PART IV.—VITAL STATISTICS.

404. The marriages celebrated in 1892 numbered 7,723, as against 8,780 in 1891, 9,187 in 1890, and 9,194 in 1889. Marriages, 1892.

405. The marriages returned in 1892, although fewer than in the six previous years, were more numerous than those in any year prior to those. The number returned annually had been almost stationary during the seven years prior to 1880, but in that year an advance was made which continued until 1890. In 1882, for the first time, the marriages returned exceeded 6,000; in 1884 they exceeded 7,000; in 1888 they nearly reached 9,000; and in 1889 and 1890 they exceeded that number by nearly 200*; but in 1891 they again fell below 9,000; and in 1892 they fell below 8,000. Marriages, 1892 and former years.

406. The proportion which the number of marriages bears 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 from 1866 to 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, until the period between 1888 and 1890, when it again exceeded 8 per 1,000, for the first time since 1862. In 1891 a somewhat sudden fall took place to 7·66 per 1,000, which was about the same average as that prevailing during the four years prior to 1888, and in 1892 a still further fall to 6·64. The following table gives the number of marriages and number of persons married per 1,000 of the population during 1860 and each subsequent fifth year, also in 1891 and 1892:— Marriage rate.

ANNUAL MARRIAGE RATE, 1860 TO 1892.

Year.	Per 1,000 of the Mean Population.	
	Number of Marriages.	Numbers of Persons Married.
1860	8·15	16·30
1865	7·36	14·72
1870	6·63	13·26
1875	6·33	12·66
1880	6·22	12·44
1885	7·73	15·46
1890	8·21	16·42
1891	7·66	15·32
1892	6·64	13·28
Mean of 33 years	7·15	14·30

* 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.

Marriage rate at various periods.

407. 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 six census years ended with 1891:—

PROPORTION OF MARRIAGES TO POPULATION† AND TO SINGLE MEN AND WOMEN, 1854 TO 1891.

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

Fluctuations in marriage rate.

408. It will thus be observed that, whilst the proportion of marriages to the population (marriage rate), and to the marriageable women, has fluctuated considerably, the proportion to the marriageable men has been tolerably constant, the extremes being $57\frac{1}{2}$ in 1881 and $42\frac{1}{3}$ in 1861. At the last three decennial periods, when the colony was in a more settled condition than at earlier periods, this proportion averaged 55 per 1,000, which also was about the rate in 1891. At the same periods the proportion of marriages per 1,000 marriageable

* See *Victorian Year-Book*, 1889-90, pages 265 to 267; same work, 1879-80, pages 103 and 104; same work, 1880-81, pages 199 and 200; same work, 1881-2, pages 165 and 166; and same work, 1892, Vol. I., pages 323 and 324.

† 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 proportion of the latter to the former in 1891, therefore, differs slightly from that in the previous table, which is 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.

females varied from 72 in 1871 to 48 in 1881; since 1881, as was anticipated,* this proportion has increased, and in 1891 it stood at 52.

Victorian, French, and Swiss marriage rates.

409. In 1891, according to the lowest line in the last table, marriageable males in Victoria married at the annual rate of 55 per 1,000, and the marriageable females at the rate of 52 per 1,000. Similar proportions for France are 57 and 46, and for Switzerland 49 and 38; the former, especially as regards the males, approximating closely to, but the latter, as regards both males and females, being much lower than, the proportions for Victoria.†

Marriage rates in Australasian colonies.

410. 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 fifth year from 1865 to 1890, also for 1891 and 1892, except Western Australia, for which colony the first year given is 1875:—

MARRIAGE RATES IN AUSTRALASIAN COLONIES, 1865 TO 1892.‡

Year.	Number of Marriages§ per 1,000 of Mean Population.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1865 ...	7·36	8·94	13·27	9·45	...	6·27	10·47
1870 ...	6·63	7·85	7·80	6·90	...	6·62	7·62
1875 ...	6·33	7·88	8·63	8·01	7·26	6·63	8·94
1880 ...	6·22	7·68	6·97	8·69	7·42	7·38	6·71
1885 ...	7·73	8·22	9·20	7·82	7·51	8·22	6·73
1890 ...	8·21	7·15	8·28	7·04	6·18	6·64	6·12
1891 ...	7·66	7·39	7·22	7·29	8·06	6·63	6·05
1892 ...	6·64	6·77	6·67	6·50	7·36	6·51	6·23
Mean of 28 years	7·01	7·90	8·53	7·76	7·03	7·01	7·50

Marriage rates in colonies compared.

411. According to an average extending over a period of 28 years, the marriage rate in Victoria was identical with that in Tasmania, also almost identical with that in Western Australia, but was below that in any of the other colonies; in the last year, however, the marriage rate in Victoria occupied a middle position, it being higher than that in South Australia, Tasmania, and New Zealand, but lower than that in the other three colonies.

* See *Victorian Year-Book*, 1889-90, Vol. I., paragraph 447.

† 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.

‡ For the number of marriages in the various colonies during the twenty years ended with 1892, 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.

Order of colonies in respect to marriage rates.

412. 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-eight years:—

Order in Latest Year.	Order in a Series of Years.
1. Western Australia.	1. Queensland.
2. New South Wales.	2. New South Wales.
3. Queensland.	3. South Australia.
4. Victoria.	4. New Zealand.
5. Tasmania.	5. Western Australia.
6. South Australia.	6. Victoria. Tasmania.
7. New Zealand.	

Marriage rates in Australia and Australasia.

413. 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 1892 than in any year since 1872, as is shown by the following figures:—

MARRIAGE RATES IN AUSTRALIA AND AUSTRALASIA, 1873 TO 1892.

Year.	Number of Marriages* per 1,000 of Mean Population.		Year.	Number of Marriages* 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 ...	7·35	7·38	1884 ...	8·22	7·98
1874 ...	7·07	7·32	1885 ...	8·09	7·86
1875 ...	7·12	7·38	1886 ...	7·84	7·50
1876 ...	6·93	7·15	1887 ...	7·56	7·26
1877 ...	7·05	7·18	1888 ...	7·99	7·61
1878 ...	7·08	7·27	1889 ...	7·69	7·37
1879 ...	6·88	7·01	1890 ...	7·67	7·37
1880 ...	7·15	7·08	1891 ...	7·46	7·20
1881 ...	7·62	7·41	1892 ...	6·69	6·61
1882 ...	8·03	7·86			
1883 ...	8·24	8·02	Means ...	7·48	7·39

Marriage rates in certain British possessions.

414. 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 may perhaps also affect the marriage rate in the

* The numbers doubled give the *persons* married per 1,000 of the population.

Mauritius, although the low marriage rate there 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 Colonies.

	Years.	Annual Rate per 1,000 of the Population.*		Years.	Annual Rate per 1,000 of the Population.*
Ceylon ...	1867-76	...	7·3	West Indies—			
Cape of Good Hope	1890	...	3·9	St. Lucia ...	1878-79	...	5·2
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
Bermuda ...	1871-75	...	8·3	Dominica ...	1871-75	...	6·9
				Trinidad ...	1888-90	...	5·8†

415. The following table gives for each of the five years ended with 1891 a statement of the marriage rates in each division of the United Kingdom and such Foreign countries as the information is available for. The figures have been taken from the latest report of the Registrar-General of England :— Marriage rates in European countries.

Marriage Rates in European Countries, 1887 to 1891.

Countries.	Number of Marriages* per 1,000 of Mean Populations.					
	1887.	1888.	1889.	1890.	1891.	Mean of 5 Years.
Hungary	8·9	9·3	...	...	...	9·1‡
Prussia	8·0	8·0	8·2	8·2	8·1	8·1
Italy	8·0	8·0	7·7	7·4	7·7	7·8
German Empire	7·8	7·8	8·0	8·1	8·0	7·9
Austria	7·8	7·9	7·5	7·6	7·7	7·7
England and Wales ...	7·2	7·2	7·5	7·8	7·8	7·5
France	7·3	7·2	7·1	7·0	7·5	7·2
Belgium	7·1	7·1	7·3	7·3	7·4	7·2
Switzerland	7·1	7·0	7·1	7·1	7·1	7·1
Holland	7·0	6·9	7·0	7·1	7·1	7·0
Denmark	7·0	7·1	7·1	6·9	6·8	7·0
Scotland	6·4	6·4	6·6	6·9	6·9	6·6
Spain	...	...	...	...	..	6·5§
Norway	6·2	6·1	6·3	6·5	6·6	6·3
Sweden	6·3	5·9	6·0	...	...	6·1‖
Ireland¶	4·3	4·2	4·5	4·5	4·6	4·4

* The numbers doubled give the *persons* married per 1,000 of the population.

† The East Indian section of the population (Coolies), amongst whom concubinage largely prevails, is not taken into account in the calculation.

‡ Mean of two years.

§ Mean of two years, 1883 and 1884. ‖ Mean of three years.

¶ 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.

European marriage rates in 1891 and former years.

416. It will be observed that in Prussia, Austria, and Switzerland the average marriage rate prevailed in 1891; in England and Wales, the German Empire, France, Belgium, Holland, Scotland, Norway, and Ireland the rate was slightly above the average; whilst in Italy and Denmark it was slightly below the average.

Australasia and European marriage rates compared.

417. In the same five years the mean marriage rate in Queensland was above that in any of the countries named, except Hungary (two years); in Victoria it was about the same as in Prussia, but higher than in any of the other countries except Hungary; and in New South Wales higher than in any except those named, together with Italy, Germany, Austria, and England; whilst the mean rate was higher in Western Australia than in eight, in Tasmania and South Australia than in five, but in New Zealand than in only one, of these countries. The following are the rates referred to:—

MEAN MARRIAGE RATES IN AUSTRALASIAN COLONIES, 1887 TO 1891.

	Number of Marriages per 1,000 of Mean Population.
Queensland	8·25
Victoria	8·08
New South Wales	7·34
Western Australia	7·19
Tasmania	6·82
South Australia	6·79
New Zealand	6·00

Marriage rate in United Kingdom.

418. The following, according to the reports of the Registrar-General of England, is the marriage rate of the United Kingdom during 1870 and each subsequent fifth year, also in 1891. If, however, the registrations in Ireland are defective, as is alleged,* some disturbance to the calculations must result from that circumstance:—

MARRIAGE RATE IN THE UNITED KINGDOM, 1870 to 1891.

	Marriages per 1,000 of the Population.		Marriages per 1,000 of the Population.
1870	7·50	1890	7·25
1875	7·67	1891	7·30
1880	6·83		
1885	6·80	Mean ...	7·26

Marriageable persons in Australasian colonies.

419. The following table shows the number of marriageable men and women in each Australasian colony, according to the returns of the census of 1891, the unmarried (never married) being distinguished from the widowed:—

* See footnote (¶) on previous page.

Marriageable Men and Women in each Australasian Colony, 1891.

(Exclusive of Chinese and Aborigines.)

Colony.	Marriageable Men.			Marriageable Women.		
	Bachelors aged 20 and upwards.*	Widowers at all ages.	Total.	Spinsters aged 15 and upwards.*	Widows at all ages.	Total.
Victoria	144,567	18,481	163,048	140,240	32,898	173,138
New South Wales ...	140,242	16,760	157,002	111,221	25,795	137,016
Queensland ...	60,518	4,464	64,982	33,171	6,695	39,866
South Australia ...	32,056	3,791	35,847	34,692	8,442	43,134
Western Australia ...	10,667	890	11,557	4,526	886	5,412
Total	388,050	44,386	432,436	323,850	74,716	398,566
Tasmania	15,616	2,413	18,029	15,416	3,945	19,361
New Zealand ...	70,437	7,797	78,234	59,861	12,098	71,959
Grand Total ...	474,103	54,596	528,699	399,127	90,759	489,886

Proportion of single women to men in Australasian colonies.

420. South Australia, Tasmania, and Victoria are the only colonies in which the marriageable women exceeded the marriageable men. The following are the proportions of the former to the latter, the colonies being arranged in order:—

Marriageable Women per 10,000 Marriageable Men living in each Colony, 1891.

1. South Australia	...	12,033	5. New South Wales	...	8,727
2. Tasmania ...	...	10,739	6. Queensland ...	...	6,135
3. Victoria ...	...	10,619	7. Western Australia	...	4,683
4. New Zealand	...	9,198			

Proportion of marriages to single men in Australasian colonies.

421. Comparing the marriages with the marriageable men, which is the most correct way of computing the marriage rate, South Australia stood first and Western Australia last, Victoria occupying the fourth position, the proportion relating to it being almost identical with that relating to New South Wales:—

Marriages per 100,000 Marriageable Men living in each Colony, 1891.

(Exclusive of Chinese and Aborigines.)

1. South Australia	...	6,458	5. New Zealand	...	4,864
2. Tasmania ...	...	5,480	6. Queensland ...	...	4,470
3. New South Wales	...	5,387	7. Western Australia	...	3,574
4. Victoria ...	...	5,385			

Proportion of marriages to single women in Australasian colonies.

422. It would appear that women have a smaller chance of getting married in Victoria than in any other Australasian colony, as the proportion of marriages to those of them who are marriageable was lower

* Including divorced persons at all ages.

here than in any of the other colonies. Western Australia, which occupied the lowest position in regard to the ratio of marriages to marriageable men, is, in regard to the ratio of marriages to marriageable women, at the head of the list:—

MARRIAGES PER 100,000 MARRIAGEABLE WOMEN LIVING IN EACH COLONY, 1891.
(Exclusive of Chinese and Aborigines.)

1. Western Australia	...	7,631	5. New Zealand	...	5,288
2. Queensland	...	7,287	6. Tasmania ...	...	5,103
3. New South Wales	...	6,172	7. Victoria ...	...	5,071
4. South Australia	...	5,367			

Husbands and wives in Australasian colonies.

423. The following are the numbers of husbands and wives in each Australasian colony, those under and over 21 years of age being distinguished:—

HUSBANDS AND WIVES IN EACH AUSTRALASIAN COLONY, 1891.
(Exclusive of Aborigines.)

Colony.	Husbands.			Wives.		
	Under 21 years.	Over 21 years.	Total.	Under 21 years.	Over 21 years.	Total.
Victoria	276	170,678	170,954	3,447	170,302	173,749
New South Wales ...	393	166,241	166,634	5,233	160,415	165,648
Queensland ...	115	57,772	57,887	1,873	55,723	57,596
South Australia ...	103	48,829	48,932	785	47,510	48,295
Western Australia ...	20	7,223	7,243	208	6,170	6,378
Total ...	907	450,743	451,650	11,546	440,120	451,666
Tasmania ...	76	22,237	22,313	591	20,808	21,399
New Zealand ...	107	90,443	90,550	1,666	89,211	90,877
Grand Total ...	1,090	563,423	564,513	13,803	550,139	563,942

Proportion of wives to husbands in Australasian colonies.

424. Victoria and New Zealand are the only Australasian colonies in which wives exceeded husbands. In all the other colonies husbands were in excess. Wives relatively to husbands were fewest in Western Australia, and next so in Tasmania. The following are the proportions in the different colonies:—

WIVES TO EVERY 10,000 HUSBANDS IN EACH COLONY, 1891.
(Exclusive of Aborigines.)

1. Victoria ...	...	10,164	5. South Australia	...	9,870
2. New Zealand	...	10,036	6. Tasmania	...	9,590
3. Queensland	...	9,950	7. Western Australia	...	8,806
4. New South Wales	...	9,941			

Proportion of wives to husbands in Australasia.

425. In the Australian Continent as a whole the husbands and wives were about equal, the difference being only 16 in favour of the latter. In Australia, combined with Tasmania and New Zealand,

there was a slight difference in the opposite direction, there being 571 more husbands than wives.

Marriage rates in town and country.

426. 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 1892, it was about two and a half times as high in the metropolis, and about three 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 1892 and in the previous decennial period :—

MARRIAGES IN URBAN AND COUNTRY DISTRICTS, 1892.

Districts.	Estimated Mean Population.	Marriages, 1892.		Proportion per 1,000 of the Population, 1881-1890.
		Total Number.	Number per 1,000 of the Population.	
Melbourne and suburbs (Greater Melbourne)	481,550	4,135	8·59	11·11
Extra-Metropolitan towns ...	194,182	1,900	9·78	10·83
Country districts	486,978	1,688	3·47	3·48
Total	1,162,710	7,723	6·64	7·67

Marriages in each quarter.

427. 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. This was the case in 1892, although in the previous year the marriages in the summer and winter quarters were more numerous than those in the spring quarter. The following table shows the number and percentage of marriages in each quarter of 1892, and the mean percentage in each quarter of two previous decades :—

MARRIAGES IN EACH QUARTER.

Seasons.	Quarter ended on the last day of—	Year 1892.		Percentage in Ten Years—	
		Number of Marriages.	Percentage.	1871 to 1880.	1881 to 1890.
Summer ...	March... ..	1,855	24·02	24·43	23·44
Autumn ...	June	2,148	27·81	26·19	26·66
Winter ...	September ...	1,823	23·61	23·81	23·35
Spring ...	December ...	1,897	24·56	25·57	26·55
	Year ...	7,723	100·00	100·00	100·00

Re-marriages.

428. In 1892, 664 widowers and 532 widows re-entered the marriage state. During the last nineteen years more widowers have re-married than widows. Formerly it was different. In the nine years ended with 1873 the widowers re-entering the married state numbered 4,847, and the widows 5,128, 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. In England and Wales, during the ten years ended with 1890, 42 per cent. more widowers re-married than widows, the proportion in every 1,000 marriages being 122 of the former and 86 of the latter. The following is a statement of the number of widowers and widows who re-married in Victoria during 1865 and each subsequent fifth year, also in 1891 and 1892:—

RE-MARRIAGES, 1865 TO 1892.

Year.	Number of Re-marriages of—	
	Widowers.	Widows.
1865	503	510
1870	547	595
1875	614	583
1880	603	520
1885	735	646
1890	748	674
1891	743	673
1892	664	532
Mean of 28 years ...	639	589

Former condition of those marrying.

429. In 1892, nearly nine-tenths of the unions which took place were between bachelors and spinsters, the proportion having gradually increased since 1871-1880, when it was about seven-eighths. The next most numerous marriages are generally those between widowers and spinsters, although they have occasionally been exceeded by marriages between bachelors and widows. Marriages between widowers and widows in the decennial period 1881-90 were about a thirtieth, but in 1892 only about a fortieth of the whole. The following is the number and percentage of each of these groups during 1892, and the percentage during the decennial periods 1871-1880 and 1881-1890:—

Former Condition of Persons Married.

Previous Condition.	Year 1892.		Percentage in Ten Years—	
	Number of Marriages.	Percentage.	1871 to 1880.	1881 to 1890.
Bachelors and spinsters ...	6,720	87·01	80·59	85·84
Bachelors and widows ...	339	4·39	7·10	4·72
Widowers and spinsters ...	471	6·10	7·75	6·17
Widowers and widows ...	193	2·50	4·56	3·27
Total	7,723	100·00	100·00	100·00

Re-marriages in various countries.

430. By the figures in the following table it would appear that a larger proportion of widowers re-marry in Vermont and a smaller in the Australasian colonies, 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 New Zealand, New South Wales, and Queensland; but that in eleven of these countries widows re-marry less frequently than in Victoria:—

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	New South Wales ...	85
Roumania	124	Belgium	85
Scotland	120	Victoria	80
Denmark	118	Switzerland	80
Belgium	116	Queensland	78
France	115	France	78
Ireland	112	Italy	74
Sweden	112	Denmark	72
Norway	112	Greece	72
Greece	100	South Australia ...	71
South Australia	98	New Zealand ...	71
Victoria	95	Scotland	60
New Zealand	90	Ireland	57
New South Wales	83	Sweden	55
Queensland	78	Norway	55

* The figures in this table have been derived from those contained in a table showing the proportions of marriages of persons of different conjugal conditions in various countries, for which see *Victorian Year-Book*, 1892, Vol. I., paragraph 583.

Marriages of divorced persons, 1892.

431. Divorced persons marrying are classified 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. Twenty-four divorced men and twenty-seven divorced women re-entered the marriage state in 1892; twenty-two of the former married spinsters, and two married divorced women; eighteen of the latter married bachelors, and seven married widowers; and in two instances both parties to the marriage had been divorced. At least twenty-nine of the fifty-one divorced persons marrying in 1892 had been divorced in the last two years. In the previous year, twenty-two marriages of divorced men, and twenty-three of divorced women, took place.

Number of divorced persons, 1891.

432. The persons returned at the census of 1891 as living in a state of divorce numbered 196, viz., 110 males and 86 females, the former being in the proportion of 1 to every 1,555 men returned as husbands, and the latter in the proportion of 1 to every 2,021 women returned as wives. At the previous census, only 19 divorced persons were returned, viz., 9 males and 10 females.*

Divorced persons in Australasian colonies.

433. The number of males and females returned as living in a state of divorce in five Australasian Colonies when the census was taken are subjoined:—

DIVORCED PERSONS IN FIVE AUSTRALASIAN COLONIES, 1891.

	Males.	Females.
Victoria	110	86
New South Wales	178	126
Queensland	16	7
Western Australia	3	3
Tasmania	25	6
Total	332	228

NOTE.—In South Australia and New Zealand the persons stated in the householder's schedules to be living in a state of divorce were not separately tabulated.

Proportion of divorced to married persons.

434. Comparing the divorced with the married persons of either sex, the following proportions are found to have existed in the different colonies:—

In Tasmania	there was 1	divorced man	to every	...	893 husbands.
„ New South Wales	„	„	„	...	936 „
„ Victoria	„	„	„	...	1,554 „
„ Western Australia	„	„	„	...	2,414 „
„ Queensland	„	„	„	...	3,618 „

* For the occupations and religions of the persons returned at the census of 1891 as living in a state of divorce, see *Victorian Year-Book*, 1892, Vol. I., paragraph 508.

In New South Wales there was 1 divorced woman to every				...	1,315 wives.
„ Victoria	„	„	„	...	2,021 „
„ Western Australia	„	„	„	...	2,126 „
„ Tasmania	„	„	„	...	3,566 „
„ Queensland	„	„	„	...	8,228 „

435. The number of divorces which took place in each Australasian colony during 1890 and their proportions to the married persons of either sex returned at the census were as follow :— Divorces in Australasian colonies.

DIVORCES IN AUSTRALASIAN COLONIES, 1890.

Colony.	Number of Divorces.	Divorces per 100,000 Husbands.	Divorces per 100,000 Wives.
1. Western Australia	3	41·4	47·0
2. New South Wales	42	25·2	25·3
3. Victoria	40	23·4	23·0
4. New Zealand	21	23·2	23·1
5. Queensland	8	13·8	13·9
6. Tasmania	2	8·5	9·3
7. South Australia	2	4·1	4·1

436. If the divorces be compared with the number of marriages, the positions of the colonies remain unaltered, except that New Zealand rises above New South Wales and Victoria, and occupies the second position on the list instead of the fourth, thus :— Marriages to each divorce in Australasian colonies.

MARRIAGES TO EACH DIVORCE IN EACH AUSTRALASIAN COLONY, 1890.

	Marriages to each Divorce.		Marriages to each Divorce.
1. Western Australia ...	93	5. Queensland	399
2. New Zealand	181	6. Tasmania	477
3. New South Wales ...	187	7. South Australia ...	1,117
4. Victoria	230		

437. Combining the dissolutions of marriage with the judicial separations in the Australasian colonies for the sake of comparison with such events in other countries, the following are the numbers in some of the principal countries of the world, the proportions to the married couples living being also shown. The figures for the Australasian colonies are those of the average of the five years ended with 1890, whilst those for the other countries are for the year 1885 :— Divorces and separations in various countries.

Divorces and Separations in Various Countries.

Country.	Divorces and Judicial Separations.		Country.	Divorces and Judicial Separations.	
	Number in One Year.*	Number per 100,000 Married Couples.		Number in One Year.*	Number per 100,000 Married Couples.
United States ...	23,472	203·0†	New South Wales	40	26·4
Switzerland ...	920	195·5	New Zealand ...	23	26·1
Denmark ...	635	184·7	Victoria ...	27	16·9
France	6,245	80·5	Tasmania ...	3	14·6
Germany ...	6,161	77·7	Queensland ...	6	11·1
Roumania ...	541	61·5	Russia in Europe	1,789	11·1
Holland	339	47·7	Italy	556	10·6
Austria	1,718	44·0	South Australia	5	10·4
Belgium... ...	290	31·4	United Kingdom	508	8·6
Western Australia	2	27·8	Canada ...	12	1·6
Sweden and Norway	297	27·0			

High proportion of divorces in United States.

