; whilst the scheme submitted is capable of providing for a future population of nearly 1,700,000. In the course of his investigations Mr. Mansergh came to the conclusion "that there is no spot within a practicable distance of the metropolis where its sewage can be got rid of into its natural outfall—the river or the sea—without being so treated as to remove the solid impurities which it contains"—*i.e.*, either on land or by chemical treatment. Mr. Mansergh recommends the construction of certain main sewers, the more important of which will convey the sewage to two pumping stations wherefrom it will be forced to high levels and allowed to flow by gravitation to two sewage farms situated on opposite coasts of Port Phillip Bay, at some distance from the city, where, after the solid matter has been deposited and rendered fit for use in cultivation, the effluent water will become clarified in percolating through the soil, and ultimately by means of subsoil drainage pipes find its way into the Bay. Mr. Mansergh calculates the capital cost of the scheme within the first eight years at about 5 millions sterling, and the ultimate cost at £5,816,500, and that it would take five years to execute the main works, and at least eight years to completely sewer the whole district. The gross annual charge, including an allowance of £191,651 for repayment of principal and interest in 50 years, is set down at £223,192 at the end of the fifth year, of which at least £81,140 will be defrayed from the water revenue, leaving a net charge of £142,052 to be provided for from the proceeds of a rate of 4·86d.* in the £ levied on all rateable property. It is also estimated that, after the payment of the principal in the time stated, the water revenue will alone be sufficient to pay the whole of the working cost.†

* At the end of the eighth year the rate will apparently be at a maximum, viz., 5½d.

† See Report on the Sewerage and Sewage Disposal of the proposed Melbourne Metropolitan District, dated 1st August, 1890, by James Mansergh, C.E., etc.: Parliamentary Paper, No. 182, Session 1890.

522. Throughout Victoria, the duration of leases of farms from private persons was returned in 1889-90 as averaging from 2 to 6 years; the extreme figures being 1 year and 14 years. The average rental of agricultural land per acre was stated to be from 6s. to 22s. 5d.; the extreme figures being 2s. and 90s. The average rental of pastoral land per acre was stated to be from 2s. to 10s.; the extreme figures being 1s. and 40s. It may be mentioned that 3s. 6d. per annum for as much land as will carry one sheep is considered a fair rental; thus land capable of carrying two sheep to the acre ought to be let for 7s. per acre per annum.*

Leases and
rental of
farms.

523. Each collector is required to furnish a statement of the price of the principal articles of agricultural produce in his district at the time he makes his rounds. The prices, being those prevailing in the place where the crops are grown, are generally lower than those obtaining in Melbourne, which are quoted at the end of Part Interchange *ante*. The following is an average deduced from the returns of all the districts during each of the last twenty-one years:—

Prices of
agricultural
produce.

PRICES OF AGRICULTURAL PRODUCE, 1870 TO 1890.

During February and March.	Wheat.		Oats.		Barley.		Maize.		Hay.	Potatoes.		Turnips.		Mangolds	
	per bushel.		per bushel.		per bushel.		per bushel.		per ton.	per ton.		per ton.		per ton.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	s.	d.	s.	d.	s.	d.
1870	4	3	3	7	4	0	4	10	77	75	0	...	...	40	0
1871	5	4	3	9	4	11	5	3	76	70	0	...	...	36	0
1872	4	8	2	11½	3	6¼	4	2	64	65	6	...	...	28	1
1873	4	9	3	5	4	1	3	10	81	67	4	...	...	24	5
1874	5	9	5	6	5	3	5	9	88	118	3	...	...	31	4
1875	4	5	4	3	4	6	4	8	89	89	0	...	...	28	0
1876	4	7	3	3	3	10	4	8	82	87	0	...	...	23	8
1877	5	10	3	7	3	10	4	4	93	114	0	...	...	31	6
1878	5	1	4	6	4	4	5	4	87	115	0	...	...	37	3
1879	4	2	3	6	4	1	4	2	75	92	4	...	...	25	6
1880	4	0½	2	3½	4	8	3	6½	63	69	11	...	...	24	11
1881	4	1¾	2	3	4	11¼	5	0	60	46	3	...	...	24	0
1882	5	0	3	3	3	6	5	4	76	70	0	...	...	25	4
1883	4	9	3	1	4	1	4	7	81	75	4	...	...	30	5
1884	3	8	2	8	3	6	4	8	67	74	8	35	5	29	5
1885	3	4	3	0	3	6	4	5	74	80	0	40	0	34	0
1886	3	10	2	10	3	3	4	1	74	100	0	48	6	24	6
1887	3	9	2	9	3	3	4	4	73	80	0	54	0	28	4
1888	3	4	2	7	3	6	4	2	59	65	0	27	0	24	0
1889	4	7	3	10	4	2	4	10	102	163	2	46	6	30	7
1890	3	8	2	10	3	2	4	1	62	83	4	58	3	28	5

524. The drought which occurred in 1888, together with the failure of crops in other parts of the world, caused the prices of all

Prices of
agricultural
produce,
1889-90 and
previous
years.

* In certain parts of the colony, where the soil is of especially good quality—especially in the Western District—much higher rentals have sometimes been obtained.

articles of agricultural produce to rise considerably in 1889, but the promise of improved yields, consequent upon the plentiful rainfall which took place in that year, caused a fall in price in 1890 to nearly the same rate which prevailed in 1888, the only exception being turnips, which fetched higher prices in 1890 than they did in either of the other six years named.

525. It will be observed that the price of wheat was highest in 1877, that of oats, barley, and maize in 1874, that of turnips in 1890, that of mangolds in 1870, and that of hay and potatoes in 1889; also that the price of wheat was lowest in 1885 and 1888, that of barley in 1890, that of oats and potatoes in 1881, that of maize in 1880, that of mangolds in 1876, and that of hay and turnips in 1888.

526. The wholesale price of wheat per Imperial quarter* in London during 1889 varied from 28s. 8d. in July to 30s. 10d. in January—the average for the year being 30s. The price has fallen off considerably since 1883, and in 1889 was even lower than that in 1886, which at the time was by far the lowest recorded since 1761, when it was 26s. 9d.† The following statement of the average *Gazette* prices (wholesale) during the six years ended with 1888 has been taken from an official source,‡ and that of the average prices in 1889 and the first seven months of 1890 has been taken from the *London Statist*:—

AVERAGE PRICE PER QUARTER OF WHEAT IN LONDON.

Month.	1883.		1884.		1885.		1886.		1887.		1888.		1889.		1890.	
	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.	s.	d.
January ...	40	2	38	7	33	7	29	10	35	8	31	1	30	10	30	0
February ...	40	11	37	3	32	8	29	5	33	3	30	4	30	5	29	11
March ...	42	3	37	7	31	10	29	10	32	10	30	4	30	4	29	10
April ...	41	11	37	5	34	1	30	7	32	9	30	4	30	0	29	9
May ...	43	2	37	9	36	8	31	10	33	9	31	5	29	10	32	0
June ...	42	10	37	2	33	6	31	7	35	1	31	6	28	10	32	10
July ...	42	2	37	0	33	8	31	2	34	4	31	10	28	8	33	2
August ...	43	6	36	11	33	5	32	5	32	6	35	0	30	7	...	...
September ...	41	10	33	9	31	3	31	10	29	1	35	10	30	5	...	...
October ...	40	5	32	3	30	11	29	11	29	2	31	5	29	4	...	...
November ...	40	3	31	5	30	11	31	2	30	5	31	10	30	2	...	...
December ...	39	6	31	1	30	6	33	2	31	0	31	0	30	1	...	...
The Year ...	41	7	35	8	32	10	31	0	32	6	31	10	30	0	...	...

527. Another official authority§ gives the highest, lowest, and average *Gazette* price of wheat, barley, and oats in England and Wales as follows, during each of the eleven years ended with 1888:—

* The Imperial quarter is equal to 8 bushels. † See Supplement to *The Statist* for 1887.
‡ Giffen's Statistical Abstract for the United Kingdom, 1874 to 1888.
§ Report on the Agricultural Returns of Great Britain, dated September, 1889, issued from the Privy Council Office, page 120.

AVERAGE PRICE OF WHEAT, BARLEY, AND OATS IN ENGLAND AND WALES.

Year.	Average Price per Quarter.								
	Wheat.			Barley.			Oats.		
	Highest Weekly.	Lowest Weekly.	The Year.	Highest Weekly.	Lowest Weekly.	The Year.	Highest Weekly.	Lowest Weekly.	The Year.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1878	52 4	39 0	46 5	44 8	30 9	40 2	28 5	20 7	24 4
1879	50 5	37 7	43 10	43 2	24 0	34 0	26 7	19 2	21 9
1880	48 4	39 5	44 4	37 7	25 7	33 1	28 2	20 2	23 1
1881	52 2	40 9	45 4	35 8	26 11	31 11	24 6	19 5	21 9
1882	51 3	39 2	45 1	36 11	25 10	31 2	25 9	19 1	21 10
1883	43 10	39 0	41 7	35 0	25 6	31 10	24 1	19 1	21 5
1884	39 0	30 5	35 9	32 8	27 1	30 8	23 5	18 10	20 3
1885	38 1	30 2	32 10	32 6	24 10	30 2	23 6	18 1	20 7
1886	33 11	29 0	31 1	29 7	22 4	26 7	21 4	16 7	19 0
1887	36 4	28 5	32 6	29 7	20 5	25 4	17 9	14 7	16 3
1888	38 1	30 0	31 11	32 5	18 8	27 10	20 9	15 5	16 9

528. The value of the agricultural produce raised in Victoria during the year ended 1st March, 1890, may be estimated at over $7\frac{3}{4}$ millions sterling. The following table shows the means whereby such an estimate is arrived at:—

VALUE OF AGRICULTURAL PRODUCE,* 1889-90.

Name of Crop.	Gross Produce and Price.				Estimated Value
			£	s. d.	£
Wheat ...	11,495,720 bushels	@	0	3 8	2,107,549
Oats ...	5,644,867	@	0	2 10	799,689
Barley ...	1,831,132	@	0	3 2	289,929
Other cereals ...	901,828	@	0	3 6	157,820
Grass and clover seed ...	54,547	@	0	4 0	10,909
Potatoes ...	157,104 tons	@	4	3 4	654,600
Onions ...	10,815	@	3	15 0	40,556
Chicory ...	1,376	@	10	0 0	13,760
Other root crops ...	24,699	@	1	15 0	43,223
Hay ...	666,385	@	3	2 0	2,065,794
Green forage ...	155,596 acres	@	2	10 0	388,990
Tobacco ...	4,123 cwt.	@	2	16 0	11,544
Grapes, not made into wine ...	59,428	@	0	10 0	29,714
Wine ...	1,578,590 gallons	@	0	4 0	315,718
Brandy ...	5,285	@	0	10 0	2,643
Hops ...	5,711 cwt.	@	4	13 4	26,651
Other crops ...	936 acres	@	10	0 0	9,360
Garden and orchard produce	29,243	@	30	0 0	877,290
Total ...					7,845,739

* For a summary of the estimated value of agricultural produce during a series of years, see table, "Value of Agricultural, Pastoral, and Mining Produce," *post*.

Value of
agricultural
produce in
various
countries.

529. The following figures, showing the annual value of agricultural produce in some of the principal countries of the world, have been re-arranged from those contained in a table published in the report of the United States Department of Agriculture for the month of April, 1890* :—

ANNUAL VALUE OF AGRICULTURAL PRODUCE IN VARIOUS COUNTRIES.

	Millions of £.
United States	604
Russia	509
Germany	456
France	444
Austria	322
United Kingdom	266
Italy	178
Spain	136
Australia	76
Canada	58
Argentine Republic	19½

Specific
weight of
crops.

530. The standard weight of crops in Victoria is reckoned to be 60 lbs. to the bushel for wheat, 40 lbs. for oats, 50 lbs. for barley, and 56 lbs. for maize. The actual weight, however, differs in different districts. The wheat, during 1889-90, ranged from 55 lbs. to 67 lbs.; oats, from 35 lbs. to 50 lbs.; barley, from 40 lbs. to 60 lbs.; and maize, 40 lbs. to 60 lbs. In the same year, taking the districts as a whole, the average weight per bushel of wheat was 60 lbs.; of oats, 41 lbs.; of barley, 52 lbs.; and of maize, 55 lbs.

Rates of
agricultural
labour.

531. The following figures show the average rates paid for agricultural labour in the last two years. Rations are allowed in all cases in addition to the wages quoted, except in the case of threshers, hop-pickers, and maize pickers :—

RATES OF AGRICULTURAL LABOUR,† 1889 AND 1890.

Description of Labour.				1888-9.		1889-90.	
				s.	d.	s.	d.
Ploughmen,	per week	...	...	22	3	22	1
Farm labourers,	"	...	...	19	0	19	9
Married couples,	"	...	...	26	1	25	8
Females,	"	...	...	11	3	11	9
Mowers,	"	...	...	32	0	32	6
"	per acre	...	...	5	1	5	2
Reapers, per week	...	...	...	30	5	30	4
"	per acre	...	...	12	9	14	9
Threshers, per bushel (without rations)	...	...	...	0	8¼	0	9
Hop-pickers, "	"	...	...	0	3½	0	3½
Maize-pickers, per bag	"	...	...	0	5¼	0	5

* Page 168.

† See also table of Wages at the end of Part "Interchange" ante.

532. The number and power of steam engines used on farms, and the value of farming plant and improvements, were returned as follows for the year under review and the previous one :—

Plant and improvements on farms.

STEAM ENGINES, IMPLEMENTS, AND IMPROVEMENTS ON FARMS, 1889 AND 1890.

	1888-9.	1889-90.
Steam engines, number	640	654
„ horse-power	5,006	4,870
Value of farming implements and machines	£2,782,848	£2,779,309
„ improvement on farms ...	£15,242,103	£15,729,676

533. The following figures, which have been obtained by means of averages struck from the returns of the collectors in all the districts, show the rates paid for machine labor in the last two years :—

Machine labour.

MACHINE LABOUR, 1889 AND 1890.

Average Rates paid for—	1888-9.	1889-90.
	s. d.	s. d.
Machine reaping, per acre { With binding ...	7 7	8 2
„ { Without binding ...	4 7	4 7
„ mowing, „	4 8	3 9
„ threshing, per 100 bushels :—		
With winnowing	21 5	19 6
Without winnowing	12 7	16 6

534. Information as to the numbers of live stock kept was obtained at the census of 1881, and since that time the figures have been brought on by estimates furnished by the municipal authorities. The following are the census numbers, and the numbers in March, 1890, as derived from the municipal estimates alluded to :—

Live stock, 1881 and 1890.

LIVE STOCK, 1881 AND 1890.

Period.	Horses.	Cattle.			Sheep.	Pigs.
		Milch Cows.	Exclusive of Milch Cows.	Total.		
3rd April, 1881 (enumerated)	275,516	329,198	957,069	1,286,267	10,360,285	241,936
March, 1890 (estimated)	329,335	368,047	1,026,162	1,394,209	10,882,231	249,673
Increase ...	53,819	38,849	69,093	107,942	521,946	7,737

Goats, asses,
and mules.

535. Besides the live stock returned at the census, as shown in the table, 68,426 goats, 135 asses, and 78 mules were then enumerated. No attempt has been made to bring these numbers on to any later period.

Estimates
not quite
reliable.

536. The estimates for 1890, as compared with the numbers returned at the census, show an increase in all kinds of stock. Too much reliance, however, must not be placed on any statement of the numbers of live stock, except such as is derived from the returns of a general census.

Stock per
square
mile

537. Speaking roughly, there are now in Victoria 4 horses, 16 head of cattle, 124 sheep, and 3 pigs, or, taking the different kinds together, 147 head of stock of these descriptions, large and small, to the square mile.

Dairy
produce.

538. No complete returns of dairy produce have ever been obtained in Victoria, but in 1889-90 it was ascertained that 31,775 milch cows produced on the average 42,285 gallons of milk daily, or about 15½ million gallons annually, from which over 2,200,000 lbs. of butter, and 1,790,000 lbs. of cheese were made in the year. The following estimate of the value of the dairy produce of the colony has been compiled according to the method adopted by Mr. D. Wilson, Government Dairy Expert, in his paper on “The Dairy Industry,” published in *Bulletin* No. 9 of the Victorian Department of Agriculture:—

VALUE OF DAIRY PRODUCE OF VICTORIA, 1889-90.

Nature of Produce.	Value.
	£
Milk consumed, at ¾-pint per head, per diem, 38,256,500 gallons at 8d.	1,275,216
Butter made from 89,786,250 gallons of milk, at an average of 2½ gal- lons to 1 lb. butter, 35,914,500 lbs. at 8d.	1,197,150
Cheese made from 17,957,250 gallons of milk, at an average of 1 lb. per gallon of milk, 17,957,250 lbs. at 6d.	448,931
Total 	2,921,297

NOTE.—The total milk yield is estimated—allowing 1 gallon of milk per diem to each milch cow in the colony—at 146,000,000 gallons, and it is reckoned that after taking into account the human consumption, five-sixths of the remainder is made into butter and one-sixth into cheese.

539. Information respecting the numbers of poultry kept is not Poultry. obtained except at the taking of a census. The following is a statement of numbers of the different kinds, according to the returns of the censuses of 1871 and 1881:—

POULTRY, 1871 AND 1881.

Year of Census.	Number of Owners of Poultry.	Geese.	Ducks.	Fowls.	Turkeys.	Pea Fowls	Guinea Fowls.	Pheasants	Ostriches.
1871 ..	81,347	83,025	137,355	1,636,782	69,756	970	3,542	199	16
1881 ..	97,152	92,654	181,698	2,328,521	153,078	1,701	2,307	40	..
Increase	15,805	9,629	44,343	691,739	83,322	731	1,235	159	16
Decrease	..	..	..	..	..	..	..	..	..

540. It is seen that in ten years an increase of nearly 16,000 took place in the number of keepers of poultry, also a fair increase in all the different kinds of poultry except guinea fowls. Pheasants and ostriches, although not strictly speaking poultry, were returned in 1871, but no ostriches at the latter period; moreover, pheasants fell off in number from 199 in 1871 to 40 in 1881. Increase or decrease of poultry.

541. The live stock in the United Kingdom and any British Possessions, respecting which the information is available, is officially stated to have been as follows in the years named:— Live stock in British Possessions.

LIVE STOCK IN BRITISH POSSESSIONS.

Possessions.	Year.	Number of—			
		Horses.	Cattle.	Sheep.	Pigs.
The United Kingdom ...	1889	1,945,386	10,272,765	29,484,774	3,905,865
Malta ...	1887	7,171	10,673	14,609	...
Cyprus ...	1886	53,243	54,658	289,837	...
India* ...	1887-8	888,039	46,089,178	25,880,571	518,700
Ceylon ...	1888	5,684	1,051,438	108,396	...
Mauritius ...	1884	12,000	15,000	30,000	30,000
Cape of Good Hope ...	1888	295,370	1,502,845	14,463,445	166,835
Natal ...	1888	49,548	655,932	609,805	45,569
Canada ...	1881	1,059,358	3,514,989	3,048,678	1,207,619
Newfoundland ...	1884	5,436	19,884	40,326	...
Jamaica ...	1888	67,635	113,649	14,399	...
Falkland Islands ...	1888	2,173	8,169	582,419	...
Australasia† ...	1888-9	1,486,819	9,209,801	96,580,640	1,171,697
Fiji ...	1888	684	6,754	6,996	1,903

* There are also in India 12 million buffaloes, nearly 1 million mules. Goats are included with the sheep, as given above.

† For particulars relating to each colony, see third folding sheet *ante*, and Appendix A. *post*.

Live stock
in Foreign
countries.

542. The following table contains a statement of the number of horses, cattle, sheep, and pigs in the principal Foreign countries. The information has been derived entirely from official documents:—

LIVE STOCK IN FOREIGN COUNTRIES (000's OMITTED).

Country.	Year.	Number of—			
		Horses.	Cattle.	Sheep.	Pigs.
EUROPE.					
Austria	1880	1,463,	8,584,	3,841,	2,721,
Belgium	1880	272,	1,383,	365,	646,
Bulgaria	1887	...	...	6,872,	394,
Denmark	1888	376,	1,460,	1,225,	771,
France	1887	2,909,	13,395,	22,880,	5,979,
Germany	1883	3,522,	15,787,	19,190,	9,206,
Greece	...	108,	164,	3,465,	180,
Holland	1887	274,	1,526,	804,	490,
Hungary	1884	1,749,	4,879,	10,595,	4,804,
Italy	1881-2	660,	4,783,	8,596,	1,164,
Norway	1875	152,	1,017,	1,686,	101,
Portugal	1870	...	625,	2,977,	971,
Roumania	1888	554,	2,260,	4,807,	770,
Roumelia (Eastern)	1883	44,	371,	1,859,	107,
Russia (European)	1883	17,881,	23,628,	46,725,	9,362,
Servia	1882	123,	827,	3,621,	1,068,
Spain	1878	310,	2,353,	16,939,	2,349,
Sweden	1887	481,	2,331,	1,378,	571,
Switzerland	1886	98,	1,211,	338,	394,
ASIA.					
Japan	1885	1,548,	1,060,	...	...
Java and Madura	1885	518,	4,530,	...	...
Russia in Asia	1874-83	1,070,	3,716,	10,612,	...
AFRICA.					
Algeria	1886	175,	1,198,	9,358,	87,
Egypt	1887	21,	462,	958,	...
Orange Free State	1881	132,	465,	5,056,	...
AMERICA.					
Argentine Republic	1888	5,000,	23,000,	80,000,	300,
Brazil	...	...	30,000,	...	...
Costa Rica	1884	...	206,	...	...
Guadaloupe	1880	6,	10,	14,	14,
Guatemala	1885	118,	494,	460,	...
Nicaragua	1884	...	400,	...	...
Paraguay	1887	62,	730,	32,	12,
United States	1889	14,214,	52,802,	44,336,	51,603,
Uruguay	1885	635,	5,924,	17,050,	100,
Venezuela	1883	292,	2,927,	3,491,	977,

Live stock
of the
world.

543. The following summary of the live stock of the world was published by Mr. J. R. Dodge, statistician to the Department of Agriculture of the United States* :—

* See Report No. 59 (new series) for January and February 1889, Government Printing Office, Washington.

LIVE STOCK OF THE WORLD (000's OMITTED).

Countries.	Horses.	Cattle.	Sheep.	Pigs.	Mules and Asses.	Goats.
Europe ...	33,253,	97,240,	186,557,	44,719,	3,727,	19,513,
Asia ...	4,195,	70,402,	36,649,	519,	1,182,	1,227,
Africa ...	656,	4,018,	28,959,	304,	600,	5,340,
North America ...	14,918,	55,093,	46,174,	51,530,	2,311,	15,
South America ...	5,992,	57,659,	101,090,	1,388,	1,512,	3,017,
Australasia ...	1,440,	8,966,	97,912,	1,208,	...	25,
Oceania ...	1,	3,	3,	20,	...	1,
Total ...	60,455,	293,381,	497,344,	99,688,	9,332,	29,138

544. The numbers of live stock slaughtereded in Victoria are furnished by the local bodies, but it is probable the returns do not in every case include the animals slaughtered by private persons, and on farms and stations, and, therefore, that more were really slaughtered than the figures show. The following were the numbers returned for 1888 and 1889, those for the latter year being in all cases larger than those for the former :—

LIVE STOCK SLAUGHTERED, 1888 AND 1889.

Year.	Cattle and Calves.	Sheep and Lambs.	Pigs.
1888 ...	249,475	2,366,525	144,528
1889 ...	250,822	2,383,946	145,724
Increase ...	1,347	17,421	1,196

545. The purposes to which the carcasses of the slaughtered animals were appropriated in 1889 were returned as follow :—

PURPOSES FOR WHICH LIVE STOCK WAS SLAUGHTERED, 1889.

Description of Live Stock.	Numbers Slaughtered for—			
	The Butcher and Private use.	Preserving or Salting.	Boiling down for Tallow or Lard.	Total.
Cattle and Calves ...	250,254	548	20	250,822
Sheep and Lambs ...	2,357,162	25,518	1,266	2,383,946
Pigs ...	74,935	70,789	...	145,724
Total ...	2,682,351	96,855	1,286	2,780,492

546. In the 10 years ended with 1888, the returns show the average number slaughtered annually for preserving and salting to have been of cattle 723, of sheep and lambs 79,812, and of pigs 49,734. These numbers, as regards pigs, are much below, but as regards cattle and sheep, are much above the numbers slaughtered for the same purposes in 1889.

Wool produced, 1888 and 1889.

547. The quantity of wool produced in Victoria during the year 1889 may be set down as 56,954,721 lbs.* valued at £2,449,368, These figures represent the excess of exports over imports during the year, to which is added the quantity and value of wool used in Victorian woollen mills. In the previous year, the quantity produced, similarly estimated, was 54,143,961 lbs., valued at £2,577,107.

Wool produced in Australasian colonies, 1885 to 1888.

548. The following is a statement of the quantity and value of wool produced in the various Australasian colonies in 1888 and the three preceding years. The estimate for each of the other colonies has been made upon the same principle as that for Victoria, viz., by substituting the difference between the imports and the exports for the entry as to the origin of the wool made at the Customs, to which has been added an estimate for the quantity used for manufacturing purposes during each of the years :—

WOOL PRODUCED IN THE AUSTRALASIAN COLONIES, 1885 TO 1888.

Colony.	1885.	1886.	1887.	1888.
QUANTITY.	lbs.	lbs.	lbs.	lbs.
Victoria ...	53,390,100	57,439,634	48,420,119	54,143,961
New South Wales ...	165,857,466	171,228,430	216,650,129	236,638,426
Queensland ...	42,472,071	28,700,546	47,482,926	50,675,289
South Australia ...	45,329,646	40,991,388	42,198,632	41,650,088
Western Australia ...	4,968,000	6,139,917	6,675,713	8,475,240
Tasmania...	5,774,142	8,300,180	9,846,830	7,134,438
New Zealand ...	87,470,035	92,741,733	90,776,881	87,291,513
Total ...	405,261,460	405,541,828	462,051,230	486,008,955
DECLARED VALUE.	£	£	£	£
Victoria ...	2,960,890	2,778,160	2,400,515	2,577,107
New South Wales ...	7,122,366	6,947,526	8,925,516	9,167,534
Queensland ...	1,779,682	1,413,908	2,368,711	2,258,365
South Australia ...	1,411,872	1,227,007	1,323,879	1,334,589
Western Australia ...	248,400	332,519	333,785	423,762
Tasmania...	260,480	319,227	422,531	317,423
New Zealand ...	3,240,630	3,200,499	3,453,278	3,386,504
Total ...	17,024,320	16,218,846	19,228,215	19,465,284

Wool produced in each colony.

549. It appears by the figures that Victoria, in 1888, did not produce a fourth as much wool as New South Wales, and produced not quite two-thirds as much as New Zealand. She, however, produced rather more than Queensland, and a third more than South Australia. Western Australia, notwithstanding the immense extent

* The quantity of Victorian wool exported in 1889, according to the Customs returns, was 118,817,873 lbs., or considerably more than the total quantity given above as produced in Victoria.— (See footnotes on pages 100 and 101, ante.) There is no doubt, however, that, in order to obtain the higher price generally realized in England and elsewhere for Victorian wool, much wool produced outside the colony is entered at the Customs as Victorian.

of her territory, produced but little more than the island of Tasmania. The wool clip was much larger in 1888 than in any of the other years in New South Wales, Queensland, and Western Australia, but was exceeded in one or more of the years in the other colonies.

550. The figures also show that the wool produced in the Australasian colonies, in 1888, was more by nearly 24 million pounds than in 1887, by nearly 80½ million pounds than in 1886, and by nearly 81 million pounds than in 1885; and, further, that the value of such wool was greater in 1888 than in 1887 by £237,000; than in 1886 by £3,247,000; and than in 1885 by over £2,440,000.

551. The following statement of the wool produced in one year in various countries has been computed, except as regards Australasia, from figures given in the Third Annual Report of the Statistical Institute of Holland* :—

WOOL PRODUCED IN VARIOUS COUNTRIES.

	lbs.		lbs.
Australasia (1888) ...	486,009,000	Italy (1874) ...	21,378,800
Russia (1878) ...	390,548,800	Asiatic Turkey and Persia	13,224,000
Argentine Republic (1882)	244,666,040	Natal (1881) ...	12,496,680
United States (1882) ...	233,073,000	Austria (1881) ...	10,909,800
United Kingdom (1882) ...	127,942,200	Portugal ...	10,358,800
France (1879) ...	90,319,920	Belgium (1865) ...	4,408,000
Spain (1878) ...	66,120,000	British North America (1881)	3,570,480
Germany (1881) ...	54,879,600	Sweden (1870) ...	3,306,000
Cape Colony (1881) ...	42,427,000	Other countries ...	96,976,000
Uruguay (1880) ...	41,369,080		
Hungary (1880) ...	35,682,760		
British India (1881-2) ...	21,400,840		
		Total	2,011,066,800

552. The average price per lb. of Victorian wool in 1889, based upon its declared value before leaving this colony, as obtained from the Customs returns of exports, was not quite 10½d., as against not quite 10⅓d. in 1888, nearly 10⅝d. in 1887, 11⅜d. in 1886 and 1885, and 12⅞d. in 1884. There was thus a rise of nearly ½d. per lb. as compared with 1888, but a slight fall (⅓d.) as compared with 1887, a fall of nearly 1d. per lb. as compared with 1886 or 1885, and of 2½d. per lb. as compared with 1884. This would appreciate the wool produced in Victoria during 1889 by £84,600, as compared with a similar quantity in 1888; but depreciate it by £282,000 as compared with a similar quantity in 1887; by £197,500 as compared with a similar quantity in 1886 or 1885; and by £535,600 as compared with a similar quantity in 1884.†

* See *Bijdragen van het Statistisch Instituut*, Amsterdam, 1887, page 19; there given in kilogrammes, each of which has been assumed to be equal to 2·204 lbs.

† See also Part "Interchange," ante, where the export value of all wool—not Victorian wool only—is dealt with.

Price of
wool in
Melbourne.

553. In the foregoing paragraph, the price given is the average for all descriptions of wool included in the one total, so that it is possible that a variation in the quality or condition may to a certain extent account for the difference in the declared value. The variation in the price of wools of like quality will, however, be readily recognised by means of the figures in the following table, which have been kindly supplied for this work by Messrs. Goldsbrough, Mort and Co. (Limited), Melbourne:—

AVERAGE PRICE PER LB. OF WOOL IN MELBOURNE, 1885 TO 1890.

Year.	Greasy.		Washed.*	
	Merino.	Crossbred.	Fleece or Washed.	Scoured.
	d.	d.	d.	d.
1884-5	10½	9	20	19
1885-6	8½	8	16	15
1886-7	10½	9	17	18
1887-8	9½	8	15½	16
1888-9	10½	10	18	17½
1889-90	11½	11	18½	19½

Price of
Australian
wool in
London.

554. The average price in 1888 of Australian wool in London, as officially computed from the returns of imports by the Agricultural Department† of the Privy Council, was ¼d. lower than in 1885 and 1887, 1d. higher than in 1886, but much lower than in any other previous years. The following are the results obtained for the twenty-four years ended with 1888:—

AVERAGE PRICE OF AUSTRALIAN WOOL IN LONDON, 1865 TO 1888.

per lb.				per lb.			
		s.	d.			s.	d.
1865	...	1	7¾	1877	...	1	3
1866	...	1	8½	1878	...	1	2½
1867	...	1	7½	1879	...	1	2½
1868	...	1	3½	1880	...	1	2¾
1869	...	1	2½	1881	...	1	2½
1870	...	1	3¼	1882	...	1	0½
1871	...	1	2¼	1883	...	1	0½
1872	...	1	3	1884	...	1	0½
1873	...	1	3¼	1885	...	0	10½
1874	...	1	2¾	1886	...	0	9¼
1875	...	1	4¼	1887	...	0	10½
1876	...	1	3¼	1888	...	0	10¼

Price of wool
of each
Austral-
asian
colony in
London.

555. The Supplement to the *Statist* (London journal) of the 11th February, 1888, gives the following quotations of the price of greasy wool produced in four of the Australian colonies during the eight years ended with 1887. The wool is described as “good average

* Comprising both merino and crossbred.

† Report dated September, 1889, page 121.

greasy” in the case of Victoria; “average greasy” in the case of New South Wales and South Australia; and “superior greasy” in the case of New Zealand. The average price of “good to superior” Victorian wool is also given:—

AVERAGE PRICE OF THE WOOL OF EACH AUSTRALIAN COLONY
IN LONDON, 1880 TO 1887.

Year.	Prices per lb. on 31st December.					
	Greasy Wool, the Produce of—					Good to Superior Wool, the Produce of Victoria.
	Victoria.	New South Wales.	South Australia.	New Zealand.	Australia Crossbred (Superfine).	
	d.	d.	d.	d.	d.	d.
1880	13	11	10	13½	14½	23½
1881	12	10½	9½	12½	14	22
1882	12½	10½	9	12½	13½	22½
1883	12½	10	9	12½	13½	22
1884	11½	9½	8	12	13½	22½
1885	9½	8	6½	10	11½	17
1886	10	8	6½	10½	12	18
1887	10	8	6½	11	12½	18

556. The following is an estimate of the gross value of pastoral produce raised on holdings of all descriptions in 1889-90:—

Value of
pastoral
produce.

VALUE OF PASTORAL PRODUCE, 1889-90.

Nature of Produce.	Value.
	£
Milk, butter, and cheese, from 368,047 milch cows kept, @ £8 10s. ...	3,128,399
Estimated value of stock produced in 1889:—	
Cattle, 368,047, viz., 245,365, @ £8, and 122,682 (calves), @ 30s.	2,146,943
Sheep, 2,720,558, @ 7s. 6d.	1,020,209
Pigs, 74,902, @ £2 10s.	187,255
Horses, 16,467, @ £8	131,736
Excess of exports over imports of wool, Customs value	2,333,440
Estimated value of wool used in the colony for manufacturing purposes, 1,738,929 lbs., @ 1s. 4d.	115,928
Total	9,063,910

NOTE.—The principle on which the numbers of “stock produced” have been estimated is as follows:—It has been assumed that the increase of cattle amounted to one to every milch cow, and that one-third of the calves born were slaughtered for veal, the remainder taking the place of the older cattle slaughtered. The increase of sheep has been reckoned at 25 per cent. on the total number of both sexes over six months old in the colony, that being the proportionate increase ascertained by Mr. A. J. Skene, the late Surveyor-General of Victoria, to have taken place during a series of years on nearly 3¼ millions of sheep on 34 stations situated in various parts of the colony. The increase of pigs and horses has been arbitrarily estimated at 30 and 5 per cent. respectively upon the total numbers of such stock. The value per head set down for the different kinds of stock is intended to represent the average value per head of all the stock of each kind in the colony, young and old; for although the stock born in the year would be only six months old, on the average, when the year terminated, and would, consequently, not be of so high a value as the figures indicate, yet all the growing or fattening stock may be considered to have become more valuable during the year, and the increase of bulk, and consequently of value, of such stock may fairly be set down as part of the year’s produce as much as the stock actually born therein, the numbers of the latter being taken as a basis whereto such values may be applied. The quantity of wool manufactured in Victoria has been ascertained from the various woollen mills. No estimate has been made of the value of meat, tallow, lard, hides, skins, horns, hoofs, bones, etc., as this is supposed to be included in the value of stock produced.

Australasian
fresh meat
in London.

557. Australian-killed fresh meat was delivered in London for the first time in the year 1880, when the supply consisted of 60 carcasses of beef and 555 of mutton. New Zealand fresh meat was first delivered in 1882. The following, according to the Agricultural Department of the Privy Council,* are the quantities delivered from Australasia in the eight years ended with 1888 :—

AUSTRALIAN AND NEW ZEALAND-KILLED FRESH MEAT DELIVERED IN LONDON, 1881 TO 1888.							
Cwt.				Cwt.			
1881	...	...	11,300	1885	...	...	230,400
1882	...	...	34,540	1886	...	...	294,220
1883	...	...	93,420	1887	...	...	302,140
1884	...	...	222,560	1888	...	...	398,960

Price of
meat in
London.

558. In the same eight years the average prices of beef and mutton in London, by the carcass, are quoted as follow † :—

AVERAGE WHOLESALE PRICE OF BEEF AND MUTTON IN LONDON, 1881 TO 1888.

			Beef per lb.	Mutton per lb.
1881	...	...	4½d. to 7¼d.	5d. to 9d.
1882	...	...	4¾d. „ 8d.	5½d. „ 9½d.
1883	...	...	5d. „ 8d.	5¾d. „ 9¾d.
1884	...	...	4¼d. „ 7¾d.	5d. „ 8¾d.
1885	...	...	3¾d. „ 6¾d.	4¼d. „ 7½d.
1886	...	...	3½d. „ 6¼d.	4d. „ 8d.
1887	...	...	3d. „ 5¾d.	3¾d. „ 7d.
1888	...	...	3¼d. „ 6¼d.	3¾d. „ 7¾d.

Rabbits.

559. Tame rabbits were kept in Victoria during the early years of the colony, but rabbits were first turned out upon an extensive scale by a landed proprietor in the Western district. They bred rapidly, and for several years there was a demand for specimens in most districts of the colony for breeding purposes. At that time no one seems to have thought of the nuisance they might eventually become, and of the large expenditure which would be necessary to keep down their numbers. There are now few parts of Victoria which are not infested with them,‡ although, in consequence of the vigorous efforts which have been made by the Government, by Shire Councils, and by private individuals, to suppress the evil, there are not so many as formerly. It is found, however, that if efforts are relaxed they breed so rapidly that they soon become as

* Report dated September, 1889, page 108. † Ibid., pages 114 and 115.
‡ It is estimated that their ravages extend over 40 millions out of the 56 millions of acres in the colony of Victoria.

numerous as ever. Some persons have advocated the introduction of animals hostile to rabbits, such as ferrets, weasels, or the mangouste (Indian ichneumon*), but where this has been tried it has been found that the introduced animals have been so destructive to poultry that the rabbits were the lesser evil of the two; it was also discovered that, as a rule, these animals only attack rabbits when hungry, and cease to do so as soon as they become satiated, consequently it would have been necessary to introduce immense numbers to cope with the multitude of rabbits with which the colony is infested. The most successful way of destroying rabbits has been found to be poisoning either with phosphorized oats, or wheat, or with arsenic mixed with bran or chaff, or else with the fumes of bisulphide of carbon, which, being placed in their burrows, speedily effects the desired object if all the entrances are properly stopped. They are also largely trapped and shot, in which case their flesh is available for food. The following account of the steps which have been taken to exterminate the rabbits has been supplied by the branch of the Department of Crown Lands under which the *Rabbit Suppression Acts* are administered:—

RABBIT EXTERMINATION.

The first *Rabbit Act* came into force on the 28th December, 1880. Its principal provisions are:—

Owners or occupiers are liable for destruction of rabbits on their land.

Licensees, part 2 *Land Act* 1869 and section 49 *Land Act* 1869, deemed owners.

Pastoral tenants not deemed owners or occupiers, and were exempted (altered by Act 813).

Crown liable for all unoccupied Crown land and land held under pastoral licence, but not liable to be served with notice by shire council to destroy rabbits, nor to be summoned in default of compliance (altered by Act 813).

The enforcement of the provisions of the Act (*re* the destruction of vermin on all private lands) entrusted to the shire councils with power to compel destruction of log, brushwood fencing, and stone walls when deemed to be harbour for vermin. Occupier failing to clear land after notice, council to clear and recover expenses in any court of competent jurisdiction.

The second Act No. 721 in force on the 24th December, 1881, repealed section 7 of Act 683, conferred power on inspectors of the councils to serve notices and to enter and destroy (if not complied with after 14 days) and recover costs.

Under the third Act No. 813 in force the 12th December, 1884:—

All licensees are owners and liable to be served with notices to destroy and be summoned in default of compliance after 14 days, shire to do the work and recover. It also places the Board of Land and Works in the same position, rendering it liable to be called upon to clear unoccupied Crown lands of rabbits, dead timber, and other harbour.

Gives power to Board of Land and Works to arrange with any shire to destroy rabbits on Crown lands on terms to be agreed upon.

Enables shires to recover expenses incurred in clearing private holdings before two justices in lieu of court of competent jurisdiction.

Authorizes shire council inspector to act on his own authority in lieu of waiting directions of shire council.

* *Herpestes mangos* of Desmarest.

Provides that any person having a live rabbit in his possession be liable to a penalty up to £100 on conviction.

Provides that it shall be the duty of every shire council to take simultaneous action to destroy vermin on any day appointed by the Governor-in-Council, and continue such action till district is certified as clear. Any shire not complying may be proclaimed an infested district by Governor-in-Council, and a local committee appointed to attend to the matter, with power to perform all duties. Expenses not recoverable from an owner to be a debt due by council, and if not paid may be satisfied out of municipal subsidy.

Gives power to proclaim any animal a natural enemy of the rabbit and protect it.

The foregoing is a brief extract of the principal features of the present Rabbit Acts, and for further information it may be stated there are about 102 shires and boroughs in the colony of Victoria more or less infested with rabbits, but in many of them the pests have not, up to the present, increased to a sufficient extent to cause any damage. Active operations to destroy the vermin on Crown lands were not taken until towards the latter end of 1881. During the first two years the operations extended to only about 20 shires; but to such an extent had the evil spread, that it was early found imperative to extend the scope of operations, and at the present time the Department is working Crown lands in upwards of 40 shires.

The amounts expended on rabbit extermination are as follow :—

1879 80	...	£1,280	1885-86	...	£24,833
1880-81	...	£2,600	1886-87	...	£21,065
1881-82	...	£12,890	1887-88	...	£20,551
1882-83	...	£9,883	1888-89	...	£17,621
1883-84	...	£10,063	1889-90	...	£24,000*
1884-85	...	£22,177			

These amounts include expenditure on labour, inspectors' salaries, materials, cartage, etc., and for working unoccupied Crown lands.

The pests have of late years been largely diminished, and operations on the whole attended with marked success. The greatest obstacle in the way of effectually clearing land of the pest is found in the difficulty of enforcing simultaneous and continuous action; when once this difficulty is overcome by the whole operations being placed in the hands of the Government, with sufficient powers to enforce the working of all the infested lands at one time, the rabbits will soon be effectually destroyed, and a moderate expenditure suffice to keep them within a very small limit.

A few years ago, on one estate alone, upwards of £15,000 was expended in efforts to clear the land from the pest.

It is estimated that, including the expenditure of private individuals, shire councils, and the Government, loss by depreciation in grazing capabilities of land and destruction to crops, the colony has sustained a loss of about three millions by the introduction of these four-footed rodents; but the damage has been immensely reduced during the last five years, and at present is not great, though any relaxation of efforts would in two or three years result in the animals being as numerous as ever. Phosphorized wheat and oats, bran and chaff and arsenic, strychnine water, arsenic and carrots, have been amongst the most successful poisons, but where burrows abound, and can be got at, bisulphide of carbon is the most deadly and effective enemy of the rabbit, and never fails to destroy them when properly used, unless the soil be of too porous a nature to hold the gas; in this case digging out is the best remedy. In concluding, it may interest some persons who are not fully aware of the prolific nature of rabbits, to state that in three years, under favourable circumstances, two pairs of rabbits, if undisturbed in any way and sufficient food abounded, would increase to the enormous number of five millions, which fully shows the necessity that exists for continuous and vigorous action to destroy them.

560. In the thirteen years ended with 1889, nearly 39 millions of rabbit skins, valued at £258,000, have been exported from Victoria.

* Approximate figures.

Exports of
rabbit
skins.

In addition to these, many have been used in the colony by hat manufacturers* and others, and large numbers have doubtless been destroyed or allowed to decay. The following are the exports of rabbit skins in the period referred to:—

EXPORTS OF RABBIT SKINS, 1877 TO 1889.

Year.	Rabbit Skins Exported.		Year.	Rabbit Skins Exported.	
	Number.	Value.		Number.	Value.
		£			£
1877	700,565	5,790	1885	3,424,259	23,548
1878	711,844	6,206	1886	910,609	6,800
1879	1,036,372	7,322	1887	2,663,314	16,294
1880	3,309,408	21,674	1888	3,967,533	20,759
1881	4,473,108	32,217	1889	3,429,015	12,303
1882	4,929,432	37,538			
1883	4,245,596	30,364	Total ...	38,764,426	258,058
1884	4,963,371	37,243			

561. The number of couples of rabbits received at the Melbourne fish market, the number sold, and the number condemned during the last four years, were as follow :—

Rabbits sent to market in Melbourne.

RABBITS SENT TO MELBOURNE MARKET.

Year.	Number of Couples of Rabbits.		
	Sold.	Condemned.	Total.
1886-7	346,856	4,460	351,316
1887-8	418,618	2,272	420,890
1888-9	474,384	13,458	487,842
1889-90	606,568	11,567	618,135
Total	1,846,426	31,757	1,878,183

562. For some time past experiments have been in progress in various parts of Australia upon a method of destroying rabbits by disease. The proposition last under consideration was that of M. Pasteur, the eminent French physician and chemist, who proposed to infect the rabbits with the rabbit itch or scab, a complaint resulting

Destruction of rabbits by disease

* Mr. E. Shaw, the manager of the Denton Mills Hat Factory, reports that during the three years ended with 1888, about 600 dozen rabbit skins had been used weekly in that establishment. This would give a total of 374,400 skins yearly, or 1,123,200 in the three years.

from the presence of a parasite called *sarcoptes cuniculi*, and believed to be identical with chicken cholera. To test this method the Government of New South Wales appointed a Royal Commission, which held numerous sittings and took a large amount of evidence upon the subject. An account of the report of this Commission, which was unfavourable to M. Pasteur's scheme, was published in the last edition of this work.*

rabbit fence
between
Victoria
and South
Australia.

563. With the view of keeping the rabbits and wild dogs on the South Australian side of the border from crossing into Victoria, a fence of wire netting has been erected by the Victorian Government, commencing at about $36^{\circ} 45'$ south latitude and extending north to the Murray, a distance of 150 geographical miles. From the commencing point of this fence the Government of South Australia has fenced south for about 36 miles along the Victorian frontier, but it is not known whether it intends to continue the fencing to the sea. As the distance from the Murray to the sea is 282 miles, the portion undertaken by Victoria covers more than one-half of the whole.

rabbit
suppression
bill.

564. An Act† was passed on the 25th November, 1889, to amend and consolidate the law providing for the destruction and suppression of rabbits and other vermin. It provides for the supply of wire netting to the settlers wherewith to erect rabbit proof fences, the amount to be paid back in ten annual instalments, without interest. All the settlers have to do is to apply to the shire councils for the wire netting, the estimated cost per mile being £18 or £20. The councils will be held responsible for the repayment, and are to collect the moneys advanced and account for the same to the Government. It has been suggested that the applicants should join in groups to fence in their holdings, it being relatively cheaper to fence in a large block than a number of small ones. In introducing the measure, the then Minister of Lands, the Hon. J. L. Dow, stated that whilst the annual expenditure of Victoria on rabbit destruction was about £20,000, that of New South Wales was about £90,000, and that of South Australia was over £40,000; but that the magnitude of the evil was not disclosed by these figures, which simply represented what was spent on Crown lands. In addition, there was the large expenditure incurred by private individuals in attempting to keep

* See *Victorian Year-Book*, 1888-9, Vol. II., paragraph 545.

† *The Vermin Destruction Act* 1889 (53 Vic. No. 1,028).

their land clear. The sum of £150,000 was placed upon the estimates 1889-90 to be expended on the purchase of wire netting in accordance with the provisions of the Act.

565. In 1890, as compared with 1889, whilst a decrease of 7 Flour mills. occurred in the number of mills, and of 32 in the number of pairs of stones employed, there was an increase of over 400 in the horse-power of machinery; and of 31 in the sets of rollers in use. The wheat operated upon fell off by 1,700,000 bushels, and the flour made by over 37,000 tons*; but, on the other hand, the other grain operated upon increased by 142,000 bushels. The hands employed were fewer by 11, and a decrease of £72,584 took place in the estimated value of machinery, lands, and buildings :—

FLOUR MILLS, 1889 AND 1890.

Year ended March.	Number of Mills.	Mills employing—		Amount of Horse-power of Machinery.	Number of Pairs of stones.	Number of sets of Rollers.
		Steam-power.	Water-power.			
1889 ...	114	107	7	3,174	301	396
1890 ...	107	100	7	3,585	269	427
Increase	...	...	...	411	...	31
Decrease	7	7	...	...	32	...

Year ended March.	Number of Hands employed.	Grain operated upon.		Flour made.	Approximate total Value of—		
		Wheat.	Other.		Machinery and Plant.	Lands.	Buildings.
		bushels.	bushels.	tons.*	£	£	£
1889 ...	803	8,903,320	234,149	184,056	323,404	153,325	247,500
1890 ...	807	7,203,602	376,280	146,828	303,232	122,007	226,406
Increase	4	...	142,131	...	...	...	...
Decrease	...	1,699,718	...	37,228	20,172	31,318	21,094

566. In 1881 the statistics were collected by the census sub- Value of enumerators, and consequently it was possible to obtain more complete materials used and information than is supplied in ordinary years by the collectors produced. employed by the local bodies, especially in regard to the values of materials operated upon and articles produced, which, in the case of the flour mills, were as follow :—

* A ton of flour is considered to be equivalent to 2,000 lbs.

FLOUR MILLS, 1880-81.

Value of materials operated upon	...	£1,412,099
„ articles produced	...	1,651,351
Increased value		£239,252, or 17 per cent.

Breweries.

567. The number of breweries returned was 2 more in 1890 than in 1889; whilst the hands employed in breweries increased by 146, and the horse-power of machinery increased by 235; moderate increases also took place in the materials used and beer brewed, the latter being more by over 253,000 gallons than that in the previous year; although the value of lands was less by £53,575, a higher value by over £84,000 was set down for the machinery, plant and buildings :—

BREWERIES, 1889 AND 1890.

Year ended March.	Number of Breweries.	Breweries employing—				Number of Hands employed.	Materials used.		
		Steam-power.	Water-power.	Manual Labour only.	Amount of Horse-power of Machinery.		Sugar.	Malt.	Hops.
1889	68	52	1	15	538	1,106	lbs. 15,674,848	bushels. 813,160	lbs. 1,003,925
1890	70	57	1	12	773	1,252	15,975,568	841,841	1,038,073
Increase	2	5	...	...	235	146	300,720	28,681	34,148
Decrease	...	...	...	3	...	...	...	...	...

Year ended March.	Beer made.	Approximate Total Value of—		
		Machinery and Plant.	Lands.*	Buildings.
1889	gallons. 19,798,272	£ 172,928	£ 755,981	£ 349,108
1890	20,051,346	206,233	702,406	399,851
Increase	253,074	33,305	...	50,743
Decrease	...	...	53,575	...

Value of materials used and produced.

568. The value of the sugar, malt, and hops used, and of the beer made, were returned for the census year, but not since. The following are the figures given :—

BREWERIES, 1880-81.

Value of materials used	..	...	£442,885
„ of beer made	...	...	780,501
Increased value		...	£337,616, or 76 per cent.

* The figures in this column apply to purchased lands only. One brewery in 1889 and 1890 was upon Crown lands; in this case no valuation of the land has been given.

569. The beer made in Victoria during 1889-90 amounted to 20,051,346 gallons; and the quantity imported, after deducting exports, was 1,534,185 gallons. These numbers gave a total consumption of 21,585,531 gallons, or an average of $19\frac{2}{5}$ gallons per head. The consumption of beer per head in 1888-9 was as much as 20 gallons, in 1887-8 $18\frac{2}{3}$ gallons, in 1886-7 $17\frac{1}{2}$ gallons, and in the two previous years no more than 16 gallons.

570. The following is a statement of the quantity of beer brewed in one year in the United Kingdom, four countries of Europe, and the United States:—

BEER BREWED IN VARIOUS COUNTRIES* (000's OMITTED).

	gallons.		gallons.
United Kingdom (1885) ...	989,890,	Austria-Hungary (1884) ...	272,624,
Holland (1884) ...	932,228,	Belgium (1885) ...	206,074,
United States (1888) ...	819,640,	France (1883) ...	189,618,

571. The average annual consumption of malt liquor per head in various countries may be set down as follows, the figures being generally calculated over a series of years:—

ANNUAL CONSUMPTION OF BEER PER HEAD IN VARIOUS COUNTRIES.

	gallons.		gallons.
United Kingdom ...	28·74	Tasmania ...	10·02
Germany ...	19·38	New Zealand ...	9·59
Holland ...	19·05	Switzerland ...	8·15
South Australia ...	20·04	Austria-Hungary ...	6·83
Victoria ...	19·36	France ...	4·53
New South Wales ...	11·94	Canada ...	3·05
United States ...	10·74	Sweden ...	2·52
Queensland ...	10·23		

572. The brickyards and potteries were fewer by 8 in 1890 than in 1889, and the hands employed by 7; but the horse-power of machinery employed was increased by 505. The number of bricks made was smaller than in the previous year by $1\frac{1}{4}$ million; and there was also a decrease of nearly £1,700 in the value of pottery made. The plant and buildings show an increased value of about £49,000, whilst the value of lands was less by £2,240. The following are the comparative figures of the two years:—

* Computed, in most cases, from figures given in the *Bijdragen van het Statistisch Instituut*, 1887, page 15, there stated in hectolitres, each of which has been assumed to be equal to 22 Imperial gallons.

BRICKYARDS AND POTTERIES, 1889 AND 1890.

Year ended March.	Number of Brick- yards and Potteries.	Number of Machines in use.		Brickyards employing—			Amount of Horse- power of Machinery.	Number of Hands employed.
		For tempering or crushing Clay.	For making Bricks or Pottery.	Machines worked by—		Manual Labour.		
				Steam.	Horses.			
1889 ...	241	236	130	75	102	64	1,879	3,250
1890 ...	233	237	117	78	82	73	2,384	3,243
Increase	...	1	...	3	...	9	505	...
Decrease	8	...	13	...	20	...	...	7

Year ended March.	Number of Bricks made.	Approximate Total Value of—			
		Pottery made.	Machinery and Plant.	Lands.*	Buildings.
		£	£	£	£
1889 ...	277,896,807	71,927	256,471	408,702	210,242
1890 ...	276,650,844	70,240	293,560	406,462	222,206
Increase ...	...	...	37,089	...	11,964
Decrease ...	1,245,963	1,687	...	2,240	...

Tanneries, fellmongeries, etc.

573. The establishments for tanning and wool-washing were more numerous by 1, and the tanpits by 73, in 1890 than in 1889, although a decrease of 11 took place in the number of hands employed; whilst the returns show an increase of about £45,800 in the value of plant, lands, and buildings connected with that industry. Notwithstanding the slight increase in the number of establishments, the work done as a whole was in excess of that in the previous year; for although the hides tanned were fewer by 5,856, the skins tanned were more numerous by 385,759, the skins stripped by 689,415, and the wool washed, other than that stripped from skins, was more by 167,274 lbs. The following are the particulars for the two years :—

TANNERIES, FELLMONGERIES, AND WOOL-WASHING ESTABLISHMENTS, 1889 AND 1890.

Year ended March.	Number of Establishments.	Establishments employing—					Amount of Horse-power of Machinery.	Number of Hands employed.	Number of Tan Pits.
		Steam-power.	Wind-power.	Water-power.	Horse-power.	Manual Labour only.			
1889 	136	65	2	...	7	62	724	1,587	3,571
1890 	137	68	...	1	11	57	825	1,576	3,644
Increase ..	1	3	...	1	4	...	101	...	73
Decrease ...	...	...	2	...	...	5	...	11	...

* The figures in this column apply to purchased lands only Twenty-three of the brickyards in 1889 and thirty-one in 1890 were on Crown lands.

TANNERIES, FELLMONGERIES, AND WOOL-WASHING ESTABLISHMENTS,
1889 AND 1890—*continued*.

Year ended March.	Number Tanned of—		Number of Skins Stripped of Wool.	Other Wool Washed.	Approximate Total Value of—		
	Hides.	Skins.			Machinery and Plant.	Lands.*	Buildings.
				lbs.	£	£	£
1889	354,000	1,382,815	1,752,553	9,275,923	87,154	102,966	115,505
1890 ...	348,144	1,768,574	2,441,968	9,443,197	107,535	105,607	138,296
Increase...	...	385,759	689,415	167,274	20,381	2,641	22,791
Decrease	5,856	...	...	...	...	...	...

574. An estimate of the value of the materials used and articles produced in tanneries, fellmongeries, and wool-washing establishments was obtained at the census of 1881, but no later information exists respecting these values. The following are the figures:—

Value of
materials
used and
produced.

TANNERIES, FELLMONGERIES, AND WOOL-WASHING ESTABLISHMENTS,
1880–81.

Value of materials used	...	...	£1,008,531
„ articles produced	...	...	1,406,274
Increased value	...	...	£397,743, or 39 per cent.

575. An Act† to encourage the growth of the several species of acacia, locally known as “wattle,” the bark of which is of great value for tanning purposes, was passed on the 25th November, 1889. The Act allows selections of 1,000 acres each for wattle cultivation, to be taken up on a 21 years’ lease at a rental of not less than 2d. per acre per annum for the first seven years, not less than 4d. for the next seven years, and not less than 6d. for the third period of seven years, the right being given to select 320 acres of the area as a freehold. It is stipulated that the planting of one-fifth of the area must be made each year after the first, so that the whole may be covered by the end of the sixth year. The tree being of exceedingly quick growth, the bark is fit for stripping in 5 or 6 years. It is a peculiarity of the wattle that whilst its timber, which is valueless, becomes finer on good land, its bark producing properties are said to be greatest on

Wattle
Cultivation
Bill.

* The figures in this column apply to purchased land only. Six of the establishments in 1889, and seven in 1890 were on Crown lands. In these cases no valuation of the land is given.

† The Wattle Trees Cultivation Act 1889 (53 Vict. No. 1,037).

poor arid soils. Large areas of land suitable for the growth of the wattle have been thrown open for selection under this Act.

576. The number of woollen mills returned was 1 less in 1890 than in 1889, and a decrease of 31 also occurred in the number of hands employed, and of £44,600 in the value of plant, lands, and buildings; but, notwithstanding this, there was an increase of 85,375 lbs. in the quantity of wool used, of 8,846 in the number of yards of tweed, cloth, and flannel made, and also increases in the number of blankets and shawls manufactured.

Woollen
mills.

WOOLLEN MILLS, 1889 AND 1890.

Year ended March.	Number of Woollen Mills.	Number of Spindles.	Horse- power of Machinery.	Quantity of Wool used.	Goods Manufactured : Quantity of—		
					Tweed, Cloth, Flannel, etc.	Blankets.	Shawls.
				lbs.	yards.	pairs.	number.
1889 ...	8	23,644	806	1,653,554	1,030,322	2,248	233
1890 ...	7	23,190	775	1,738,929	1,039,168	2,362	658
Increase ...	...	...	...	85,375	8,846	114	425
Decrease ...	1	454	31	...	...	...	...

Year ended March.	Hands employed.		Approximate Total Value of—		
	Males.	Females.	Machinery and Plant.	Lands.	Buildings.
			£	£	£
1889 ...	431	410	156,136	12,317	64,847
1890 ...	423	387	129,109	7,481	52,108
Decrease ..	8	23	27,027	4,836	12,739

577. The value of the raw material used in woollen mills, and of the articles produced, was returned for the census year, but not since, the difference in favour of the manufactured articles being then £79,298. The following are the figures:—

WOOLLEN MILLS, 1880-81.

Value of materials used	...	...	£89,412
„ articles produced	...	...	168,710
Increased value	...	...	£79,298, or 89 per cent.

Value of
articles
used and
produced.

578. The manufacture of cotton has not yet been introduced into Australia, but statistics of its manufacture elsewhere may not be uninteresting. The following is a statement of the number of spindles in use in the United Kingdom, the Continent of Europe, the United States, and India in each of the four years ended with 1888:—

Cotton
manufac-
ture in
various
countries.

SPINDLES FOR MANUFACTURING COTTON IN USE IN VARIOUS COUNTRIES, 1885 TO 1888.
(000's omitted.)

Countries.	Number of Spindles.			
	1885.	1886.	1887.	1888
United Kingdom ...	43,000,	42,700,	42,740,	42,740,*
Continent of Europe ...	22,750,	22,900,	23,180,	23,380,
United States ...	13,250,	13,350,	13,500,	13,525,
India ...	2,145,	2,260,	2,420,	2,490,
Total ...	81,145,	81,210,	81,840,	82,135,

579. The following are the quantities of cotton consumed in the same countries during the ten years ended with 1887-8. The figures express substantially the world's consumption of that staple in the years named:—

World's con-
sumption
of cotton.

WORLD'S CONSUMPTION OF COTTON, 1879 TO 1888.
(00,000's omitted.)

Years.	Quantity of Cotton Consumed in—				
	United Kingdom.	Continent of Europe.	United States.	India.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.
1878-9 ...	1,137,2	1,038,4	713,6	104,9	2,994,1
1879-80 ...	1,340,0	1,100,0	792,4	120,6	3,353,0
1880-81 ...	1,428,8	1,182,4	847,2	148,6	3,607,0
1881-2 ...	1,456,0	1,279,2	878,8	155,8	3,769,8
1882-3 ...	1,497,6	1,352,0	950,0	179,0	3,978,6
1883-4 ...	1,466,4	1,352,0	897,6	208,3	3,924,3
1884-5 ...	1,373,2	1,302,0	763,6	233,9	3,672,7
1885-6 ...	1,451,2	1,386,0	911,2	252,1	4,000,5
1886-7 ...	1,477,6	1,456,0	969,2	284,7	4,187,5
1887-8 ...	1,536,4	1,508,0	1,012,0	300,0	4,356,4

* According to a return published in *The Manufacturer and Inventor* (a London industrial newspaper), of the 20th October, 1890, the number of textile factories in the United Kingdom is 7,190, in which 48,409,733 spinning spindles or throwing spindles, 5,231,329 doubling spindles, and 822,489 power looms are used; whilst the number of hands employed was 1,084,631, viz., 428,082 males, and 656,549 females.

Soap and
candle
works.

580. Thirty-three soap and candle works were returned in 1890 as against 32 in 1889, and the hands employed increased by 20. The weight of soap made in the year under review was, moreover, greater by 8,420 cwt. than that in the previous year, but the weight of candles made was less by 1,086 cwt. than in 1889, whilst the valuation placed upon the machinery, lands, and buildings was higher by £10,355 than in that year:—

SOAP AND CANDLE WORKS, 1889 AND 1890.

Year ended March.	Number of Establishments.	Establish- ments employing—		Amount of Horse-power of Machinery.	Number of Hands employed.	Soap made.	Candles made.	Approximate Total Value of—		
		Steam- power.	Manual labour only.					Machinery and Plant.	Lands.*	Buildings.
						cwt.	cwt.	£	£	£
1889 ...	32	22	10	436	379	151,150	52,085	83,280	65,545	38,530
1890 ...	33	24	9	532	399	159,570	50,999	70,090	76,560	51,060
Increase ...	1	2	...	96	20	8,420	...	...	11,015	12,530
Decrease ...	...	...	1	...	...	...	1,086	13,190	...	...