438. According to the table, more divorces and separations take place in the United States than in all the other countries combined, there being in that country a proportion of over 200 divorces annually per 100,000 married couples living. This proportion is approached in only two other countries, viz., Switzerland and Denmark. The Australasian colonies stand low on the list, but even South Australia has a higher rate than the United Kingdom. Strange to say, Canada, which adjoins the United States, has the lowest rate of all. Perhaps its inhabitants cross the frontier when they desire to become divorced.

Deserted husbands and wives.

439. 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. Four deserted persons (all females) availed themselves of this provision in 1892. Three of these married bachelors, and one a widower; two had not heard of their former husbands for over seven years, one for over ten years, and the other for over twelve years. In the previous year only one deserted person (a male) re-married.

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* In the absence of official information, the numbers, except those relating to the Australasian colonies, have been taken from a pamphlet entitled *A Divorce Problem*, by Dr. W. F. Wilcox, of Columbia College, U.S. It is possible that, in some cases, judicial separations may not be included.

† Proportion for 1880.

440. 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 two 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. *Divorce Act* 1889.

441. The marriages of 6 Aboriginal males with Aboriginal females (including one couple who were half-castes) are included in the returns of 1892. In the previous year, 3 marriages of Aborigines took place. Marriages of Aborigines.

442. Fourteen Chinese males were married in Victoria in the year 1892, as against 8 in 1891, and 14 in 1890. Of the women who married Chinese in the year under review, one was a half-caste. During the twenty-six years prior to 1892, 405 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 :— Marriages of Chinese.

NATIONALITY OF WOMEN MARRYING CHINESE, 1866 TO 1892.

Birthplace of Wives.	Number of Marriages of Chinese Males.		
	Twenty-six years : 1866 to 1891.	Year 1892.	Total : 1866 to 1892.
Victoria	207†	10‡	217
Other Australasian colonies ...	62	2	64
England and Wales... ...	71	1	72
Scotland	17	...	17
Ireland	27	1	28
Other British possessions ...	1	...	1
France	1	...	1
Germany	2	...	2
Spain	1	...	1
The United States	2	...	2
China	4	...	4
At sea	9	...	9
Not known	1	...	1
Total	405	14	419

443. The marriage ceremony in Victoria may be performed either by the registered clergy of any religious sect, or by lay registrars. In Marriages by different sects.

* An account of the provisions of this Act was given in the last issue of this work, Vol. II., paragraph 256. Further particulars respecting divorces are given under the head of "Law, Crime, etc.," in the second volume.

† Two of the wives, although born in Victoria, were stated to be of the Chinese race.

‡ Four of these were stated to be half-castes.

1892, about 93½ per cent. of the marriages were celebrated according to the former, and about 6½ per cent. according to the latter system. The number of lay marriages was 510. The following table gives a statement of the number and percentage of marriages celebrated by each religious denomination and by lay registrars during 1892, also the percentage in the decennial periods ended with 1880 and 1890 respectively:—

MARRIAGES BY DIFFERENT DENOMINATIONS.

Marriages performed according to the usages of the—	Marriages in 1892.		Percentage of Marriages in Ten Years—	
	Number.	Percentage.	1881 to 1890.	1871 to 1880.
Church of England	2,254	29·18	30·52	24·63
Presbyterians	1,339	17·34	17·24	20·46
Wesleyans*	1,349	17·46	15·63	16·38
Bible Christians	147	1·90	2·00	1·69
Independents	185	2·40	4·42	5·42
Baptists	239	3·09	5·00	3·70
Lutherans	94	1·22	·93	1·02
Unitarians	3	·04	·05	·02
Calvinistic Methodists	13	·17	·06	·16
Roman Catholics	1,261	16·33	14·91	17·21
Jews	26	·34	·43	·42
Other sects	303	3·93	1·78	1·07
Lay registrars	510	6·60	7·03	7·82
Total	7,723	100·00	100·00	100·00

Duplicate marriages.

444. 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 circumstances occur too seldom to cause any serious disturbance in the marriage statistics. One such case, however, was noticed in 1892, and included in the returns, viz., that of a couple who had been previously married—probably outside the colony—being re-united under the form of the Roman Catholic denomination.

Sects of Aboriginals married.

445. Of the 6 Aboriginal marriages which took place in 1892, 4 were solemnized according to the rites of the Moravians, and 2 according to those of the Church of England.

Sects of Chinese married.

446. Of the 14 marriages of Chinese in 1892, 3 were celebrated according to the rites of the Church of England, 1 according to those

* Including Primitive Methodists and United Methodists.

of the Free Church of England, 1 according to those of the Presbyterians, 4 according to those of the Wesleyans, 1 according to those of the Methodists, 1 according to those of the Independents, and 3 were performed by local registrars.

Marriages by different denominations.

447. The returns of the censuses of 1881 and 1891 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 the two periods, and of the marriages which were performed in the interval between them, the same information is obtained extending over a period of ten years. The results are given in the following table, as are also those of the previous decennial period:—

PROPORTION OF MARRIAGES TO NUMBER OF EACH DENOMINATION, 1871-80 AND 1881-90.

Religious Denomination.	Persons of each Denomination (mean of 1881 and 1891).	Marriages celebrated annually.		
		Mean of 1881 to 1890.	Proportion per 1,000 persons living.	
			1881 to 1890.	1871 to 1880.
Church of England ...	364,237	2,332·0	6·40	4·31
Presbyterians... ...	149,809	1,317·5	8·79	8·30
Wesleyans	128,427	1,194·5	9·30	8·22
Bible Christians ...	8,119	152·6	18·80	15·48
Independents ...	20,994	337·5	16·08	14·17
Baptists	24,128	382·3	15·84	10·03
Lutherans	13,339	71·0	5·32	4·68
Unitarians	1,222	4·0	3·27	·92
Society of Friends ...	321	·1	·31	1·30
Calvinistic Methodists ...	869	4·4	5·06	7·65
Roman Catholics ...	226,036	1,140·4	5·14	4·58
Jews	5,395	32·6	6·04	5·34
Other sects	21,928	135·7	...	...
Residue	36,551*	537·5†	...	...
Total	1,001,375	7,642·1	7·63	6·25

Churches which perform most marriages and *vice versâ*.

448. 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 proportions in the ten years 1881 to 1890, were 16 per 1,000 or upwards, whilst the proportions in all the other denominations were below 10 per 1,000 persons living. In

* Including Buddhists, Confucians, etc., those of no denomination and of no religion, and the unspecified.

† Marriages by lay registrars.

proportion to their respective numbers, the marriages performed in the ten years named according to the rites of the Church of England were much fewer than those celebrated according to the rites of the Wesleyans and Presbyterians, but were more numerous than those performed according to the rites of the Roman Catholic Church, as well as those of all other denominations, except the three first named. In the last decade, as compared with the preceding one, a marked increase took place in the marriage rate amongst most denominations, the only ones showing a decrease being the Society of Friends and the Calvinistic Methodists.

Signing with marks

449. The numbers of either sex who evinced their want of elementary education by signing the marriage register with a mark instead of in writing were as follow in 1892, the proportion of those who signed with marks to the total numbers married being also shown:—

SIGNING MARRIAGE REGISTER WITH MARKS, 1892.

Persons Married.	Numbers Married.	Signing with marks.	
		Total Number.	Number in every 100 Married.
Bridegrooms	7,723	74	·96
Brides	7,723	92	1·19
Mean	7,723	83	1·08

Increased numbers signing in writing.

450. 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 1892, the proportion of men and of women signing with marks was lower than in any previous year. The following figures show the proportions so signing in 1875 and each subsequent fifth year, also in 1891 and 1892:—

NUMBERS SIGNING WITH MARKS PER 100 MARRIED, 1875 TO 1892.

Year.	Men.	Women.	Mean.	Year.	Men.	Women.	Mean.
1875 ...	5·48	9·43	7·46	1890 ...	1·50	1·53	1·52
1880 ...	4·18	4·09	4·13	1891 ...	1·25	1·51	1·38
1885 ...	2·56	2·62	2·59	1892 ...	·96	1·19	1·08

451. The marriages in which marks instead of writing were made use of in 1892 numbered 166, but in only 10 of these, or about 1 in 17, did both the parties use marks. In the 146 other instances either the husband or the wife signed in writing. Thus, whereas in the case of 1 marriage in 53, either the bride or the bridegroom was unable to write, it happened in the case of only 1 marriage in 772 that neither party was able to sign the marriage register in writing. Cases of both signing with marks

452. Of the 14 Chinese who married in 1892, 7 signed with an ordinary cross, and 7 in writing. All the women they married signed in writing. Signatures of Chinese.

453. In the case of the Aborigines who married in 1892, all signed in writing. Signatures of Aborigines.

454. 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 1892, and the average of the decennial periods ended with 1880 and 1890 respectively. Considerable improvement will be noticed in respect to all the principal denominations:— Signing with marks in each denomination.

Signing with Marks in each Denomination.

Marriages performed according to the usages of the—	Number signing with Marks in every 100 Married.								
	Year 1892.			Ten Years: 1881 to 1890.			Ten Years: 1871 to 1880.		
	Men.	Women.	Mean.	Men.	Women.	Mean.	Men.	Women.	Mean.
Church of England ...	1·02	1·20	1·11	1·62	1·76	1·69	4·54	6·11	5·33
Presbyterians ...	·60	·75	·68	1·32	1·42	1·37	3·67	5·97	4·82
Methodists ... Bible Christians	·74	·74	·74	1·82	1·80	1·81	4·15	5·33	4·74
Independents ...	·54	·54	·54	1·72	1·39	1·56	3·37	5·49	4·43
Baptists ...	·42	·42	·42	1·91	2·15	2·03	3·48	5·22	4·35
Lutherans ...	...	...	...	·56	·56	·56	1·77	4·13	2·95
Calvinistic Methodists	...	...	...	2·86	...	1·43	1·22	6·10	3·66
Roman Catholics ...	1·35	1·82	1·59	3·85	3·91	3·88	10·14	15·43	12·79
Jews	...	·38	·19	1·84	3·12	2·48	·95	·47	·71
Other sects	·65	·98	·82	2·27	2·07	2·17	7·01	3·79	5·40
Lay registrars ...	2·16	2·94	2·55	4·56	6·68	5·62	6·60	12·93	9·77
Total ...	·96	1·19	1·08	2·17	2·38	2·28	5·31	7·93	6·62

Roman Catholic and civil marriages.

455. It will be observed that the proportion of those signing with marks is generally 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 1892 show a very considerable improvement as compared with the ten years ended with 1890, 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 latterly been much higher than amongst marriages by Roman Catholics.

Marriages by Unitarians, Calvinists, and Jews.

456. In 51 marriages by Unitarians which took place in the twenty-two years ended with 1892, not one instance occurred of either of the parties signing with a mark; this denomination, therefore finds no place in the above table. In 141 marriages by Calvinistic Methodists during the same period, all but 2 of the males signed in writing, but 5 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 141 marriages of Jews celebrated since, as many as 15 persons signed with marks. On examining the returns of the last three years it was found that most of the Jews not signing in writing were Eastern Jews, chiefly from Russia or Russian Poland.

Signing with marks in Australasian colonies.

457. 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 1887 to 1891 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 AUSTRALASIAN COLONIES, 1887 TO 1891.

Colony.	Year.	Number Signing with Marks to every 100 Married.		
		Men.	Women.	Mean.
1. Victoria	1887	1·73	2·12	1·92
	1888	1·72	1·81	1·76
	1889	1·51	1·38	1·45
	1890	1·50	1·53	1·52
	1891	1·25	1·51	1·38
Mean of 5 years	...	1·54	1·67	1·61

Signing with Marks in Australasian Colonies, 1887 to 1891—*continued.*

Colony.	Year.	Number Signing with Marks to every 100 Married.		
		Men.	Women.	Mean.
2. New Zealand	1887	1·94	3·11	2·52
	1888	1·66	2·52	2·09
	1889	2·01	2·59	2·30
	1890	1·63	1·92	1·78
	1891	1·39	1·68	1·54
Mean of 5 years	...	1·73	2·36	2·05
3. South Australia ...	1887	2·18	1·80	1·99
	1888	2·40	2·45	2·42
	1889	2·38	2·18	2·28
	1890	2·10	2·46	2·28
	1891	1·73	2·12	1·92
Mean of 5 years	...	2·16	2·20	2·18
4. New South Wales ...	1887	3·04	3·95	3·49
	1888	3·91	3·57	3·74
	1889	3·47	3·23	3·35
	1890	2·77	2·64	2·70
	1891	3·16	2·84	3·00
Mean of 5 years	...	3·27	3·25	3·26
5. Queensland	1887	3·53	5·39	4·46
	1888	3·01	4·98	4·00
	1889	2·88	3·68	3·28
	1890	2·94	3·60	3·27
	1891	3·03	3·75	3·39
Mean of 5 years	...	3·08	4·28	3·68

458. 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 in 1888 was 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.

Victoria the least illiterate colony.

Signing with marks in various countries.

459. No returns are at hand showing the manner in which the marriage registers are signed in British colonies other than those named and Trinidad. 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	1889	4·30	7·38	5·84
England and Wales ..	1890	7·19	8·31	7·75
Holland...	1877	7·53	14·83	11·18
France	1882	14·39	22·62	18·50
Ireland	1890	20·36	20·86	20·61
Italy	1886	21·58	31·73	26·65
Trinidad	1891-2	...	...	50·00

Countries compared as to illiteracy.

460. By comparing these figures with those in the previous table, it will appear that adult education, so far as it is indicated by signature to the marriage register, is more forward in the Australasian colonies than in any of the countries named. It will further be remarked that 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 one-third as illiterate again. Holland, which comes next to Scotland and England, would doubtless rank higher were it not that the latest return available dates as far back as 1877, when adult education was probably not so advanced as it is now. The very large proportion signing with marks in France, Ireland, Italy, and Trinidad attracts particular attention.

Ages of bridegrooms and brides in combination.

461. The age of both bridegroom and bride was specified in the case of all but 57 of the 7,723 marriages which took place in 1892. In 52 of the defective entries the age of neither party was given; in 1 case the age of the husband was stated, but not that of his wife; and in 4 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 Bridegrooms and Brides in Combination, 1892.

Ages of Husbands.	Ages of Wives.																			Total Husbands.
	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	...	...	...	6	1	1	2	1	...	...	...	...	...	...	...	...	...	...	...	...	11
19 to 20 ,,	...	...	9	2	7	15	1	14	1	...	...	...	...	...	...	...	...	...	...	...	49
20 to 21 ,,	...	1	5	7	15	19	22	24	5	...	...	...	...	...	...	...	...	...	...	...	98
21 to 25 ,,	1	5	21	72	140	191	205	1167	290	38	6	2	...	1	...	...	...	...	...	...	2139
25 to 30 ,,	...	2	16	48	84	133	199	1310	962	139	35	5	4	...	...	...	...	...	...	...	2937
30 to 35 ,,	...	2	2	7	19	42	47	435	493	205	55	19	3	...	...	...	...	...	...	1	1330
35 to 40 ,,	...	...	...	2	7	7	14	93	150	100	65	18	2	1	1	...	...	...	...	...	460
40 to 45 ,,	...	...	...	...	...	1	4	24	61	49	43	27	7	3	2	...	...	...	...	...	221
45 to 50 ,,	...	...	...	...	...	1	3	13	28	33	30	23	17	3	1	1	...	...	...	...	153
50 to 55 ,,	...	...	...	1	...	1	...	6	19	13	13	13	15	3	6	1	...	1	...	...	92
55 to 60 ,,	...	...	...	...	...	...	...	3	3	12	9	8	21	10	9	3	1	...	...	...	79
60 to 65 ,,	...	...	...	...	...	...	1	2	4	9	5	7	4	7	9	6	1	...	...	...	55
65 to 70 ,,	...	...	...	...	...	...	...	...	4	5	1	3	3	4	2	3	3	1	1	...	30
70 to 75 ,,	...	...	...	...	...	...	...	1	1	1	1	3	...	3	1	1	...	...	...	...	12
75 to 80 ,,	...	...	...	...	...	...	...	...	1	...	...	...	...	...	...	...	...	...	...	...	1
Unspecified	...	...	...	...	1	1	1	...	1	...	...	...	...	...	...	...	...	...	...	52	56
Total Wives	1	10	53	145	274	412	499	3093	2023	604	263	128	76	35	31	15	5	2	1	53	7723

NOTE.—This table may be read thus:—Two men between 30 and 35 married girls between 15 and 16; six women between 35 and 40 married men between 21 and 25, etc.

462. An examination of the 7,666 cases in which the ages of both parties are specified will show that in 2,502 instances, or 33 per cent. of the whole, both parties to the marriage were about the same age; in 700 instances, or nine per cent. of the whole, the wife was older than the husband; and in 4,464 instances, or 58 per cent. of the whole, the husband was older than the wife. Relative ages of husband and wife.

463. Some striking inequalities of age amongst the parties married appear in several of the columns, as, for instance, a man between 50 and 55 married a girl between 17 and 18, one between 60 and 65 married a woman between 20 and 21; one between 70 and 75 married a woman between 21 and 25; and one between 75 and 80 married a woman between 25 and 30. On the other hand, a woman between 50 and 55 married a man between 21 and 25; a woman between 55 and 60 married a man between 35 and 40; a woman between 70 and 75 married a man between 50 and 55. Inequalities of age.

464. It will be noticed that eleven youths aged 18 and forty-nine aged 19 took upon themselves the cares and responsibilities of matrimony, the wives of three of the former and sixteen of the latter being, however, somewhat older than themselves. On the other hand, it will be remarked that one man and one woman who had passed the Extreme ages of marriage.

age of 75 entered the marriage state, the partner of the former being under 30, whilst that of the latter was over 65 years of age.

Age at which marriage is contracted.

465. The next table has been designed for the purpose of showing the ages at which persons of either sex generally marry in Victoria,* the information being given for the year 1892, and for the decennial period 1881 to 1890:—

PROPORTION OF MALES AND FEMALES MARRYING AT DIFFERENT AGES, 1881–90 AND 1892.

Ages.	Bridegrooms.			Brides.		
	Numbers, 1892.	Proportions per 1,000.		Numbers, 1892.	Proportions per 1,000.	
		Year 1892.	Ten Years, 1881–90.		Year 1892.	Ten Years, 1881–90.
Under 15 years ...	...	...	...	1	·13	·15
15 to 16 „ ...	...	...	...	10	1·30	1·17
16 to 17 „ ...	...	...	·03	53	6·91	6·53
17 to 18 „ ...	...	...	·29	145	18·91	20·32
18 to 19 „ ...	11	1·43	1·46	274	35·72	42·94
19 to 20 „ ...	49	6·39	5·62	412	53·72	65·03
20 to 21 „ ...	98	12·78	15·19	499	65·06	73·84
21 to 25 „ ...	2,139	278·99	321·02	3,093	403·26	432·34
25 to 30 „ ...	2,937	383·08	365·48	2,023	263·76	223·83
30 to 35 „ ...	1,330	173·48	134·57	604	78·75	62·07
35 to 40 „ ...	460	60·00	58·29	263	34·29	29·53
40 to 45 „ ...	221	28·82	32·54	128	16·69	17·10
45 to 50 „ ...	153	19·96	24·77	76	9·91	12·23
50 to 55 „ ...	92	12·00	18·40	35	4·56	6·74
55 to 60 „ ...	79	10·30	11·49	31	4·04	3·40
60 to 65 „ ...	55	7·17	6·11	15	1·95	1·90
65 to 70 „ ...	30	3·90	3·05	5	·65	·63
70 and upwards ...	13	1·70	1·69	3	·39	·25
Total ...	7,667†	1,000·00	1,000·00	7,670†	1,000·00	1,000·00

Frequency of marriage at 21 to 30.

466. The large proportion of both sexes marrying at between 21 and 30 years of age is very marked; thus in 1892 about two-thirds of either sex who married were between those ages. These proportions are somewhat lower than those shown by an average extending over the last ten years.

Ages of Chinese bridegrooms and their brides.

467. In the case of the marriages of Chinese which took place in 1892, all the men but one were older than the females with whom they formed unions. None of the former were under 24 years of age, but of the latter, two had not reached the age of 21. The

* For table showing the proportion of males and females marrying at different ages in various countries, see *Victorian Year-Book*, 1892, Vol. I., paragraph 543.

† The bridegrooms and brides of unspecified ages being omitted, these numbers are les than those in the last table, the bridegrooms by 56 and the brides by 53.

following table shows the ages of the Chinese bridegrooms and of their brides in combination :—

AGES OF CHINESE BRIDEGROOMS AND THEIR BRIDES IN COMBINATION, 1892.

Ages of Bridegrooms.	Ages of Brides.												Total Bridegrooms.
	18.	20.	22.	24.	25.	26.	29.	30.	34.	36.	37.	40.	
24	...	...	...	...	1	...	...	...	...	...	...	...	1
25	1	...	...	...	...	...	...	...	...	...	...	...	1
28	...	...	1	...	...	...	...	...	...	...	...	...	1
36	...	...	...	...	...	1	...	...	...	...	...	...	1
38	...	...	...	...	...	...	1	...	...	...	...	...	1
39	...	...	...	1	...	...	...	...	...	...	...	...	1
43	.	..	1	...	...	...	...	...	...	...	...	...	1
45	...	1	...	...	...	...	...	..	...	...	...	...	1
46	...	...	...	...	...	...	...	...	...	1	...	...	1
48	...	...	...	1	...	...	...	...	..	...	...	...	1
55	...	...	...	...	...	...	...	1	...	...	...	...	1
57	...	..	...	...	...	...	...	...	1	...	...	...	1
60	...	...	...	...	...	...	..	...	...	...	1	...	1
63	...	...	...	...	...	...	...	...	...	...	...	1	1
	1	1	2	2	1	1	1	1	1	1	1	1	14

468. Of the six male Aborigines who married in 1892, five were bachelors and one a widower, and of their partners four were spinsters and two widows. The ages of bridegroom and bride were set down as follow:—19 and 16, 24 and 22 (in two instances), 26 and 17, 26 and 27, 26 and 29. Ages of Aborigines marrying.

469. 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 minimum age in Victoria is the same 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. Eleven of the males, however, who married in 1892, had not completed their nineteenth year. Of the brides, eleven had not completed their sixteenth, and 53 more had not completed their seventeenth year. As Marriages of minors.

* For table showing the minimum legal age of marriage in various countries, see *Victorian Year-Book* 1889-90, Volume I., paragraph 500.

many as 158 of the males, or one in every 49, and no fewer than 1,394 of the females, or over a sixth, had not attained the full age of 21 years.

Marriages of minors in Victoria and England.

470. From the experience of Victoria during the year 1892, and the decades 1871-80 and 1881-90, 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 and Wales. The proportion of females marrying under age, which was formerly higher in Victoria than in England, has fallen considerably, and in 1892, as well as in the previous decennial period, 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 1892.	Ten Years: 1881 to 1890.	Ten Years: 1871 to 1880.	Ten Years: 1871 to 1880.
Bridegrooms	2·05	2·26	2·52	7·95
Brides	18·05	21·00	28·32	21·96
Mean	10·05	11·63	15·42	14·96

Youthful husbands in Australasian colonies.

471. According to the Census of 1891, the tendency of males to marry under age appears to be greater in Tasmania, and less in New Zealand, than in any of the other Australasian colonies, Victoria standing immediately above the latter. The following is the order in which the colonies stood in this particular, the colony in which the proportion of husbands under age was largest being placed first, and the rest in succession :—

HUSBANDS UNDER AND OVER 21 YEARS OF AGE IN EVERY 10,000 HUSBANDS LIVING IN EACH COLONY, 1891.

(Exclusive of Aborigines.)

		Under 21 Years.	Over 21 Years.
1.	Tasmania	34	9,966
2.	Western Australia	28	9,972
3.	New South Wales	24	9,976
4.	South Australia	21	9,979
5.	Queensland	20	9,980
6.	Victoria	16	9,984
7.	New Zealand	12	9,988

Youthful husbands in Australasia.

472. In continental Australia 20 in 10,000 of the husbands were under 21 years of age, and in continental and insular Australia combined 19 in 10,000 were under that age.

* For a comparison of the marriages of minors with marriageable minors, see *Victorian Year-Book*, 1889-90, Volume I., paragraphs 503 to 506.

473. The proportion of females marrying under age would seem to be greatest in Western Australia, closely followed by Queensland, and at no great distance by New South Wales. Victoria stands fifth in this respect, and South Australia last. The following are the proportions of wives under and over 21 years old as returned in each colony, the colonies being placed in order according to the former proportion:— Youthful wives in Australasian colonies.

WIVES UNDER AND OVER 21 YEARS OF AGE IN EVERY 10,000 WIVES IN EACH COLONY, 1891.

(Exclusive of Aborigines.)

		Under 21 Years.	Over 21 Years.
1.	Western Australia	326 ...	9,674
2.	Queensland	325 ...	9,675
3.	New South Wales	316 ...	9,684
4.	Tasmania	276 ...	9,724
5.	Victoria	198 ...	9,802
6.	New Zealand	183 ...	9,817
7.	South Australia	163 ...	9,837

474. In Australia as a whole 256 in 10,000, and in Australasia as a whole 245 in 10,000, of the married women were under 21 years of age. Youthful wives in Australasia.

475. The births registered in Victoria during 1892 numbered 37,831, as against 38,505 in 1891. The decrease in the year under review, as compared with the previous one was thus 674. Births, 1892.

476. 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 continued during the seven subsequent years, the number of births in 1891 being the highest recorded.* There was, however, a falling-off in 1892 as just stated. Births in 1892 and former years.

477. In proportion to population, the births decreased steadily for a number of years. The lowest point was reached in 1882, since which year there was a gradual improvement until 1890, but in 1891 there was a slight falling-off, and a still further falling-off in 1892. The following are the birth rates for 1860 and each subsequent fifth year, also in 1891 and 1892:— Birth rate.

ANNUAL BIRTH RATE,† 1860 TO 1892.

	Births per 1,000 of Mean population.		Births per 1,000 of Mean population.
1860	42·81	1890	33·60
1865	42·40	1891	33·57
1870	38·07	1892	32·54
1875	33·94		
1880	30·75	Mean of 33 years ...	35·73
1885	31·33		

* For number of births in each year, see Statistical Summary of Victoria (first folding sheet), published in the second volume of this work.

† For the birth rate of each of the 32 years ended with 1891, see *Victorian Year-Book*, 1892, Vol. I., paragraph 547.

Proportion of births to population and to married women.

478. 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, according to the censuses of 1871, 1881, and 1891:—

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
1891	1,140,405	120,700	35,853	31·44	297·04

Reason for fluctuation of birth rate.

479. It will be noticed that although the proportion of legitimate births per 1,000 of the population fluctuated considerably at the three periods, the proportion per 1,000 of the married women at reproductive ages remained tolerably uniform, being 297 per 1,000 in 1891 as compared with $302\frac{2}{3}$ per 1,000 at each of the two former periods. The increase in the birth rate calculated in the ordinary way, since 1881, is therefore found to be due merely to an increase in the proportion of married women in the community at the fruitful period of life.

Birth rates in Australasian colonies.

480. Returns of the births in all the Australasian colonies are available to the end of 1892, 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 1865 and each subsequent fifth year until 1890, also for 1891 and 1892:—

* In each case these are the legitimate births which occurred during the twelve months of which the census was the middle.

Birth Rates in Australasian Colonies, 1865 to 1892.*

Year.	Number of Births per 1,000 of Mean Populations.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1865 ...	42·40	43·21	43·65	43·90	...	32·56	41·12
1870 ...	38·07	40·09	43·51	38·48	...	30·18	42·32
1875 ...	33·94	38·53	38·90	35·70	28·72	29·88	40·23
1880 ...	30·75	38·80	36·92	38·94	32·35	32·91	40·78
1885 ...	31·33	37·79	37·80	38·47	35·22	36·18	34·78
1890 ...	33·60	35·36	39·93	32·63	34·69	33·49	29·44
1891 ...	33·57	34·50	36·35	33·92	34·85	33·37	29·01
1892 ...	32·54	33·90	35·84	32·32	33·01	32·48	27·83
Mean of 28 years }	34·36	38·38	39·41	37·54	34·35†	32·16	37·64

481. In 1892 the birth rate was below the average in all the colonies except Tasmania. In New South Wales, South Australia, and New Zealand the rate was absolutely the lowest recorded during the whole period of 28 years, that for the last named colony (28 per 1,000), moreover, being the lowest recorded in any Australasian colony since 1864. In Victoria the rate was lower than in the previous four years, but higher than in any other year since 1876. In Western Australia it was lower than in any other year since 1880, and in Tasmania than in any other since 1879. Low birth rates in Australasian colonies in 1892.

482. 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-eight years. It will be observed that Victoria stands fourth on the list for 1892, and fifth in the twenty-eight year series :— Order of colonies in respect to birth rates.

Order of Australasian Colonies in reference to Birth Rates.

Order in 1892.	Order in a Series of Years.
1. Queensland.	1. Queensland.
2. New South Wales.	2. New South Wales.
3. Western Australia.	3. New Zealand.
4. Victoria.	4. South Australia.
5. Tasmania.	5. Victoria.
6. South Australia.	6. Western Australia.
7. New Zealand.	7. Tasmania.

483. On the continent of Australia, taken as a whole, the birth rate in 1892 was the lowest recorded during the last twenty years; and on that continent, combined with Tasmania and New Zealand, it was also the lowest during the whole period. The following are the figures for the period referred to :— Birth rate in Australia and Australasia.

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* For the number of births in the various colonies during the twenty years ended with 1892, see General Summary of Australasian Statistics (third folding sheet) in the second volume. See also Appendix A. to the same volume. For the birth rates of those colonies in each of the 27 years ended with 1891 see *Victorian Year-Book* 1892, Vol. I., paragraph 550. † Mean of 18 years.

Birth Rate in Australia and Australasia, 1873 to 1892.

Year.	Number of Births per 1,000 of Mean Populations.		Year.	Number of Births per 1,000 of Mean Populations.	
	Continent of Australia.	Australia with Tasmania and New Zealand.		Continent of Australia.	Australia with Tasmania and New Zealand.
1873	37·36	37·19	1884	35·25	35·46
1874	36·46	36·70	1885	35·41	35·33
1875	35·29	35·82	1886	35·11	34·78
1876	35·20	36·04	1887	35·36	34·79
1877	34·15	35·16	1888	35·38	34·60
1878	34·31	35·51	1889	34·62	33·84
1879	34·55	35·42	1890	34·97	34·00
1880 ...	35·33	36·20	1891	34·34	33·43
1881	35·22	35·63	1892	33·43	32·23
1882	34·24	34·77			
1883	34·50	34·83	Means ...	35·03	35·09

Birth rates in British possessions.

484. 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 are 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
Gibraltar	1888-9	26·4
Ceylon	1886-8	30·7
Straits Settlements	1888-9	20·0
Hong Kong	1882-6	8·5
Mauritius	1886	36·3
Seychelles	1886	39·8
Sierra Leone	1887-9	17·9
Nova Scotia	1871-5	32·0
Bermuda	1884-9	35·4
British Guiana	1886	35·2
West Indies—		
Bahama	1878-9	41·0
Jamaica	1886-7	36·0
St. Lucia	1869-89	41·3
St. Vincent	1888-9	40·3
Barbados	1886	41·5
Grenada	1871-9	45·3
Tobago	1886	36·0
Antigua	1875-6	40·4
Montserrat	1886	40·4
Dominica	1871-6	31·0
Trinidad	1881-90	33·8

485. A statement of the birth rates in British and certain Foreign countries, for each of the five years ended with 1891, 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.

BIRTH RATES IN EUROPEAN COUNTRIES, 1887 TO 1891.

Countries.	Number of Births per 1,000 of Mean Population.					
	1887.	1888.	1889.	1890.	1891.	Mean of 5 years.
Hungary	44·1	43·8	43·7	40·3	...	43·0*
Austria...	38·2	37·9	37·9	36·7	38·1	37·8
Italy	39·0	37·6	38·4	35·9	37·3	37·6
Prussia...	37·6	37·4	37·1	36·6	37·7	37·3
German Empire	36·9	36·6	36·4	35·7	37·0	36·5
Holland	33·7	33·7	33·2	32·9	33·7	33·4
England and Wales ...	31·9	31·2	31·1	30·2	31·4	31·2
Scotland	31·8	31·3	30·9	30·2	31·2	31·1
Norway...	30·8	30·8	29·7	30·3	30·9	30·5
Belgium	29·4	29·1	29·5	28·7	29·6	29·3
Sweden...	29·7	28·8	27·7	28·0	...	28·6*
Switzerland	27·9	27·7	27·6	26·6	28·2	27·6
France	23·5	23·1	23·0	21·8	22·6	22·8
Ireland...	23·1	22·8	22·7	22·3	23·1	22·8

486. 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 Low birth rates in Ireland and France.

* Mean of four years.

† 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.

their social philosophy the division of their property among a large family at their decease."*

Australasian and European birth rates compared.

487. In the same five years the mean birth rate in Queensland was above that in any of the European countries referred to in the table, except Hungary; that in Western Australia, New South Wales, Tasmania, and South Australia, above that in any except the country just named, together with Austria, Italy, Prussia, and the German Empire; the mean birth rate in Victoria was below that in those five European countries, with the addition of Holland; the mean birth rate in New Zealand was below that in any of the countries named in the table, except Belgium, Sweden, Switzerland, France, and Ireland. The following are the birth rates referred to:—

MEAN BIRTH RATES IN AUSTRALASIAN COLONIES, 1887 TO 1891.

	Number of Births per 1,000 of Mean Population.
Queensland	38·64
Western Australia	35·98
New South Wales	35·82
Tasmania	34·20
South Australia	33·58
Victoria	33·14
New Zealand	30·39

Birth rate in United Kingdom.

488. According to the reports of the Registrar-General of England, the births in the United Kingdom have fallen off by 3½ per 1,000 during the last 21 years; in 1890 the rate was lower than in any year since 1870, and, for the first time, was less than 30 per 1,000 persons living; there was, however, a revival in 1891. The following are the figures for 1870 and each subsequent fifth year, also for 1891:—

BIRTH RATE IN THE UNITED KINGDOM, 1870 TO 1891.

	Births per 1,000 of the Population.		Births per 1,000 of the Population.
1870	33·8	1890	29·2
1875	33·9	1891	30·4
1880	32·7		
1885	31·6	Mean of 22 years...	32·5

Birth rates in town and country, 1892.

489. 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 1892; also the average birth rates in the same divisions during the ten years ended with 1890:—

* See 41st Report of the Registrar-General of England, page xlvi.

Births in Urban and Country Districts, 1892.

Districts.	Estimated Mean Population, 1892.	Births.		
		Total Number, 1892.	Number per 1,000 of the Population.	
			1892.	Annual Mean, 1881 to 1890.
Melbourne and suburbs (Greater Melbourne)	481,550	17,399	36·13	35·58
Extra-Metropolitan towns	194,182	6,791	34·97	32·79
Country Districts ...	486,978	13,641	28·01	28·18
Total ...	1,162,710	37,831	32·54	31·38

490. The next table shows the number of births per 1,000 of the population of the same three divisions of the colony for 1875 and each subsequent fifth year, also for 1891 and 1892 :— Birth rates in town and country, 1875 to 1892.

Birth Rates in Urban Districts, 1875 to 1892.

Year.	Number of Births per 1,000 of the Population.			
	Greater Melbourne.	Extra-Metropolitan Towns.	Country Districts.	Total of Victoria.
1875 ...	33·63	38·63	31·54	33·94
1880 ...	31·19	34·21	28·72	30·75
1885 ...	34·94	31·87	28·12	31·33
1890 ...	37·71	34·43	28·93	33·60
1891 ...	36·64	35·00	29·68	33·57
1892 ...	36·13	34·97	28·01	32·54

491. It will be noticed that in 1875 and 1880 the proportion of births in extra-metropolitan towns was higher than that in the metropolis, but at all subsequent periods the metropolitan rate has been the higher, and, moreover, that at all the periods the rate in the country districts has been lower than that in either the metropolitan district or the extra-metropolitan towns. Results compared.

492. The mean population, the number of births, and the birth rate during 1892; also the mean annual birth rate during the ten years 1881 to 1890, in the different municipalities, etc., forming the component parts of the district of Greater Melbourne, are shown in the following table :— Birth rates in metropolitan sub-districts.

Births in Greater Melbourne.

Sub-districts.	Estimated Mean Population, 1892.	Births.		
		Total Number, 1892.	Number per 1,000 of the Population.	
			1892.	Annual Mean, 1881 to 1890.
Melbourne City	72,050	1,610	22·35	25·39
North Melbourne Town ...	21,064	826	39·21	40·90
Fitzroy City	30,818	999	32·42	34·38
Collingwood City	34,203	1,217	35·58	39·57
Richmond City	34,822	1,408	40·43	38·65
Brunswick Town	20,984	946	45·08	44·83
Northcote Town	6,888	342	49·65	39·21
Prahran City	38,229	1,315	34·40	33·51
South Melbourne City	41,640	1,370	32·90	34·83
Port Melbourne Town* ...	12,481	514	41·18	42·11
St. Kilda City	19,838	520	26·21	25·97
Brighton Town	9,828	311	31·64	31·01
Essendon Town	14,986	592	39·50	33·09
Flemington & Kensington Borough	10,300	399	38·74	39·68
Hawthorn City	19,064	614	32·21	33·23
Kew Borough	7,424	240	32·33	26·98
Footscray City	18,142	877	48·34	46·01
Williamstown Town	15,780	614	38·91	37·85
Oakleigh Borough	1,150	61	53·04	
Caulfield Shire	8,185	271	33·11	
Malvern Shire	8,662	327	37·75	
Boroondara Shire	6,432	162	25·19	
Preston Shire	3,209	150	46·74	33·66
Coburg Shire	5,840	224	38·36	
Remainder of district	13,377	576	43·06	
Shipping in Hobson's Bay and River	1,965	...	...	
Total	477,361	16,485	34·23	34·09
Hospitals, Asylums, etc.† ...	4,189	914	1·90‡	1·49‡
Grand Total	481,550	17,399	36·13	35·58

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.

Birth rates in sub-districts, 1881 to 1890.

493. It will be observed that during the ten years ended with 1890 the births in four municipalities, viz., North Melbourne, Brunswick, Port Melbourne, and Footscray, averaged above 40 per 1,000 of the population; that in five municipalities, viz., Collingwood, Richmond, Northcote, Flemington, and Williamstown, they were between 35 and 40 per 1,000; in seven municipalities, viz., Fitzroy, Prahran, South

* Port Melbourne was proclaimed a Town on the 16th January, 1893.

† The population given is that of all the institutions, but the Women's Hospital is the only one in which births occurred.

‡ Per 1,000 of the population of the whole of Melbourne and Suburbs.

Melbourne, Brighton, Essendon, Hawthorn, and "Remainder of District," they were between 30 and 35 per 1,000; and that in three municipalities, viz., Melbourne City, St. Kilda, and Kew, they were below 30 per 1,000. The lowest rate was in Melbourne City, viz., $25\frac{1}{3}$ per 1,000.

Birth-rates in sub-districts, 1892.

494. During 1892, the birth rates in all the sub-districts except Melbourne, North Melbourne, Fitzroy, Collingwood, South Melbourne, Port Melbourne, Hawthorn, and Flemington and Kensington were higher than they were in the ten years ended with 1890, but this was more particularly noticeable in Northcote and Essendon. The sub-districts with the highest birth rates in 1892 were Oakleigh with 53, Northcote with nearly 50, Footscray with 48, Preston with nearly 47, and Brunswick with 45 per 1,000, which were followed by "Remainder of District," Port Melbourne, and Richmond, in the order named, in all of which the rates were above 40 per 1,000; those with the lowest rates were Melbourne City, Boroondara, and St. Kilda, in which the respective rates were only 22, 25, and 26 per 1,000.

Births in Australasian capitals.

495. In 1892 the birth rate in Melbourne was much lower than that in Perth and slightly lower than in Brisbane, but above that in Sydney, Adelaide, Hobart, or Wellington, 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, 1892.

Capital Cities.*	Estimated Mean Population.	Births, 1892.	
		Total Number.	Number per 1,000 of the Population.
1. Perth	10,580	471	44·52
2. Brisbane	98,900	3,627	36·67
3. Melbourne	481,550	17,399	36·13
4. Sydney	405,820	14,070	34·67
5. Adelaide	134,670	4,432	32·91
6. Hobart	34,450	1,097	31·84
7. Wellington	35,348	1,013	28·66

Birth rate in London.

496. The average birth rate in the Australasian capital cities in 1892 was 35·07, that being much higher than the rate in London

* With suburbs.

according to the average of the ten years 1881-90, viz., 33·2, which was somewhat higher than that of England and Wales (32·5) during the same period. The rate in London was thus higher than that in Adelaide, Hobart, or Wellington, but below that in any of the other Australasian cities named in the last table.

Birth rates in Scotch towns.

497. In the five years ended with 1885 the mean birth rate of the principal towns of Scotland was 33·76; of the large towns, 33·74; and of the small towns, 32·53. 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 British towns.

498. 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 Perth than in any of those towns; in Brisbane and Melbourne than in any except Cardiff, Newcastle, Preston, Glasgow, and Portsmouth; in Sydney than in any except those towns and Manchester and Blackburn; in Adelaide than in any except those named and Sunderland, Norwich, Nottingham, and Wolverhampton; in Hobart than in any except those and Sheffield, Leicester, Bolton, Birkenhead, Salford, and 28 towns unnamed; whilst in Wellington it is lower than in any of those towns except Brighton, Huddersfield, Bradford, Dublin, and Halifax.

Birth Rates in 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

Birth rates in Foreign towns.

499. 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 Perth is above the rate in any of the towns named, but in Brisbane it is below that

in 11; in Melbourne and Sydney than in 12; in Adelaide than 14; in Hobart than in 15; and in Wellington than in 17 of those 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	Baltimore (1889) ...	18·7

Birth rates in Victorian towns.

500. The following are the birth rates in seven Victorian towns during 1892; the rate in the metropolis being, as will be observed, below that in Stawell, Warrnambool, and Bendigo (Sandhurst), but above that in Geelong, Castlemaine, or Ballarat. The populations on which the proportions are based have been brought on from those ascertained by the census of 1891:—

Birth Rates in Seven Victorian Towns, 1892.

	Births per 1,000 of Population.		Births per 1,000 of Population.
Stawell	43·65	Geelong	35·14
Warrnambool ...	40·48	Castlemaine ...	34·55
Bendigo (Sandhurst) ...	37·21	Ballarat	34·55
Melbourne	36·13		

Births of males and females.

501. The births of males in Victoria during 1892 numbered 19,405, those of females 18,426. These numbers furnish a proportion of 105·31 boys to 100 girls. In 1891 the proportion was 103·66, in 1890 104·19, and in 1889 as high as 106·05; whilst in the ten years 1881-90, 160,057 births of males and 152,508 births of females were registered, giving a proportion of 104·95 boys to 100 girls.

Births of males and females in Australasian colonies.

502. 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

* 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.

Australasian colonies during the period of twenty years ended with 1892, although not in every one of those years so far as South Australia, Western Australia, and Tasmania are concerned. The following are the numbers of boys per 100 girls born in the respective colonies during 1875, and in each subsequent fifth year, also in 1891 and 1892:—

PROPORTION OF MALE TO FEMALE BIRTHS IN AUSTRALASIAN COLONIES, 1875 TO 1892.*

Year.	Number of Boys to 100 Girls Born.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1875 ...	104·95	102·08	104·01	103·85	98·95	109·51	107·80
1880 ...	104·44	104·99	103·63	110·98	92·37	101·56	104·71
1885 ...	106·44	104·88	102·50	101·57	108·00	104·36	103·59
1890 ...	104·19	104·27	102·19	101·56	95·13	105·07	103·43
1891 ...	103·65	106·89	104·12	104·28	110·61	101·99	105·41
1892 ...	105·31	105·24	108·00	98·31	107·87	108·88	103·72

Order of colonies in respect to sexes of those born.

503. In the Australasian colonies, taken as a whole, the proportion during the three years ended with 1892 was 104·3 male to 100 female infants. In the different colonies, the proportions ranged from 105·5 males per 100 females in New South Wales to 101·4 males per 100 females in South Australia. The following is the order of the colonies in respect to these proportions:—

ORDER OF COLONIES IN REFERENCE TO PROPORTION OF MALE TO FEMALE BIRTHS, 1890 TO 1892.

	Boys to 100 Girls.		Boys to 100 Girls.
New South Wales	.... 105·47	New Zealand ...	... 104·19
Tasmania ...	... 105·31	South Australia	... 101·38
Queensland	... 104·77		
Western Australia	... 104·54	Mean ...	... 104·29
Victoria ...	... 104·38		

Births of males and females in certain countries.

504. 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 1881 to 1890, and those for the other countries named extend over periods of various lengths:—

* For the relative proportions of male and female births in the colonies during each of the 19 years ended with 1891, see *Victorian Year-Book* 1892, Vol. I., paragraph 572.

Proportion of Male to Female Births in Various Countries.

	Boys to 100 Girls.		Boys to 100 Girls.
Greece	112·0	Ireland	105·6
Roumania	111·0	Tasmania	105·5
Connecticut	110·0	South Australia ...	105·3
Italy	107·1	Victoria	105·0
Spain	107·0	Sweden	105·0
Austria	106·8	Denmark	105·0
Western Australia ...	106·7	Russia in Europe ...	105·0
France	106·4	Finland	105·0
Switzerland	106·3	Vermont	105·0
German Empire ...	106·2	Rhode Island ...	105·0
Holland	106·1	New South Wales ...	104·9
Norway	106·0	Queensland ...	104·7
Servia	106·0	New Zealand ...	104·4
Massachusetts ...	106·0	England and Wales ...	104·3
Belgium	105·9	Russian Poland ...	104·1
Scotland	105·7		

Australasian and other countries compared.

505. It will be observed that the proportion of boys born to girls is in Western Australia below that in 6 countries out of Australasia; whilst the proportion in South Australia, Tasmania, and Victoria is above that in only 8, and in New South Wales, Queensland, and New Zealand above that in only 2, of such countries.

Low proportion of boys born in England.

506. In England and Wales the proportion of births of boys to those of 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-three years ended with 1890, 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.

507. In 1892, 302 twin births and 5 triple births were registered, as against 407 twin births and 3 triple births in 1891. In the ten years ended with 1890, 2,734 cases of twins and 20 cases of triplets were recorded, the total number of births in the same period having been 312,565. There were thus 309,791 confinements in the ten years, and it follows that one mother in every 113 gave birth to twins, and 1 mother in every 15,490 was delivered of three children at a birth. During the previous decade, 1871 to 1880, 1 mother in every 111, on the average, gave birth to twins, and 1 in every 12,796 was delivered of three children at a birth.

Twins and triplets in Australasian colonies.

508. It appears that only three of the Australasian colonies besides Victoria distinguish the double and treble births in their

* See 43rd Report of the Registrar-General of England, page xvi.

returns. The following are the numbers of such births in each of the four colonies during each of the nine years ended with 1891:—

TWINS AND TRIPLETS IN FOUR AUSTRALASIAN COLONIES,* 1883 TO 1891.

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
1889	381	1	329	1	146	1	152	...
1890	353	3	398	1	154	1	190	2
1891	407	3	393	...	137	1	178	2

Illegitimate births.

509. The illegitimate children born in 1892 numbered 2,116, or 1 to every 18 births registered, the proportion for the preceding year being 1 to 19. In the ten years 1881-90, out of 312,565 infants born, 14,916 were traced as having been born out of wedlock, which numbers furnish a proportion of 1 illegitimate child to every 21 births, as compared with an average during the ten years ended with 1880 of 1 to every 27 births.

Illegitimacy and concubinage, 1875 to 1892.