NOTE.—In addition to the other manufactures, 6,240 cwt. of soda crystals were made in 1889, and 8,880 cwt. in 1890.

Value of
articles
used and
produced.

581. The value of the raw material used, and of the articles produced, in soap and candle factories was returned for the twelve months preceding the census, with the following result. No later information exists on these points:—

SOAP AND CANDLE WORKS, 1880-81.

Value of raw materials used	...	£288,340
„ articles produced	...	450,924
Increased value	...	£162,584, or 56 per cent.

Tobacco
manufac-
tories.

582. The tobacco manufactories returned were 3 more in 1890 than in 1889, and the hands employed increased by 144, viz., 75 males and 69 females. The tobacco manufactured, however, fell off by 236,407 lbs.; and the snuff manufactured by 1,349 lbs.; on the other hand there was an increase of over 5 millions in the number of cigars made, and of 2½ millions in the number of cigarettes made. The value of lands, buildings, and plant in use was set down as greater by £39,705 in 1890 than in 1889:—

* The figures in this column apply to purchased land only. Two of these establishments in both years were on Crown lands. In these cases no valuation of the land is given.

TOBACCO MANUFACTORIES, 1889 AND 1890.

Year ended March.	Number of Establishments.	Establish- ments em- ploying—			Amount of Horse- power of Machinery.	Number of Hands employed.		Quantity of —		Number of Cigars Manu- factured.	Approximate Total Value of—		
		Steam- power.	Gas-power.	Manual Labour.		Males.	Females.	Tobacco Manufactured.	Snuff Manufactured.		Machinery and Plant.	Lands.	Buildings.
1889 ..	13	4	1	8	53	518	178	lbs. 1,303,862	lbs. 2,882	9,129,600	£ 34,725	£ 46,000	£ 46,070
1890 ..	16	4	1	11	59	593	247	1,067,455	1,533	14,320,340	38,550	74,250	53,700
Increase ..	3	..	..	3	6	75	69	..	..	5,190,740	3,825	28,250	7,630
Decrease ..	..	..	..	..	..	..	..	236,407	1,349	..	..	..	..

NOTE.—In addition to the other manufactures, 3,775,000 cigarettes were made in 1889, and 6,266,000 in 1890.

583. According to the census returns, the value of the articles produced in tobacco manufactories in 1880-81 showed an excess over that of the raw materials used of £72,870, which is equivalent to an increase of value by the process of manufacture amounting to 58 per cent. The following are the figures :—

Value of raw and manufactured materials.

TOBACCO MANUFACTORIES, 1880-81.

Value of materials used	...	...	£126,450
„ articles produced	...	...	199,320
Increased value	...	...	£72,870, or 58 per cent.

584. Six distilleries were returned in 1890, as against eight in 1889; moreover, a decrease took place of 12 in the number of hands employed, of 26,000 gallons in the quantity of spirits made, and of £95,000 in the value of plant, lands, and buildings. The following are the figures for the two years :—

Distilleries.

DISTILLERIES, 1889 AND 1890.

Year ended March.	Number of Distilleries.	Amount of Horse-power of Machinery.	Number of Hands employed.	Spirits made.	Approximate Value of—		
					Machinery and Plant.	Lands.	Buildings and Improve- ments.
1889 ...	8	199	105	gallons. 451,459	£ 133,000	£ 80,000	£ 54,000
1890 ...	6	127	93	425,431	76,500	52,500	43,000
Decrease...	2	72	12	26,028	56,500	27,500	11,000

585. According to the following figures, the average consumption of spirits per head is greatest in Holland, next in Queensland, Western Australia, and the United States in the order named. In all of these countries the consumption per head appears to be greater,

Consumption of spirits in various countries.

whilst in the other countries named it appears to be less, than in the colony of Victoria:—

ANNUAL CONSUMPTION OF SPIRITS PER HEAD IN VARIOUS COUNTRIES.

	Gallons.		Gallons.
Holland ...	2·08	Switzerland ...	1·04
Queensland ...	1·59	Germany ...	·95
Western Australia ...	1·46	France ...	·85
United States ...	1·34	New Zealand ...	·78
Victoria ...	1·32	Austria-Hungary ...	·63
Sweden ...	1·27	United Kingdom ...	·59
Canada ...	1·19	Tasmania ...	·59
New South Wales ...	1·15	South Australia ...	·49

Other manu-
factories,
works, etc. 586. The manufactories and works, exclusive of those of which mention has already been made—viz., flour mills, breweries, distilleries, brickyards, potteries, tanneries, fellmongeries, wool-washing establishments, woollen mills, soap and candle works, and tobacco manufactories—were more numerous by 173 than those returned in 1889. It will be observed that the establishments employing water power decreased by 2, whilst there was an increase of 79 in those worked with the aid of other machinery—especially steam and gas, and of 96 in those worked by manual labour only. The males employed increased by 1,563, and the females employed by 1,128; whilst the value of lands, buildings, and plant shows an increase of £858,800. The totals of the two years are subjoined:—

MANUFACTORIES, WORKS, ETC., 1889 AND 1890.

(Exclusive of Flour Mills, Breweries, Distilleries, Brickyards, Potteries, Tanneries, Fellmongeries, Wool-washing Establishments, Woollen Mills, Soap and Candle Works, and Tobacco Manufactories.)

Year ended March.	Number of Manufactories, Works, etc.	Manufactories, etc., employing—						Horse- power of Machinery.
		Steam.	Water.	Gas.	Wind	Horse- power.	Manual Labour only	
1889 ...	2,355	1,035	21	262	1	21	1,015	17,129
1890 ...	2,528	1,071	19	301	2	24	1,111	18,623
Increase ...	173	36	...	39	1	3	96	1,494
Decrease ...	...	...	2	...	...	...	...	...

Year ended March.	Number of Hands employed.		Approximate Total Value of—		
	Males.	Females.	Machinery and Plant.	Lands.*	Buildings.
1889 ...	39,156	6,565	£ 4,247,534	£ 3,803,940	£ 2,743,101
1890 ...	40,719	7,693	4,637,043	3,937,624	3,078,688
Increase ...	1,563	1,128	389,509	133,684	335,587

NOTE.—Exclusive of stone-breaking and tar-pavement works, which numbered 19 in 1889. These works being carried on in connexion with quarries, it is found impossible to separate them therefrom. See table following paragraph 591 *post*.
* In the case of establishments standing upon Crown lands no estimate of the value of the land is given. The number of such establishments was 203 in 1889 and 197 in 1890.

587. By summarizing the returns of manufactories and works of all descriptions, including not only such as are embraced in the foregoing table, but also those excluded therefrom—viz., flour mills, breweries, distilleries, brickyards, potteries, tanneries, fellmongeries, wool-washing establishments, woollen mills, soap and candle works, and tobacco manufactories—it is found that during 1889-90 the total number of establishments increased by 162, those of them which use steam or gas by 78; at the same time the hands employed increased by 2,944, the amount of horse-power by 2,745, and the value of machinery, lands, and buildings, by £819,753. The returns of the two years are contained in the following table :—

MANUFACTORIES, WORKS, ETC., 1889 AND 1890.

(Including Flour Mills, Breweries, Distilleries, Brickyards, Potteries, Tanneries, Fellmongeries, Wool-washing Establishments, Woollen Mills, Soap and Candle Works, and Tobacco Manufactories, as well as all other Manufactories, Works, etc.)

Year ended March.	Total Number of Establishments.	Number of Establishments using Steam or Gas Engines.	Horse-power of Machinery.	Number of Hands employed.	Approximate Value of Lands,* Buildings, Machinery, and Plant.
1889 ...	2,975	1,639	24,938	54,488	£ 14,792,311
1890 ...	3,137	1,717	27,683	57,432	15,612,064
Increase ...	162	78	2,745	2,944	819,753

NOTE.—Exclusive of stone-breaking and tar-pavement works, which numbered 19 in 1889. These works being carried on in connexion with quarries, it is found impossible to separate them therefrom.

588. The manufacturing establishments of all kinds respecting which returns are obtained are named in the following table, and their numbers are given for 1880-81 and 1889-90. For the former, which was the census year, are also given the approximate values of the materials used and articles produced, and for the latter the number of hands employed and the approximate value of lands, buildings, machinery, and plant. The establishments are generally of an extensive character, the exceptions being in cases where the existence of industries of an unusual or interesting nature might seem to call for notice, or where machinery worked by steam, gas, or water is used. No attempt is made to enumerate mere shops, although some manufacturing industry may be carried on thereat. Were this done, the “manufactories” in the colony might be multiplied to an almost indefinite extent:—

* In the case of establishments standing upon Crown lands no estimate of the value of the land is given. The number of such establishments was 235 in 1889, and 238 in 1890.

MANUFACTORIES, WORKS, ETC., 1881 AND 1890.

Description of Manufactory, Work, etc.	1880-81.			1889-90.		
	Number of Establishments.	Approximate Value of—		Number of Establishments.	Hands employed.	Approximate value of Machinery, Plant, Lands, and Buildings.
		Materials used.	Articles produced.			
BOOKS AND STATIONERY.		£	£			£
Account-book manufactories, manufacturing stationers	7	62,386	100,057	12	1,044	251,105
Printing and lithographic printing establishments* ...	89	202,475	569,797	161	4,219	1,211,478
Photo-lithographic works ...	...	...	...	1	...	...
MUSICAL INSTRUMENTS.						
Organ-building establishments ...	2	3,500	8,050	3	37	8,850
Pianoforte manufactories ...	5	1,700	4,150	4	14	4,900
CARVING FIGURES, ETC.						
Wood carving and turnery works ...	10	4,965	10,800	19	76	20,955
DESIGNS, MEDALS, AND DIES.						
Die-sinkers, engravers, medalists, trademark makers	6	3,350	9,200	5	66	19,300
Indiarubber stamp manufactories † ...	2	350	1,700	...	...	...
Type foundry ...	1	...	...	...	...	...
PHILOSOPHICAL INSTRUMENTS, ETC.						
Electric-lighting apparatus manufactory	...	...	...	6	79	31,080
Philosophical instrument manufactories	1	...	...	1	...	...
SURGICAL INSTRUMENTS.						
Surgical instrument, truss—manufactories	6	2,400	5,600	5	28	11,840
ARMS, AMMUNITION, ETC.						
Blasting powder, dynamite, etc.—manufactories	3	9,964	16,737	6	69	31,000
Fuze manufactory ...	1	...	...	1	...	...
Shot manufactories ...	...	...	...	2	5	5,493
MACHINES, TOOLS, AND IMPLEMENTS.						
Agricultural implement manufactories	54	91,659	202,535	72	1,006	149,367
Boiler and pipe-covering manufactories	...	...	...	1	...	...
Cutlery, tool—manufactories ...	3	800	2,400	10	60	30,140
Domestic implement‡ manufactories ...	2	...	...	6	33	12,580
Iron foundries and engineering establishments §	147	329,395	723,919	185	8,329	1,606,982
Nail manufactories ...	...	...	...	3	23	7,800

* Including paper-bag manufactories.

† Indiarubber stamps are now generally made by manufacturing stationers. See Books and Stationery above.

‡ Including bellows, churn, washing-machine, etc., makers.

§ Including brass-founders and pattern makers.

MANUFACTORIES, WORKS, ETC., 1881 AND 1890—continued.

Description of Manufactory, Work, etc.	1880-81.			1889-90.		
	Number of Establishments.	Approximate Value of—		Number of Establishments.	Hands employed.	Approximate Value of Machinery, Plant, Lands, and Buildings.
		Materials used.	Articles produced.			
MACHINES, TOOLS, AND IMPLEMENTS— continued.		£	£			£
Pattern-makers ... ..	...	...	...	5	23	6,010
Sheet-iron and tin works	61	143,000	247,299	58	739	214,028
CARRIAGES AND HARNESS.						
Carriage lamp manufactories	3	900	2,950	3	20	5,400
Coach, waggon, etc.—manufactories	132	99,415	212,615	209	2,980	449,817
Perambulator manufactories	3	1,750	5,000	5	18	7,975
Saddle, harness—manufactories	47	35,792	81,130	73	618	114,236
Saddle-tree, etc., manufactories	4	2,400	6,860	4	28	4,350
Whip manufactories	3	940	2,950	3	17	3,890
SHIPS AND BOATS.						
Ship, boat—builders	10	3,570	14,614	8	40	13,860
Ships' wheels, blocks, etc.—manufac- tories	3	505	1,100	1	...	..
Floating-dock	1	...	...	8	174	423,425
Graving-docks	3	...	...	
Patent slips	2	...	...	
HOUSES, BUILDINGS, ETC.						
Architectural modelling works	11	3,584	8,900	18	120	39,780
Enamelled mantelpiece manufactories.	...	...	...	4	54	8,208
Patent ceiling ventilator manufactories	2	250	1,600	...	...	...
Lime works	21	6,560	17,216	36	358	32,183
Roof-covering composition manufac- tories	2	944	2,180	...	...	...
Venetian blind manufactories	12	5,500	11,750	9	117	20,900
Earth-closet manufactories	1	...	...	3	36	11,340
FURNITURE.						
Bedding, flock, and upholstery manu- factories	15	13,350	26,880	28	331	65,214
Bedstead manufactory ... ..	...	...	...	1	...	...
Cabinet works, including billiard-table makers	63	131,000	258,188	83	1,672	253,499
Iron-safe manufactories	2	670	970	2	26	8,200
Looking-glass manufactories	2	400	1,300	4	36	10,300
Picture-frame makers, etc.	13	5,627	11,550	10	63	46,340
CHEMICALS.						
Chemical works	6	25,160	43,600	11	188	90,350
Dye works	6	1,130	7,150	8	66	18,860
Essential oil manufactories	4	1,825	3,900	11	70	11,025
Ink, blacking, blue, washing-powder, etc.—manufactories	12	37,280	58,560	10	227	52,010
Japanner ... ..	...	...	...	1	...	...
Paint, varnish—manufactories	1	...	...	2	10	11,700

MANUFACTORIES, WORKS, ETC., 1881 AND 1890—continued.

Description of Manufactory, Work, etc.	1880-81.			1889-90.		
	Number of Establishments.	Approximate Value of—		Number of Establishments.	Hands employed.	Approximate Value of Machinery, Plant, Lands, and Buildings.
		Materials used.	Articles produced.			
CHEMICALS—continued.						
Printing ink manufactories...	...	£ ...	£ ...	2	20	£ 8,000
Salt works ...	8	4,882	10,810	7	60	16,935
TEXTILE FABRICS.						
Woollen mills ...	10	89,412	168,710	7	810	188,698
DRESS.						
Boot manufactories ...	105	355,418	686,922	98	3,819	230,212
Clothing factories ...	63	370,181	761,401	90	5,068	419,060
Fur manufactories ...	3	4,300	6,900	8	57	13,328
Hat, cap—manufactories ...	22	34,753	66,264	19	482	66,081
Hosiery manufactories ...	...	...	...	3	78	8,630
Oilskin, waterproof-clothing—manufactories	5	900	5,700	5	112	22,480
Umbrella and parasol manufactories	9	13,180	24,825	9	132	18,030
Wig manufactory ...	1	...	...	...	...	...
FIBROUS MATERIALS.						
Rope, twine, mat, bag, sack—manufactories	18	66,975	102,280	12	288	101,775
Sail, tent, tarpaulin—manufactories ...	12	28,860	47,250	9	95	24,095
ANIMAL FOOD.						
Butter factories ...	...	...	...	9	59	46,538
Cheese factories* ...	28	17,733	31,586	30	104	32,745
Fish preserving factory ...	...	...	...	1	...	...
Meat-curing establishments ...	16	192,150	258,790	23	279	92,188
VEGETABLE FOOD.						
Maizena, oatmeal, starch — manufactories	5	5,620	8,000	3	149	93,200
Biscuit manufactories ...	13	106,110	181,840	10	671	109,775
Confectionery works ...	8	61,600	88,800	15	381	87,650
Flour mills ...	144	1,397,099	1,637,351	107	807	651,645
Jam, pickle, vinegar, sauce—manufactories	25	84,430	132,170	18	406	100,935
Macaroni works ...	2	125	230	1	...	...
DRINKS AND STIMULANTS†						
Aërated waters, gingerbeer, liqueur, etc.—works	114	91,849	196,810	160	1,183	334,325
Breweries ...	81	442,885	780,501	70	1,252	1,308,490
Coffee, chicory, cocoa, mustard, spice—works	12	235,355	322,786	12	127	106,910

* A large quantity of cheese and butter is made on dairy farms which are not returned as factories, and therefore are not included in this table. Some of these have steam engines, and use cream separators and other machinery. It was ascertained that in 1890 as many as 14,112 hands were employed in such establishments exclusively on dairy work.

† Places where wine is made are not included. The number of wine-presses returned in 1889-90 was 545.

MANUFACTORIES, WORKS, ETC., 1881 AND 1890—continued.

Description of Manufactory, Work, etc.	1880-81.			1889-90.		
	Number of Establishments.	Approximate Value of—		Number of Establishments.	Hands employed.	Approximate Value of Machinery, Plant, Lands, and Buildings.
		Materials used.	Articles produced.			
DRINKS AND STIMULANTS*—continued.		£	£			£
Distilleries	6	26,368	44,500	6	93	172,000
Malthouses	14	67,635	98,000	18	123	154,190
Sugar, treacle—refineries	1	...	...	3	260	125,300
Tobacco, cigars, snuff—manufactories	16	126,450	199,320	16	840	166,500
ANIMAL MATTERS.						
Boiling-down, tallow-rendering—establishments	15	28,303	77,000	13	71	24,971
Bone mills and bone manure manufactories	15	50,225	70,845	13	97	37,575
Brush manufactories	8	15,700	27,800	11	181	24,764
Comb manufactory	1	...	...	...	...	...
Catgut manufactories	2	800	2,000	1	...	...
Curled hair manufactories	3	1,700	2,565	4	30	9,640
Glue, oil—manufactories	7	8,200	12,700	3	22	11,550
Leather belting (machinery) manufactory	...	...	...	1	...	...
Morocco, fancy leather—manufactories	3	2,480	4,400	7	51	10,570
Portmanteau, trunk—manufactories ...	7	5,680	9,520	8	37	11,215
Soap, candle—works	38	288,340	450,924	33	399	197,710
Tanneries, fellmongeries, and wool-washing establishments	151	1,008,531	1,406,274	137	1,576	351,438
VEGETABLE MATTERS.						
Bark mills	8	17,000	25,650	3	18	4,100
Basket-making works	9	1,670	4,560	12	74	16,325
Broom manufactories†	2	6,200	13,000	2	38	8,200
Chaff-cutting, corn-crushing—works‡	165	357,232	516,623	212	940	273,563
Cooperage works	24	17,829	35,243	30	186	37,888
Cork manufactories	2	2,100	3,100	3	11	7,350
Fancy-box, hat-box—manufactories ...	5	3,080	6,745	7	112	29,975
Paper manufactories	3	24,300	47,370	2	201	103,928
Sawmills, moulding, joinery, etc.—works	174	552,463	973,127	323	6,202	1,069,128
COAL AND LIGHTING.						
Gasworks	19	97,392	226,116	29	859	1,754,988
Electric-light works ... ..	...	...	...	3	23	32,500
Ironfounders' charcoal factory ... ..	...	...	...	1	...	...
STONE, CLAY, EARTHENWARE, AND GLASS.						
Asphalt paving material works ... ..	...	...	...	1	...	...

* Places where wine is made are not included. The number of wine presses returned in 1889-90 was 545.

† See also Brush factories under Animal Matters *ante*.

‡ All these establishments used machinery worked by steam, wind, or horse power. They must not be confounded with chaff-cutting and grain-crushing machines in use on farms, which numbered 19,163.

MANUFACTORIES, WORKS, ETC., 1881 AND 1890—*continued.*

Description of Manufactory, Work, etc.	1880-81.			1889-90.		
	Number of Establishments.	Approximate Value of—		Number of Establishments.	Hands employed.	Approximate Value of Machinery, Plant, Lands, and Buildings.
		Materials used.	Articles produced.			
STONE, CLAY, EARTHENWARE, AND GLASS— <i>continued.</i>		£	£			£
Asbestos works ... ..	...	...	...	1	...	...
Brickyards and potteries	165	...	137,834	233	3,243	922,228
Cement tile works... ..	...	...	...	1	...	...
Filter manufactories	1	...	...	2	10	1,650
Glass manufactories, works	9	12,705	41,150	9	256	31,200
Stone-breaking, asphalt, tar-pavement—works*	9	10,640	27,783	...	...	...
Stone and marble sawing, polishing—works	43	50,583	104,614	53	676	104,050
WATER.†						
Ice manufactories	2	2,000	7,000	5	25	50,818
GOLD, SILVER, AND PRECIOUS STONES.						
Goldsmiths, jewellers, and electroplaters (manufacturing)	28	62,020	109,650	29	416	141,870
Royal mint	1	...	...	1	51	68,000
METALS OTHER THAN GOLD AND SILVER.						
Bell foundry	1	...	...	...	...	...
Brass and copper works—gasalier manufactories	...	...	...	30	400	110,040
Lead, pewter, and zinc—works ...	5	17,850	23,800	4	28	38,600
Pyrites works	1	...	...	1	...	...
Smelting works	7	32,396	48,610	4	65	30,890
Wire-working establishments ...	10	3,650	9,800	13	128	30,550
Total where only one return was received‡	...	257,910	400,080	...	132	39,305
Total	2,468	7,997,745	13,370,836	3,137	57,432	15,612,064

Value of materials used and produced.

589. The difference between the value of materials used and articles produced in 1880-81, as shown by the table, indicates an increase in the value of the former by the process of manufacture of over $5\frac{1}{3}$ millions sterling, or 67 per cent. The following are the exact figures:—

* Now included under the head of Stone Quarries—*post.*

† Works for the storage and supply of water are not included in the manufacturing tables. For information relating to these, see paragraph 505 *et seq.*

‡ The particulars of these have been combined in accordance with a promise made that the contents of individual schedules would not be published.

VALUE OF RAW AND MANUFACTURED MATERIALS, 1880-81.

		£
Value of materials operated upon	...	7,997,745
„ articles produced	...	13,370,836
Increased value	...	5,373,091, or 67 per cent

590. By comparing the particulars respecting these manufactories, as returned in 1890 and in the first year of each of the two previous quinquennia, considerable increases at each successive period will be found in all the columns. The number of establishments increased by 27 per cent. between 1880 and 1885, and by 10 per cent. between 1885 and 1890; the hands employed increased by 48 per cent. and 17 per cent. in those intervals respectively; and the value of machinery, plant, lands, and buildings, increased by 51 per cent. in the first, and by 54 per cent. in the second, interval. The following is the comparison referred to:—

Summary of
manufac-
tories at
three
periods.

SUMMARY OF MANUFACTORIES, WORKS, ETC., 1880, 1885, AND 1890.

Year ended March.	Total Number of Establish- ments.	Number of Establishments using Steam or Gas Engines.	Horse-power of Engines.	Number of Hands employed.	Approximate Value of Lands, Buildings, Machinery, and Plant
					£
1880 ...	2,239	877	12,677	33,247	6,711,745
1885 ...	2,841	1,340	18,949	49,066	10,166,463
1890 ...	3,137	1,717	27,683	57,432	15,612,064

591. The stone quarries, stone-crushing, and tar-pavement works returned in 1890 were fewer by 8 than in 1889, and the hands employed were fewer by 34; but the output of stone increased by 29,454 cubic yards, and a substantial increase also appears in the power of steam engines, and in the value of plant, lands, and buildings. The following are the figures for the two years:—

Stone
quarries.

STONE QUARRIES,* ETC., 1889 AND 1890.

Year ended March.	Number of Quarries, etc.	Cubic Yards of Stone raised.					Steam Engines in use.	
		Bluestone.	Slate and Flagging.	Sandstone and Freestone.	Granite.	Other.	Number.	Horse- power.
1889	179	726,174	2,060	17,900	1,700	6,000	27	548
1890	171	749,656	3,476	29,556	600	...	26	864
Increase	...	23,482	1,416	11,656	...	...	...	316
Decrease	8	...	...	...	1,100	6,000	1	...

* Including stone-crushing and tar-pavement works.

STONE QUARRIES,* ETC., 1889 AND 1890—continued.

Year ended March.	Number of Hands employed.	Approximate Total Value of—			
		Stone raised.	Machinery and Plant.	Lands.†	Buildings.
		£	£	£	£
1889	1,783	196,020	70,693	74,835	8,310
1890	1,749	208,410	78,118	88,785	14,843
Increase	...	12,390	7,425	13,950	6,533
Decrease	34	...	...	...	...

592. According to the official returns, the manufactories and works (including stone quarries) in Victoria exceeded those in New South Wales by 309, and the hands employed were also more numerous by 13,275. The number of works and hands employed therein in the two colonies are placed side by side in the following table:—

MANUFACTORIES, WORKS, ETC., IN VICTORIA AND NEW SOUTH WALES, 1890.

Description of Manufactory, Work, etc.	Number of Establishments.		Hands Employed.	
	Victoria.	New South Wales.	Victoria.	New South Wales.
BOOKS AND STATIONERY.				
Manufacturing stationers, including rubber-stamp makers	12	26	1,044	658
Printing and lithographic printing establishments	161	180	4,219	3,784
Photo-lithographic works	1	2	19	29
MUSICAL INSTRUMENTS, ETC.				
Organ builders	3	...	37	...
Pianoforte makers	4	...	14	...
CARVING, ENGRAVING, ETC.				
Wood-carving, turnery works	19	...	76	...
Die-sinkers, engravers	5	7	66	36
PHILOSOPHICAL INSTRUMENTS, ETC.				
Philosophical and surgical instrument makers	12	10	111	61
ARMS, AMMUNITION, ETC.				
Blasting-powder, dynamite, and fuze makers	7	...	87	...
Shot manufacturers	2	...	5	...

* Including stone-crushing and tar pavement works.
† The figures in this column apply to purchased land only. Thirty-nine of the stone quarries in 1890, and fifty-three in 1889, were on Crown lands, and in these cases no valuation of the land has been given.

MANUFACTORIES, WORKS, ETC., IN VICTORIA AND NEW SOUTH
WALES, 1890—continued.

Description of Manufactory, Work, etc.	Number of Establishments.		Hands employed.	
	Victoria.	New South Wales.	Victoria.	New South Wales.
MACHINES, TOOLS, AND IMPLEMENTS.				
Agricultural implement makers ...	72	22	1,006	187
Domestic implement manufactories ...	6	...	33	...
Engine and machine makers, iron and brass founders	216	166	8,732	5,765
Sheet, galvanized iron, tin, lead, zinc, pewter, type works	62	98	767	899
Nail manufacturers ...	3	...	23	...
Cutlery, tool makers ...	10	...	60	...
Pattern makers ...	5	...	23	...
CARRIAGES AND HARNESS.				
Carriage lamp, etc., manufactories ...	3	...	20	...
Coach, waggon, perambulator builders ...	214	218	2,998	1,948
Saddle, saddle-tree, whip makers ...	80	67	663	527
SHIPS AND BOATS.				
Ship, boat builders, block makers ...	9	35	41	714
Graving docks, patent slips, etc. ...	8	10	174	413
HOUSES AND BUILDINGS.				
Architectural modellers, etc. ...	18	8	120	44
Lime and cement works ...	36	18	358	177
Venetian blind makers ...	9	8	117	64
Enamelled mantelpiece makers ...	4	...	54	...
FURNITURE.				
Bedding manufacturers ...	28	15	331	191
Furniture, cabinet works ...	84	87	1,676	1,103
Picture frame makers ...	10	9	63	38
Earth-closet makers ...	3	...	36	...
Iron safe makers ...	2	...	26	...
Looking-glass makers ...	4	...	36	...
CHEMICALS.				
Chemical works ...	11	7*	188	96
Dye works ...	8	7	66	41
Ink, printing ink, blacking, blue, washing powder, baking powder manufactories	12	8	247	64
Essential oil factories ...	11	...	70	...
Paint, varnish, japanning works ...	3	2	16	12
Salt works ...	7	...	60	...
TEXTILE FABRICS AND DRESS.				
Woollen mills ...	7	5	810	172
Boot factories ...	98	59	3,819	2,420
Clothing factories ...	90	30	5,068	2,745
Fur manufactories ...	8	2	57	12
Hat, cap factories ...	19	14	482	106

* Including 2 poudrette and ammonia factories.

MANUFACTORIES, WORKS, ETC., IN VICTORIA AND NEW SOUTH WALES, 1890—*continued*.

Description of Manufactory, Works, etc.	Number of Establishments.		Hands employed.	
	Victoria.	New South Wales.	Victoria.	New South Wales.
DRESS—<i>continued</i>.				
Oil-skin, waterproof clothing makers ...	5	3	112	58
Umbrella, parasol makers ...	9	1	132	5
Hosiery manufacturers ...	3	...	78	...
FIBROUS MATERIALS.				
Rope, twine, mat, bag, sack makers ...	12	7	288	118
Sail, tent, tarpaulin makers ...	9	16	95	98
ANIMAL FOOD.				
Meat, fish, curing, preserving works ...	24	13	295	355
Butter and cheese factories (steam) ...	39	74	163	503
„ „ „ (hand or other power)	*	160	*	836
VEGETABLE FOOD.				
Maizena, oatmeal, starch, macaroni makers, rice dressers, etc.	4	2	152	24
Biscuit manufactories ...	10	6	671	375
Confectionery works ...	15	21	381	497
Flour mills ...	107	80	807	583
Fruit preserving, jam, pickle, sauce, condiment, vinegar works	18	9	406	347
DRINKS AND STIMULANTS.				
Aërated waters, liqueur, cordial works ...	160	144	1,183	1,099
Breweries ...	70	67†	1,252	820
Distilleries ...	6	2	93	13
Coffee, chocolate, mustard, spice works ...	12	6	127	154
Sugar refineries ...	3	1	260	230
Sugar (raw) works ...	...	40	...	2,194
Tobacco, cigars, snuff manufacturers ...	16	10	840	621
Malthouses ...	18	...	123	...
ANIMAL MATTERS.				
Boiling down, tallow melting, glue making works	17	17	105	144
Bone mills, bone manure works ...	13	6	97	36
Brush, broom factories ...	11	4	181	32
Curled hair, flock manufactories ...	4	4	30	16
Portmanteau, trunk makers ...	8	2	37	12
Leather belting, morocco, fancy leather, catgut factories	8	2	56	8
Soap, candle works ...	33	30	399	250
Tanneries, fellmongeries, woolwashing works	137	152	1,576	2,242

* In Victoria a large quantity of cheese and butter is made on dairy farms, which are not returned as factories. Some of these have steam-engines, and use cream-separators and other machinery. It was ascertained that in 1890 as many as 14,112 hands were employed in such establishments exclusively on dairy work. See also paragraph 538 *ante*.

† Including bottling works.

MANUFACTORIES, WORKS, ETC., IN VICTORIA AND NEW SOUTH WALES, 1890—continued.

Description of Manufactory, Work, etc.	Number of Establishments.		Hands employed.	
	Victoria.	New South Wales.	Victoria.	New South Wales.
VEGETABLE MATTERS.				
Bark mills	3	2	18	9
Basket makers	12	10	74	72
Broom (millet) factories	2	2	38	26
Chaff cutting, corn crushing works ...	212	100	940	446
Cooperage works	30	10	186	150
Fancy box, hat box manufactories ...	7	7	112	86
Paper manufactories	2	1	201	66
Saw mills, moulding, joinery, packing case, cork cutting works	326	392	6,213	4,372
COAL AND LIGHTING.				
Electric light works	3	7	23	32
Gas, coke works	30	36	867	1,131
Kerosene, oil works ... ..	...	2	...	251
STONE, CLAY, AND GLASS.				
Stone quarries,* stone crushing, dressing works, asphalt, pavement works	172	82	1,766	993
Brickyards, potteries	233	228	3,243	2,134
Glass works	9	7	256	108
Stone, marble—sawing, polishing, monumental works	53	37	676	259
Artificial stone, asbestos, cement tile, filter works	4	...	22	...
WATER.				
Ice manufactories, refrigerating works ...	5	8	25	157
GOLD, SILVER, AND PRECIOUS STONES.				
Goldsmiths, jewellers, gold beaters, electroplaters, mother-of-pearl workers	29	35	416	200
Mint	1	1	51	28
METALS OTHER THAN GOLD AND SILVER				
Smelting, pyrites works	5	21	69	1,276
Wire working establishments	13	8	128	106
Other works ... ..	...	4	...	28
Total	3,308	2,999	59,181	45,906

593. Gold was first discovered in Australia by the Rev. W. B. Clarke, of Sydney, who, in 1841, found the precious metal in the mountainous regions to the west of the vale of Clwyd, in New South Wales, and in 1844 exhibited a specimen of gold in quartz to the

Discovery of gold.

* In making comparisons it has been found impossible to separate stone quarries from the other works carried on in connexion therewith. They are, therefore, necessarily included in this table.

then Governor, Sir George Gipps, and others. But the subject was not followed up, "as much from considerations of the penal character of the colony as from general ignorance of the value of such an indication." In 1850, however, Mr. E. H. Hargreaves returned to Sydney from California for the express purpose, as he states, of searching for gold; and on the 12th February, 1851, he succeeded in finding gold at Summer Hill Creek, in New South Wales. This discovery afterwards led to gold being found at other places in that colony, and to the discovery of the gold-fields of Victoria. The following is a short statement of the order in which a Select Committee, appointed in 1853* by the Legislative Council to consider claims for rewards for gold discoveries in Victoria, placed the various claimants:—The Hon. W. Campbell discovered gold in March, 1850, at Clunes; concealed the fact at the time from the apprehension that its announcement might prove injurious to the squatter on whose run the discovery was made, but mentioned it in a letter to a friend on the 10th June, and afterwards on the 5th July, 1851, which friend, at Mr. Campbell's request, reported the matter to the gold-discovery committee on the 8th July. Mr. L. J. Michel and six others discovered gold in the Yarra Ranges, at Anderson's Creek, which they communicated to the gold-discovery committee on the 5th July. Mr. James Esmond, a Californian digger, and three others, obtained gold in the quartz rocks of the Pyrenees, and made the discovery public on the 5th July. Dr. George Bruhn, a German physician, found indications of gold in quartz "two miles from Parker's station" in April, 1851, and forwarded specimens to the gold committee on the 30th June. Mr. Thomas Hiscock found gold at Buninyong on the 8th August, and communicated the fact to the editor of the *Geelong Advertiser* on the 10th of the same month. This discovery led to that of the Ballarat gold-fields. Mr. C. T. Peters, a hutkeeper at Barker's Creek, and three others, found gold at Specimen Gully on the 20th July, worked secretly to the 1st September, then published the account. This led to the discovery of the numerous gold-fields about Mount Alexander.

Gold raised,
1888 and
1889.

594. According to the estimate of the Mining Department, the gold raised in Victoria in 1889 was 614,839 oz., which is less than the quantity obtained in 1888 by 10,187 oz., representing, at £4 per oz., a decreased value of £40,700. The following are the figures for the two years:—

* The report of this Committee was dated 10th March, 1854.

QUANTITY AND VALUE OF GOLD RAISED IN 1888 AND 1889.

Year.	Gold raised in Victoria.	
	Estimated Quantity.	Value, at £4 per oz.
	oz.	£
1888	625,026	2,500,104
1889	614,839	2,459,356
Decrease	10,187	40,748

595. From 1871 to 1879 the quantity of gold raised from year to year had been steadily diminishing, but in the next three years an improvement took place, which, however, has not since been sustained, the yield having again gradually fallen off since 1882, and being less in the last three years than it had been previously since 1851. The subjoined figures give an estimate of the quantity of gold raised in 1871 and each subsequent year:—

ESTIMATED QUANTITY OF GOLD RAISED, 1871 TO 1889.

1871	oz. 1,355,477	1881	oz. 858,850
1872	1,282,521	1882	898,536
1873	1,241,205	1883	810,047
1874	1,155,972	1884	778,618
1875	1,095,787	1885	735,218
1876	963,760	1886	665,196
1877	809,653	1887	617,751
1878	775,272	1888	625,026
1879	758,947	1889	614,839
1880	829,121		

596. Carrying on to the end of 1889 the calculations given in previous years, the following may be estimated as the total quantity and value of the gold raised in Victoria from the period of its first discovery about the middle of 1851. The figures give an average per annum during the whole period of about 1,442,000 oz., which is about two and a third times the quantity raised in 1889:—

ESTIMATED TOTAL QUANTITY AND VALUE OF GOLD RAISED IN VICTORIA, 1851 TO 1889.

Gold raised in Victoria.	Estimated Quantity.	Value, at £4 per oz.
	oz.	£
Prior to 1889 ...	55,635,959	222,543,836
During 1889 ...	614,839	2,459,356
Total ...	56,250,798	225,003,192

597. Since the first discovery, in 1851, of gold in Australasia, 86 million ounces have been raised in the various colonies, two-thirds of

Gold raised,
1871 to
1889.

Gold raised
1851 to
1889.

Gold raised
in Austral-
asian
colonies.

which was got in Victoria. The following is a statement of the quantity recorded as having been raised in the respective colonies during each year. No column is assigned to Western Australia, as, although during the last three or four years gold has been raised in that colony, chiefly in the Kimberley district, no reliable information as to the quantity has ever been obtained:—

GOLD PRODUCE IN AUSTRALASIAN COLONIES, 1851 TO 1889.

Year.	Victoria.	New South Wales.	Queensland.	South Australia.	Tasmania.	New Zealand.
	oz.	oz.	oz.	oz.	oz.	oz.
1851	145,137	144,121	...	...	...	...
1852	2,738,484	818,752	...	...	...	...
1853	3,150,021	548,053	...	...	...	...
1854	2,392,065	237,911	...	...	...	...
1855	2,793,065	170,146	...	...	...	...
1856	2,985,735	183,946	...	...	...	...
1857	2,761,567	161,043	...	...	...	10,437
1858	2,528,227	280,558	...	...	...	13,534
1859	2,280,717	323,984	...	...	...	7,336
1860	2,156,700	381,614	4,127	...	...	4,538
1861	1,967,453	459,879	1,077	...	...	194,031
1862	1,658,281	616,910	190	...	...	410,862
1863	1,627,105	467,399	3,937	...	...	628,450
1864	1,545,437	341,954	22,037	...	...	480,171
1865	1,543,188	364,541	25,339	...	...	574,574
1866	1,478,280	287,534	22,916	...	348	735,376
1867	1,433,246	269,407	49,092	...	1,363	686,905
1868	1,634,200	258,774	165,801	...	692	637,474
1869	1,337,296	252,130	138,221	...	137	614,281
1870	1,222,798	240,402	136,773	...	964	544,880
1871	1,355,477	321,469	171,937	...	6,005	730,029
1872	1,282,521	424,100	186,019	2,494	6,969	445,370
1873	1,241,205	360,850	194,895	98	4,661	505,337
1874	1,155,972	270,710	375,586	8,351	4,651	376,388
1875	1,095,787	229,386	391,515	13,742	3,010	355,322
1876	933,760	155,166	374,776	9,857	11,107	322,016
1877	809,653	122,629	428,104	11,811	5,777	371,685
1878	775,272	117,978	310,247	10,746	25,249	310,486
1879	758,947	107,640	288,556	14,250	60,155	287,464
1880	829,121	116,751	267,136	13,246	52,595	305,248
1881	858,850	145,532	270,945	16,976	56,693	270,561
1882	898,536	129,233	224,893	15,669	49,122	251,204
1883	810,047	122,257	212,783	15,939	46,577	248,374
1884	778,618	105,933	307,804	21,455	42,340	229,946
1885	735,218	100,667	310,941	18,327	41,241	237,371
1886	665,196	98,446	340,998	26,315	31,014	227,079
1887	617,751	108,101	425,923	36,569	42,609	203,869
1888	625,026	85,295	481,643	16,763	39,610	201,219
1889	614,839	119,759	739,103	20,833	32,333	203,211
Total	56,250,798	10,050,960*	6,873,314*	273,441	565,222	11,625,028

* The estimate for New South Wales, which has been derived from official documents, is lower by 41,396 ounces than that furnished by the Government Statistician of that colony, but that for Queensland is higher by 45,426 ounces than that furnished by the Registrar-General of Queensland and published in the "Australasian Statistics, 1889," for which see Table XIX. in Appendix A., at end of this volume.

598. According to the above figures the total quantity of gold raised in each colony from 1851 to 1889 has been as follows:—

Gold pro-
duce of
Austral-
asia, 1851
to 1889.

SUMMARY OF GOLD PRODUCE OF AUSTRALASIA, 1851 TO 1889.

	Oz.		Oz.
Victoria ...	56,250,798	South Australia ...	273,441
New Zealand...	11,625,028	Western Australia ...	135,492*
New South Wales ...	10,050,960		
Queensland ...	6,873,314	Total ...	85,774,255
Tasmania ...	565,222		

599. The average value of the gold raised varies in the different colonies. If it be estimated at £4 per ounce, the total value would be £343,097,020, or if at £3 15s. per ounce it would be £321,653,456.†

Value of
gold raised
in Austral-
asia.

600. By the following table, which, with the exception of the figures for Australasia, has been taken from the report for 1889 of Mr. Edward O. Leech, director of the United States Mint, it appears that during the four years ended with 1888 the world's annual production of gold has averaged rather more than 5 million ounces, the largest quantity being produced in the United States, the next largest in Australasia, and the next in Russia:—

Gold pro-
duce of the
world, 1885
to 1888.

GOLD PRODUCE OF EACH COUNTRY, 1885 TO 1888.‡

Countries.	1885.	1886.	1887.	1888.
	oz.	oz.	oz.	oz.
Australasia ...	1,442,437	1,389,048	1,434,822	1,499,556
Europe—				
Great Britain ...	...	...	...	7,071
Russia ...	1,225,414	992,288	971,717	1,030,215
Sweden ...	1,511	2,154	2,154	2,443
Germany ...	44,292	34,231	72,352	58,177
Austria-Hungary ...	53,484	53,484	60,331	60,331
Turkey ...	321	321	321	321
Italy ...	4,564	6,268	6,268	5,143
Asia—				
British India ...	6,525	20,378	15,460	32,399
China ...	224,898	176,524	162,896	435,267
Japan ...	8,518	10,703	18,128	18,128
Africa ...	66,952	69,523	92,826	217,633

* For Western Australia, the yield prior to 1889 has been set down roughly at 100,000 oz., and to this has been added the quantity which appeared in the export returns for 1889. This, however, is admittedly considerably below the actual production. See last edition of this work, Vol. II., footnote to paragraph 582.

† Pure gold is worth £4 4s. 11½d., and standard gold (22 carats fine) £3 17s. 10½d.

‡ See U.S. Mint Report, 1889, pages 166 and 167, where the quantities are given in kilogrammes, which have been converted into ounces on the assumption that a kilogramme is equal to 32.142 oz. troy. When the figures for any year were not given by Mr. Leech, those for a previous year have been inserted.

GOLD PRODUCE OF EACH COUNTRY, 1885 TO 1888*—*continued.*

Countries.	1885.	1886.	1887.	1888.
	oz.	oz.	oz.	oz.
America—				
Canada ...	34,713	64,895	66,245	66,245
United States ...	1,537,930	1,692,694	1,595,979	1,604,432
Mexico ...	41,913	29,699	39,856	47,088
Salvador ...	...	...	3,214	} 7,264
Costa Rica ...	289	4,211	4,211	
Colombia ...	120,918	120,918	120,918	72,544
Venezuela ...	226,055	161,353	161,353	45,770
Brazil ...	38,699	48,277	48,277	10,639
Peru ...	7,264	5,464	5,464	5,078
Bolivia ...	3,504	3,504	3,504	3,504
Chile ...	16,071	16,071	16,071	76,980
Argentine Republic ...	3,793	964	1,446	1,511
The World ...	5,110,065	4,902,972	4,903,813	5,307,739

Value of the world's gold produce, 1885-1888. 601. According to the figures, the gold raised in the world during 1888, if valued at £4 per ounce, would be £21,230,956; or if at £3 15s. per ounce, it would be £19,904,020. During the four years the value of the whole quantity raised (20,224,589 oz.) would be £80,898,356 at the former, or £75,842,208 at the latter valuation.

Silver raised in Australasian colonies. 602. Some years since a silver mine was worked at St. Arnaud, in Victoria, but after a time it ceased to be remunerative, and the workings were abandoned. Since the establishment of a branch of the Royal Mint in Melbourne, a certain quantity of silver has been extracted annually from the crude gold lodged there for coining, and latterly the whole quantity of silver produced in Victoria has been from that source. It is difficult to obtain reliable information respecting silver produce, as in consequence of the silver being generally associated with lead and other metals, it is found economical to send the ore in a concentrated form to Europe for smelting. For Queensland and South Australia† no definite returns are available; and but little silver has been raised in Western Australia and Tasmania. The following, so far as is known, are the quantities

* See U.S. Mint Report, 1889, pages 166 and 167, where the quantities are given in kilogrammes, which have been converted into ounces on the assumption that a kilogramme is equal to 32.142 oz. troy. When the figures for any year were not given by Mr. Leech, those for a previous year have been inserted.

† It is known that in Queensland 1,014 tons of silver-lead ore, valued at £61,500, were raised in 1889; 1,190 tons, valued at £44,015 in 1888; 2,183 tons, valued at £80,092, in 1887; 1,631 tons, valued at £52,797, in 1886; 2,377 tons, valued at £49,922, in 1885; and 15,519 tons, valued at £224,669, in the previous six years; also that in South Australia 1,620 tons of silver-lead ore, valued at £23,349, were raised in the ten years ended with 1884.

raised in Victoria, New South Wales, and New Zealand during each of the twenty-seven years ended with 1889 :—

SILVER PRODUCE IN AUSTRALASIAN COLONIES, 1863 TO 1889.

Year.	Victoria.*	New South Wales.	New Zealand.*
	oz.	oz.	oz.
1863	1,098	...	...
1864	5,688	...	...
1865	3,379	...	...
1866	2,348	...	...
1867	78	...	...
1868	5,761	...	...
1869	...	753	11,063
1870	...	13,868	37,123
1871	...	71,311	80,272
1872	8,011	49,544	37,064
1873	14,347	66,997	36,187
1874	11,906	78,027	40,566
1875	21,842	52,553	29,085
1876	26,355	69,179	12,683
1877	19,717	31,409	33,893
1878	22,995	60,563	23,018
1879	23,728	83,164	20,645
1880	23,247	91,419	20,005
1881	20,957	57,254	18,885
1882	20,343	38,618	5,694
1883	22,121	77,065	16,826
1884	27,070	93,660	24,914
1885	28,951	794,174	16,624
1886	26,422	1,015,433	12,108
1887	26,321	3,137,800†	20,809
1888	28,971	6,427,000†	403
1889	28,630	9,067,500†	24,105
Total ...	420,286	21,377,291	521,972

603. The total quantity of silver raised in the three colonies, according to the table, was 22,319,549 oz., which would represent a value at 4s. per ounce of £4,463,910; or, at 3s. 6d. per ounce, of £3,905,921. Value of silver raised in Australasia.

604. The bulk of the silver raised in Australasia is from the Broken Hill mines, situated in New South Wales, at or near the Barrier Ranges, close to the eastern frontier of South Australia. The principal mine is that of the Broken Hill Proprietary Company, which has a capital of £320,000 in 160,000 shares of £2 each, fully Broken Hill silver mines.

* In Victoria and New Zealand, nearly all the silver produced has been extracted from crude gold.

† No official statement having been published in New South Wales of the quantity of silver raised in that colony in the last three years, these quantities have been estimated in the office of the Government Statist, Melbourne, from information supplied by the manager of the Broken Hill Proprietary mine, and that obtained from other sources.

paid up.* From the time of the formation of this company on 13th August, 1885, to the 31st May, 1890, the ore treated (gross) amounted to 412,316 tons, the total yield of which was 16,897,076 ounces of silver, and 68,475 tons of lead, of which 7,140,199 ounces of silver and 29,059 tons of lead were produced in the year 1889-90. The dividends and bonuses paid, together with profits resulting from sales of outlying portions of the company's property allotted to shareholders since the commencement, have amounted to a total value of £3,960,000. For the six months ended with May, 1890, the mine has paid dividends to the amount of £464,000. The manager of the mine reported that there was in May, 1889, more than 700,000 tons of ore in sight, averaging 31 ounces of silver to the ton, and there was every hope that the present dividends might be increased. The number of men permanently employed at and in connexion with the mine at the present time is 2,309.

Silver pro-
duce of
each
country

605. The next table, with the exception of the figures for Australasia, has also been taken from Mr. Leech's Mint report for 1889, and shows that the world's production of silver during the four years ended with 1888 was 404,671,757 oz., the largest quantity being raised in the United States, the next largest in Mexico, and the next in Bolivia:—

SILVER PRODUCE† OF EACH COUNTRY, 1885 TO 1888.

Countries.	1885.	1886.	1887.	1888.
	oz.	oz.	oz.	oz.
Australasia ...	839,749	1,053,963	3,184,930	6,456,374
Europe—				
Russia ...	499,808	408,428	434,624	466,798
Sweden ...	74,762	99,030	99,030	149,396
Norway ...	231,422	231,422	231,422	231,422
Germany‡ ...	789,633	856,584	769,126	752,509
Austria-Hungary ...	1,617,064	1,617,064	1,716,094	1,716,094
Turkey ...	42,524	42,524	42,524	42,524

* On the 12th February, 1890, the shares were sub-divided into 800,000 shares of 8s. each, and a further issue was allowed to the shareholders of 160,000 shares, at 8s. each, to be registered in London.

† See U.S. Mint Report, 1889, pages 166 and 167, where the quantities are given in kilogrammes, which have been converted into ounces on the assumption that a kilogramme is equal to 32.142 oz. troy. According to the New York *Financial and Commercial Chronicle*, of 2nd August, 1890, the world's production of silver in 1889 was 125,988,671 oz.

‡ The figures for Germany differ from those published in the last issue of this work, which included large quantities of silver derived from ore sent from other countries to be smelted. The present figures denote the silver actually raised from German mines.

SILVER PRODUCE* OF EACH COUNTRY, 1885 TO 1888—*continued*.

Countries.	1885.	1886.	1887.	1888.
Europe— <i>continued</i> .	oz.	oz.	oz.	oz.
Italy	940,443	940,443	1,087,653	1,101,828
France	1,639,242	1,639,242	1,503,892	1,745,761
Spain	1,746,436	1,746,436	1,746,436	1,655,377
Great Britain	244,504	325,406	320,263	216,091
Asia—				
Japan	741,998	798,889	1,030,633	1,030,633
Africa	40,949	101,729	13,885	13,885
America—				
Canada	161,674	161,674	349,223	349,223
United States	39,906,800	39,442,766	41,265,667	45,780,686
Mexico	24,835,159	25,521,809	29,056,368	31,997,361
Salvador ... ..	...	...	185,588	} 270,700
Honduras ... ..	...	...	57,823	
Colombia	309,367	309,367	309,367	928,068
Brazil	84,855	4,532	4,532	4,532
Peru	1,537,673	3,093,539	1,599,064	2,419,103
Bolivia	12,374,188	12,374,188	7,733,879	8,507,280
Chile	5,796,553	6,749,820	6,749,820	6,602,674
Argentine Republic	369,633	46,413	23,207	328,684
The World†	94,824,436	97,565,268	99,515,050	112,767,003

606. At 4s. per ounce the quantity of silver raised in the world during 1888, would be worth £22,553,401; or, at 3s. 6d. per ounce, it would be worth £19,734,225. The quantity raised in the four years ended with 1888 would be worth £80,934,351 at the former, or £70,817,558 at the latter valuation.‡

Value of
the world's
silver
produce,
1885-1888.

607. The relative values of silver and gold have always been variable. Until comparatively recent years, however, the fluctuations have been but slight. In the 102 years, 1687 to 1789, the ratio of the former to the latter was as high as 15·39 to 1, viz., in 1734; and as low as 14·14 to 1, viz., in 1760. After 1789 the ratio was never below 15 to 1, but until 1874 only twice rose above 16 to 1, viz., in 1812, when it rose to 16·11 to 1, and in 1813, when it rose to 16·25 to 1. Since 1873, the depreciation of silver and consequent difference in

Relative
values of
gold and
silver.

* See U.S. Mint Report, 1889, pages 166 and 167, where the quantities are given in kilogrammes, which have been converted into ounces on the assumption that a kilogramme is equal to 32·142 oz. troy. According to the New York *Financial and Commercial Chronicle*, of 2nd August, 1890, the world's production of silver in 1889 was 125,988,671 oz.

† British India, which, according to another authority, produced silver to the value of £914,367 in 1883, does not appear to be included.

‡ In 1889, according to the 20th Annual Report of the Deputy-Master of the Royal Mint, London, page 14, the average price per ounce paid for silver bullion for coinage (standard silver) was rather more than 3s. 6½d., or ½d. lower than the average price for 1888. The silver in the table, taken as a whole, was probably considerably below the standard.

value between the two metals has been greater from year to year, and in 1889 it took 21·8 parts of silver to be equivalent to 1 part of gold. This is the greatest difference yet reached. The following figures show the relative values of the two metals in each of the 19 years, 1871 to 1889:—

RELATIVE VALUES OF GOLD AND SILVER, 1871 TO 1889.*

In 1871 1 part of gold was worth 15·57 parts of silver.			
„ 1872	„	„	15·63
„ 1873	„	„	15·92
„ 1874	„	„	16·17
„ 1875	„	„	16·59
„ 1876	„	„	17·88
„ 1877	„	„	17·22
„ 1878	„	„	17·94
„ 1879	„	„	18·40
„ 1880	„	„	18·05
„ 1881	„	„	18·16
„ 1882	„	„	18·19
„ 1883	„	„	18·64
„ 1884	„	„	18·57
„ 1885	„	„	19·41
„ 1886	„	„	20·78
„ 1887	„	„	21·10
„ 1888	„	„	21·76
„ 1889	„	„	21·82

Gold derived
from allu-
vial and
quartz
workings.

608. Of the gold which was raised during 1889 in Victoria, 384,984 oz. was obtained from quartz reefs, and 229,855 oz. from alluvial deposits. These figures, as compared with those of the previous year, show a decrease of 1,408 oz. in the yield of quartz reefs, and one of 8,779 oz. in that of alluvial workings. The respective proportions of quartz and alluvial gold raised were 62 and 38 per cent. in 1888, and 63 and 37 per cent. in 1889.

Value of
gold per
miner.

609. The value of gold raised in Victoria in proportion to the number of miners at work† fell to its lowest point in 1879, when it only amounted to £76 1s. 2d. per head; and reached its highest point in 1885, when it was £108 15s. 9d. per head. In 1889, it was £101 2s. 3d., or £3 13s. 8d. higher than in 1888, and also higher than in any years since 1870, except 1875, 1884, 1885, and 1886. The following figures, which have been derived from returns supplied by the Secretary for Mines, express this proportion for the last nineteen years:—

* For years previous to 1888, see U. S. Mint Report, 1888, page 209.

† For the number of gold miners at work in 1889, see paragraph 165, Volume I.

VALUE OF GOLD PER MINER,* 1871 TO 1889.

	£	s.	d.		£	s.	d.
1871	93	6	1½	1881	95	11	9½
1872	93	17	1½	1882	95	19	7¾
1873	93	16	2½	1883	95	6	3½
1874	99	8	3	1884	106	14	6¼
1875	104	4	4	1885	108	15	9¼
1876	89	19	6¾	1886	104	18	4
1877	82	6	1¾	1887	96	17	2
1878	82	12	11½	1888	97	8	7
1879	76	1	2¼	1889	101	2	3
1880	81	18	11¾				

610. In proportion to the number of miners engaged in alluvial and quartz mining, the yield of gold from the latter has frequently been more than twice as large as that from the former. The following are the figures for the last twelve years :—

Value of gold per alluvial and quartz miner.

VALUE OF GOLD PER ALLUVIAL AND QUARTZ MINER, 1878 TO 1889.

Year.	Alluvial Miners.	Quartz Miners.
	£ s. d.	£ s. d.
1878 ...	47 3 6¾	138 7 7¼
1879 ...	48 10 1½	118 8 7
1880 ...	49 14 2	129 11 7¾
1881 ...	62 0 9¾	141 19 2½
1882 ...	68 14 1½	131 19 5½
1883 ...	66 4 4	132 13 2
1884 ...	76 4 2	144 9 10
1885 ...	75 17 2	148 19 11
1886 ...	72 11 2½	144 13 11½
1887 ...	68 5 4	125 12 0
1888 ...	76 17 7	121 8 11
1889 ...	78 13 11	124 11 7

611. The estimated yield of gold in the first half of 1890 was 286,492 oz. as against 293,750 oz. in the first half of 1889.† Twice the first quoted amount would give 572,984 oz. as the estimate for the whole of 1890, or 41,855 oz. less than the quantity actually raised in 1889, and 52,042 oz. less than the quantity raised in 1888.

Estimated gold yield, 1890.

612. Exclusive of dividends paid by a few private companies, respecting which the Mining Department was unable to obtain information, the following are the amounts of dividends paid by gold mining companies in Victoria, in the last two quarters of 1889 and the first two quarters of 1890 :—

Dividends of gold mining companies.

* These amounts are sometimes incorrectly spoken of as the "average earnings" of the miners. It has been pointed out on former occasions that, as a very large proportion of the miners are working on wages, the gold they raise no more represents their individual earnings than do the products of a manufactory represent the earnings of its operatives. For wages of miners, see Part "Interchange" ante.

† See Mining Registrars' Reports for first two quarters of 1889 and 1890.

DIVIDENDS OF GOLD MINING COMPANIES, 1889-90.

Quarter ended September, 1889	...	...	...	£132,520
„ December, 1889	...	...	...	158,076
„ March, 1890	...	...	...	114,304
„ June, 1890	...	...	...	124,223
Total in 12 months				£529,123

Steam
engines
used in
mining.

613. Of the steam engines employed in connexion with gold mining, about a fifth are used on alluvial and four-fifths on quartz workings. The following is the number of engines in use and their horse-power in each of the last sixteen years :—

STEAM ENGINES USED IN GOLD MINING, 1874 to 1889.

Year.	Number.	Horse-Power.	—	Number.	Horse-Power.
1874	1,141	24,866	1882	1,074	24,692
1875	1,101	24,224	1883	1,087	25,933
1876	1,081	23,947	1884	1,104	26,228
1877	1,067	23,416	1885	1,085	26,627
1878	1,036	22,711	1886	1,072	26,920
1879	1,024	22,509	1887	1,080	27,218
1880	1,030	22,499	1888	1,119	27,472
1881	1,034	23,379	1889	1,123	26,680

Mining
machinery.

614. The value of gold mining machines of all descriptions, as estimated by the Department of Mines, increased from £1,838,123 in 1888 to £1,845,862 in 1889. In the latter year, the value of those used in quartz mining was £1,584,300, whilst that of those used in alluvial mining was only £261,562.

Auriferous
reefs.

615. The number of quartz reefs proved to be auriferous, as returned by the mining surveyors and registrars, was 3,718 in 1888, and 3,848 in 1889. It has been pointed out, however, that these cannot in every case be distinct reefs, as parts of the same reef in different localities are held to be independent veins, and named accordingly; and, moreover, as the lines of reef are further explored, it is found that what were supposed to be separate reefs are in reality not distinct.

Extent of
auriferous
ground.

616. The approximate area of auriferous ground worked upon during the last quarter of 1889 was stated to be about 327 square miles. The figures are derived from estimates, not from actual surveys, and they vary from year to year. As the different gold-workings are abandoned by the miners, they are excluded from the returns, which only take into account the ground on which gold mining operations are actually being carried on.

617. It is impossible to obtain an exact statement of the yield of auriferous quartz in any year, owing to the fact that many of the owners of machines for crushing quartz are unable to give, or are precluded from giving, information respecting their operations. The officers of the Mining Department, however, succeeded in obtaining particulars respecting the crushing of 734,313 tons in 1888, and 732,461 tons in 1889. The average yield per ton of these crushings was 9 dwt. 17·96 gr. in the former, and 9 dwt. 19·19 gr. in the latter year. From similar estimates, extending over a long series of years, and embodying information respecting the crushing of nearly 24,854,000 tons of quartz, an average is obtained of 10 dwt. 10·12 gr. of gold to the ton of quartz crushed.

Average
yield of
quartz.

618. The following is the estimate of the Mining Department* of the gross and average yield of over 43 millions of tons of the various minerals and drifts from which gold is obtained in Victoria. The quantity of gold included in the estimate is about a fourth of the total yield of the Victorian gold-fields from the period of the first gold discoveries to the end of 1889 :—

Gold from
various
matrices.

GOLD FROM VARIOUS MATRICES.

Matrix.	Quantity treated.	Yield of Gold.	
		Total.	Average per ton.
<i>From Quartz Reefs.</i>	tons.	oz.	oz. dwt. gr.
Quartz	24,853,711	12,950,885	0 10 10·12
Tailings and mullock ...	2,275,942	349,496	0 3 1·70
Pyrites	129,525	280,303	2 3 6·76
<i>From Alluvial Workings.</i>			
Washdirt	15,389,599	1,159,648	0 1 12·17
Cement	413,254	96,465	0 4 16·04
Total	43,062,031	14,836,797	0 6 21·38

619. The ten deepest shafts in the colony are those of Lansell's 180 mine, 2,640 feet; Moonlight Company, 2,409 feet; Victoria Reef Quartz Company, 2,302 feet; Victory and Pandora Company, 2,300 feet; New Chum and Victoria Company, 2,228 feet; North Old Chum Company, 2,210 feet; Old Chum Company, 2,128 feet; Lansell's 222 claim, 2,091 feet; Ironbark Company, 2,073 feet; Watson's Central and Kentish mine, 2,061 feet. It thus appears

Deep shafts.

* Mineral Statistics 1889, Statement No. 6.

that the greatest depth to which the earth's crust has been pierced in this colony by a shaft is a little over 2,600 feet.* The second mine mentioned is at Stawell, all the others are at Sandhurst.

Gold-mining
leases.

620. Since the first issue of gold-mining leases, the total number granted has been 16,703, giving the right to mine over an area amounting in the aggregate to 321,167 acres. Of these leases, 461, for 10,768 acres, were granted in 1889, and 1,561; for 34,693 acres, were in force at the end of that year.

Minerals
other than
gold exist-
ing in
Victoria.

621. Silver, tin†, copper, antimony, lead, iron, and coal have been mined for at different times in Victoria, but with the exception of brown coal, little, if any, of these minerals were raised in 1889. The silver obtained in that year was, as has already been stated, extracted at the Mint during the process of refining the gold. The following metals also exist in Victoria, but up to this date have not been discovered in paying quantities:—Bismuth, cobalt, cadmium, manganese, molybdenite, osmiridium, and zinc-blende. Various limestones and marbles, as well as kaolin and other clays, also exist, and have been worked to a certain extent.

Coal.

622. Many attempts have been made to mine for coal, but the seams hitherto worked have been too thin to yield a profit;‡ the reported discovery of thicker seams, however, and of large deposits of brown coal, chiefly in South Gippsland, led to the appointment, in July, 1889, of a Royal Commission, which was instructed “to inquire into and report as to the best means of developing the coal mining industry of Victoria.” This commission has brought up a progress report,§ in which several seams of true coal situated in different localities are referred to, varying in thickness from 2 feet to 4 feet 6 inches, the latter being the “Jumbunna East” seam, which is thus reported upon by Mr. R. A. F. Murray, the Geological Surveyor attached to the Mining Department:—

“The thickness of the seam varies at different parts of the cutting from 4 feet 6 inches to 5 feet, but it may be safely stated that the seam contains 4 feet 6 inches of good solid coal, without break, parting, or impurity so far as exposed. In a steep bank immediately over the creek, and on the same side as the large seam, is an exposure of coal about 18 inches thick, which may possibly be an attenuated portion

* See Report of Mining Registrars for the quarter ended 30th June, 1890, page 5.

† In the latter part of 1890 the discovery was reported of extensive deposits of tin in the Omeo districts.

‡ So far as is known, only 43,361 tons of coal have been raised, chiefly from Crown lands, in Victoria up to the present time. Of this, 19,729 tons were obtained during the last five years by the Moe Coal Mining Company on private lands.

§ Parliamentary Paper, No. 168, Session 1890.

of the main seam ; but this is uncertain until more has been done to trace out the extension of the seam. The quality of the coal appears very good. It is clean, hard, and bright, contains very little pyrites and carbonate of lime, and burns well and freely, though it does not appear to be a coking coal. Taking into consideration thickness, quality, freedom from impurity, and accessibility, I consider this seam to be the best, so far as exposed, yet found in Victoria, and careful exploration should be made to trace its continuation round the side of and under the range, and its extension in dip towards the creek and under the opposite range, all of which could be done easily and cheaply by means of open cuttings in the first place and boring subsequently. Should a mine be established, access to the Great Southern line or Anderson's Inlet could be easily obtained. There have been other seams of coal discovered in the neighbourhood."

623. The Commissioners, in their report, mentioned the existence of extensive seams of brown coal or lignite, and visited one mine the thickness of the deposits in which ranged from 60 to 200 feet. They say that "the brown coal differs materially from the black both in appearance and character. It belongs to the tertiary formation, and represents only a partial degree of mineralization. It is comparatively light, burns freely when dry, gives off a strong heat without smoke, and leaves a very small percentage of ash. Its principal drawback arises from the quantity of moisture it contains, and the fact that the gas extracted from it is of low luminosity." Some experiments respecting the value of this material as a fuel have been made under the direction of Messrs. R. A. F. Murray and Cosmo Newbery, who found that the proportion of brown coal equivalent to the best Newcastle coal for similar work was nearly in the ratio of 3 to 2 by weight. Further trials of brown coal in furnaces of different kinds, and with bars specially adapted to its use, are in progress.

624. The Coal Commission wound up their progress report with the following recommendations :—

Recom-
mendations
by Coal
Commis-
sion.

1. That the geological survey of the carboniferous areas of the colony be at once undertaken and conducted with vigour and continuity.

2. That the most important and accessible coal deposits should be connected by railway with the existing lines where sufficient assurance is given that such deposits will be worked.

3. That there shall be no State expenditure incurred in establishing railway communication with any coal deposits until they shall have been sufficiently opened up to demonstrate that they are of a payable character.

4. That in cases where coal deposits are developed close to a railway line we recommend the construction of sidings under the above conditions.

5. That the sum of £10,000 be added to the amount already upon the Estimates for prospecting for coal, to be devoted to prospecting other than by means of the diamond drill, upon the basis of £1 for £1 contributed and expended exclusively on labour.

6. That boring with diamond drills be continued both in Gippsland and in the Western District upon a preconcerted plan, and under the best scientific advice obtainable ; the number of drills to be increased if necessary.

625. At the present time, the coal-producing colonies of Australasia are, practically, New South Wales, Queensland, and New Zealand, whilst small quantities have been found in Victoria and Tasmania. In these over $4\frac{1}{2}$ million tons of coal were raised in 1889, but four-fifths of this quantity came from New South Wales. The following are the quantities returned as brought to the surface in each of those colonies during a series of years :—

COAL RAISED IN AUSTRALASIAN COLONIES, 1876 TO 1889.

Year.	Tons of Coal raised in—				
	New South Wales.	Queensland.	Tasmania.	New Zealand.	Victoria.
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	162,218	Nil.
1879	1,583,381	55,012	9,514	231,218	Nil.
1880	1,466,180	58,052	12,219	299,923	3
1881	1,769,597	65,612	11,163	337,262	Nil.
1882	2,109,282	74,436	8,803	378,272	10
1883	2,521,457	104,269	8,872	421,764	428
1884	2,749,109	129,980	7,194	480,831	3,280
1885	2,878,863	209,698	5,334	511,063	800
1886	2,830,175	228,656	10,391	534,353	86
1887	2,922,497	238,813	27,763	558,620	3,357
1888	3,203,444	311,412	41,577	613,895	8,573
1889	3,655,632	265,507	40,300	586,445	14,596

626. The following is a statement of the quantity of coal raised in various countries during one year, the returns being generally those for 1884, 1885, or 1886 :—

ANNUAL PRODUCTION OF COAL IN VARIOUS COUNTIES.*

Tons.			Tons.		
United Kingdom ...	157,518,482		Canada	2,091,976	
United States (1887) ...	124,015,255		Spain	1,000,000	
Germany	58,020,612		Japan	900,000	
France	20,014,597		Sweden	250,600	
Belgium	17,253,144		Italy	220,000	
Austria-Hungary ...	17,191,500		Chile	50,000	
Australasia (1889) ...	4,562,480		Other Countries (estimated)	8,000,000	
Russia	4,500,000				
British-India	4,000,000				
China	4,000,000				
			Total	423,588,646	

* The figures in this table, except those for Australasia and Canada, have been derived from the *American Almanac and Treasury of Facts*, 1888, p. 40, by Ainsworth R. Spofford, Librarian of Congress.

627. During 1889, 70 leases—of which 49 were for tin mining—of Crown lands were issued, conferring the privilege of working for minerals and metals other than gold; whilst at the end of the year the number and area of leases in force in Victoria were as follows:—

Leases for other minerals.

LEASES FOR MINERALS AND METALS OTHER THAN GOLD, 1889.

Metals and Minerals.	Leases in force at end of 1889.			
	Number.	Area.		
		a.	r.	p.
Antimony and the Ores of Antimony ...	3	281	0	1
Bismuth ...	2	98	3	4
Calcite and Silicate of Alumina ...	1	13	3	39
Coal ...	19	9,188	3	19
Copper and the Ores of Copper ...	6	450	1	20
Infusorial Earth and Kaolin ...	1	22	2	28
Iron, Silver, and Lead ...	1	459	1	0
Iron and the Ores of Iron ...	1	319	3	0
Lead, Copper, and Coal ...	1	232	2	5
Lead and the Ores of Lead ...	3	449	0	9
Lead and Silver ...	2	481	2	27
Lignite, or Brown Coal ...	1	414	2	10
Porphyry ...	2	104	2	37
Sapphires ...	1	30	2	22
Silver and the Ores of Silver ...	10	492	0	18
Silver, Lead, and Copper ...	1	38	0	37
Slate and Slate Flagging ...	10	546	1	20
Tin and the Ores of Tin ...	70	5,236	0	15
Turquoise ...	4	130	2	30
Total ...	139	18,991	1	21

628. The leases in force at the end of 1889, as shown in the table were greater by 48, and the area comprised therein was greater by 3,871 acres, than at the end of 1888. The leases for tin mining increased from 25 to 70, and those for coal mining from 17 to 19, while those for silver and lead mining fell from 16 to 11. It should also be mentioned that besides leases there were several licences issued during the year to search for metals and minerals other than gold.

Leases for other minerals, 1888 and 1889.

629. According to the estimate of the Mining Department, the following are the values of metals and minerals other than gold raised in Victoria from 1851 to the end of 1889:—

Minerals other than gold raised

VALUE OF MINERALS AND METALS OTHER THAN GOLD,
1851 TO 1889.

Name.	Estimated Value.		
	1851 to 1888.	Year 1889.	Total.
	£	£	£
Silver* ...	78,003	5,726	83,729
Tin ...	669,071	1,112	670,183
Copper and copper ore ...	190,932	175	191,107
Antimony ...	169,295	157	169,452
Lead ...	5,340	20	5,360
Iron ...	12,535	5	12,540
Coal† ...	28,765	10,991	39,756
Lignite... ..	2,193	140	2,333
Kaolin ...	7,444	...	7,444
Flagging ...	71,505	723	72,228
Slates ...	8,646	283	8,929
Gypsum ...	7	...	7
Magnesite ...	12	...	12
Ores, mineral earthy clays, etc. ...	10,901	...	10,901
Diamonds ...	108	...	108
Sapphires, etc. ...	630	...	630
Total ...	1,255,387	19,332	1,274,719

630. The following, according to the estimate of the Mining Department, is the number of men engaged in mining for various kinds of minerals or metals other than gold‡ at the end of 1889. The figures show an increase of 200 in the coal miners, but a falling-off under most of the other heads, the net increase being 143, as compared with 1888:—

MINERS FOR MINERALS OTHER THAN GOLD, 1889.

Number of Miners.			Number of Miners.		
Antimony ...	...	12	Lignite ...	...	3
Coal ...	...	254	Silver and lead ...	...	36
Freestone ...	...	6	Slate and flag ...	...	74
Granite ...	...	13	Tin ...	...	81
Infusorial earth ...	...	4			—
Kaolin ...	...	5			494
Turquoise ...	...	6			—

631. The revenue derived from the gold-fields amounted to £17,268 in 1887-8, and £18,408 in 1888-9. The amount in the latter year was made up of the following items:—

* Of late years the silver produced has been extracted from gold in the process of refinement at the Melbourne branch of the Royal Mint.
† The quantity of coal raised was 43,361 tons, inclusive of 19,729 tons raised by the Moe Coal Mining Company on private lands in 1885, 1887, 1888, and 1889.
‡ For number of gold miners, see paragraph 165, Volume I.

REVENUE FROM GOLD-FIELDS, 1888-9.

Miners' rights	...	...	...	...	£5,896
Business licences	...	...	...	...	264
Rents for leases of auriferous and mineral lands	...	...	...	...	9,317
„ mining on private property	...	...	...	...	1,759
Water-right and searching licences	...	...	...	...	1,172
Total	...	...	...	...	£18,408

632. The State aid to the mining industry during the year 1888-9, State aid to mining. was £119,139, as compared with £117,837 in 1887-8.* The former sum is made up of £24,452, cost of the Mining Department and Mining Boards; £81,072 to assist miners in prospecting operations, and to defray the cost and working expenses of diamond drills; £2,909 for prospecting and boring for coal; and £10,706 for geological and underground surveys, cutting tracks in unexplored regions, etc. Under the second of these items, usually known as the “Prospecting Vote,” the expenditure was only £20,000 a few years since; but it has latterly amounted to about £80,000.

633. During the period from 1875-6 to 1879-80, the sum of Loans to mining companies. £21,050 was lent to mining companies, but only £1,237 has since been repaid. Of the balance (£19,813), as much as £15,813 has been written off as non-recoverable.

634. In 1889, exclusive of the expenditure incurred in consequence Diamond drills. of the wear and tear of diamonds, £15,704 was spent on the working of diamond drills, of which £9,494 was expended in gold prospecting, and £6,210 in coal prospecting. The average cost of boring was 10s. 4½d. per foot.

635. Of the fifteen diamond drills belonging to the Mining Operations of diamond drills. Department, nine were engaged in alluvial prospecting, five in coal prospecting, and one in boring for water, at the end of June, 1890. The number of bores made in 1889 was 188, viz., 176 in search of gold, and 12 in search of coal; the aggregate depth bored was 18,454 feet for gold, and 11,840 for coal.

636. An Act to legalise mining for gold and silver on private Mining on private property. property,† and to compensate the owner and occupier thereof for the damage sustained by reason of the land being taken, or of their being deprived of possession of the surface thereof, in consequence of mining operations, came into force on the 24th November, 1884. Between that date and the 31st December, 1888, 698 leases were issued under

* See page 159 of the first volume of this work.

† *The Mining on Private Property Act 1884* (48 Vic. No. 796).

it, covering an area of 131,267 acres; and during the year 1889, 73 leases were issued covering an area of 14,804 acres.

637. The estimated value of the produce raised from Victorian mines and quarries in 1889 is summarized as follows:—

VALUE OF MINING PRODUCE, 1889.				
				£
Gold	...	...	...	2,459,356
Other metals and minerals	...	...	...	19,332
Stone from quarries	...	...	...	208,410
Total	...	...	...	2,687,098

638. The estimated value of the agricultural, pastoral, and mining produce raised in Victoria, during each of the last sixteen years, is given in the following table. It should be borne in mind that the prices of agricultural and pastoral produce, on which the value mainly depends, fluctuates from year to year.* In several of the years the value of the pastoral produce was greater than that of the other two industries combined :—

VALUE OF AGRICULTURAL, PASTORAL, AND MINING PRODUCE, 1874 TO 1889.

Year.	Estimated Value of—			Total.
	Agricultural Produce.	Pastoral Produce.†	Mining Produce.‡	
	£	£	£	£
1874	4,410,436	9,840,562	4,740,679	18,991,677
1875	4,835,894	9,541,551	4,475,876	18,853,321
1876	5,574,239	10,069,570	3,949,135	19,592,944
1877	5,792,898	8,652,471	3,322,264	17,767,633
1878	4,912,745	8,360,265	3,211,990	16,485,000
1879	5,875,313	6,375,965	3,136,527	15,387,805
1880	5,395,021	9,855,800	3,397,661	18,648,482
1881	5,893,874	8,684,218	3,533,658	18,111,750
1882	6,439,972	9,297,812	3,681,245	19,419,029
1883	7,372,143	10,203,914	3,357,252	20,933,309
1884	6,565,527	9,887,229	3,228,738	19,681,494
1885	7,118,388	9,049,679	3,091,244	19,259,311
1886	7,260,735	8,911,336	2,839,120	19,011,191
1887	7,078,653	8,651,599	2,661,625	18,391,877
1888	6,601,601	9,016,573	2,711,024	18,329,198
1889	7,845,739	9,063,910	2,687,098	19,596,747

* For prices of agricultural produce in different years, see table following paragraph 523 ante.
† The pastoral produce referred to is that derived from the live stock kept by farmers as well as that kept by graziers and squatters.
‡ Including the value of stone raised from quarries.

639. The census taken on the 3rd April, 1881, enabled an approximate return to be made of the value of articles manufactured in the twelve months prior to that date, and the net result has already been stated to be £5,373,091.* On the assumption that the value of manufacturing produce has increased since the census in the same proportion as the number of hands employed, or by 51 per cent., the value in 1889 would be £8,110,000, which amount being added to the figures in the lowest line of the last column in the above table, a total of the gross value of agricultural, pastoral, mining, and manufacturing produce will be obtained for that year, amounting in the aggregate to £27,707,000.

Agricultural, pastoral, mining, and manufacturing produce.

640. The patents for inventions applied for in 1889 numbered 951, or 68 more than in 1888, and a larger number than in any previous year. Since 1854 the total number of patents applied for has been 7,399.

Patents.

641. The *Victorian Copyright Act* (33 Vict. No. 350) came into force in December, 1869. Copyrights—especially those for literary productions—have been increasingly numerous during the last six or seven years, during which period they averaged about 573 per annum; whereas prior to 1883 the largest number registered was 347. The following copyrights have been registered since the passing of the Act:—

Copyrights.

COPYRIGHTS, 1870 TO 1889.

Subject of Copyright.	Copyrights Registered.		
	Prior to 1889.	During 1889.	Total.
DESIGNS.			
Articles of manufacture, chiefly of—			
Metals	310	13	323
Wood, stone, cement, or plaster ...	63	8	71
Glass	9	5	14
Earthenware	10	1	11
Ivory, bone, papier-mâché, etc. ...	55	10	65
Woven fabrics	18	...	18
Miscellaneous	18	1	19
LITERARY PRODUCTIONS.			
Literary works	3,589	432	4,021
Dramatic „	115	11	126
Musical „	104	6	110

* See paragraph 589 ante.

COPYRIGHTS, 1870 TO 1889—continued.

Subject of Copyright.					Copyrights Registered.		
					Prior to 1889.	During 1889.	Total.
WORKS OF ART.							
Paintings	...	...	...	...	6	2	8
Drawings	...	...	...	...	30	2	32
Engravings	...	...	...	...	1,241	61	1,302
Photographs	...	...	...	...	1,057	75	1,132
Sculpture	...	..	...	...	5	...	5
Total	...	...	...	...	6,630	627	7,257

Trade-
marks.

642. Provision for the registration of trade-marks was established under the *Trade-marks Registration Act* 1876 (40 Vict. No. 539), which came into operation on the 22nd September of that year. The registration of a person as the proprietor of a trade-mark is *primâ facie* evidence of his right to its exclusive use, subject to the provisions of the Act as to its connexion with the good-will of a business. From the period of the commencement of the Act to the end of 1889, 2,310 trade-marks were submitted for registration, and 1,554 were registered. During the year 1889, the number submitted was 297—or 47 less than in 1888, and the numbers registered 204—or 35 more than in 1888.

PART IX.—SOCIAL CONDITION.

643. It was provided by the *Constitution Act* that, for the advancement of the Christian religion in Victoria, the sum of £50,000 should be set apart each year from the general revenue to promote the erection of buildings for public worship and the maintenance of ministers of religion, which sum should be apportioned to each denomination according to the number of its members at the preceding census. This provision was, however, repealed by an Act (34 Vict. No. 391) which came into operation on the 31st December, 1875. Since that date no further State assistance to religion has been given.

Abolition of
State aid to
religion.

644. The following table contains a statement of the number of clergy in 1889, and the approximate number of religious services performed in connexion with each denomination during the last two years:—

Clergy and
services.

CLERGY AND SERVICES PERFORMED.*

Religious Denominations.	Number of Clergy, Ministers, etc., 1889.	Approximate Number of Services Performed.		
		1888.	1889.†	Increase (+) Decrease (—)
Church of England	217	48,983	51,828	+ 2,845
Presbyterians	218	54,081	54,668	+ 587
Methodists	216	107,805	108,046	+ 241
Bible Christians	42	10,870	15,345	+ 4,475
Independents... ..	54	20,800	6,135	—14,665
Baptists	45	10,879	6,614	—4,265
Evangelical Lutherans... ..	15	2,916	2,751	—165
Welsh Calvinists	3	1,050	490	—560
Church of Christ	22	7,200	7,600	+ 400
Society of Friends	2	344	344	...
Moravians	3	1,350	810	—540
Protestants unattached	8	2,183	1,000	—1,183
Roman Catholics	167	76,606	29,716	—46,890
Unitarians	1	104	104	...
Swedenborgians	1	134	134	...
Catholic Apostolic	29	1,271	1,236	—35
Christian Israelites	1	157	157	...
Seventh Day Adventists	5	676	400	—276
Salvation Army	368	67,808	35,568	—32,240
Spiritualists ... ..	...	38	40	+ 2
Jews	11	1,293	1,077	—216
Total	1,428	416,548	324,063	—92,485

* The information in this and the next two tables was obtained from the heads or clergy of the different denominations. In most cases where blanks occur in the column for increase or decrease, no returns have been received for 1889, and the figures for the previous year have been repeated.

† For explanation of decrease in some cases, see next paragraph.

Increase or decrease in services of different sects.

645. In 1889, as compared with 1888, increases in the number of services performed will be observed in the case of the Church of England, the Presbyterians, the Methodists, the Bible Christians, the Church of Christ, and the Spiritualists ; and decreases in the case of the Roman Catholics, the Independents, the Baptists, the Lutherans, the Welsh Calvinists, the Moravians, the Protestants unattached, the Catholic Apostolic Church, the Seventh Day Adventists, the Salvation Army, and the Jews. It should be pointed out, however, that in many instances the increases were due to the circumstance that the number of Sunday services were specially asked for in that year, whereas formerly week day services were in many cases included.

Churches, attendance, etc.

646. The next table shows for the same two years the number of churches or other buildings used for public worship, the number of persons they can accommodate, and the number of persons usually attending at the principal Sunday services :—

CHURCHES, ACCOMMODATION, AND ATTENDANCE.*

Religious Denominations.	Churches and other Buildings used for Public Worship.			Persons for whom there is Accommodation.			Persons Attending Sunday Services. †		
	1888.	1889.	Inc. + Dec. -	1888.	1889.	Inc. + Dec. -	1888.	1889.	Inc. + Dec. -
Church of England	982	1,001	+19	108,566	113,849	+5,283	60,599	60,004	-595
Presbyterians ...	919	933	+14	95,250	97,030	+1,780	69,710	70,260	+550
Methodists ...	1,131	1,314	+183	167,074	173,166	+6,092	73,431	78,239	+4,808
Bible Christians ...	168	171	+3	16,910	17,592	+682	7,330	7,485	+155
Independents ...	80	105	+25	20,000	19,466	-534	12,000	13,154	+1,154
Baptists ...	115	101	-14	17,004	18,770	+1,766	9,209	10,922	+1,713
Evangelical Lu- therans	52	49	-3	5,080	4,800	-280	3,020	2,660	-360
Welsh Calvinists	7	4	-3	1,150	879	-271	600	578	-22
Church of Christ	70	74	+4	9,000	9,500	+500	4,200	4,500	+300
Society of Friends	4	4	...	230	230	...	67	67	...
Moravians ...	2	2	...	315	330	+15	115	100	-15
Protestants unat- tached	22	13	-9	5,730	4,430	-1,300	3,650	3,270	-380
Roman Catholics	548	539	-9	113,549	114,869	+1,320	73,701	108,214	+34,513
Unitarians ...	1	1	...	500	500	...	100	100	...
Swedenborgians ...	2	2	...	230	230	...	83	85	+2
Catholic Apostolic	5	4	-1	510	510	...	200	200	...
Christian Israelites	1	1	...	200	200	...	100	100	...
Seventh Day Ad- ventists	7	7	...	500	500	...	300	400	+100
Salvation Army ...	171	259	+88	34,530	96,318	+61,788	29,730	64,008	+34,278
Spiritualists ...	1	1	...	400	400	...	150	100	-50
Jews ...	7	7	...	2,425	2,700	+275	1,052	855	-197
Total ...	4,295	4,592	+297	599,153	676,269	+77,116	349,347	425,301	+75,954

* See footnote (*) on previous page.
† In 1888 the "number of persons usually attending at principal Sunday service," and in 1889 the "Approximate number of distinct individuals attending Sunday services," was returned.

647. It will be seen that the Church of England, Presbyterians, the Methodists, the Bible Christians, the Independents, the Church of Christ, and the Salvation Army returned more, and the Roman Catholics, the Baptists, the Lutherans, the Welsh Calvinists, the Protestants unattached, and the Catholic Apostolic Church returned fewer, church edifices in 1889 than in 1888; that the only denominations which returned less accommodation were the Independents, the Lutherans, the Welsh Calvinists, and Protestants unattached; and the only denominations which returned a smaller attendance at their principal service were the Church of England, the Lutherans, the Welsh Calvinists, the Moravians, the Protestants unattached, the Spiritualists, and the Jews. The fact of some sects returning fewer buildings and less accommodation in the latter year than in the former may perhaps be accounted for by the circumstance that halls, schoolhouses, and even private dwellings in which services are held are sometimes returned as church buildings, but disappear from the totals on such services being discontinued.

Increase or
decrease of
churches of
different
sects.

648. As compared with the number in 1888, there was an increase of 297 in the number of church buildings, of 77,116 in the accommodation, and of 75,954 in church attendance. An apparent decrease of 92,485 occurred in the number of services performed, but this was due, as already explained, to week day services being now excluded.

Total in-
crease in
churches,
etc.

649. The number of Sunday schools attached to each religious denomination, the number of teachers, and the number of scholars, were returned as follow for 1888 and 1889 :—

Sunday
schools.

SUNDAY SCHOOLS, TEACHERS, AND SCHOLARS.*

Religious Denominations.	Sunday Schools.			Teachers.			Average Attendance of Scholars.		
	1888.	1889.	Inc. + Dec. —	1888.	1889.	Inc. + Dec. —	1888.	1889.	Inc. + Dec. —
Church of England	460	482	+22	3,750	3,744	—6	30,080	30,426	+346
Presbyterians ...	414	455	+41	2,860	3,118	+258	28,907	30,698	+1,791
Methodists ...	671	667	—4	6,297	6,421	+124	38,487	37,531	—956
Bible Christians...	103	107	+4	809	795	—14	3,870	3,741	—129
Independents ...	90	69	—21	850	810	—40	7,850	5,740	—2,110
Baptists ...	68	58	—10	720	700	—20	5,250	5,594	+344
Evangelical Lu- therans	23	17	—6	68	48	—20	656	437	—219
Welsh Calvinists	4	3	—1	42	40	—2	266	250	—16
Church of Christ	43	47	+4	340	379	+39	2,755	3,080	+325
Moravians ...	2	2	...	5	3	—2	45	26	—19
Protestants unat- tached	12	11	—1	139	128	—11	1,599	1,455	—144

* See footnote (*) to table following paragraph 644 ante.

SUNDAY SCHOOLS, TEACHERS, AND SCHOLARS*—continued.

Religious Denominations.	Sunday Schools.			Teachers.			Average Attendance of Scholars.		
	1888.	1889.	Inc. + Dec. -	1888.	1889.	Inc. + Dec. -	1888.	1889.	Inc. + Dec. -
Roman Catholics	280	294	+14	1,342	1,453	+111	18,936	22,080	+3,144
Unitarians	1	...	-1	1	...	-1	10	...	-10
Swedenborgians	2	1	-1	7	6	-1	35	25	-10
Society of Friends	1	...	-1	1	...	-1	12	...	-12
Seventh Day Ad- ventists†	8	9	+1	44	55	+11	210	269	+59
Spiritualists ...	2	2	...	30	14	-16	92	112	+20
Salvation Army...	...	54	+54	...	250	+250	...	1,860	+1,860
Jews†	7	6	-1	18	19	+1	258	247	-11
Total	2,191	2,284	+93	17,323	17,983	+660	139,318	143,571	+4,253

Increase or decrease of Sunday schools.

650. As compared with the numbers in 1888, the Sunday schools increased by 93, the scholars in average attendance by 4,253, and the teachers by 660. An increase in schools, teachers, and scholars took place in the case of the Presbyterians, the Roman Catholics, the Salvation Army, the Church of Christ, and the Seventh Day Adventists; in schools and scholars in the case of the Church of England; and in scholars in the case of the Spiritualists and Baptists; but a falling-off occurred in the number of schools, teachers, and scholars in the case of the Independents, the Lutherans, Unitarians, Society of Friends, the Welsh Calvinists, the Protestants unattached, and the Swedenborgians; in the number of schools and teachers in the case of the Baptists; of the schools and scholars, in the case of the Methodists and Jews; of the teachers and scholars in the case of the Bible Christians and the Moravians.

Ages of Sunday school children.

651. Efforts have been made for several years past to get a return of the ages of the children attending Sunday schools, but in the majority of instances blank forms have been sent back, the religious bodies expressing themselves as unable to supply the information. From such returns as have been received, however, it would appear that about 64 per cent. of the children were between 6 and 13 years, whilst 22 per cent. were below, and 14 per cent. were above that age. The total number of Sunday school scholars was 143,571 in 1889; the probable numbers, as follow, at above and below the school age were, therefore, in that year :—

* See footnote (*) to table following paragraph 644 ante.
† Schools held on Saturday.

PROBABLE AGES OF SUNDAY SCHOOL CHILDREN, 1889.

Under 6 years	...	...	...	...	34,573
6 to 13 years	...	...	...	...	75,727
13 years and upwards	...	...	...	...	33,271
Total	...	...	...	...	143,571

652. The estimated number of children living in the colony between 6 and 13 years of age was 163,878 in 1889; the proportion of these attending Sunday school was thus probably 46 per cent. in that year.*

Proportion
of Sunday
school
children to
population.

653. The Melbourne University was established under a special Act of the Victorian Legislature (16 Vict. No. 34), which was assented to on the 22nd January, 1853. This Act, as amended by the *University Act* 1881 (44 Vict. No. 691), which came into force on the 7th June, 1881, provides for the endowment of the University by the payment of £9,000† annually out of the general revenue; also, that no religious test shall be administered to any one to entitle him to be admitted to the rights and privileges of the institution; also for the constitution of a senate, to consist of all male persons who had been admitted to the degree of master or doctor, and for the election by them annually, or after the occurrence of a vacancy, of one of their body as warden as soon as such superior degrees should amount to not less than 100, which number having been reached in 1867, the senate was constituted on the 14th of June of that year; also for the election by the senate of a council consisting of twenty members (all males), of whom not more than three may be members of the teaching staff, and for the election by them out of their own body of a chancellor and a vice-chancellor. The council are empowered by these Statutes to grant in any faculty except divinity, any degree, diploma, certificate, or licence which can be conferred in any University in the British dominions. The recent Act also gives power to the senate to amend Statutes or regulations sent to them by the council; and it also reduces the tenure of office of members of council from life to five years.

Melbourne
University.

654. Royal letters patent, under the sign manual of Her Majesty Queen Victoria, were issued on the 14th March, 1859, declaring that the degrees of Bachelor and Master of Arts, and Bachelor and Doctor

University
ranks with
British Uni-
versities.

* In 1888 the proportion for the age period 6 to 15 was 43 per cent.

† Besides this amount, an additional annual subsidy of £2,000 was voted by Parliament for the years 1883 and 1884; £5,500 for the years from 1885 to 1887; and £7,500 for 1888 and 1889. The total subsidy at the present time is thus £16,500 per annum. Moreover, since 1884, various sums, amounting in the aggregate to £37,500, have been granted for buildings and apparatus.

of Medicine, Laws, and Music, which had been granted or might thereafter be granted by the Melbourne University, should be recognised as academic distinctions and rewards of merit, and should be entitled to rank, precedence, and consideration in the United Kingdom, and in British colonies and possessions throughout the world, just as fully as if they had been granted by any University in the United Kingdom

655. The foundation stone of the Melbourne University was laid on the 3rd July, 1854, by His Excellency Sir Charles Hotham, K.C.B., the then Governor of Victoria, and the building was opened on the 3rd October of the following year.

656. On the 22nd March, 1880, the University was thrown open to females. For some years afterwards they were not allowed to study medicine, but this prohibition has recently been removed, and they are now admitted to all the same corporate privileges as male students.

657. The following is a statement of the fees payable at the Melbourne University :—

UNIVERSITY FEES.		£	s.	d.
For admission to examination at any matriculation examination	...	0	10	0
For each subject at matriculation selected by the candidate	...	0	5	0
For matriculation and certificate thereof	...	1	1	0
For the degree of Bachelor of Arts—For each year of not more than five courses	...	12	12	0
For the degree of Bachelor of Science—For each year	...	21	0	0
For the degree of Bachelor of Laws—For each year	...	25	4	0
For the degrees of Bachelor of Medicine and Bachelor of Surgery—				
For the first year	...	18	18	0
For the second year	...	21	0	0
For any subsequent year	...	25	4	0
For the degree of Bachelor of Engineering—				
For the first and second years	...	12	12	0
For the third and fourth years	...	25	4	0
For a course of Surveying, Levelling, and Practical Mensuration	...	6	6	0
For the Certificate of Engineer under the old regulations	...	5	5	0
For any certificate, not for completion of a year's course for a degree, either of attendance upon lectures or of Examination, or of both	...	1	1	0
For any admission <i>ad eundem statum</i>	...	2	2	0
For any degree of Bachelor, whether direct or <i>ad eundem</i>	...	5	5	0
For any higher degree when direct	...	10	10	0
For any higher degree when <i>ad eundem</i>	...	5	5	0

Note.—Besides the above amounts, special fees are charged for different departments. Any yearly fee may be paid in three equal terminal instalments.

658. The memorial stone of the University Hall, called the "Wilson Hall," was laid on the 2nd October, 1879, in the presence of His Excellency the Marquis of Normanby and a large concourse of spectators, by Sir Samuel Wilson, Knt., then a member of the Legislative Council, now a member of the British House of Commons, who,

by his munificent gift of £30,000 (which by interest had increased to £37,000 before the University authorities were in a position to expend it), was the means of the Hall being erected. The building, which, except the organ loft, is now completed, is of the perpendicular Gothic style of architecture, in length 140 feet; breadth 47 feet; height of walls 45 feet; and of apex of roof 84 feet. Its cost has exceeded £40,000.

659. Provision had been made in the Act of Incorporation for the establishment of affiliated colleges in connexion with the four principal religious denominations, and ground for the erection of such colleges was reserved near the University. Up to the present period this privilege has been taken advantage of by the Church of England, Presbyterians, and the Wesleyans; their colleges being named respectively Trinity, Ormond, and Queen's. The Roman Catholics have not yet commenced to erect a college on the site reserved for their body.

Affiliated
colleges.

660. The following information respecting Trinity College has been supplied for this work :—

Trinity
College.

“Trinity College, which, though connected with the Anglican Church, extends its advantages of residence and training to all religious denominations alike, stands in a section of the University reserve facing the Sydney road. It was for several years the only University College in Victoria. From the time of its affiliation to the University, in 1876, the progress of the college was rapid and uninterrupted. Before the end of 1877 a considerable increase in the accommodation for students was required, and a large pile of buildings was consequently erected. In a short time the additional rooms thus provided were all occupied, and the building of another wing was rendered necessary. Through the munificence of Sir Wm. Clarke, Mr. Joseph Clarke, and other friends of the college, the council was in the year 1882 placed in a position to erect the new structure. These additional rooms were speedily occupied, and the buildings were further extended in 1887. The existing buildings, in addition to apartments for the warden, tutors, and students, contain a chapel, dining hall, lecture rooms, billiard room, chemical and biological laboratories, libraries, etc. The college, while maintaining its primary character as a place of residence and education, both religious and secular, for University students belonging to the various professional schools, has also, since the year 1878, contained the Theological Training-school for the Diocese of Melbourne.

“Lectures on the subjects of the Arts, Law, Science, Engineering, and Medical courses are regularly delivered at the college during term. Most of these lectures are given in the evening or early morning, in order to meet the requirements of bank-clerks, teachers, and others who may be prevented, by the nature of their employment, from attending lectures at the University. The college lectures are intended to be ancillary to those delivered in the University, and are given with a view to preparing students for both the Ordinary and Honour University Examinations. The college provides students with extra private tuition in any subject in which they may require special assistance. All the lectures are open to women students, and a large number have already availed themselves of the privilege.

“The college offers exceptional facilities for the study of the subjects of the University Medical course and the course for the degree of Bachelor of Science in its chemical and biological laboratories.

“Special attention is devoted by the Science Lecturers to the preparation of First Year Medical Students in the subjects of Natural Philosophy, Biology, and Chemistry (both practical and medical).

“Practical demonstrations are regularly given in Biology, Physiological Chemistry, and Histology, and form an important feature of the college teaching. The use of microscopes, electrical apparatus, etc., is allowed to the students without extra charge.

“Abundant means for recreation have been provided, including two asphalted tennis courts, a billiard room, and a reading room supplied with the best English, Australian, and American newspapers and periodicals. A special feature of the college is its libraries, containing about six thousand volumes, which comprise many rare and valuable works. The buildings of the college represent an outlay of about £30,000, the whole of which has been derived from the liberality of Victorian churchmen. Several hundred names have already been entered on the college books, and in 1888 there were nearly 100 students residing or attending lectures. The fees payable to the college for residence and commons are sixty guineas per annum; and for tuition, £2 2s. per course per term. In the case of students who have not yet entered upon residence, the payment of the enrolment fee (£4 4s.) secures a grant of rooms upon the first vacancy occurring. Each student is provided with a separate bedroom. The sitting-rooms are for the most part jointly occupied by two students, but a separate sitting-room can be arranged for if desired.

“A hall or hostel, connected with Trinity College and under its control, has been established in the college grounds for the residence of female students attending the college lectures. A principal presides over it, who undertakes the religious and moral supervision of the students. The hostel building is named after Lady Clarke, by whose liberality mainly it was erected.

“No religious test or disability is imposed upon the students of the college or hostel, and attendance at the services in chapel is not required in cases where conscientious objections are felt.”

Ormond
College.

661. Ormond College was erected at a total cost to the present date (including furniture, fencing, etc.) of £47,850, of which amount £41,780 was contributed during his lifetime by its generous founder, the late Hon. Francis Ormond, M.L.C., after whom the college has been named. Mr. Ormond died on the 2nd June, 1889, and bequeathed to the college a sum of £40,000, part of which will be used to complete and extend the present building, and the remainder will be reserved as a permanent endowment for the institution. It is estimated that when completed in its quadrangular form the total cost of the building will be at least £70,000. A portion of the north-east side was completed in 1888. This is to be called the Victoria wing, in commemoration of the jubilee of Her Most Gracious Majesty. The sum of £15,000 has already been obtained from the public towards the maintenance of the institution and the foundation of scholarships. Although allied to the Presbyterian body, it is open to members of all religious denominations. The following account of this institution has been supplied by the Master of the college:—

“The foundation stone of the college, which is built on a section of the University reserve, was laid by the Marquis of Normanby on the 14th November, 1879; and the college was opened by His Excellency on the 18th March, 1881, and affiliated to the University on the 17th May of the same year. In 1884, owing to the number of applicants for admission, it was found necessary to enlarge the buildings. A new wing containing students' bedrooms, sitting-rooms, bathrooms, students' common

room, etc., was erected and formally opened by Mrs. Ormond on the 23rd December, 1885. At the opening of the session, 1886, this additional accommodation was all taken up, and when a fourth side was added to the quadrangle and opened at the beginning of the University session, 1889, it was immediately filled with students, and the number of applicants for admission is now greater than the present building can accommodate.

“Tutorial assistance is provided by the college for students in preparing for the University lectures and examinations in Arts, Law, Medicine, and Engineering, and the college lectures are open to both resident and non-resident students.

“Many of the college lectures take place in the early morning and in the evening, so that those who are engaged at other employments throughout the day have an opportunity of preparing themselves for the University examinations, and of ultimately taking a degree, as the University does not make attendance at its own lectures compulsory, except in the case of Medical students.

“All the classes in Arts and Medicine are open to ladies, and arrangements have lately been made by which the college will be able to provide residential accommodation for ladies attending the University lectures.

“A chemical laboratory has been fitted up by the Council with all the necessary appliances, and the college has also a supply of microscopes for the use of students in the Biology Class.

“A reading room, billiard room, and lawn tennis court have been provided by the college, and handed over to the management of the students, who have lately built a college gymnasium, and laid down a second asphalt tennis court. A flourishing debating society meets in the college once a fortnight, and is open to all members of the University.

“During the session 1890, there were in all upwards of 100 students attending the college lectures.

“An examination for entrance scholarships and exhibitions, each of which is of the value of either £18 18s., £25, £50, or £60, is held at the beginning of December in each year, and is open to all, irrespective of age, sex, or creed. The total yearly cost for tuition and residence varies from a maximum of £84 13s. to £65 15s., according to the number of subjects in which a student receives tuition; but special arrangements are made either in the case of clergymen’s sons or in the case of students studying for the ministry of the Presbyterian Church—these pay about half fees for residence. Breakfast, luncheon, and dinner are provided in hall by the college, so that a student need have no extra expenses except his laundry bill. The lectures in connexion with the Theological Hall of the Presbyterian Church are delivered in Ormond College by two Professors and two Lecturers appointed by the General Assembly. The students attending these classes are candidates for the ministry of the Presbyterian Church, and they are required to take a three years’ course in the Hall after graduating in Arts either in Melbourne or in some other recognised University.”*

662. The following account of Queen’s College has been supplied by the Master:— Queen’s
College.

“Queen’s College is built in the section of the University Reserve granted by the Government to the Wesleyan Church in the Act of Incorporation of 1853, and is open to students of either sex, without regard to their religious belief.

“The Conference first appointed a Committee to arrange for the building of the College in 1878. Steps were at once taken to secure donations for this object, and a generous response was made, the first donor being Sir William McArthur, of London, who presented £1,000 to the Committee. But it was considered essential that the College should be opened free from debt, and, as the amounts promised were not sufficient to cover the estimated expense, the matter was allowed to stand over until 1887, when, the Conference having voted a sum of £13,000 from the Jubilee Fund

* For further particulars respecting Ormond College, see *Melbourne University Calendar* and *Ormond College Calendar*.

for the College, it was decided to build it at once. Accordingly on Thursday the 16th June, 1887, the memorial stone was laid by His Excellency Sir H. B. Loch, K.C.M.G., etc., the then Governor of the Colony, by whom the College was formally opened on 14th March, 1888. On the previous day the Building Committee held its final meeting, and passed a vote of thanks to the Rev. W. A. Quick, whose strenuous and indefatigable efforts in the promotion of the scheme entitle him to the honour of being practically the founder of Queen's College. The insufficiency of the accommodation provided was felt even during the first session; and steps have been taken to enlarge the building, so as to accommodate about 40 students. A large hall, 60 ft. by 27 ft. was erected in 1889, and formally opened on 2nd April, 1890, by the Hon. the Speaker of the Legislative Assembly.

"All the rooms have been furnished by the Council, and each student is provided with a separate bedroom and sitting-room.

"A Lawn Tennis Court and Reading Room have also been provided, and handed over to the management of the students.

"Lectures are delivered in the College on the chief subjects of the University Examinations. The lectures are given in the evening, so as not to interfere with the attendance of students at the University Classes, and are open to non-resident as well as resident students. For the present the Lectures in Chemistry, Biology, and Histology will be given in the Laboratory of Trinity, and those in Classics at Ormond.

"A first-rate microscope has been expressly constructed for the College, under the personal direction of the Rev. Dr. Dallinger, F.R.S., late President of the Microscopical Society of Great Britain.

"The College Library is furnished with all necessary books of reference for the use of students, and all the leading scientific periodicals.

"An examination will be held at Queen's College, in the early part of December, 1890, at which eight scholarships will be offered for competition. Each of these is of the value of not less than £50 per annum, tenable for one year only; but scholars will, on the expiry of their tenure, be again eligible as candidates. Scholars are required to reside in the College. Three minor scholarships and a number of exhibitions will also be awarded.

"Exhibitioners may be resident or non-resident in the College.

"There are no restrictions as to age, sex, or religion for either scholarships or exhibitions. The scholarships and exhibitions will be awarded on condition that the holders thereof obtain first or second class honours at the close of the year.

"Graduates in Arts who intend to read for any University scholarship examination, or to study for degrees in medicine, law or engineering, may be elected scholars or exhibitioners of this College without examination, provided they have taken first or second class honours or a scholarship at any final honour examination.

"Examination entry forms should be filled up and sent in not later than 1st December of each year. Candidates are required to state the subjects in which they wish to be examined, and generally the extent of their reading. They must forward at the same time testimonials of good character. An entrance fee of ten shillings will be charged to each candidate for the examination. This must be forwarded with the entry form.

HOUSE REGULATIONS.

"1. The College is open to members of all religious denominations, either as resident or non-resident students.

"2. Applicants for admission as resident students must produce satisfactory evidence of good moral character.

"3. Each student is required, upon enrolment, to sign the following declaration:—
'I solemnly promise that, so long as I am a student in Queen's College, I will loyally obey the Master and all other persons to whom he may delegate his authority, and will faithfully keep all the rules that are or may be made for the government of the College.'

"4. No student is allowed to reside in the College for a shorter period than one full term, unless he have paid his fees for the whole term.

"5. One term's notice must be given previous to the withdrawal of any student, otherwise a charge of £10 10s. may be made.

"6. Resident students shall have rooms (a separate study and bedroom) assigned to them by the Master. Students will be allowed to choose their rooms in the order of their enrolment, subject to the Master's approval.

"7. Students will be held responsible for any damage done to the furniture of their rooms or to other College property.

"8. All resident students are expected to attend at morning or evening chapel on six days in each week unless specially excused by the Master. Such excuse will be granted to any student who states in writing that he has conscientious objections to being present. Chapel will be held at 7.30 a.m. and 10 p.m. Sunday morning chapel will be held at 9.15 a.m., at which all students in College must attend.

"9. Meals will be provided in the College Hall at stated hours, viz.:—Breakfast, 7.40 a.m. (Sundays, 8 a.m.); luncheon, 12.30 to 2; dinner, 6.15 p.m.

"10. Non-resident students may have luncheon or dinner in hall by giving due notice, and on payment of 1s. for luncheon and 1s. 6d. for dinner, or by special arrangement with the Master for the whole term.

"11. Any resident student may invite guests (not exceeding two in number for any meal) on entering their names in the guest-book at the meal previous, and on payment at the following rates:—Breakfast, 1s. 6d.; luncheon, 1s. 6d.; dinner, 2s.

"12. Two students shall be appointed weekly by the Master to read the lessons at chapel, and to say grace in hall. A fine of 1s. will be levied in case of absence.

"13. No undergraduate student shall be out of College later than 11 p.m. Students coming in after 11 p.m. will pay a fine of 1s.; after 12 midnight, 2s. 6d.

"14. No student shall spend the night out of College except by special permission of the Master.

"15. No visitor may remain in the College after midnight.

"16. Academical dress shall be worn at prayers, at meals, at lectures and examinations, and at all public ceremonies connected with the College.

"17. The College terms, vacations, and holidays shall be the same as those of the University. Students wishing to remain in residence during the short vacations, or after the third Monday of the fourth term, may do so by arrangement with the Master.

"18. The fees are as follow, and must be paid within the first week of lectures in each term. A fine of 5s. per week will be levied in case of late payment:—

<i>Entrance Fees.</i>				£	s.	d.
Enrolment fee (to be paid on making application for rooms)	...	...	...	2	2	0
*Caution money (resident students only)	...	...	...	2	2	0
Library entrance fee (resident students)	...	...	...	2	2	0
" " (non-resident students)	...	...	...	1	1	0

Terminal Fees.†

"Residence and commons, from the beginning of the first term till the third Monday in the fourth term, 60 guineas, to be paid in three equal instalments within the first week of lectures in the first, second, and third terms respectively.

"In the case of students entering for one, two, or three terms only, a proportionate deduction will be made.

	£	s.	d.
Residence and commons, during vacations, per week	...	1	10 0
Use of furniture, per annum	...	1	10 0
‡Tuition, per term, one course	...	2	2 0
" " two courses	...	4	4 0
" " three or more courses	...	6	6 0

* This will be returned when a student leaves if no arrears are due by him to the College.

† These charges include breakfast, lunch, and dinner. Fuel will be provided at current rates. Students must provide their own bed-linen and towels.

‡ Resident students must pay tuition fees for at least two courses of lectures per term. Students in chemistry and biology will have the use of the laboratories at Trinity College on the same terms as the students of that College.

"A students' society has been founded, under the name of 'The William Quick Club,' for the purpose of reading essays, holding debates, and in general encouraging social intercourse amongst the students. The ordinary meetings are held on alternate Wednesday evenings at eight o'clock. Membership is open to all members of the University or affiliated Colleges. A sports committee has also been appointed for the arrangement of cricket, tennis, football, and rowing contests. A musical society, for the practice of part singing, is also held at regular intervals.

"Fellowships may be granted (1) to students obtaining first-class honours in the final examination for their degree; (2) to any other persons distinguished for special original work in any department of science or literature. The following are the present Fellows of the College:—The Master (Rev. E. H. Sugden, B.A., B.Sc.); A. H. S. Lucas, M.A., B.Sc.; A. Dendy, M.Sc.; E. F. J. Love, M.A.; J. R. Harcourt, B.A.; the Rev. L. Fison, M.A.; A. S. Way, M.A.; A. W. Howitt, F.L.S.; R. T. A. Bernard, M.A. The number of Fellows is limited to 12. Rooms and commons may be granted to any Fellow who is engaged in original research approved by the Fellows' Meeting."

Chair of
Music.

663. A Chair of Music has been established in connexion with the University, for the endowment of which the late Hon. Francis Ormond contributed the sum of £20,000. Besides this about £5,000 has been raised by public subscription and concerts for the endowment of musical scholarships in connexion with the Ormond Professorship of Music. The following information respecting the appointment of a professor has been supplied by the Chancellor of the University, Dr. A. C. Brownless, C.M.G.:—

"A commission has been appointed in England to act with the Agent-General in selecting from the candidates who may apply for the professorship five gentlemen whom they may consider the best qualified to fill the office, and from these five the Council of the University will elect the professor, and towards defraying his travelling expenses to this colony, the late Mr. Ormond had prior to his death promised a further sum of £200.

"The salary of the Ormond Professor of Music will be £1,000 per annum, and his tenure of office will be five years, 'si tam-diu se bene gesserit.'

"Great difficulty has been experienced in endeavouring to appoint a suitable professor of music. The selection committee in London reported the names of five eminent musicians from amongst the candidates applying, as the most suitable for the office; but as the committee declined to place them in order of merit or to name any one of them as the most fit for the office, the Council determined to forward the correspondence which took place between the Council and the Agent-General to the Hon. Francis Ormond, who was then on his way to England, in order that he might confer with the selection committee and the Agent-General on the matter.

"Mr. Ormond died, unfortunately, before he had an opportunity of conferring with the Agent-General and the committee of selection. Upon hearing of the death of Mr. Ormond, the Council wrote to the Agent-General, requesting him to again communicate with the committee of selection, with the view of taking the best and most speedy course to obtain a gentleman highly qualified for the appointment.

"About the middle of 1890, Sir Charles Hallé, one of the selection committee, who was on a visit to Melbourne, had an interview with the Council, and furnished much valuable information with reference to the appointment, and the Council hope to be in a position, after hearing further from Sir Charles Hallé, to obtain an eminent musician to fill the office.

“The duties of the Ormond Professor of Music will be—

I. To deliver lectures on—

- (1.) The history of music.
- (2.) Harmony and composition.
- (3.) Thorough bass, counterpoint, and fugue.
- (4.) The teaching of music.
- (5.) The various musical instruments, and the physical laws involved in them.
- (6.) Public performance, solo and concerted playing.
- (7.) Conducting.
- (8.) Vocalisation and the physiological laws governing it.
- (9.) The selection of voices for choirs, solos, and operas.
- (10.) Sound and general acoustics.
- (11.) Instrumentation and reading from orchestral score.

II. To conduct examinations of candidates for musical degrees.

III. To periodically report upon the progress of scholars in music, whether in the colony or travelling.

IV. To conduct examinations of candidates for certificated teachers.

“The professor will not be allowed to sit in Parliament or to become a member of any political association, neither will he in any case be allowed to give private instruction, nor, without sanction of the Council, to deliver lectures to persons not being students of the University.”

664. The matriculation examination of the Melbourne University is at present held twice a year, viz., at the end of the first term, and at the end of the fourth term. The subjects of examination are fourteen in number, viz., Greek, Latin, English, French, German, algebra, geometry,* history, arithmetic, geography, chemistry, physics, physiology, and botany. In all these subjects, with the exception of arithmetic and geography, honour as well as pass papers are set, but the candidate must decide before entering for the examination which he intends to present himself for. The last four are called science subjects, any two, but not more, of which may be selected. To pass the matriculation course it is necessary, at one and the same examination either to pass in six subjects, or obtaining honours in one subject to pass in four others, or obtaining honours in two subjects to pass in two others.

665. In addition to the lists published after every matriculation examination, containing a record of honours, pass, or failure in each subject presented by the various candidates, six class lists are published of those who have passed creditably the honour papers

* Trigonometry as well as geometry is set in the honour papers, but geometry only in the pass papers.

set in—(a) Classics (Greek and Latin); (b) Mathematics (algebra, geometry, and trigonometry); (c) English and history; (d) Modern languages (French and German); (e) Physics and chemistry; (f) Physiology and botany. In these lists the names of candidates are arranged in three classes—those in the first and second classes being placed in order of merit, those in the third in alphabetical order.

Exhibitions
at matricu-
lation.

666. At the matriculation examination in the fourth term in each year, six exhibitions, two of the value of £25 each; one in classics, and one in mathematics, and four of the value of £20 each; one in English and history, one in French and German, one in physics and chemistry, and one in physiology and botany, are open for competition, and may be awarded to the candidates under twenty-one years of age who severally stand highest in the first class of the six class lists of that examination.

Candidates
at matricu-
lation ex-
amination.

667. During the year 1889 the total number of candidates who presented themselves for the matriculation examination was 1,113. Of these 121 entered for fewer subjects than the number required for passing the examination, leaving 992 who attempted to pass. Of this number 464, or 46·7 per cent., were successful.

Matricu-
lated
students.

668. A large majority of those who pass the matriculation examination have no intention of pursuing a University career any further and therefore do not matriculate, to do which it is necessary to pay a fee of one guinea and to go through a formal ceremony, which involves making a declaration and signing the matriculation book—the matriculation examination being, as a matter of course, passed beforehand. Although 464 persons passed the matriculation examination in 1889, only 189 matriculated, as against 146 in the previous year. From the date of its opening to the end of 1889, the total number who matriculated was 2,908.

Attendance
at lectures.

669. In 1889, 537 students, of whom all but three had matriculated, attended lectures, as against 539 in 1888, 492 in 1887, 450 in 1886, and only 213 ten years previously. Of the number in 1889, 212 attended lectures in arts, 84 in Laws, 11 in Engineering, 223 in Medicine, and 7 in Science.

Degrees.

670. The number of degrees taken in 1889 was 144, of which 130 were direct and 14 *ad eundem*. The direct graduates numbered 118 in 1888, and 115 in 1887. The *ad eundem* degrees numbered 15 in 1888, and 13 in 1887. The following table shows the number

of degrees conferred at the University between the date of its first opening and the end of 1889, also those in the year 1889:—

MELBOURNE UNIVERSITY GRADUATES * 1855 TO 1889.

Degrees.	Prior to 1889.			During 1889.			Total.		
	Direct.	<i>Ad eundem</i>	Total.	Direct.	<i>Ad eundem</i>	Total.	Direct.	<i>Ad eundem</i>	Total.
Bachelor of Arts	342	76	418	30	7	37	372	83	455
Master of Arts ...	178	119	297	21	3	24	199	122	321
Bachelor of Medicine	201	10	211	32	1	33	233	11	244
Doctor of Medicine	33	81	114	3	2	5	36	83	119
Bachelor of Surgery	161	2	163	24	...	24	185	2	187
Master of Surgery	2	...	2	...	...	...	2	...	2
Bachelor of Laws	134	6	140	11	1	12	145	7	152
Master of Laws	23	...	23	2	...	2	25	...	25
Doctor of Laws ...	9	18	27	...	...	...	9	18	27
Bachelor of Engineer- ing	3	2	5	4	...	4	7	2	9
Master of Engineer- ing	22	...	22	2	...	2	24	...	24
Bachelor of Science	...	2	2	1	...	1	1	2	3
Doctor of Science	...	2	2	...	...	...	...	2	2
Bachelor of Music	...	1	1	...	...	...	...	1	1
Doctor of Music ...	...	1	1	...	...	...	...	1	1
Total	1,108	320	1,428	130	14	144	1,238	334	1,572

671. The following is a statement of the receipts and expenditure of the University in the last two years, including the amounts received for and expended on buildings. An increase will be observed in the revenue, amounting to £2,700, of which £1,000 was due to the increased Government subsidy, and of £600 in the expenditure:—

University receipts and expenditure.

MELBOURNE UNIVERSITY.—RECEIPTS AND EXPENDITURE, 1888 AND 1889.

Year.	Receipts from—				Expenditure.
	Govern- ment.†	College Fees.	Other Sources.	Total.	
1888	£ 15,500	£ 13,282	£ 806	£ 29,588	£ 32,042
1889	16,500	14,983	816	32,299	32,652
Increase ...	1,000	1,701	10	2,711	610

* The figures in this table do not always refer to distinct individuals. The total number of graduates was about 977.

† See footnote to paragraph 653 ante.

State
schools.

672. The *Education Act* 1872 (36 Vict. No. 447), providing free instruction of a secular character to all willing to accept it, but prescribing that, whether willing to accept State education or not, all children must be educated up to a certain standard, came into operation on the 1st January, 1873. The following is a statement, based upon returns supplied by the Education Department, of the number of schools aided or supported by the State, and of the instructors and scholars in such schools, for the year prior to and for each of the years which have elapsed since that period :—

STATE SCHOOLS, 1872 TO 1889.

Year.	Number of Schools.*	Number of Instructors.†	Number of Scholars.		
			Enrolled during the Year.	In Average Attendance.	Distinct Children (esti- mated).‡
1872	1,049	2,416	136,055	68,456	113,197
1873	1,107	3,149	209,406	99,536	174,236
1874	1,167	3,715	221,164	106,886	184,010
1875	1,320	3,826	220,533	101,495§	183,484
1876	1,498	3,772	231,560	106,758§	192,658
1877	1,626	3,860	234,519	116,015	194,994
1878||	1,664	3,906	231,169	116,608	189,455
1879	1,713	4,130	227,775	119,259	193,588
1880	1,810	4,215	229,723	119,520	195,736
1881	1,757	4,303	231,423	121,250	195,526
1882	1,762	4,162	222,945	118,279	187,390
1883	1,777	4,169	222,428	118,328	188,949
1884	1,803	4,199	222,054	120,701	188,238
1885	1,826	4,050	224,685	119,488	189,637
1886	1,870	4,175	230,576	123,550	190,223
1887	1,911	4,294	230,882	123,563	192,565
1888	1,933	4,234	242,046	128,958	197,115
1889	2,062	4,586	250,429	130,859	202,822

Schools.
teachers,
and
scholars,
1888 and
1889.

673. In 1889, as compared with the previous year, the number of schools increased by 129, the number of scholars on the rolls by 8,383, the number of distinct scholars by 5,707, the number of scholars in average attendance by 1,901, and the number of instructors by 352.

* In accordance with the principle followed in the Education Department, each night school as well as each day school (although both kinds of schools may be carried on in the same building) is considered as a separate school, and is included as such in this column. There was only 1 night school in 1872, there were 29 in 1873, 56 in 1874, 117 in 1875, 181 in 1876, 216 in 1877, 208 in 1878, 180 in 1879, 136 in 1880, 41 in 1881, 35 in 1882, 27 in 1883, 30 in 1884, 23 in 1885, 24 in 1886, 19 in 1887, and 17 in 1888 and 1889.

† Including workmistresses, who numbered 496 in 1889.
‡ The figures in this column are derived from estimates formed by the Education Department, the reductions made for multiple enrolments in the last two years being as follow :— In 1888, 18·09 for day schools, and 51·16 for night schools ; in 1889, 18·58 per cent. for day schools, and 49·78 for night schools.

§ The average attendance was affected in 1875, and to a certain extent also in 1876, by the prevalence of epidemics of scarlatina and measles.

|| With the commencement of 1878 capitation grants were abolished, the consequence being that 30 schools, which in 1877 had been receiving such grants, ceased to be connected with the State.

674. The net increase of schools during the year, amounting to 129, as just stated, is made up of 148 new schools opened, less 19 schools closed. Net increase of schools.

675. By comparing the figures on the lowest and uppermost lines in the table following paragraph 672 *ante*, it will be ascertained that, during the period the present *Education Act* has been in force,* the following increases have taken place in, and in connexion with, the schools supported by the State :— Increase in State schools, 1872-89.

STATE SCHOOLS.—INCREASE BETWEEN 1872 AND 1889.

	Number.	Percentage.
Schools	1,013	96·57
Instructors	2,170	89·82
Scholars on the rolls	114,374	84·06
„ in average attendance	62,403	91·16
Distinct children attending (estimated)	89,625	79·18

676. The instructors referred to consist of masters and mistresses, male and female assistant and pupil teachers, and workmistresses. According to the following table, there was an increase during the year of 116 male and 237 female teachers :— Teachers, 1888 and 1889.

TEACHERS IN STATE SCHOOLS, 1888 AND 1889.

Year.	Males.				Females.				
	Masters.†	Assistants.	Pupil-teachers.	Total.	Mistresses.†	Assistants.	Work-mistresses.	Pupil-teachers.	Total.
1888... ..	1,356	174	163	1,693	515	627	480	919	2,541
1889	1,445	178	186	1,809	631	651	496	1,000	2,778
Increase ...	89	4	23	116	116	24	16	81	237

677. In every one of the Australasian colonies the State system of education is compulsory and undenominational (or secular). Western Australia, however, grants some assistance to private denominational schools. Public instruction is free in Victoria, Queensland and New Zealand ; but fees are charged in the other colonies, although they are partially or entirely remitted in cases where the parents are unable to pay them. The prescribed school age varies in the different colonies— in Victoria, prior to November, 1889, it was from 6 to 15 years, but State education systems of Australasian colonies.

* During this period the number of children at school age in the colony increased by about 19½ per cent., and the total population by about 44 per cent.
† Including 68 relieving teachers in 1888, and 80 such teachers, viz. 41 males and 39 females, in 1889.

since altered to from 6 to 13 years; in New South Wales and Western Australia, from 6 to 14 years; in Queensland, from 6 to 12 years; in South Australia, Tasmania, and New Zealand, from 7 to 13 years.*

678. The following table shows the number of State schools, teachers, and scholars in each Australasian colony during the year 1889; also the proportion of scholars in average attendance to population:—

STATE SCHOOLS, TEACHERS, AND SCHOLARS IN AUSTRALASIAN COLONIES, 1889.

Colony.	Number of Schools.	Number of Teachers.†	Scholars in Average Attendance.	
			Number.	Number per 100 of the Population.
Victoria	2,063	4,586	130,859	11·85
New South Wales	2,317	4,002	114,569	10·38
Queensland	584	1,497	40,472	10·19
South Australia	540	1,076	28,216	8·78
Western Australia	94‡	168	3,625	8·42
Total	5,594	11,329	317,741	10·70
Tasmania	229	459	8,973	6·03
New Zealand	1,155	2,894	93,374	15·21§
Grand Total	6,982	14,682	420,088	11·26

679. It will be observed that, in proportion to population, the average attendance at State schools is largest in New Zealand, where, however, the proportion is swelled by Maori children being included amongst the scholars, whereas they are not included in the population. Victoria, however, stands above any of the other colonies. The following is the order of the colonies in this respect, Tasmania being at the bottom of the list, which, however, may be explained by the circumstance that in Tasmania the proportion of children to the population is smaller than in the other colonies:—

ORDER OF THE COLONIES IN REFERENCE TO PROPORTION OF STATE SCHOOL SCHOLARS TO POPULATION.