510. The following table gives a statement of the number of illegitimate births and their proportion to the total number registered; 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 1875 and each subsequent fifth year, also to those of 1891 and 1892:—

ILLEGITIMACY AND CONCUBINAGE, 1875 TO 1892.‡

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.
1875	779	2·92	2,573	3·36
1880	1,254	4·80	4,143	4·39
1885	1,308	4·36	4,320	3·54
1890	1,913	5·09	6,320	4·65
1891	2,064	5·36	6,150	4·26
1892	2,116	5·59	7,124	4·78
Mean of 18 years	1,418	4·65	4,653	4·10

* For the proportion of twins and triplets in various countries, see *Victorian Year-Book*, 1892, paragraph 579.

† Including one case of quadruplets.

‡ For similar results for each of the 19 years ended with 1891, see *Victorian Year-Book*, 1892, Vol. I., paragraph 583.

Illegitimacy in Australasian colonies.

511. All the Australasian colonies 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 Victoria and New South Wales, next in Western Australia, next in Queensland, next in Tasmania, and least of all in South Australia and New Zealand, and in 1891 the same order prevailed. 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 various colonies, during 1875 and each subsequent fifth year, also in 1891 :—

ILLEGITIMACY IN AUSTRALASIAN COLONIES, 1875 TO 1891.*

Year.	Illegitimate Births to every 100 Children Born.					
	Victoria.	New South Wales.	Queensland.	South Australia.	Tasmania.	New Zealand.
1875	2·92	4·20	3·43	...	...	1·36
1880	4·80	4·35	4·31	...	...	2·43
1885	4·36	4·60	4·08	2·42	4·55	3·20
1890	5·09	5·26	4·85	2·50	4·05	3·30
1891	5·36	5·36	4·65	2·93	3·72	3·49
Mean of 17 years	4·54	4·55	4·10	2·52†	3·93†	2·76

NOTE.—In Western Australia the proportion was 4·36 in 1887, and 3·95 in 1888. Since then the proportions do not appear to have been published.

Illegitimacy in United Kingdom.

512. 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, except Victoria and New South Wales. 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 last one :—

ILLEGITIMACY IN ENGLAND, SCOTLAND, AND IRELAND, 1871 TO 1891.

Period.	Illegitimate Births to every 100 Children born.		
	England and Wales.	Scotland.	Ireland.
1871-80	5·0	8·7	2·4
1881-85	4·8	8·2	2·7
1886	4·7	8·2	2·7
1887	4·8	8·3	2·8
1888	4·6	8·1	2·9
1889	4·6	8·0	2·8
1890	4·4	7·6	2·7
1891	4·2	...	2·7

* For similar results for each of the 19 years ended with 1890, see *Victorian Year-Book*, 1892, Vol. I., paragraph 584.

† Mean of 7 years.

Illegitimacy in various countries.

513. 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.

Country.	Illegitimate Births to every 100 Children Born.	Country.	Illegitimate Births to every 100 Children Born.
Austria	14·7	Spain	5·5
Bavaria	13·9	England	4·7
Saxony	12·7	Switzerland	4·6
Sweden	10·2	New South Wales ...	4·6
Denmark	9·6	Victoria	4·6
German Empire ...	9·3	Western Australia ...	4·2
Belgium	8·7	Queensland	4·1
Hungary	8·4	Tasmania	3·9
Scotland	8·2	Holland	3·2
Norway	8·1	Russia	3·1
France	8·1	Ireland	2·8
Prussia	8·1	New Zealand... ...	2·8
Italy	6·8	South Australia ...	2·5
Portugal	5·6	Greece	1·6

Position of Victoria in respect to illegitimacy.

514. According to the figures, more illegitimacy prevails in Austria, Bavaria, Saxony, and Sweden, and less in Greece, than in any other countries. In Victoria, illegitimacy appears to be less prevalent than in eighteen, and more so than in nine, of the countries.

Illegitimacy in town and country.

515. 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 1892, in the metropolitan district about 1 birth in 12, in the extra-metropolitan towns 1 birth in 21, but in country districts only one birth in 41 was registered as illegitimate. In the previous year the proportions were 1 in 13, 1 in 21, and 1 in 36 respectively.*

Fecundity of women in Australasian colonies.

516. In order to ascertain the fruitfulness of the women of a country, it is usual to compare the legitimate births with the number of married women at the child-bearing age, which may be assumed to include all who have not passed their 45th year. Comparing the births with the total population, which is the ordinary means resorted to for the purpose of obtaining a knowledge of the reproductive strength of a community, is likely to mislead, as the population of

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* Statistics of illegitimacy in 32 foreign cities are given in the *Victorian Year-Book*, 1892, Vol. I., paragraph 589. In every one of these a larger amount of illegitimacy is shown than that prevailing in Melbourne.

different countries, or of the same country at different periods, varies considerably in regard to the sexes, ages, and conjugal condition of those forming its component parts. The number of legitimate, as distinguished from natural, births is published in all the Australasian colonies except Western Australia. By comparing the former in 1891 with the number of married women at child-bearing ages returned at the census, as is done in the following table, the relative fecundity of the women of each of the colonies named is shown:—

PROPORTION OF BIRTHS TO MARRIED WOMEN IN SIX AUSTRALASIAN COLONIES, 1891.

(Exclusive of Aborigines.)

Colony.	Married Women under 45 Years of age.	Legitimate Births, 1891.	
		Total Number.	Number per 100 Married Women under 45.
1. Tasmania	15,150	4,786	31·59
2. Queensland	44,537	14,031	31·50
3. South Australia	33,486	10,425	31·13
4. Victoria	120,630	36,441	30·21
5. New South Wales ...	125,056	37,343	29·86
6. New Zealand	63,172	17,635	27·92

Concubinage in Australasian colonies.

517. Supposing the distinction between children born in and out of wedlock to be correctly stated in the marriage registers, it would be possible to ascertain approximately what number of single women were living in concubinage, the assumption being that the illegitimate births would bear the same proportion to such single women that the legitimate births do to the married women at the reproductive period of life. Statistics of illegitimacy are, however, always more or less unreliable. The very natural desire of a woman to conceal her shame and protect her offspring from the legal and social disabilities attending illegitimate birth may, and no doubt often does, impel her when registering her child's birth to keep back the fact of its having been born out of wedlock. It is certain that illegitimacy is always as rife as the returns indicate, but how much more common it may be there are no means of ascertaining. In the following table an attempt is made to state the probable number of single women living in concubinage in the six Australasian colonies which published statistics of the illegitimacy prevailing during the census year. The figures, however, for the reasons given, must be taken only for what they may be worth:—

Concubinage in Six Australasian Colonies, 1891.

(Exclusive of Aborigines.)

Colony.	Single Women between 15 and 45 Years of Age.*	Illegitimate Births, 1891.	Single Women living in Concubinage (exclusive of public prostitutes).	
			Total Number.	Number per 100 Single Women between 15 and 45.
1. Queensland ...	34,627	684	2,171	6·27
2. New South Wales ...	114,426	2,115	7,083	6·19
3. Victoria	142,443	2,064	6,832	4·80
4. Tasmania	15,425	185	586	3·80
5. New Zealand ...	68,030	638	2,285	3·36
6. South Australia ...	35,310	312	1,002	2·84

Concubinage in Australasian colonies, 1881 and 1891.

518. Similar computations were made in 1881 for the same colonies except South Australia and Tasmania, which did not then separate the illegitimate births. The colonies referred to then stood in the same relative positions in regard to the single women (exclusive of public prostitutes, who, as is well known, rarely have children) living in concubinage as they did in 1891, but the proportions at the latter period were higher in Victoria, Queensland, and New South Wales (especially the last named), and very much lower in New Zealand, than they were at the former. The following are the figures at the two periods calculated according to a different, and perhaps more readily understood, method than those in the last column of the table :—

	1881.	1891.
In Queensland 1 single woman† was living immorally in every ...	15 ...	16
„ New South Wales „ „ „ „ ..	20 ...	16
„ Victoria „ „ „ „ ...	22 ...	21
„ Tasmania „ „ „ „ ...	— ...	26
„ New Zealand „ „ „ „ ...	23 ...	30
„ South Australia „ „ „ „ ...	— ...	35

Fecundity of women in Australasian colonies.

519. 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, Tasmania, and New Zealand; but not in that of Western Australia, as in the returns of that colony no distinction was made at the time the census of 1891 was taken between the infants born in

* Including those never married, divorced, and widowed.

† Between 15 and 45 years of age.

and those born out of wedlock. By means of such a comparison in regard to the six colonies named, it would appear that the highest degree of fecundity exists in Tasmania, and the lowest in New Zealand, Victoria occupying a position above that colony and New South Wales. 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 six colonies :—

PROPORTION OF BIRTHS TO MARRIED WOMEN IN AUSTRALASIAN COLONIES, 1891.

Colony.	Married Women under 45 years of age.	Legitimate Births, 1891.	
		Total number.	Number per 100 Married Women under 45.
1. Tasmania	15,150	4,786	31·59
2. Queensland	44,537	14,031	31·50
3. South Australia ...	33,486	10,425	31·13
4. Victoria	120,630	36,441	30·21
5. New South Wales ...	125,056	37,343	29·86
6. New Zealand	63,172	17,635	27·92

Children to a marriage in Victoria.

520. Another method of determining the fecundity of women is to find the average number of children born to a marriage, which may 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 1875 and each subsequent fifth year, also during 1891 and 1892 :—

CHILDREN TO A MARRIAGE, 1875 TO 1892.

Year.	Legitimate Births.	Marriages in Year prior to that named in first column.	Average Number of Children to a Marriage.
1875	25,941	4,925	5·27
1880	24,894	4,986	4·99
1885	28,667	7,218	3·97
1890	35,665	9,194	3·88
1891	36,441	9,187	3·97
1892	35,715	8,780	4·07
Sums and Mean during 18 years	522,447	120,527	4·33

Decrease in children to a marriage in Victoria.

521. The figures show a steady diminution in the proportion of children born until the last two years, during which there has been a slight revival. Comparing the last year with the first, there has been

a falling-off of a child and a fifth to a marriage, or of six children to five 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.

Children to a marriage in Australasian colonies.

522. 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. The following are the proportions in each colony for 1880 and each subsequent fifth year, also for 1891:—

CHILDREN TO A MARRIAGE IN AUSTRALASIAN COLONIES, 1880 TO 1891.

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
1885 ...	3·97	4·68	4·39	4·60	4·62	5·18
1890 ...	3·88	4·90	4·69	4·90	4·78	4·87
1891 ...	3·97	5·01	4·61	4·60	5·21	4·81
Mean of 12 years	4·20	4·72	4·60	4·72	4·74*	5·21

NOTE.—In Western Australia, the proportion in 1887 was 5·03, and in 1888, 4·61; mean of the two years 4·82. The number of legitimate, as distinguished from the illegitimate, births does not appear to have been published for the other years.

Decrease in children to a marriage in each colony.

523. It seems that in all the colonies except Tasmania and New South Wales 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 1891, however, the proportions were above the average in all the colonies named in the table except Victoria, South Australia, and New Zealand.

Children to a marriage in various countries.

524. 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:—

* Mean of seven years.

Children to a Marriage in Various Countries.

	Children to each Marriage.		Children to each Marriage.
Ireland	5·46	Scotland	4·43
New Zealand ...	5·21	Holland	4·34
Western Australia ...	4·82	Victoria	4·20
Tasmania	4·74	Belgium	4·21
New South Wales ...	4·72	England	4·16
South Australia ...	4·72	Sweden	4·01
Queensland ...	4·60	Denmark	3·55
Italy	4·56	France	2·98

525. Ireland is at the head of the list, but it may be questioned whether the high proportion prevailing there does not in some degree result from the fact that the registration of marriages* is more defective than that of births. Ireland is closely followed by six Australasian colonies, after which comes Italy. Ireland, Italy, Scotland, and Holland are the only countries out of Australasia which stand above Victoria. Position of Victoria in reference to births to a marriage.

526. 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 1892, and the percentages for two previous decennial periods :— Births in each quarter.

Births in each Quarter.

Seasons.	Quarter ended on the last day of—	Year 1892.		Percentage in Ten Years—	
		Number of Births.	Percentage.	1881 to 1890.	1871 to 1880.
Summer	March ...	9,309	24·61	23·63	23·74
Autumn	June ...	9,490	25·08	25·49	25·10
Winter	September ...	9,905	26·18	26·73	27·15
Spring	December ...	9,127	24·13	24·15	24·01
	Year ...	37,831	100·00	100·00	100·00

527. The deaths registered in 1892 numbered 15,851, as against 18,631 in 1891. There was thus a decrease in the year under notice of 2,780, or 15 per cent. Deaths, 1892.

* See footnote (¶) to table following paragraph 415 *ante*.

† A table showing the proportion of births occurring in each quarter in various countries was given in the *Victorian Year-Book*, 1892, Vol. I., paragraph 597.

Deaths, 1892 and former years.

528. The deaths in 1892 were fewer than in any previous year since 1886. The greatest mortality was in 1889, when the deaths exceeded 19,000; 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.

Excess of births over deaths.

529. The births in 1892 exceeded the deaths by 21,980 or 139 per cent., the corresponding proportion being 107 per cent. in the previous year. The proportion in 1892 was exceeded in 1865, and the six years ended with 1873, but in no other years. In the ten years ended with 1890 the proportion averaged 107 per cent.; and in the ten years ended with 1880 it averaged 119 per cent.; whilst during the twenty-eight years ended with 1892 the average was 118 per cent. The following were the births and deaths in 1865 and in each subsequent fifth year, also in 1891 and 1892 and the excess of the former over the latter:—

EXCESS OF BIRTHS OVER DEATHS, 1865 TO 1892.

Year.	Births.	Deaths.	Excess of Births over Deaths.	
			Numerical.	Centesimal.
				Per Cent.
1865 ...	25,915	10,461	15,454	148
1870 ...	27,151	10,420	16,731	161
1875 ...	26,720	15,287	11,433	75
1880 ...	26,148	11,652	14,496	124
1885 ...	29,975	14,364	15,611	109
1890 ...	37,578	18,012	19,566	109
1891 ...	38,505	18,631	19,874	107
1892 ...	37,831	15,851	21,980	139
Total in 28 years ...	814,578	374,108	440,470	118

Years in which births doubled deaths.

530. It may be remarked that the births more than doubled the deaths in all the years except 1875, 1876, 1882, and 1889.

Excess of births over deaths in Australasian colonies.

531. Of the Australasian colonies, New Zealand is the one in which the births almost invariably exceed the deaths by the highest proportion, although an exception to this rule took place in 1891, when the

* 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.

proportion was highest in Queensland, and in 1892, when the proportion was higher in South Australia, New South Wales, and that colony. The position of Victoria in regard to the proportionate increase of births over deaths, although higher than that in most countries, is below that in any of the other colonies of the group. The following table shows the percentage of excess of births over deaths in each of the Australasian colonies during the respective years 1883 to 1892, 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, 1883–1892.

Colony.	Excess per cent. of Births over Deaths.										
	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	Mean of 10 years.
New Zealand ...	217	246	224	215	212	231	220	205	180	177	213
South Australia ...	152	147	202	164	175	180	195	164	155	184	172
New South Wales ...	155	139	129	149	177	168	151	174	142	178	156
Queensland ...	96	56	87	126	162	158	135	173	185	183	136
Tasmania	101	130	128	134	119	135	127	127	122	140	126
Western Australia ..	89	55	100	82	122	126	161	189	106	99	113
Victoria	112	114	109	106	106	112	88	109	107	139	110

532. In 1892 the percentage of excess of births over deaths in Melbourne was below that in any of the Australasian capital cities except Perth and Hobart; it was, however, twice as high as in the former and nearly three times as high as in the latter, 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, 1892.

	Per cent.		Per cent.
1. Brisbane ...	161	5. Melbourne ...	126
2. Sydney	155	6. Perth	63
3. Adelaide	133	7. Hobart	44
4. Wellington ...	131		

533. The following table shows the percentage of excess of births over deaths in certain European countries during each of the five years ended with 1891. 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, 1887 to 1891.

Countries.	Excess per cent. of Births over Deaths.					
	1887.	1888.	1889.	1890.	1891.	Mean of 5 years.
Norway	92	82	71	69	77	78
Sweden	84	80	73	63	...	75*
The Netherlands ...	71	66	65	60	63	65
Denmark	75	61	68	60	55	64
England and Wales ...	67	72	71	55	55	64
Scotland	67	73	68	54	51	63
Prussia	58	64	60	52	65	60
German Empire ...	53	54	54	46	58	53
Belgium	52	45	48	40	41	45
Italy	38	36	50	36	42	40
Hungary	31	37	47	25	...	35*
Switzerland	38	39	36	27	36	35
Austria	32	30	39	25	37	33
Ireland	27	28	30	23	26	27
France	7	5	11	−5†	−1†	3

Excess of births over deaths in Australia and elsewhere.

534. 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) until the last two years the births have been more than three times as numerous as the deaths. It will, moreover, be noticed that the deaths exceeded the births in France in 1890 and 1891.

Natural increase of population.

535. During the ten years 1883-1892, the population of Victoria increased at the average annual rate of 1·70 per cent. by excess of births over deaths, at which rate, irrespective of immigration, the population would double itself in 41 years. The rates varied from a minimum of 1·58 in 1889 to a maximum of 1·90 in 1892, as will be seen by the following figures :—

* Mean of 4 years.

† The minus sign (−) implies that the deaths were more numerous than the births.

INCREASE OF POPULATION BY EXCESS OF BIRTHS OVER DEATHS, 1883 TO 1892.

	Per cent.		Per cent.		Per cent.
1883 ...	1·62	1887 ...	1·70	1891 ...	1·76
1884 ...	1·67	1888 ...	1·76	1892 ...	1·90
1885 ...	1·65	1889 ...	1·58		
1886 ...	1·64	1890 ...	1·77	Mean ...	1·70

536. Comparing the mean of the ten years ended with 1890 with similar means for the other Australasian colonies during the same period the figures are as follow:— Natural increase in Australasian colonies.

MEAN ANNUAL RATE OF INCREASE BY EXCESS OF BIRTHS OVER DEATHS IN AUSTRALASIAN COLONIES, 1881-1890.

	Per cent.		Per cent.
1. New Zealand ...	2·34	5. Tasmania	1·92
2. South Australia ...	2·26	6. Western Australia ...	1·91
3. New South Wales ...	2·23	7. Victoria	1·64
4. Queensland	2·06		

537. Sir Rawson W. Rawson, in his 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
Würtemberg	1·11	Hungary	·48
Baden	1·05	Roumania	·32
Belgium	·91	France	·16
Bavaria	·89		

538. According to the figures, the rate of natural increase (excess of births over deaths) in Victoria is about equal to that in Servia, and much higher in every one of the Australasian colonies than in any of the other countries named. It will be noticed that England and Wales stands near the head of the list, Scotland lower, and Results in various countries compared.

Ireland very much lower, also that in France the rate of natural increase is much below that in any other country.

Deaths of males and females.

539. In Victoria, deaths of males in 1892 numbered 9,098, and deaths of females, 6,753. These numbers furnish a proportion of nearly 74 females to every 100 males; as against a proportion to every 100 males of 74 females in the ten years 1882-91, and of 75 females in the ten years 1872-81. Females in the total population were in the proportion to every 100 males of 92 during 1892, 90 during the last, and 88 during the preceding decennial period; 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.

540. 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 1860 and each subsequent fifth year, also in 1891 and 1892:—

ANNUAL DEATH RATE, 1860 TO 1892.

Year.	Estimated Mean Population.		Number of Deaths.		Deaths per 1,000 of the Mean Population.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.*
1860 ...	331,979	202,475	7,134	4,927	21·49	24·33	21·49
1865 ...	347,083	264,135	6,158	4,303	17·74	16·29	17·11
1870 ...	392,159	321,036	6,114	4,306	15·59	13·41	14·61
1875 ...	419,779	367,558	8,563	6,724	20·40	18·29	19·42
1880 ...	446,445	403,898	6,610	5,042	14·81	12·48	13·70
1885 ...	504,000	452,880	8,300	6,064	16·47	13·39	15·01
1890 ...	589,310	529,190	10,369	7,643	17·60	14·44	16·10
1891 ...	600,860	546,070	10,666	7,965	17·75	14·59	16·24
1892 ...	606,990	555,720	9,098	6,753	14·99	12·15	13·63
Average of thirty-three years ..					16·82	14·47	15·74

NOTE.—In 1860 and 1875, especially in the former year, the death rate was swelled by epidemics of measles and scarlatina.

Male and female death rate compared.

541. It will be noticed that in all the years shown, except 1860, death bore more hardly upon males than upon females. The figures in the lowest line of the table show that, over a period of thirty-three years, the deaths of males per 1,000 of the same sex living exceeded by $2\frac{1}{3}$ the deaths of females per 1,000 of that sex living.

Normal death rate.

542. 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 these conditions rarely prevail in newly settled countries, and consequently the death rates based merely upon the total population, in common

with birth and marriage rates, calculated upon a like basis, are not 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 the 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 nine times in the last thirty-three years, but over the whole period it has averaged less than 16 per 1,000. In the last sixteen years it has only thrice been so high as 16 per 1,000, whilst in six of those years it was below 15 per 1,000, in two being even below 14 per 1,000.

Low mortality in two census years.

543. The death rate of both males and females was lower in 1892 than in any other year except 1871, and next to these the lowest death rate was in 1881; it thus happened that those two successive 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.

Death rate in Australasian colonies.

544. The proportion which the deaths that occurred in each Australasian colony bore to the total population of that colony during 1865 and each subsequent fifth year, also in 1891 and 1892, will be found in the following table:—

DEATH RATES IN AUSTRALASIAN COLONIES, 1865 TO 1892.

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
1870 ...	14·61	13·38	14·59	13·94	...	13·88	11·13
1875 ...	19·42	18·42	23·80	19·45	17·88	20·00	15·92
1880 ...	13·70	15·47	13·59	14·85	13·24	16·12	11·46
1885 ...	15·21	16·48	20·19	12·73	17·61	15·89	10·74
1890 ...	16·10	12·90	14·61	12·40	12·00	14·74	9·66
1891 ...	16·24	14·24	12·77	13·26	16·96	15·00	10·35
1892 ...	13·63	12·20	12·66	11·38	16·63	13·53	10·06
Mean of 28 years	15·62	15·24	17·30	14·35	16·10*	15·29	11·52

Normal death rate in colonies.

545. In the twenty-eight years over which the observations extend, the normal death rate of 17 per 1,000 persons living was reached in Queensland fourteen times, in Victoria five times, in New South Wales and South Australia four times, in Tasmania three

* Mean of 18 years.

times, and in New Zealand not at all. In the last twenty-one 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.

Order of colonies in respect to death rates.

546. 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; next to Queensland in point of mortality stands Western Australia, and then follow—with death rates differing but slightly from one another—Victoria, Tasmania, and New South Wales; whilst the average death rate in South Australia is lower than that in any except New Zealand. In 1892, the death rates were low in all the colonies, but the death rate of Victoria was above that of any of the other colonies except Western Australia. 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 1892.	Order over a Series of Years.
1. Western Australia.	1. Queensland.
2. Victoria.	2. Western Australia.
3. Tasmania.	3. Victoria.
4. Queensland.	4. Tasmania.
5. New South Wales.	5. New South Wales.
6. South Australia.	6. South Australia.
7. New Zealand.	7. New Zealand.

Death rate in Australia and Australasia.

547. 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 twenty years ended with 1892:—

DEATH RATE IN AUSTRALIA AND AUSTRALASIA, 1873 TO 1892.

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	1884 ...	16·35	15·30
1874 ...	15·73	15·36	1885 ...	15·98	15·02
1875 ...	19·08	18·63	1886 ...	15·27	14·44
1876 ...	17·12	16·37	1887 ...	14·43	13·78
1877 ...	15·23	14·77	1888 ...	14·49	13·64
1878 ...	15·72	14·94	1889 ...	15·39	14·37
1879 ...	14·06	13·84	1890 ...	14·25	13·51
1880 ...	14·47	14·01	1891 ...	14·75	14·04
1881 ...	14·62	14·01	1892 ...	12·77	12·36
1882 ...	15·82	15·01			
1883 ...	15·05	14·50	Means ...	15·25	14·10

548. 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 1892 the rate for the continent, as well as that for the whole of Australasia, was lower than in any previous year. Normal death rate in Australia and Australasia.