1. New Zealand.

2. Victoria.

3. New South Wales.

4. Queensland.
5. South Australia.

6. Western Australia.

7. Tasmania.

* For a full account of the education systems of the various colonies, see *Victorian Year-Book*, 1888-9, Volume II., Appendix B.
† It is believed that workmistresses are included in the returns of all the colonies.
‡ Including 16 assisted schools.
§ This high proportion is partly accounted for by the circumstance that Maoris are included amongst the scholars, but excluded from the population.

680. By the figures in the last column of the following table it is shown that in proportion to the total number of children enrolled in State schools, the average number attending is greater in Victoria than in Tasmania, slightly less than in New South Wales, but considerably less than in any of the other Australasian colonies:—

School attendance in Australasian colonies.

STATE SCHOOL ATTENDANCE IN AUSTRALASIAN COLONIES, 1889.

Colony.	Number of Scholars.		Percentage of Average Attendance to Gross Enrolment.
	Enrolled during the Year.	In Average Attendance.	
1. Western Australia	4,744	3,625	76·41
2. New Zealand	154,015	93,374	60·63
3. South Australia	49,277	28,216	57·26
4. Queensland	71,687	40,472	56·46
5. New South Wales	217,289	114,569	52·73
6. Victoria	250,429	130,859	52·25
7. Tasmania	17,948	8,973	49·99

681. Of the gross number of children on the rolls of Victorian State schools in 1889, 246,982, or 98²/₃ per cent., were in day, and 3,447, or about 1¹/₃ per cent., were in night, schools. The following is a statement of the numbers of such children, at each age, placed side by side with the estimated numbers living at the same ages:—

Ages of State school scholars.

AGES OF STATE SCHOOL SCHOLARS ENROLLED, 1889.

Ages.	Number of Children Enrolled.			Estimated Population at each Age.
	In Day Schools.	In Night Schools.	Total.	
3 Years	3,061	...	3,061	26,104
4 "	10,353	...	10,353	25,538
5 "	18,317	...	18,317	24,875
6 "	22,697	...	22,697	23,654
7 "	24,726	...	24,726	23,479
8 "	24,971	...	24,971	23,259
9 "	25,209	...	25,209	22,795
10 "	24,989	...	24,989	23,807
11 "	23,672	...	23,672	23,530
12 "	22,085	...	22,085	23,354
13 "	19,617	545	20,162	23,181
14 "	14,160	1,162	15,322	22,734
15 "	7,113	931	8,044	22,368
16 to 18 Years	2,954	683	3,637	22,956*
Unspecified	3,058	126	3,184	...
Total	246,982	3,447	250,429	331,634
Total, 6 to 15 years ...	202,126	1,707	203,833	209,793

* Age 16 to 17 only.

682. It will be observed that the difference at the school age (6 to 15 years*) between the enrolments and the numbers living is 5,960; but that between the ages of 7 and 12 years the enrolments even exceed the estimated numbers living at the same ages. It must, however, be remembered that the gross annual enrolment is given, under which a child attending several schools in the year would be entered afresh at each school; also that the population, although carefully estimated from the best information available, may possibly be more or less wide of the truth.

683. Grouping the numbers in this table so as to distinguish the scholars below, at, and above the school age,* and adopting the correction applied by the Education Department—already alluded to†—to allow for children who attended at more than one school in the year, the following results, showing the probable number of distinct children who attended State schools in the year are obtained:—

AGES OF DISTINCT CHILDREN ATTENDING STATE SCHOOLS, 1889.

Ages.	Distinct Children Attending.					
	Day Schools.		Night Schools.		Total.	
	Number.	Per-centage.	Number.	Per-centage.	Number.	Per-centage.
Under 6 years ...	26,159	13·01	...	...	26,159	12·90
6 to 15 „ ...	166,633	82·86	890	51·42	167,523	82·59
15 years and upwards ...	8,299	4·13	841	48·58	9,140	4·51
Total ...	201,091	100·00	1,731	100·00	202,822	100·00

684. In the State schools, boys exceed girls. In the last two years, the proportion was 92 of the latter to every 100 of the former. In 1889 there was an improvement in the average attendance of both sexes, as is shown in the following table:—

SEXES OF SCHOLARS IN STATE SCHOOLS, 1888 AND 1889.

Year.	Scholars in Average Attendance.		
	Boys.	Girls.	Total.
1888 ...	67,255	61,703	128,958
1889 ...	68,210	62,649	130,859
Increase...	955	946	1,901

* The school age has since been altered to that between 6 and 13 years. See footnote to paragraph 685 post.

† See footnote (†) to table following paragraph 672 ante.

685. The 13th section of the *Education Act* 1872 prescribes that the parents of children between the ages of 6 and 15 shall cause such children to attend school for at least 60 days in each half-year,* unless there is some valid reason to prevent them from so doing. The returns, which are made up quarterly, show that of the whole number set down as attending State schools in 1889, the highest proportion which completed a 30 days' attendance (77 per cent.) was in the September quarter; the next highest (74 per cent.) was in the December quarter; the next (70 per cent.) was in the June quarter; and the lowest proportion (68 per cent.) was in the March quarter, the mean 30 days' attendance for the whole year being $72\frac{1}{3}$ per cent., as compared with $73\frac{1}{3}$ per cent. in the previous year. The following are the figures for the four quarters of 1889; also the average for the year:—

STATE SCHOOL ATTENDANCE IN EACH QUARTER OF 1889.

Quarter ended—	Number who Attended School.		Percentage who completed 30 days' Attendance.
	Total in each Quarter.	For at least 30 days in each Quarter.	
31st March	188,356	128,772	68·36
30th June	191,632	134,413	70·14
30th September	192,608	148,183	76·93
31st December	189,394	139,985	73·91
Average	190,497	137,838	72·33

686. It should be mentioned that a considerable proportion of those who attended less than 30 days in all the quarters were exempt or excusable for various reasons. During the last quarter of the year, for example, 49,409 of the enrolled children attended less than 30 days; but to 11,962 of these the compulsory provisions of the Statute did not apply, as they were either above or below the school age; 6,789 were also exempt on account of living beyond the prescribed distance (from two to three miles) from a State school, and 2,796 on account of having been educated up to the standard; whilst 5,394 were excusable on account of sickness, and 11,866 entered late in the quarter or left before its termination; thus the number of actual defaulters was reduced to 10,602, or to 5·6 per cent. of the number enrolled. Taking the year as a whole, the defaulters who had no reasonable excuse averaged only 4·02 per cent.

* The *Education Act* 1889 (53 Vict. No. 1023), which was passed on the 4th November, and gazetted on the 8th November of that year, altered the school age to that between 6 and 13 years, also increased the period of compulsory school attendance from 60 to 80 days each half-year.

Pupils who
have passed
the stan-
dard.

687. In 1889, the children who passed the examination qualifying for the certificate of exemption from further attendance at school numbered 7,999, or more by 3,319 than in 1888. During the seventeen years which have elapsed since the passing of the present Education Act, 109,226 children passed this examination; some of these, however, were above the school age.

Prosecu-
tions for
non-attend-
ance at
school.

688. In order to carry out the compulsory portion of the system, 8,824 prosecutions against parents were instituted in 1889, with the result that 7,585 convictions were obtained, whilst in 1,089 other instances the case was withdrawn or not proceeded with, and in 150 instances the case was dismissed. The total amount of fines inflicted was £2,073, also costs amounting to £126. Nearly three-fourths of the prosecutions were instituted by the Boards of Advice.

Free
subjects.

689. In 1889, military drill was taught in 210 schools to an average attendance of 13,740 pupils, and in 15 of these schools instruction in gymnastics was also given to 830 pupils; singing was taught in 281 schools, in 190 of which instruction was given by members of the ordinary staff, to 37,851 pupils; and drawing was taught, in 227 schools, to 24,418 pupils. All these are free subjects.

Kinder-
garten
instruction.

690. In the early part of 1887, the kindergarten system of instruction specially engaged the attention of the Education Department, and a lady who was recommended as an expert in the work was asked to deliver a course of lectures explanatory of the system. Great interest in the matter was shown by the teachers, about 90 of whom attended these lectures. The result is that in the last two years kindergarten instruction has been practised in several of the largest Melbourne schools, and the Minister reports that the system is slowly and surely growing in favour, and has been gradually extended to about 20 of the largest provincial schools, whilst more than 100 up-country teachers have had opportunities of learning the system, also that other applications had been received which it has not yet been practicable to comply with.*

Lectures on
needlework.

691. Unfavourable criticism having been offered on the teaching of some branches of needlework in State schools, an expert on the subject was requested to deliver a course of lectures illustrating the system of teaching needlework as carried out in England. These lectures lasted from May to October, 1889, and were largely attended by teachers. The same lady has been engaged to teach a special class of girls from various schools in the last four months of the current year.†

* See Education Report, 1889-90, Parliamentary Paper No. 90, Session 1890, page xxvi.

† *Ibid.*, page xxvii.

692. A further experiment made last year with the view of ^{Instruction in cookery.} affording some instruction in cookery to a number of girls in the advanced classes of Melbourne and suburban schools, proved so encouraging that steps have been taken to provide further courses of lessons in this necessary art. The instruction is in the hands of two experts, who hold diplomas of qualification from the South Kensington School of Cookery, and their labours include the Training College and twelve of the largest metropolitan schools. These courses are highly popular, admission to the classes being regarded as a privilege; and it is a matter of satisfaction to know that 300 or 400 girls of sufficient age are having efficient lessons in the practice of wholesome, appetizing and economical cookery.*

693. At the request of the Department of Agriculture, opportunities ^{Instruction in agriculture.} have been afforded for an expert lately attached to that Department to deliver courses of lectures on agriculture and the method of teaching it. Applications for the services of this lecturer have been received from several places, and besides a couple of lectures delivered to teachers in Melbourne, an alternating fortnightly course in Ballarat and Sandhurst has been commenced. The Minister proposes to add agriculture to the list of sciences which may be studied by certificated teachers who desire to gain a higher qualification, and is in favour of a small garden for instruction consisting of industrial plants or interesting exotics, such as hops, tobacco, camphor-laurel, cotton, castor oil plant, tea plant, cinchona, and many others, being formed in a school ground, which he thinks would greatly interest the children, and could be kept in order by them.*

694. The number of schools in which extra subjects were taught ^{Extra subjects.} in 1889 was 101, as against 104 in 1888, and as many as 123 in 1887; the amount paid by pupils for instruction in such subjects was £2,042 in 1889, as against £2,238 in 1888. As compared with the previous year, there was a marked decrease in the pupils being instructed in nearly all the subjects except German, book-keeping (about the same), painting, and fancy work. Some of the other subjects also are now taught to a certain extent in the ordinary course under the revised programme, and many pupils who have gained exhibitions or scholarships now pursue their studies at secondary schools.† The following is a list of the subjects, and the number of pupils instructed in each subject in 1888 and 1889:—

* See Education Report, 1889-90, page xxvii.

† *Ibid.*, page xxiv.

EXTRA SUBJECTS TAUGHT IN STATE SCHOOLS, 1888 AND 1889.

	1888. Pupils.	1889. Pupils.
Advanced English	30	26
French	522	467
German	6	14
Latin	470	398
Euclid	474	364
Algebra	719	591
Trigonometry	1	...
Mensuration*	35	81
Bookkeeping	1,168	1,160
Chemistry*	1	...
Physiology*	4	...
Physics*	70	8
Physical Geography	30	26
Shorthand	92	14
Painting	20	32
Fancy work ... ..	...	13

695. To enable them to continue their education at the best grammar schools, two hundred scholarships are annually awarded to the most clever and industrious pupils of State schools, who are selected in accordance with the results of competitive examinations, the conditions being that all must be under 15 years of age and in the sixth class. Each scholarship is of the value of £10, tenable for three years, on condition that the scholar attends at, and obtains favourable reports annually from the authorities of, one of the public grammar schools, one of the Schools of Mines, one of the Agricultural Colleges, or some other school approved by the Minister. If the scholar does not live within three miles from the approved place of education, the Minister may allow him such sum as will cover his cost of transit to and fro, or may commute the scholarship for one of £40 tenable for one year. The holders of commuted scholarships, at the end of a year, may compete among themselves for renewed scholarships offered to 30 of the best students. In the following year these 30 students may present themselves for a further renewal offered to the best 15. The subjects for competitive examination are solely those taught in State schools, except in the case of competitions for a renewal of commuted scholarships, when the examination is partly upon the State school subjects, but chiefly upon the new subjects they have been learning at the grammar

State
school
scholar-
ships.

* Now included in a greater or less degree in the ordinary course.

schools. These scholarships were instituted in 1886, and up to the end of 1889 eight hundred had been awarded. Of these 199 have expired through effluxion of time; and of the remainder 76 were commuted; in 450 instances the successful competitor attended at grammar school or college; in 65 instances he resigned or did not take up his scholarship; in 4 instances he was suspended for a year; and in 6 instances he gained an exhibition.

696. A considerable falling-off occurred in 1889 as compared with the two previous years in the number of candidates who presented themselves at the initial examinations for these scholarships, which is attributed to the teachers taking more care to present such scholars only as would reflect credit on their schools. The number for each of the last four years was as follow :—

Candidates
for scholar-
ships.

						Candidates for Scholarships.
1886	...	...	...	...	...	313
1887	...	...	...	...	...	527
1888	...	...	...	...	...	694
1889	...	...	...	...	...	466

697. A certain number of exhibitions, each of the yearly value of £40, are annually awarded for competition to the holders of State school scholarships who have passed the matriculation examination. These exhibitions, which are for the purpose of enabling the abler scholars to finish their education at the University, are each tenable for four years, but in the case of candidates for a degree of law or medicine they may be continued for another year. The subjects upon which the candidates are examined are those taught in grammar schools, namely, English, history, algebra, geometry, and two languages as prescribed for the matriculation examination. In 1889 twelve exhibitions were awarded for which there were 40 candidates. Of the successful candidates 9 were attending grammar schools in Melbourne and suburbs, and 3 in the country districts. During the same year there were 37 exhibitioners attending at the University, and 20 at various approved grammar schools; 17 of the latter number being in Melbourne and suburbs, 1 in Geelong, 1 in Ballarat, and 1 in Castlemaine.

State
school
exhibitions

698. The regulations and practice of the Education Department relative to the supply of school books, apparatus, and other requisites are as follow :—Such books and apparatus as may be regarded as

School
books and
requisites.

indispensable to the efficient working of the school are supplied by the department for the teacher's use free of charge. It is expected that the children will generally supply themselves with books, slates, and other articles required to enable them to take part in the work of their class, but free grants of school requisites are made for children who are unprovided with them for use in the school. The Minister reports that "generally children purchase their own school requisites, and when it is considered that the total cost of free stock amounted last year (1889) to no more than £4,091 10s. 6d., or about £2 for each school, it will be readily conceded that this expense is kept down almost to a minimum."*

Expenditure
on State
education.

699. The following is a statement of the expenditure from all sources on State education during the financial years 1888-9 and 1889-90. The amounts set down for extra subjects were paid by parents, all the remainder by the State:—

EXPENDITURE ON PRIMARY EDUCATION, 1888-9 AND 1889-90.

Heads of Expenditure.	Amounts Expended.		Increase.	Decrease.
	1888-9.	1889-90.		
GENERAL EXPENDITURE.	£	£	£	£
Office staff†	21,604	22,195	591	...
Inspection‡	19,996	22,435	2,439	...
Teachers' salaries	361,247	392,920	31,673	...
„ payments on results	139,030	149,891	10,861	...
Singing	7,337	7,497	160	...
Drawing	4,902	5,065	163	...
Drill and gymnastics ...	3,500	3,858	358	...
Bonuses	3,888	5,359	1,471	...
Training Institute§ ...	4,049	4,520	471	...
Stores, books, and requisites	6,481	6,255	...	226
Maintenance expenses of schools	41,021	36,300	...	4,721
Compulsory clause ...	2,913	3,098	185	...
Purchase of carbines and encouragement of rifle shooting	46	22	...	24
Boards of Advice	1,058	709	...	349
Compensation, retiring allowances, gratuities, etc.	20,563	22,206	1,643	...

* See Education Report, 1889-90, page xxi.
† Including non-clerical division, and temporary clerical assistance.
‡ Including salaries of Training Institute, £1,840 in 1889-90, also travelling expenses.
§ Including allowance for board of students and prizes for students in training ; but excluding salaries, see previous footnote.

EXPENDITURE ON PRIMARY EDUCATION, 1888-9 AND 1889-90—*contd.*

Heads of Expenditure.	Amounts Expended.		Increase.	Decrease.
	1888-9.	1889-90.		
GENERAL EXPENDITURE— <i>continued.</i>	£	£	£	£
Other expenditure* ...	4,358	5,321	963	...
Extra subjects† ...	2,238	2,042	...	196
Total exclusive of buildings	644,231	689,693	45,462 ‡	...
EXPENDITURE ON BUILDINGS.				
Maintenance ...	30,075	30,790	715	...
Rent ...	3,622	4,341	719	...
Cost of erection ...	68,000	93,340	25,340	...
Grand total ...	745,928	818,164	72,236 ‡	...

700. It will be observed that the total expenditure on public instruction in 1889-90 was £818,164, of which only £2,042 was paid by parents. The amount paid by the State (£816,122) was made up of £687,651 cost of management, inspection, instruction, etc.; of £35,131 for maintenance and rents of private buildings; and of £93,340—of which £86,885 was to be recouped from loans—for the erection of buildings. The following are the amounts expended under each of these heads during the last eleven years:—

State expenditure on primary education, 1880 to 1889

STATE EXPENDITURE ON PRIMARY EDUCATION, 1880-90.

Financial Year.	General Expenditure (Exclusive of Buildings.)	Expenditure on Buildings, Rents, etc.			
		From Revenue.			From Loans (Cost of Erection of Schools.)
		Maintenance.	Rents.	Cost of Erection of Schools.	
	£	£	£	£	£
1879-80 ...	512,861	10,000	5,899	...	66,085
1880-1 ...	521,006	14,930	4,864	...	84,828
1881-2 ...	533,225	19,604	4,487	2,127	50,693
1882-3 ...	525,405	20,000	3,725	...	58,501
1883-4 ...	530,135	19,887	2,970	...	38,953
1884-5 ...	535,347	19,900§	2,400	...	81,935
1885-6 ...	575,799||	19,949	2,700	...	53,602
1886-7 ...	584,195	15,449	2,981	...	49,748
1887-8 ...	610,520	17,995	8,408	16	54,265¶
1888-9 ...	641,993	30,075	3,622	8,000	60,000¶
1889-90 ...	687,651	30,790	4,341	6,455	86,885¶

* Including teachers' travelling expenses and expenses of examiners in singing, drawing, and science, which amounted in 1888-9 to £4,107 and £149 respectively; and in 1889-90 to £4,949 and £269.
 † This is the only item paid by parents. The amounts are for the calendar years 1888 and 1889.
 ‡ Net increase.
 § Approximate.
 || The Public Service Act 1883 came into operation about the middle of the financial year, i.e., at the commencement of 1885, hence the increased cost in this year.
 ¶ These amounts were expended from revenue, but are to be recouped from a loan.

701. In view of the large sums the State expends upon elementary education, the amount parents are willing to pay to have extra subjects taught their children appears extremely small. If the whole sum so expended in 1889-90 be divided by the number of children in average attendance, the proportion per child would be about 3¾d. per annum; and if it be divided by the number of distinct children enrolled, the proportion per child would be only 2½d.

702. The following table shows the cost of public instruction in all the Australasian colonies during the year ended 31st December, 1889, the amount paid by scholars being given separately from that contributed by the State. The expenditure on the construction, maintenance, and rent of school buildings is excluded; but the departmental expenses are, in all cases, included :—

COST OF PUBLIC PRIMARY EDUCATION* IN AUSTRALASIAN COLONIES, 1889.

Colony.	Amount contributed by the State.	Fees paid by scholars, etc.	Total.
	£	£	£
Victoria† ...	664,820	2,042	666,862
New South Wales ...	453,615	72,318	525,933
Queensland ...	171,077	...	171,077
South Australia ...	89,686‡	24,343	114,029
Western Australia ...	9,697	1,456	11,153
Total ...	1,388,895	100,159	1,489,054
Tasmania ...	29,957	9,463	39,420
New Zealand ...	343,100‡	4,567	347,667
Grand Total ...	1,761,952	114,189	1,876,141

703. Exclusive of expenditure on erecting and keeping in repair or renting State school buildings, the total cost in 1889 per scholar in average attendance at State schools ranged from £5 1s. 11d. in Victoria to £3 6s. 4d. in Western Australia. Of the total cost, over £1 per head was derived from school fees in Tasmania, 17s. 3d. in

* Total cost, exclusive of expenditure (either for erection, maintenance, or repairs) on buildings and rent. In the case of New Zealand, however, rent is included, as the amount could not be ascertained.
† The figures relate to the calendar, not the financial year.
‡ Including amounts derived from Education reserves. In South Australia it was £10,418, and in New Zealand £31,646.

South Australia, 12s. 8d. in New South Wales, and 11s. 7d. in Western Australia; on the other hand, in Victoria, Queensland, and New Zealand practically the whole amount was provided from public funds. In New Zealand about one-eleventh, and in South Australia nearly one-ninth, of the State expenditure on education was derived from Education reserves: The following table shows the average cost per scholar, distinguishing the proportions defrayed by the State and by parents or otherwise, in each colony :—

COST OF PRIMARY INSTRUCTION PER SCHOLAR IN AUSTRALASIAN COLONIES, 1889.*

Colony.	Cost per Scholar in Average Attendance.								
	Paid by State.			Paid by Parents, etc.			Total.		
	£	s.	d.	£	s.	d.	£	s.	d.
1. Victoria ...	5	1	7	0	0	4‡	5	1	11
2. New South Wales ...	3	19	2	0	12	8	4	11	10
3. Tasmania ...	3	6	9	1	1	1	4	7	10
4. Queensland ...	4	4	7	...			4	4	7
5. South Australia ...	3	3	7†	0	17	3	4	0	10
6. New Zealand ...	3	13	6†	0	1	0‡	3	14	6
7. Western Australia§	2	14	9	0	11	7	3	6	4

704. In regard to the total cost (including contributions by parents) of State primary instruction per head of population, Victoria stands at the head of the list, the amount being 12s. 1d., and Western Australia stands at the bottom with only 5s. 2d. The following is the order of the colonies in this respect:—

Order of colonies in respect to cost per head.

ORDER OF COLONIES IN REFERENCE TO COST OF STATE PRIMARY EDUCATION PER HEAD OF POPULATION.*

		Amount paid per Head of Population.				Amount paid per Head of Population.	
		s.	d.			s.	d.
1. Victoria ...	...	12	1	5. South Australia	...	7	1
2. New Zealand	...	11	4	6. Tasmania ...	...	5	4
3. New South Wales	...	9	6	7. Western Australia	...	5	2
4. Queensland	...	8	7				

* See footnote (*) on preceding page.
† In South Australia about 7s. 5d., and in New Zealand about 6s. 9d. of the amounts entered in this column was derived from Education reserves.
‡ For extra subjects only. In the figures for New Zealand amounts received by boards from local sources, and sums raised locally by School Committees are also included.
§ Government schools only. The average amount paid by the State to assisted schools was £1 8s. 4½d.

Cost per scholar and per head in Australia and Australasia.

705. In Australia, taken as a whole, the cost per scholar in average attendance was £4 13s. 9d., and the cost per head of population 10s. In Australia, with the addition of Tasmania and New Zealand, the cost per scholar was £4 9s. 4d., and the cost per head of population 10s. 1d.

Success of education system greatest in Victoria.

706. It has been shown that the amounts devoted to primary instruction in Victoria are larger than those so expended in any of the other Australasian colonies; but it is satisfactory to know that the expenditure is justified by the result, the last census having shown that, in respect to the education of children, Victoria was much in advance of any of her neighbours, whilst she was only behind one of them in respect to the education of adults. The census figures relating to these matters will be given later on.*

State expenditure on secondary instruction.

707. The following figures show that the amounts expended on the higher education in 1889-90 exceeded by £17,500 that so expended in 1888-9, and by £31,600 that expended in 1887-8, the increase being chiefly under the head of technical schools and schools of mines, and under that of University buildings:—

EXPENDITURE ON SECONDARY EDUCATION.

	1887-8.	1888-9.	1889-90.
	£	£	£
Exhibitions and Scholarships	6,519	9,077	9,899
Technical Schools and Schools of Mines	11,099	24,093	33,804
Melbourne University Endowment and Subsidy	16,500	16,500	16,500
„ „ Buildings	5,000	3,500	10,500
Total	39,118	53,170	70,703

State school buildings held in fee.

708. About the middle of 1890 the Department of Education possessed 1,996 school-houses, having accommodation for 191,280 children; also 1,446 teachers' residences. Of the latter, 1,059 were attached to, and 387 were detached from, the school-houses. The following is a classification of the buildings and of the accommodation they afforded according to the material of which they are constructed:—

† See tables following paragraph 738 *et seq. post.*

SCHOOL BUILDINGS BELONGING TO THE STATE, 1890.

Materials.	School-houses.		Number of Teachers' Residences.
	Number.	Accommodation.	
Brick or stone	490	116,141	89
Wood or other light material ...	1,485	69,156	1,343
Part brick or stone, part wood ...	21	5,983*	14
Total	1,996	191,280	1,446

709. Under the *Public Service Act* 1883 (47 Vict. No. 773), State schools are classified as follows, according to the number of pupils in average attendance at each :—

CLASSIFICATION OF SCHOOLS.

	Average Attendance of Scholars.
First Class	Over 700
Second Class	400 to 700
Third Class (Subdivision A)	250 to 400
„ (Subdivision B)	150 to 250
Fourth Class	50 to 150
Fifth Class	Under 50

710. Under the same Act, the teachers are classified and salaried according to the honours or certificates they hold and the schools in which they officiate. Subjoined is a statement of the basis upon which the classification is regulated :—

CLASSIFICATION AND SALARIES OF TEACHERS.

*** In addition to the fixed salary of a head teacher or assistant, a sum equal to one-half the amount of such salary is obtainable by way of results. Relieving teachers are paid an amount equal to one-half the amount of the fixed salary in lieu of results.

First-class teachers.—Male teachers who are certificated, and are classified in First Honours, or hold a degree of the University of Melbourne, and also are in charge of first-class schools. Minimum fixed salary, £280 per annum, rising by five annual increments of £10 to a maximum of £330.

Second-class teachers.—Male teachers who are certificated, and are classified in Second Honours, and also are in charge of second-class schools; also certificated female teachers who are first assistants in first-class schools, and are classified in First or Second Honours, or hold a degree of the University of Melbourne. Minimum fixed salary for males, £220 per annum, rising by five annual increments of £10 to a maximum of £270. Minimum fixed salary for females, £176 per annum, rising by five annual increments of £8 to a maximum of £216.

Third-class teachers.—That is, teachers who are certificated, and have also passed the matriculation examination; or are certificated and hold two of the Department's science certificates; or have obtained the trained teacher's certificate subsequently to 31st December, 1875; or obtained a trained teacher's certificate of first or second class under the Board of Education; or possess a certificate of competency alone in the case of teachers employed at the passing of this Act. And in addition to possessing

* Of which 3,921 was the accommodation of the brick or stone portion, and 2,062 of the wooden portion.

any such qualification also hold one of the following positions, that is to say—As head teachers of third-class schools, or as first male assistants in first-class schools, or as first female assistants in second-class schools; or as first female assistants in schools which were reduced from the second class on the 30th June, 1888. Minimum fixed salary for males, £176 per annum, rising by four annual increments of £8 to a maximum of £208. Minimum fixed salary for females, £121 12s., rising by seven annual increments of £6 8s. to a maximum of £166 8s.

Fourth-class teachers.—That is, teachers who are certificated, and also are in charge of fourth-class schools, or hold positions as first male assistants in second-class schools, or as first female assistants of third-class schools. Minimum fixed salary for males, £144 per annum, rising by three annual increments of £8 to a maximum of £168. Minimum fixed salary for females, £89 12s., rising by four annual increments of £6 8s. to a maximum of £115 4s.

Fifth-class teachers.—That is, teachers who are licensed to teach, and also are in charge of fifth-class schools, or hold other assistantships than those specified above, or act as relieving teachers. They are divided into two sections, with fixed salaries, payable as follow :—

- (a) Employed otherwise than as junior assistants under Sixth Schedule—

Males—Minimum, £88, rising by six annual increments of £8 to a maximum of £136.
Females—Minimum, £64, rising by three annual increments of £6 8s. to a maximum of £83 4s.
- (b) Employed as junior assistants under Sixth Schedule—

Males—£80 per annum, without increment.
Females—£64 per annum, without increment.

Pupil-teachers—
Class I.—Salary, Males £50; Females, £40 per annum.
" II. " " 40; " 32 "
" III. " " 30; " 24 "
" IV. " " 20; " 16 "

Sewing Mistresses—Salary, £30 per annum.

Teachers of
each class.

711. The following is a statement of the number of male and female teachers of each class at the end of 1889, and their classification under the *Public Service Act* 1883 :—

TEACHERS OF EACH CLASS, 1889.

Classification.			Head Teachers.		Assistants.		Pupil-teachers.	
			Males.	Females.	Males.	Females.	Males.	Females.
First class	...	...	39	...	...	...	42	325
Second class	...	...	43	...	...	36	47	177
Third class	...	...	95	...	38	41	37	210
Fourth class	...	...	319	5	42	83	60	288
Fifth class	...	...	850*	494†	71	305	...	...
Juniors	...	...	..	...	27	186	..	..
Total	...	...	1,346	499	178	651	186	1,000

NOTE.—In addition to the above, there were 496 sewing-mistresses; also 98 male and 132 female temporary unclassified head teachers. The grand total was 4,586, viz., 1,808 males, and 2,778 females.
* Including 41 relieving teachers.
† Including 39 relieving teachers.

712. The following table gives the number of private schools, and of the teachers and scholars connected therewith, according to the returns of the eighteen years, 1873 to 1890 :—

PRIVATE SCHOOLS, 1873 to 1890.

Year.*	Number of Schools.	Number of Instructors.	Number of Scholars.†
1873	888	1,841	24,781
1874	653	1,446	18,428
1875	610	1,509	22,448
1876	565	1,511	27,481
1877	645	1,646	28,847
1878	530	1,457	28,422
1879	585	1,656	35,873
1880	568	1,587	34,824
1881 (Census)	643	1,516	28,134
1882	645	1,553	34,062
1883	655	1,551	34,443
1884	670	1,638	35,773
1885	655	1,635	35,115
1886	665	1,645	34,787
1887	691	1,680	35,811
1888	749	1,812	37,823
1889	753	1,878	40,291
1890‡	782	1,967	40,181

713. The figures in the first line of the table relate to the early part of the year in which *The Education Act* came into operation. Since then there appears to have been a falling-off of 106 in the number of private schools, but an increase of 126 in the number of instructors, and of 15,400 in the number of scholars.

714. For the last fourteen years a column has been placed in the schedule used for collecting the returns of private schools for the purpose of ascertaining to what religious sect, if any, each school was attached. This column was, on each occasion, filled, in a considerable number of instances, with the name of some denomination ; but it is believed that this entry was frequently meant to indicate merely the religion of the principal teacher or proprietor of the school, and

* The statistics of private schools are generally collected in February and March. See next footnote.
† The numbers for 1881 are those returned by the census sub-enumerators as actually attending school on the 4th April of that year. The numbers given for other years are, or ought to be, those upon the school rolls at the time of the collector's visit, which is generally in February or March.
‡ The Education report for 1889-90 gives a return of 787 private schools, but in these there were said to be 42,264 scholars, or 2,083 more than in the returns furnished to the Government Statist. With reference to the scholars, however, it is stated that the figures in the Report represent the whole number which appeared on the school rolls during any portion of the year, whilst those furnished to the Government Statist represent the number on the rolls at the time of the collectors' visits.

perhaps the principles on which the establishment was conducted, not that it was recognised as connected with his church, or was subordinate to the clergy thereof. The exceptions to this are believed to be most of the schools returned as Roman Catholic, Lutheran, and Jewish, and a few as of the Church of England, but scarcely any connected with other denominations. The following are the returns of the fourteen years :—

RELIGIOUS SECTS OF PRIVATE SCHOOLS, 1877 TO 1890.

Year ended March.	Total.	Religious Denomination.									
		Church of England.	Presbyterian.	Wesleyan.	Independent.	Lutheran.	Protestant (undefined).	Roman Catholic.	Jewish.	Other Sects.*	Not any or not stated.
SCHOOLS.											
1877 ...	645	41	4	2	1	3	9	111	2	...	472
1878 ...	530	47	4	7	...	3	7	115	4	...	343
1879 ...	585	62	7	6	1	4	1	179	3	2	320
1880 ...	568	75	6	5	1	3	1	163	2	2	310
1881 (Census)	643	57	10	5	1	10	17	187	3	1	352
1882 ...	645	58	8	3	...	3	14	180	2	2	375
1883 ...	655	61	8	4	...	5	...	175	2	4	396
1884 ...	670	56	13	2	1	5	...	182	2	3	406
1885 ...	655	48	11	3	2	4	...	172	2	2	411
1886 ...	665	40	5	3	2	4	...	182	2	3	424
1887 ...	691	27	5	3	1	4	...	175	2	2	472
1888 ...	749	30	5	3	1	6	...	185	2	2	515
1889 ...	753	27	3	3	...	6	...	186	2	2	524
1890 ...	782	30	4	2	...	7	...	195	4	1	539
TEACHERS.											
1877 ...	1,646	159	46	12	1	4	27	338	10	...	1,049
1878 ...	1,457	210	32	19	...	4	10	345	13	...	824
1879 ...	1,656	242	43	18	1	4	1	539	11	2	795
1880 ...	1,587	270	50	18	2	3	2	473	7	4	758
1881 (Census)	1,516	146	50	18	1	9	33	544	13	3	699
1882 ...	1,553	161	43	12	...	3	25	537	8	3	761

* Including, in 1879, 2 Baptist schools, with 2 teachers and 30 scholars; in 1880, 1 Unitarian school, with 2 teachers and 16 scholars, and 1 Moravian school, with 2 teachers and 40 scholars; in 1881, 1 school, connected with the "Brethren," with 3 teachers and 26 scholars; in 1882, 1 school connected with the "Brethren," with 2 teachers and 52 scholars, and 1 school connected with the Moravians, with 1 teacher and 13 scholars; in 1883, 2 Baptist schools, with 4 teachers and 45 scholars, 1 school connected with the "Brethren," with 2 teachers and 52 scholars, and 1 school connected with the Moravians, with 1 teacher and 16 scholars; in 1884, 1 Baptist school, with 2 teachers and 18 scholars; 1 school connected with the "Brethren," with 4 teachers and 55 scholars, and 1 school connected with the Moravians, with 1 teacher and 14 scholars; in 1885, 1 school connected with the "Brethren," with 4 teachers and 77 scholars, and 1 school connected with the Moravians, with 1 teacher and 16 scholars; in 1886, 1 school connected with the Bible Christians, with 1 teacher and 5 scholars, 1 school connected with the "Brethren," with 3 teachers and 95 scholars, and 1 Moravian school, with 1 teacher and 18 scholars; in 1887, a school connected with the "Brethren," with 3 teachers and 83 scholars; and 1 with the Moravians, with 1 teacher and 22 scholars; in 1888, 1 school connected with the "Brethren," with 3 teachers and 74 scholars; and 1 with the Moravians, with 1 teacher and 15 scholars; in 1889, 1 school connected with the "Brethren," with 3 teachers and 91 scholars; and 1 with the Moravians, with 1 teacher and 9 scholars; in 1890, 1 school connected with the Moravians, with 1 teacher and 11 scholars.

RELIGIOUS SECTS OF PRIVATE SCHOOLS, 1877 TO 1890—*continued.*

Year ended March.	Total.	Religious Denominations										
		Church of England.	Presbyterian.	Wesleyan.	Independent.	Lutheran.	Protestant (undefined).	Roman Catholic.	Jewish.	Other Sects.*	Not any or not stated.	
TEACHERS— <i>continued.</i>												
1883	...	1,551	185	46	22	...	5	...	527	10	7	749
1884	...	1,638	177	52	20	2	5	..	555	9	7	811
1885	...	1,635	154	51	22	2	4	...	514	11	5	872
1886	...	1,645	162	35	24	4	4	...	527	11	5	873
1887	...	1,680	97	40	26	2	5	...	536	6	4	964
1888	...	1,812	124	37	25	2	6	...	568	4	4	1,042
1889	...	1,878	127	31	25	...	6	...	592	4	4	1,089
1890	...	1,967	119	35	25	...	7	...	633	10	1	1,137
SCHOLARS.												
1877	...	28,847	1,491	612	221	20	68	338	13,430	270	...	12,397
1878	...	28,422	1,730	638	333	...	142	123	15,631	293	...	9,532
1879	...	35,873	2,055	744	314	22	183	57	23,225	231	30	9,012
1880	...	34,824	2,200	793	327	23	108	69	22,514	190	56	8,544
1881 (Census)	...	28,134	1,582	836	248	13	206	449	16,430	276	26	8,068
1882	...	34,062	1,596	947	199	...	121	380	20,377	196	65	10,181
1883	...	34,443	2,061	914	319	..	170	...	20,340	178	113	10,348
1884	...	35,773	1,996	1,010	288	18	142	...	21,019	180	87	11,033
1885	...	35,115	1,728	1,019	363	28	126	...	20,369	173	93	11,216
1886	...	34,787	1,466	799	387	39	129	...	20,315	133	118	11,401
1887	...	35,811	1,301	751	389	33	128	...	20,854	93	105	12,157
1888	...	37,823	1,504	761	464	26	196	...	21,461	59	89	13,323
1889	...	40,291	1,425	691	437	...	194	...	22,696	79	100	14,669
1890	...	40,181	1,554	738	447	...	210	...	22,075	229	11	14,917

715. By the figures relating to 1890 it may be ascertained that, in that year, 243 private schools or 31 per cent., employing 830 instructors or 42 per cent., and educating 25,264 children or 63 per cent., of the total numbers, claimed to be connected with some religious denomination; also that 22,075 children, or about 55 per cent. of the total number attending private schools, or 87 per cent. of the number attending schools connected with some religious sect, were being educated in schools claiming connexion with the Roman Catholic church.

Proportion
of denomi-
national
schools.

716. The number of children at the then school age belonging to each religious denomination was ascertained from the census returns, and the amount of rudimentary education they respectively possessed

Proportion
of other
children
educated by
sect.

* See footnote (*) on previous page.

will shortly be referred to.* In the following table the numbers are collated with the numbers who attended the schools connected with the same denomination on the census day, and the proportion of the latter to the former is also shown :—

CHILDREN OF EACH SECT ATTENDING PRIVATE DENOMINATIONAL SCHOOLS ON CENSUS DAY, 1881.

Religious Denomination.	Children between 6 and 15 years of age.		
	Total Number of each Denomination living (3rd April, 1881).	Attending Denominational Schools on School Census Day (4th April, 1881).	
		Number.	Percentage of Total Number living.
Church of England ...	68,202	988	1·45
Presbyterian ...	29,848	491	1·65
Wesleyan ...	24,270	138	·57
Independent ...	4,431	13	·29
Lutheran ...	1,816	199	10·96
Roman Catholic ...	49,982	13,442	26·89
Jewish ...	1,000	248	24·80

717. Judging from the results of the census enumeration, it appears that, so far as children at the then school age are concerned, the Roman Catholic educate in their own schools nearly 27 per cent., the Jews nearly 25 per cent., and the Lutherans nearly 11 per cent., of the whole numbers belonging to their respective denominations. Compared with these, the proportions of their children educated by the other denominations are very small indeed.

718. The male teachers in private schools returned in 1890 were more numerous by 21, and the female teachers by 68 than those in 1889, the result being a total increase of 89. The number and sexes of the teachers returned in the year under review and the previous one are compared in the following table :—

TEACHERS IN PRIVATE SCHOOLS, 1889 AND 1890.

Year.				Males.	Females.	Total.
1889	...	...	...	437	1,441	1,878
1890	...	...	...	458	1,509	1,967
Increase	...	...	...	21	68	89

* See paragraph 736 *et seq. post.*

719. In private schools connected with religious bodies the number of scholars entrusted to each teacher is generally larger than in purely secular institutions. The following are the proportions as derived from the returns of 1890 :—

Scholars to each teacher in denominational and other schools.

In schools attached to religious bodies there was 1 teacher to 30 scholars.
 „ not attached „ „ „ 13 „

720. The authorities of the different religious bodies vary greatly in regard to the number of scholars they deem it expedient to entrust to each instructor. Thus, whilst in the Church of England schools the average is 13 scholars to each teacher, in the Roman Catholic schools it is as high as 35 to each. The following are the proportions of scholars to each teacher in the schools attached to the different denominations :—

Scholars to each teacher in schools of different denominations.

In schools of the Church of England there was 1 teacher to 13 scholars.
 „ Wesleyans ... „ „ 18 „
 „ Presbyterians ... „ „ 21 „
 „ Jews ... „ „ 23 „
 „ Lutherans ... „ „ 30 „
 „ Roman Catholics „ „ 35 „

721. In State schools the mean number of scholars in average attendance committed to the charge of each teacher is 29.* This is higher than the number so committed in the schools of any of the religious denominations except the Lutherans and the Roman Catholics.

Scholars to each teacher in public and denominational schools.

722. In 1890, as compared with 1889, there was an increase of 429 in the number of boys, but a decrease of 539 in the number of girls, in private schools. The following are the numbers according to the returns of the years referred to :—

Sexes of scholars in private schools.

SEXES OF SCHOLARS IN PRIVATE SCHOOLS, 1889 AND 1890

Year.	Boys.	Girls.	Total.
1889	19,396	20,895	40,291
1890	19,825	20,356	40,181
Increase	429	...	...
Decrease ... ..	...	539	110

723. The number of girls educated in private schools is greater than that of boys. The proportion was 108 girls to every 100 boys in 1889, and 103 to every 100 in 1890. In State schools the reverse is the case, as has been already shown,† the proportion being only 92 girls to every 100 boys.

Proportion of male to female scholars

* If workmistresses be excluded, this number would be increased to 32.
 † See paragraph 684 *ante*.

Ages of scholars.

724. The age prescribed by law as that at which children were to attend school, unless there might be some reasonable excuse for their not doing so. was, in the greater part of 1889, from 6 to 14 years last birthday, both inclusive.* The following are the numbers in both descriptions of schools at above and below those ages during the past year :—

AGES OF SCHOLARS, 1889.

Ages.	State Schools (distinct children).	Private Schools.	Total.
Under 6 years	26,159	5,458	31,617
6 to 14 years (school age)*	167,523	30,047	197,570
15 years and upwards ...	9,140	4,676	13,816
Total	202,822	40,181	243,003

Proportion of scholars at school age.

725. In public schools, $82\frac{1}{2}$ per cent. of the scholars were at the school age, whilst $4\frac{1}{2}$ per cent. were above and 13 per cent. were below it. In private schools, only 75 per cent. of the scholars were at the school age, whilst $11\frac{1}{2}$ per cent. were above and $13\frac{1}{2}$ per cent. were below it.

Scholars, 1889.

726. The number of children of all ages receiving education in Victoria during any portion of the year 1889 may be stated as follows :—

CHILDREN OF ALL AGES RECEIVING EDUCATION, 1889.

Being educated—

In State schools (distinct children)	202,822
In private schools	40,181
In Government industrial and reformatory schools ...	137
At home (census figures, 1881)	11,547
Total	254,687

Scholars at school age.

727. Of these children the following were at the then school age* (6 and under 15) :—

CHILDREN AT SCHOOL AGE RECEIVING EDUCATION, 1889.

Being educated—

In State schools	167,523
In private schools	30,047
In Government industrial and reformatory schools ...	74
At home (census figures, 1881)	5,800
Total	203,444

* The school age was changed in November, 1889, to from 6 to 12 years last birthday.

728. The estimated total number of children at the school age* (6 and under 15) living in Victoria in 1889 was 209,793. The following, therefore, will be the number and percentage receiving and not receiving education :—

CHILDREN AT SCHOOL AGE RECEIVING AND NOT RECEIVING EDUCATION, 1889.

	Numbers.	Per Cent.
Being educated ...	203,444	96·97
Not being educated ...	6,349	3·03
Total at school age ...	209,793	100·00

729. By the foregoing figures it would appear that 203,444 children or 97 per cent. of children at the then school age (6 and under 15) living in Victoria were being educated during some portion of the year, of whom 167,523, or 82 per cent., were at State schools. These are the “distinct children,” whose number it will be remembered has not been ascertained by actual counting but by an estimate made by the Education Department. If the number of children in average attendance be used in the computation instead of the estimated distinct children, the number of State school children at the school age would be reduced to about 108,000,† and the total number at that age receiving education in the whole colony would be reduced to 144,000, whilst the number of children not receiving education would be increased to 65,000.

730. If the distinct children have been accurately estimated, the total number receiving education during some portion of the year would be correct also, but it should be clearly understood that the stay of some of these in the schools is so short that practically they are not being educated at all. It has already been shown that the prescribed number of days in each quarter, viz., 30, was not reached in the case of 28 per cent. of the children who attended State schools during some portion of one or more of the quarters of 1889.‡

* The school age was changed in November, 1889, to from 6 to 12 years last birthday.

† Eighty-three per cent. of the whole average attendance have been assumed to be at the school age. This was about the proportion of distinct children at the school age as estimated by the Education Department.

‡ See paragraph 685 ante.

Colleges,
grammar
schools, etc.

731. Six of the schools included with the private schools are called colleges or grammar schools. Five of these at some former period received sums of money and grants of land from the Government for the erection of school buildings, but no State assistance has been given them of late years. They receive male pupils only, and are all attached to some religious denomination; and in connexion with several of them there are exhibitions, chiefly with the view of assisting the ablest scholars to complete their education at the University. The following is a return, derived from statements furnished by the authorities, of these institutions for the year under review :—

COLLEGES AND GRAMMAR SCHOOLS,* 1889.

Name of Institution.	Religious Denomination.	Amount received towards Building in former years.	Number of Masters.	Number of Scholars.
		£		
Grammar School, Melbourne	Church of England	13,784	18	319
Scotch College, „	Presbyterian Church	6,445	14	340
Wesley „ „	Wesleyan Methodist	2,769	9	182
St. Patrick's „ „	Roman Catholic ...	10,002	8	140
St. Francis Xavier College, Kew	„ ...	...	14	157
Grammar School, Geelong ...	Church of England	7,000	7	98
	Total ...	40,000	70	1,236

Education at
school
age, 1881.

732. The return of the census of 1881 showed 194,979 children at the school age,† of whom 97,722 were boys and 97,257 were girls. The following are the numbers of these who could read, who could also write, and who could not read :—

* At the Melbourne Grammar School there are three Council Scholarships of the annual value of £21 for boys under 14, open only to members of the school, and tenable at it for three years; and two exhibitions of the annual value of £20, tenable for two years, open to the competition of boys proceeding to the Melbourne University, whose names have been for the two previous years on the school register, and who have passed the matriculation examination with credit; the head master also offers every year for open competition two scholarships of the annual value of £30 and £25 respectively, four exhibitions—two of the value of £15 and two of £10; and there is a Witherby scholarship, which entitles the holder to exemption from school fees for three years. In connexion with the Scotch College, the following scholarships were announced to be competed for :—(1) Scholarships of the value of 10 or 20 guineas each, tenable for one year, to students who gain a satisfactory position in the class honour lists at the matriculation examination; (2) Scholarships of 20 guineas or 10 guineas each (according to merit), tenable for one year, open to all boys who have passed the matriculation examination, to be awarded for excellence in any one or more of the four groups of subjects :—Classics, Mathematics, French and German, English and History. In connexion with the Wesley College, there is a scholarship called the “Draper Scholarship”—established in memory of the late Rev. D. J. Draper, who perished in the *London*—of the value of £25, tenable for one year; two “Walter Powell Scholarships” founded by Mrs. Powell, in memory of her late husband, of the value of £40 each, payable in two annual instalments of £20; also the “Waugh,” the “Eggleston,” and “Corrigan” scholarships, each of the value of 16 guineas, tenable for two years. At the Geelong Grammar School there is an exhibition, given by Mrs. F. W. Armytage, of the value of £60, tenable for two years on condition that the holder shall be a resident student of Trinity College, Melbourne, and shall have been for two years previously a pupil of the Grammar School; the head master also receives one son of a clergyman of the Church of England as a resident boarder, exempt from all school fees and cost of residence.

† Or 6 to 15, now changed to from 6 to 13 years.

EDUCATION OF CHILDREN AT THE SCHOOL AGE, 1881.

	Boys.			Girls.		
Could read	92,362	...	92,489
Could write	82,714	...	83,708
Could not read	5,360	...	4,768

733. The *Education Act* 1872 came into operation twenty-one months after the census of 1871 was taken, and thus the returns of that census and of the census of 1881 afford an opportunity of comparing the state of children's education before and since the passing of that Act. Such a comparison is made in the following table, the education of children being reduced to a common standard, the numbers per 10,000 being taken as such at both periods :—

Education at school age, 1871 and 1881.

EDUCATION OF CHILDREN AT THE SCHOOL AGE, 1871 AND 1881.

Educational Attainment.	Proportions per 10,000 living at the School Age (6 to 15 years*).					
	Boys.		Girls.		Both.	
	1871.	1881.	1871.	1881.	1871.	1881.
Could read	8,955	9,451	9,045	9,510	9,000	9,481
Could write	7,072	8,464	7,124	8,607	7,098	8,535
Could not read	1,045	549	955	490	1,000	519

734. In 1881, as compared with 1871, an increase is observed in the proportion of both sexes able to read, but a much larger one in those able to write, the increase of the former (the returns of the two periods being reduced to a common standard) being about 5 per cent., whilst that of the latter was over 20 per cent.; at the same time, the decrease of those unable to read was 48 per cent.

Improvement in ten years

735. It will be noticed that at both periods rudimentary education was rather more common amongst girls than boys, the proportions of the former able to read and to write being greater, and the proportions unable to read being smaller, than those of the latter.

Education of boys and girls.

736. The degree of education at the school age* is found to differ according to the religious denomination. In the following table (which has been based upon the returns of the last census) the numbers of and proportionate amount of primary instruction possessed by the children belonging to each of the principal sects are shown :—

Education of children of different denominations, 1881.

* Now changed to from 6 to 13 years.

EDUCATION OF CHILDREN OF DIFFERENT RELIGIOUS
DENOMINATIONS,* 1881.

Religious Denominations.	Numbers between 6 and 15 years old who—			Proportions per 10,000 Living between 6 and 15 years old who—		
	Could Read.	Could Write.	Could not Read.	Could Read.	Could Write.	Could not Read.
Church of England ...	63,211	57,431	3,327	9,500	8,631	500
Presbyterians ...	28,218	25,633	1,135	9,614	8,733	386
Methodists ...	25,808	23,664	949	9,645	8,844	355
Bible Christians ...	1,677	1,543	53	9,694	8,919	306
Independents ...	4,193	3,900	145	9,666	8,990	334
Baptists ...	4,219	3,913	160	9,635	8,936	365
Lutherans ...	1,658	1,529	115	9,352	8,624	648
Other Protestants ...	1,710	1,589	77	9,569	8,892	431
Total Protestants...	130,694	119,202	5,961	9,564	8,723	436
Roman Catholics ...	45,630	40,053	3,306	9,325	8,185	675
Jews ...	954	920	33	9,666	9,321	334
Residue ...	3,310	2,953	257	9,280	8,279	720
Grand Total ...	180,588	163,128	9,557	9,500	8,577	500

Denomina-
tions
compared.

737. According to the table, the children of the Bible Christians, in proportion to their numbers, stood higher than those of the members of any of the other denominations, so far as the ability to read was concerned; but the children of the Jews stood the highest in reference to the ability to write, in which respect the children of the Independents and Baptists also surpassed those of the Bible Christians. The children of the Roman Catholics were apparently less instructed, both in reading and writing, than any of the others; the next less instructed being the children of the Lutherans, and then those of the members of the Church of England.

Education
of children
in Austral-
asian
colonies.

738. The school age prescribed by law differs in the various Australasian colonies.† In scarcely one of them, strange to say, were the census returns compiled in such a manner that the state of education at its own school age could be ascertained from the published tables, much less compared with that obtaining at the school age of this colony. All of the colonies, however, publish their education

* This table includes the few Chinese and Aborigines who were at the school age, but is exclusive of those whose education was unspecified. The latter numbered as follow :—Members of the Church of England, 1,664; Presbyterians, 495; Methodists, 511; Bible Christians, 46; Independents, 93; Baptists, 101; Lutherans, 43; Other Protestants, 48; Roman Catholics, 1,043; Jews, 13; Residue, 252. Total, 4,309.

† When the census of 1881 was taken the prescribed school age was in Victoria from 6 to 15 years, in New South Wales from 6 to 14 years, in Queensland from 6 to 12 years, in South Australia and New Zealand from 7 to 13 years, and in Tasmania from 7 to 14 years.

returns in quinquennial periods, so the period from 5 to 15 years is adopted for Victoria, as well as for the others, as an age at which the success of the respective educational systems can be conveniently judged. The following figures measure the education of the children of each colony at that age, the colonies being arranged in order:—

EDUCATION OF CHILDREN IN AUSTRALASIAN COLONIES, 1881.

Colony.	Proportions per 10,000 Children (5 to 15 years) Living who—		
	Could Read.	Could Write.	Could not Write.
1. Victoria	9,088	7,977	912
2. New Zealand	8,254	6,851	1,746
3. South Australia	8,138	6,956	1,862
4. Queensland	8,082	6,676	1,918
5. New South Wales	7,832	6,495	2,168
6. Western Australia	7,809	6,075	2,191
7. Tasmania	7,632	6,160	2,368

739. It will be observed that Victoria stood easily at the head of the list, being much in advance of all the other colonies, both as regards reading and writing. As the arrangement is in accordance with the numbers able to read, South Australia is placed below New Zealand, and Tasmania below Western Australia; but the order in these cases would have been reversed had the arrangement been in accordance with the numbers able to write, as the proportion of such was greater in South Australia than in New Zealand, and greater in Tasmania than in Western Australia. Colonies compared.

740. The persons above 15 years of age may be designated adults. The following are the numbers of those of either sex returned as able to read, as able also to write, and as uninstructed:— Adult education, 1881.

EDUCATION OF ADULTS (15 YEARS AND UPWARDS), 1881.

	Males.	Females.
Could read	263,830	236,380
Could write	256,315	223,901
Could not read	9,238	8,867

741. In compiling their census returns of education, most of the colonies of this group excluded the Aborigines, but several of them did not separate the Chinese, or distinguish their educational attainments so as to admit of their being accurately deducted from the remainder of the population; and as the Chinese were set down as illiterate if not able to read English, which few of them were able to Adult education in Australasian colonies.

do, the view which such colonies gave of the state of adult education within their borders was not so favourable as it should have been. To rectify this, and to enable fair comparison to be made between the different colonies, it has been assumed in these cases that the bulk of the Chinese are included amongst the adults unable to read, and they have been deducted therefrom accordingly, so that the state of adult education in all the colonies is given, as nearly as possible, exclusive of Chinese and Aborigines. Upon the number so obtained, the following proportions have been based:—

EDUCATION OF ADULTS IN AUSTRALASIAN COLONIES, 1881.

Colony.	Proportions per 10,000 Adults (15 years and upwards) Living who—		
	Could Read.	Could Write.	Could not Read.
1. New Zealand	9,699	9,390	301
2. Victoria	9,651	9,265	349
3. South Australia	9,619	9,179	381
4. Queensland	9,446	8,918	554
5. New South Wales	9,293	8,747	702
6. Western Australia	9,004	8,362	996
7. Tasmania	8,897	8,153	1,103

Colonies compared.

742. Victoria, it will be observed, is no longer at the top of the list, but is below New Zealand, although only slightly so; South Australia, in like manner, being slightly below Victoria. New South Wales, as in the case of the education of children, occupies the fifth place on the list, and stands below all the other colonies except Western Australia and Tasmania.

Expenditure on armaments and education in various countries.

743. Mr. Andrew Carnegie draws attention to the large amount spent annually by European States upon armaments as compared with the much smaller amounts they spend upon education, and points out to what a remarkable extent this contrasts with the practice in United States, where much less is spent on the former than on the latter. The contrast with the Victorian practice is even more marked, as the amount spent on armaments in proportion to that spent on education is much less here than in the United States. The following are Mr. Carnegie's figures,* to which the figures for Victoria for an average of five years have been added:—

* See *Triumphant Democracy*, by Andrew Carnegie, page 96, Sampson Low & Co., London, 1887

EXPENDITURE ON ARMAMENTS AND EDUCATION IN VARIOUS COUNTRIES.

Countries.	Annual Expenditure on—	
	Armaments.	Education.
	£	£
United Kingdom	28,900,000	6,685,000
France	35,000,000	3,200,000
Germany	20,000,000	6,900,000
Russia	33,000,000	1,000,000
Austria	13,400,000	2,900,000
Italy	18,900,000	1,100,000
Spain	6,300,000	1,200,000
Other European States	8,300,000	2,100,000
United States	9,400,000	18,600,000
Victoria	204,000	618,000

744. It will be found, from the figures in this table, that whilst Russia spends 33 times, Italy 17 times, France 11 times, Spain $5\frac{1}{4}$ times, Austria $4\frac{2}{3}$ times, the United Kingdom $4\frac{1}{3}$ times, Germany nearly 3 times, and other European States 4 times as much on armaments as on education, the United States spends twice, and Victoria no less than three times as much upon education as upon armaments.

745. Through the instrumentality, and mainly owing to the liberality, of the late Hon. Francis Ormond, M.L.C.—whose name has been already mentioned in connexion with the Ormond College and the Chair of Music—a Working Men’s College has been established in Melbourne.* The following account of this institution has been supplied for this work by Mr. F. A. Campbell, C.E. (Melb.), F.R.G.S., Secretary to the College:—

“The College is centrally situated, in Latrobe Street, opposite the Public Library. There are now two buildings, facing Latrobe and Bowen Streets respectively, but only the back portion of one of them has been completed. The front, however, is now being built, and will have a handsome tower at the corner, altogether presenting a very imposing appearance. The Bowen Street building has been erected on a half-acre of ground, granted by the Government, and is intended mainly for the extension of Trade Classes, but will also accommodate the classes in drawing and modelling.

“The initiation of the college is due to the late Mr. Ormond, who subscribed £5,500 towards the building, a like sum being obtained by public subscription. The sites were granted by the Government, who have also subsidized the institution by grants, both for buildings and maintenance.

“The college is governed by a Council of 18 members, consisting of representatives of the Founder, the Government, the University, the Public Library, the Trades’ Hall Council, subscribers of £1 and upwards, and subscribers of from 2s. 6d. to £1 stg. A subscription of from 2s. 6d. upwards annually gives the privilege of a vote for members of the Council.

* The total amount contributed by the late Mr. Ormond to the three institutions during his lifetime was £60,700, besides the sum of £113,500 bequeathed to various charitable and religious purposes. For further particulars, see last edition of this work, Vol. II., footnote (†) to paragraph 807.

“The college is intended to improve the general and technical education of the working classes ; but is open to all, women as well as men. The class work is carried on almost entirely in the evening, between the hours of 7 and 10.15 p.m. Saturday morning lectures in science for the special benefit of State School teachers are also held.

“Courses of study extending over 3 years are laid down for students in the various Trade Classes, and the four following certificates are issued :—

- “1. Class Ordinary Certificate, to those students who pass the annual examination in any class.
- “2. Class Credit Certificate, to those students who pass the examination with credit.
- “3. Technical Certificate, to those students who pass all the examinations in the 2 years’ course.
- “4. Expert Certificates, to those students who have passed all the examinations in the 3 years’ course.

“Before gaining Expert and Technical Certificates, the students must produce evidence of having been engaged in practical work for some time.

“The progress of this institution since its commencement in June, 1887, is shown in the following table :—

The Working Men’s College.		1887.	1888.	1889.
Average per term of—				
Enrolments (individual students) ...	...	815	1,767	2,064
Females ...	...	32	225	358
Juniors under 18 and apprentices under 21...	...	344	671	...
Males under 21—Apprentices ...	...	...	...	236
“ “ Others ...	...	...	...	810
Fees received ...	£	457	1,753	2,455
Average fees per student ...	...	16s. 4½d.	19s. 10d.	23s. 4d.
Number of classes ...	...	37	74	93
Number of instructors ...	...	19	29	37
Salaries paid instructors...	£	342	1,855	2,849

“The following is a list of subjects taught :—

Algebra.	Handrailing and Staircasing.
Applied Mechanics—Construction.	Harmony.
“ “ Machines.	History.
Architectural Drawing.	Latin.
Arithmetic.	Logic.
Boiler Making.	Marbling.
Book-keeping.	Mechanical Drawing.
Botany.	Mensuration.
Building Construction.	Modelling.
Carpentry.	Photography.
Cookery.	Physics.
Dress Cutting.	Physiology.
Electrical Engineering.	Plaster Casting.
Elementary Drafting.	Plumbing.
Elementary Mechanics.	Practical Plane Geometry.
Elocution.	Shorthand.
Freehand Drawing.	Sign Writing.
French.	Singing.
Geography.	Solid Geometry.
Geology and Mineralogy.	Steam and the Steam Engine.
Geometry.	Surveying and Levelling.
German.	Trigonometry.
Graining.	Violin.
Grammar.	Voice Production.
Grammar of Music.	Writing and Correspondence.

"The largest number of individual students enrolled for any one term was 2,269. The average enrolment for 1889 was 2,064, and the average attendance 1,466. 799 students were examined for first and second year certificates in 39 subjects; 503, or 63 per cent., passed, and 201, or 27 per cent., passed with credit."

746. An institution, similar in character to the Working Men's College, was established in Geelong in 1885 under the title of the Gordon Technical College. The following account of this college has been furnished by the Secretary:—

"The idea of establishing a technical college in Geelong was first taken up early in 1885 by a few citizens who were stimulated to adopt a more extensive system of technical instruction than that hitherto in operation at the local school of design, the very limited means of which naturally hampered the prospect of anything further than drawing classes being thought of.

"About this time the lamentable news of the death of General Gordon came to hand. This was thought a favourable opportunity for the erection of a fitting memorial to the late General, and the establishment of a much needed institution. In order to test the public feeling on the subject, a public meeting was held at the Town Hall on the 1st of July, 1885, when over 500 persons assembled, including some 70 members of the 1st Brigade of Garrison Artillery, who had marched to the hall accompanied by the corps' band. The meeting was presided over by the mayor, and a committee was appointed, which at once started an active canvass and received a very encouraging response, the late Hon. Francis Ormond being amongst the first donors.

"In November, 1887, the first portion of the building was opened by the Minister of Education (the Hon. C. H. Pearson), and before the end of the following year operations were commenced for the completion of the building—or the completion of that design before the committee. It is now contemplated doubling the size of the present building and providing workshops, laboratories, etc.

"The local contributions to date amount to £1,000, exclusive of the Ormond bequest. This is sufficient evidence of the public feeling towards the institution.

"The Government grants amount to £3,700.

"The highest number of students attending at one time during 1888 (or the first year of actual work) was 224, and in 1889, 276. And for the quarter ending 30th June, 1890, 302.

"The subjects taught are:—Arithmetic (commercial and technical), architecture, algebra, building construction, bookkeeping, chemistry, Euclid, English, French, freehand drawing, German, geology, Latin, mineralogy, mechanical drawing, physics, practical geometry, perspective, painting, shorthand, telegraphy, writing. Other subjects are being taken up.

"The fees range from 3s. 3d. to 21s.

"Through the liberality of the publishers, a large number of scientific and other useful publications are sent to the college gratis. These are well used and appreciated by students.

"There are also Field Science and Photographic Clubs under the sanction of the College Council, which are in a flourishing condition."

747. Schools of Mines, which 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, have been established at four of the principal mining centres of the colony, viz., Ballarat, Sandhurst, Castlemaine, and Maryborough.* One of these—the Ballarat School of Mines—is now an integral part of the Melbourne University, having been affiliated to that institution by a

* A School of Mines was also established at Stawell early in 1890.

Statute passed by the Senate in April, 1887, which provided, however, that only matriculated students of the Melbourne University shall be admitted to the privileges conferred by the affiliation. The schools, as a whole, possess 42 lecturers, and had in 1889 an average quarterly enrolment of 1,888 pupils. The total receipts during the year amounted to £16,667, of which £11,650 was from the Government and £115 from the Royal Technological Commission; and the expenditure amounted to £17,094, of which £5,468 at least was expended on buildings.

School of
Mines,
Sandhurst.

748. The following account of the School of Mines, Sandhurst, has been supplied for this work by Professor J. B. Lillie Mackay, A.K.C.L., F.L.S., F.C.S., Scientific Director of the School and Curator of the Museum:—

“The School of Mines and Industries, Sandhurst, has now been established over seventeen years (having been formally opened in April, 1873), and although the buildings are extensive and imposing, the institution has outgrown its accommodation, and the efforts recently made to secure an adjacent site and to erect enlarged premises are, through the liberality of the Government, shortly to be brought to a successful issue. A new lecture hall, class-rooms, and more thoroughly equipped and commodious chemical lecture theatre, which were urgently needed, have been designed; the buildings commenced in February, 1889. The foundation stone of the new wing was laid on 29th May, 1889, by the Hon. C. H. Pearson, M.A., LL.D., M.L.A., Minister of Education, and the structure is now nearly completed, but still requires furnishing. The valuation of the old buildings and effects amounts to £15,000; and of the additional three-story building £8,000. The institution receives a Government grant of £3,000 per annum for maintenance, and this sum is materially supplemented by class fees, also by fees for assays and analyses which are conducted for the public. There is a large teaching staff (numbering fourteen); and although prominence is given to subjects connected with mining pursuits, such as geology, mineralogy, chemistry, metallurgy, mechanics, and surveying, yet botany, materia medica, and other subjects of natural and physical science are taught for the benefit of the community, besides machine and building construction, mechanical, geometrical, and architectural drawing and some extra subjects. Workshops for practical instruction in the mechanical arts and trades—*e.g.*, wood carving, carpentry, engineering, smith and iron work, brass casting, and metal work generally—were, in October, 1888, successfully revived. Here, there is a steam engine to drive lathes, grindstone, etc., and a good forge with bellows. Two instructors have been appointed for carpentry and metal working respectively, and all the 20 benches are already taken up. The chemical and metallurgical laboratories are open every day for instruction and practice in gold and other assays and in analytical investigation. There is a large telegraphy class, the Sandhurst school being one of the main feeders for telegraphic operator positions in the colonies; while the art classes in connexion with the School of Design are numerously attended. Altogether there were 802 students on the roll in the session of 1889,* some coming from great distances, *e.g.*, Queensland, New South Wales and South Australia. During the twelve months ending 30th June, 1890, no less than 935 separate individuals have received instruction in the school, either in day or evening classes. Special facilities are given to country school teachers, who are enabled to travel by rail at nominal fares.† There are periodical examinations conducted by honorary examiners, and

* A remarkable growth has taken place in the school during the past three years, the roll having been nearly trebled.

† No less than 2,709 railway tickets were issued at the Registrar's office during the past twelve months, covering distances of from 12 to 60 miles.

certificates of proficiency, as well as medals, are granted to distinguished students. The fees are merely nominal. A large number of past students have received important positions in the colonies—assayers, surveyors, mining engineers, managers of mines, architects, etc., while two out of the three new inspectors of mines were trained at the Sandhurst school.

“A meteorological observatory is attached to the school, from which observations on the fluctuations of temperature and pressure, direction and force of the wind, the amount of rainfall, cloud, etc., are despatched every morning by telegram to the Government Astronomer (R. L. J. Ellery, Esq., C.M.G., F.R.S.). Daily weather reports and prognostications are also sent to the three local papers. The instruments are placed in a clear space in the gardens, and observations are taken four times a day, viz., at 9 a.m., 12 noon, 3 p.m., and 9 p.m. The Director of the school has charge of this department. There is likewise a valuable museum in connexion with the school, of which a brief notice is appended.

“In the Museum attached to the School of Mines there is a good collection of Natural History objects, including thousands of specimens illustrative of the geology, mineralogy, and the living and fossil flora and fauna of the globe. These include mammals, birds, reptiles, fish, insects, crustaceans, echinoderms, recent shells, sponges, birds' eggs, etc.; besides a large number of specimens of rocks, minerals, ores, and fac similes of gems, as well as fossils typical of the different geological strata. There are some valuable examples of the arts of the aborigines of Australia and the islands of the Pacific, and a great variety of native weapons from Fiji, New Guinea, and Western Australia. The walls are hung with geological maps, and sections and sketches of scenery, exhibiting some of the striking features of the rock formations in Australia. One department is of more than common interest, including, as it does, models of mining machinery and mining plant, showing to scale the methods of timbering shafts, etc., etc., the application of contrivances to prevent over-winding, the action of safety cages, etc. Numerous fac similes of gold nuggets and cubes representing the yield of gold from the various mines in the district are exhibited; besides plans and photographs of reefs extension, crushing works, etc.

“As many as 1,419 specimens and articles were presented during the year from various parts of the colony, and the attendance of visitors numbered over 41,000 persons. The space for the reception of donations is shortly to be doubled.

“An attractive little court was prepared in the Melbourne Centennial International Exhibition, showing specially-taken photographs of the underground workings of the Sandhurst mines, as well as cases of specimens, and a trophy of cubical gilded models illustrative of the yields of gold from the chief mines of the district, and received a ‘first order of merit’ and gold medal from the jurors. Most of these exhibits were forwarded to the Paris Exposition, 1889.

“The curator will be glad to receive donations to the Museum, of animals, curios, or any objects of interest; or to effect exchanges with other museums, there being an abundance of graptolites in the rocks of the neighbourhood, as well as numerous animals in duplicate.

“The Museum is open daily from Monday until Friday, inclusive, from 10 a.m. until 6 p.m.; and every Saturday from 10 a.m. until 9 p.m.

“The institution is chiefly controlled by an Administrative Council, which includes a President, Vice-President, and ten other members. The Visitor for the time being is His Excellency the Earl of Hopetoun, Governor of the colony. There is a Registrar to transact the business of the institution, while the whole school is under the supervision of a Director appointed by the Administrative Council. Prospectuses will be forwarded free on receipt of addresses.

“Popular science lectures are given monthly, or more frequently, during the autumn and winter (admission free), and the attendance on some occasions is very large. The regular lectures on geology, mineralogy, and principles of mining are delivered by the Director.

“Connected with the school is a local science society under the presidency of Dr. P. H. MacGillivray, F.L.S. (present president of the school). It was resuscitated

under favourable auspices in April, 1888, and now, after two years, numbers no less than 300 members, some of whom contribute valuable papers. The aim of the society is to foster greater interest in Natural and Physical Science. The Director of the School of Mines (where the meetings are regularly held) acts as the Honorary Secretary."

School of
Mines.
Ballarat.

749. Mr. Andrew Berry, Registrar of the School of Mines at Ballarat, has supplied the following account of that institution:—

"The School of Mines, Ballarat, was opened on the 26th October, 1870.* Through the liberality of Parliament, this school is in a position to supply technical instruction on an extended scale. Classes, conducted by eleven lecturers, including two professors, are formed in mathematics, mining, land, and engineering surveying; applied mechanics and mechanical engineering; technical, mechanical, architectural, freehand, and model drawing; metallurgy, and assaying; mineralogy, and geology; natural philosophy; elementary inorganic, organic, applied, analytical, and pharmaceutical chemistry; botany, materia medica, pharmacy, physiology, and telegraphy; at a cost to the student of from five shillings to three guineas per term of ten weeks for ordinary evening and day classes respectively. Provision is made for students whose means are such as to prevent them from paying even the small fees mentioned; and for those who can afford to devote their whole time to instruction, arrangements are made for training indentured students for the scientific professions. The academical year is divided into four terms, each of ten weeks' duration, and at the end of each term examinations, by means of printed questions and otherwise, are held at the school in scientific and technical subjects, both theoretical and practical. Any person, whether or not a student at the school, may present for examination, and if the report of the examiners be favourable, the council grant a certificate. Up to the end of the year 1889, 618 certificates had been thus awarded, embracing the subjects of mathematics, chemistry, geology, mineralogy, materia medica, botany, etc., also testifying to the competency of the successful candidates as captains of shifts, managers in mines, assayers, telegraphists, engineers, and engine-drivers. The Museum contains collections of minerals, rocks, and technological products, shells, stuffed birds, etc.; geological maps, plans, and sections of mines, etc. The library, accessible to students, contains books of reference, and is kept supplied with current numbers of selected technical English, continental, and American journals. The museum and library are open to the public daily, free. In connexion with the Assay and Metallurgical Department there is a mining laboratory equipped with machinery and appliances requisite for the reduction of quartz and practical treatment of auriferous mine products by the usual processes of crushing, washing, amalgamating, roasting, etc., and a complete plant for the treatment of gold ores by the Newbery-Vautin chlorination process. There is also on the school grounds a model mine, with pumping and winding gear attached, for giving practical instruction in mining, mine surveying, levelling, engine driving, etc. The school possesses the most complete apparatus in the southern hemisphere for testing vacuum and steam pressure-gauges. A meteorological station has been established at the school, and the usual daily observations of rainfall, temperature, atmospheric pressure, etc., are regularly recorded and forwarded to the Government Astronomer. Standing at an elevation of 1,420 feet above sea-level, the meteorological observations will, it is expected, prove useful auxiliaries to Melbourne work. During the year 1889 the average number of students attending practical classes was 381, and at the elementary science lectures delivered weekly in State schools the total average attendance was 746 pupils. Free science classes in elementary, agricultural, and industrial chemistry, botany, physics, mineralogy, geology, and physiology are now established in connexion with the State schools; teachers attending lectures on Friday evenings and Saturdays, and scholars on days appointed. Half-yearly examinations of these pupil classes are held, and free instruction scholarships, tenable for one year, are awarded to such as distinguish themselves. The total receipts from all sources for the year were £6,271 10s. 11d., of which the sum of £4,000 was from the Government; and the expenditure amounted to £6,546 1s. 2d."

* It is now an integral part of the University of Melbourne. See last paragraph.

750. The following account of the Castlemaine District School of Mines and Industries has been supplied by Mr. T. S. Hall, M.A., Director :—

School of
Mines,
Castle-
maine.

“The Castlemaine District School of Mines and Industries was founded in October, 1887. The institution is supported by a Government grant of £800 per annum, aided by fees and subscriptions from residents of the district. The Government placed the old Telegraph Office at the disposal of the Council, but the school rapidly outgrew the accommodation provided, and the old Police Court was also handed over to the school. Great inconvenience was experienced by the unsuitability of the buildings, and a Government grant was obtained which enabled the Council to erect chemical and metallurgical laboratories at the rear of the latter building. At the close of last year an additional grant was obtained, and large additions were made in front of the old building, and the structure is one of the finest in the town. A large room has been set apart for a museum, and the natural and economic products of the district, and of Victoria generally, will be represented in the collection. The upper floor has been set apart for the art classes. The various Government departments and scientific societies supply copies of their periodical publications, and the library contains a good collection of maps and plans. The Council has set aside a sum of money for the purchase of books for the library, and the text books dealing with the various subjects taught in the school will be found on the shelves. The fees are low, and railway tickets at greatly reduced fares are issued to students by the Railway Department. A number of scholarships entitling holders to free tuition are at the disposal of the Council. The management of the school is in the hands of a Council elected by the subscribers to the institution. Classes in the following subjects are now held at the school :—Assaying and metallurgy, chemistry, geology, physiology, Euclid, algebra, practical mechanics, engine-driving, telegraphy, shorthand, elocution, harmony, surveying, practical geometry, perspective, drawing, and painting.”

751. The Director of the School of Mines, Maryborough, Mr. W. F. Fremersdorff, A.R.S.M., has furnished the following account of his institution :—

School of
Mines,
Mary-
borough.

“The Maryborough District School of Mines, Industries, and Science was opened on 26th January, 1889. A sum of money having been collected in the district towards the establishment of the school, the Government supplemented it with a grant for maintenance in November, 1888, and the Council decided to open the School in the old Town Hall buildings, rented for the purpose from the Borough Council. Owing to the increase in the number of students larger class-rooms and more accommodation became a necessity. Through the liberality of the Government, the Council were enabled, in April, 1890, to invite tenders for the erection of the east wing, of a large and handsome edifice, the estimated and complete cost of which is £15,000. The foundation stone was laid on 2nd June, 1890, by the Hon. C. H. Pearson, M.A., LL.D., M.L.A., Minister of Education. The east wing will be ready for use in October, 1890. The new buildings will provide sufficient class-rooms, laboratories and workshops for the wants of practical students. It is proposed to form classes for practical instruction in engineering, carpentry, and other mechanical arts.

“The school year is divided into four terms, each of ten weeks’ duration, and the term fees are small enough to bring the teaching of the school within the reach of everyone. Instruction is imparted by a staff of ten teachers and instructors, including the director.

“Classes are now held in assaying, metallurgy, chemistry, geology, surveying, engine driving, mathematics, telegraphy, shorthand, French, pharmacy, materia medica, botany, natural philosophy, physiology, book-keeping, photography, painting, and drawing.

“Besides the students who attend the School of Mines, the scholars at eight of the surrounding State Schools receive free elementary instruction in science.

"A series of lectures upon science, given in and around Maryborough, attracts large audiences, and has already directly benefited the school. Railway tickets at a reduced rate are issued to students residing within 60 miles of the school. That the concession is appreciated is shown by the fact that between 25 and 30 per cent. of the students attending come in by rail. Time-tables for classes have been, when necessary, so arranged as to enable students to avail themselves of the ordinary trains.

"Certificates are granted to students who pass examinations as mining engineers, mining surveyors, assayers, engineers, or in any scientific subjects.

"The school museum contains a large number of specimens of rock-minerals and ores, and through the courtesy of the Trustees of the Public Library, a loan collection of standard works of reference has been placed in the Library."

Schools of
Design.

752. Twenty-nine Schools of Design were established at various places in Victoria in connexion with a Royal Commission for promoting technological and industrial instruction.* The subjects taught comprised practical geometry, mechanical and architectural drawing, perspective, model, and freehand drawing. Each school receives 2s. 6d. from Government for every pupil who attends not less than eight times per quarter, besides which fees varying from 1s. to 10s. 6d. per quarter, for one or more lessons per week, are paid by the pupils. The number of teachers on the 31st December, 1889, was 72, and the number of pupils enrolled was 1,873, of whom 1,267 had attended eight or more times during the quarter ended on that date. The local South Kensington examinations were attended by 496 students of the Schools of Design, of whom 295 were successful in obtaining the Science and Art Department's certificates of merit. As a result of a conference held with the Honorable the Minister of Public Instruction, the Technological Commission arranged that after the 31st December, 1889, the Government allowance to those schools that were in receipt of a direct vote from Parliament should be withdrawn. On the 30th day of June, 1890, the Royal Technological Commissioners resigned office. The whole of the Schools of Art and Design, Technical Schools, Working Men's Colleges, and Schools of Mines throughout the colony are now under the direct control of the Education Department of Victoria. Fresh regulations with regard to the maintenance and conduct of these schools are under consideration by the Department.

Melbourne
Public
Library.

753. The buildings of the Melbourne Public Library have cost from first to last £111,604, and are still unfinished. These funds were provided by Government, as also were further moneys, amounting, with the sum just named, to a total of £464,597, of which £16,770

* A digest of some of the evidence taken before the Royal Commission on Technical Instruction in Great Britain, 1881 to 1884, together with valuable comments thereon by the Hon. C. H. Pearson, LL.D., M.P., Minister of Public Instruction in Victoria, was laid before the Parliament of Victoria in 1888, and will amply repay perusal. (See Parliamentary Paper B. 579, Session 1888.)

was received by the trustees during the year under review. The private contributions, consisting of books, pamphlets, maps, newspapers, etc., have amounted in all to 455,225, of which 237,476 were presented to the institution, and the remainder were deposited under the *Copyright Statute*. The estimated value of these contributions is £24,750. At the end of 1889 the library contained 118,556 volumes, and 134,148 pamphlets and parts. 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 462,042 persons. The trustees report that, of 3,688 volumes added to the institution in 1889, 1,897 were donations; including a valuable donation of 846 volumes, besides 2,458 pamphlets and 5,186 maps from the British Government; also a gift of 65 volumes, besides 262 pamphlets, from Professor Giglioli, of Florence. It is also reported that the progress of the new catalogue has been retarded by various causes, but efforts are being made to ensure its speedy completion. Arrangements were made at the commencement of the year for lighting the library with the electric light.

754. The National Gallery, at the end of 1889, contained 15,711 National Gallery. works of art, viz., 164 oil paintings, 2,530 objects of statuary, etc., and 13,017 drawings, engravings, and photographs. It is opened at 10 a.m. and closed at 5 p.m. daily, Sundays and certain holidays excepted. The school of painting in connexion with this institution was attended in the year by 10 male and 18 female students, and the school of design by 66 male and 120 female students. The trustees report that the National Gallery was enriched during 1889 by the addition of several works of great value, of which the following are the most important:—“After the Massacre of Glencoe,” by Peter Graham, R.A., presented by James Graham, Esq.; “Summer Morning in North Wales,” by Edwin Ellis, presented by David Beath, Esq.; “Langley Dell,” by D. C. Hunt, presented by Robert Litton, Esq.; also a copy from the original in the Louvre of Titian’s “Entombment of Christ,” by Mr. John Longstaff, that being his first copy of an old master, received by the Trustees under the terms of the travelling scholarship awarded to him in 1887. There were also three oil paintings purchased from the collection at the Centennial International Exhibition. It has been decided to proceed at once with the erection of buildings which will provide accommodation for two sculpture galleries.

755. The Industrial and Technological Museum joins the National Industrial Museum. Gallery, and was opened on the 7th September, 1870. It now contains

617 publications, 49,027 specimens, and 261 drawings. It is open on the same days and during the same hours as the National Gallery. Class lectures, given in 1889, on chemistry and mineralogy, were attended by 17 students. A collection of fruits and timbers were sent by this institution to the Paris Exhibition, and several small collections of duplicates have been sent to local schools of mines and kindred institutions. In the Museum the whole foreign mineral collection has been re-arranged, the Department of Mines having handed over their valuable foreign collection for classification with that already in the Museum, the whole now making a most complete series scientifically classified. The section of economic botany has been largely added to by donations from agricultural societies.

National
Museum.

756. The collections of the National Museum are kept in a building situated on the grounds of the Melbourne University. They consist of stuffed animals and birds, insects, specimens of minerals, and other objects of curiosity. The cost of the edifice was about £8,500. It is open to the public free of charge on all week days throughout the year, except Christmas Day and Good Friday, between the hours of 10 a.m. and 5 p.m., and in 1889 was visited by 133,065 persons. During the same year, besides presentations of value and interest made to the institution, purchases were made to the extent of £1,285. The payments for salaries and wages amounted to £1,525. The total amount of aid from Government during the year was £2,845. By a further instalment of the register of the museum recently furnished by the Director, it appears that 53,601 specimens have been catalogued, classified, and labelled. The Director complains of the delay which is taking place in the completion of the buildings, and says if this is not done soon irreparable damage to the collections will result.

Patent
Office
Library.

757. There is a free library in connexion with the Patent Office, attached to the Registrar-General's Office, Melbourne. This contains about 5,000 volumes, consisting of the patent records of Great Britain, Victoria, New South Wales, New Zealand, Canada, the United States, Italy, Germany, etc., and other works. Here also are on view about 324 models of patented or protected inventions, and 186 models of designs under the *Copyright Act*. The approximate value of the books is £4,000, and of the models £250. The library is open to the public on each week day, except Saturday, between the hours of 9 a.m. and 4.30 p.m., and on Saturday from 9 a.m. until noon.

Supreme
Court
Library.

758. The Supreme Court Library at Melbourne has seventeen 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 rules of court for the admission of barristers and attorneys. The number of volumes at the end of 1889 was 19,791. The expenditure from the commencement has amounted to £28,005, of which £1,583 was spent in 1889.

759. There are free libraries, athenæums, or scientific, literary, or mechanics' institutes, in most of the suburban and country towns of the colony. Some of these institutions receive books on loan from the Melbourne Public Library. Three hundred and seventy-eight furnished returns for 1889 to the Government Statist. Their statements show that the cost of erection of the buildings was £291,568; that their total receipts in 1889 amounted to £57,246, of which £16,994 was contributed by Government, and £40,252 by private individuals; that the number of volumes in all the institutions amounted to 435,946, and that during the year about 2,621,500 visits were paid to 343 of them which furnished returns. If visitors attended the others in the same proportion, the total number of visits during 1889 must have amounted to fully 2,890,000.

760. An International Exhibition was opened in Melbourne in 1888 to commemorate the hundredth anniversary of the founding of the first Australasian colony, for which reason it was styled "The Centennial International Exhibition." Commissioners were appointed to it on the 6th January, 1887, and the Exhibition was opened on the 1st August, 1888. The buildings consisted of the permanent Exhibition building, erected in connexion with the Exhibition of 1880-81,* and of various temporary annexes erected for the occasion, the whole covering an area of 1,353,864 square feet, or rather more than 31 acres. Besides this, however, the floor space on the galleries, basement, and cellars, amounted to 101,960 square feet, or about $2\frac{1}{3}$ acres; the gardens outside occupied 295,534 square feet, or about $6\frac{3}{4}$ acres; and the open grounds, on which were erected kiosks, machinery, switchback and electric railways, etc., covered 236,027 square feet, or about $5\frac{1}{2}$ acres. The whole space therefore under the control of the Commissioners and available for exhibits, concert room, refreshment rooms, offices, walks, passages, lakes, gardens, and grounds, etc., amounted to 1,987,385 square feet, or 45 acres, 2 roods, and 20 perches. The Exhibition was opened by His Excellency Sir Henry Brougham Loch, and was inaugurated by an imposing out-

Free
libraries,
etc.

Melbourne
Centennial
Inter-
national
Exhibition
1888.

* See *Victorian Year-Book*, 1881-2, paragraph 1,171.

door procession of the Imperial and local military and naval forces, the friendly and trade societies, etc. In the buildings a grand procession was formed, consisting of the Governors of the Australasian colonies, the Presidents, Vice-Presidents, and Executive Commissioners of the countries officially represented, the Foreign Consuls, the President, Executive Vice-President, Vice-Presidents, and Members of the Executive and general body of the Victorian Commissioners with their Secretary, the Speakers of the Colonial Parliaments, the Members of the Houses of Legislature in the different colonies, Her Majesty's Ministers in Victoria and the other Australasian colonies, the Judges of the Supreme Courts, the Mayor and Town Clerk of the City of Melbourne, and the Imperial Naval and Military Officers of all nations then in Melbourne. The total number of exhibits was 10,240, of which 2,625 were Victorian; 3,108 were forwarded from the other Australasian colonies, 1,722 from Great Britain, 1,066 from Germany, 683 from France, 374 from the United States, 192 from Belgium, 178 from Austria-Hungary, and the remainder from 26 other countries. One of the most prominent features of the Exhibition was the orchestra of 73 instrumentalists and 708 vocalists, which was presided over by a musical director of recognized standing and ability, who was specially engaged in England at a cost of £5,000; and who specially selected and brought out with him 15 of the instrumental performers. No payment was made to the vocal performers, but the average amount of salaries payable to the orchestra was about £450 weekly, and the total net cost, after allowing for the sale of tickets, was £19,157. The total attendance at the concerts was 467,299, which was equivalent to 24 per cent. of the whole admissions to the Exhibition. The Exhibition was officially closed on the 31st January, 1889, after having been open for a period of six months. The total number of persons who paid for admission was—adults, 1,542,415; children, 179,219; besides which there were 241,802 free admissions. The total attendance was, therefore, 1,963,436.* The charge for entrance on ordinary occasions was—adults, one shilling; children, sixpence. There were no season tickets. The Exhibition was kept open both day and night, and the buildings were lit throughout

* The public were admitted informally to the 9th March, the number so admitted after the official day of closing being 40,157.

by the electric light. The gross cost of the Exhibition was £409,743 ; the expenditure on the erection of temporary annexes amounting to £125,178 ; additions, alterations, decorations, etc., to the permanent buildings, £30,986 ; gardens (including £2,967 for wages), £4,854 ; machinery, £16,471 ; orchestra and chorus, £28,177 ; electric lighting, £77,128* ; gas and gas fittings, £8,337 ; medals and certificates, £6,788 ; office expenses, general wages, incidental expenses, and contingences, £68,088 ; other expenditure, £43,736. After allowing for various sums realized from sale of material, etc., after the close of the Exhibition, amounting to £56,904 (which includes £14,887 for the temporary annexes, and £15,509 allowed for as the value of additions, etc., to the permanent building), the cost was reduced to £352,839. The amount realized for admissions to the Exhibition was £85,468 ; to the dome, £1,093 ; to the aquarium, £7,498 ; to concerts, £9,531 ; whilst £1,787, which was equal to 42½ per cent. of its receipts, was received from the switchback railway, and £9,677 from other sources. The total amount thus contributed by the public was £115,054, and the net cost of the Exhibition to the consolidated revenue was £237,785. The total number of awards made by jurors was 9,109, viz.—5,374 first class, 1,803 second class, 1,172 third class, and 760 honorable mentions. In consequence of these awards, the commissioners granted 409 gold medals, 1,102 silver medals, 777 bronze medals, and 6,821 certificates ; and in addition, 76 gold medals, 342 silver medals, 479 bronze medals, and 425 diplomas were granted for services rendered.

761. Greater Melbourne is amply supplied with public reserves and parks, the total area of which is 5,293 acres. Of these reserves 1,723 acres are in Melbourne city, 634 in Kew, 482½ in South Melbourne, 446½ in Williamstown, 190 in Richmond, 80¼ in Port Melbourne, 166½ in Brighton, 250 in St. Kilda, 23 in Prahran, 36 in Footscray, 41 in Fitzroy, 39 in Collingwood, 54 in Essendon, 14½ in Northcote, 15 in Hawthorn, 9½ in North Melbourne, 306¾ in Flemington and Kensington, and 782 outside urban municipalities.

Public
reserves in
Greater
Melbourne.

762. The following list of these reserves, together with a statement of their respective areas, has been supplied by the Lands Department:—

Public
reserves.

* The net cost, after sale of plant, was £56,190.

PUBLIC RESERVES IN MELBOURNE AND SUBURBS.* 1890.

Municipality.	Name of Reserve.	Area.
		Acres.
Melbourne City	Royal Park	444
"	Yarra ..	155
"	Prince's ..	97
"	Fawkner ..	102
"	Flinders ..	24
"	Park (Model Farm)	81
"	Botanic Garden and Domain	235
"	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 Square	1
"	University ..	3 $\frac{1}{2}$
"	University Grounds	106
"	Friendly Societies' Grounds	33
"	Industrial Schools and Board of Health Depôt	47
"	Melbourne Cricket Ground...	9 $\frac{1}{2}$
"	East Melbourne ..	7 $\frac{1}{2}$
"	Scotch College ..	7
"	Richmond ..	6
"	Carlton ..	5
"	Parliament Reserve	10
"	Ornamental Plantations	1 $\frac{1}{2}$
"	General Cemetery	101
"	Old Cemetery	8 $\frac{1}{2}$
"	Military Parade Ground	5
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	150
"	Horticultural Gardens	33
"	Barkly Square	7
Northcote Town	Jika Park	14 $\frac{1}{2}$
South Melbourne City	Albert Park (part of)	464
"	St. Vincent Gardens	7 $\frac{1}{8}$
"	Ornamental Plantations	2 $\frac{1}{4}$
"	Cricket and Recreation (Warehousemen's)	8
Port Melbourne Borough	Cricket Ground	7 $\frac{1}{4}$
"	Park and Garden...	56
"	Ornamental Plantations	17

* A description of the most important of these reserves, as well as of the Botanic and other public gardens in several of the country towns, was published in the *Victorian Year-Book*, 1883-4, following paragraph 1,315.

† Vested in Victorian Railways Commissioners, but still used for cricket.

PUBLIC RESERVES IN MELBOURNE AND SUBURBS,*
1890—continued.

Municipality.	Name of Reserve.					Area.
						Acres.
Prahran City	...	Recreation	...	...	...	23
St. Kilda City	...	St. Kilda Gardens	...	...	...	16
"	...	Albert Park (part of)	...	...	...	106
"	...	Recreation	...	...	...	54
"	...	"	4 ³ / ₄
"	...	"	11
"	...	"	15 ³ / ₄
"	...	" (Dandenong Road)	...	...	...	22 ¹ / ₂
"	...	Cemetery	...	...	...	20
Brighton Town	...	Elsternwick Park...	...	...	...	85
"	...	Recreation (Elsternwick)	...	...	...	14 ¹ / ₂
"	...	Beach Park	...	...	...	67
Essendon Town	...	Recreation	...	...	...	10 ¹ / ₂
"	...	"	5 ¹ / ₄
"	...	Agricultural Society's Yards	...	...	...	30
"	...	Ornamental Plantations	...	...	...	8 ¹ / ₄
Flemington and Kensington Borough	...	Racecourse	...	...	...	301
"	...	Recreation	...	...	...	5 ³ / ₄
Hawthorn City	...	"	15
Kew Borough	...	Studley Park	...	...	...	203
"	...	Lunatic Asylum	...	...	...	384
"	...	Cemetery	...	...	...	31
"	...	Recreation	...	...	...	16
Footscray Town	...	Public Gardens	...	...	...	26
"	...	Cricket Ground, etc.	...	...	...	5
"	...	Recreation (Yarraville)	...	...	...	5
Williamstown Town	...	Park	...	...	...	36
"	...	"	20
"	...	Beach Park	...	...	...	20
"	...	Cemetery	...	...	...	15
"	...	Rifle Range	...	...	...	332
"	...	Cricket Ground	...	...	...	6 ³ / ₄
"	...	Public Garden	...	...	...	3 ¹ / ₂
"	...	Recreation (Newport)	...	...	...	13
Outside urban municipalities	{	Yarra Bend Asylum	...	...	...	350
		Malvern Recreation	...	...	...	5
		"	...	...	...	8
		" Park and Garden	...	...	...	16
		Caulfield Park	...	...	...	62
		" Racecourse	...	...	...	144
		Camberwell Gardens	...	...	...	7
		Williamstown Racecourse	...	...	...	190
Total					...	5,293

763. The Melbourne Botanic Garden is situated on the south side of the River Yarra, at a distance of about a mile and a half from the heart of the city. The area of the garden proper is 83 acres, and is as large as the Botanic Gardens of Sydney, Adelaide, and Brisbane

Botanic Garden.

* See footnote (*) on page 428.

combined; but with the Domain and Government House grounds adjoining it covers about 300 acres. This garden, although nominally in existence for some forty-eight years, was virtually created by Dr. (now the Baron Sir Ferdinand von) Mueller, who was for 16 years its director, but retired from that post in 1873. It was early extremely rich in rare plants, these being in very many instances then new to the colony. The garden under the present director, Mr. W. R. Guilfoyle, F.L.S., still maintains its beauty. An interesting description of it from his pen appears in the *Victorian Year-Book*, 1888-9.*

Zoological
and Accli-
matisation
Gardens.

764. 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 the Post Office, and can be reached by the Brunswick tramcars starting from Elizabeth Street South, close to the Hobson's Bay Railway Station, every few minutes. A transfer has to be made at the south entrance to the Royal Park to a short horse tram running from the Sydney Road to the Society's gardens, but only one fare of 3d for adults and half-price for children is made. The gardens can also be reached from Spencer Street by the Coburg, Fitzroy, or Heidelberg trains, all of which stop at the Royal Park Station, close to the railway gates on the north side of the gardens. 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. The following interesting account of the operations of this society has been kindly contributed for this work by the Director of the Gardens, Mr. A. A. C. Le Souef:—

“The society was first founded in 1857. When a meeting was held to consider the desirability of establishing an Ornithological Society, Dr. Thomas Black, now of Cintra, St. Kilda, who was one of those present at the meeting (and who was for many years afterwards president of the society), moved that the original idea be extended, and that a Zoological Society be established instead; and the motion finding favour, was unanimously carried, and the convener of the meeting, Mr. Frederick Selwyn, a well-known solicitor of that day, was, on the motion of Dr. Black, elected its first president. The society thus inaugurated has continued its operations ever since, but principally until 1880 as an Acclimatisation Society, and with this branch of its labours the name of the late Mr. Edward Wilson will always be associated, as he was to the day of his death one of its most earnest and staunch supporters. The society always possessed a small collection of animals and birds, and a few years ago

* Volume II., paragraph 891.

it was determined to give more prominence to the zoological element, and to this end, in 1880, the director of the society, Mr. Le Souef, was requested by the council to visit the principal Zoological Gardens of England and the continent, and to make himself acquainted with their management. This he did, and on his return, at the latter end of that year, steps were at once taken to place the society on a proper footing, and efforts were made to obtain permission from the Government to charge for admission at the gates, that being the only plan ever found to succeed in carrying on a Zoological Garden successfully. At first permission to charge on one day in the week was granted, then on five days, and finally on all days except Sunday, on which day it is still free from 1.30 o'clock till 4.30 in winter, and 6 p.m. in summer.

"The gardens are now very attractive, and contain a fine zoological collection, which is always increasing. There are at present lions from South Africa, Bengal tigers, the tiger royal from Java, different varieties of leopards, panthers, cheetahs, pumas, bears of several kinds, hyænas, Brahmin cattle of several varieties, water buffaloes from Ceylon, yaks from Thibet, anoas from the Celebes, the white tailed gnu from South Africa, a fine elephant from India, single and double humped camels, wolves, dingoes, jackalls, foxes, wild boars from India and Africa, porcupines, the South American beaver, the guanaco, alpaca, and llamas, antelopes of several sorts, the wapiti deer from North America, the red deer from Europe, the axis, Formosan, Java, barasingu, and rusine deer, zebras from the Orange River, South Africa, and a large collection of monkeys, including a splendid example of that rare creature the mandrill, and several fine ourang-utans.

"In addition to the animals mentioned, there are also a splendid collection of kangaroos of many different varieties, and a large number of smaller animals, both foreign and native, too numerous to mention. There are besides ostriches, rheas, emus, cassowaries, adjutants from India, flamingoes from Egypt, the Indian sarus crane, the native companion (or large Australian crane), the demoiselle crane, crowned crane, and Stanley cranes, all from different parts of Africa; white and black swans, and several of the beautiful black-necked swans from Chili; the magnificent crown goura pigeons from New Guinea, and, in the same aviary, a number of other beautiful birds from South America. In other parts of the grounds are more pheasants of different varieties, macaws, cockatoos, parrots, bustards (or native turkeys), eagles, vultures, ravens, hawks, and a large number of other birds; and a large collection of water-fowl. There is also a collection of reptiles: pythons, snakes (venomous and non-venomous), lizards, iguanos, and a crocodile. Many of the cages are pretty and attractive; for example, the guinea-pigs live in luxurious style in a small Swiss chalet, known as 'Guinea-pig Cottage;' the white Egyptian rats in a model of an old Norman or Rhenish castle, called 'Rat Castle;' the white rabbit in a miniature log cabin of the old times; and on the opposite side of the path is a still more primitive structure known as the 'Old Bush House,' an exact counterpart, in miniature, of the shepherd's hut of thirty or forty years ago. In another part of the garden is a native encampment, the mia-mias, or huts, being exactly similar to those erected by the natives when the white men first entered Victoria; they are furnished with spears, boomerangs, shields, and waddies or war-clubs.

"The efforts of the society are appreciated by the public, as shown by the increasing attendance; and the Melbourne Zoological Gardens now compare with some of the fine Zoological Gardens of the different capitals of Europe. The entrance fee has been fixed at a low rate. On Mondays it is 1s. for adults, and 6d. for children, and on all other week days, 6d. for adults, and 3d. for children, whilst on Sundays the admission is free. For a member's ticket, admitting lady and gentleman, the annual subscription is £1 1s. The yearly subscription for a family ticket is £2 2s., and a life member's ticket £10 10s."

765. The following is a list of the principal Charitable Institutions in Victoria, and a statement of the accommodation which, according to the returns of the year ended 30th June, 1889, was available for indoor patients:—

Accommo-
dation of
charities

CHARITABLE INSTITUTIONS.*—AMOUNT OF ACCOMMODATION, 1888-9.†

Description of Institution.	Number of Institutions.	Dormitories.		Number of Beds for Inmates.	Number of Cubic Feet to each Inmate.
		Number.	Capacity in Cubic Feet.		
General hospitals ‡	39	352	3,147,011	2,430	1,295
Women's Hospital	1	21	118,000	70	1,686
Children's Hospital	1	9	59,176	70	845
Eye and Ear Hospital	1	6	33,322	43	775
Hospitals for the Insane	5	1,022	2,094,805	3,411	614
Idiot Asylum §	1	12	49,746	83	599
Benevolent asylums	5	138	1,043,096	1,401	745
Immigrants' Home	1	24	390,256	677	576
Blind Asylum	1	5	78,658	108	728
Deaf and Dumb Asylum	1	4	73,765	74	997
Orphan asylums	7	61	532,566	1,019	523
Industrial Schools	5	20	224,169	309	725
Reformatory Schools	4	22	231,091	218	1,060
Infant Asylum	1	9	34,482	61	565
Female refuges	7	125	312,240	474	659
Total	80	1,830	8,422,383	10,448	806

NOTE.—Besides the hospitals above referred to, there were two Convalescent Homes, with accommodation for 25 inmates. Particulars of these institutions will be found in a subsequent paragraph.

Cubic space in wards.

766. According to regulations issued by the Central Board of Health in Melbourne, not less than 1,200 cubic feet in the wards of a hospital or other institution of a like nature, should be allowed for each individual. It will be observed by the figures in the last column of the foregoing table that this amount of space for inmates is not attained in the case of any of the institutions, except the general hospitals and the Women's Hospital. It may be remarked that one important authority considers so large an amount of space unnecessary. The late Dr. Paley, in his report on the Hospitals for the Insane for 1878,¶ mentioned 500 feet for each patient in ordinary wards, and 1,000 feet in hospital wards, as a sufficient allowance; but, on the other hand, Dr. McCrea, the late Chief Medical Officer, in a paper contributed by him to a "Précis of Information concerning the Colony of Victoria," prepared some years since, under the editorship of the present writer, for the Intelligence Department of the Imperial War Office, gave it as his opinion that, whilst 600 feet of cubic space

* Only three of the kinds described are Government institutions, viz., the Hospitals for the Insane, the Idiot Asylum, and four of the Industrial and Reformatory Schools.
† Except in the case of the Industrial and Reformatory Schools, for which the returns, both in this and the following tables, are for the year ended 31st December, 1889.
‡ A list of the general hospitals is given in the table following paragraph 755 in Volume I.
§ The Idiot Asylum is under the same control as the Hospitals for the Insane.
¶ The name of this institution is misleading; it is really a benevolent asylum.
¶ Parliamentary Paper No. 36, Session 1879.

is sufficient for each person in a well-ventilated sleeping room, as much as from 1,500 to 2,000 cubic feet ought to be allowed in hospital wards.

767. The following table shows the total and average number of inmates in the same institutions during the year ended 30th June, 1889; also the number of deaths, and the proportion of deaths to inmates :—

Inmates and deaths in charities.

CHARITABLE INSTITUTIONS.—INMATES AND DEATHS, 1888–9.

Description of Institution.	Number of Inmates.		Number of Deaths.	Proportion of Deaths to Total Number of Inmates.
	Total during Year.	Daily Average.		
				Per cent.
General hospitals	17,848	1,833·5	2,160	12·10
Women's Hospital, etc.*	1,160	43·2	28	2·41
Children's Hospital	983	57·0	77	7·83
Eye and Ear Hospital	443	39·4	3	·68
Hospitals for the Insane	4,299	3,552·0	228	5·30
Idiot Asylum	101	77·5	9	8·91
Benevolent asylums	2,036	1,302·1	257	12·62
Immigrants' Home	2,291	676·0	102	4·45
Blind Asylum	116	106·5	1	·86
Deaf and Dumb Asylum	77	68·4	...	...
Orphan asylums	1,458	1,164·4	7	·48
Industrial and Reformatory Schools†	3,719	3,248·5	56	1·50
Infant Asylum	88‡	49·0	14	15·91
Female refuges	865	407·0	6	·69
Total	35,484	12,624·5	2,948	8·30

768. With reference to the overcrowding of some of the institutions, a comparison of the last two tables will show that the daily average of inmates in the year under review was greater than the number of beds in the Hospitals for the Insane, and the Orphan Asylums. The children attached to the Industrial and Reformatory Schools greatly outnumber the beds, but as the majority of these are boarded-out,§ the institutions are not overcrowded.

Inmates in excess of beds.

769. Nearly all the institutions give returns of the birthplaces of their inmates. These are summarized in the following table, and the totals are compared with the estimated numbers of the same birthplaces in the population :—

Birthplaces of inmates.

* Exclusive of infants.
† Including those boarded-out and sent to service as well as the inmates of the institution.
‡ Exclusive of mothers, of whom 39 were admitted during the year, and 19 remained at its end.
§ See paragraph 797 *post*.

CHARITABLE INSTITUTIONS.—BIRTHPLACES* OF INMATES, 1888-9.

Description of Institution.	Australasian Colonies.	England and Wales.	Scotland.	Ireland.	China.	Other Countries & Unknown.	Total.
General hospitals ...	7,137	4,606	1,221	3,093	357	1,434	17,848
Women's Hospital ...	844	137	30	110	...	39	1,160
Eye and Ear Hospital ...	212	91	32	83	2	23	443
Hospitals for the Insane ...	714	947	363	1,175	106	994	4,299
Idiot Asylum ...	81	2	...	...	...	18	101
Benevolent asylums ...	139	886	217	598	55	141	2,036
Immigrants' Home ...	292	956	357	526	...	160	2,291
Blind Asylum ...	100	10	1	3	...	2	116
Deaf and Dumb Asylum...	69	5	...	...	...	3	77
Orphan asylums ...	1,367	18	1	29	...	43	1,458
Industrial and Reformatory Schools†	230	5	1	2	...	12	250
Total ...	11,185	7,663	2,223	5,619	520	2,869	30,079
Proportions per 1,000 of population‡ ...	15·93	41·87	37·05	52·51	44·52	70·69	27·25

Religions of inmates.

770. The same institutions which furnish returns of the birth-places furnish also returns of the religions of their inmates, and the result is given in the following table. The figures in the lower line express the proportions to the estimated living population of each sect:—

CHARITABLE INSTITUTIONS.—RELIGIONS* OF INMATES, 1888-9.

Description of Institution.	Protestants.	Roman Catholics.	Jews.	Bud-dhists, Confu-cians, etc.	Of other Sect, of no Sect, and Unknown.	Total.
General hospitals ...	11,772	5,399	47	310	320	17,848
Women's Hospital ...	774	375	3	...	8	1,160
Eye and Ear Hospital ...	295	141	4	2	1	443
Hospitals for the Insane ...	2,392	1,358	17	92	440	4,299
Idiot Asylum ...	61	23	1	...	16	101
Benevolent asylums ...	1,345	592	3	40	56	2,036
Immigrants' Home ...	1,600	641	3	4	43	2,291

* Particulars relating to the Children's Hospital, Infant Asylum and Female refuges are not given in this table.

† The figures in this line represent the number of inmates of Industrial and Reformatory Schools (exclusive of those boarded-out, etc.) at the end of the year. The total number under the control of the institution during some portion of the year was 3,719.

‡ For numbers of each birthplace, see table following paragraph 120 in Vol. I.

CHARITABLE INSTITUTIONS.—RELIGIONS* OF INMATES,
1888-9—continued.

Description of Institution.	Protestants.	Roman Catholics.	Jews.	Bud- dhists, Confu- cians, etc.	Of other Sect, of no Sect, and Unknown.	Total.
Blind Asylum	95	20	1	...	...	116
Deaf and Dumb Asylum ...	64	12	1	...	...	77
Orphan asylums	751	707	...	...	...	1,458
Industrial and Reformatory Schools†	140	109	1	...	...	250
Total	19,289	9,377	81	448	884	30,079
Proportions per 1,000 of } population‡	24·35	36·07	14·62	41·83	24·56	27·25

771. The ages of the inmates of most of the institutions are given as follow; also the proportion of the numbers at each age period to the numbers at the same age in the population:—

Ages of inmates of charities.

CHARITABLE INSTITUTIONS.—AGES OF INMATES, 1888-9.

Description of Institution.	Ages.										Total.
	Under 5.	5 to 10.	10 to 15.	15 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 and upwards.	Unknown.	
General hospitals ..	242	526	875	4,192	3,418	1,958	2,268	2,146	2,195	28	17,848
Women's Hospital ..	..	..	..	699	360	74	21	2	..	4	1,160
Eye and Ear Hospital ..	..	40	37	96	75	48	50	65	32	..	443
Hospitals for the Insane ..	..	24	32	363	781	764	959	657	308	411	4,299
Idiot Asylum ..	..	18	31	45	3	..	..	..	..	4	101
Benevolent asylums ..	52	..	..	59	20	42	131	353	1,379	..	2,036
Immigrants' Home ..	87	75	19	96	349	396	443	411	407	8	2,291
Blind Asylum ..	..	5	20	47	32	9	2	1	..	..	116
Deaf and Dumb Asylum ..	..	14	31	32	..	..	..	..	..	..	77
Orphan asylums ..	107	551	745	54	1	..	..	..	..	..	1,458
Industrial and Reforma- tory Schools†	6	12	124	108	..	..	..	..	..	..	250
Infant Asylum ..	88	..	..	..	..	..	..	..	..	..	88
Female refuges ..	..	..	9	266	186	117	121	35	..	131	865
Total ..	582	1,265	1,923	6,057	5,225	3,408	3,995	3,670	4,321	586	31,032
Proportions per 1,000 } of population§	4·21	10·72	16·49	24·66	26·40	36·45	44·88	51·11	128·75	..	28·10

* See footnote (*) on page 434.
† See footnote (†) to table following paragraph 769 ante.
‡ For numbers of each sect, see table following paragraph 131 of Vol. I.
§ For numbers of each age, see table following paragraph 134 of Vol. I.

772. The total receipts of these institutions in 1888-9 amounted to £401,930, of which £229,041, or not quite three-fifths, was contributed by Government ; and the expenditure amounted to £382,362. Of the Government contribution, £120,267 was expended on the Hospitals for the Insane, the Idiot Asylum, and the Industrial and Reformatory Schools, which are Government institutions ; and the balance (£108,774) was distributed as grants in aid to the other institutions. A statement of the receipts and expenditure for the year of the Charitable Institutions is given in the following table :—

CHARITABLE INSTITUTIONS.—RECEIPTS AND EXPENDITURE, 1888-9.

Description of Institution.	Receipts.			Expendi- ture.
	From Govern- ment.	From other Sources.	Total.	
	£	£	£	£
General hospitals	65,474	85,884	151,358	135,935
Women's Hospital	2,500	3,714	6,214	6,218
Children's Hospital	250	5,153	5,403	4,585
Eye and Ear Hospital	800	2,244	3,044	2,921
Hospitals for the Insane Idiot Asylum	80,286	28,094*	108,380	108,380
Benevolent asylums	18,053	11,747	29,800	31,225
Immigrants' Home	6,726	2,556	9,282	8,798
Blind Asylum	2,000	4,049	6,049	6,416
Deaf and Dumb Asylum	1,850	1,956	3,806	3,136
Orphan asylums	8,951	10,679	19,630	20,219
Industrial and Reformatory Schools	39,981	1,751†	41,732	41,732
Infant Asylum	250	1,547	1,797	1,952
Female refugees	1,920	13,515	15,435	10,845
Total	229,041	172,889	401,930	382,362

773. The following table gives a statement of the average number of inmates of the respective institutions during the year ended with June, 1889, the total cost of their maintenance, and the average cost per annum of each inmate :—

* This represents the amount paid into the Treasury in 1889 by the Master-in-Lunacy on account of the maintenance of lunatic patients ; and it is entered in this table as being a set-off against the total cost to Government of these institutions.

† Of this amount, £1,417 was received and paid into the Treasury during the year from parents and others for the maintenance of Industrial and Reformatory School children, and £334 was derived from the sale of articles produced, making a total of £1,751. No information is furnished of the amounts received from private sources by the assisted Industrial and Reformatory Schools.

CHARITABLE INSTITUTIONS.—AVERAGE COST OF EACH INMATE, 1888-9.

Description of Institution.	Daily Average Number of Inmates.	Total Cost of Maintenance.*	Average Cost of each Inmate per annum.
		£	£ s. d.
General hospitals	1,833·5	113,560	61 18 9
Women's Hospital	43·2	5,795	134 3 0
Children's Hospital	57·0	4,459	78 4 7
Eye and Ear Hospital	39·4	2,538	64 8 4
Hospitals for the Insane	3,552·0	108,380	29 17 2
Idiot Asylum	77·5		
Benevolent asylums	1,302·1	22,751	17 9 6
Immigrants' Home... ..	676·0	8,279	12 4 11
Blind Asylum	106·5	6,032	56 12 9
Deaf and Dumb Asylum	68·4	3,090	45 3 6
Orphan asylums	1,164·4	18,790	16 2 9
Industrial and Reformatory Schools ...	3,248·5	41,732†	12 16 11
Infant Asylum	49·0	1,503	30 13 6‡
Female refuges	407·0	10,325	25 7 4
Total	12,624·5	347,234	27 10 1

774. In 1888-9 the average cost per inmate was greatest in the Women's Hospital (£134), the next in the Children's Hospital (£78), and the next in the Eye and Ear Hospital (£64). The general hospitals followed, with an average per inmate of £62; then the Blind Asylum, with £56; and the Deaf and Dumb Asylum, with £45. The institutions in which the relative cost was least were the Immigrants' Home, with an average of less than £12 5s.; the Industrial and Reformatory Schools, with an average of less than £13; the Orphan Asylums, with an average of £16; and the Benevolent Asylums, with an average of £17 10s. per inmate. The children of the Industrial and Reformatory Schools, and Orphan Asylums, are, however, for the most part not resident in the institutions, but are boarded-out or licensed.

775. In the following table the principal ordinary occupations or callings of persons who were inmates of Hospitals and Benevolent Asylums during the year ended 30th June, 1889, are specified under various heads:—

* The amounts in this column represent the expenditure of the institutions less the cost of building and repairs and of out-door relief.

† Cost to the State only. The assisted schools, which receive annually about £1,640 out of the Government grant, are also partly supported by private contributions.

‡ If, however, allowance be made for an average of 18 mothers, who accompanied their children, the cost per head would be reduced to £22 8s. 8d.

OCCUPATIONS OF INMATES OF CHARITABLE INSTITUTIONS, 1889.*

Occupations.	General Hospitals.		Benevolent Asylums and Immigrants' Home.	
	Males.	Females.	Males.	Females.
GOVERNMENT, PROFESSIONS, ARTS, EDUCATION, LITERATURE.				
Army officer, soldier	3	...	50	...
Clergyman, lawyer, doctor	29	...	6	...
Police constable, warder	26	...	4	...
Printer, compositor	52	...	33	...
Others	131	23	25	18
BOARD AND LODGING, DOMESTIC DUTIES, ATTENDANCE, ETC.				
Hotel servant	62	28	33	1
Domestic servant	29	1,007	2	449
Cook	162	36	108	53
Nurse, nursemaid ... ..	...	98	...	39
Housekeeper ... ..	...	66	...	50
Domestic duties, married woman, etc. ... ..	...	1,542	...	...
Others	47	74	15	183
COMMERCIAL PURSUITS.				
Book-keeper, clerk	175	1	79	...
Merchant, dealer, storekeeper	56	...	45	9
Hawker	71	1	31	2
Others	130	8	17	...
CARRYING AND MESSAGES.				
Cab, coach—man, etc.	108	...	11	...
Carrier, carter, etc.	302	...	8	...
Railway servant	69	...	...	...
Sailor, ship's steward, etc.	240	1	116	...
Others	138	...	9	...
AGRICULTURAL PURSUITS AND LAND.				
Farmer, farm labourer, etc.	324	4	56	...
Gardener	189	...	109	...
Others	12	...	6	...
PASTORAL PURSUITS AND ANIMALS.				
Drover	40	...	9	...
Groom, stable boy	193	...	55	...
Horse dealer, trainer, jockey	50	...	...	...
Shepherd	46	...	...	...
Others	73	...	51	...
ARTIZANS, MECHANICS, LABOURERS.				
Bricklayer	74	...	35	...
Carpenter	344	...	91	...
Engineer	58	...	4	...
Labourer	5,187	...	1,075	...
Painter, paperhanger, signwriter	136	...	93	...
Stonemason	64	...	13	...
Others	356	4	77	2

* For further details see *Statistical Register of Victoria* for 1889, Part "Social Condition."

OCCUPATIONS OF INMATES OF CHARITABLE INSTITUTIONS, 1889*—
continued.

Occupations.	General Hospitals.		Benevolent Asylums and Immigrants' Home.	
	Males.	Females.	Males.	Females.
TEXTILE FABRICS AND DRESS.				
Boot and shoe maker	132	...	68	2
Dressmaker, milliner, seamstress, etc. ...	...	127	...	59
Tailor, tailoress	76	59	70	55
Others	83	16	33	16
FIBROUS MATERIALS				
	4	1	2	...
ANIMAL FOOD.				
Butcher	115	1	31	...
Others	25	1	2	2
VEGETABLE FOOD.				
Baker	89	...	37	...
Others	38	...	22	...
DRINKS AND STIMULANTS.				
Grocer	36	...	17	...
Others	41	1	8	...
ANIMAL MATTERS				
	41	...	8	...
VEGETABLE MATTERS.				
Axeman, sawyer, wood splitter, etc., etc. ...	180	...	20	...
Others	15	1	6	...
MINING, ENGAGED IN				
	1,332	...	317	...
COAL, STONE, CLAY, EARTHENWARE AND GLASS				
	109	...	27	...
MINERALS AND METALS.				
Blacksmith, whitesmith... ..	127	...	44	...
Engine driver, cleaner	52	...	...	...
Others	123	...	40	...
INDEFINITE AND NON-PRODUCTIVE.				
Children under 15 years of age	676	521	120	96
No occupation, etc.	414	1,448	15	79
Others	57	38	59	...
Total	12,741	5,107	3,212	1,115

776. In Melbourne and suburbs, during the month of October of each year, the last Saturday and Sunday are set apart for making collections in aid of the charitable institutions. The movement is taken up warmly by the clergy of all denominations, who, on Hospital Saturday and Sunday.

Sunday, preach sermons in aid thereof, and devote thereto all the offerings collected in their churches. Superintendents of Sunday and head masters of State schools, and the proprietors and persons employed in many places of business, also render important assistance in the collection of funds. The following are the amounts collected in each year since the movement was inaugurated:—

HOSPITAL SATURDAY AND SUNDAY, AMOUNTS COLLECTED,
1873 TO 1889.

£				£			
1873	...	...	4,219	1883	...	...	7,091
1874	...	...	5,542	1884	...	...	8,253
1875	...	...	5,493	1885	...	...	9,516
1876	...	...	5,171	1886	...	...	9,222
1877	...	...	6,195	1887	...	...	10,289
1878	...	...	6,203	1888	...	...	14,416
1879	...	...	5,583	1889	...	...	11,459
1880	...	...	6,053				
1881	...	...	6,984				
1882	...	...	7,022				
				Total		...	£128,711

Distribution
of moneys
collected.

777. The following table shows the distribution of the amounts collected and the extent to which the respective charitable institutions have profited thereby:—

DISTRIBUTION OF HOSPITAL SATURDAY AND SUNDAY FUND,
1873 TO 1889.

Institution.				Amount Distributed.		
				1873 to 1888.	1889.	Total.
				£	£	£
Melbourne Hospital	...	...	...	39,277	2,985	42,262
Alfred Hospital	...	...	...	16,128	1,992	18,120
Benevolent Asylum	...	...	...	12,225	872	13,097
Women's Hospital	...	...	...	9,947	954	10,901
Hospital for Sick Children	...	...	...	11,588	1,397	12,985
Eye and Ear Hospital	...	...	...	5,801	549	6,350
Homœopathic Hospital	...	...	...	4,436	883	5,319
Immigrants' Aid Society	...	...	...	4,675	385	5,060
Richmond Dispensary	...	...	...	800	50	850
Collingwood Dispensary	...	...	...	1,085	100	1,185
Austin Hospital for Incurables	...	...	...	3,839	533	4,372
Convalescent Home for Women	...	...	...	90	100	190
" " Men	...	...	...	75	100	175
Total distributed				109,966	10,900	120,866
Total collected				117,252	11,459	128,711

Recoveries
of lunatics,
Australia
and
England.

778. The proportion of recoveries of patients in the Victorian Lunatic Asylums (Hospitals for the Insane) was not so high in 1889 as in most previous years, the proportion having been 4,423* per

* Males, 4,214 ; females, 4,737 per 10,000 admissions of either sex.

10,000 admitted as against a proportion of 4,737 in 1888, and an average during the ten years ended with 1887 of 4,451. The proportion of recoveries was higher than in three of the other Australasian colonies, or than in England and Wales, as is shown by the following figures :—

RECOVERIES OF LUNATIC ASYLUM PATIENTS IN AUSTRALASIAN COLONIES AND ENGLAND.

	Recoveries per 10,000 Admissions.*		Recoveries per 10,000 Admissions.*
1. New South Wales	... 4,676	4. England and Wales	... 3,856
2. Victoria	... 4,423	5. South Australia	... 3,847
3. Queensland	... 4,163	6. New Zealand	... 3,766

779. It has been noticed that in South Australia, England and Wales, Victoria, and New Zealand, the proportion of recoveries of female patients is greater than that of male patients ; but in Queensland and New South Wales the reverse has been the case, the proportion of recoveries of males in these colonies having been greater than that of females.

780. In proportion to the numbers resident, the mortality in the Victorian Asylums during 1889 was lower than that during the year 1886 in the asylums of the other countries named, except South Australia and New Zealand, as is thus shown :—

MORTALITY OF LUNATIC ASYLUM PATIENTS IN AUSTRALASIAN COLONIES AND ENGLAND.

Country.	Deaths per 10,000 Patients Resident.†		
	Males.	Females.	Both Sexes.
1. England and Wales	1,070	824	937
2. New South Wales	761	497	658
3. Queensland	712	572	657
4. Victoria (1889)	775	507	653
5. South Australia	700	560	640
6. New Zealand	756	416	636

781. It will be noticed that the proportion of deaths of female patients was in all cases smaller than that of male patients ; and although the total mortality of lunatic patients was lower in Victoria than in New South Wales or Queensland, the mortality of male patients was greater in the former than in either of the latter.

* Figures for the neighbouring colonies, and for England and Wales, taken from page 14 of Reports of the Inspector of Lunatic Asylums for 1886 and 1888.
† Figures for England and Wales and the neighbouring colonies from page 15 of Report of Inspector of Lunatic Asylums, 1886.

Causes of
insanity.

782. The following are stated to have been the probable or pre-disposing causes of insanity in the male and female patients admitted into the Lunatic Asylums of Victoria in the last four years :—

CAUSES OF INSANITY OF LUNATIC ASYLUM PATIENTS, 1886 TO 1889.

Probable Causes.	Number of Admissions.									
	Males.					Females.				
	1886.	1887.	1888.	1889.	Total.	1886.	1887.	1888.	1889.	Total.
MORAL.										
Domestic trouble (including loss of relatives and friends)	8	3	8	3	22	15	21	18	14	68
Adverse circumstances (including business anxieties and pecuniary difficulties)	19	15	21	12	67	3	...	3	5	11
Mental anxiety and worry (not included under the above two heads), and over work	13	18	11	18	60	2	14	5	13	34
Religious excitement ...	9	7	7	8	31	7	10	8	6	31
Love affairs (including seduction)	...	1	2	1	4	1	3	10	5	19
Fright and nervous shock ...	...	1	1	1	3	4	9	2	10	25
PHYSICAL.										
Intemperance in drink ...	36	69	71	60	236	21	27	14	20	82
" sexual ...	4	1	...	1	6	...	...	2	3	5
Venereal disease ...	1	1	...	1	3	...	...	...	2	2
Self-abuse ...	23	17	22	20	82	...	...	1	...	1
Over exertion ...	...	...	...	...	...	1	...	...	...	1
Sunstroke ...	9	14	19	9	51	2	5	2	1	10
Accident or injury (including surgical operations)	17	14	16	8	55	4	2	1	2	9
Pregnancy ...	...	...	...	...	...	3	...	1	...	4
Parturition and the puerperal state	...	...	...	...	...	18	18	10	15	61
Lactation... ..	...	...	...	...	...	2	...	4	1	7
Uterine and ovarian disorders	...	...	...	...	...	8	9	3	10	30
Puberty ...	...	...	...	...	...	...	...	...	...	...
Change of life ...	...	...	...	...	...	2	4	2	1	9
Fevers ...	4	3	4	5	16	2	1	...	2	5
Privation and starvation ...	1	3	4	4	12	..	...	2	2	4
Old age ...	3	9	23	23	58	5	10	15	18	48
Epilepsy ...	9	1	2	...	12	2	...	...	...	2
Other bodily diseases or disorders	7	8	16	37	68	6	6	8	15	35
Previous attacks ...	...	36	49	55	140	11	17	51	42	121
Hereditary influences ascertained (direct and collateral)	9	4	12	15	40	6	11	15	1	33
Congenital defect ascertained	4	9	10	10	33	9	12	8	14	43
Habitual use of opium ...	1	...	...	...	1	...	...	...	...	...
Other ascertained causes ...	5	4	4	1	14	2	10	...	5	17
Unknown ...	151	129	73	110	463	126	101	78	56	361
Convulsions ...	...	...	...	...	...	...	...	...	1	1
Total ...	333	367	375	402	1,477	262	290	263	264	1,079

783. In his report for 1888, the Inspector of Lunatic Asylums, Dr. Dick, alludes to the fact that many patients are discharged from the asylums without any means of support, that such money as they may have brought with them when admitted is paid into the Treasury by the Master in Lunacy, and frequently the whole sum is absorbed for maintenance and other charges, that the discovery of their loss when about to leave the asylum is a source of keen disappointment, and adds to the difficulties against which they have to contend in striving to regain their position in life; he therefore recommended that all patients' property within a certain limit, or its value, should be returned to them at the time of discharge on grounds of policy as well as humanity.