549. 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 certain British possessions.

DEATH RATES IN BRITISH POSSESSIONS.

Colonies.	Years.	Number of Deaths per 1,000 of the Population.
Gibraltar	1888–9	21·8
Malta	1886	27·0
British India	1880–88	24·9
Ceylon	1886–8	24·8
Straits Settlements	1888–9	30·4
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
Sierra Leone	1887–9	18·3
Nova Scotia	1871–5	12·1
Bermudas	1875–89	24·0
British Guiana	1871–83	33·7
West Indies—		
Bahamas...	1888–9	22·8
Jamaica	1883–7	22·9
St. Lucia...	1869–84	25·3
St. Vincent	1886–9	21·2*
Barbados	1886	25·7
Grenada	1888–9	23·9*
Tobago	1886	21·0
Antigua	1883–4	39·5
Montserrat	1883–6	20·4
Dominica	1882–3	17·3
Trinidad...	1881–90	27·8*

550. In all the European countries of which the information is at hand, except Sweden and Norway, 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 Sweden, Death rates in European countries.

* Inclusive, it is believed, of still-births, which are recorded as deaths.

the mean rate is above 17 per 1,000, and, with the exception of that country and Norway, in not one of those countries did the rate during any of the years named ever fall as low as 17 per 1,000; whilst in Hungary, on the other hand, the average rate amounts 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, 1887 TO 1891.

Countries.	Number of Deaths per 1,000 of Mean Population.					
	1887.	1888.	1889.	1890.	1891.	Mean of Five Years.
Hungary	33·7	32·0	29·8	32·3	...	32·0*
Austria	28·8	29·2	27·3	29·4	27·9	28·5
Italy	28·0	27·6	25·6	26·4	26·2	26·8
German Empire ...	24·2	23·7	23·7	24·4	23·4	23·9
Prussia	23·8	22·8	23·2	24·1	22·9	23·4
France	22·0	21·8	20·5	22·6	22·6	21·9
Switzerland	20·2	19·9	20·3	20·9	20·8	20·4
Holland	19·7	20·4	20·1	20·5	20·7	20·3
Belgium	19·3	20·1	19·1	20·6	21·0	20·0
Scotland	19·0	18·0	18·4	19·7	20·7	19·2
Denmark	18·3	19·7	18·6	19·0	20·0	19·1
England and Wales ...	19·1	18·1	18·2	19·5	20·2	19·0
Ireland	18·2	17·9	17·4	18·2	18·4	18·0
Norway	16·0	16·9	17·4	17·9	17·5	17·1
Sweden	16·1	16·0	16·0	17·1	...	16·3*

Death rate in United Kingdom.

551. According to the reports of the Registrars-General of England and Scotland, the death rate of the latter country approximates 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 it is found that the death rate in 1891 was higher than in any previous year since 1880. The following are the death rates for 1870 and each subsequent fifth year, also for 1891:—

DEATH RATE IN THE UNITED KINGDOM, 1870 to 1891.

	Deaths per 1,000 of the Population.		Deaths per 1,000 of the Population.
1870	21·8	1890	19·4
1875	22·2	1891	20·0
1880	20·4		
1885	19·1	Mean of 22 years	20·1

Death rates in town and country, 1892.

552. In every country the death rate is higher in towns than it is in extra-urban districts. This circumstance, although no doubt partly attributable to the superior healthfulness and immunity from

* Mean of four years.

† 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, in the more recent years, but few deaths escaped registration.

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 1892, the death rate was much lower in Melbourne and suburbs than in the country towns, whilst in the former it was nearly twice as high, and in the latter more than twice as high as in the country districts. The rate in Melbourne was considerably below, and that for country towns was slightly below, whilst that for rural districts was slightly above, the average of the ten years ended with 1890. The following are the figures:—

DEATHS IN URBAN AND COUNTRY DISTRICTS, 1892.

Districts.	Estimated Mean Population.	Deaths, 1892.		
		Total Number.	Number per 1,000 of the Population.	
			1892.	Annual Mean, 1881-90.
Melbourne and suburbs (Greater Melbourne)	481,550	7,698	15·99	20·65
Extra-metropolitan Towns	194,182	3,700	19·05	19·90
Country districts ...	486,978	4,453	9·14	8·90
Total ...	1,162,710	15,851	13·63	15·20

553. The number of deaths per 1,000 of the estimated population of the metropolis and suburbs (Greater Melbourne), the extra-metropolitan towns, and the country districts of Victoria, is given in the following table for 1875 and each subsequent fifth year, also for 1891 and 1892:— Death rates in town and country, 1875 to 1892.

DEATH RATES IN URBAN AND COUNTRY DISTRICTS, 1875 TO 1892.*

Years.	Number of Deaths per 1,000 of the Estimated Population.			
	Greater Melbourne.†	Extra-Metropolitan Towns.	Country Districts.	Total of Victoria.
1875 ...	25·82	26·03	11·24	19·42
1880 ...	18·70	17·65	8·13	13·70
1885 ...	20·15	18·88	9·03	15·01
1890 ...	19·63	21·58	10·09	16·10
1891 ...	19·05	22·79	10·45	16·24
1892 ...	15·99	19·05	9·14	13·63

* For the death rates in urban and country districts during each of the nineteen years ended with 1891, see *Victorian Year-Book*, 1892, Volume I., paragraph 626.

† The death rate in Greater Melbourne would be considerably reduced if the deaths which occurred in the metropolitan hospitals, asylums, etc., the patients in which come from all parts of the colony, should be eliminated from the total. In 1891, it would be reduced to 15·75, and in 1892 to 13·13 per 1,000 persons living.

Normal death rate in town and country.

554. In thirteen of the last twenty years,* including eight of the last eleven, the death rate in Melbourne and suburbs was higher than that in the other town districts; but in 1890, 1891, 1892, and the other four years the death rate in the extra-metropolitan towns was the higher. A greater mortality in proportion to population prevailed in the urban than in the country districts 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. In 1892 the death rate in Greater Melbourne was lower than in any year since 1872, in the extra-metropolitan towns than in any year since 1886, and in the country districts than in any year since 1888.

Death rates in town and country districts of England.

555. In England and Wales, during the ten years 1881-90, the death rate in urban districts was 20·3 per 1,000, and in country districts, 17·3 per 1,000; the difference between these rates being not nearly so great as in similar divisions of Victoria.†

Death rates in Melbourne and suburbs.

556. The following table shows the mean population, the number of deaths, and the proportion of the latter to the former, in 1892, also the number of deaths to every 1,000 persons living during the period of ten years ended with 1890, 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, 1892.	Deaths.		
		Total Number.	Number per 1,000 of the Population.‡	
			1892.	Annual Mean, 1881 to 1890.
Melbourne City	72,050	885	12·28	16·64
North Melbourne Town	21,064	263	12·49	18·76
Fitzroy City	30,818	431	13·99	17·55
Collingwood City	34,203	475	13·89	19·84
Richmond City	34,822	598	17·17	19·03
Brunswick Town	20,984	302	14·39	18·39
Northcote Town	6,888	77	11·18	15·86§

* See first footnote on preceding page.
† See 53rd Report of the Registrar-General of England, page li.
‡ In order to compare the death rate with density of population, see table following paragraph 67 *ante*.
§ Average of 7 years.

Deaths in Greater Melbourne—*continued.*

Sub-districts.	Estimated Mean Population, 1892.	Deaths.		
		Total Number, 1892.	Number per 1,000 of the Population.*	
			1892.	Annual Mean, 1881 to 1890.
Prahran City	38,229	522	13·65	16·53
South Melbourne City	41,640	540	12·97	17·45
Port Melbourne Town † ...	12,481	164	13·14	19·53
St. Kilda City...	19,838	250	12·60	14·15
Brighton Town	9,828	129	13·13	14·76
Essendon Town	14,986	171	11·41	12·28‡
Flemington and Kensington Borough	10,300	125	12·14	15·02‡
Hawthorn City	19,064	231	12·12	14·06
Kew Borough...	7,424	70	9·43	12·01
Footscray City	18,142	266	14·66	18·39
Williamstown Town	15,780	194	12·29	16·55
Oakleigh Borough	1,150	20	17·39	15·33
Caulfield Shire	8,185	72	8·80	
Malvern Shire	8,662	109	12·58	
Boroondara Shire	6,432	55	8·55	
Preston Shire	3,209	42	13·09	
Coburg Shire	5,840	51	8·73	
Remainder of district	13,377	220	16·45	
Shipping in Hobson's Bay and river	1,965	10	5·09	7·22
Total	477,361	6,272	13·03	16·96
Hospitals, Asylums, etc.§ ...	4,189	1,426	2·96‖	3·69‖
Grand Total	481,550	7,698	15·99	20·65

557. It will be observed that in 1892 the death rates were below the average of the decennial period in all the sub-districts. In the whole of these a low rate of mortality prevailed, more especially in the shires of Boroondara, Coburg, and Caulfield, the town of Northcote, and the borough of Kew. Death rates in 1892 and series of years.

558. The only sub-districts which, according to the average of ten years, had a higher death rate than 19 per 1,000¶ are the low-lying Places in which death rate was highest and lowest.

* In order to compare the death rate with density of population, see table following paragraph 67 *ante*.

† Port Melbourne was proclaimed a town on the 16th January, 1893.

‡ Average of 8 years.

§ Includes the Melbourne, Alfred, Women's, and Children's Hospitals, and the Immigrants' Home (partly also in South Melbourne), all situated in Melbourne City; the Benevolent Asylum, which is on the boundary between North Melbourne and Melbourne City; the Homœopathic Hospital, which is in South Melbourne; the Home of the Little Sisters of the Poor, which is in Northcote; the Metropolitan Lunatic Asylum, which is in Kew; 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.

¶ 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.

localities of Collingwood, Port Melbourne, and Richmond; the next highest death rate prevailed in the densely populated suburb of North Melbourne, and next in Brunswick and Footscray. In 1891 the highest death rate was in Footscray, which, with Port Melbourne, were the only districts with a rate exceeding 18 per 1,000; then followed in the order named, Brunswick and Collingwood, with rates of nearly 18 per 1,000. In 1892 no sub-district had as high a death rate as 18 per 1,000, and Richmond and Oakleigh were the only ones in which it exceeded 17 per 1,000; in "Remainder of District," the rate was about 16½ per 1,000, but in no other sub-district than those named did it reach as high as 15 per 1,000.

Death rate in Greater Melbourne, excluding hospitals, etc.

559. The death rate of Greater Melbourne, taken as a whole, in the calculation of which the deaths in charitable institutions are included, was about 16 per 1,000 persons living in 1892, or 4⅔ per 1,000 lower than the average during the period of ten years. 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 6,272, or a proportion of 13·03 per 1,000 living, a similar proportion for the ten years ended with 1890 being 16·96.

Deaths in Australasian capitals, 1892.

560. In 1892, according to the following figures, the death rate of Melbourne was very much lower than that of Perth or Hobart, but somewhat higher than that of any of the other Australasian capital cities. In 1881, or eleven years previously, the death rate in Adelaide was higher than in Melbourne or any other capital; whilst that of Sydney was only slightly lower than in Melbourne; but the returns indicate a marked decline in the mortality of those cities since 1881. There is reason to believe, however, that in some of the colonies the metropolitan radius, so far as the deaths are concerned, is smaller than that for which the population is returned. In such 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 possibly 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 of the other capital cities named :—

Deaths in Australasian Capital Cities, 1892.

Capital Cities.*	Estimated Mean Population, 1892.	Deaths, 1892.	
		Total Number.	Number per 1,000 of the Population.
Perth ...	10,580	288	27·22
Hobart ...	34,450	762	22·12
Melbourne ...	481,550	7,698	15·99
Adelaide ...	134,670	1,900	14·11
Brisbane ...	98,900	1,387	14·02
Sydney ...	405,820	5,512	13·58
Wellington ...	35,348	438	12·39

561. According to the following figures, showing the death rates in the principal towns in the United Kingdom, and the figures just given (for 1892) showing the death rates in Australasian capital cities, the death rate is apparently lower in Wellington, Sydney, Brisbane, Adelaide, and Melbourne than in any British town; but the death rate in Perth is higher than in all of the towns given in the list except Dublin, Manchester, and Preston; and that in Hobart higher than in all except those towns together with Blackburn, Newcastle, Oldham, Liverpool, Glasgow, Huddersfield, Plymouth, and Salford :— Death rates in towns of United Kingdom.

Death Rates in British Towns.

	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

562. 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 had always been, and continued to be highest; but Towns having highest and lowest death rates.

* With suburbs.

Liverpool, which some years previously stood at the head of the list, had, in 1887, six towns above it, and stood immediately above Glasgow. In Birmingham the mortality was comparatively low, and approximated closely to that of London.

Death rates in foreign towns.

563. The death rate in all the Australasian capitals will be found to be considerably lower than the average death rates of most of the 51 Colonial and Foreign towns named in the subjoined list:—

Death Rate in 51 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	New York	26·2
Valparaiso	64·6	Leipsic	26·1
St. Petersburg	51·4	Zurich	25·6
Havanna	45·7	Turin	25·6
Madras (1887)	40·3	Dresden	25·4
Rio Janeiro	39·4	Stockholm	24·7
Madrid	37·4	Lyons	24·7
Buda-Pesth	35·2	Hamburg	24·5
Alexandria	34·2	Bucharest	24·5
Naples	33·1	Brussels	23·9
Munich	32·8	Paris (1887)	23·4
Breslau	32·5	Rotterdam	23·3
Rouen	31·3	Berlin (1889)	23·1
Calcutta	31·1†	Boston (1890-91)	22·9
Mexico	30·9	Quebec	22·9
Milan	30·6	Venice	22·7
Buenos Aires	30·1	New Orleans	22·7
Montreal (1889)	29·6	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

Death rates in Victorian towns.

564. Of the 6 principal towns in Victoria next in importance to Melbourne, all, except Warrnambool, had a higher death rate than that city; but in only one of them—Castlemaine—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 7 Victorian Towns, 1892.

	Deaths per 1,000 of the Population.		Deaths per 1,000 of the Population.
1. Castlemaine	26·58	5. Ballarat	17·37
2. Stawell	23·85	6. Melbourne	15·99
3. Bendigo (Sandhurst)	21·35	7. Warrnambool	14·44
4. Geelong	19·13		

* Except where other years are specially given. Many of the figures are taken from Mulhall's *Dictionary of Statistics* (1891), page 174.

† In 1889, the proportion was 34·36 per 1,000 living.

Deaths in each month.

565. 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 decennium ended with 1890, the months in which most deaths occur appear to be January, March, and December, and then April, February, May, in the order named; whereas in the preceding decennium fewer deaths occurred in December than in any of the other months just named. In the year under review more deaths occurred in March, January, April, February, December, and June, in the order named, than in any other months. The number of deaths in each month of 1892, and their proportion to the total number in the year, also the proportion of the deaths in each month of the decennial periods ended with 1880 and 1890 to the total number of deaths during the same periods, will be found in the following table:—

DEATHS IN EACH MONTH.

Months.	Year 1892.		Percentage in—	
	Number of Deaths.	Percentage.	Ten Years: 1881 to 1890.	Ten Years: 1871 to 1880.
January	1,515	9·56	10·05	10·29
February	1,412	8·91	8·69	9·09
March	1,716	10·83	9·46	10·17
April	1,456	9·19	8·77	9·73
May	1,294	8·16	8·52	8·55
June	1,310	8·26	7·51	7·44
July	1,220	7·69	7·78	7·89
August	1,267	7·99	7·93	7·37
September ...	1,112	7·02	7·17	6·81
October	1,090	6·88	7·04	7·09
November ...	1,094	6·90	7·62	7·12
December	1,365	8·61	9·46	8·45
Total ...	15,851	100·00	100·00	100·00

Deaths at different seasons.

566. 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, then the spring, and lastly the winter; but in 1892, after the summer quarter, most deaths occurred in the autumn quarter and fewest in the spring quarter. In the United Kingdom 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 the two last decennial 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 1892.	Average of Ten Years, 1881 to 1890.	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	29·29	28·20	29·55	23·24	22·34	20·21
Autumn	53·8	44·3	25·61	24·80	25·72	24·65	24·71	23·45
Winter	50·2	40·0	22·71	22·90	22·07	27·49	27·95	30·19
Spring	60·3	52·8	22·39	24·10	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.

567. The Chinese who died in 1892 numbered 171—of whom 2 were females; and the Aborigines who died numbered 19—of whom 6 were females. Supposing the Chinese in Victoria to have numbered 9,000, and the Aborigines 700; deaths of the former formed a proportion of 19, and the latter of 27 per 1,000 of their respective numbers. In the same year the proportion of deaths of all races to every 1,000 of the population was 13·63.

Ages at death of Chinese and Aborigines.

568. In 1892 only 3 of the Chinese who died were under the age of 5 years, and only 20 others were under 45 years of age; the great majority, or more than half, were between 45 and 65; whilst the oldest were said to be aged 81 and 86 respectively. Of the Aborigines who died, four were under 5.

Deaths at each age, 1892, and 1881-90.

569. The following table shows the number of deaths at various periods of age registered in Victoria during the year 1892, and during the decennial period 1881-90; also the proportion of the deaths at each age to the total at all ages:—

* 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.

Deaths at each Age, 1892 and 1881-90.

Ages.	Number of Deaths at each Age.			Percentage of Deaths at each Age.		
	Males.	Females.	Total.	Males.	Females.	Total.
Year 1892.						
Under 5 years	2,946	2,535	5,481	32·38	37·54	34·58
5 years to 10 years ...	228	187	415	2·51	2·77	2·61
10 „ 15 „ ...	127	117	244	1·40	1·73	1·54
15 „ 20 „ ...	204	196	400	2·24	2·90	2·52
20 „ 25 „ ...	277	299	576	3·04	4·42	3·63
25 „ 35 „ ...	744	648	1,392	8·18	9·60	8·80
35 „ 45 „ ...	566	463	1,029	6·22	6·86	6·49
45 „ 55 „ ...	715	513	1,228	7·86	7·60	7·75
55 „ 65 „ ...	1,305	676	1,981	14·34	10·01	12·49
65 „ 75 „ ...	1,202	608	1,810	13·21	9·00	11·42
75 years and upwards ...	784	511	1,295	8·62	7·57	8·17
Total	9,098	6,753	15,851	100·00	100·00	100·00
Ten Years, 1881–90.						
Under 5 years	29,885	25,679	55,564	34·38	39·79	36·69
5 years to 10 years ...	2,445	2,312	4,757	2·81	3·58	3·14
10 „ 15 „ ...	1,499	1,432	2,931	1·73	2·22	1·94
15 „ 20 „ ...	2,153	2,273	4,426	2·48	3·52	2·92
20 „ 25 „ ...	3,309	3,075	6,384	3·81	4·76	4·22
25 „ 35 „ ...	6,217	5,693	11,910	7·15	8·82	7·86
35 „ 45 „ ...	5,914	4,960	10,874	6·81	7·68	7·18
45 „ 55 „ ...	9,608	5,472	15,080	11·05	8·48	9·96
55 „ 65 „ ...	11,711	5,307	17,018	13·47	8·22	11·23
65 „ 75 „ ...	8,616	4,596	13,212	9·91	7·12	8·72
75 years and upwards ...	5,558	3,745	9,303	6·40	5·81	6·14
Total	86,915	64,544	151,459	100·00	100·00	100·00

Proportion of deaths at different ages.

570. It will be noticed that in the period of ten years, over one-third of the males and nearly two-fifths of the females who died had not reached their fifth year; that a fourth of the males and not quite a third of the females were between 5 and 45 years of age; that nearly a fourth of the males, but only a sixth 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 15 years younger than the males—about half the former being under and half over 17 years of age, whilst about half the latter were under and half over 32 years of age. Owing to the growing proportion of elderly people in the population, the proportions in 1892 are, it will be observed, higher at all age-periods over 55 than in the decennial period.

Proportion of deaths at each age to population.

571. Amongst the influences which tend to impair the efficacy of the ordinary death rate as a standard for comparing the hygienic conditions of one country with those of another, or those of the same

country at different periods, the most important is the variation in the age constitution of the living population, a disturbing influence which can only be eliminated by ascertaining the death rates at various age-periods. The exact ages of the population of Victoria having been ascertained at the censuses of 1881 and 1891, accurate results for comparisons are obtainable for this colony. These are shown in the following table by taking into account at successive age-periods the numbers of the population and the deaths for the year 1892, and for the ten years 1881 to 1890:—

Proportion of Deaths to Population at each Age, 1881-90 and 1892.

Ages.	Mean Population.		Deaths.		Deaths per 1,000 living at each age.	
	Ten years, 1881 to 1891. *	Year 1892.	Mean of ten years, 1881 to 1890.	Year 1892.	Mean of ten years, 1881 to 1890.	Year 1892.
Males.						
Under 5 years ...	66,730	76,307	2,989	2,946	44·79	38·61
5 to 10 „ ...	60,082	66,398	244	228	4·06	3·43
10 to 15 „ ...	56,580	59,888	150	127	2·65	2·13
15 to 20 „ ...	53,303	58,105	215	204	4·03	3·53
20 to 25 „ ...	52,124	64,346	331	277	6·35	4·30
25 to 35 „ ...	80,591	112,570	622	744	7·72	6·61
35 to 45 „ ...	52,622	56,702	591	566	11·23	9·98
45 to 55 „ ...	49,844	45,600	961	715	19·28	15·68
55 to 65 „ ...	35,220	43,109	1,171	1,305	33·25	30·27
65 to 75 „ ...	14,100	18,651	862	1,202	61·13	64·45
75 and upwards	4,053	5,314	556	784	137·18	147·53
All Ages ...	525,249	606,990	8,692	9,098	16·55	14·99
Females.						
Under 5 years ...	65,082	75,370	2,568	2,535	39·46	33·63
5 to 10 „ ...	58,977	65,615	231	187	3·92	2·85
10 to 15 „ ...	55,848	59,369	143	117	2·56	1·97
15 to 20 „ ...	54,483	59,352	227	196	4·17	3·30
20 to 25 „ ...	52,870	63,238	307	299	5·81	4·73
25 to 35 „ ...	71,983	97,496	569	648	7·90	6·65
35 to 45 „ ...	45,362	49,187	496	463	10·93	9·41
45 to 55 „ ...	36,867	40,057	547	513	14·84	12·81
55 to 65 „ ...	22,606	29,882	531	676	23·49	22·62
65 to 75 „ ...	9,142	12,289	460	608	50·32	49·48
75 and upwards	2,907	3,865	375	511	129·00	132·21
All Ages ...	476,127	555,720	6,454	6,753	13·56	12·15

* The figures in this column, being derived from the numbers returned at the censuses of 1881 and 1891, both of which were taken at the beginning of April, represent the mean of a decennial period commencing and ending three months later than that for which the deaths are given in the next column but one, viz., that ended with the 31st December, 1890.

572. Comparing the figures in the last two columns, it is found that, as regards both males and females, whilst in 1892 the total mortality at all ages was less than the average of the decade 1881-90, this diminution was confined to all ages under 65 in the case of the males and all ages under 75 in that of the females, the death rate of males of 65 and upwards and that of females of 75 and upwards having been higher in 1892 than in the decennial period.

Death rate at each age, 1892, compared with average.

573. In the next table the death rates of males and females at different ages in Victoria, England and Wales, Germany, and France are compared—the observations being in all cases for periods of ten years:—

Death rates in Victoria, England, Germany, and France.

DEATH RATE AT EACH AGE IN VICTORIA, ENGLAND, GERMANY, AND FRANCE.