Property of
lunatic
patients.

784. An Act was passed in 1888* authorising the establishment of Inebriate Asylums, where persons addicted to the habitual use of alcohol in excess could be received either as voluntary patients or under legal compulsion, the general direction and control of these establishments being vested in the Lunacy Department. The following particulars respecting these institutions have been taken from the report of the Inspector of Lunatic Asylums for 1889:—

Inebriate
asylums.

“A site for the buildings required to give full effect to this Act has been selected, and plans have been submitted and approved. Circumstances have not, however, admitted of further progress. In the meantime, in order that the Act should not be entirely inoperative, and until permanent provision for inebriates has been made, the Government have leased two houses in the neighbourhood of Beaconsfield, and converted them into temporary asylums. Situated in a mountainous district, on a main line of railway within about 28 miles of the metropolis, and favoured with a salubrious climate, these establishments fairly answer their purpose. To each of these is attached a considerable area of land, admitting of healthful exercise and occupation for the inmates; and books, newspapers, and various games, offer a means of distraction for those of the less actively disposed. A dietary on a sufficiently liberal scale has been approved, and can be supplemented under medical sanction. The male division contains accommodation for 10 and the female for 9 patients. A staff of assistants, somewhat large in proportion to the number of patients hitherto received, is also in attendance. The rates of maintenance have been rigidly fixed at £2 and £5 per week. It is to be anticipated that the payment of the higher rate will be eluded by many on one pretext or another, and it is probable that a more elastic scale, under which persons could be charged according to their means, limited only by a maximum and minimum, would be a more fair and satisfactory arrangement.

“The house for male patients was opened on the 1st October, 1889; that for females on the 1st November, 1889. Up to the end of the year only 2 male patients and 1 female patient had been admitted. Doubtless there would have been more applicants for admission had the existence of the retreat been generally known, the numerous inquiries by friends of inebriates showing the urgent need of some such institution. Under the Act, persons can only be committed for three months—a period which is inadequate to the reformation of confirmed inebriates, and requiring to be much extended. In view of the projected opening of an establishment specially

* *The Inebriate Asylums Act 1888* (52 Vict. No. 1009).

designed for the reception and treatment of inebriates, where the number of persons to be dealt with will probably be largely increased, the modification of the Act in certain directions appears to be called for.

- “ 1. It should be legal to commit a patient for any period up to twelve months, according to the condition of individual, as indicated by the medical evidence, and otherwise.
- “ 2. Power should be intrusted to the Medical Superintendent to allow short absences from the asylum, after a certain time of detention, say six or nine months.
- “ 3. In the event of circumstances arising which would necessitate a patient's temporary absence from the asylum, it should be competent for the Medical Superintendent to grant a permit for the time required. At present on an emergency, such, for instance, as the death of a near relative, in order that a patient should legally leave the asylum, the order of committal would have to be rescinded—a course attended with much inconvenience, and calculated to undo the benefit which may already have been obtained by the patient.
- “ 4. A progressive maintenance rate should be introduced, ranging, say, from 25s. to £5 a week, according to the patient's circumstances and requirements.
- “ 5. Before the admission of any patient an approved bond, to secure monthly prepayments, should be executed by those interested.

“It is desirable at times, from various considerations, to take control over inebriates who are unable directly or indirectly to contribute towards the expense of their maintenance. If such an obligation be admitted, provision will have to be made for this class in the form of special refuges, and it is probable that legislation to meet the particular circumstances will also be required. It is to be remarked that in England and Scotland much attention is at present being given to this branch of legislation, conceived in great measure on the lines above suggested.”

Inebriate
Retreat.

785. The Inebriate Retreat, which is a private institution, receiving no pecuniary aid from Government, admitted 37 patients—viz., 30 males and 7 females—in 1889, as against 32 males and 9 females in 1888. All those admitted in 1889 entered voluntarily; 26 had been constant and 7 periodical drinkers; 22 had had delirium tremens; 27 had been accustomed to use tobacco, and 4 are known to have had intemperate parents.* Forty-four patients were discharged during the year, and 1 remained in the institution at its close.

Blind
Asylum.

786. The following information respecting the Victorian Asylum and School for the Blind has been taken from the report of the Committee for the year ending 30th June, 1890:—

“At the commencement of the year the number of inmates was 108, and 6 former pupils were then employed as journeymen, making a total of 114. During the year 16 have been admitted, 12 have been discharged, and 1 has died. At the close of the year there were 111 inmates and 4 journeymen; so that the total number of blind persons then enjoying the benefits of the Institution was 115. The total number received into the Institution since its establishment is now 328.

“The ordinary income for the year was £6,189 4s. 3d., and the expenditure for the same period, £6,857 9s. 11d.; the latter included £1,255 7s. 2d. paid for raw material to be used in the manufacturing department, the balance of which at the close of year formed a considerable item in the assets—viz., £763 6s. 11d.

* Some of the patients are unwilling to acknowledge parental intemperance, and consequently the number is understated.

"The legacies received during the year (which are not included in the above statement) amounted in the aggregate to £4,816 19s. 11d.; of this sum £4,500 was bequeathed by the late Hon. Francis Ormond. From these legacies the Committee have transferred £1,316 19s. 11d. to the General Account, to meet existing liabilities, and the remainder, viz., £3,500, they have constituted a Building Fund, to be used in aid of completing the structure according to its original design, and in the erection of a Music Hall; this latter it is intended to call the 'Ormond Hall for the Blind.'

"The number of pupils in the school at the close of the year was 39, viz., 19 girls, and 20 boys.

"In May last the senior member of the matriculation class endeavoured to pass the matriculation examination. By the kindness of the University authorities, special arrangements were made to meet the peculiar requirements of the student, who, although she failed to obtain the object of her laudable ambition, yet succeeded in passing in the five following subjects, viz., English, arithmetic, geography, botany, and history, a very praiseworthy and encouraging achievement, considering that the student is only sixteen years old, and has been educated entirely as a blind person.

"Eighteen of the inmates are being taught basketmaking, 12 brushmaking, and 9 matmaking.

"The total proceeds of sales for the year were £1,354 12s. 9d., being £162 7s. 3d. in excess of the previous year.

"The number of pupils taught music is 40, 5 of whom assist in teaching; 35 are learning the piano, 13 stringed instruments, 12 wind instruments (who, together with two drummers, form the brass band), 6 piano-tuning, and 4 the organ.

"The senior choir consists of 23, and the junior choir of 22 members. During the past year 35 concerts and 17 band performances have been given in aid of the funds of the Institution, and the aggregate net profit, including £27 10s. from last year, amounted to £756 3s. 10d.

"The Committee rejoice in the prospect of the greater facilities which the completion of the building, and the erection of the Music Hall, will afford for carrying on, even more successfully than heretofore, the operations of the Institution; and they venture to express the hope that, with the continued support of the charitable, and by the unfailing help and blessing of God, the future of the Victorian Asylum and School for the Blind will be one of increasing prosperity and usefulness."

787. The following information relating to the Deaf and Dumb Institution has been taken from the latest report of that institution:—

Deaf and
Dumb
Institution.

"At the beginning of the year ended 30th June, 1890, the number of pupils was 63; since then 14 have been discharged and 6 admitted, leaving on the roll at the end of the year 55, and making the total number received from the commencement of the institution, 291.

"The health of the inmates, generally, has remained good during the year, but in April last 15 were attacked by the prevailing influenza epidemic. The cases, however, were of a mild character and of short duration, so that the services of the hon. medical officer (Dr. Fetherston) have not been required except on a few occasions. In order to provide increased vigorous and healthy exercise an excellent gymnasium has been constructed by enclosing the boys' play-shed, in which, through the kindness of Mr. Newbiggin, Punt-road, Prahran, a set of gymnastic apparatus has been erected; and an instructor has been appointed at a salary of £48 per annum. The gymnasium is much appreciated by the pupils, who take a keen interest in the exercises, from which they have already derived considerable benefit.

"The work of instruction is still carried on by means of the manual and the oral systems, and with few exceptions the pupils have made encouraging progress in the several branches of education comprised in the school curriculum. The extra subjects taught in the manual department are map drawing, the use of the atlas, and leading events in the world's history; and in the oral department, articulation and lip-reading. Thirty-six pupils are being instructed by means of the manual and nineteen by the oral system. In order to complete as far as possible the isolation of the latter from the former, a portion of the dining hall has been enclosed and an additional playground provided. The teachers in both departments have been painstaking and

assiduous in the discharge of their arduous duties, and deserve commendation. Specimen exercises in penmanship, drawing, mapping and arithmetic were sent to the recent Centennial International Exhibition, Melbourne, and the juries have been pleased to award to the institution a certificate of the second order of merit.

“The total sum received from all sources during the past year was £3,316, and the expenditure for the same period amounted to £3,280; whilst the liabilities, at the end of the year, amounted to £448.

“The amount to the credit of the endowment fund, which at the end of last year was £2,730, has been increased to £7,478—principally by the munificence of the late Hon. Francis Ormond, who bequeathed to the institution the sum of £5,000, which has been duly paid over by the executors, less £500 charged for probate duty.”

Eye and Ear
Hospital.

788. The Victorian Eye and Ear Hospital was established with the object of treating a class of diseases which not only are the cause of extreme suffering, but also, where unchecked, produce much helplessness and poverty, arising from deafness and blindness, thus 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. It received 405 in-patients during the year ended 30th June, 1889, making, with 38 in the institution at its commencement, a total of 443 treated. The patients discharged numbered 403, of whom 375 were stated to be cured or relieved, and 13 to be incurable. The number of out-patients during the year was 22,860.

Children's
Hospital.

789. The Melbourne Free Hospital for Sick Children had 59 in-door patients at the beginning of the financial year. During the year ended 30th June, 1889, 924 patients were admitted; and 851 were discharged, 77 died, and 55 remained at its close.

Victorian
Infant
Asylum.

790. The objects of the Victorian Infant Asylum 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, 1889, the number of infants admitted was 42, of whom 39 were accompanied by their mothers, besides which 46 were under the care of the institution at the commencement of the year. The number who died during the year was 14, and 22 were discharged; and thus the number remaining under the control of the institution at the end of the year was 52, of whom 20 were boarded out. Besides the infants, there were 56 mothers in the institution during the year, of whom 1 died, and 36 were discharged, and 19 remained at the close of the year. The receipts during the year

amounted to £1,797, of which £250 was from Government, and £1,547 from private sources; and the expenditure was £1,952.

791. A Humane Society was established in 1874, under the name of "The Victorian Humane Society," for the purpose of circulating information respecting the most effectual methods of, and providing suitable apparatus for, restoring persons apparently drowned or dead, and of bestowing rewards on those who risk their own lives to save those of their fellow-creatures. In April, 1883, Her Majesty's permission having been first obtained, the society assumed the title of "The Royal Humane Society," and in 1885 it was incorporated as "The Royal Humane Society of Australasia." Its objects are stated to be—(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 information regarding the most approved methods and the best apparatus to be used for such purposes. The following information respecting the operations of this society has been supplied by its secretary, Mr. William Hamilton:—

Royal
Humane
Society of
Austral-
asia.

"In 1881, the Hon. Sir W. J. Clarke, Bart., generously presented to the society the sum of £250 for the purpose of founding a gold or silver medal, to be awarded annually to the best case that comes before the society. Since its establishment, it has dealt with 761 cases, and made 638 awards. During the year ended 30th June, 1890, 125 applications for awards were investigated, with the result that 54 certificates, 38 bronze medals, 2 silver medals, and the Clarke silver medal, were granted. The receipts during the year amounted to £1,334 2s. 8d., and the expenditure to £512 13s. 7d. The institution has placed and maintains 344 life-buoys at various places on the coast, rivers, lakes, and reservoirs throughout all the Australasian colonies—(its operations extend throughout the Australasian colonies)—and Fiji. Of the honorary awards distributed in 1890, 51 were for deeds of bravery performed in Victoria, 15 for similar acts in New South Wales, 8 in Queensland, 11 in New Zealand, 5 in Tasmania, and 4 in South Australia. The Society has 184 honorary correspondents, residing as follows, viz.:—37 in New South Wales, 30 in New Zealand, 33 in Queensland, 10 in Tasmania, 3 in South Australia, 6 in Western Australia, and 65 in Victoria. Owing to the appointment of these gentlemen and to the awards made by the society appearing to give complete satisfaction throughout the colonies, there is no urgency for forming local branches of the society in the other colonies. Renewed exertion is being made to induce both the Imperial and Australasian Governments to amend the law for the protection of life and property at sea, by introducing provisions respecting the carriage on board ship of suitable life-saving apparatus, to meet the numerous cases of shipwreck (which so often occur even to the best constructed and appointed ships, by collision, stranding, or foundering), and which alone can prevent or avert the lamentable loss of human life which, under the inadequacy of the present law, so often happens. The views of the society on this subject were embodied in a letter transmitted for the consideration of the members of the Royal Commission on 'Loss of Life at Sea,' and the subject was again brought under the notice of the Imperial Conference which recently sat in

London, and resulted in a Bill being introduced into the House of Lords, which subsequently passed the Commons and received Her Majesty's assent on the 10th August, 1888. The title of the Act is *The Merchant Shipping Act 1888* (Life Saving Appliances). *The Marine Board Bill* passed in the colony also provides for the better preservation of life at sea. Instructions for saving life from drowning, sunstroke, snake-bite, etc., are taught in the State schools throughout the colony, but the directors of this society are urging that something more is now required; and, to give practical effect to their views, have determined to award bronze medallions for proficiency in swimming exercise, with reference to saving life; the competition to be open to the scholars at all public and private schools throughout Australasia. Efforts are still being made to induce the Education departments of the other colonies to adopt the plan followed in Victoria by making the instructions for saving life, etc., a part of the curriculum in the public schools."

Health
Society.

792. An Australian Health Society was established in Melbourne in 1875, and still maintains a vigorous existence. It consists of about 400 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 issues (*gratis*) pamphlets, tracts, and wall sheets, bearing upon the subject of health and disease; maintains a lending library of specially selected works for the use of members; and arranges for the delivery of public lectures, the annual recurrence of which is considered by many a welcome event, as is evidenced by the large audiences they succeed in attracting. Instruction in hygiene is also given by the ladies' committee to classes, and at meetings for females only. The receipts of the society for 1889-90 amounted to £153, and the expenditure to about the same amount. No pecuniary aid is received from the Government, the work of the society being carried on by subscriptions ranging from 5s. per annum upwards.

Charity Or-
ganization
Society.

793. A Charity Organization Society has been established in Melbourne, its objects being—(1) Promotion of co-operation in charitable work; (2) direction of the stream of charity to the deserving; (3) discouragement of indiscriminate giving; (4) exposure of sturdy beggars and professional impostors; (5) adequate inquiry before relief and compilation of records; (6) distribution of immediate relief *in kind* pending arrangements with existing charities; (7) inquiry upon the request of any charitable institution; (8) fostering the establishment of provident dispensaries; (9) encouragement of charitable effort in

localities where no suitable societies are in existence. The business of the society is managed by a council empowered to make rules and regulations for the management of the business of the society and for their own government. This council consists of a representative of each of the charities, and of twenty members to be elected at an annual meeting of subscribers of the society. The number of subscribers during the third year of the society's existence, which ended on the 30th June, 1890, was 292. The income of the year, added to an amount of £188 brought forward, was £798, the expenditure £442, and the balance on hand at the end of the financial year was £356. The cases investigated by the society during the year numbered 345, the result of the inquiry being that 102 were set down as satisfactory, 95 as unsatisfactory, and 148 as doubtful. The society claims to have prevented a large amount of imposture, to have relieved subscribers of the annoying feeling that their benevolence was wasted on unworthy objects, and to have stimulated and directed the flow of charity. Especially good work has, they say, 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.*

794. Since 1873 a society has been in existence in Melbourne 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, 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 colony. The society also takes charge of and distributes the sums earned by the prisoners whilst under detention. The number of individuals relieved in 1888-9 was 292, of whom 289 were males and 3 females. The receipts in the same year amounted to £983, viz., £396 from the Penal Department, and £587 from private sources, and the expenditure to £892. The Inspector-General of Penal Establishments, in one of his annual reports, referred to the society in the following manner:—"The Discharged Prisoners' Aid Society has maintained its usefulness in the assistance of discharged prisoners to return to honest life and industry, and is a valuable auxiliary to the Penal Department."

Victorian
Discharged
Prisoners'
Aid Society.

795. There are 5 Industrial Schools in the colony, of which 2 are wholly, and 3 partly, maintained by the State; 2 of the latter are in connexion with the Roman Catholic denomination, and 1 is a Servants'

Industrial
Schools.

* A Royal Commission is now enquiring into the condition and management of the Charitable Institutions of the colony; and it has quite recently presented to Parliament its first progress report. See Parliamentary Paper No. 203, Session 1890.

Training School. The two Government schools are merely receiving depôts, it being the policy of the department to send the children, as soon as possible after they are committed, to the assisted schools or foster-homes. The Government Experimental Farm at Dookie* and the Macedon State Nursery were formerly, but are not now, included with the Industrial Schools. The number of Industrial School children at the end of 1889 was 2,905, viz., 1,660 males and 1,245 females. Of these, only 33 were in the Government receiving depôts, and 66 in assisted schools; of the remainder, 1,872 were boarded-out or adopted, 421 were placed with relatives on probation, and 513 were at service. The children committed to the Industrial Schools in 1889 numbered 420, viz., 145 boys and 275 girls. They were placed in the schools for the following reasons:—

	Boys.	Girls.
Neglected	133	273
Having committed a punishable offence	10	2
Uncontrollable	2	...
	—	—
Total	145	275
	—	—

Discharges from Industrial Schools. 796. The number of distinct children who left the control of the Industrial Schools during the year was 430. These were discharged as follow:—

	Boys.	Girls.
From schools, and boarded-out homes	31	36
From situations, on expiration of term	20	288
Died (in schools, 16; while boarded out, 37; in hospital, 2)	31	24
	—	—
Total	82	348
	—	—

Children boarded-out, etc., from Industrial Schools. 797. Children are boarded-out from the Industrial Schools from the time they are weaned to that at which they are able to earn their own living, the welfare of the boarded-out children being cared for by honorary committees, who send in reports to the Industrial Schools Department. The rate paid by the Government to persons in charge of the boarded-out and adopted children is five shillings per week for each child. The number of such children at the end of 1889 was 1872, or 109 fewer than at the end of the previous year; and there were besides 421 in 1889, as against 336 in 1888, who were placed with friends on probation, without wages. In addition to these, 513 children at the end of 1889, as against 464 at the end of 1888, were at service or apprenticed.

Reformatories. 798. Under the same management and control as the Industrial Schools, there are also 4 Reformatory Schools, one of which is a

* For particulars of this farm, see paragraph 464 ante.

Protestant and one a Roman Catholic institution. These schools are intended for children who have been convicted of crime ; and criminal children committed by magistrates to industrial schools may be transferred thereto, and, in like manner, children not of sufficiently depraved habits to warrant their being detained in reformatories may be transferred to the Industrial Schools. The number of children belonging to reformatories at the commencement of the year 1889 was 323, and during the year there were 61 new committals, thus making a total of 384. Of these 54 were discharged, viz., 27 at the request of relatives, 26 on expiration of term, and 1 died. At the end of the year 354 children—254 boys and 100 girls—remained in connexion with the institutions. Of the boys, 93 were in the reformatory at Ballarat, 128 were at service, and 33 were placed with relatives on probation ; and of the girls, 26 were in the reformatory at Coburg, 14 were in the assisted reformatory school maintained under the supervision of the nuns at Oakleigh, 18 in the Brookside Protestant school, 34 were at service, and 8 were placed with relatives on probation.

Inmates of
reforma-
tories.

799. The Government expenditure for the maintenance of industrial and reformatory school children amounted in 1889 to £41,731, as against which £1,416 was received for maintenance from parents, and £334 was derived from the sale of farm produce, etc., or £1,750 in all, which leaves £39,981 as the net amount expended by Government. The mean number of children maintained was 3,248 ; and the average net cost of each to the State was thus £12 6s. 2d.

Cost of
mainten-
ance of
industrial
and re-
formatory
children.

800. Of the 865 females who were inmates of Refuges during the year ended 30th June, 1889, 100 were at the Temporary Home at Collingwood ; 427 were at the Magdalen Asylum, Abbotsford ; 82 at the Melbourne Refuge ; 26 at the Ballarat Home ; 19 at the Geelong Refuge ; 107 at the South Yarra Home ; and 104 at the Elizabeth Fry Retreat. Moreover, 54 children were allowed to accompany their mothers to the Melbourne Refuge, 9 to the Ballarat Home, 4 to the Geelong Refuge, and 2 to the Elizabeth Fry Retreat ; but of the total number 17 died during the year. Four women from the Magdalen Asylum, 4 from the South Yarra Home, and 1 from the Geelong Refuge, were discharged for misconduct ; and 5 in the Magdalen Asylum, and 1 in the South Yarra Home, died. Besides these numbers, 250 from all the institutions were placed in service or restored to friends, 140 left voluntarily, 8 were sent to other institutions, and 6 at the Elizabeth Fry Retreat, South Yarra, 1 at the Melbourne Refuge, and 1 at the Geelong Refuge, were married, and 21 were otherwise discharged. At the end of

Refuges for
fallen
women.

the year, the number remaining in the institutions was 423, of whom 304 were in the Magdalen Asylum. The objects of these institutions are (1) To provide a refuge for women who have fallen into vice, and who are desirous to 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 for such women, or in otherwise providing for them on leaving the institution.

Convalescent
Homes.

801. In addition to the hospitals referred to in previous paragraphs, there were 2 Convalescent Homes, with accommodation for about 25 inmates. The number of inmates at the beginning of the year 1888-9 was 19; 377 were admitted, and 380 were discharged during the year, and 16 remained at its close. The receipts in 1888-9 amounted to £955, of which £300 was from Government; and the expenditure to £906, of which £799 was for maintenance.

Governesses'
Institute
and Mel-
bourne
Home.

802. The Governesses' Institute and Melbourne Home contains 12 sleeping-rooms, having 27,354 feet of cubic space, and makes up 35 beds. The inmates in 1889 numbered 145, of whom 89 were needlewomen and servants, and 56 were governesses. The receipts during the year, all from private sources, amounted to £708, and the expenditure to £610.

Sailors'
Home.

803. The Melbourne Sailors' Home contains 3 wards, divided into 96 separate rooms, each containing one bed. The total number of cubic feet in the wards is 42,156. The total number of inmates in 1889 was 1,310. No aid was received from Government during the year. The receipts from private sources amounted to £4,497, and the expenditure to £5,371. The objects of the institution are to provide seamen frequenting the port of Melbourne with board and lodging at moderate charges, to encourage them in provident habits, and to promote their professional improvement.

Free Dispen-
saries.

804. Three free dispensaries furnished returns for 1888-9. One of these was a homœopathic institution. The individuals treated during the year ended 30th June, 1889, numbered 4,171, viz., 1,856 males and 2,315 females. The visits to or by these persons numbered 15,051. The total receipts amounted to £722, of which £225 was from Government and £497 from private sources. The total expenditure was £808.

Benevolent
Societies.

805. Forty-five benevolent or philanthropic societies furnished returns for the year ended 30th June, 1889. These associations are for the relief of distressed or indigent persons, and are generally managed by ladies. The names of three of the societies indicate their

connexion with the Jewish body, but no distinctive denomination is perceptible in the titles of the others. The persons relieved during the year numbered 15,134, the receipts amounted to £15,717 (of which £5,422 was from Government and £10,295 from private sources), and the expenditure to £15,907.

806. At Dr. Singleton's Night Shelters, Collingwood, 44,094 cases were accommodated during the year 1889-90, viz., 30,702 of men, 12,201 of women, and 1,191 of children. The receipts during the year, partly in kind and partly in cash, were equivalent to nearly £600.

807. The Victorian Society for the Protection of Animals has been established for about 18 years, its object being to prevent cruelty to animals by enforcing the existing laws, by procuring such further legislation as may be found expedient, and by exciting and sustaining an intelligent public opinion regarding man's duty to the lower animals. In 1888-9 the cases dealt with by the society numbered 621, of which 521 was for cruelty to horses; whilst there were 165 prosecutions, in all but 24 of which the parties were fined. The receipts during the year amounted to £395, and the expenditure to £480.

808. There is no poor law in Victoria, and, happily, one is not required, as pauperism does not exist here in the same sense as in the countries of the old world. The official returns of paupers in England and Wales are stated to be those showing the number of persons relieved exclusive of vagrants, and of pauper inmates of lunatic asylums, registered hospitals, and licensed houses. By the following figures, taken from a return ordered by the House of Commons to be printed, it would appear that although the proportion of paupers to the population is still large in England and Wales, it has materially diminished of late years :—

PAUPERISM IN ENGLAND AND WALES, 1857 TO 1889.

Year.	Estimated Population.	Paupers relieved in last week of each year.	
		Total Number.	Number per 1,000 of the Population.
1857	19,256,516	936,815	48·6
1862	20,371,013	1,105,234	54·3
1867	21,677,525	980,421	45·2
1872	23,096,495	838,636	36·3
1877	24,699,539	685,218	27·7
1882	26,413,861	740,907	28·0
1887	28,247,151	758,146	26·8
1888	28,628,804	738,388	25·8
1889	29,015,613	715,587	24·7

Friendly Societies

809. Friendly Societies are associations chiefly of working men, whose object is, by means of small periodical payments, to provide for medical and monetary relief in sickness, and for payments to the families of members at the death of themselves and their wives. The following is an abstract of the particulars furnished respecting the Victorian societies for 1878 and the last three years :—

FRIENDLY SOCIETIES.

	1878.	1887.	1888.	1889.
Number of Societies	34	31	32	32
„ Branches	759	891	930	969
Average number of members ...	45,552	70,998	75,586	81,710
Number of members sick ...	8,207	11,209	11,227	12,233
Weeks for which aliment was allowed	55,289	88,532	89,602	98,860
Deaths of members	467	801	790	883
„ of registered wives	291	321	383	437
Income of sick and funeral fund ...	£78,863	£139,192	£149,838	£161,922
„ incidental fund*	£83,016	£127,914	£132,090	£140,084
Total income	£161,879	£267,106	£281,928	£302,006
Expenditure of sick and funeral fund	£59,325	£92,182	£96,027	£101,712
„ incidental fund	£80,725	£126,635	£131,715	£139,929
Total expenditure	£140,050	£218,817	£227,742	£241,641
Amount to credit of sick and funeral fund	£372,598	£674,107	£727,918	£788,128
„ „ incidental fund	£16,310	£39,954	£40,329	£40,484
Amount invested—Sick and funeral fund	...	£629,479	£675,220	£738,117
„ „ Incidental fund ... ..	...	£29,998	£29,662	£29,995
Total invested	£348,703	£659,477	£704,882	£768,112

Growth of Friendly Societies.

810. From the figures in this table it may be ascertained that whilst during the eleven years ended with 1889 the number of members increased by 79 per cent., and the total annual expenditure by 73 per cent., the total annual income of the sick and funeral fund increased by as much as 105 per cent. ; also that no less a sum than £415,530 was added to the sick and funeral fund in the same period, or an increase of 112 per cent. on the amount (£372,598) standing to its credit at the end of 1878.

Sickness and death rates.

811. In proportion to the number of effective members of Friendly Societies, the average amount of sickness remains tolerably steady from year to year. The days per member for which aliment was allowed numbered 8·9 in 1880, 9·1 in 1881, 8·8 in 1882, 9·1 in 1883, 8·5 in 1884, 8·9 in 1885, 8·7 in 1886, 8·9 in 1887, 8·7 in 1888, and

* This fund is applied to the payment of medical attendance and medicines, and expenses of general management.

8·6 in 1889. The death rate shows more fluctuation than the sick rate, as deaths per 1,000 members numbered 9·26 in 1880, 11·92 in 1881, 11·87 in 1882, 10·77 in 1883, 10·87 in 1884, 10·15 in 1885, 10·52 in 1886, 11·28 in 1887, 10·45 in 1888, and 10·81 in 1889.

812. Friendly Societies are regulated under the *Friendly Societies Act* 1890 (54 Vict. No. 1,094), which, amongst other provisions, prescribes that each society shall furnish returns annually to the Government Statist, and once in every five years shall cause its assets and liabilities to be valued to the satisfaction of the same officer. As, in the event of the valuations being made outside the department of the Government Statist, which was originally contemplated under the *Statute*, it would probably have been necessary to reject some of them, which would have occasioned delay and caused trouble and expense to the societies, a qualified actuary has been appointed to that department, and the valuations are effected by him. The fees for valuation have purposely been fixed low, and average no more than threepence 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 departmental actuary, an arrangement which has worked in a most satisfactory manner.*

Valuations
of Friendly
Societies.

* For full particulars relating to the valuation and operations of Friendly Societies in Victoria, see Annual Reports of the Government Statist of the Proceedings in connexion with Friendly Societies, published by the Government Printer, Melbourne.

PART IX.—DEFENCES.

Land forces.

813. The Land Forces of Victoria consist of Permanent Forces, Militia, and Auxiliary Forces. The Permanent Forces are made up of the Head Quarters Staff, the Victorian Artillery, and the Permanent Section of the Engineer Corps; the Militia embrace the Cavalry, Horse Artillery, Field and Garrison Artillery, Engineers, Infantry, Ambulance, Commissariat, and Medical arms of the service; and the Auxiliary Forces include Mounted Rifles and Victorian Rangers. At the end of 1889 the strength of the various corps in all cases approximated closely to the establishment, which is as follows:—

LAND FORCES.—ESTABLISHMENT, 1889.

Branch of Service.	RANKS.				Total Establish- ment.
	Officers.	Warrant Officers.	Staff Sergeants and Ser- geants.	Rank and File.	
Permanent Forces—					
Head Quarters Staff	4	...	...	...	4
Victorian Artillery	11	2	15	228	256
Permanent Section Victorian Engineers	1	3	2	25	31
„ Staff, Militia and Auxili- ary Forces	6	12	37	...	55
Militia—					
Cavalry...	3	...	5	63	71
Horse Artillery	3	...	6	51	60
Field Artillery (3 Batteries)	17	...	26	226	269
Garrison Artillery (8 Batteries)	43	1	32	647	723
Engineers (Submarine Mining Com- pany and Field Company)	8	1	9	165	183
Infantry (4 Battalions)	74	4	64	1,766	1,908
Ambulance Corps	1	...	3	35	39
Commissariat and Transport Corps	2	...	6	56	64
Medical Staff	17	...	...	...	17
Total Permanent and Militia Forces	190	23	205	3,262	3,680
Auxiliary Forces—					
Mounted Rifles	64	1	45	900	1,010
Victorian Rangers	42	...	30	784	856
Unattached List—Mounted Rifles	5	...	...	...	5
„ Medical Staff, Militia...	18	...	...	...	18
„ „ Mounted Rifles, and Rangers	2	...	...	...	2
Total all ranks	321	24	280	4,946	5,571

814. The naval force of the colony consists of a Permanent Naval Force and a Naval Brigade, with an establishment as follows :—

NAVAL FORCES—ESTABLISHMENT, 1889.

Permanent Force	...	...	...	236 Officers and Men.
Naval Brigade	...	...	...	379 „

Strength
and estab-
lishment
of naval
forces.

815. The naval flotilla consists of eight ships and torpedo boats, but, in addition to these, three vessels belonging to the Harbor Trust—viz., the *Batman*, *Fawkner*, and *Gannet*—are armed with breech-loading guns as auxiliaries. Provision has also been made to arm two steamers as scouts when required for active service, which have accordingly been fitted so as to carry quick-firing guns. The following are the particulars of the ships and torpedo boats :—

Ships of
naval
forces.

WAR VESSELS, 1889.

Cerberus.—Armour-plated turret ship.
Victoria } Steel gunboats.
Albert }
Nelson.—Wooden frigate.

Childers.—First-class torpedo boat.
Nepean }
Lonsdale } Second-class torpedo boats.
Gordon }

816. The following account of the present system of Defence in Victoria has been furnished for this work by the Defence Department :—

Victorian
system of
defences.

“Important changes in the system of Victorian defences were made in 1883 and 1884.

“The Volunteer Force was disbanded, and corps of paid militia were raised *in lieu*, and enrolled under the *Discipline Act* 1883 (47 Vict. No. 777) which came into operation on the 3rd November of that year.

“This Act provided for a Minister of Defence, the establishment of a Council of Defence, and a special appropriation of £110,000 per annum for 5 years.

“Officers from the Active List of the Imperial Navy and Army were engaged for terms of service in the colonial forces to carry out the discipline and instruction necessary. Two gunboats and four torpedo boats were added to the strength of the Naval force.

“The laws relating to defences and discipline have since been consolidated under Act 1083, *The Defences and Discipline Act* 1890.

“A further appropriation of £145,000 was, on the expiration of the previous one, provided for Naval and Military purposes for 2½ years, that is, from 1st July, 1889, to 31st December, 1891.

“The practice inaugurated of engaging officers from the Imperial Navy and Army for terms of service has been continued.

“Colonial officers have also been sent to England to undergo special courses of instruction, and it is proposed to adopt a scheme by which certain selected officers of both the Naval and Military forces shall be annually seconded for courses of instruction in the Imperial Service. The consent of the Imperial authorities to such a scheme has already been obtained.

“Permission has also been granted by the Admiralty for officers of the Colonial Navy to be borne on board H.M. ships on the station for periods of training.

“In order to enable these officers to undertake responsible duties, the Admiralty has agreed, on representations being made by this colony, to grant acting commissions to them as officers of the Royal Naval Reserve.”

The following are the rates of pay of the petty officers, stokers, seamen, stewards, servants, etc., attached to the Victorian Naval Forces:—

PETTY OFFICERS, SEAMEN, AND. OTHERS.

Rating.	Daily Pay.				Increment per Diem.
	Mini- mum.		Maxi- mum.		
	s.	d.	s.	d.	
Chief Engine-room Artificer	11	0	12	0	1s. after 5 years
Engine-room Artificers	9	0	10	0	„
Chief Leading Stokers	6	6	7	0	6d. after 5 years
Leading Stokers	6	0	6	6	„
Torpedo Artificers	5	6	7	6	6d. a day annually
Stokers	5	6	5	6	Nil
Stokers	5	0	5	0	Nil
Chief Petty Officers	6	6*	7	0	6d. after 5 years
1st Class Petty Officers	6	0*	6	6	„
Leading Seamen	5	6*	5	6	Nil
Able Seamen	5	0*	5	0	Nil
Training Seamen	3	6	3	6	Nil
Boys	2	0	2	0	Nil
Chief Ship's Corporal	6	6*	7	0	6d. after 5 years
Ship's Corporal	6	0*	6	6	„
Chief Armourer	8	0	9	0	„
Chief Painter	6	6	8	6	6d. a day annually
Chief Carpenter's Mate... ..	7	6	8	0	6d. a day after 1 year
Carpenter's Mate	6	6	7	0	6d. after 5 years
Carpenters and Joiners... ..	5	6	5	6	Nil
Officer's Cook	5	6	6	0	6d. after 5 years
Ship's Cook	5	6	5	6	Nil
Cooks	5	0	5	0	Nil
Chief Ship's Steward	7	0	8	6	6d. a day annually
Sick Bayman	6	6	8	6	„ „
Officer's Steward	5	6	5	6	Nil
Officers' Stewards	5	0	5	0	Nil
Officers' Stewards (2nd Class)	4	0	4	0	Nil
Officers' Servants†	5	0	5	0	Nil
Naval Storekeeper	6	0	6	6	6d. after one year

In every case where a salary in the above table has an annual increment attached to it, such increment will be payable when the officer, warrant officer, petty officer, or man has been in receipt of the salary for a period of 12 months.

FIXED ALLOWANCES.

- (1) Tool money to 7 carpenters, at 3d. a day.
- (2) Special allowance of 6d. a day to 12 men who qualify as torpedo instructors.
- (3) Special allowance of 4d. a day to 36 men who qualify as 1st class seamen, gunners, and torpedo men.
- (4) Special allowance of 3d. a day will be paid to 4 men to encourage them to qualify as divers.
- (5) Special allowance of 4d. a day to 5 men as leading signalmen, and of 2d. a day to 15 men as signalmen.
- (6) Special allowance of 3d. a day to 3 men as buglers.

* Including 6d. deferred pay.

† These servants are held in accordance with special agreement with Lieutenants of the Royal Navy for the term of their engagement.

RIFLE CLUBS.

The facilities granted to persons in districts where Militia Corps have not been established for the formation of Rifle Clubs have caused these associations to spring up very rapidly. In all, 134 clubs have been formed, consisting of 2,650 members to whom 2,020 M.-H. rifles have been sold, and 3,200 muzzle-loading rifles have been lent. The rifles are sold at less than the cost to the Government, and ammunition is supplied at half the actual cost; 368,000 rounds have been purchased by clubs during the current year (1888-9).

In order to encourage the practice of rifle shooting, Parliament voted the sum of £500 for prizes to Rifle Clubs. Lieut.-Colonel The Hon. Sir F. Sargood, K.C.M.G., presented a shield, valued at £40, for competition amongst these clubs.

MOUNTED RIFLES.

A force of 1,010 Mounted Rifles has been raised, consisting of nine companies;* they are drilled by itinerant sergeants-major. The formation of many detachments has been refused on account of distance from centres of district. The men, on being passed into the ranks, get M.-H. rifles and all accoutrements and horse gear free, with the exception of saddle, which each member supplies. Engagement is for a period of three years; but members may be re-engaged. After passing into the ranks, members must undergo a minimum of 12 daylight drills per annum. An annual course of musketry is carried out. Officers and non-commissioned officers, on passing the required examination, are appointed on probation for six months, when those who pass the final practical and theoretical test are confirmed in their appointments. 395 attended the Easter Encampment. A feature of the regiment at this camp was the excellent work done by the Signalling Corps. The force is very popular. Members purchase their own uniform.

RANGERS.

A force consisting of seven companies formed in connexion with the Rifle Clubs. The establishment is 850. Two new companies and a battery of 40-pr. R. B.-L. guns have been added, making a total of 1,300 of all ranks. It is proposed to divide the Infantry into three battalions of 400 each. The engagement is for a period not exceeding three years, but re-engagements will be permitted if sanctioned by the Commandant.

FIRST CLASS MILITIA RESERVE.

Regulations for the establishment of this reserve have been passed. It will consist of (a) all members of the militia passed to the reserve after completing three years' service in the ranks, and (b) such men now serving in the reserve (designated by these regulations the 2nd Class Reserve) or who may now or hereafter be serving in the Militia and effective on their electing to join and being recommended by the Commandant.

CADET CORPS.

The encouragement of drilling and rifle-shooting in the schools of the colony has led to the establishment of Cadet Corps. Cadet companies may be formed in any school in detachments of not less than 20. The Cadets are principally armed with Francotte rifles lent by the Government, and purchased ammunition is issued at half price, the same as to the Rifle Clubs.

The uniform is khaki, with a soft felt hat, and all the battalions of Junior Cadets wear the same.

The Drill Instructors of the Victorian Military Forces are permitted, at such times as they are not required for their ordinary duties, to drill Cadet companies, for which they are paid 2s. 6d. for each drill.

To stimulate the movement, Colonel Sir Frederick Sargood has presented a handsome shield for competition by the Cadets. This trophy must be won three times before becoming the property of the winners. It has been already six times shot for. In March, 1884, it was won by the Hawthorn Grammar School; in December of the same

* Two new companies are about to be raised, including 1,200 in all, and the regiment will then be divided into two battalions. Compensation for a camp has been allowed and will have a good effect.

year, by the East Sandhurst State School; in December, 1885, by the Chiltern State School; in 1886, by the North Williamstown State School; in 1887, by the Kensington State School; in 1888, by the Seymour State School; and in 1889, by the Scotch College, Melbourne.

There are now 98 corps established (numbering upwards of 3,300 Cadets), all provided with uniform at their own expense, in various parts of the colony. Each corps, under the regulations, must undergo drill for one hour per week, but, from returns furnished, the drill is far in excess of that demanded.

A trophy is offered for the best drilled corps in Melbourne and suburbs, which trophy must be won three times, not necessarily consecutively, before becoming finally the property of any corps. This trophy was won, in 1885, by State School No. 1,479, St. Kilda; in 1886, by the Scotch College; in 1887, by the Latrobe Street State School (No. 1,274); in 1888, by the Cambridge Street State School (No. 1,896); and in 1889 by the Scotch College.

The various Cadet Corps have been formed into battalions, as follow :—

No. 1 Battalion.—Comprising corps in Sandhurst, Eaglehawk, and Echuca.

No. 2 Battalion.—The Grammar Schools, Colleges, and State Schools south of the Yarra, etc.

No. 3 Battalion.—Geelong, Warrnambool, and Colac Colleges, Grammar and State Schools.

No. 4 Battalion.—State Schools in the Gippsland district.

No. 5 Battalion.—Ballarat, Allandale, Clunes, Creswick, Maryborough, Ararat, Stawell—Colleges, Grammar, and State Schools.

No. 6 Battalion.—The Scotch College, Camberwell Grammar School, and the Senior Cadets.

No. 7 Battalion.—The State and Grammar Schools and Colleges in the Carlton, Richmond, and Prahran districts.

No. 8 Battalion.—The State Schools at Footscray, Kensington, Brunswick, Collingwood, Essendon, West Melbourne, and North Melbourne.

No. 9 Battalion.—The State Schools, Colleges, and Grammar Schools of Hamilton, Coleraine, and Portland.

No. 10 Battalion.—The Grammar and State Schools in the North-Eastern district.

Annual encampments are held. The first took place at Elsternwick in 1887. In the two succeeding years the camps were held at the military ground at Langwarrin, and were attended by over 1,800 of all ranks. This year (1890) the muster was 2,340, all in uniform, thus demonstrating the increasing popularity of the movement. The whole were inspected by His Excellency the Governor and the Major-General Commanding, and a general order was subsequently issued expressing great satisfaction with the drill and discipline.

Ammunition is issued "free" at the rate of 150 rounds Francotte ball cartridges and 50 rounds of blank cartridges annually, for every boy regularly enrolled in a Cadet Corps.

The battalions are commanded by an officer with the rank of captain, and to the other Cadet officers a lieutenant's commission is issued by the Governor-in-Council upon their passing the prescribed examinations.

The Battalion of Senior Cadets now numbers about 400. The boys have all left school, and are engaged in various occupations. The uniform chosen is a Lincoln green, which looks very smart. So far the success of this battalion justifies the hope that the bridge has now been formed between the Cadet Corps and the Militia. The Senior Cadets are all armed with Martini-Henry rifles. Regulations lately issued allow of Senior Cadets, under certain conditions, being enrolled in the Militia without going through the usual recruit drill.

On the 20th February, 1889, the Cadet Corps in the Metropolitan districts paraded in Albert Park, when Lady Loch presented Colours to the successful corps. These were the gift of Her Ladyship, and a yearly competition for their possession will take place, the Scotch College being the holders for the first year.

The motto of the force is, "*Pro Deo et Patria.*"

An annual "effective" allowance is now granted of ten shillings to Junior, and one pound to Senior, Cadets. This grant is principally devoted towards assisting the Cadets to purchase uniforms.

817. Batteries for the defence of Melbourne were constructed in 1861-2 at Williamstown, Sandridge, and Queenscliff; but the battery at Sandridge is now set aside as unsuited to the requirements of modern warfare, which rendered it absolutely necessary to make the first line of defence of Port Phillip at the Heads. Lieutenant-General Sir W. F. D. Jervois, R.E., G.C.M.G., C.B., who visited the colony in 1877, suggested a plan for defending the channel between the Heads of Port Phillip, which he modified in March, 1879, in consequence of his having found when in England, during the year 1878, that great improvements had been made in the manufacture of, and modes of mounting, ordnance.

818. The Government adopted the plan of Sir W. Jervois, and the construction of the works, commenced under the supervision of Major-General Sir P. H. Scratchley, R.E., has been carried out in accordance with this plan.

819. The following table shows the expenditure of all kinds on military and naval defences for the financial year ended 30th June, 1890. The amounts expended under the heads "Victorian Artillery" and "Militia," give an average cost per man per annum in each division respectively as £105 11s. and £17 12s.*:—

MILITARY AND NAVAL EXPENDITURE, 1889-90.

MILITARY EXPENDITURE.						£	£
Head Office ...	...	...	...	...	...	...	5,879
Head Quarters Staff—Salaries ...	...	...	...	...	...	4,484	
" " Allowances ...	...	...	...	...	...	1,315	
							5,799
Victorian Artillery—Salaries and working pay ...	...	...	...	...	...	19,911	
" Allowances ...	...	...	...	...	...	7,107	
							27,018
Militia—Effective allowance ...	...	...	...	...	...	7,339	
" Pay of Cavalry ...	...	...	...	...	...	508	
" " Field Artillery ...	...	...	...	...	...	3,295	
" " Garrison Artillery ...	...	...	...	...	...	6,874	
" " Nordenfelt Battery ...	...	...	...	...	...	717	
" " Rifles ...	...	...	...	...	...	17,916	
" " Engineers ...	...	...	...	...	...	1,020	
" Torpedo Corps—Pay and incidentals ...	...	...	...	...	...	5,967	
" Medical department ...	...	...	...	...	...	558	
" Ambulance Corps ...	...	...	...	...	...	432	

* These calculations have been based on the establishment, viz.: 256 Victorian Artillery, and 3,334 Militia.

MILITARY AND NAVAL EXPENDITURE, 1889-90—continued.

MILITARY EXPENDITURE—continued.				£	£
Militia—Commissariat department	...	...	...	343	
„ Drill instructors—Salaries and allowances	...	...	...	5,626	
„ Lodging allowances and uniform	...	...	...	...
„ Horsing guns and forage	...	...	...	3,506	
„ Travelling expenses	...	...	...	433	
„ Allowance for bands	...	...	...	200	
„ Incidentals	...	...	...	3,940	
					58,674
Auxiliary Forces—Cadet Corps—Salaries, effective allowance, etc.	...	£2,679	...		
„ Annual parade	...	926	...		
„ Free ammunition	...	868	...		
				4,473	
„ Mounted Rifles—Pay and contingencies	...	...	...	8,598	
„ Victorian Rifles	...	...	...	6,364	
„ Rifle Clubs	...	...	...	1,368	
					20,803
Ordnance Branch—Fitter and inspector machinery	...	...	...	1,190	
„ Warlike stores	...	...	...	6,530	
„ Great coats, accoutrements, etc.	...	...	...	1,283	
„ Railway transport	...	...	...	1,506	
					10,509
Purchase of Ammunition	...	...	...	5,000	
„ Rifles and warlike stores	...	...	...	1,990	
					6,990
Easter Encampment, etc.	...	...	...	...	9,513
Grant to Victorian Rifle and Artillery Association	...	...	...	1,000	
Prizes to Rifle Clubs and Queen's Prize (£100)	...	...	...	600	
„ Encouragement drill and shooting—Naval and military forces	...	...	...	924	
					2,524
Compensation, gratuities, etc.	...	...	...	2,258	
Miscellaneous	...	...	...	3,018	
					5,276
Defence works and buildings	...	...	...	...	139,144
Total				...	292,129
NAVAL EXPENDITURE.					
Naval Forces—Salaries and wages	...	...	...	28,622	
„ Stores, clothing, fuel, etc.	...	...	...	8,458	
„ Repairs, machinery, etc., and expenses docking vessels	...	...	...	447	
					37,527
Naval Brigade—Salaries and pay	...	...	...	5,469	
„ Effective allowances	...	...	...	935	
„ Clothing and incidentals	...	...	...	261	
					6,665
Purchase of Torpedo Boat (first-class)	...	...	...	...	14,500
Total				...	58,692
Grand Total ..				...	350,821

820. A statement of the expenditure on the establishment and maintenance of defences during the last thirty-six years and a half will be found in the following table:—

EXPENDITURE ON THE ESTABLISHMENT AND MAINTENANCE OF
DEFENCES, 1854 TO 1889-90.

Year.	Military Expenditure (including Buildings and Works of Defence).	Naval Expenditure.	Total.*
	£	£	£
1854 and 1855	287,973	...	287,973
1856 to 1864	758,000	123,000	881,000
1865	38,434	7,743	46,177
1866	47,647	14,453	62,100
1867	64,606	17,243	81,849
1868	58,873	19,061	77,934
1869	34,200	12,672	46,872
1870	37,102	10,570	47,672
1871 (6 months)	21,014	6,305	27,319
1871-2	38,634	19,604	58,238
1872-3	35,367	18,641	54,008
1873-4	41,050	17,643	58,693
1874-5	37,847	17,135	54,982
1875-6	40,698	17,536	58,234
1876-7	54,599	19,421	74,020
1877-8	62,842	58,424	121,266
1878-9	82,917	35,205	118,122
1879-80	60,420	33,359	93,779
1880-81	57,117	21,616	78,733
1881-2	59,589	21,845	81,434
1882-3	145,064	41,344	186,408
1883-4	205,596	25,442	231,038
1884-5	157,929	29,639	187,568
1885-6	281,092	37,886	318,978
1886-7	272,682	38,324	311,006
1887-8	281,206	40,913	322,119
1888-9	306,589	46,578	353,167
1889-90	292,129	58,692†	350,821
Towards cost of <i>Cerberus</i> and <i>Nelson</i> ‡	...	101,966	101,966
Total ...	3,861,216	912,260	4,773,476
Arms, ammunition, and stores for defences generally§	...	...	47,408
Value of land certificates granted to Volunteers, including Naval Brigade, computed at £1 per acre	...	...	139,683
Grand Total	...	...	4,960,567

* These figures, which are derived from the Departmental accounts, do not exactly agree in all cases with those taken from the Treasurer's Finance Statement and shown on page 166, Vol. I., owing to the closing of the accounts not being exactly simultaneous.

† Including £14,500 for purchase of a torpedo boat.

‡ The figures in this line do not represent the total cost of the vessels, but only so much of it as cannot now be apportioned to particular years.

§ The figures in this line do not represent the total cost of the arms, ammunition, and stores, but only so much of it as cannot now be apportioned to particular years.

821. It is to be specially noted that the total expenditure recorded includes not only the cost of establishing the military and naval defences but also the annual outlay incurred for their maintenance, which annual outlay was estimated by the late General Scratchley to represent close upon seven-eighths of the total expenditure. The annual expenditure from 1854 to 1864 was unusually large, in consequence of Imperial troops serving in the colony; the last detachment of these was withdrawn in 1870. During the last five years the military expenditure was considerably larger than in any previous one, and of those the largest was in 1888-9, in which the excess, as compared with the subsequent year, was about £14,400. The naval expenditure in 1889-90 was about £12,100 greater than in 1888-9, about the same as in 1877-8, and far larger than in any other previous year. The total expenditure on defences during the last five years has averaged about £331,000 per annum; although during the previous three years it was only about £200,000; and prior to 1882-3 it rarely exceeded £100,000.

822. The land forces of the Australasian colonies at the end of 1889 numbered 32,490, of which 23,896 were upon the Australian Continent. The largest number were in Victoria, and nearly two-fifths of these were militia, an arm which neither New South Wales, Western Australia, Tasmania, nor New Zealand appears to possess. New South Wales has, however, about twice as many volunteers as Victoria, which may, perhaps, be accounted for by the fact that the men there are partially paid. She also has 232 more regular troops, and 866 more men attached to reserves than Victoria. In South Australia, however, all adult males under 45 years of age, and in New Zealand, all under 55, are liable to be called out in case of necessity. The following is a statement of the land forces in each colony of the group:—

LAND FORCES IN AUSTRALASIAN COLONIES, 1889.

Colony.	Regular Troops.	Militia.	Volun- teers.	Reserves (including rifle clubs).	Total.
Victoria	346	3,334	1,891	2,650	8,221
New South Wales	578	...	3,718*	3,516	7,812
Queensland	130	2,662	1,683	...	4,475

NOTE.—In South Australia—where the male population is with a few necessary exceptions divided into three classes—and in New Zealand—where there is no regular militia—all males between certain ages (18 to 45 in the former, and 17 to 55 in the latter) are liable to be called out in time of necessity. In New Zealand, such males numbered approximately 154,000.
* Partially paid.

LAND FORCES IN AUSTRALASIAN COLONIES, 1889—continued.

Colony.			Regular Troops.	Militia.	Volun- teers.	Reserves (including rifle clubs).	Total.
South Australia	...	...	48	1,573	1,164	...	2,785
Western Australia	...	...	...	...	603	...	603
Total	...	...	1,102	7,569	9,059	6,166	23,896
Tasmania	...	...	32	...	592	1,378	2,002
New Zealand	...	...	191	...	6,401	...	6,592
Grand Total*	...	...	1,325	7,569	16,052	7,544	32,490

823. Only three of the Australasian colonies, viz., Victoria, Queensland, and South Australia, possess regular naval forces, and of these nearly two-thirds are maintained by Victoria. Victoria, also, as well as New South Wales, Queensland, and South Australia, possesses a few irregular naval forces who generally receive a small payment for their services, and are sometimes called the naval reserve. The largest number of forces of this description belongs to Victoria. New South Wales possesses 276, Queensland 52, and New Zealand as many as 1,318 Naval Volunteers, but no other colony has an arm so designated. The following table contains a statement of the number of such forces in each of the colonies from which particulars have been received:—

Naval forces in Australasian colonies.

NAVAL FORCES IN AUSTRALASIAN COLONIES, 1889.

Colony.			Regular Forces.	Forces only casually employed.†	Volunteers.	Total.
Victoria	...	...	236	379	...	615
New South Wales	...	...	18	339	276	633
Queensland	...	...	45	337	52	434
South Australia	...	...	70	79	...	149
Total	...	...	369	1,134	328	1,831
New Zealand	...	...	...	...	1,318	1,318
Grand Total	...	...	369	1,134	1,646	3,149

824. The figures in the following table, which show the number of local troops of all arms in the self-governing possessions of the

Local forces in British colonies.

* Exclusive of cadets, who numbered 3,300 in Victoria and 2,344 in New Zealand
† Partially paid in some of the colonies.

British Empire, embracing the Australasian, Canadian, and South African colonies, have been taken from a paper by Colonel J. F. Owen, R.A., read before the Royal Colonial Institute, London, on the 19th May, 1890 :—

LOCAL FORCES OF BRITISH SELF-GOVERNING COLONIES, 1889.

Branch of Service.	Australasian.	Canadian.	South Africa.	Total.
<i>Permanent Forces.</i>				
Mounted troops	32	150	819	1,001
Artillery	1,060	387	...	1,447
Infantry ... ..	...	463	...	463
Engineers and Torpedo Corps ...	247	...	...	247
Police* ... ..	...	1,050	887	1,937
Staff	164	...	...	164
Total	1,503	2,050	1,706	5,259
<i>Partially Paid Forces.</i>				
Mounted Troops	2,618	1,944	1,314	5,876
Artillery	3,010	3,408	436	6,854
Infantry	13,429	30,657	2,920	47,006
Engineers and Torpedo Corps ...	1,244	179	249	1,672
Naval Brigade	2,893	...	85	2,978
Total	23,194	36,188	5,004	64,386
<i>Volunteer Forces.</i>				
Mounted troops	860	...	...	860
Artillery	307	...	...	307
Infantry	6,001	...	...	6,001
Engineers and Torpedo Corps ...	129	...	...	129
Total	7,297	...	...	7,297
Grand Total	31,994	38,238	6,710	76,942

825. According to this table the local troops in the self-governing colonies of the Empire number 77,000, and half of these are in Canada, whilst 41 per cent. are in Australasia, and 9 per cent. in South Africa. The partially paid forces amount to five-sixths of the whole, whilst the permanent forces and the volunteer forces—the latter of which exist only in Australasia—amount to only a fifteenth and a tenth of the whole respectively.

826. In 1889-90 Victoria spent over £350,000 on defences, or nearly two-fifths of the amount so expended by all the colonies on

* Only those used for military service.

Relative proportions of various forces.

Defence expenditure in Australasian colonies.

the Australian continent, whilst New South Wales spent over £414,000, or nearly half that amount. The Australasian colonies, as a whole, spent nearly £1,000,000 on defences in the same year, as is shown in the following table :—

EXPENDITURE ON DEFENCES IN AUSTRALASIAN COLONIES, 1889-90.

Colony.	Ordinary Expenditure.		Expenditure on Fortifications.	Grand Total.
	Military.	Naval.		
	£	£	£	£
Victoria	152,985	44,192	153,644	350,821
New South Wales	172,477	34,698	207,175	414,350
Queensland	49,306	14,046	11,487	74,839
South Australia	36,635	17,817	6,003	60,455
Western Australia	3,697	...	...	3,697
Total	415,100	110,753	378,309	904,162
Tasmania	10,369	...	7,980	18,349
New Zealand	57,521	...	15,752*	73,273
Grand Total	482,990	110,753	402,041	995,784

NOTE.—The figures for New South Wales, Western Australia, and Tasmania are for the calendar year 1889; those for the other colonies for the financial year 1889-90.

827. The military forces of the Australasian colonies have recently been inspected by Major-General J. B. Edwards, a distinguished officer in the Imperial service, specially sent by the Horse Guards to perform that duty. General Edwards reports (9th October, 1889) that, so far as Victoria is concerned, the troops are in a satisfactory condition, and capable of fulfilling the duty for which they are maintained, viz., the defence of the colony. He, however, strongly recommends that, for the general defence of Australasia, there should be a federation of the forces of the different colonies.†

Inspection of Australasian troops.

828. In July, 1887, Captain John Whitney, who had for some time been engaged upon the manufacture of cartridges for the New Zealand Government, submitted, on behalf of a company with which he was connected, certain terms on which he would undertake to establish an ammunition factory in Victoria. The site selected for the operations of this company is on the banks of the Saltwater River, near Melbourne. Its extent is five acres, and a lease thereof for five

Ammunition factory.

* Including Naval Expenditure and expenditure on harbour defence works.
† See Report by Major-General Edwards, Parliamentary Paper No. 139, Session 1889.

years at a peppercorn rent has recently been granted and ratified by Parliament, the conditions being that they erect an ammunition factory within twelve months from the 30th May, 1889, and deliver ammunition cartridges within twelve months from that date at the rate of half a million rounds every two months if required, which shall be equal in quality to those used in England and at the same price as those there used, with an allowance for freight, charges, and cost of delivery in Melbourne added, the Government to pay the company £5,000 as a bonus as soon as 500,000 rounds of ammunition shall have been delivered, and to refund from time to time to the lessees such amounts up to £2,800 as they may have paid the Customs as duty on the machinery imported by them. The company having imported machinery and stores, and erected buildings at a cost of £25,000, operations were fairly started in September, 1890, and before the end of that month 20,000 approved Martini-Henry cartridges had been supplied to the Government, which number it is expected will be increased to 100,000 during the month of October. At the present time 8 men and 30 women are employed at the works, but Captain Whitney hopes before the end of 1891 to employ 150 women, and to be able to turn out cartridges at the rate of half a million monthly.

Military
cadetships.

829. One cadetship at the Royal Military College, Sandhurst, England, is allocated annually to students of each university in the Australasian colonies to which a charter by letters patent has been granted. This includes the Melbourne University, as well as the universities of Sydney, Adelaide, and New Zealand. A candidate who is recommended for a cadetship must be within the limits of 17 and 22 years of age at the date of his joining the Royal Military College; he is required to enter the college within six months of his passing the requisite qualifying examination, otherwise his claim to a cadetship will lapse; and at least one month before the date of his entering, certificates of his age and moral character, together with a recommendation by the proper university authority, must be forwarded to the Military Secretary at the Horse Guards.*

Colonial
candidates
for the
army.

830. In the case of colonial candidates for commissions in the army who are not members of any university, an arrangement has

* For despatches respecting military cadetships and colonial candidates for army commissions, see *Government Gazettes* of the 22nd October, 1880, and 26th June, 1890.

been made whereby the ordinary preliminary examination held in London by the Civil Service Commissioners is dispensed with (except as regards geometrical drawing), upon the candidate producing a certificate of his having passed an equivalent examination in the colonies.*

831. Commissions in the cavalry or infantry of the line will be granted to officers who are *bonâ fide* colonists under specified conditions as to age, physical and moral fitness, length of service, etc. The candidate will be required to undergo a qualifying literary examination in mathematics, French, German, or other modern language, geometrical drawing, a second more advanced examination, and finally a military examination, the text-books in this latter being those at the time in use at the Royal Military College, Sandhurst. Sets of examination papers in both literary and military subjects will be sent to the Governors of the respective colonies, and boards for the proper conduct of the examinations are to be held. The Governor of the colony to notify the War Office each year whether he has any qualified candidates to nominate. Till further notice, two army commissions will be allotted annually to Victoria, New South Wales, South Australia, Queensland, New Zealand, and the Cape of Good Hope. In the event of the number of candidates nominated by the Governor in a colony at any time exceeding the allotted number of commissions, the selection will be decided by competition in the military portion of the prescribed examination.

Commis-
sions to
colonial
military
officers.

832. Four nominations to naval cadetships are placed annually at the disposal of the Secretary of State for distribution to sons of gentlemen in certain colonies.† The Governor in any of such colonies has the right of submitting an application in favour of a candidate, with any recommendation he may think fit.‡ The qualifications of a candidate are—that he must be a colonist in the strict sense of the term, must not be less than 13 or more than 14½ years of age, must be in good health and perfectly free from any

Naval
cadetships

* See footnote (*) on page 468.

† The colonies from which nominations will, in the first instance, be received, are—each of the Australasian colonies, Canada, Newfoundland, Jamaica, Antigua; Barbados, British Guiana, Trinidad, Cape Colony, Natal, Malta, Ceylon, and Mauritius; but should all the four nominations not be applied for by the end of the first quarter in each year, the balance will be made available for applications which may be received from other colonies.

‡ Revised regulations respecting naval cadets are published in the *Government Gazette* of 2nd September, 1887 (No. 83), and the Premier's memo. dated 14th March, 1889, notifies a further revise of the Admiralty dated December, 1888.

physical defect or disease, and must be able to pass a preliminary examination in English, Arithmetic, Elementary Algebra, Elementary Geometry, French, and Scripture History, obtaining not less than two-fifths of the whole number of marks assigned in each subject; and a second examination of any two of the following subjects, viz., Elementary Mathematics, Latin, Geography, and the outlines of English History. When a cadet is entered, he will be required to pay annually the sum of £75 for a period of two years, to be spent on board the *Britannia* training ship, besides expenses of outfit and of all necessary books or instruments, during which time he must pass four examinations in seamanship and study. He is subsequently to pay £50 per annum until he passes his final examination for the rank of lieutenant. The Lords of the Admiralty have decided to allow colonial candidates, who fail to pass at their first trial, the opportunity of being examined again in about six months time, provided they are still within the limits of age. Colonial candidates for cadetships were previously under a disadvantage in this respect, and the decision of the Admiralty is the consequence of their recognition of this fact.

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* Epitomized from tables published by the Government Statist of Victoria in Parliamentary Paper No. 132, Session 1890.

APPENDIX A.

AUSTRALASIAN STATISTICS, 1889.

TABLE I.—POPULATION, 1889.

(Exclusive of Aborigines except a few in Victoria and New South Wales.)

Name of Colony.	Area in Square Miles. ¹	Estimated Population ² on 31st December.			Females to 100 Males.	Persons to the Square Mile.
		Males.	Females.	Total.		
Victoria	87,884	593,798	524,230	1,118,028	88·28	12·722
New South Wales ..	309,175	618,300	503,900	1,122,200	81·50	3·630
Queensland	668,224	235,607	171,051	406,658	72·60	·609
South Australia ..	903,425	167,441	157,043	324,484	93·79	·359
Western Australia ..	975,920	25,066	18,632	43,698	74·33	·045
Total	2,944,628	1,640,212	1,374,856	3,015,068	83·82	1·024
Tasmania	26,375	80,809	70,671	151,480	87·45	5·743
New Zealand	104,235	331,771	288,508	620,279 ³	86·96	5·951
Grand Total ..	3,075,238	2,052,792	1,734,035	3,786,827	84·47	1·231

¹ The areas here given, except in the case of New Zealand, are the results of planimetric calculations made in the office of the Surveyor-General, Melbourne. Except in the case of Western Australia, the area of which differs from the official estimate by 84,000 square miles, these results agree closely with the figures furnished officially by the various colonies. The latest official statement of the area of New Zealand, including all islands, is 104,471 square miles. See also Vol. I. of this work, page 6.

² In making up the estimates of population in Victoria and New South Wales, allowance has been made for unrecorded emigration since the date of the last census (3rd April, 1881). If this had not been done, the population of Victoria would have been set down as 1,165,257; and that of New South Wales as 1,170,017. The allowance for 1889 was 5,972 in the case of Victoria and 6,312 in that of New South Wales. South Australia and Queensland also made some allowance in 1889 for overland migration. Censuses were taken in New Zealand and Queensland in the early part of 1886, and, therefore, the populations of those colonies should be nearer the truth than those of the other colonies, which have taken no census since 1881. On the 30th June, 1890, the estimated population of Victoria was 1,131,247, viz., 599,545 males and 531,702 females; that of New South Wales was 1,144,083, South Australia 319,985, New Zealand 623,136.

³ Maoris are not included. On the 28th March, 1886, these numbered 41,969, viz., 22,840 males and 19,129 females.

TABLE II.—BIRTHS, DEATHS AND MARRIAGES, 1889.

Name of Colony.	Births of—			Deaths of—			Marriages. ¹	Per 1,000 of Mean Population—Number of—			Excess of Births over Deaths.	
	Males.	Fe-males.	Total.	Males.	Fe-males.	Total.		Births.	Deaths.	Mar-riages. ¹	Numeri-cal.	Per cent.
Victoria	18,713	17,646	36,359	11,064	8,328	19,392	9,194	32·92	17·56	8·33	16,967	87·50
New South Wales ..	19,335	17,960	37,295	8,674	6,122	14,796	7,530	33·78	13·40	6·82	22,499	152·06
Queensland	7,449	6,952	14,401	3,930	2,202	6,132	3,123	36·27	15·44	7·87	8,269	134·85
South Australia ..	5,286	5,032	10,318	1,966	1,535	3,501	2,062	32·10	10·89	6·42	6,817	194·72
Western Australia ..	825	769	1,594	412	199	611	300	37·02	14·19	6·97	983	160·88
Total	51,608	48,359	99,967	26,046	18,386	44,432	22,209	33·66	14·96	7·48	55,535	124·99
Tasmania	2,438	2,319	4,757	1,208	890	2,098	967	31·97	14·10	6·50	2,659	126·74
New Zealand	9,514	8,943	18,457	3,356	2,416	5,772	3,632	30·07	9·40	5·92	12,685	219·77
Grand Total ..	63,560	59,621	123,181	30,610	21,692	52,302	26,808	33·00	14·01	7·18	70,879	135·52

¹ The numbers in these two columns doubled give the total number of *persons* married and the number married in proportion to every 1,000 of the mean population.

TABLE III.—IMMIGRATION AND EMIGRATION, 1889.

Name of Colony.	Number of Immigrants.			Number of Emigrants. ¹			Excess of Immigrants over Emigrants. ²		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Victoria.. ..	56,163	28,419	84,582	46,679	21,739	68,418	9,484	6,680	16,164
New South Wales	44,348	19,849	64,197	29,789	13,768	43,557	14,559	6,081	20,640
Queensland ..	24,713	10,893	35,606	18,141	6,539	24,680	6,572	4,354	10,926
South Australia ..	6,608	2,622	9,230	5,866	2,870	8,736	742	-248	494
Western Australia	2,086	764	2,850	1,708	564	2,272	378	200	578
Total ..	133,918	62,547	196,465	102,183	45,480	147,663	31,735	17,067	48,802
Tasmania ..	15,249	8,194	23,443	13,699	7,072	20,771	1,550	1,122	2,672
New Zealand ..	10,158	5,234	15,392	9,493	5,685	15,178	665	-451	214
Grand Total	159,325	75,975	235,300	125,375	58,237	183,612	33,950	17,738	51,688 ³

NOTE.—Except in the case of Queensland—for which colony the number of persons returned as arriving and departing by railway (equal to about four-fifths of the whole number) has been included—the immigration and emigration in this table is by sea only. See second footnote to Table I. *ante*. The numbers of assisted and free immigrants included were as follow:—Victoria, *nil*; New South Wales, 431; Queensland, 6,274; South Australia, *nil*; Western Australia, 161; Tasmania, 19; New Zealand, 91; total, 6,976.

¹ The figures in these columns generally understate the truth. Many persons leave the colonies by sea without their departure being noted. It is stated, however, that in New Zealand a complete account is now kept.

² In consequence of the emigration returns being defective, as stated in the last footnote, many of the figures in these columns are too high, except where the minus sign (–) appears indicating that the emigrants exceeded the immigrants by the number against which it is placed, when the figures are too low.

³ According to Imperial returns, the number of persons who left the United Kingdom for the Australasian colonies in 1889 was 28,834, and the number who returned to the United Kingdom from these colonies was 10,637. The excess in favour of departures was thus 18,197, or little more than one-third of the excess of immigrants over emigrants shown in the table.

TABLE IV.—PUBLIC REVENUE, 1889.
(Exclusive of Revenue from Loans.)

Name of Colony.	Public Revenue derived from—					Total Revenue.
	Taxation. ¹	Crown Lands.	Railways.	Post and Telegraphs.	Other Sources.	
	£	£	£	£	£	£
Victoria	3,749,670 ²	616,028	3,104,907	552,877 ²	652,508	8,675,990
New South Wales ..	2,677,169	2,137,563	2,596,375 ³	597,988	1,054,302	9,063,397 ⁴
Queensland	1,574,607 ⁶	648,788	799,779	220,171	196,904	3,440,249
South Australia ..	711,248	174,246	910,561	208,118	266,260	2,270,433
Western Australia ..	194,248	87,016	41,151	24,455	35,343	382,213 ⁵
Total	8,906,942	3,663,641	7,452,773	1,603,609	2,205,317	23,832,282
Tasmania	422,644	70,891	75,922	55,874	53,578	678,909
New Zealand	2,086,081 ²	319,809 ⁶	1,018,211	322,083 ²	245,735	3,991,919
Grand Total ..	11,415,667	4,054,341	8,546,906	1,981,566	2,504,630	28,503,110

NOTE.—The figures of revenue and expenditure for Victoria are for the twelve months ended 30th June, but those for the other colonies are for the calendar year. Refunds of revenue, drawbacks, and such similar entries are rigidly excluded from the accounts of revenue and expenditure of Victoria and New Zealand, but are included in those of New South Wales and Queensland, also in those of some of the other colonies. See also Note 4.

¹ The amounts in this column are made up of Customs and Excise duties, including licences imposed for revenue purposes; duties on bank notes; stamps, other than those for fees of office; legacy, succession, and probate duties; property and income taxes; and any other impost, payable to the General Government, levied distinctly as a tax; but excluding fees, and charges for special services rendered. Three-fourths of the taxation in Australasia as a whole is levied by means of Customs duties.

² The proportion of the revenue of Victoria and New Zealand derived from “Taxation” and “Post and Telegraphs” has been roughly estimated, there being no means of obtaining the exact figures.

³ Exclusive of tramways. See footnote (1) to Table X., *post*. Revenue collected for Victoria for traffic beyond Albury (£20,262) is also excluded.

⁴ Including revenue returned to the extent of at least £368,983—viz., £21,873, being repayments to credit of votes; £38,466, for drawbacks and refunds of duty; £20,262, railway revenue collected for the Victorian Government; £155,454, refunds to pastoral lessees; and about £132,928 being other revenue returned, etc.

⁵ Excluding £60,512 recouped from loans.

⁶ Inclusive of revenue from gold-fields, £19,567.

TABLE IV.—PUBLIC REVENUE, 1889—*continued*.

(Exclusive of Revenue from Loans.)

Name of Colony.	Proportion of Revenue derived from—					Amounts per Head.	
	Taxation.	Crown Lands.	Railways.	Post and Telegraphs.	Other Sources.	Total Revenue.	Taxation.
	per cent.	per cent.	per cent.	per cent.	per cent.	£ s. d.	£ s. d.
Victoria	43·22	7·10	35·79	6·37	7·52	7 19 10	3 9 1
New South Wales ..	29·54	23·58	28·65	6·60	11·63	8 4 2	2 8 6
Queensland ..	45·77	18·86	23·25	6·40	5·72	8 13 3	3 19 4
South Australia ..	31·33	7·67	40·10	9·17	11·73	7 1 3	2 4 3
Western Australia	50·82	22·76	10·77	6·40	9·25	8 17 7	4 10 3
Total ..	37·37	15·37	31·27	6·73	9·26	8 1 6	3 0 4
Tasmania ..	62·25	10·44	11·19	8·23	7·89	4 11 3	2 16 10
New Zealand ..	52·26	8·01	25·51	8·07	6·15	6 10 1	3 8 0
Grand Total	40·05	14·22	29·99	6·95	8·79	7 13 6	3 1 6

TABLE V.—PUBLIC EXPENDITURE, 1889.

(Exclusive of Expenditure from Loans.)

Name of Colony.	Public Expenditure on—					Total Expenditure.
	Railways ¹ (Working Expenses.)	Post and Telegraphs.	Interest and Expenses of Public Debt.	Immigration.	Other Services.	
	£	£	£	£	£	£
Victoria	1,803,124	619,070	1,459,242	..	4,038,466	7,919,902
New South Wales ..	1,638,118	628,182	1,805,770	8,073	5,170,128	9,250,271 ¹
Queensland ..	594,649	326,974	1,059,769 ²	..	1,613,234	3,594,626
South Australia ..	534,331	177,987	755,084	1,697	886,828	2,355,927
Western Australia ..	63,938	33,702	68,170	2,000	218,190	386,000
Total ..	4,634,160	1,785,915	5,148,035	11,770	11,926,846	23,506,726
Tasmania ..	88,568	65,316	209,736	113	317,941	681,674
New Zealand ..	626,939	273,753	1,616,501 ³	..	1,464,528	3,981,721
Grand Total ..	5,349,667	2,124,984	6,974,272	11,883	13,709,315	28,170,121

NOTE.—For periods to which the figures relate in each colony, see Note to last table. For remarks in reference to the practice of swelling the returns of some of the colonies by including refunds of revenue, etc., on both sides of the account, see Note to last table.

¹ See footnote (*) to last table.

² Interest only.

³ Exclusive of charges for the sinking fund (viz., £275,200), formerly charged to revenue, but now met by debentures raised for the purpose.

TABLE V.—PUBLIC EXPENDITURE, 1889—*continued*.
(Exclusive of Expenditure from Loans.)

Name of Colony.	Proportion of Total Expenditure expended on—					Total Expenditure per Head.
	Railways.	Post and Telegraphs.	Interest and Expenses of Public Debt.	Immigration.	Other Services.	
	per cent.	per cent.	per cent.	per cent.	per cent.	£ s. d.
Victoria	22·77	7·82	18·42	..	50·99	7 5 11
New South Wales ..	17·71	6·79	19·52	·09	55·89	8 7 7
Queensland ..	16·54	9·10	29·48	..	44·88	9 1 1
South Australia ..	22·68	7·56	32·05	·07	37·64	7 6 7
Western Australia..	16·56	8·73	17·66	·52	56·53	8 19 4
Total ..	19·71	7·60	21·90	·05	50·74	7 19 4
Tasmania	12·99	9·58	30·77	·02	46·64	4 11 7
New Zealand ..	15·75	6·87	40·60	..	36·78	6 9 9
Grand Total..	18·99	7·54	24·76	·04	48·67	7 11 8

TABLE VI.—EXPENDITURE FROM LOANS, 1889.

Name of Colony.	Expenditure from Loans on—						Total Expenditure from Loans.
	Railways.	Water Supply.	Roads and Bridges.	Harbours, Rivers, Light-houses, etc.	Immigration.	Other Services.	
	£	£	£	£	£	£	£
Victoria	3,083,211	484,068	18,207	54,279 ¹	..	97,533 ²	3,737,298
New South Wales ..	601,939	299,783	5,598	300,977	..	256,602	1,464,899 ³
Queensland ..	1,170,598	45,368	24,171	130,646	123,542	232,710	1,727,035
South Australia ..	704,838	124,964 ⁴	39,912	977	..	266,810	1,137,501
Western Australia ..	1,746	1,245	..	14,409	..	29,708	47,108
Total ..	5,562,332	955,428	87,888	501,283	123,542	883,363	8,113,841
Tasmania	173,548	..	122,910 ⁵	.. ⁵	..	70,581	367,039
New Zealand ..	244,906	66	92,333	22,142 ⁶	1,251	154,360	515,058
Grand Total ..	5,980,786	955,494	303,131	523,430	124,793	1,108,304	8,995,938

Name of Colony.	Proportion Expended from Loans on—						Expenditure from Loans per Head.
	Railways.	Water Supply.	Roads and Bridges.	Harbours, Rivers, Light-houses, etc.	Immigration.	Other Services.	
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	£ s. d.
Victoria	82·50	12·95	·49	1·45	..	2·61	3 8 10
New South Wales ..	41·09	20·46	·38	20·55	..	17·52	1 6 6
Queensland ..	67·78	2·63	1·40	7·57	7·15	13·47	4 7 0
South Australia ..	61·96	10·99	3·51	·09	..	23·45	3 11 6
Western Australia ..	3·71	2·64	..	30·59	..	63·06	1 1 11
Total ..	68·55	11·78	1·08	6·13	1·52	10·89	2 15 1
Tasmania	47·28	..	33·49	..	..	19·23	2 9 4
New Zealand ..	47·55	·01	17·93	4·30	·24	29·97	0 16 9
Grand Total ..	66·48	10·62	3·37	5·82	1·39	12·32	2 8 6

NOTE.—The figures for Victoria and South Australia relate to the 30th June, and those for the other colonies to the 31st December.

¹ Exclusive of expenditure on the Port of Melbourne by the Melbourne Harbor Trust.

² Including £59,970 on school buildings.

³ Exclusive of £901,100, loans paid off.

⁴ Including expenditure on Sewerage.

⁵ In Tasmania, the expenditure on harbours, etc., is included with that on roads and bridges.

⁶ Including expenditure on Defences.

TABLE VII.—PUBLIC DEBT, 1889.

(On the 31st December.)

Name of Colony.	Public Debt contracted for—							
	Railways and Tramways	Electric Telegraphs.	Water Supply and Sewerage.	Roads and Bridges.	Harbours, Rivers, Light-houses, and Docks, etc.	School Buildings	Defence Works.	Other Public Works.
	£	£	£	£	£	£	£	£
Victoria ..	29,016,625	..	5,643,876	108,043	626,018	1,105,557	100,000	766,908
New South Wales	31,380,508	726,807	4,122,823	603,985	2,674,345	55,000	775,192	1,066,680
Queensland ..	15,374,420	786,610	221,170	844,910	1,693,103	.. ¹	138,163	1,928,263 ²
South Australia	11,374,903	848,081	3,321,300	1,428,284	1,389,562	680,300 ³	250,645	471,425
West'rn Australia	824,845	195,193	5,310	48,822	12,913	..	..	193,861
Total ..	87,971,301	2,556,691	13,314,479	3,034,044	6,395,941	1,840,857	1,264,000	4,427,137
Tasmania ..	2,029,191	99,471	..	..⁴	1,521,928 ⁴	120,428	120,868	554,879
New Zealand ⁵ ..	13,924,072	590,356	560,280	3,552,999	879,152 ⁶	..	429,719 ⁶	2,099,871
Grand Total ..	103,924,564	3,246,518	13,874,759	6,587,043	8,797,021	1,961,285	1,814,587	7,081,887

Name of Colony.	Public debt contracted for—		Total Public Debt.			Proportion of Total Debt contracted for Railways and Telegraphs.
	Immigra-tion.	Other Services. ⁷	Amount. ⁸	Average per Head.	Years' Revenue equal to—	
	£	£	£	£ s. d.		per cent.
Victoria ..	..	..	37,367,027	33 8 5	4·31	77·65
New South Wales	569,930	4,671,179	46,646,449	41 11 4	5·15	68·83
Queensland ..	2,621,727	2,232,584	25,840,950	63 10 11	7·51	62·54
South Australia	..	671,000	20,485,500	62 19 7	9·00	59·81
Western Australia	..	91,037	1,371,981	31 7 11	3·59	74·35
Total ..	3,191,657	7,665,800	131,661,907	43 13 4	5·52	68·76
Tasmania ..	235,714	336,571	5,019,050	33 2 8	7·39	42·41
New Zealand ⁵ ..	2,143,327	14,303,474	38,483,250	62 0 10	9·64	37·72
Grand Total ..	5,570,698	22,305,845	175,164,207	46 5 1	6·15	61·18

NOTE.—The amounts of debt set down for New South Wales and South Australia are, exclusive of Treasury Bills, viz., £1,907,100 and £250,000 respectively; but Treasury Bills for £397,335 are included in the debt of Queensland. On the 30th June, 1890, the Public Debt of Victoria was £41,377,693. Moreover, since the end of 1889 Queensland has floated in London a fresh loan of £2,264,734.

¹ Included with other public works.

² Including £1,139,999, loans to local bodies, chiefly for Waterworks.

³ Including other buildings.

⁴ The amount for Roads and Bridges is included with that for Harbours, etc.

⁵ The figures set down as showing the objects for which the Public Debt of New Zealand was contracted represent the bulk of the expenditure out of the "Public Works Fund" since 1870—the date of the first Immigration and Public Works Loan—which is the only existing record of the loan expenditure; it is, however, stated that, besides loan moneys, receipts in aid from Stamp duties, etc., contributed somewhat towards the total sum so expended. The balance required to make up the total debt at the end of 1889 has been entered as "Unapportioned."

⁶ In New Zealand, a portion of the expenditure on "Defences" is included under the head of "Harbours," etc., and a portion is under the head of "Other Services."

⁷ Included in this column, in the line for New South Wales, are £49,855 on account of public works in Queensland, when it formed part of New South Wales, and £2,723,430 for repayment of loans; Queensland, Treasury Bills £397,335; South Australia, £591,000 for public works for Northern Territory; New Zealand, £1,228,318 for land purchases (presumably from the Maoris) and rates on native lands, and £1,021,472 for charges and expenses of raising loans; also the following amounts, which had been unapportioned or unexpended:—New South Wales, £1,897,894; Queensland, £1,835,249; Western Australia, £30,525; New Zealand, £11,812,601. The last amount includes the old provincial loans of New Zealand (prior to the abolition of provinces in 1876), and loans not accounted for, as well as the unspent balance of loan moneys.

⁸ As a set-off against the public debt, New Zealand possessed an accrued sinking fund amounting, on the 31st December, to £1,320,359; the net liability for that colony was, therefore, £37,162,891, or £59 18s. 3d. per head of population, equal to 9 times the revenue. The sinking funds possessed by the other colonies are comparatively small, consisting of the following amounts:—Victoria, £54,112; Western Australia, £71,536; Tasmania, £103,181.

TABLE VIII.—IMPORTS AND EXPORTS, 1889.

Name of Colony.	Total Value of—		Value per Head of—		Exports of Home Produce.	
	Imports.	Exports.	Imports.	Exports.	Value per Head.	Percentage of Total Exports.
	£	£	£ s. d.	£ s. d.	£ s. d.	
Victoria	24,402,760	12,734,734	22 2 0	11 10 8	8 17 1	76·77
New South Wales	22,863,057	23,294,934	20 14 2	21 2 0	15 15 8	74·79
Queensland ..	6,052,562	7,736,309	15 4 10	19 9 8	18 18 4	97·10
South Australia ..	6,804,451	7,259,365	21 3 5	22 11 9	11 9 11	50·90
Western Australia	818,127	761,392	19 0 1	17 13 8	17 7 11	98·36
Total ..	60,940,957	51,786,734	20 10 5	17 8 9	13 3 8	75·61
Tasmania ..	1,611,035	1,459,857	10 16 6	9 16 2	9 13 11	98·81
New Zealand ..	6,297,097	9,339,265	10 5 2	15 4 4	14 14 7	96·82
Grand Total	68,849,089	62,585,856	18 8 11	16 15 4	13 6 0	79·31

Name of Colony.	Proportion of Total Imports from—			Proportion of Total Exports to—		
	The United Kingdom.	The Australasian Colonies.	Other Countries.	The United Kingdom.	The Australasian Colonies.	Other Countries.
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
Victoria	46·78	35·26	17·96	55·26	31·72	13·02
New South Wales	38·21	46·57	15·22	38·48	46·11	15·41
Queensland ..	47·30	44·90	7·80	32·29	66·80	·91
South Australia	29·51	59·46	11·03	47·01	45·23	7·76
Western Australia	44·54	40·94	14·52	66·46	19·38	14·16
Total	41·66	43·24	15·10	43·29	45·15	11·56
Tasmania	32·13	64·38	3·49	17·25	82·75	..
New Zealand ..	65·53	17·58	16·89	70·67	22·97	6·36
Grand Total	43·62	41·39	14·99	46·77	42·71	10·52

NOTE.—There is reason to believe that both imports and exports are over-valued in most of the colonies. See Report to *Australasian Statistics*, 1884.

TABLE IX.—SHIPPING, 1889.

Name of Colony.	Inwards.		Outwards.		Total.	
	Vessels.	Tons.	Vessels.	Tons.	Vessels.	Tons.
Victoria	2,855	2,270,827	2,886	2,328,351	5,741	4,599,178
New South Wales ..	3,254	2,632,081	3,229	2,689,098	6,483	5,321,179
Queensland	760	506,780	773	494,229	1,533	1,001,009
South Australia ..	1,036	978,532	1,046	980,810	2,082	1,959,342
Western Australia ..	349	497,232	345	507,586	694	1,004,818
Total	8,254	6,885,452	8,279	7,000,074	16,533	13,885,526
Tasmania	842	458,247	819	453,999	1,661	912,246
New Zealand	781	602,634	762	593,252	1,543	1,195,886
Grand Total	9,877	7,946,333	9,860	8,047,325	19,737	15,993,658

TABLE X.—RAILWAYS, 1889.

Name of Colony.	Length at End of Year.		Government Lines Open for Traffic.					
	Open. ¹	In course of construction.	Capital Cost at End of Year.		Revenue Account for the Year.			Proportion of Net Receipts to Capital Cost. ²
			Total.	Average per Mile.	Receipts.	Working Expenses.	Net Receipts.	
	Miles.	Miles.	£	£	£	£	£	per cent.
Victoria	2,199	684	29,125,280	13,245	3,110,140	1,945,837	1,164,303	4·18
New South Wales ..	2,252	..	29,839,167	13,744	2,538,477	1,634,602	903,875	3·20
Queensland	2,064	571 ³	13,332,046	6,460	868,123	595,149	272,974	2·07
South Australia ..	1,774	55	10,976,376	6,251	927,812	519,978	407,834	3·95
Western Australia ..	497	300 ⁴	871,377	4,271	40,849	54,339	-13,490 ⁵	-1·53 ⁵
Total	8,786	1,610	84,144,246	10,024	7,485,401	4,749,905	2,735,426	3·40
Tasmania ⁶	374	67	2,738,164	8,399	157,583	139,419	18,164	·71
New Zealand	1,912	176	13,899,955	7,684	1,095,569	682,787	412,782	3·02
Grand Total	11,072	1,853	100,782,365	9,572	8,738,553	5,572,111	3,166,442	3·27

NOTE.—The figures are for the year ended 30th June, 1889, for Victoria and New South Wales; for that ended 31st March, 1890, for New Zealand; and for that ended 31st December for the other colonies. The railway gauge adopted is 5 feet 3 inches in Victoria and for portion of the lines of South Australia, 4 feet 8½ inches in New South Wales, and 3 feet 6 inches in the other colonies. In New South Wales, in 1889-90, the extent opened increased to 2,182 miles, and the capital cost to £30,555,123, whilst the gross receipts amounted to £2,633,086, and the working expenses to £1,665,835; the net receipts being thus £967,251, or equivalent to 3·20 per cent. on the mean capital cost. For later information for Victoria, see footnotes on pages 205, 208, *et seq. ante*.

¹ Including private as well as Government lines. The following are the lengths of private lines included:—New South Wales, 81; South Australia, 18; Western Australia, 293; Tasmania, 48; New Zealand, 103; total, 543 miles. Tramways are not included in the table. Of tramways open at the end of 1889, there were in Victoria 35¼ miles (chiefly cable), constructed by a Trust elected by the City of Melbourne and surrounding municipalities, but let to a private company; in New South Wales, in 1889-90, 39½ miles (steam), constructed by Government at a capital cost of £933,614, the gross receipts from which amounted in 1889-90 to £268,962, and the working expenses to £224,073; in Queensland, 8½ miles; and in Western Australia, constructed by timber companies, 100 miles. The cost of construction of the cable tramways of Victoria (including expenditure on lines in progress) to the end of 1889, was £1,563,810, and the receipts during 1889 amounted to £519,617. In New Zealand, the cost of private lines was £740,986; whilst the earnings from traffic during the year were £67,167, and the working expenses £23,339.

² The calculations in this column are based on the mean of the amounts of capital cost at the beginning and end of year.

³ Including railways authorized.

⁴ This is the Great Southern Railway, constructed on the land-grant system.

⁵ The minus (—) indicates a net loss, or excess of working expenses over receipts.

⁶ Included with the Government lines in Tasmania are 122 miles guaranteed by the State, constructed at a cost of £1,188,316. The 48 miles of unguaranteed private lines in that colony cost £187,198. The receipts of the latter during the year amounted to £16,935, and the working expenses to £12,753.

TABLE XI.—POSTAL RETURNS, 1889.

Name of Colony.	Number of Post Offices.	Number Despatched and Received of—				Revenue. ²	Expendi- ture.
		Letters and Post Cards.		Newspapers. ¹			
		Total.	Per Head of Popula- tion.	Total.	Per Head of Popula- tion.		
Victoria	1,600	48,097,268	43·55	20,662,732	18·71	£ 529,093 ³	£ 582,910 ³
New South Wales ..	1,261	53,971,300	48·89	36,530,800	33·09	395,584	393,606
Queensland.. ..	834	13,070,083	32·92	10,937,339	27·55	133,469	209,404
South Australia ..	593	16,388,607	50·99	9,085,714	28·27	107,560	177,987
Western Australia ..	186	2,737,034	63·57	1,392,825	32·35	13,367	33,704 ⁴
Total.. ..	4,474	134,264,292	45·21	78,609,410	26·47	1,179,073	1,397,611
Tasmania	293	4,703,324	31·61	5,424,657	36·45	39,536	44,283
New Zealand	1,189	44,151,393	71·93	16,721,016	27·24	197,311	154,101
Grand Total	5,956	183,119,009	49·06	100,755,083	26·99	1,415,920	1,595,995

¹ Subject to certain regulations and restrictions, newspapers posted in New South Wales, Queensland, and Tasmania, travel free to any of the Australasian Colonies, and in Western Australia they travel free to places within the colony itself. In the other colonies a small postage fee is charged on newspapers.

² This probably includes commission on money orders in all the colonies.

³ Including amounts on account of Telegraphs and Telephones. The revenue is made up of Postal revenue (roughly estimated), £370,000; Telegraphic revenue (as shown in Table XII.), £159,093; but does not include any allowance for official correspondence and telegrams transmitted without charge, at an estimated cost of about £50,000. The expenditure includes cost of printing books, forms, and stamps by the Government Printer; but is exclusive of expenditure on buildings and on construction and maintenance of telegraph lines.

⁴ Including expenditure on telegraphs.

TABLE XII.—ELECTRIC TELEGRAPHS AND TELEPHONES, 1889.

Name of Colony.	On the 31st December.				During the Year.	
	Miles of Line (Poles). ¹		Miles of Wire in Operation. ¹		Telegrams Received and De- spatched.	Amount Received.
	In opera- tion.	In course of Con- struction.	Telegraph. ₂	Tele- phone.		
Victoria	3,967	60	8,241	5,313	2,885,919 ³	£ 159,093 ⁴
New South Wales ..	10,732	293	22,606	*	3,433,562	186,862
Queensland	9,456	414	16,981	*	1,568,872	93,297
South Australia ..	5,511	12	9,921	1,756	984,180	100,558 ⁴
Western Australia ..	2,961	517	3,330	..	197,587	10,036
Total	32,627	1,296	61,079	*	9,070,120	549,846
Tasmania	1,979	..	2,590	346	280,559	26,414 ⁴
New Zealand	4,874	17	11,827	1,662	1,802,987	106,462 ⁴
Grand Total	39,480	1,313	75,496	*	11,153,666	682,722

NOTE.—Telephones.—In Victoria, there were, in 1889, seven Telephone Exchanges, with 1,988 subscribers, whose annual subscriptions amounted to £29,203. In Queensland there were 634 Telephones in use. In New South Wales they are included with Telegraphs.

* Where asterisks occur, the information was not furnished, or is incomplete.

¹ Exclusive of railway telegraphs used for railway purposes in Victoria and New South Wales, but inclusive of 40 miles of line and 1,875 of wire in South Australia, and 337 of line and 341 of wire in Tasmania.

² Including cable, viz., 359 miles belonging to Tasmania, and 202 miles to New Zealand.

³ Exclusive of Telegrams on railway service. ⁴ Including Telephone revenue.

TABLE XIII.—CROWN LANDS ALIENATED AND IN PROCESS OF ALIENATION, 1889.

Name of Colony.	During the Year 1889.					
	Sold by Auction, Private Contract, etc.			Selected under System of Deferred Payments. ¹	Granted without Purchase.	Total Extent Wholly or Conditionally Alienated.
	Area.	Amount of Purchase Money.	Average Price per Acre.			
	acres.	£	£ s. d.	acres.	acres.	acres.
Victoria ..	15,639	86,233	5 10 3	71,251	531	87,421
New South Wales ..	40,226	148,120	3 13 8	740,964	..	781,190
Queensland ..	11,933	94,710	7 18 9	441,179 ²	306	453,418 ²
South Australia ..	3,012	3,390	1 2 6	324	20,000	23,336
Western Australia..	45,457	8,681	0 3 10 ³	93,626 ⁴	1,373,221 ⁵	1,512,304
Total ..	116,267	341,134	2 18 8	1,347,344	1,394,058	2,857,669
Tasmania ..	885	14,051	15 17 6	50,566	1,109	52,560
New Zealand ..	42,617	47,950	1 2 6	45,016	60,708 ⁶	148,341
Grand Total ..	159,769	403,135	2 10 6	1,442,926	1,455,875	3,058,570

Name of Colony.	Up to the End of 1889.—Extent—			At the end of 1889.—Extent—	
	Alienated in Fee Simple. ⁷		In process of Alienation under System of Deferred Payments. ⁸	Alienated or in Process of Alienation.	Neither Alienated nor in process of Alienation.
	Sold.	Granted without purchase.			
	acres.	acres.	acres.	acres.	acres.
Victoria ..	15,827,347	14,965	6,650,000	22,492,312	33,753,448
New South Wales	22,912,664	3,113,393	17,574,059	43,600,116	154,271,884
Queensland ..	9,852,537	67,155	2,237,488 ⁹	12,157,180	415,506,180
South Australia ..	7,391,310	409,124	3,494,530 ⁹	11,294,964	566,897,036
Western Australia	1,942,684	1,373,221	445,232	3,761,137	620,827,663
Total ..	57,926,542	4,977,858	30,401,309	93,305,709	1,791,256,211
Tasmania ..	*	*	*	4,647,988	12,232,012
New Zealand ..	13,071,875	6,306,636 ¹⁰	525,958	19,904,469	46,805,851 ¹¹
Grand Total ..	*	*	*	117,858,166	1,850,294,074

*Where asterisks occur the information has not been furnished or cannot be completed.

¹ The purchase money for selected land varies in the different colonies from 10s. to 30s. per acre, payable by annual instalments (often without interest) extending over a period of 10 or 20 years. For particulars of the terms and conditions under which such land is acquired, see paragraph 392 *et seq.*, *ante*.

² Land alienated in fee-simple only. See also footnote (⁹) *infra*.

³ This low average is explained by the circumstance that a large portion of the purchase money was previously paid as rent. The price of rural land is 10s. per acre.

⁴ Approximate only.

⁵ Chiefly Great Southern Railway grant.

⁶ Of this area 29,088 acres were granted to Natives, or Europeans who purchased from them, under Native Land Acts.

⁷ Including only that of which the purchase has been completed.

⁸ Exclusive of the extent estimated to have been forfeited for non-fulfilment of conditions, etc.

⁹ Including land held under leases with right of purchase on certain conditions, viz., 1,195,169 acres in Queensland, and 1,312,971 acres in South Australia.

¹⁰ These figures relate partly to lands in respect to which Crown grants have been issued either to the original Maori possessors, or to Europeans or Maoris who have purchased from them, under certain Native Land Acts.

¹¹ Of this extent, about 14,000,000 acres belong to the Maoris, or to Europeans who have purchased from them; and 544,914 acres were held under "Perpetual Lease."

TABLE XIV.—STATE PRIMARY EDUCATION, 1889.

Name of Colony.	At the end of 1889.				Gross Enrolment of Scholars during 1889.		
	Number of State Schools.	Number of Teachers.			Males.	Females.	Total.
		Males.	Females.	Total.			
Victoria ..	2,063	1,808	2,778	4,586	130,135	120,294	250,429
New South Wales ..	2,317	1,982	2,020	4,002	113,200 ¹	104,089 ¹	217,289
Queensland ..	584	702	795	1,497	37,581	34,106	71,687
South Australia ..	540	409	667	1,076	25,600 ¹	23,677 ¹	49,277
Western Australia ..	94 ²	46	122	168	2,400	2,344	4,744
Total ..	5,598	4,947	6,382	11,329	308,916	284,510	593,426
Tasmania ..	229	187	272	459	9,731	8,218	17,949
New Zealand ..	1,155	1,291	1,603	2,894	80,100 ¹	73,915 ¹	154,015
Grand Total ..	6,982	6,425	8,257	14,682	398,747	366,643	765,390

Name of Colony.	Scholars in Average Daily Attendance during the Year.			Esti- mated Number of Distinct Children Attend- ing during the Year.	Expenditure on State Education. ³			Expenditure per head of—	
	Total Number	Number to each Teacher	Per- centage of Scholars on the Rolls.		Amount contributed by—		Total.	Mean Popula- tion.	Scholars in Average Attend- ance.
					State. ⁴	Parents, etc., in Fees.			
Victoria ..	130,859	29	52.25	202,822	£ 664,820	£ 2,042 ⁵	£ 666,862	£ s. d. 0 12 1	£ s. d. 5 1 11
New South Wales ..	114,569	29	52.73	191,215	453,615	72,318	525,933	0 9 6	4 11 10
Queensland ..	40,472	27	56.46	62,347	171,077	..	171,077	0 8 7	4 4 7
South Australia ..	28,216	26	57.26	44,576	89,686	24,343	114,029	0 7 1	4 0 10
Western Australia ..	3,625	22	76.41	4,300 ¹	9,697	1,456 ⁶	11,153	0 5 2	3 6 4 ⁷
Total ..	317,741	28	53.54	505,260	1,388,895	100,159	1,489,054	0 10 0	4 13 9
Tasmania ..	8,973	20	49.99	12,460	29,957	9,463	39,420	0 5 4	4 7 10
New Zealand ..	93,374	32	60.63	119,001	343,100	4,567 ⁵	347,667	0 11 4	3 14 6
Grand Total	420,088	29	54.89	636,721	1,761,952	114,189	1,876,141	0 10 1	4 9 4

NOTE.—The State system of education is compulsory and undenominational (or secular) in all the colonies, and Western Australia is now the only colony which grants assistance to denominational schools. Public instruction is free in Victoria, Queensland, and New Zealand ; but fees are charged in the other colonies, although they are partially or entirely remitted in cases where the parents are unable to pay them. The prescribed school age differs in the various colonies—in Victoria it was from 6 to 15 years until November, 1889, when it was altered to from 6 to 13 years ; in New South Wales and Western Australia, it is from 6 to 14 ; in Queensland from 6 to 12 ; in South Australia, Tasmania, and New Zealand from 7 to 13. For a complete account of the educational systems of the various colonies, see Appendix to *Year-Book*, 1888-9, Vol. II.

¹ These figures have been estimated in the office of the Government Statist, Melbourne.
² Including 16 assisted schools.
³ This represents the cost of State (Primary) Education, including expenditure on Head Office, staff, and inspection, but exclusive only of expenditure on buildings (either for repairs or erection) and rent. In the case of New Zealand, however, rent is included, as the amount could not be ascertained.
⁴ Portions of the amounts in this column are derived from Education Reserves, etc., viz., £10,418 in South Australia and £31,646 in New Zealand.
⁵ For extra subjects.—In the figures for New Zealand, amounts received by Boards from local sources, and sums raised locally by School Committees, are also included.
⁶ Exclusive of amounts received by assisted schools, which were not returned.
⁷ In Government schools only. The average amount paid by the State to assisted schools was £1 8s. 4½d.

TABLE XV.—AGRICULTURAL STATISTICS, 1889-90.—LAND IN CULTIVATION.

* * The Agricultural Statistics in most of the colonies are collected in the months of February or March in each year. The present returns are for those months of 1890. In calculating the rates of tillage per head, the population on the 31st December, 1889, has been taken.

Name of Colony.	Number of Acres under Tillage.	
	Total.	Per Head of Population.
Victoria	2,627,262	2·35
New South Wales	1,164,475	1·04
Queensland	247,073	·61
South Australia	2,864,877	8·83
Western Australia	117,833	2·70
Total	7,021,520	2·33
Tasmania	488,354	3·22
New Zealand	1,560,605 ^e	2·52
Grand Total	9,070,479	2·40

Name of Colony.	Number of Acres under—									
	Wheat.	Oats.	Barley.	Maize.	Other ¹ Cereals.	Pota- toes.	Hay.	Vines.	Green Forage. ²	Other Tillage. ³
Victoria	1,178,735	236,496	90,724	8,447	23,873	47,139	451,546	15,662	155,596	419,044
New South Wales	419,758	22,358	5,440	173,836	1,573	17,551	212,106	7,867	245,319	58,667
Queensland	8,459	750	1,254	97,698	249 ⁴	7,185	45,617	1,763	10,120	73,978
South Australia	1,842,961	10,297	19,679	..	4,267	6,383	329,643	7,352	36,500	607,795
West. Australia	35,517	2,075	5,475	80	649	462	25,694	1,088	329	46,464
Total	3,485,430	271,976	122,572	280,061	30,611	78,720	1,064,606	33,732	447,864	1,205,948
Tasmania	49,055	40,169	4,446	..	8,055	17,015	50,913	30	192,919	125,752
New Zealand	335,861	426,071	42,402	6,253	15,918	30,577	45,889	.. ⁵	474,204 ⁶	183,430
Grand Total	3,870,346	738,216	169,420	286,314	54,584	126,312	1,161,408	33,762	1,114,987	1,515,130

NOTE.—Land in fallow is included in the total area under tillage in all the colonies, except New South Wales; but land under permanent artificial grasses is not included in Queensland, Western Australia, and New Zealand. See also Notes 2, 3, and 6.

¹ Including beans and pease, except in the case of New South Wales.

² In addition to crops sown for the purpose of being cut green for cattle, this column contains the following areas laid down in permanent artificial grass in the colonies named:—Victoria, 149,616 acres; New South Wales, 217,403 acres; South Australia, 28,331 acres; Western Australia, only small area; Tasmania, 190,717 acres. In Queensland, where it is not so included, the area returned is 16,120 acres. For extent of such land in New Zealand, see Note 6.

³ In the returns of some of the colonies, this column embraces land in fallow as well as land under crop. The following are the areas in fallow included in the returns of such colonies:—Victoria, 379,701 acres; New South Wales (not returned); Queensland, 14,430 acres; South Australia, 591,432 acres; Western Australia, 44,425 acres; Tasmania, 26,131 acres; New Zealand, 149,979 acres. Total, 1,206,098 acres. The following is a statement of the acreage under various crops included in the same column, also of the produce so far as it has been given:—

Miscellaneous Crops.

Victoria—	Acres.	Produce.	South Australia—	Acres.	Produce.
Turnips, carrots, parsnips, and beet ..	820	9,095 tons	Hops	—	101 cwt.
Mangel-wurzel ..	984	15,604 „	Tasmania—		
Onions	1,957	10,815 „	Turnips	2,576	20,326 tons
Tobacco	955	4,123 cwt.	Mangel-wurzel ..	1,044	13,349 „
Chicory	229	1,376 tons	Gardens and orchards	9,808	—
Hops	829	5,711 cwt.	Fenced and cleared land, not strictly under tillage, devoted to pastoral purposes	81,547	—
Grass seeds	3,390	54,547 bush.	New Zealand—		
N.S. Wales—			Green maize	1,675	—
Tobacco	3,239	27,724 cwt.	Mangolds, beet, carrots, parsnips, etc. ..	3,983	—
Sugar cane	18,730		Hops	585	5,715 cwt.
Of which productive	7,348	168,862 cwt.	Tobacco	25	102 „
Oranges	9,804	11,074,392 doz.	Gardens and orchards	24,339	—
Gardens and orchards	24,276	—	Other crops	2,844	—
Queensland—			Land broken up, but not under crop ..	149,979	—
Sugar cane	49,741				
Of which crushed	29,438	803,380 cwt.			
Arrowroot	210	583,988 lbs.			
Oranges	1,194	560,564 doz.			
Bananas	3,282	4,993,517 „			
Pineapples	628	227,785 „			
Tobacco	266	2,531 cwt.			

⁴ Rice.

⁵ No account taken.

⁶ In the figures for New Zealand, the land under permanent artificial grass, amounting to 6,479,160 acres—of which about one-half had been, and the other half had not been, previously ploughed—is not entered as green forage, nor is it included in the total area under tillage, as in the majority of the other colonies. Were the whole so placed, it would bring the land under tillage up to 8,039,765 acres, or to 12·96 acres per head of the population. The green forage entered above consists of 121,301 acres of green oats, and 352,903 acres of turnips.

TABLE XVI.—AGRICULTURAL STATISTICS, 1889-90.—PRODUCE OF CROPS.

Name of Colony.	Bushels raised of—					Tons raised of—	
	Wheat.	Oats.	Barley.	Maize.	Other Cereals. ¹	Pota-toes.	Hay.
Victoria	11,495,720	5,644,867	1,831,132	357,047	544,781	157,104	666,385
New South Wales ..	6,570,335	543,330	113,109	5,354,827	28,057	50,096	366,229
Queensland	134,335	14,561	26,630	1,743,051	4,121	25,889	88,172
South Australia ..	14,577,358	131,449	246,841	..	57,800	23,853	395,920
Western Australia ..	497,238	41,500	93,075	1,200	12,980 ²	1,386	25,694
Total	33,274,986	6,375,707	2,310,787	7,456,125	647,739	258,328	1,542,400
Tasmania	756,639	1,148,935	105,574	..	165,742	72,275	73,859
New Zealand	8,448,506	13,673,584	1,342,823	270,282	427,160	159,729	65,476
Grand Total ..	42,480,131	21,198,226	3,759,184	7,726,407	1,240,641	490,332	1,681,735

Name of Colony.	Gallons of Wine made.	Bushels per Acre of—					Tons per Acre of	
		Wheat.	Oats.	Barley.	Maize.	Other Cereals.	Pota-toes.	Hay.
Victoria	1,578,590	9·75	23·87	20·18	42·27	22·82	3·33	1·48
New South Wales ..	688,685	15·65	24·30	20·79	30·81	17·84	2·85	1·73
Queensland	164,626	15·88	19·41	21·24	17·84	16·55	3·60	1·93
South Australia ..	510,674	7·91	12·77	12·54	..	13·55	3·74	1·20
Western Australia ..	205,632	14·00	20·00	17·00	15·00	20·00	3·00	1·00
Total	3,148,207	9·55	23·44	18·85	26·62	21·16	3·28	1·45
Tasmania	800	15·42	28·60	23·75	..	20·58	4·25	1·45
New Zealand .. ..	..	25·15	32·09	31·67	43·22	26·84	5·22	1·43
Grand Total ..	3,149,007	10·98	28·72	22·19	26·99	22·73	3·88	1·45

¹ Including beans and pease, except in the case of New South Wales.
² Estimated.

TABLE XVII.—LIVE STOCK, 1889-90.

*** The Live Stock Statistics are collected in October in Western Australia, and in most of the other colonies simultaneously with the Agricultural Statistics, in the months of February and March.

Name of Colony.	Number of—				Total.
	Horses.	Cattle.	Sheep.	Pigs.	
Victoria	329,335	1,394,209	10,882,231	249,673	12,855,448
New South Wales ..	430,777	1,741,592	50,106,768	238,585	52,517,722
Queensland	352,364	4,872,416	14,470,095	80,730	19,775,605
South Australia ¹ ..	170,515	324,412	6,386,617	106,856	6,988,400
Western Australia ..	42,806	119,571	2,366,681	27,079	2,556,137
Total	1,325,797	8,452,200	84,212,392	702,923	94,693,312
Tasmania	29,778	150,004	1,551,429	58,632	1,789,843
New Zealand ²	187,382	895,461	15,503,263	369,992	16,956,098
Grand Total..	1,542,957	9,497,665	101,267,084	1,131,547	113,439,253

¹ Exclusive of the Northern Territory of South Australia.
² The figures for New Zealand, except in regard to sheep—which are for May, 1889—are those returned at the census of March, 1886. They include 42,103 cattle, and 92,091 pigs belonging to the Maoris.

TABLE XVII.—LIVE STOCK, 1889-90—continued.

Name of Colony.	Horses.		Cattle.		Sheep.		Pigs.		Total.	
	Per Square Mile.	Per 100 Persons Living.	Per Square Mile.	Per 100 Persons Living.	Per Square Mile.	Per 100 Persons Living.	Per Square Mile.	Per 100 Persons Living.	Per Square Mile.	Per 100 Persons Living.
Victoria ..	3·75	30	15·86	125	124	973	2·84	22	146	1,150
New South Wales ..	1·39	39	5·63	155	162	4,465	·77	21	170	4,680
Queensland ..	·53	87	7·29	1,198	22	3,558	·12	20	30	4,863
South Australia ¹	·19	53	·36	100	7	1,968	·12	33	8	2,154
Western Australia	·04	98	·12	274	3	5,416	·03	62	3	5,850
Total ..	·45	44	2·87	280	29	2,793	·24	23	32	3,140
Tasmania ..	1·13	20	5·69	99	59	1,024	2·22	39	68	1,182
New Zealand ² ..	1·80	30	8·59	144	149	2,500	3·55	60	163	2,734
Grand Total ..	·50	41	3·09	251	33	2,674	·37	30	37	2,996

¹ Exclusive of the Northern Territory of South Australia.

² The figures for New Zealand, except in regard to sheep—which are for May, 1889—are those returned at the census of March, 1886. They include 42,103 cattle, and 92,091 pigs belonging to the Maoris.

TABLE XVIII.—WOOL PRODUCE, 1889.

Name of Colony.	Wool Imported.		Wool Exported.		Wool used in Manufacture in the Colony.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value, at 1s. 4d. per lb.
	lbs.	£	lbs.	£	lbs.	£
Victoria ..	80,390,758	3,595,407	135,606,550	5,928,847	1,738,929	115,928
New South Wales ..	8,695,393	330,072	266,229,029	10,785,070	700,000 ²	46,666
Queensland ..	..	..	59,228,753	2,680,134	..	..
South Australia ..	24,098,655	848,330	63,331,639	2,194,707	120,000 ²	8,000
Western Australia ..	..	..	9,501,695	395,903	..	..
Total ..	113,184,806	4,773,809	533,897,666	21,984,661	2,558,929	170,594
Tasmania ..	..	..	6,240,921	283,237	143,000	9,533
New Zealand ..	3,435	84	102,227,354	3,976,375	3,556,004	237,067
Grand Total ..	113,188,241	4,773,893	642,365,941	26,244,273	6,257,933	417,194

Name of Colony.	Wool Production, 1889.				Proportion of Exports of Wool to Total General Exports.	Average Export Price per lb.
	Quantity. ¹		Value.			
	Total.	Average to each Sheep in the Colony.	Total.	Average per Head of Population.		
	lbs.	lbs.	£	£ s. d.	per cent.	d.
Victoria	56,954,721	5·23	2,449,368	2 4 4	46·56	10½
New South Wales ..	258,233,636	5·15	10,501,664	9 10 3	46·30	9¾
Queensland	59,228,753	4·09	2,680,134	6 15 0	34·64	10¾
South Australia ..	39,352,984	6·16	1,354,377	4 4 3	18·66	8¼
Western Australia ..	9,501,695	4·01	395,903	9 3 11	52·00	12
Total	423,271,789	5·03	17,381,446	5 17 1	42·45	10
Tasmania	6,383,921	4·11	292,770	1 19 4	19·40	10¾
New Zealand	105,779,923	6·82	4,213,358	6 17 3	42·58	9¼
Grand Total	535,435,633	5·29	21,887,574	5 17 3	41·93	9¾

¹ These figures are made up of the sum of the total quantities exported from and used for manufactures in, less the quantities imported by, the respective colonies. The wool referred to is, of course, not homogeneous in quality, some being greasy and some washed and scoured. The Government Statistician of New South Wales has estimated that the equivalent weight in greasy wool of the whole clip for that colony was 299,012,200 lbs.

² Estimated.

TABLE XIX.—GOLD PRODUCE.

Name of Colony.	Gold raised—					
	Prior to 1889.		During 1889.		Total.	
	Quantity.	Value. ¹	Quantity.	Value. ¹	Quantity.	Value. ¹
	oz.	£	oz.	£	oz.	£
Victoria	55,635,959	222,543,836	614,839	2,459,356	56,250,798	225,003,192
New South Wales ..	9,972,597	37,180,817	119,759	434,070	10,092,356	37,614,887
Queensland	6,088,785	21,310,747	739,103	2,586,861	6,827,888	23,897,608
South Australia ² ..	252,608	991,411	20,833	76,780	273,441	1,068,191
Western Australia ..	120,000 ³	460,000	15,492 ⁴	58,871	135,492	518,871
Total	72,069,949	282,486,811	1,510,026	5,615,938	73,579,975	288,102,749
Tasmania	532,889	2,031,866	32,333	119,703	565,222	2,151,569
New Zealand	11,421,817	44,843,642	203,211	808,549	11,625,028	45,652,191
Grand Total	84,024,655	329,362,319	1,745,570	6,544,190	85,770,225	335,906,509

NOTE.—The figures for Victoria, New South Wales, and Queensland express the quantity and value of all the gold known to have been raised in those colonies since the period of its first discovery in Australia in 1851; those for South Australia are estimated chiefly from the returns of the Melbourne and Sydney Mints, and partly from the export returns; those for New Zealand express the total exports of gold from the earliest period; and those for Tasmania express the quantity known to have been raised since 1866, there being no record of the gold raised prior to that period. There are no reliable returns of the gold raised in Western Australia, although a considerable quantity has been obtained on the Kimberley gold-fields of that colony; in 1888 it was estimated that 50,000 oz. were raised, yet only 3,493 oz. were declared for export. No similar estimate was made for 1889, and therefore only the quantity declared for export could be entered.

¹ The purity, and consequently the value, of gold varies considerably in different localities. In Victoria the average value is set down as £4 per oz., and in Queensland as £3 10s. per oz. Standard gold (*i.e.*, 22 carats fine) is worth £3 17s. 10½d., and pure gold £4 4s. 11½d. per oz.

² Including Northern Territory. ³ Roughly estimated. ⁴ Quantity declared for export only.

TABLE XX.—PUBLIC SAVINGS BANKS, 1889.
(Including both General and Post Office Savings Banks.)

Name of Colony.	On the 31st December.				Rates of Interest allowed to Depositors.
	Number of Depositors.		Amount remaining on Deposit.		
	Total.	Per 100 of the Population.	Total.	Average to each Depositor.	
			£	£ s. d.	per cent.
Victoria	268,462	24·01	4,971,933	18 10 5	4
New South Wales	134,914	12·02	4,280,083	31 14 6	4 and 5
Queensland	43,875	10·79	1,597,784	36 8 4	5 ¹
South Australia	65,815	20·28	1,905,632	28 19 1	5
Western Australia	5,371	12·29	31,061	5 15 8	3 ³ / ₄
Total	518,437	17·19	12,786,493	24 13 3	3 ³ / ₄ to 5
Tasmania	24,397	16·11	497,492	20 7 10	3 ¹ / ₂ and 5
New Zealand	110,566	17·83	2,858,644	25 17 1	4 ¹ / ₂ and 5
Grand Total	653,400	17·25	16,142,629	24 14 1	3 ¹ / ₂ to 5

NOTE.—There are both Post Office and General Savings Banks in Victoria, New South Wales, Tasmania, and New Zealand; Post Office Savings Banks only in Queensland and Western Australia; and General Savings Banks only in South Australia. There is a limit to the amount of an interest-bearing deposit, varying from £100 to £250 in the different colonies. When two rates of interest are quoted, the lower one is that allowed by the Post Office Banks.

¹ This rate is allowed on deposits up to £200; above that amount, *nil*.

TABLE XXI.—STATISTICS OF FIJI, 1878 TO 1889.

* * Fiji consists of from 70 to 80 inhabited islands, the estimated area of which is 7,500 square miles. There are also about 150 smaller islands uninhabited. The total area of the group is estimated to be 7,740 square miles.

Year.	Estimated Population on the 31st December.			Births.	Deaths.	Marriages.	Immigrants (Polyne- sians and Coolies only).		
	Males.	Females	Total.				Males.	Females	Total.
1878	64,748	52,350	117,098	2,262	2,244	419	1,346	174	1,520
1879	67,697	52,962	120,659	3,654	3,532	1,356	2,098	288	2,386
1880	67,598	54,286	121,884	4,103	4,326	1,358	2,500	34	2,534
1881	71,323	57,188	128,511	4,321	4,411	1,056	1,100	58	1,158
1882	72,376	57,703	130,079	4,552	4,933	1,280	2,561	511	3,072
1883	71,540	58,354	129,894	4,649	5,310	1,097	2,013	546	2,559
1884	71,011	57,512	128,523	4,540	8,592	978	2,292	980	3,272
1885	69,860	57,419	127,279	4,319	5,775	1,133	1,422	736	2,158
1886	68,727	57,283	126,010	4,253	5,502	1,155	..	..	1,273
1887	66,144	58,514	124,658	4,749	4,365	1,167	..	..	276
1888	66,635	58,806	125,441	4,709	4,236	966	627	190	817
1889	67,480	57,439	124,919	4,289	4,906	1,102	475	180	655

Year.	Emigrants (Poly- nesians only).			Public Revenue.			Public Expen- diture.	Public Debt.	Value of Imports	Value of Ex- ports.
	Males.	Fe- males.	Total.	Raised by Taxa- tion.	Not raised by Taxa- tion.	Total.				
1878	638	71	709	£ 42,697	£ 18,324	£ 61,021	£ 65,267	£ 100,000	£ 136,608	£ 192,865
1879	313	32	345	46,260	21,511	67,771	71,108	120,000	142,213	169,040
1880	170	18	188	46,544	34,134	80,678	91,102	210,000	185,741	229,528
1881	860	24	884	49,606	37,837	87,443	89,960	254,025	276,040	174,146
1882	1,066	73	1,139	59,518	51,796	111,314	109,986	254,025	303,329	190,517
1883	1,251	94	1,345	74,805	32,009	106,814	88,277	254,025	450,595	351,998
1884	693	60	753	68,162	23,361	91,523	98,468	254,025	434,522	345,344
1885	1,681	265	1,946	62,985	13,684	76,669	92,209	264,025	294,585	326,750
1886 .. ..	..	..	2,113	51,882	12,692	64,574	78,133	264,695	230,742	283,496
1887 .. ..	..	..	1,634	41,616	23,300	64,916	73,150	265,389	188,071	281,080
1888	267	31	298	44,223	20,795	65,018	58,993	253,289	183,222	376,978
1889	410	187	597	44,316	19,406	63,722	57,710	251,090	189,393	364,282

Year.	Shipping.				Crown Lands Granted and Sold in each Year. ¹	Live Stock. ²			
	Inwards.		Outwards.			Number of—			
	Vessels.	Tons.	Vessels.	Tons.		Horses.	Cattle.	Sheep.	Pigs. ³
1878	124	23,180	128	24,080	acres. 39,476	200	3,000	3,100	50,000
1879	131	28,967	125	28,085	23,559	300	4,000	3,771	50,000
1880	157	32,933	150	32,689	27,562	360	5,000	4,769	50,000
1881	164	35,542	160	35,230	75,627	400	5,000	4,769	50,000
1882	163	43,768	165	43,757	65,745	600	5,000	4,000	50,000
1883	198	68,530	193	69,322	31,665	600	5,324	5,373	50,000
1884	150	63,246	144	64,731	38,325	610	4,600	5,869	50,000
1885	124	54,056	135	55,892	26,368	650	5,953	6,350	50,000
1886	118	54,132	113	51,237	14,028	567	6,841	6,055	50,000
1887	119	46,902	118	44,865	8,120	647	6,778	6,508	1,711
1888	106	49,579	110	51,548	6,300	684	6,754	6,996	1,903
1889	89	51,220	81	47,303	5,059	695	8,768	6,838	2,089

NOTE.—The following additional information has been supplied for the year 1889 :—Birth rate, 34·33; death rate, 39·27; marriage rate, 8·8, per 1,000 persons living. *Immigration*—Unassisted (not included above), 482 in 1888, and 752 in 1889: *Emigration*, 1,192. *Sources of revenue*—Customs duties, £27,131; other taxes, £17,185; other sources, £19,406. *Heads of Expenditure*—Interest on public debt, £8,972; post office, etc., £946; immigration, £5,144; other expenditure, £42,648. *Public Debt*—Consists of £115,390 Imperial advances, bearing no interest, in aid of annexation, and in payment of compensation in respect of disallowed land claims; £100,000 for payment of liabilities of former so-called Government; and £50,000 for public works and immigration, less £14,300 redeemed, bearing interest at 4½ per cent. *Imports and Exports*—Of the total value of imports, £185,976 was from the Australasian Colonies, and £3,417 from other countries; and of the total value of exports, £335,858 was to Australasian Colonies, and £28,424 to other countries; almost the whole of the exports were of Fijian production. *Postal Returns*, 1888—Number of offices, 36; letters, 189,174; newspapers, 170,788. *State Education*—Number of schools, 2; teachers, 5; viz., 2 males and 3 females; scholars on the rolls, 157; viz., 88 males and 69 females. *Agriculture*—Land under cultivation (by whites only), 35,300 acres, of which 335 acres were under maize; 19,000 acres under cocoanuts; 12,600 acres under sugar-cane; 2,500 acres under bananas; 127 acres under pineapples; and 738 acres under cotton, coffee, tobacco, tapioca, and other crops.

¹ The total area alienated at the end of 1889 was 410,615 acres, and the area unalienated 4,543,345 acres. The amount realized by the State for sales of land to the end of 1888 was only £26,446, which, however, represents the price of but a small proportion of the acreage alienated. The majority of the grants issued were for lands acquired by whites and others previously to annexation, and these received their titles at the nominal price of one shilling.

² In addition to the live stock referred to in these columns, about 5,000 angora goats were kept on the islands.

³ Returns from Europeans only since 1836.

APPENDIX B.

TARIFFS OF THE AUSTRALASIAN COLONIES, IN CLASSIFIED ARRANGEMENT, INCLUDING EXCISE DUTIES, 1890.

The Tariff of Victoria is re-published in the present volume, for, although no alterations have been made since the last publication of this work, several items which have since lapsed by effluxion of time are now omitted altogether. The tariffs of the other colonies, however, having been only slightly, if at all, altered since the last publication, they do not appear in the present work, but a description is given of the changes which have taken place. All the tariffs were published in full in the *Victorian Year-Book*, 1888-9.

The articles are arranged according to the system of classification described on page 71 *ante*; and the position of any article may be ascertained by reference to the index at pages 72 to 75 *ante*.

ALTERATIONS IN TARIFFS OF THE AUSTRALASIAN COLONIES, 1889-90.

The following, so far as known, are the changes which have taken place in the tariffs of Western Australia and Tasmania, since the last issue of this work; no changes having taken place in those of the other colonies:—

Order.	Articles.	Rate of Duty.		Date of Alteration.
		Former.	Present.	
24	WESTERN AUSTRALIA. Export Duty on Live Pearl Shells, per ton	4 0 0	2 0 0	1st Jan., 1890
21	TASMANIA. Import Duty on Pork— Under 5 lbs. ... } Over 5 lbs. ... } ad valorem	10 per cent.	{ 10 per cent. { 2d. per lb.	7th Aug., 1890

ERRATA.

The following items were either incorrectly given or accidentally omitted from the tariffs as published in the last *Year-Book*:—

Order.	Articles.	Rate of Duty.
	SOUTH AUSTRALIA. <i>Northern Territory.*</i>	
	Import Duty on—	£ s. d.
14	Opium per lb.	1 10 0
22	Rice „	0 0 1
	Rice, Meal Offal per ton	0 10 0
23	Chinese Oil per gal.	0 1 0
	WESTERN AUSTRALIA.	
14	Import Duty on Opium per lb.	1 0 0
33	Export Duty on Horses per head	0 1 0
	NEW ZEALAND.	
...	Primage Duty† (in addition to Import Duty) on all goods, wares, and merchandize imported into the colony ... ad valorem	1 per cent.