Ages.	Annual Deaths per 1,000 of the Population.							
	Victoria.		England and Wales.		Germany.		France.	
	1881 to 1890.		1881 to 1890.		1871 to 1881.		Average of 10 Years.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females
All ages ...	16·55	13·56	20·3	18·0	28·45	25·29	23·80	23·19
Under 5 years	44·79	39·46	58·7	49·7	81·4	73·2	84·55	75·45
5 to 10 ,,	4·06	3·92	5·2	5 2	8·8	8·7	10·49	11·04
10 to 15 ,,	2·65	2·56	3·0	3·2	3·9	4·2	5·36	6·41
15 to 20 ,,	4·03	4·17	4·4	4·5	5·3	4·9	10·34	8·41
20 to 25 ,,	6·35	5·81	5·8	5·7	8·2	7·0		
25 to 35 ,,	7·72	7·90	7·9	7·5	9·3	9·6	10·02	9·69
35 to 45 ,,	11·23	10·93	12·5	10·7	13·5	12·0	10·96	11·03
45 to 55 ,,	19·28	14·84	19·7	15·2	21·4	16·0	14·76	14·88
55 to 65 ,,	33·25	23·49	34·0	28·2	38·7	32·9	29·19	27·27
65 to 75 ,,	61·13	50·32	71·2	62·0	83·4	77·3	60·69	63·49
75 to 85 ,,	125·19	110·75	146·5	133·0	186·9	180·0	160·22	153·76

574. It will be noticed that the mortality of males at the age-period 20 to 25 and at all age-periods over 45, and that of females at the age-periods 25 to 45 and 65 to 75, is higher in Victoria than in England; it is higher than in France, in the case of males at from 35 to 75, but lower in the case of females at all age-periods, although the excess at the age-period 45 to 55 is very slight; and it is lower than in Germany, in the case of both males and females, at all periods of life.

Death rate in Victoria and other countries compared.

575. 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

Death rate of children less in Victoria than elsewhere.

opinion so far as England, France, and Germany 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 ten years.

Death rate of males and females in Victoria and other countries.

576. According to the table, the death rate during a term of ten years of females exceeds that of males at from 15 to 20 and from 25 to 35 in Victoria; at from 10 to 20 in England and Wales; at from 10 to 15 and from 25 to 35 in Germany; and at from 5 to 15, from 35 to 55, and from 65 to 75 in France; moreover, in England and Wales, at from 5 to 10, 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.

"Ordinary" and "Adjusted" death rates.

577. For the two decades ended with 1880 and 1890 respectively, and for the year 1892 the "Adjusted death rates"* of males and females, 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, 1881-1890, AND 1892.

Period.	Death Rate.			
	Ordinary.†	Adjusted.‡	Ordinary in excess of adjusted rate.	Adjusted in excess of ordinary rate.
MALES.				
1871 to 1880 ...	16·45	16·48	...	·03
1881 to 1890 ...	16·55	15·97	·58	...
1892	14·99	14·07	·92	...
FEMALES.				
1871 to 1880 ..	14·15	14·64	...	·49
1881 to 1890 ...	13·56	13·85	...	·29
1892	12·15	12·06	·09	...

Results of the two methods in 1881-90 and 1871-80.

578. Comparing the death rates in 1881-90 with those in the previous decade, 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 ·10 per 1,000, but a decrease

* For the method of calculating the "adjusted death rate" see *Victorian Year Book*, 1892, paragraph 655 *et seq.*

† Per 1,000 of the actual population.

‡ Per 1,000 of the standard population.

in that of females, amounting to ·59 per 1,000; whereas, according to the "Adjusted," or more correct method, there was a decrease in the case of both sexes, viz., of ·51 per 1,000 in the case of the males, and of ·79 per 1,000 in the case of females.

Results of the two methods in 1892 and 1881-90.

579. Comparing the death rates in 1892 with those in the decade 1881-90, a decreased mortality per 1,000 of 1·56 by the ordinary and of 1·90 by the adjusted method is shown in regard to the males, and a decreased mortality per 1,000 of 1·41 by the ordinary and of 1·79 by the adjusted method is shown in regard to the females.

Death rates by the two methods in Victoria, England, Germany, and France.

580. The average mortality of both males and females at all ages is much lower in Victoria than in England, Germany, or France, but the difference is not so great when the new method of comparison is used ("Adjusted" death rate) as it is when the old one is used ("Ordinary" death rate). Thus, according to the old method, deaths of males per 100,000 living are, in England, 380, in Germany, 1,190, and in France, 725, more than in Victoria; but, according to the new method, only 265 more in England, 775 more in Germany, and 718 more in France. And, according to the old method, deaths of females per 100,000 living are, in England, 440, in Germany, 1,173, and in France, 963, more than in Victoria; but, according to the new method, only 226 more in England, 749 more in Germany, and 782 more in France. The following are the figures:—

ORDINARY AND ADJUSTED DEATH RATES IN VICTORIA, ENGLAND, GERMANY, AND FRANCE.

Country.	Period.	Ordinary death rate.		Adjusted death rate.	
		Males.	Females.	Males.	Females.
Victoria ...	1881-90	16·55	13·56	15·97	13·85
England ...	„	20·30	18·00	18·62	16·11
Germany ...	1871-81	28·45	25·29	23·72	21·34
France ...	10 years	23·80	23·19	23·15	21·67

Infantile mortality, 1892.

581. The mortality of infants in 1892, in proportion to the number born, was considerably below the average, and was by far the lowest recorded since 1866. The total number under 1 year of age who died in 1892 was 4,039, and as the births numbered 37,831, it follows that 1 infant died to every 9·4 births, or 10·7 infants to every 100 births. In the twenty-six years 1866 to 1891, the proportion of infants dying before completing their first year was 12·53 to every 100 births.*

* See table following paragraph 589 *post*.

Mortality of male and female infants.

582. 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 two recent decades and for each of the last six years, of the number of births of boys and girls, and of the deaths of each before completing their first year, together with the proportion of deaths of infants of either sex to the births of the same sex:—

MORTALITY OF MALE AND FEMALE INFANTS, 1871 TO 1892.*

Period.	Annual Births.		Deaths at under 1 Year of Age.			
			Annual Number.		Number per 100 Births.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1871-80 ...	13,728	13,144	1,782	1,482	12·98	11·28
1881-90 ...	16,006	15,251	2,158	1,805	13·48	11·83
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
1890	19,175	18,403	2,372	2,040	12·37	11·09
1891	19,598	18,907	2,575	2,286	13·14	12·09
1892	19,405	18,426	2,196	1,845	11·32	10·01

Mortality of male greater than of female infants.

583. According to a previous paragraph,† the births of male infants in a series of years were in the proportion of about 105 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 favor 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.

584. 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 ten years ended with 1880 being 130 of the former and 113 of the latter; and in the ten years ended with 1890, 135 and 118 respectively. In 1892, deaths of male infants occurred in the proportion of 113, and deaths of female infants in the proportion of 100, to every 1,000 of either sex born.

* For detailed particulars relating to each year, see *Victorian Year-Book* for 1890-91, Vol. I., paragraph 579.

† See paragraph 501 *ante*.

585. 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 1892, and the ten years ended with 1890, 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 1892 the mortality of both male and female infants was below the average at all the age-periods :— Deaths of infants at different ages.

AGE AT DEATH OF MALE AND FEMALE INFANTS.

Ages.	Deaths at under 1 Year of Age.				
	Year 1892.			Average of 10 years, 1881-90.*	
	Number.	Percentage at each Age.	Number per 100 Births.	Percentage at each Age.	Number per 100 Births.
BOYS.					
Under 1 month ...	683	31·10	3·52	30·99	4·20
1 to 3 months ...	388	17·67	2·00	17·92	2·37
3 to 6 „ ...	470	21·40	2·42	22·26	3·01
6 to 12 „ ...	655	29·83	3·38	28·83	3·90
Total ...	2,196	100·00	11·32	100·00	13·48
GIRLS.					
Under 1 month ...	510	27·64	2·77	27·41	3·24
1 to 3 months ...	325	17·62	1·76	18·68	2·21
3 to 6 „ ...	415	22·49	2·25	23·01	2·73
6 to 12 „ ...	595	32·25	3·23	30·90	3·66
Total ...	1,845	100·00	10·01	100·00	11·84

586. During the period of ten 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 nearly a third; in the next two months this excess was reduced to about a fourteenth, in the next three months to about a tenth, and in the next six months to about a fifteenth. More deaths of male than female infants at all ages.

587. In the same period of ten years, nearly a third of the male and nearly two-sevenths of the female infants who died before they were a year old did so in the first month after birth; about two-elevenths of both males and females in the next two months; between a fourth and fifth of both males and females in the next three months; between a third and a fourth of the males, and not quite a third of the females, in the next six months. Periods at which infants die.

* For corresponding average for 1871-81, see *Victorian Year-Book*, 1889-90, Vol. I., table following paragraph 635.

Probable mortality of infants.

588. As a practical result of these calculations, it may be mentioned that of every 20,000 newly-born boys and girls in equal numbers, 420 of the former and 324 of the latter may be expected to die before they are a month old; 237 more boys and 221 more girls may be expected to die between one and three months of age; 301 more boys and 273 more girls between 3 and 6 months; 390 more boys and 366 more girls between 6 and 12 months. At the end of a year it is probable that 1,348 of the boys and 1,184 of the girls will have died, and 8,652 of the former and 8,816 of the latter will be still living.

Infantile mortality in Australasian colonies.

589. The following table shows 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 1891, also for one quinquennial and two successive decennial periods (except in regard to Western Australia, for which the information is given at the foot of the table for the six years ended with 1891). All the calculations were made in the office of the Government Statist, Melbourne:—

INFANTILE MORTALITY IN AUSTRALASIAN COLONIES.

Period.*	Annual Births.	Annual Deaths at under 1 Year of Age.		Annual Births.	Annual Deaths at under 1 Year of Age.		Annual Births.	Annual Deaths at under 1 Year of Age.	
		Number.	Proportion to 100 Births.		Number.	Proportion to 100 Births.		Number.	Proportion to 100 Births.
	VICTORIA.			NEW SOUTH WALES.			QUEENSLAND.		
1866-70	26,210	3,383	12·91	18,529	1,945	10·50	4,524	575	12·71
1871-80	26,871	3,265	12·15	23,411	2,566	10·96	6,681	866	12·96
1881-90	31,257	3,963	12·68	34,718	4,130	11·90	11,913	1,506	12·64
1891 ...	38,505	4,861	12·62	39,458	4,691	11·89	14,715	1,489	10·12
Mean of 26 Years.	28,878	3,618	12·53	27,438	3,129	11·40	8,588	1,080	12·58
	SOUTH AUSTRALIA.			TASMANIA.			NEW ZEALAND.		
1866-70	7,013	1,092	15·57	2,936	294	10·01	9,354	907	9·70
1871-80	8,270	1,227	14·84	3,248	339	10·44	14,810	1,481	10·00
1881-90	10,982	1,319	12·01	4,515	477	10·56	19,055	1,666	8·74
1891 ...	10,737	976	9·09	4,971	470	9·45	18,273	1,667	9·12
Mean of 26 Years.	9,166	1,227	13·39	3,742	388	10·37	15,527	1,449	9·33

NOTE.—In Western Australia the proportions for the last 6 years were as follow:—1886, 15·48; 1887, 15·68; 1888, 12·38; 1889, 8·79; 1890, 8·97; 1891, 11·98; or an average of 12·21 for the six years.

* For information relating to individual years prior to 1886, see issue of this work for 1890-91, Vol. I., table following paragraph 586.

590. For many years the returns of South Australia showed a very high infantile death rate, much higher than that in any of the other Australasian colonies. It has since, however, been 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 infantile death rate of South Australia, as officially stated, has compared favourably with that of the other colonies.*

Apparently high infantile death rate in South Australia explained.

591. 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 rate in 1891, as in the previous year, was highest in Victoria, although that colony was third on the list over a series of years. The reduced rate in South Australia is indicated by the low place it occupies in the list for 1891 as compared with that it occupied in the list extending over a series of years :—

Order of colonies in respect to infantile mortality.

ORDER OF COLONIES IN REFERENCE TO INFANTILE MORTALITY.

Order in 1891.	Order over a Series of Years.
1. Victoria.	1. South Australia.
2. Western Australia.	2. Queensland.
3. New South Wales.	3. Victoria.
4. Queensland.	4. Western Australia.†
5. Tasmania.	5. New South Wales.
6. New Zealand.	6. Tasmania.
7. South Australia.	7. New Zealand.

592. Of all the countries respecting which the information is procurable, infantile mortality is highest in the German States, Austria, and Italy. In France it is just below the average of the whole of the countries, and in England and Belgium it is next below that in France; then follow Denmark and Sweden; Victoria, Queensland, and Western Australia stand just below Sweden; South Australia, New South Wales, and Tasmania below these and Scotland; whilst New Zealand, with Ireland, stands below all the other countries:—

Infantile mortality in various countries.

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* See issue of this work for 1889-90, Vol. I., paragraph 640.

† According to an average of 6 years only.

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	Sweden	13·19
Bavaria	30·84	Victoria	12·68
Saxony	28·22	Queensland ...	12·64
Baden	26·17	Western Australia ...	12·26
Austria	25·63	Scotland	12·20
Alsace-Lorraine ...	21·27	South Australia ...	12·01
Italy	20·97	New South Wales ...	11·90
Prussia	20·78	Tasmania	10·56
Holland	19·32	Norway	10·49
Switzerland ...	18·79	Ireland	9·50
France	16·60	New Zealand ...	8·74
England	14·92		
Belgium	14·82	Mean of the countries named... ...	17·18
Denmark	13·75		

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, except Western Australia, which is for 5 years, is based on the average of the 10 years ended with 1890, and that respecting Ireland is for the year 1890. All the figures have been derived from official documents.

Infantile mortality in Melbourne and country.

593. 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 twenty years ended with 1892 averaged nearly 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 the eight years 1873 to 1880 and in each subsequent quinquennial period, also in 1891 and 1892 :—

Infantile Mortality in and outside of Greater Melbourne, 1873 to 1892.

Period.	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 to 1880	66,787	11,252	16·85	147,138	14,946	10·16
1881 to 1885	51,883	8,847	17·05	88,375	8,196	9·16
1886 to 1890	77,962	13,411	17·20	94,345	9,171	9·72
1891 ...	18,018	2,862	15·88	20,487	1,999	9·76
1892 ...	17,399	2,237	12·86	20,432	1,805	8·83
Sums and means	232,049	38,609	16·64	370,777	36,117	9·74

Infantile mortality in English and Australasian towns.

594. 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 identical. 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 TOWNS OF ENGLAND AND AUSTRALASIA, 1877 TO 1886.

	Deaths under 1 Year of Age to 100 Births.		Deaths under 1Year 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 Towns	16·1
Salford	17·8	Newcastle	16·0
Bolton	17·7	Wolverhampton ...	15·9
Nottingham	17·5	Halifax	15·9
Manchester	17·4	Sunderland	15·7
Brisbane (1883 to 1887)	17·4	Plymouth	15·7
Norwich	17·3	London	15·2
Adelaide (1884 to 1887)	17·2	Brighton	14·8
Leeds	17·2	Bristol	14·5
Cardiff	16·9	Hobart (1883 to 1887) ...	14·5
Huddersfield	16·9	Derby	14·3
Oldham	16·9	Wellington (1883 to 1887)	14·2
Melbourne (1878 to 1888)	16·9	Portsmouth	13·8
Sydney (1878 to 1888) ...	16·8	Birkenhead	13·7
Birmingham	16·4		

Deaths of infants in Women s Hospital.

595. In, or in connection with, the Women's Hospital, Melbourne, 873 children were born alive during the year ended with 30th June, 1892, and of these 27, or about 3 per cent., died whilst under the care of the institution. In the previous year 3 per cent.; in 1889-90, $4\frac{1}{2}$ per cent.; in 1888-9, 4 per cent.; in 1887-8, 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.; and in the year 1880, $5\frac{1}{2}$ 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 seven 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.

596. In the year 1892 deaths of male children under 5 years of age numbered 2,944, and deaths of female children under that age numbered 2,535—the former being in the proportion of over 32 per cent., and the latter of over 37½ per cent., to the total number of deaths at all ages. These proportions are below the average; in the case of both males and females being the lowest in the last 22 years. Thus the mortality of young children of both sexes in the last three years was in striking contrast to that in 1889, when it was higher than it had been for several years previously. Comparing the average of the last decade with that of the previous one, a marked falling-off took place in the mortality of children relatively to that of persons of all ages, which 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 earlier period referred to. The following table shows the annual number of such deaths at each year of age, and their proportion to the deaths at all ages, in each of the last two years and during the two decennial periods ended with 1880 and 1890 respectively :—

DEATHS OF CHILDREN UNDER 5 YEARS OF AGE,
1871 TO 1892.

Period.	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.							
1871–80 ...	1,783	508	206	148	119	2,764	39·41
1881–90 ...	2,158	464	161	114	92	2,989	34·28
1891 ...	2,575	498	145	122	103	3,443	32·33
1892 ...	2,196	438	142	99	71	2,946	32·38
FEMALES.							
1871–80 ...	1,482	482	198	139	106	2,407	46·06
1881–90 ...	1,805	423	151	105	84	2,568	39·61
1891 ...	2,286	463	146	103	77	3,075	38·57
1892 ...	1,845	392	151	81	66	2,535	37·55

More boys die than girls.

597. During the ten years ended with 1890, deaths of male children under 5 numbered 29,884, and deaths of female children under 5 numbered 25,679, and thus the former exceeded the latter by 4,205, or by 16 per cent. The deaths of male children in all the years bore a much 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. During the same period the mortality of boys under 5 amounted to over 34 per cent., and that of girls under 5 amounted to nearly 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.

Number of children under 5 and their deaths.

598. The average number of male and female children at each year of age under 5 living, during the period of ten years ended with 1890, 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, 1881 TO 1890.

Age last Birthday	Males.				Females.			
	Mean Number Living, 1881 and 1891.	Mean Annual Deaths, 1881 to 1890.	Percentage of Deaths at each age.	Deaths per 1,000 Children Living.	Mean Number Living, 1881 and 1891.	Mean Annual Deaths, 1881 to 1890.	Percentage of Deaths at each age.	Deaths per 1,000 Children Living.
0 ...	14,229	2,158	72·20	151·66*	13,891	1,805	70·29	129·94*
1 ...	13,123	464	15·52	35·36	12,778	423	16·47	33·10
2 ...	13,453	161	5·39	11·97	12,938	151	5·88	11·67
3 ...	13,005	114	3·81	8·77	12,818	105	4·09	8·19
4 ...	12,727	92	3·08	7·23	12,506	84	3·27	6·72
Total...	66,537	2,989	100·00	44·92	64,931	2,568	100·00	39·55

Proportion of children dying annually.

599. During the period to which the table refers, the mean number of children of both sexes under 5 living was 131,468, and the mean number of deaths of such children was 5,557, whence it results that 42 in every 1,000 children under 5, or about 1 in 24, died annually, as compared with 44 per 1,000 in the previous 11 years. In every 1,000 boys the proportion who died annually was 45, or 1 in 22, whilst in every thousand girls it was 40, or 1 in 25, whereas in the previous eleven years the proportion per 1,000 was 47 for males and 41 for females.

* These results, being based upon infants living at any one time instead of annual births, are naturally in excess of those given for the corresponding period in the last two columns of table following paragraph 582 *ante*.

Proportion of infants dying annually.

600. Of every 1,000 boys under 1 year of age, 152, and of every 1,000 girls under 1 year of age, 130, died annually in the decade under notice; the corresponding proportions for the previous ten years being 146 and 125 respectively. These are higher proportions than those quoted in the table showing the comparison of deaths of children under 1 with the births, the proportions in which were 135 deaths of male infants and 118 deaths of female infants to every 1,000 births of infants of those sexes respectively during the recent decade, and 130 and 113 respectively during the previous one.*

More boys died than girls.

601. 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 22 at under 1,† but only about 2 at from 1 to 2, and less than 1 at subsequent ages.

Boys and girls dying under 1.

602. According to the figures, deaths of boys under 1 year of age furnish a larger proportion to the total deaths of boys under 5 than deaths of girls under 1 do to the total deaths of girls under 5, but the reverse is the case at each of the years of age after the first.

Proportion of deaths of children at each age.

603. Of the whole number of children who died before they attained the age of 5, nearly three-fourths, viz., 72 per cent. of the boys and 70 per cent. of the girls, were under 1 year of age; less than a sixth of the boys and about a sixth of the girls were between 1 and 2; about 1 in 18 of the boys and about 1 in 17 of the girls were between 2 and 3; 1 in 26 of the boys and 1 in 24 of the girls were between 3 and 4; 1 in 32 of the boys and 1 in 30 of the girls were between 4 and 5.

Probable mortality of children under 5.

604. 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, 1,348 boys and 1,184 girls may be expected to die before they complete a year of life, 301 more boys and 287 more girls before they complete 2 years, 99 more boys and 99 more girls before they complete 3 years, 72 more boys and 69 more girls before they complete 4 years, and 59 more boys and 56 more girls before they complete 5 years. At the end of that period it is probable that 1,879 of the boys and 1,695 of the girls will have died; and 8,121 of the boys and 8,305 of the girls will be still living. This

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* See table following paragraph 582 *ante*.

† See also paragraph 598 *ante*.

‡ See table following paragraph 585, from which probable deaths at under 1 year of age have been deduced; also paragraph 588 *ante*. Probability of death at other ages under 5 has been calculated from the numbers in the last table.

result is more favourable than that deduced from the mortality of the decade 1871-80, which showed the number of survivors at the end of the first five years of life to be 8,015 for boys and 8,195 for girls.

Deaths of octogenarians.

605. The persons who died at the age of 80 or upwards numbered 695 in 1892, as against 831 in 1891 and 647 in 1890. Those in 1892 consisted of 405 males and 290 females. Fifty-three of the males and 45 of the females had passed the age of 90, and 3 males and 1 female had passed the age of 100. The following are the exact registered ages of such persons in the last twenty-two years :—

DEATHS OF OCTOGENARIANS, 1871 TO 1892.

Years of age.	Year 1892.		Ten Years, 1882–91.		Eleven Years, 1871–81.	
	Males.	Females.	Males.	Females.	Males.	Females.
80	62	46	537	365	253	144
81	34	30	320	221	135	98
82	72	37	391	232	119	97
83	40	30	293	187	101	75
84	37	24	348	236	115	79
85	28	20	259	186	91	70
86 ...	23	18	192	156	63	61
87	29	17	166	143	65	46
88	22	12	125	123	48	38
89	5	11	91	85	35	26
90	9	9	98	83	26	37
91	9	11	52	50	10	16
92	16	11	38	46	18	18
93	3	5	32	36	9	8
94	6	2	23	25	14	8
95	3	1	19	20	16	9
96	1	1	14	7	11	4
97	...	...	12	12	3	4
98	2	4	11	8	5	2
99	1	...	10	10	8	...
100 ...	...	...	12	8	2	5
101	1	1	3	4	1	2
102	...	...	6	4	3	...
103	...	...	3	2	1	2
104	1	...	2	3	2	1
105	...	...	1	2	2	...
106	1	...	3	1	...	1
107	...	...	...	2	...	...
108	...	...	1	...	...	...
109	...	...	1	...	...	...
110	...	...	...	..	...	1
111	...	...	1	...	...	...
114	...	...	...	...	...	1
Unspecified ...	...	...	...	...	135*	98*
Total	405	290	3,064	2,257	1,291	951

* These figures are those relating to the years 1871 and 1872, in which the exact ages of octogenarians were not noted.

Deaths of octogenarians, 1882 to 1891.

606. In the 10 years ended with 1891, 3,064 males and 2,257 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 90,557 and 67,231 respectively, therefore 1 male in every 30 males who died, and 1 female in every 30 females who died, had lived to be upwards of 80 years of age. In the same period, 342 of the males, or 1 in 265, and 323 of the females, or 1 in 208, had lived to be 90 years of age or upwards; and 33 of the males, or 1 in 2,744, and 26 of the females, or 1 in 2,586, had 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 11 years ended with 1881, when only 1 male in every 56 males and 1 female in every 58 females who died were upwards of 80 years of age; only 1 male in 496, and 1 female in 413, were upwards of 90 years; and only 1 male in 5,912, and only 1 female in 3,776, were upwards of 100 years.

Average age at death.

607. The average age at death in 1892 was 33·21 years, or a fraction over 33 years and $2\frac{1}{2}$ months. For males the average was 35·45 years, or about 35 years and 5 months, and for females it was 30·19 years, or about 30 years and 2 months; the females being thus on the average about $5\frac{1}{4}$ 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. The following figures show the average age at death according to the means of the 23 years 1852-1874, the mean of each of the three succeeding quinquennial periods, and each of the three years ended with 1892:—

AVERAGE AGE AT DEATH IN VICTORIA.