* In force since 17th November, 1886.

† Levied under an Act of Parliament to 30th June, 1889, and since levied under a resolution of the House of Representatives. This duty was discontinued on the 30th September, 1890.

(Corrected up to October, 1890.)

For the position of any article see Index, page 72, *et seq.*, *ante*.

Order.	Articles Imported by Land or Sea.	Rate of Duty.
		£ s. d.
1	Cards, Playing per doz. pcks.	0 3 0
	" " in Sheets "	0 2 6
	Stationery, Manufactured, as under—	
	Albums of all sorts ad valorem	20 per cent.
	Blotters, Blotting Cases, Blotting Pads, Bill-heads, and all other printed, ruled, or engraved forms or paper, bound or unbound, including Printed or Lithographed Advertisements or Posters of all kinds when framed	" "
	Books—Account, Betting, Cheque, Copy, Diary, Drawing, Exercise, Guard, Letter, Music, Memo., Pocket, Receipt, Sketch "	" "
	Bill Files and Letter Clips "	" "
	Cards—Printers', Visiting, Funeral, Menu, Programme, Wedding, in sheet or cut "	" "
	Card Cases, not being of Gold or Silver "	" "
	Date Cases, Cards, Calendars "	" "
	Envelopes "	" "
	Ink Bottles, Inkstands, Ink Wells "	" "
	Labels—Luggage and other "	" "
	Memo. Slates and Tablets "	" "
	Mounts or Stands for Pictures "	" "
	Parchment—Cut "	" "
	Sketch Blocks "	" "
	Wrappers—Fancy, for Writing Paper "	" "
	Writing Cases, Desks, and Stationery Cases "	" "
2	Instruments, Musical (except action-work in separate pieces, including Rails and Keys), including second-hand—	
	Pipe Organs and all parts thereof, including Pianoforte action, made up "	25 per cent.
	Pianos, upright each	5 0 0
	" Square, Grand, or Semi-Grand "	15 0 0
	Harmoniums and Cabinet Organs, not otherwise enumerated... .. "	3 0 0
4	Architraves and Mouldings of all sorts, wholly or partly prepared—	
	Under 3 inches per 100ft. lin.	0 4 0
	3 inches and over "	0 7 0
	Pipes—Smoking, Clay per gross	0 1 0
	" " All other, and Cigar and Cigarette Holders ad valorem	25 per cent.
	" Cases for Pipes, Cigar and Cigarette Holders "	" "
5	Fireworks "	20 per cent.
6	Clocks, and all parts thereof, whether wholly or partly made up	" "
	Watches, and all parts thereof, wholly or partly made up "	" "

IMPORT DUTIES—*continued.*

Order.	Articles Imported by Land or Sea.	Rate of Duty.		
		£	s.	d.
8	Explosives (except Fine Meal Powder, not Sporting, in bulk and in packages of not less than 25 lbs. each), viz. :—			
	Powder, Sporting per lb.	0	0	3
	„ Blasting „	0	0	1
	Gelatine and Gelatine Dynamite „	0	0	1
	Other Explosives „	0	0	4
	Fuze, per coil of 24 ft. or less, and in proportion for any greater quantity	0	0	1½
	Shot per lb.	0	0	1
9	Engines, being Portable Engines, fixed on a Locomotive Boiler horizontally, and fitted up with wheels and shafts suitable for transport on an ordinary road ad valorem	25 per cent.		
	Implements (Agricultural)* „	20 per cent.		
10	Axles—			
	Common Dray, with Linchpins „	25 per cent.		
	Common nut and others not enumerated—			
	Up to 1½ inch diameter inclusive... .. per arm	0	3	0
	Above 1½ inch ditto, ditto „	0	4	6
	Mail-patent, up to 1½ inch diameter inclusive „	0	4	6
	„ above 1½ inch „	0	7	0
	Other patent Axles, with brass caps „	0	10	0
	Carriages, Carts, and Conveyances, including second-hand, viz. :—			
	Boston Chaises, Dog Carts, Gigs, Tilburys, and other Two-wheeled Vehicles on Springs or thorough braces each	10	0	0
	Buggies—Four-wheeled Without Tops,	15	0	0
	Waggons for carrying Goods } mounted on springs			
	„ Single or Double Seated } or thorough braces			
	„ Express } „			
	Hansom Safety Cabs } „	20	0	0
	Waggons—Single and Double seated } with Tops			
	Waggonettes } „			
	Buggies—Four-wheeled } „			
	Omnibuses and Coaches for carrying mails or passengers „	40	0	0
	Barouches } „	50	0	0
	Broughams }			
	Drags }			
	Landaus }			
	Mail Phaetons }			
	All Carts and Waggons without springs, and Spring Carts and Spring Drays with Two wheels ad valorem	20 per cent.		
	All Carriages or Conveyances not otherwise enumerated „	25 per cent.		
	Bicycles, Tricycles, and similar Vehicles, Perambulators, Children's Carriages, whether wholly or partly made up, or parts of same „	„		
†	Parts of Carriages:—			
	Sets of Wheels (unbored and untired) per set	2	0	0
	Poles each	0	5	0
	Shafts and Bars per set	0	1	0

* The following are now considered by the department to be agricultural implements:—Chaff-cutters, Cleaners, Corn Screens, Corn Crushers, Cultivators, Drills—Seed, Harrows, Hay Presses, Hay Rakes, Horse Rakes, Horse Hoes, Maize Shellers, Mowers, Ploughs, Reapers, Rollers—Field, Root Cutters, Seed-sowers, Smutters, Strippers, Stump Extractors, Threshers, Wheat Cleaners, Winnowers.

† Any separate parts of carriages not specially enumerated as dutiable or free are chargeable with such duty as the Commissioner may determine under section 5 of *Duties of Customs Act 1883*.

IMPORT DUTIES—continued.

Order.	Articles Imported by Land or Sea.	Rate of Duty.
10	*Parts of Carriages :— Under Gear (including axles and arms) ... per set Buggy Tops (if composed principally of leather) ... each " " (if of any other material) ... " Carriage bodies in the white ... "	£ s. d. 4 0 0 5 0 0 3 0 0 5 0 0
	†Saddle-trees :— Harness ... per dozen Riding ... "	0 10 0 1 0 0
12†	Bricks—Fire ... per 1,000	1 0 0
13	Furniture, including second-hand ... ad valorem	35 per cent.
	Lamps, Lampware, and Lanterns (except Electroliers and Gasaliers, otherwise dutiable as Manufactures of Metal) ... "	25 per cent.
	Springs—Sofa, Chair, and other furniture ... "	10 per cent.
14	Blacking, including Burnishing Ink, Dressing, Harness Polishing, and Paste ... "	25 per cent.
	Drugs, viz. :— Acid, Acetic, containing not more than 30 per cent. acidity ... per pint or lb. " " for every extra 10 per cent. or part of 10 per cent. above 30 per cent. ... " " Muriatic ... per cwt. " Nitric ... " " Sulphuric ... " Ammonia, Carbonate of ... per pint or lb. " Liquid ... " Chlorodyne ... ad valorem Cocculus Indicus ... per lb. Gelatine ... " Glycerine, Pure ... " " Crude ... " Morphia ... per oz. Nitrate of Silver ... " Nux Vomica ... per lb. Strychnine ... per oz.	0 0 3 0 0 1 0 5 0 0 5 0 0 5 0 } 0 0 2 25 per cent. 0 1 0 0 0 6 0 0 3 0 0 1 0 1 6 0 0 6 0 0 2 0 1 0
	Inks—Writing, Liquid, or Powder ... ad valorem Ink (printing), coloured ... per lb.	10 per cent. 0 0 6
	Medicines—Consisting of two or more ingredients mixed ready for use, not being in chemical combination; Drugs and Chemicals, packed ready for retail sale or consumption, including medical compounds containing spirits not exceeding the strength of proof by Sykes' Hydrometer; and all preparations recommended as beneficial for any portion of the human or animal body, or the cure or the treatment of any disease or affection whatever; and Medicine Chests or Cases, with or without fittings ... ad valorem	25 per cent.
	Matches and Vestas—Wax Vestas— For every gross of metal boxes, not otherwise specified, containing in each box— 100 Vestas or under ... Over 100 and not exceeding 200 Vestas... And so on per gross of metal boxes for each additional 100 Vestas or part thereof ... additional	0 1 3 0 2 6 0 1 3

* See footnote (†) on previous page.

† See also "Leatherware," under Order 24.

‡ See also under "Timber," Order 25.

IMPORT DUTIES—continued.

Order.	Articles Imported by Land or Sea.	Rate of Duty.
		£ s. d.
14	Matches and Vestas—Wax Vestas— For every gross of paper, small round tin, or other boxes, containing in each box— 100 Vestas or under Over 100 and not exceeding 200 Vestas And so on per gross of boxes for each additional 100 Vestas or part thereof additional	0 1 0 0 2 0 0 1 0
	Wooden Matches— For every gross of boxes, containing in each box— 100 Matches or under Over 100 and not exceeding 200 Matches And so on per gross of boxes for each additional 100 Matches or part thereof additional	0 0 6 0 1 0 0 0 6
	Opium, including all goods, wares and merchandise mixed or saturated with opium, or with any preparation or solution thereof, or steeped therein respectively per lb.	1 0 0
	Powders—Baking, Seidlitz, Washing ad valorem	20 per cent.
	Paints and Colours (except Artists' Colours) — Ground in Oil, including Patent Dryers and Putty per ton	2 0 0
	Mixed ready for use, from or of any substance „	4 0 0
	Soda Crystals „	2 0 0
	Spirits—Methylated per liq. gal.	0 1 0
	Varnish (including lithographic) „	0 2 0
15	Carpeting and Druggeting ad valorem	20 per cent.
	Woollen Manufactures, or Manufactures containing Wool (except Printers' Blankets), viz.:— Piece Goods, whether in the piece or cut into lengths or shapes, being Vestings, Trouserings, Coatings, Shirt- ings, Broadcloths, Witneys, Naps, Flannels, Mantle Cloths, Cloakings, Ulsterings, Kerseys, Serges, Costume Cloths, Melton Cloths, and Tweeds „	30 per cent.
	Blankets, Blanketing, Rugs and Rugging „	25 per cent.
16	Silks (except Hatters' Silk Plush, Umbrella Silk, Silk for Flour Dressing, Silk Fags, Oil Silk, Fringes, Tassels, and Gimp for Furniture, Repts, Damasks, and other material for covering Furniture) in the Piece, or Piece Goods containing Silk, whether cut into lengths or shapes or not „	20 per cent.
17	Tents and Tarpaulins „	„
18	Bags—Fancy, Hand, Reticules, or Travelling, including the articles belonging thereto (if any) „	25 per cent.
	Boxes or Cases, viz.—Dressing, Glove, Handkerchief, Jewel, Scent, Work, including the articles belonging thereto (if any) „	„
	Quilts—Sewn, Cosies and Cushions „	30 per cent.
19	Apparel, Articles of, being wholly or partly made up from materials containing wool, the duty on which is 30 per cent. ad valorem on importation „	35 per cent.

IMPORT DUTIES—*continued.*

Order.	Articles Imported by Land or Sea.	Rate of Duty.		
		£	s.	d.
19	Apparel, Slops, Clothing, Underclothing, and articles of attire, not otherwise enumerated, whether wholly or partly made up (except Diving Dresses, including the Boots, Gloves, and Helmets for such Dresses) ad valorem	25	per cent.	
	*Boots and Shoes—English sizes of 1888 to be the standard (except Children's, 0 to 3, and slippers of straw only), viz.:—			
	Men's, No. 6 and upwards per doz. pairs	2	5	0
	Youths', Nos. 2-5 "	1	10	0
	Boys', Nos. 7-1 "	1	3	6
	Women's, Nos. 3 and upwards "	1	8	6
	Girls', Nos. 11-2... .. "	1	2	0
	" Nos. 7-10 "	0	15	6
	Children's, Nos. 4-6, and Slippers "	0	6	0
	With Uppers of Lasting or of other material not being Leather, with or without Leather Toe-caps, but not goloshed or vamped with Leather "	0	19	0
	Slippers, Nos. 7-2 "	0	9	0
	" Not otherwise mentioned "	0	12	0
	Shoes—Spiked "	0	12	0
	Goloshes or Overshoes "	0	4	0
	Boots and Shoes of Indiarubber "	0	12	0
	Fur Skins—Dressed or Prepared for making up per lb.	0	0	2
	Fur—Hatters' (except Mungo) ad valorem	25	per cent.	
	Frilling, Ruffling, Plaitings, Ruchings "			
	Feathers for ornamental purposes "			
	Gloves "	20	per cent.	
	Hair—Articles of artificial human hair manufactured, viz., Headdresses, Hair Plaits, Hair Plait Stems, Side Pads, Chignons "	25	per cent.	
	Curled per lb.	0	0	2
	Handkerchiefs (except of Cotton or Linen only), whether made up or in the piece ad valorem	10	per cent.	
	Hats, Caps, and Bonnets (except of Braid, Chip, Straw, Tape, Willow, untrimmed and all such being both untrimmed and unlined, Paper or glazed Calico not being considered lining), viz.:—			
	Hats and Caps—Cloth, sewn, and not upon any foundation or frame per dozen	0	8	0
	Hats—Children's, Boys', Men's, or Women's Felt, and Pith Hats or Helmets "	1	0	0
	Hats, with a Calico or other foundation or frame, and covered with any material "	1	10	0
	Hats—Dress "	3	0	0
	Hats, Caps, and Bonnets, all other ad valorem	25	per cent.	
	Hoods—Felt, Pull-over Hoods, and any article of felt prepared for the manufacture of hats per dozen	0	5	0
	†Hosiery (except of Cotton, Linen, and Elastic Silk Stockings for surgical purposes or otherwise specified) ad valorem	25	per cent.	

* For Boot-Uppers, etc., see "Leather," Order 24.

† Hosiery means Stockings, Socks, and other Machine or Hand knit Covering for the feet or legs, and no other articles. (Sec. 7, Act 769.)

IMPORT DUTIES—continued.

Order.	Articles Imported by Land or Sea.	Rate of Duty.		
		£	s.	d.
19	Parasols, Sunshades, and Umbrellas, with or without Covers, made up wholly or in part, viz. :—			
	From Materials not containing Silk each	0	1	0
	„ containing Silk „	0	2	6
	Parasol, Sunshade, and Umbrella Sticks, when wholly or partly fitted with Frames „	0	1	0
	Waterproof rugs and Horse Clothing ad valorem	25 per cent.		
20	Bags and Sacks (except Gunnies and Sugar Mats), the capacity of which is less than 3 bushels per dozen	0	0	6
	Cordage (except unserviceable, when cut into lengths of not over 3 feet, Metal Cordage, Coir Yarn, Reaper and Binder Twine), viz. :—			
	Coir Rope per cwt.	0	5	0
	Other Cordage, including Engine Packing (not being Sheet) and Housing and Seizing Lines, and Spunyarn „	0	12	0
	Cloths—Oil and other Floor ad valorem	20 per cent.		
	Matting—Coir, Jute „	25 „		
	Mats „	25 per cent.		
	Reaper and Binder Twine and Yarn made from Jute, Hemp, or Flax per cwt.	0	8	0
	Twine (except sewing or seaming of Hemp, Cotton, or Flax) per lb.	0	0	2½
	Butter „	0	0	2
	Butterine and Oleomargarine „	0	1	0
21	Cheese „	0	0	2
	Eggs per gross	0	2	0
	Fish (<i>see</i> Meats).			
	Honey per pt. or lb.*	0	0	2
	Meats and Fish—Potted; and Meats, Fish, Soups, and Vegetables—Extracts of, or concentrated ad valorem	20 per cent.		
	Meats and Fish—Preserved; not salted, or dried, or preserved in brine per pt. or lb.*	0	0	2
	Hams per lb.	0	0	2
	Bacon „	0	0	2
	Provisions (including Vegetables), salted, dried, or preserved in brine (except fish not otherwise enumerated) per cwt.	0	5	0
	Almonds per lb. or pt.*	0	0	2
	Arrowroot „	0	0	2
22	Biscuits per lb.	0	0	2
	Confectionery, Comfits, Succades, Sweetmeats per pt. or lb.*	0	0	2
	Fruits and Vegetables—Dried or preserved per lb.	0	0	2
	„ Preserved (not dried) packed in bottles, jars, or other vessels, as under :—			
	Quarts and over a pint per doz.	0	6	0
	Pints and over half-a-pint „	0	3	0
	Half-pints and smaller sizes „	0	1	6
	Over a quart and not exceeding a gallon „	0	18	0
	Fruits—Boiled, or partly boiled, or pulp per lb.	0	0	3
	„ Green, not otherwise enumerated per bush.	0	1	6
	„ „ being Oranges or Lemons „	0	0	9

* Per pint or lb., or reputed package of that quantity or weight, and so in proportion for any such reputed quantity or weight.

IMPORT DUTIES—continued.

Order.	Articles Imported by Land or Sea.	Rate of Duty.		
		£	s.	d.
22	Grain, viz.:—			
	Oats and Barley per cental	0	3	0
	Maize, Peas, Beans, Wheat „	0	2	11
	Rice :—			
	Undressed, imported into any bonded warehouse and dressed therein „	0	4	0
	Paddy „	0	2	0
	Prepared, viz.:—			
	Barley—Pearl and Scotch „	0	7	6
	Oatmeal „	0	9	0
	Maizena, Maize Flour, or Corn Flour per pt. or lb.*	0	0	2
	Malt per bush.	0	4	6
	Grain and Pulse of every kind, not otherwise enumerated, when prepared or in any way manufactured per cental	0	5	0
	Jams or Jellies per pt. or lb.*	0	0	3
	Macaroni and Vermicelli „	0	0	2
	Molasses (except unrefined) per cwt.	0	3	0
	Nuts (except Cocoanuts and Candlenuts) per lb.*	0	0	2
	Onions per ton	1	0	0
	Peel, candied, drained, or preserved per lb.	0	0	2
	Potatoes per ton	0	10	0
	Sugar :—			
	The produce of Beet-root and all other Sugar per cwt.	0	6	0
	„ Sugar-cane „	0	3	0
	„ „ bonded on and after the 27th July, 1887, and refined in Victoria in a bonded warehouse under regulations to be framed by the Governor-in-Council „	0	2	0
	Sugar Candy per pt. or lb.*	0	0	2
	Vegetables (see Provisions, Order 21, and Fruits <i>ante</i>).			
23	Ale, Porter, Spruce, and other beer, Cider and Perry per gallon †	0	0	9
	Beer, Lager—quarts per dozen	0	3	0
	„ pints „	0	1	6
	Coffee, Cocoa, Chicory, Chocolate per lb.	0	0	3
	Hops „	0	0	8
	Mustard „	0	0	2
	Milk—Preserved per pt. or lb.*	0	0	2
	Perfumery ad valorem	20 per cent.		
	Pickles (packed in Bottles, Jars, or other vessels, not exceeding one gallon in size) as under :—			
	Quarts and over a pint per dozen	0	3	0
	Pints and over half-a-pint „	0	2	6
	Half-pints and smaller sizes „	0	1	0
	Over a quart and not exceeding a gallon „	0	12	0
	Pickles, all other ad valorem	20 per cent.		
	Salt (except rock salt) per ton	1	0	0
	Sauces, packed in Bottles, Jars, or other vessels, not exceeding one gallon in size, as under, viz. :—			
	Quarts and over a pint per dozen	0	4	0
	Pints and over half-a-pint „	0	2	0

* Per pint or lb., or reputed package of that quantity or weight, and so in proportion for any such reputed quantity or weight.

† Or for six reputed quart bottles, or for 12 reputed pint bottles.

IMPORT DUTIES—continued.

Order.	Articles Imported by Land or Sea.	Rate of Duty.		
		£	s.	d.
23	Sauces, packed in Bottles, Jars, or other vessels, not exceeding one gallon in size, as under, viz. :—			
	Half-pints and smaller sizes per dozen	0	1	0
	Over a quart and not exceeding a gallon „	0	12	0
	All other ad valorem	10	per cent.	
	Spices, ground per pint or lb.*	0	0	2
	Spirits—Perfumed per gallon	1	4	0
	Spirits or Strong Waters of any strength not exceeding the strength of proof by Sykes' hydrometer, and so in proportion for any greater strength than the strength of proof „	0	12	0†
	Spirits, Cordials, Liqueurs, or Strong Waters, sweetened or mixed with any article, so that the degree of strength cannot be ascertained by Sykes' hydrometer (including all alcohol diluted or undiluted with water or other menstruum, and containing in solution any essence, essential oil, ether, or other flavouring or other substance, whether of natural or artificial origin) „	0	12	0
	Tea per lb.	0	0	1
	Tobacco (except Sheepwash, including tobacco soaked on the landing thereof from the importing ship or on delivery from the warehouse in turpentine, oil, or other fluid in the presence of some officer of Customs, so as to render it unfit and useless for human consumption) :—			
	Manufactured „	0	3	0
	Unmanufactured „	0	1	0
	Cigars „	0	6	0
	Snuff „	0	3	0
	Vinegar, not being Acetic Acid or Crude Vinegar, Aromatic or Raspberry per gallon	0	0	6
	Waters, Aërated or Mineral ad valorem	10	per cent.	
	‡ Wine—Sparkling per gallon	0	8	0
	„ Other „	0	6	0
24	Candles per lb.	0	0	2
	Combs—Toilet ad valorem	10	per cent.	
	Glue per lb.	0	0	2
	„ Liquid, and Liquid Gum and Cements ad valorem	20	per cent.	
	Grease—Antifriction per ton	3	0	0
	Leather—Wellington Fronts and Grafts per doz pairs.	0	6	0
	Uppers of Cashmere, Lasting, or Stuff „	0	3	0
	Clogs and Pattens ad valorem	20	per cent.	
	Leather (except Crust or Rough-tanned, viz. :—Calf, Goat, Hogskin, Sheep, or Kangaroo, when not exceeding seven pounds each Skin; and English Bend, sometimes called Butt) per lb.	0	0	6

* Per pint or lb., or reputed package of that quantity or weight, and so in proportion for any such reputed quantity or weight.

† Or 24s. for each reputed 2-gallon case, or 48s. for each reputed 4-gallon case, when the said cases respectively do not contain more than the reputed contents, and so on for each reputed gallon or part of a gallon.

‡ Wine containing more than 25 per cent. of alcohol of the S.G. .825 at the temperature of 60° Fahrenheit is chargeable with duty as spirits.

IMPORT DUTIES—continued.

Order.	Articles Imported by Land or Sea.	Rate of Duty.	
		£ s. d.	
24	Leather, being Furniture and Bookbinding Morocco, Roan, and Paste Grain Skiver per lb.	0 1 0	
	„ Laces „	0 1 0	
	„ Uppers—Closed, Men's per doz. pairs	1 4 0	
	„ „ „ Women's and Children's „	0 18 0	
	Leatherware, Harness, Saddles, or Articles made up of Leather, or any Manufacture of which Leather is the most valuable part, including Whips of any description, Trunks and Portmanteaus, and Leather cut into shapes, not otherwise enumerated... .. ad valorem.	25 per cent.	
	Soap—Perfumed and Toilet per lb.	0 0 4	
	„ other „	0 0 2	
	Stearine „	0 0 2	
	25	Buckets and Tubs (Wooden) ad valorem.	25 per cent.
		Beehives „	„
Boxes—Cardboard or Paper, including Paper or Cardboard (with or without Printing) cut into shapes for wrapping or boxing „		„	
Blue per lb.		0 0 2	
Corks, cut „		0 0 4	
Casks or Shooks, new or second-hand ad valorem		25 per cent.	
Paper (except Writing and Printing in original wrappers and uncut edges as it leaves the mill; Paperhangings and Millboard):—			
Cut per lb.		0 0 2	
Advertising Matter, Printed or Lithographed, or any Printed Plates, Lithographs, Pictures, Cards, or matter of a similar description used, or capable of being used, for advertising purposes „		0 0 4	
Cardboards and Pasteboards, on per cwt.		0 4 0	
Other „		0 6 0	
Paper Bags „		0 15 0	
Seeds—Canary ad valorem		10 per cent.	
Starch per lb.		0 0 2	
Timber and Building Materials:—			
Except	{ Ash, Australian and New Zealand Pine, Black-wood, Cedar, Hickory, Oak, Posts and Rails, Staves, Sycamore, Walnut, Whitewood	} Undressed.	
	Hardwood—Undressed logs, of the size of 9 inches square or larger		
	California Redwood, Sugar Pine, American White Pine, undressed, 1 inch and over		
	All other undressed, of the size of 7 inches by 2½ inches or larger		
	Spokes and Felloes of Hickory, in the rough		
	Spars, in the rough		

IMPORT DUTIES—continued.

Order.	Articles Imported by Land or Sea.	Rate of Duty.		
		£	s.	d.
25	Timber and Building Materials :—			
	Architraves and Mouldings of all sorts, wholly or partly prepared, under 3 inches per 100 ft. lin.	0	4	0
	Architraves and Mouldings of all sorts, wholly or partly prepared, 3 inches and over "	0	7	0
	Boards—Flooring } Dressed or } per 100 ft. sup.	0	1	6
	" Lining... .. } planed }			
	" Weather }			
	Doors not exceeding 1½ inch in thickness each	0	5	0
	" over 1½ inch and not exceeding 1¾ inch in thickness "	0	7	6
	" over 1¾ inch in thickness "	0	10	0
	Frames—Door, Window "	0	5	0
	Hardwood per 100 ft. sup.	0	2	0
	Laths per 1,000	0	5	0
	Palings per 100	0	0	9
	Pickets—Dressed "	0	6	6
	" Undressed "	0	0	6
	Sashes—Window, Unglazed per pair	0	2	0
	" " Glazed... .. "	0	3	0
	Shingles per 1,000	0	0	9
	Skirtings, wholly or partly prepared per 100 ft.lin.	0	7	0
	Spokes and Felloes in the rough per 100	0	0	6
	Staves, Shaped or Dressed ad valorem	25	per cent.	
	Timber of Sizes less than 7 inches by 2½ inches per 100 ft. sup.	0	2	6
	Timber—Bent } ad valorem	25	per cent.	
	" Finished }			
	" cut into Shapes, for making into Cases, Boxes, or similar articles per cub. ft.	0	0	6
	Wickerware ad valorem	25	per cent.	
	Woodenware, including Beehives, Bellows, Picture-frames, and Wooden Hames, Turnery (except Billiard Balls in the rough), Staves shaped or dressed, and Finished Timber not otherwise enumerated (except Artists' Materials, Engravers' Boxwood, Shafts and Poles in the rough, Ash Oars) "			
26	Oils, packed in Bottles, Jars, or other vessels, not exceeding one gallon in size, as under :—			
	Over a quart and not exceeding a gallon per dozen	0	12	0
	Quarts and over a pint "	0	4	0
	Pints and over half-a-pint "	0	2	0
	Half-pints and smaller sizes "	0	1	0
	Oils, in Bulk (except Cocoanut, Fish of all sorts, Mineral Refined of which the point of ignition is below 80° Fahr., Kerosene, Palm, Lubricating of which the chief component part is mineral) per gallon	0	0	6
	Oil and Paste—Furniture ad valorem	20	per cent.	
28	Charcoal and coal (ground) "			
29	Bottles—Glass or Stone, containing a reputed quart, or any less quantity of spirits (not perfumed), Wine, Ale, Porter, or other Beer, and Bottles containing Aërated or Mineral Waters per dozen	0	0	6

IMPORT DUTIES—continued.

Order.	Articles Imported by Land or Sea.	Rate of Duty.		
		£	s.	d.
29	Bottles, containing Pickles per dozen	0	0	3
	Brownware and Tiles ad valorem	20 per cent.		
	Chinaware and Porcelain (except Photographic, Scientific, and Telegraphic Materials) "	15 per cent.		
	Earthenware, including Packing (except Photographic, Scientific, and Telegraphic Materials), measuring outside the package as imported per cubic foot	0	0	8
	Glassware, including Packing (except Locket, Brooch, and Watch Glasses, and Optical, Surgical, and Scientific Instruments, and Photographic and Telegraphic Materials), viz.:—			
	Cut, Engraved, Etched, Frosted, Ground, Sandblast, and not otherwise enumerated, measuring outside the package as imported "	0	1	6
	Glass Bottles for Aërated Waters, measuring outside the package as imported "	0	0	6
	Glass Bottles for Medicines, measuring outside the package as imported "	0	0	6
	Other, measuring outside the package as imported "	0	0	6
	Glass, viz.:—			
	Bent, over 6 inches square	} ad valorem		
	Bevelled, over 6 inches square			
	Heraldic			
	Silvered			
	Corners—Cut, Bevelled, or Engraved			
	Marble and Stone, Wrought (except Slate Slabs not wholly manufactured, Lithographic Stones, and Stones for Milling and Grinding purposes) "	20 per cent.		
31	Gold and Silver Leaf per oz. troy	0	8	0
	" Plates of			
	Jewellery (except Cameos and Precious Stones unset), viz.:—			
	Rings of Gold, finished or unfinished, but without Cameos or Precious Stones set therein per dwt. troy	0	4	0
	All other, whether manufactured wholly or in part, including Imitation Jewellery, also cases containing Jewellery or Imitation Jewellery and Pencil Cases ad valorem	20 per cent.		
	Silver, Plates of per oz. troy	0	2	0
32	Barbed Wire per ton	3	0	0
	Buckets and Tubs ad valorem	25 per cent.		
	Fillets—Line, for Book-binders "	10 per cent.		
	Lead, Sheet and Piping per cwt.	0	2	6
	Metals, Manufactures of, and Machinery, not otherwise enumerated (except Portable Engines) ad valorem	35 per cent.		
	H Rolled Girder and Channel Iron			
	Castings, viz.:—			
	Cylinders—Hydraulic	} per ton		
	Pipes, and connections for same			
	Plates—Tank			
	Bars—Fire			
	Weights—Sash			

IMPORT DUTIES—continued.

Order.	Articles Imported by Land or Sea.	Rate of Duty.		
		£	s.	d.
32	Nails, Iron and Steel (except for Trunks and Grindery) ... per cwt.	0	5	0
	Nails, Horse-shoe	0	12	0
	Metalware, Plated and Mixed (except Door Handles, Locks, Shaft Tips, Stump and Finger Joints, and Slot Irons used in carriage building, Harness Mountings, and Plated Harness) ad valorem	20 per cent.		
	Rolls—Ornamental, for Bookbinders	10 per cent.		
	Typeholders for Bookbinders	"		
33	Live Stock, viz.:—			
	Bulls, Cows, Calves over 6 months old, Heifers, Oxen, Steers (except Working Bullocks in teams) ... each	0	5	0
	Colts, Fillies, Geldings, Horses, Mares, not in saddle or harness	0	5	0
	Sheep, whether Rams, Ewes, Wethers, or Lambs	0	0	6
	Pigs	0	2	0
35	Brushware (except Artists' Brushes) ad valorem	35 per cent.		
	Fancy Goods (except Artificial Flowers)	10 per cent.		
	Oilmen's Stores (except essential Oils and Essences not containing Alcohol), packed in Bottles or Jars not exceeding one reputed quart in size, or in Canisters or Vessels not exceeding one quart in size	20 per cent.		
	Oilmen's Stores, not otherwise enumerated (except Isinglass, uncut)	10 per cent.		

Exemptions.

Order.	Articles.	Order.	Articles.
3	Globes—School, mounted	10†	All Minor Articles of mixed or undescribed materials used in the making up of Saddlery
7	All Surgical Instruments or Appliances*	11†	Ships' Fittings
9†	Agricultural Implements, known as Reapers and Binders	13†	Furniture, second-hand, accompanying any passenger, which has been in such passenger's own use, up to £50 in value, which is not imported for sale
	Centrifugal Cream Separators	14	Matches—Wood, Safety
	Dairy Refrigerators and Separators	15	Carpeting, being Printed Felt
	Engines—Traction		Wool Piece Goods, being Collar Check
	Machines, not including the motive power, viz.:—Butter-Making, Eyelet, Knitting, Sheep-Shearing, Stitching	19	All Minor Articles of mixed or undescribed materials used in the making up of—
10†	All Carriages and other Vehicles used in the conveyance of passengers or goods across the frontier which have been registered with the Officers of Customs nearest the place where such Carriage or Vehicle may ply or pass, and in such manner as the Commissioner may by any order from time to time approve		Apparel
			Boots and Shoes
			Hats
			Umbrellas, Parasols, or Sunshades
			Gloves, other than Kid or Leather
			Slippers, of Straw only

* Provided that such Surgical Instruments or Appliances and Minor Articles are enumerated in any order of the Commissioner, and published in the *Government Gazette*. † See also under "Metals," Order 32.

IMPORT DUTIES—continued.

Exemptions—continued.

Order.	Articles.	Order.	Articles.
20	Jute Piece Goods	32	Metals—Manufactures of, and Machinery, viz.:—
	Matting (except Coir and Jute)		Cast Iron, being Oval Boilers, Camp Ovens, Digesters, Kettles; Brazing, Fry, Maslin, Preserving, Sauce, or Stew Pans; Danish, French, Glue, Oval, Plumbers' Stock, and Three-legged Pots; Tea Kitcheners or Fountains
22	Fruits—Green, viz.:—Bananas		Chaffcutter Knives
	„ „ Guavas		Chains
	„ „ Mangoes		„ Curtain
	„ „ Pine Apples		Cloth—Wire, over 36 mesh
	Grain—Rice imported into any bonded warehouse and manufactured into starch therein		Concentrators—Frew's (<i>for mining purposes</i>)
	Olives—Fresh		Conductors—Lightning
23	Coffee—Raw		Copper and Copperware, being Prepared plates for Engravers and Lithographers, Silver Plated Sheet, Perforated Sheet, Rivets, Washers
	Cocoa—Raw		Cornices in piece
	Spirits mixed with essential oils, so as to be unfit for human consumption to be used in the manufacture of soap, providing the mixture is performed in the presence of an officer of the Customs		Crucibles
24	Charcoal (Animal)—Ground		Cutlery—Iron or Steel
	Leather, viz., Kid, Calf Kid, Mock Kid, and Patent Calf		Detonators
25	Boxes—Cardboard, containing non-dutiable goods ordinarily imported therein		Digesters (Cast Iron)
	Candle Nuts		Door-fittings (except Handles and Plates)
26	Oils in bulk, viz., Resin		Firearms
29	Syphon Bottles for Aërated Water		Fittings (<i>See</i> Bell, Door, Meters, Pipes, Tubes, Window)
32	Galvanized machine-made wire netting		Fittings—Electric, viz., Arc Lamps without Globes, Carbons, Incandescent Lamps, Automatical Resistors, Transmitters, or Transformers, and Storage Batteries
	Metals—Manufactures of, and Machinery, viz.:—		Fountains—Tea (Cast Iron)
	Anchors		Furniture, Brassfoundry used in the manufacture of
	Anvils		Hames
	Balances—spring, to weigh up to 3 cwt.		Handles—Trunk
	Bands—Curtain		Hinges, except Hook and Eye and T
	Bar, not machined and in the rough		Hooks (Brass)
	Bell fittings		Hooks—Cornice
	Bells, 6 inches and under		Hooks—Curtain
	Bits (<i>for harness</i>)		Hoop, not machined and in the rough
	Blocks and Types—Printers'		Iron—Angle and T
	Blowers, for ventilating mines		Iron, Sheet—Corrugated
	Boilers—Oval (Cast Iron)		Irons—Box and Sad
	Brassfoundry used in the manufacture of Furniture		Irons—Stirrup
	Bushes—Patent Roller, for Block-making		
	Buttons		
	Caps—Percussion		

IMPORT DUTIES—continued.
Exemptions—continued.

Order.	Articles.	Order.	Articles.
32	<p>Metals—Manufactures of, and Machinery, viz.:—</p> <p>Kettles (Cast Iron)</p> <p>Kitcheners—Tea (Cast Iron)</p> <p>Knives—Chaffcutter</p> <p>Knives—Reaping Machine</p> <p>Latches</p> <p>Locks</p> <p>Lightning Conductors</p> <p>Machinery for Carding, Spinning, Weaving, and Finishing the manufacture of fibrous material, and Cards for such Machinery</p> <p>Machinery for Telegraph purposes</p> <p>Machinery used in the manufacture of Paper and for Felting, including Wire-cloth and Felts</p> <p>Machines, viz., Button Making, Eyelet, Knitting, Sheep-shearing, Stitching, Dairy Refrigerators and Separators, on and after 1st January, 1890</p> <p>Machines—Printing</p> <p>Machines—Sewing</p> <p>Machines known as Centrifugal Cream Separators</p> <p>NOTE.—Exemption of Machines does not apply to the motive power thereof (if any)</p> <p>Meters—Gas, Internal Fittings of, when imported in parts not put together</p> <p>Mortars and Pestles</p> <p>Netting—Wire, Galvanized, Machine-made</p> <p>Ovens—Camp (Cast Iron)</p> <p>Pans (Cast Iron), viz.—Brazing, Fry, Maslin, Preserving, Sauce, Stew</p> <p>Pestles and Mortars</p> <p>Pig</p> <p>Pins—Gimp</p> <p>Pipes and Tubes, viz., Brass-cased, Brazed Copper, Solid-drawn, Welded, and Fittings for same, except the Cocks</p> <p>Plate, not machined and in the rough</p> <p>Plates (Copper), prepared for Engravers and Lithographers</p> <p>Plates—Decorated Tin, for manufacturing Tinware</p> <p>Pots (Cast Iron), viz., Danish, French, Glue, Oval, Plumbers', Stock, Three-legged</p> <p>Presses—Printing</p>	32	<p>Metals—Manufactures of, and Machinery, viz.:—</p> <p>Primers</p> <p>Pulleys, under 4 inches</p> <p>Rails—Tram and Railway</p> <p>Reaping Machine Knives</p> <p>Rings—Curtain</p> <p>Rivets (Copper)</p> <p>Rod, not machined and in the rough</p> <p>Scales, to weigh up to 3 cwt.</p> <p>Saws of all kinds, but not the Machinery connected therewith</p> <p>Scrap</p> <p>Screws—Cork, Galvanized, Hand, Table, Wood</p> <p>Sheet, not machined and in the rough</p> <p>Sheet (Copper) Silver Plated</p> <p>Sheet (Copper) perforated</p> <p>Slides—Cornice</p> <p>Spokes, not machined and in the rough</p> <p>Spoons—Iron or Steel</p> <p>Springs—Buffer</p> <p>Steelyards, to weigh up to 3 cwt.</p> <p>Tacks, 1 inch and under</p> <p>Tires of Steel, in the rough</p> <p>Tools of Trade, not being Machinery (except Napping, Spalling, and Quartz Hammers, Picks, Mattocks, Gas and Blacksmiths' Tongs, Crowbars, Mauls, Wedges, Soldering Irons)</p> <p>Traps—Vermin</p> <p>Tubes and Pipes, viz.—Brass-cased, Brazed Copper, Solid-drawn, Welded, and Fittings for same, except the Cocks</p> <p>Types—Printers' and Bass</p> <p>Washers (Copper)</p> <p>Window Fittings (except Shutters, Blinds, Poles and Cornices)</p> <p>Wire, not machined and in the rough</p>
		36	<p>Asphyxiators for Rabbit Killing</p> <p>Goods, Wares and Merchandise for the supply of Her Majesty's land or sea forces, or for the use of Her Majesty's Government</p> <p>All packages in which goods are ordinarily imported, not otherwise enumerated</p> <p>All packages, second-hand, in which ships' stores have been imported</p> <p>Passengers' luggage, being cabin furniture and personal luggage.</p>

EXPORT DUTY.

Order.	Article.	Rate of Duty.
32	Scrap iron per ton	£ s. d. 3 0 0

EXCISE.

Order.	Articles.	Rate of Duty.
23	Spirits distilled in Victoria— From malt, grain, roots, grapes, or wine per gallon*	£ s. d. 0 8 0
	From sugar, treacle, or molasses, or from wort wash or spent wash with which sugar, treacle or molasses has been made or mixed, or from beer or ale „	0 10 0
	Tobacco } Manufactured in any tobacco factory, Snuff } on being entered for home consump- Cigars and Cigarettes } tion per lb.	0 0 6

* Such duties on spirits respectively shall be paid on the gallon standard measure of spirits of the strength of proof by Sykes' hydrometer, and so in proportion for any greater or less strength than proof.

APPENDIX C.

NOTES OF AN OFFICIAL VISIT TO MILDURA.*

(By Mr. STUART MURRAY, Chief Engineer of Water Supply.)

THE WORK DONE BY MESSRS. CHAFFEY.

The agreement between the Government and the Messrs. Chaffey sets out that they are to obtain the fee-simple of two-blocks, each of 25,000 acres, by their expending thereon a sum of not less than £5 per acre; and that the Government may concede to them a further area of 200,000 acres, by their expending a sum equal to £1 per acre, and paying £1 per acre purchase-money. To date the company have expended at Mildura a sum of £183,000, as shown by vouchers submitted to the Water Supply Department, and they have obtained Crown grants for 13,200 acres, and are now applying for further grants for 2,800, all forming part of the first of the two 25,000-acre blocks before referred to. Of the land granted to them, they have sold (exclusive of the township of Mildura) 10,500 acres in agricultural and horticultural lots. Of the sold area, 6,500 acres have been cleared and brought under tillage, whereof 6,000 acres have been, or are in process of being, planted with vines or fruit trees, and 500 acres are under forage or grain crops. The most extensive plantations are of raisin vines, next to which come oranges and lemons. There are also considerable areas under apricots and peaches, figs, and some olives. As yet not more than 50 acres have been planted with wine grapes. The plantations are of course too young yet to have yielded any returns of commercial value, but it is anticipated that during the forthcoming summer they will give 10 tons of marketable raisins, and 4,000 or 5,000 gallons of wine, besides a quantity of green fruit that will be consumed locally. The entire present population of the Mildura settlement numbers, as nearly as could be ascertained, somewhat over 3,000 persons, who may be described as follows :—

Men employed by the Messrs. Chaffey	...	...	...	300
Contractors and their employés	...	...	...	100
Resident agricultural settlers	...	...	...	950
Shopkeepers and business people	...	...	...	450
Women, mostly married	...	...	...	600
Children of school age	...	...	...	420
Other children	...	...	...	200
Sundries, unclassified	...	...	...	130
Total	...	...	...	3,150

Of these about 750 are resident within the township; the remaining 2,400 are scattered throughout the rural district.

THE POPULATION

differs considerably in character from that to be found in any other country district in Victoria, its most striking feature being a new element that seems everywhere prevalent. The large proportion of men whose appearance, language, manners, and even dress denote their origin as being from the wealthier class of society, is indeed surprising. And let it not be supposed that these men evince any disinclination for hard work. Many of them were to be seen employed on their allotments, and not a few in the day-labour gangs, content to earn from 6s. 6d. to 8s. per day while their own trees were growing, and doing as hard and as honest a day's work as any navvy or farm labourer in the country. The settlers of this class are almost all young men.

* See Fourth Annual General Report by the Secretary for Water Supply, page 70, Parliamentary Paper No. 147, Session 1890. The date of the visit was about the middle of September, 1890.

Some of them are Victorians, and a few from the adjoining colonies; but many, probably the majority, have emigrated to Mildura direct from Great Britain; so that we have here represented many of the well-known public schools and colleges of England and Scotland. The Mildura settlement has recently been created a shire under the provisions of the *Local Government Act*; and the annual rateable value of the property within the municipality is £30,000, a fact which, to those who have been connected with local government business, will convey more information than a volume of statistics.

THE PRINCIPAL BUILDINGS

in the township are of brick, several of two stories; others are of wood or of galvanized iron. The architectural features, as well as the surroundings of the place, are much superior to those of the ordinary bush township, and are quite equal to the better portions of provincial towns. Among the more important public buildings may be mentioned the Post and Telegraph Office, the Custom House, the State School, the Assembly Hall, the Wesleyan Church; and among private buildings the offices of Chaffey and Co. Limited, the Coffee Palace (with accommodation for 40 guests), the store and residence of Messrs. Williams and Co. in Deakin Avenue, Messrs. Neville's store, and the foundry and workshops of the company. In course of erection near the landing place are extensive joinery works for the manufacture of fruit cases, and cool stores for the safe bestowal of fresh fruit and other perishable products awaiting transport.

THE WATER SUPPLY

to the township is supplied by a powerful steam-pumping plant, erected on the river bank just below the landing place; and it is distributed through wrought-iron pipes laid along each street, the tapplings for the services being made through solid wrought-iron collars, which are riveted on at frequent intervals. It has been suggested that a brick tower and wrought-iron service tank should be erected on an elevated site in the town so as to provide a constant and uniform pressure in the street mains, and to obviate the necessity for keeping the pumps running during the night. The needs of the irrigators are supplied from a system of open earthen channels, differing in no respect from those now existing in many of the water trust districts of the colony, and which are themselves supplied from the Murray by pumps, the raising of the water to the higher levels being in three separate lifts. The station for the first lift is at a point on the river known as Psyche Bend, about five miles by road above the township. Here the water is to be thrown into the head of a lagoon, which, being separated from the river by a substantial embankment, will form a convenient reservoir. The works at this station had made considerable progress prior to Mr. Deakin's former visit to Mildura, fifteen months ago. Little has been done to them since, the floods of the past two winters having been sufficient to fill the lagoon without the aid of pumping, and the sites of the engine beds and works being at the present moment submerged to such a depth that even coffer-damming would be a work of some difficulty. The lift from the summer level of the Murray to the top water level of the lagoon is 24 feet; but, although the water surface frequently falls below summer level, and so remains for several months during some dry seasons, the actual lift will rarely be so great, because the water surface in the lagoon will not, as a rule, be maintained at its full height. In fact the pumps at the next station are designed to lift from as low as 15 feet above summer level—that is, 9 feet below the top water surface of the lagoon. The next, or No. 3 pumping station, is on the lagoon, and about two miles nearer to the township than Psyche Bend. The plant, which has just been completed, is a very powerful and perfect one. It consists of four 20-inch centrifugal pumps, driven by a triple expansion four-cylindere engine, of 1,000 indicated horse-power, and supplied with steam by two pairs of multitubular steel boilers, each 3 feet 6 inches by 14 feet. The housing is of brickwork, both substantial and ornamental, finished internally and externally in a style not generally seen in engine-houses; and the boiler house has room for another pair of multitubular boilers, which will make, with those in position, six in all. The rising main that delivers the water from the lagoon into the 50 feet channel—that is, the channel whose water surface is 50 feet above the summer level of the river—is 48 inches diameter, of wrought riveted boiler plate. This plant having just been finished, and not yet at work, the service is

being performed temporarily by a 20-inch centrifugal pump driven by a Tangye engine. The next pumping station is at a place known as Nichol's Point, about a mile above the township; and here the water is raised from the 50 feet into the 70 feet and 85 feet channels, the latter being probably the highest level main that will be constructed on the settlement. The pumping machinery at this station has been completed some time, and the party had an opportunity of seeing it at work. It consists of two 20-inch Allen's centrifugal pumps, driven by a triple-expansion engine of 450 indicated horse-power, supplied with steam from a pair of multitubular steam boilers of the same pattern as those at the station on the lagoon. These boilers are capable of working up to a pressure of 160 lbs. of steam. The whole of the plant is housed in substantial and elegant brick buildings; the walls plastered inside and ornamented with painted dados, and the ceilings lined with varnished pine. The designs of some of the machinery, notably of the four-cylindere engine at the No. 3 station, and the arrangement of the whole of the plant, is the work of Mr. George Chaffey. Several novel features have been introduced, which, it is claimed, conduce to economy of fuel and general efficiency. As to the workmanship and execution generally, suffice it to say that better was never turned out. Basins lined with cement concrete, and fitted with cast-iron sluice-gates, are constructed on the channels at the inlets and the outlets of the suction and delivery-pipes. The three lines of main channel above referred to, the 50 feet, the 70 feet, and the 85 feet levels, have already been constructed to a total aggregate length of 70 miles, and there are connected with them 140 miles of distributary channels. Extensions are being pushed rapidly forward to provide for the service of the further areas of land that are being constantly laid out and prepared for settlement. The pumping plant at the three stations referred to, with the three lines of main channel and their dependent system of distributaries, will, when completed, provide for the irrigation of the whole of the lands of one 25,000-acre block. All the allotments at present under tillage are supplied from these channels, the extensions keeping pace with the progress of settlement, excepting only the estate of Lord Ranfurley's party. This property is situated down the river, some miles below Mildura township; and is supplied by a separate pumping plant, of one 8-inch centrifugal, driven by a small steam engine. It has also a separate system of channels, which are lined throughout with cement concrete, to avoid waste of water by soakage, and fitted at short intervals with iron outlets to the service ditches, closed by plugs that can be readily removed and replaced by hand.

THE CLEARING AND BREAKING UP OF LAND

in preparation for planting is for the most part carried out by the firm at contract rates, though a few of the settlers have elected to clear and break up their own. The firm also arranged to provide young trees for those who choose to buy from them, and in some cases do the planting as well. There are, however, several private nurseries already established at the settlement; so that the Messrs. Chaffey have not a monopoly, and the prices of stock are likely to be kept down by competition to reasonable limits. Powerful traction engines are employed in the work of clearing; and the great bulbous roots of the mallee, after being slightly loosened from the ground by the pick and shovel, have a steel wire cable passed round them, and are torn bodily from the earth by sheer force. They are then cut up into convenient pieces for fuel for the engines. Roots of as much as half a ton weight, and even more, are thus disposed of without apparent difficulty. For the breaking up of the ground, cultivators, which are in effect simply gigantic scarifiers, with a steering wheel and hand gear, and a seat for the driver, are employed. The tines of these machines tear up the soil, without, however, turning it over, to a depth of 18 inches. In the preparation of land for planting it is twice scarified by the cultivator, the second working being at right angles to the first. The implement is drawn across the field by traction-engines, one placed at each side, and connected to it by steel wire ropes, running on winding drums. Each pair of traction-engines and cultivator can get over ten acres per day, scarifying it twice to 18 inches depth, that is, twenty acres per day once worked. There are at present eight powerful traction-engines and two of those huge cultivators employed in the work of clearing and breaking up. After the second cultivation the surface of the land is graded—that is, reduced to a series of uniform slopes. This is accomplished by removing the earth from the high

places, and depositing it in the hollows, scoops being employed for the purpose. The finishing touches are given with an implement known as the buck-scraper, which leaves the land as smooth almost as the surface of a bowling green. The buck-scraper now in use at Mildura, it may be mentioned by way of parenthesis, differs considerably from that of which the pattern was sent from California by Mr. Derry, when he accompanied Mr. Deakin on his visit to America. The old buck-scraper, which is now in common use in the colony, is in effect a beam with a cutting edge, with a projecting arm behind for regulating the angle of the cut. The improved scraper, on the other hand, is a scoop with a cutting edge in front, the blade being horizontal when the scoop is in its normal position. Those seen in use were 7 feet long, 2 feet wide, including the cutter, and 8 inches deep at the back, the bed being perfectly flat. They have a short projecting arm behind, by means of which the driver regulates the depth of cut, causes the scoop to tip and deposit its load where required, spread it out with any required degree of thinness, and smooth it down to a fine, compact surface. These scrapers were usually drawn by four horses. The final operations consist in picking up and burning off the sticks and roots torn up and left on the surface by the cultivators, and reducing the land to a fine tilth by means of the disc harrows. To aid in the operations of grading and finishing a little water is used. It helps the eye to determine the lay of the surface, and it mellows the soil, and renders it more amenable to treatment. This description applies to the preparation of land for planting with fruit trees or vines. The preparation for lucerne, hay crops, or pastures, is similarly performed, except that the surface, instead of being laid out in a succession of slopes, is divided into level, or nearly level, terraces, separated by shallow ditches with low embankments, called checks. The irrigation of young vines and fruit trees is performed by drawing a light plough furrow down each side of each row of trees or vines, running the water down the furrows from the service channel, and checking it where necessary with the spade or hoe, so that it soaks into the roots of each plant. After each watering, when the ground has sufficiently dried, the whole of the surface is lightly stirred by a horse hoe or small scarifier, an operation which restrains evaporation from the soil, and checks the growth of weeds. Great importance is attached to the cultivation of the ground after watering. It is even said that, if the subsoil be well saturated in the winter, established plantations, where the roots have got well down, may be pulled through a severe summer by means of frequent cultivation alone. No exact information could be obtained as to the actual quantity of water used, or expected to be used, on any given area of land.

THE DISTRIBUTARY CHANNELS,

however, are designed so as to be able to carry a volume of 60 cubic feet of water per minute, for 24 hours once in each month, for every 10 acres commanded by them. If the channels are kept constantly running, with a full supply, this would be equivalent to 24-inch acres per month for every 10-acre block, the inch-acre being a volume equal to a depth of 1 inch over an area of 1 acre. Or, to put it in another way, it would be equal to a gross depth of 12 inches over all the land commanded during a full summer season of five months. In practice this might mean a net depth of 10 inches applied to the land, in the same time, after allowing for inevitable waste in conveyance and distribution. Besides the more practical business of cultivating fruit and other crops for sale, many of the settlers have devoted considerable attention to the adornment of their dwellings and homesteads. There were hardly to be seen any such miserable erections of weatherboards and galvanized iron as everywhere disfigure the northern plains, even in districts that have been settled for fifteen or eighteen years. On the contrary, most of the houses had some pretensions to merit, from an architectural point of view; while several might fairly be described as artistic in design and surroundings. Flower gardens were frequent, and a few of the better homesteads were surrounded by infant shrubberies, in which in a few years they will be completely embowered.

In an official report on the condition and progress of the Mildura settlement, presented by the Chief Engineer of Water Supply about two years and a half ago, attention was called to what then seemed the necessity for reserving strips of land for

THE GROWTH OF TIMBER,

both for climatic reasons and to maintain a supply of fuel. It was suggested in

that report that a reservation for these purposes of about one acre in sixteen of the total handed over would probably prove sufficient. The Messrs. Chaffey now explain that there are numerous strips, ridges, and low dunes lying above the level of the channels, which could not be economically supplied with water. These amount in the aggregate to more than one-sixteenth of the total area. It is stated to be the intention to have them permanently set apart for timber plantations; and if this be so, the difficulty pointed out will be satisfactorily disposed of. Another question that will demand early and serious attention is that of

SANITATION.

The water supply for the town is pumped from the river at a point immediately below where the boats lie when delivering or taking in cargo. During the two days that the "*Ellen*" lay at the Mildura landing, there were two others of considerable size also moored there, with their crews on board, and boats are at all times coming and going. This may not give rise to any trouble while the river is in flood, but it is likely soon to prove otherwise when it is low, unless proper steps be taken. When the town shall have grown sufficiently to warrant such a course, probably the best way will be to subject the water intended for its supply to precipitation by lime. Experience in Europe has shown this to be a very efficient means of purifying water intended for human consumption. Dr. Katz's analysis of that supplied from the Coliban system confirms the results of this experience. The method is, moreover, one that involves comparatively little cost, and is simple and easy of application. Regulations might, however, be framed with a view to minimize the pollution of the river by boats lying at the wharves. The agricultural settlers would do well to provide themselves with house tanks, when they might collect from their roofs sufficient rain-water to meet demands for drinking; the water from the channels being used for cleansing, and for all such purposes as involve boiling and the consequent destruction of dangerous germs. Other sanitary measures will readily suggest themselves that could be easily given effect to in a country where the soil is generally dry and sandy, and where lime can be procured almost anywhere, at shallow depths, for the mere labour of digging and burning.

THE QUANTITY OF WATER AVAILABLE.

The fear that has been expressed in some quarters that the waters of the Murray River would be depleted by the withdrawal of the volumes required for the use of the irrigation settlements is one that does not seem likely to be soon realized. The surface of water in the river at Mildura is at present 22 feet above the ordinary summer level. The mean width of the river channel is not less than 400 feet, and the mean depth of this width above summer level not less than 16 feet. There are, therefore, in every mile of the river channel, in round numbers, 34,000,000 cubic feet of water over and above the summer level; that is, in every mile, 7,000 inch-acres of surplus or flood water, after making the most liberal allowance for loss by percolation, evaporation, and waste in the using. The distance by the river from Mildura to Swan Hill is about 460 miles; so that the volume of flood water at any moment in this section of the river alone, in its present state, is equal to 2,820,000 effective inch-acres. The area of that entire block set apart for settlement at Mildura is 250,000 acres, whereof probably 200,000 will be the maximum at any time irrigated. The block of flood water in the section referred to, therefore, would be equal to putting a depth of 14 inches of water over the entire irrigable surface of the Mildura settlement. But the mean current of the river is not less than $1\frac{1}{2}$ mile per hour, so that the block of 460 miles would be renewed by displacement every thirteen days. That is to say, in

THE PRESENT CONDITION OF THE RIVER,

the flood water in this length alone would be sufficient to put 14 inches of water over the whole Mildura settlement rather oftener than once a fortnight, while a total depth of 10 inches in an entire summer is the maximum proposed to be used. The river has been in high flood for the past three or four months, and is likely

to remain pretty high for some months yet to come. It was also in a still higher condition of flood during the whole of the winter of 1889. Reflection on these facts should convince the most sceptical that we are very far from having mortgaged the available water of the Murray. On the contrary, it should enable us to see that, to permit these vast volumes of fertilizing fluid to pass on unused to the ocean, instead of turning them to account for the sustenance and delectation of man, is to commit a crime. Another reflection that forces itself upon one, when looking at the progress of the irrigation settlements on the Murray River and elsewhere in Victoria, is the opportunity here offered to the disinherited of fortune, and those who have been worsted in the struggle to establish a footing for themselves, or have wearied of maintaining the fight, to commence life afresh under new and promising conditions. To make a start here does not demand any great amount of capital, especially if the settler be willing and able to labour with his own hands. He can buy land on credit by the payment of a very moderate deposit. He may also obtain employment at fair wages, the balance of which, after providing for his own maintenance, he may invest in the clearing, cultivation, and planting of his land. Or if he has enough money to buy, prepare, and plant his selection, and to keep him until his trees begin to bear a marketable crop, he may at once assume the position of an owner of the most valuable kind of property, without encumbrances.

[illegible][illegible]

SUMMARY OF THE AGRICULTURAL STATISTICS OF VICTORIA FROM 1836 TO 1889-90 INCLUSIVE.

Year.	Total Area Cultivated.	Area under each description of Tillage.																			Produce Raised.																							Year.					
		Wheat.	Oats.	Barley.	Maize.	Rye.	Pease and Beans.	Potatoes.	Turnips.	Mangel-wurzel.	Beet, Carrots, Parsnips.	Onions.	Hay.	Green Forage.	Chicory.	Grass and Clover Seeds.	Hops.	Tobacco.	Vines.	Other Crops.	Gardens and Orchards.	Land in Fallow.	Wheat.	Oats.	Barley.	Maize.	Rye.	Pease and Beans.	Potatoes.	Turnips.	Mangel-wurzel.	Beet, Carrots, Parsnips, etc.	Onions.	Hay.	Chicory.	Grass and Clover Seeds.	Hops.	Tobacco.	Grapes not made into Wine.	Grapes made into Wine.	Wine made.	Brandy made.							
	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	acres.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	tons.	tons.	tons.	tons.	cwt.	tons.	tons.	bushels.	cwt.	cwt.	cwt.	galls.	galls.								
1836	50	50	1836			
1837	1837		
1838	149½	82½	22½	...	20	20	4½	1838		
1839	2,069	1,302	252	161	140	22	...	192	12,600	1839		
1840	3,210	1,940	820	300	150	50,420	26,950	9,000	300	1840		
1841	4,881	1,702	1,285	353	82	5	...	932	450	72	47,840	37,325	9,385	1,200	900	1841			
1842	8,124½	2,432	2,410	761	68	1,419	850	171	10	3½	55,360	66,100	20,025	1,360	5,996	2,300	1842		
1843	12,072½	4,674	2,560	1,063	77½	2,069	1,622	3	4	104,040	70,789	25,156	6,933	2,661	1843		
1844	16,529½	6,919½	3,082½	1,636½	106½	...	2	2,487	1,772½	509½	2½	10½	138,436	43,361	40,080	3,290	12,418	6,459	1844		
1845	25,133½	11,466½	4,817	749	76½	2,041½	5,000	945	½	37½	234,734	71,368	39,289	1,980	11,138	9,640	1845	
1846-7	31,578½	15,802	6,099	1,691½	121½	...	1	2,140½	4,547	1,098	345,946	185,856	47,737	3,330	20	9,024	9,303	1,993	...	2,600	1846-7			
1847-8	36,289½	17,679½	7,173	2,161½	130½	...	1	2,638½	5,073½	1,330½	349,730	207,385	29,115	3,630	20	7,255	9,891	1,863	1,300	1847-8			
1848-9	40,279½	19,387½	8,289	2,579½	148	2,577½	5,903	1,287	410,220	78,877	36,403	3,928	11,988	10,625	1848-9		
1849-50	45,975½	24,247	5,379½	2,303½	28½	2,151	11,180½	519½	525,190	129,602	53,913	235	5,929	15,640	1849-50		
1850-51	52,340½	28,510½	5,007½	2,101½	24½	2,837½	13,567	130	556,167	99,535	40,144	4	5,613	20,971	1850-51		
1851-2	57,472	29,623½	6,426½	1,327½	11	4	...	2,375½	16,822	708½	733,321	132,311	34,331	586	5,988	29,692	1851-2	
1852-3	36,771½	16,823	2,947½	411½	1	1,978½	14,101½	401½	498,704	96,980	9,431	61	4,512	21,287	1852-3	
1853-4	34,816½	7,553½	2,289	411	19½	13	...	1,636½	21,829½	891	11½	162½	154,202	50,787	10,269	60	200	2,752	33,918	1853-4	
1854-5	54,905	12,827	5,341	691	35½	18	...	3,297½	31,514	958½	250,091	130,746	14,339	387	8,383	53,627	1854-5	
1855-6	115,135½	42,686	17,800	1,548½	121½	...	84½	11,017½	355½	17½	22½	38½	40,188½	1,025	1,148,011	614,614	45,151	3,142	...	2,377	59,797	2,299	1855-6	
1856-7	179,982½	80,154½	25,024½	2,233½	326½	16,281½	512½	108½	64½	24½	51,987	969½	1,858,756	641,679	69,548	8,308	1856-7
1857-8	237,728½	87,230	40,222½	5,409	445½	20,697½	355	119	63½	...	75,536	2,074½	1,808,439	1,249,800	156,459	6,558	...	2,797	51,116	1,684	2,876	268	1857-8
1858-9	298,959½	78,234	77,526½	5,322	480	57½	...	30,026½	332	185½																																							

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