	Males. Years.	Females. Years.
23 years—1852 to 1874	21·70 ...	15·01
5 years—1875 to 1879	27·98 ...	22·22
5 years—1880 to 1884	32·15 ...	26·59
5 years—1885 to 1889	32·59 ...	27·10
1890	33·57 ...	27·57
1891	35·86 ...	29·98
1892	35·45 ...	30·19

608. 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. According to a life table constructed by Mr. A. F. Burridge, F.I.A., of London, based upon the mortality experienced in the ten years 1870-1881, the average duration of life (technically called "expectation of life" or "mean after lifetime") of males in Victoria is 46·37 years. Mr. Burridge did not publish a table for females in Victoria separately, but he gave a table for Victoria, New South Wales, and Queensland combined, according to which the "expectation of life" in the three colonies is 46·47 years for males and 49·64 years for females.* In England and Wales, according to the most recent life table, the "expectation of life" is 41·92 years for males and 45·25 years for females, so that, if the figures relating to the two countries hold good, an Australian male may expect to live 4·55 years longer than an Englishman, and an Australian female 4·39 years longer than an Englishwoman.

Expectation of life in Victoria and England.

609. 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

New classification adopted in Victoria.

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* See *Journal of the Institute of Actuaries*, Vol. XXIV., page 351. Prior to this (Vol. XXIII., page 325), Mr. Burridge published a life table for both sexes, based, however, upon the results of only one year (1879). According to this table the "expectation of life" in Victoria would be—males 49·20, females 52·33 years.

of the difference between the two systems was given in the *Victorian Year-Book*, 1886-7.*

Nosological Index.

610. A Nosological Index was compiled by the present writer nearly thirty years since, under the sanction of the then Registrar-General, Mr. W. H. Archer, F.I.A., to be used in connection 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.†

Victorian Index in use throughout Australasia.

611. 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 is 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.

Causes of death classified.

612. 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 1892, also the total number who died from each cause during the ten year periods ended with 1890 and with 1880 :—

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* Paragraph 635 *et seq.*

† A copy of the new Nosological Index was published in the *Victorian Year-Book*, 1886-7, page 853 *et seq.* Copies can be obtained at a small cost from the Government Printer, Melbourne.

Causes of Death in Classified Arrangement.
(10 Years: 1871 to 1880, and 1881 to 1890; and Year 1892.)

Class.	Sub-Class.	Causes of Death.*	Number of Deaths.				
			Ten Years:		Year 1892.		
			1871-1880.	1881-1890.	Total. †	Chinese	Aborigines.
		All causes	122,570	151,459	15,851	171	19
		Classes.					
I.	...	Specific Febrile or Zymotic Diseases: — Zymotici (ζύμη, leaven). Diseases of the whole body, dependent on morbid poisons.	28,430	23,270	1,773	8	1
II.	...	Parasitic Diseases: — Parasitici (παράσιτος, parasite). Diseases dependent on animal or vegetable parasites.	734	764	81	...	...
III.	...	Dietic Diseases: — Dietici (δίαιτα, way of life; diet). Diseases produced by errors of diet.	1,979	2,163	166	7	...
IV.	...	Constitutional Diseases: — Cachectici (κακεξία, bad habit of body). This class, according to the nomenclature 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 definition being as follows: — "Sporadic diseases; affecting several organs in which new morbid products are often deposited; sometimes hereditary."	17,205	24,011	2,853	30	4
V.	...	Developmental Diseases: — Metamorphici (μεταμόρφωσις, change of form). Special diseases, the incidental result of the formative and nutritive processes.	6,042	10,617	1,188	11	1
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	69,213	7,702	88	8
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	9,678	1,047	9	3
VIII.	...	Ill-defined and Not Specified Causes: — This group includes several diseases which were formerly classed under specific heads, such as dropsy, debility, tumor, abscess, etc.	8,364	11,743	1,041	18	2

* 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, and 1881 to 1890; and Year 1892.)

Class.	Sub-Class.	Causes of Death.	Number of Deaths.				
			Ten Years.		Year 1892.		
			1871-1880.	1881-1890.	Total.*	Chinese.	Aborigines.
		Sub-Classes.					
I.	1	Miasmatic diseases	15,459	10,949	869	2	...
	2	Diarrhœal diseases	11,036	10,375	743	6	1
	3	Malarial diseases	213	72	8	...	...
	4	Zoogenous diseases	1	8	...	...	...
	5	Venereal diseases	377	425	48	...	...
	6	Septic diseases	1,344	1,441	105	..	...
II.	...	Parasitic diseases	734	764	81	...	...
III.	...	Dietic diseases	1,979	2,163	166	7	...
IV.	...	Constitutional diseases	17,205	24,011	2,853	30	4
V.	...	Developmental diseases	6,042	10,617	1,188	11	1
VI.	1	Diseases of the nervous system ...	13,532	15,999	1,540	13	1
	2	Diseases of the organs of special sense	?	80	14	...	...
	3	Diseases of the circulatory system...	6,804	10,651	1,401	28	1
	4	Diseases of the respiratory system...	15,534	21,285	2,108	32	6
	5	Diseases of the digestive system ...	11,240	14,949	1,954	11	...
	6	Diseases of the lymphatic system and ductless glands	44	105	14	...	...
	7	Diseases of the urinary system ...	1,875	3,767	441	2	...
	8	Diseases of the organs of generation	295	339	41	...	...
	9	Diseases of parturition	1,267	1,213	114	1	...
	10	Diseases of the organs of locomotion	290	375	39	...	...
	11	Diseases of the integumentary system	328	450	36	1	...
VII.	1	Accident or negligence	7,447	8,274	874	8	3
	2	Homicide	190	290	38	...	...
	3	Suicide	951	1,101	134	1	...
	4	Execution	19	13	1	...	...
VIII.	...	Ill-defined causes, or unspecified ...	8,364	11,743	1,041	18	2
		Diseases, etc.					
I.	1	Small-pox	2	7	...	...	...
		Chicken-pox	13	14	2	...	...
		Measles	2,080	534	1	...	...
		Epidemic rose rash	...	8	...	...	...
		Scarlet fever	4,101	430	26	...	...
		Influenza	276	398	111	2	...
		Whooping-cough	1,974	1,392	179	...	...
		Mumps	...	7	2	...	...
		Diphtheria †	3,040	2,566	246	...	...
		Cerebro-spinal fever	...	7	...	...	...
		Simple continued fever Typhoid (or enteric) fever	3,973	5,585	301	...	... ...
		Others	...	1	1	...	...
	2	Cholera (simple)	523	834	99	1	...
		Diarrhœa	7,667	8,304	549	3	1
		Dysentery	2,846	1,237	95	2	...
	3	Remittent fever	169	42	4	...	...
		Ague	44	27	3	...	...

* 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, and 1881 to 1890; and Year 1892.)

Class.	Sub-Class.	Causes of Death.	Number of Deaths.				
			Ten Years.		Year 1892.		
			1871-1880.	1881-1890.	Total.	Chinese.	Aborigines.
		Diseases, etc.—*continued.*					
I.	3	Beri-beri	...	3	1	...	...
	4	Glanders	1	...	...	...	...
		Cow-pox and other effects of vaccination	?	8*	...	...	...
	5	Syphilis	286	332	40	...	...
		Gonorrhœa, stricture of the urethra	91	93	8	...	...
	6	Phagedæna	?	5*	...	...	...
		Erysipelas	619	426	22	...	...
		Pyæmia, septicæmia †	264	370	22	...	...
		Puerperal fever ‡	461	640	61	...	...
II.	...	Thrush	327	220	18	...	...
		Others from vegetable parasites ...	?	1*	...	...	...
		Hydatids	379	537	63	...	...
		Others from animal parasites ...	28	6	...	...	...
III.	...	Starvation, want of breast-milk ...	1,322	1,192	89	3	...
		Scurvy §	?	6*	...	...	...
		Intemperance	646	950	71	...	...
		Other dietic diseases	11	15	6	4	...
IV.	...	Rheumatic fever, rheumatism of heart	817	799	34	1	...
		Rheumatism			68	...	...
		Gout	133	197	24	...	...
		Rickets	?	16	4	...	...
		Cancer, malignant disease ‖ ...	2,957	4,864	684	5	...
		Tabes mesenterica	723	1,192	93	...	...
		Tubercular meningitis (acute hydrocephalus)	1,394	1,714	208	...	1
		Phthisis	10,155	14,090	1,581	23	3
		Other forms of tuberculosis, scrofula, etc.	780	594	90	..	...
		Purpura, hæmorrhagic diathesis ¶ ...	100	114	10	...	...
		Anæmia, chlorosis, leucocythæmia**	?	136*	20	...	...
		Diabetes mellitus ††	146	268	35	...	...
		Other constitutional diseases ...	?	27*	2	1	...
V.	...	Premature birth	2,715	3,860	458	1	...
		Atelectasis ‡‡	?	191*	26	...	...
		Cyanosis	203	275	21	...	...
		Spina bifida	108	105	13	...	...
		Imperforate anus ...	289	334	11	...	...
		Cleft palate, harelip ...			9	...	...
		Other congenital defects			34	...	...
		Old age	2,727	5,852	616	10	1

* For 5 years only.

† A few cases of mumps and other miasmatic diseases probably included under this head prior to 1886.

‡ See also accidents of childbirth (Class VI., Sub-class 9), *post.*

§ Included with purpura (IV.) prior to 1886.

‖ Including lupus prior to 1886.

¶ Including scurvy prior to 1886.

** Distributed over other heads prior to 1886, viz., anæmia with dropsy (VIII.), chlorosis with disorders of menstruation (VI., 8), and leucocythæmia with other diseases of the circulatory system (VI., 3) prior to 1886.

†† Includes diabetes insipidus prior to 1886, and diabetes undefined.

‡‡ Included with debility (VIII.) prior to 1886.

Causes of Death in Classified Arrangement—*continued.*

(10 Years: 1871 to 1880, and 1881 to 1890; and Year 1892.)

Class.	Sub-Class.	Causes of Death.	Number of Deaths.				
			Ten Years.		Year 1892.		
			1871-1880.	1881-1890.	Total.	Chinese.	Aborigines.
		Diseases, etc.—*continued.*					
VI.	1	Inflammation of brain or its membranes	2,383	2,265	128	3	...
		Apoplexy	2,750	3,520	418	4	...
		Softening of brain	†	*393	63	...	...
		Hemiplegia, brain paralysis	1,596	2,661	42	...	...
		Paralysis, undefined ...			167	4	...
		Insanity (general paralysis of insane)			132	...	...
		Chorea	20	21	3	...	...
		Epilepsy	588	851	75	...	...
		Convulsions	3,390	3,471	335	...	...
		Laryngismus stridulus	?	*15	2	...	...
		Idiopathic tetanus ...	2,805	2,802	9	...	...
		Paraplegia, diseases of spinal cord			47	1	...
		Other diseases of nervous system			119	1	1
	2	Otitis, otorrhœa†	?	*61	7	...	...
		Epistaxis and diseases of nose† ...	?	*14	3	...	...
		Ophthalmia and diseases of eye† ...	?	*5	4	...	...
	3	Endocarditis, valvular disease	377	1,405	283	9	...
		Pericarditis			88	...	...
		Hypertrophy of heart‡	?	*90	12	...	...
		Angina pectoris‡	?	*51	17	1	...
		Syncope‡	?	*619	225	1	...
		Aneurism	785	670	57	1	...
		Senile gangrene§	?	*69	22	...	...
		Embolism, thrombosis ...	5,642	7,747	30	...	...
		Phlebitis			3	...	...
		Varicose veins			3	...	...
		Other diseases of the circulatory system			661	16	1
	4	Laryngitis	359	518	33	...	...
		Croup ‖	1,897	2,004	117	...	...
		Other diseases of larynx and trachea	?	*26	1	...	...
		Asthma, emphysema	392	635	90	6	...
		Bronchitis	4,588	6,574	678	10	5
		Pneumonia	5,077	7,875	921	14	1
		Congestion of the lungs	1,812	1,955	132	2	...
		Pleurisy	811	1,127	107	...	...
		Others	598	571	29	...	...
	5	Stomatitis¶	3	64	7	...	...
		Dentition	1,469	1,273	162	1	...
		Sore throat, quinsy	153	130	8	...	...

* For five years only.
† Included with other diseases of nervous system prior to 1886.
‡ Included with other diseases of the circulatory system prior to 1886.
§ Included with mortification (VIII.) prior to 1886.
‖ Including diphtheritic croup.
¶ The great majority of cases of stomatitis for years prior to 1886 are included with diseases of stomach.

Causes of Death in Classified Arrangement—*continued.*

(10 Years: 1871 to 1880, and 1881 to 1890; and Year 1892.)

Class.	Sub-Class.	Causes of Death.	Number of Deaths.				
			Ten Years.		Year 1892.		
			1871-1880.	1881-1890.	Total.	Chinese.	Aborigines.
		Diseases, etc.—*continued.*					
VI.	5	Dyspepsia	...	...	20	...	...
		Hæmatemesis	1,971	3,861	8	...	...
		Melæna			5	1	...
		Diseases of stomach ...		...	156	2	...
		Enteritis	2,134	2,838	830	1	...
		Ulceration of intestines	160	231	49	...	...
		Ileus, obstruction of intestine ...	424	621	98	3	...
		Stricture or strangulation of intestine	44	83	9	...	...
		Intussusception of intestine ...	93	139	10	...	...
		Hernia	191	304	39	...	...
		Fistula	17	22	3	...	...
		Peritonitis	771	1,014	144	1	...
		Ascites	184	113	10	...	...
		Gallstones	3,623	4,176	9	...	...
		Cirrhosis of liver ...			162	1	...
		Other diseases of liver ...			185	1	..
		Other diseases of the digestive system	3	80	40	...	...
	6	Diseases of lymphatic system ...	?	*36	6	...	...
		Disease of spleen	44	39	1	...	...
		Bronchocele	?	15	1	...	...
		Addison's disease†	?	*15	6	...	...
	7	Nephritis	218	536	116	1	...
		Bright's disease	749	1,837	175	1	...
		Uræmia†	?	*156	40	...	...
		Suppression of urine	29	76	6	...	...
		Calculus	48	104	3	...	...
		Hæmaturia†	?	*15	1	...	...
		Diseases of bladder and prostate ...	203	520	86	...	...
		Other diseases of the urinary system	628	523	14	...	...
	8	Ovarian disease	44	125	16	...	...
		Diseases of the uterus and vagina...	170	132	16	...	...
		Disorders of menstruation ...	52	47	2	...	...
		Pelvic abscess‡	?	*13	7	...	...
		Perineal abscess‡	?	*8	...	...	...
		Diseases of the testes, penis, scrotum, etc.	29	14	...	...	...
	9	Abortion, miscarriage ...	1,267	1,213	15	...	...
		Puerperal mania			5	...	...
		Puerperal convulsions ...			15	...	...
		Placenta prævia, flooding			25	1	...
		Phlegmasia dolens ...			...	...	...
		Other accidents of childbirth			54§	...	...
	10	Caries, necrosis‖	...	*123	25	...	...
		Arthritis, ostitis, periostitis ...	87	132	5	...	...
		Other diseases of the organs of locomotion	203	120	9	...	...

* For 5 years only.
† Included with other diseases of urinary system prior to 1886.
‡ Included with abscess (VIII.) prior to 1886.
§ Including cases undefined.
‖ Included with "Other diseases," in same sub-class prior to 1886.

Causes of Death in Classified Arrangement—*continued.*

(10 Years: 1871 to 1880, and 1881 to 1890; and Year 1892.)

Class.	Sub-Class.	Causes of Death.	Number of Deaths.				
			Ten Years:		Year 1892.		
			1871-1880.	1881-1890.	Total.	Chinese.	Aborigines.
		Diseases, etc.—*continued.*					
VI.	11	Carbuncle	37	53	4	1	...
		Phlegmon, cellulitis	20	61	6	...	...
		Lupus†	?	*11	4	...	...
		Ulcer, bedsore	86	107	2	...	...
		Eczema	185	218	16	...	...
		Pemphigus			2	...	...
		Other diseases of the integumentary system ...			2	...	...
VII.	1	Fractures, contusions	3,152	3,564	374	5	...
		Wounds	262	274	22	...	...
		Burn, scald	885	941	103	...	1
		Sunstroke	218	233	15	...	...
		Lightning	25	26	1	...	...
		Poison	178	204	26	...	...
		Bite of snake or insect‡	37	38	6	...	1
		Drowning	1,937	2,064	220	3	1
		Suffocation	625	648	95	...	...
		Otherwise	128	282	12	...	...
	2	Murder and manslaughter ...	190	290	38	...	...
	3	Gunshot wounds	69	203	23	...	...
		Cut, stab	185	181	15	...	...
		Poison	188	183	31	...	...
		Drowning	217	206	25	...	...
		Hanging	256	278	32	1	...
		Suicide by other means	36	50	8	...	...
	4	Judicial hanging	19	13	1	...	...
VIII.	...	Dropsy§	613	457	26	2	...
		Debility, atrophy, inanition‖ ...	6,987	10,309	947	14	1
		Mortification	131	92	12	...	...
		Tumour	269	325	9	...	...
		Abscess	38	95	5	...	...
		Hæmorrhage	326	465	10	...	...
		Sudden (cause unascertained)			...	...	...
		Causes not specified ...			32	2	1

Causes of death in order of fatality.

613. The next table shows the same causes of death, arranged in the order of their fatality, during 1892, with the numbers who died from each cause in that year, and during the decennial periods ended with 1890 and 1880; also the order of fatality of the different causes during those periods:—

* For five years only.

† Included with cancer (IV.) prior to 1886.

‡ At least five of the deaths in the ten years 1881-90 were cases of insect-bite, but in most of those years such cases were not distinguished; in 1892 all the cases were of snake-bite.

§ Including anæmia (IV.) prior to 1886.

‖ Including atelectasis (V.) prior to 1886.

Causes of Death in Order of Fatality.

(10 Years: 1871-80, and 1881-90; and Year 1892.)

Order of Fatality.			Causes of Death.	Number of Deaths.		
Ten Years: 1871-80.	Ten Years: 1881-90.	Year 1892.		Ten Years: 1871-80.	Ten Years: 1881-90.	Year 1892.
1	1	1	Phthisis	10,155	14,090	1,581
4	2	2	Heart disease, etc., exclusive of aneurism and pericarditis, endocarditis and valvular disease	5,642	8,576	973
5	5	3	Pneumonia	5,077	7,875	921
3	4	4	Accidents	7,447	8,274	874
19	15	5	Enteritis	2,134	2,838	830
12	9	6	Cancer, malignant disease ...	2,957	4,864	684
6	6	7	Bronchitis	4,588	6,574	678
16	7	8	Old age	2,727	5,852	616
2	3	9	Diarrhœa	7,667	8,304	549
17	12	10	Premature birth	2,715	3,860	458
15	13	11	Apoplexy	2,750	3,520	418
48	25	12	Endocarditis, pericarditis, valvular disease	377	1,405	371
9	10	13	Liver diseases not classed	3,623	4,176	356
26	17	14	Hemiplegia, paralysis, insanity ...	1,596	2,661	341
10	14	15	Convulsions	3,390	3,471	335
8	8	16	Typhoid (or enteric) and simple continued fever	3,973	5,585	301
11	18	17	Diphtheria	3,040	2,566	246
28	24	18	Tubercular meningitis (acute hydrocephalus)	1,394	1,714	208
22	11	19	Dyspepsia, and other diseases of the stomach	1,971	3,861	189
21	26	20	Whooping-cough	1,974	1,392	179
36	23	21	Bright's disease	749	1,837	175
25	22	21	Childbirth and puerperal fever ...	1,728	1,853	175
14	16	22	Diseases of spinal cord and other diseases of nervous system	2,805	2,787	166
27	27	23	Dentition	1,469	1,273	162
35	32	24	Peritonitis	771	1,014	144
30	31	25	Suicide	951	1,101	134
24	21	26	Congestion of the lungs	1,812	1,955	132
18	19	27	Inflammation of brain or its membranes	2,383	2,265	128
23	20	28	Croup (including diphtheritic croup)	1,897	2,004	117
54	45	29	Nephritis	218	536	116
41	34	30	Malformation	600	905	114
52	52	31	Influenza	276	398	111
32	30	32	Pleurisy	811	1,127	107
31	38	33	Rheumatic fever and rheumatism ...	817	799	102
44	37	34	Cholera (simple)	523	834	99
45	41	35	Ileus, obstruction of intestine ...	424	621	98
13	28	36	Dysentery	2,846	1,237	95
37	29	37	Tabes mesenterica	723	1,192	93
34	42	38	Forms of tuberculosis, scrofula, etc., not classed	780	594	90
46	40	38	Asthma, emphysema	392	635	90
29	29	39	Starvation, want of breast milk ...	1,322	1,192	89

Causes of Death in Order of Fatality—*continued.*

(10 Years: 1871-80, and 1881-90; and Year 1892.)

Order of Fatality.			Causes of Death.	Number of Deaths.		
Ten Years: 1871-80.	Ten Years: 1881-90.	Year 1892.		Ten Years: 1871-80.	Ten Years: 1881-90.	Year 1892.
55	48	40	Diseases of bladder and prostate ...	203	520	86
43	36	41	Epilepsy	588	851	75
38	33	42	Intemperance	646	950	71
...	53	43	Softening of brain†	?	*393	63
47	44		Hydatids	379	537	63
33	39	44	Aneurism	785	670	57
62	59	45	Ulceration of intestines	160	231	49
83	77	46	Diseases of the digestive system not classed	3	80	40
...	63		Uræmia	?	*156	40
51	55		Syphilis	286	332	40
56	56	47	Hernia	191	304	39
57	57	48	Murder and manslaughter ...	190	290	38
64	58	49	Diabetes mellitus	146	268	35
49	49	50	Laryngitis	359	518	33
42	43	51	Diseases of the respiratory system not classed	598	571	29
7	50	52	Scarlet fever	4,101	430	26
..	69	53	Caries, necrosis	?	*123	25
65	62	54	Gout	133	197	24
53	54	55	Pyæmia, septicæmia	264	370	22
40	51		Erysipelas	619	426	22
...	65	56	Anæmia, chlorosis, leucocythæmia ...	?	*136	20
58	61		Eczema	185	218	16
			Pemphigus			2
			Integumentary diseases not classed ...			2
50	60	57	Thrush	327	220	18
73	68	58	Ovarian disease	44	125	16
60	66		Diseases of the uterus and vagina ...	170	132	16
...	77	59	Diseases of the eye and ear (and nose?)	?	*80	14
39	47		Diseases of the urinary system not classed	628	523	14
59	72	60	Ascites	184	113	10
66	71		Purpura, hæmorrhagic diathesis ...	100	114	10
67	64		Intussusception of intestine ...	93	139	10
...	91	61	Idiopathic tetanus	?	*15	9
73	76		Stricture or strangulation of intestine	44	83	9
55	70		Diseases of the organs of locomotion not classed	203	120	9
68	75	62	Gonorrhœa, stricture of urethra ...	91	93	8
63	67		Sore throat, quinsy	153	130	8
...	93	63	Pelvic abscess	?	*13	7
83	79		Stomatitis	3	64	7
...	91	64	Addison's disease	?	*15	6
81	91		Dietic diseases not classed ...	11	15	6
...	85		Diseases of the lymphatic system ...	?	*36	6
77	80		Phlegmon, cellulitis	20	61	6
75	78		Suppression of urine	29	76	6

* For 5 years only.

† Included with diseases of spinal cord and other diseases of nervous system prior to 1886.

Causes of Death in Order of Fatality—*continued.*

(10 Years: 1871-80, and 1881-90; and Year 1892.)

Order of Fatality.			Causes of Death.	Number of Deaths.		
Ten Years: 1871-80.	Ten Years: 1881-90.	Year 1892.		Ten Years: 1871-80.	Ten Years: 1881-90.	Year 1892.
69	66	65	Arthritis, ostitis, periostitis ...	87	132	5
...	94	66	Lupus	?	*11	4
...	90	66	Rickets	?	*16	4
61	83	66	Remittent fever	169	42	4
74	81	66	Carbuncle	37	53	4
77	89	67	Chorea	20	21	3
79	88	67	Fistula	17	22	3
73	86	67	Ague	44	27	3
72	74	67	Calculus	48	104	3
...	96	68	Mumps	?	*7	2
80	92	68	Chicken-pox	13	14	2
...	91	68	Laryngismus stridulus	?	*15	2
...	86	68	Constitutional diseases not classed ...	...	*27	2
71	82	68	Disorders of menstruation ...	52	47	2
70	73	68	Ulcer, bedsore	86	107	2
20	46	69	Measles	2,080	534	1
73	84	69	Disease of spleen	44	39	1
...	87	69	Diseases of the larynx and trachea not classed	?	*26	1
...	91	69	Hæmaturia	?	*15	1
...	91	69	Bronchocele	?	*15	1
78	93	69	Judicial hanging	19	13	1
...	99	69	Beri-beri	?	*3	1
...	100	69	Miasmatic diseases not classed ...	...	1	1
75	92	69	Diseases of testes, penis, scrotum, etc.	29	14	...
...	95	...	Cow-pox and other effects of vaccination	?	*8	...
85	...	...	Glanders	1	...	...
...	95	...	Epidemic rose-rash	?	*8	...
...	95	...	Perineal abscess	?	*8	...
76	96	...	Parasitic diseases not classed ...	28	*7	...
84	96	...	Small-pox	2	7	...
...	96	...	Cerebro-spinal fever	?	*7	...
...	97	...	Scurvy	?	*6	...
...	98	...	Phagedæna	...	*5	...
			Deaths from well-defined causes...	114,206	139,716	14,810
			Deaths from "atrophy and debility" and other ill-defined and unspecified causes	8,364	11,743	1,041
			Deaths from all causes	122,570	151,459	15,851

614. 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

Death rate from various causes in Victoria and England.

* For 5 years only.

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 1892, the decennial periods ended with 1890 and 1880, and the results for England and Wales to the five years ended with 1890:—

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 1892.	Average of 10 Years: 1881-1890.	Average of 10 Years: 1871 to 1880.	Average of 5 Years: 1886 to 1890.
		All causes	1,363·28	1,512·50	1,538·01	1,889·54
		CLASSES.				
I.	...	Specific febrile or zymotic diseases	152·49	232·38	356·74	250·22
II.	...	Parasitic diseases	6·96	7·63	9·21	2·78
III.	...	Dietic diseases	14·27	21·60	24·83	6·72
IV.	...	Constitutional diseases ...	245·38	239·78	215·89	326·92
V.	...	Developmental diseases ...	102·18	106·02	75·82	158·92
VI.	...	Local diseases	662·42	691·18	642·57	986·16
VII.	...	Violent deaths	90·05	96·64	108·00	63·50
VIII.	...	Ill-defined and not specified causes	89·53	117·27	104·95	94·32
		SUB-CLASSES AND DISEASES.				
I.	1	Miasmatic diseases ...	74·74	109·34	193·98	158·34
		Measles	·09	5·33	26·10	46·84
		Scarlet fever	2·24	4·29	51·46	24·06
		Influenza	9·55	4·05	...	...
		Diphtheria*	21·16	25·62	38·15	16·96
		Whooping-cough ...	15·40	13·90	24·77	44·36
		Typhoid or enteric fever, etc.	25·89	55·77	49·85	19·58
	2	Diarrhœal diseases ...	63·90	103·61	138·48	68·10
		Diarrhœa	47·22	82·92	96·21	66·70
		Dysentery	8·17	12·35	35·71	
	3	Malarial diseases	·69	·72	2·67	·64
	4	Zoogenous diseases ...	...	·08	·01	·28
	5	Venereal diseases	4·13	4·24	4·73	8·36
	6	Septic diseases	9·03	14·39	16·87	14·50
		Puerperal fever (see also Childbirth and Puerperal *infra*)	5·25	6·39	5·78	7·64

* 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 1892.	Average of 10 Years: 1881-1890.	Average of 10 Years: 1871 to 1880.	Average of 5 Years: 1886 to 1890.
		Sub-Classes and Diseases.				
IV.	...	Constitutional diseases—				
		Rheumatism, rheumatic fever, and gout	10·84	9·95	11·92	12·22
		Cancer, malignant disease	58·83	48·57	37·10	63·16
		Phthisis	135·98	140·71	127·42	163·54
		Other tubercular and scrofulous diseases	33·63	34·95	36·35	68·68
V.	...	Developmental diseases—				
		Of children (premature birth or malformation)	49·20	47·58	41·60	61·34
		Of old age	52·98	58·44	34·22	97·58
VI.	...	Diseases of the systems—				
	1	Nervous (brain diseases, etc.)	132·45	159·77	169·80	254·92
	2	Organs of special sense (nose, ear, and eye diseases)	1·20	?	?	2·28
	3	Circulatory (heart diseases, etc.)	120·50	106·36	85·37	168·58
	4	Respiratory (lung diseases, etc.)*	181·30	212·56	194·92	376·54
	5	Digestive (stomach, bowel, liver diseases, etc.)	168·05	149·28	141·04	109·92
	6	Lymphatic, and ductless glands	1·20	1·05	·55	2·28
	7	Urinary (kidney, bladder diseases, etc.)	37·93	37·62	23·53	44·66
	8	Generative (diseases of ovary, uterus, and vagina, etc.)	3·53	3·39	3·70	5·50
	9	Childbirth (see also Childbirth and puerperal fever *infra*)	9·80	12·11	15·90	6·60
	10	Locomotive (arthritis, ostitis, etc.)	3·35	3·75	3·64	8·62
	11	Integumentary (carbuncle, phlegmon, ulcer, etc.)	3·10	4·49	4·12	6·26
VII.	1	Accident or negligence ...	75·17	82·63	93·45	54·38
	2	Homicide	3·27	2·89	2·38	1·10
	3	Suicide	11·52	10·99	11·93	7·94
	4	Execution	·09	·13	·24	·08
I. VI.	6 9	Childbirth and puerperal fever	15·05	18·50	21·68	14·24

Note.—See notes to table following paragraph 612 *ante*.

* 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 on page 334.

Diseases more fatal in Victoria than in England.

615. 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, diarrhœal diseases, malarial 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 specified cause shown, also from all causes combined, the death rate is, on the average, higher in England and Wales than in Victoria.

New nosology prevents returns from being strictly comparable.

616. It should be explained that under the altered nosological classification, which has now been in force for seven 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.

Specific febrile or zymotic diseases.

617. Per 100,000 of the population, 152 deaths in 1892 were set down to specific febrile or zymotic diseases. The proportion was much below the average of the decade 1881-90, and very much 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 considerably higher than in England during the five years 1886 to 1890. Of the 152 deaths per 100,000 persons referred to, 75 were set down to miasmatic, 64 to diarrhœal, 9 to septic, 4 to venereal diseases, only a fraction to malarial diseases, and not one to zoogenous diseases. The influenza epidemic, which caused 90 deaths per 100,000 persons living in 1891, had become so much modified as to cause less than 10 such deaths in 1892. Typhoid fever, moreover, caused only 26 such deaths, as against 31 in 1891, 54 in 1890, and 53 according to the average of 20 years. The rate, however, although so much reduced, was still higher than that which prevails in England. Diphtheria in 1892 was not nearly so fatal as in the three preceding years; the mortality therefrom being 21 per 100,000, as compared with 28 in 1891, 66 in 1890, and 48 in 1889; the average during the ten years 1881-90 was only 26, and that of the previous

* See footnote (*) on previous page.

decade 38. The mortality from diarrhœal diseases in 1892 (64 per 100,000) was less by one-tenth than that in 1891 or 1890, lower by two-fifths than during the decade 1881-90, and scarcely half as high as in the decade 1871-80. The mortality from most of the other zymotic diseases, except whooping cough, which was rather higher than in 1891 or 1890, was considerably below the average of the previous ten years.

Zymotic diseases, etc., in Australasian colonies.

618. 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 diseases 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.

619. 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.

Small-pox in various countries.

620. 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 death from small-pox has occurred in the last four years, and since the

registration system was first introduced in 1853 only 26 deaths from it have been recorded, five of which occurred in 1884. Material for giving some statistics of deaths from small-pox in other countries 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		

Vaccinations.

621. Although cases of small-pox have rarely occurred in Victoria, parents are required by law to cause their children to be vaccinated.† In 1892 the number of cases of successful vaccination performed in Victoria was 26,904; and, as the number of births was 37,831, it appears that 71 per cent. of the children born were vaccinated. This proportion is higher than in any of the previous four years. Part of the remainder are accounted for by death—2,790, or over 7 per cent., of those born having died before they were 6 months old. The average proportions of vaccinations to infants born is 75¼ per cent., as is seen by reference to the following figures, which indicate the proportions during each of the 17 years ended with 1892:—

PROPORTION OF VACCINATIONS TO BIRTHS, 1876 TO 1892.

	Vaccinations per 100 Births.		Vaccinations per 100 Births.
1876	80	1886	70
1877	87	1887	78
1878	82	1888	67
1879	82	1889	70
1880	73	1890	68
1881	100‡	1891	66
1882	75	1892	71
1883	67		
1884	74	Mean of 17 years	75¼
1885	69		

* For an account of the mortality from small-pox amongst the Australian aborigines, see *Victorian Year-Book*, 1888-9, Vol. II., paragraph 228.

† An interesting report on the efficacy of vaccination was published in the *Victorian Year-Book*, 1890-91, Vol. I., paragraph 615.

‡ 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.

622. 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 :— Vaccinations in various countries.

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		

623. 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. Vaccinations in Australasia and elsewhere.

624. The number of public vaccinators in Victoria is 201, and the amount paid in 1892 for vaccinations, including fees to deputy-registrars and travelling allowances to vaccinators, was £5,419 11s. 6d. Cost of vaccination.

625. The seven zymotic diseases which chiefly affect children are measles, scarlet fever, diphtheria, croup, whooping-cough, dysentery, and diarrhœa. The following table shows the number of deaths from such diseases which occurred during the years 1891 and 1892; the annual means of the seven years 1864-70, and of the decades 1871-80 and 1881-90, being also given :— Zymotic diseases affecting children.

DEATHS FROM ZYMOTIC DISEASES CHIEFLY AFFECTING CHILDREN, 1864 TO 1892.†

Year or Period.	Annual Number of Deaths from—							
	Measles.	Scarlet Fever.	Diphtheria.	Croup.	Whooping Cough.	Dysentery.	Diarrhœa.	Total.
1864-70 ...	161	326	410	148	185	338	801	2,369
1871-80 ...	208	410	304	190	197	285	767	2,361
1881-90 ...	54	43	257	200	139	124	830	1,647
1891 ...	4	25	326	170	168	83	655	1,431
1892 ...	1	26	246	117	179	95	549	1,213

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.

* *Bulletin*, etc., page 189.

† For the numbers in each year, see *Victorian Year-Book*, 1890-91, Vol. I., paragraph 616.

Children's zymotic diseases, 1892.

626. As compared with the previous year, a decrease took place in 1892 in the mortality from measles, diphtheria, croup, and diarrhœa, but an increase in the other diseases named in the table. Taken as a whole, these diseases in 1892 caused 218 fewer deaths than in 1891, and a still smaller number than in any previous year since 1881.*

Measles.

627. Measles in a fatal form has been almost non-existent in Victoria for some time.† An epidemic of that complaint 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 ·9 in 1892 and ·82 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)	·82
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, 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.

628. On the occasion of the earlier visitations of measles in 1866-7 and 1874-5, the epidemic was accompanied or followed by one of scarlet fever, which proved to be even more fatal than the former complaint; but no such calamity has attended the last two outbreaks

* See footnote (†) on page 239.

† An epidemic of measles has broken out during the present year (1893), the mortality caused by which cannot be known until after the year has been completed.

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 430 in the ten years 1881-90, or an average of 43 per annum; as against 5,101, or an average of 510 per annum, in the preceding ten years; and 2,284, or an average of 326 per annum, in the seven years ended with 1870. In 1892, scarlet fever caused 26 deaths, or ·22 per 10,000 of the population, as against ·43 in the ten years ended with 1890, and 5·15 in the ten years ended with 1880. Whilst the death rate from this complaint in the ten years 1881-90 was lower than the average prevailing in any of the following countries except Queensland, 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 „	·58
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.

Diphtheria and croup.

629. 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 only 3·12 in 1892, as against 4·32 in 1891, 9·11 in 1890, 7·32 in 1889, 4·54 in the ten years ended with 1890, and 6·19 in the ten years ended with 1880. The proportion, over a series of recent years, is lower than that for any of the foreign countries of which information is at hand, except Ireland, England, Holland, and Belgium, as will be seen by the following figures:—

* These proportions, except those for the Australasian colonies, have been taken and re-arranged from Dr. Raseri's paper already alluded to, 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	Sweden (principal towns) ...	9·74
Prussia	15·45	Italy	9·18
Spain (principal towns) ...	11·83	Switzerland (principal towns)	8·49
Germany (principal towns) ...	11·54	Belgium	7·72
Massachusetts	11·13	Spain	6·85
Austria (principal towns) ...	10·36	Denmark (towns)	6·28
Sweden	9·79	Switzerland	6·09
South Australia (1878 to 1887)	5·93	Victoria (1878 to 1887) ...	4·17
Scotland (8 towns)... ...	4·99	Belgium (principal towns) ...	3·79
New South Wales (1878 to 1887)	4·77	Holland	3·76
Queensland „	4·75	England and Wales ...	3·05
Russia in Europe	4·67	Ireland	2·70
Scotland	4·55	New Zealand (1878 to 1887)...	2·42
Tasmania (1878 to 1887) ...	4·46		

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.

630. Deaths from whooping-cough in 1892 were in the proportion of 1·54, in 1891 of 1·46, in the ten years ended with 1890 of 1·34, 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 Dr. Raseri's paper, page 193.

631. Typhoid fever caused 301 deaths in 1892, as against 356 in the previous year. The rate of mortality from this complaint in 1892 was only 2·59 per 10,000 persons living, which is the lowest recorded during a period of 27 years; although three years previously (in 1889) it was as high as 8·35. During the last 27 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 principal ones appear to be 1871-3, 1880-81, and 1891-2, 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, nearly 3¾ 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. The following table shows the number of deaths from typhoid fever, and their proportion to the population, during each of the past 27 years:— Typhoid fever.

DEATHS FROM TYPHOID FEVER, 1866 TO 1892.*

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	1880	297	3·49
1867	455	7·06	1881	351	4·04
1868	295	4·45	1882	472	5·30
1869	360	5·24	1883	661	7·26
1870	416	5·83	1884	456	4·89
1871	269	3·65	1885	424	4·43
1872	323	4·29	1886	530	5·38
1873	282	3·68	1887	631	6·21
1874	470	6·04	1888	541	5·13
1875	455	5·78	1889	910	8·35
1876	375	4·71	1890	611	5·46
1877	532	6·58	1891	356	3·10
1878	532	6·48	1892	301	2·59
1879	438	5·25			
			Mean ...	454	5·30

NOTE.—A useful circular issued under the direction of the Central Board of Health, describing the symptoms of typhoid fever, 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.

632. According to the average of the ten years ended with 1890, the death rate from typhoid fever ranged from 2·5 per 10,000 persons living in New Zealand to 5·7 in Victoria and 9·6 in Queensland. The Typhoid fever in Australasian colonies.

* 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.

following table shows the mortality from that complaint in the Australasian colonies during the periods 1873-80 and 1881-90, also for each of the five years ended with 1891, except in the case of Western Australia, for which the information is given for only the last five of those years :—

DEATHS FROM TYPHOID FEVER* IN AUSTRALASIAN COLONIES, 1873 TO 1891.

Period.	Deaths from Typhoid Fever Annually.					
	Number.	Proportion per 10,000 Persons Living.	Number.	Proportion per 10,000 Persons Living.	Number.	Proportion per 10,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 to 1880	423	5·25	337†	4·12†	108	5·79
1881 to 1890	559	5·69	448	4·77	301	9·61
1887 ...	631	6·21	434	4·32	245	7·07
1888 ...	541	5·13	441	4·26	228	6·31
1889 ...	910	8·35	571	5·35	385	10·28
1890 ...	611	5·46	311	2·82	131	3·40
1891 ...	356	3·10	269	2·35	126	3·11
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 to 1880	88	3·89	38	3·53	184	4·74
1881 to 1890	128	4·18	62	4·76	140	2·48
1887 ...	153	4·92	112	8·37	168	2·82
1888 ...	120	3·84	84	6·12	139	2·30
1889 ...	137	4·37	113	8·06	121	1·98
1890 ...	99	3·13	49	3·41	149	2·40
1891 ...	80	2·52	83	5·57	124	1·97

NOTE.—In Western Australia the deaths from typhoid fever numbered 13 in 1887, 7 in 1888, 5 in 1889, 2 in 1890, and 12 in 1891, the respective proportions per 10,000 persons living being 3·12, 1·65, 1·16, ·42, and 2·34, resulting in an average during the 5 years of 1·74.

Deaths from typhoid fever in the colonies, 1891 and previous years compared.

633. In 1891 the death rate from typhoid fever was above the average in Tasmania, but considerably below it in all the other colonies; in the previous year the rate was also below the average in all the colonies except Victoria. In Queensland in 1891 the rate per 10,000 persons living was only 3·11, as compared with an average extending over the ten years ended with 1890 of 9·61.

Typhoid fever in England and Wales.

634. 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, although only slightly lower than in New Zealand. During the ten years ended with 1880 the mean death rate therefrom was 4·30, but in the ten years ended with 1890 only 2·23 per 10,000 persons living, the latter being much lower

* 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. For mortality in each year since 1872, see *Victorian Year-Book*, 1890-91, Vol. I., paragraph 623.

† Years 1875 to 1880.

‡ 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.

than even the minimum rate (3·10) recorded in Victoria during the last twenty-nine years.*

635. 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		

636. Influenza, in an epidemic form, prevailed in Victoria, as well as in most other countries, during 1890 and 1891, and to a limited extent in 1892; whilst it proved fatal to persons of all ages, it pressed most hardly upon the old and the very young. The following is a statement of the deaths of males and females at various ages set down to this complaint in the three years:— Influenza.

DEATHS AT EACH AGE FROM INFLUENZA IN VICTORIA, 1890 TO 1892.

Ages.	1890.			1891.			1892.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 Years	23	13	36	96	64	160	9	8	17
5 to 15 „	5	7	12	11	16	27	6	1	7
15 to 25 „	6	9	15	21	27	48	7	4	11
25 to 35 „	18	5	23	24	57	81	8	5	13
35 to 45 „	5	6	11	39	50	89	7	3	10
45 to 55 „	12	7	19	55	50	105	2	6	8
55 to 65 „	20	10	30	121	84	205	20	6	26
65 to 75 „	6	6	12	109	87	196	8	3	11
75 and upwards	3	3	6	63	61	124	3	5	8
Total ...	98	66	164	539	496	1,035	70	41	111

* See footnote (*) on page 344.

† See Dr. Raseri's paper, page 193. The fevers referred to are there termed "Febbre tifoide e tifo esantematico."

Complaints superveningon influenza.

637. It may be remarked that, besides the deaths set down to influenza, many deaths were registered as from bronchitis, pneumonia, and other diseases of the respiratory system which originated in attacks of influenza, and were complications of that complaint.

Venereal diseases.

638. Deaths from venereal diseases averaged annually 38 in the ten years ended with 1880, and 43 in the ten years ended with 1890, and numbered 48 in 1892, being in the ratio per 10,000 of the population of ·47 during the first period, of ·42 during the second period, and of ·41 in the last year. If deaths from syphilis be considered apart from those caused by other venereal diseases, the annual numbers at the same periods would be 29, 33, and 40, and the proportions ·36, ·33, and ·34, which contrast favourably with those in six of the ten following countries. It should be mentioned that in a considerable proportion of cases occurring in Victoria the disease was congenital:—

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 Aborigines.

639. 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.

640. Parasitic diseases, chief amongst which are thrush and hydatids, caused 7 deaths in 1892 per 100,000 of the population, which was 1 below the average of the ten years ended with 1890, and about $2\frac{1}{4}$ below the average of the ten years 1871 to 1880. These diseases are more prevalent in Victoria than in England.

Hydatids.

641. 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 twenty years ended with 1892 has caused 993 deaths, or an average of 50 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

* See Dr. Raseri's paper, page 193.

† *The Australian Race*, Vol. I., page 227.

eight years being 5·18, for the ten succeeding years 5·50, and for the whole period 5·35. The following are the figures for the last twenty years:—

DEATHS FROM HYDATIDS, 1873 TO 1892.

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	1884 ...	59	6·33
1874 ...	41	5·27	1885 ...	47	4·92
1875 ...	47	5·97	1886 ...	51	5·18
1876 ...	36	4·52	1887 ...	51	5·02
1877 ...	37	4·57	1888 ...	53	5·03
1878 ...	37	4·50	1889 ...	61	5·61
1879 ...	60	7·19	1890 ...	53	4·75
1880 ...	48	5·64	1891 ..	58	5·06
1881 ...	48	5·50	1892 ...	63	5·42
1882 ...	58	6·52			
1883 ...	56	6·16	Mean ...	50	5·35

642. According to the returns of the ten years ended with 1891, 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 Australasian colonies.

DEATHS FROM HYDATIDS IN AUSTRALASIAN COLONIES, 1882 TO 1891.

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	1·50	3	1·26
1883 ...	56	6·16	10	1·19	4	1·50
1884 ...	59	6·33	20	2·26	8	2·71
1885 ...	47	4·92	28	3·02	3	·97
1886 ...	51	5·18	23	2·37	Nil.	...
1887 ...	51	5·02	27	2·69	1	·29
1888 ...	53	5·03	22	2·12	Nil.	...
1889 ...	61	5·61	24	2·25	3	·80
1890 ...	53	4·75	35	3·18	2	·52
1891 ...	58	5·06	33	2·89	3	·74
Means ...	54·7	5·46	23·4	2·35	2·7	·88

Deaths from Hydatids in Australasian Colonies, 1882 to 1891 —*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	3·35	7	1·37
1883 ...	6	2·01	4	3·35	1	·19
1884 ...	13	4·21	6	4·79	3	·55
1885 ...	5	1·60	2	1·56	3	·53
1886 ...	18	5·78	2	1·53	4	·68
1887 ...	9	2·89	3	2·24	3	·50
1888 ...	13	4·16	2	1·46	5	·83
1889 ...	11	3·51	5	3·56	2	·33
1890 ...	8	2·53	Nil.	...	3	·48
1891 ...	12	3·78	3	2·01	3	·48
Means ...	10·7	3·46	3·1	2·39	3·4	·59

Note.—In Western Australia only 1 death in 1888, but none in the other years, were set down to this disease.

Hydatids in England.

643. Hydatid disease is much more fatal in all the Australasian colonies than it is in England and Wales, where there were only 46 deaths from it in 1891, or a proportion of ·16 per 100,000 persons living, as compared with a mean of ·20 in the five years 1881 to 1885.*

Dietic diseases.

644. Dietic diseases, consisting principally of want of breast milk and alcoholism, caused in 1892 over 14 deaths per 100,000 persons living, which was 2 less than in 1891, and $7\frac{1}{3}$ below the average of the previous ten years. These diseases appear to be over three times as fatal in Victoria as in England.

Intemperance.

645. In 1892, 71 deaths were set down to intemperance—of which 20 ended with delirium tremens—as against 90 in 1891, and an average of 95 during the ten years 1881-90, and of 65 in the ten years preceding that period. These figures furnish annual proportions per million persons living of 61 for 1892, 77 for 1891, 92 for 1890, 95 for the decennium 1881 to 1890, and 81 for the decennium 1871 to 1880, and would appear to indicate that the mortality from this cause was decreasing. As a matter of fact, however, returns of the mortality from intemperance are of doubtful value, as comparatively few deaths are set down to alcoholism pure and simple, although a large number of complaints are no doubt brought on or aggravated, and many lives

* For further information respecting hydatid disease, see *Victorian Year-Book*, 1888-9, Vol. II., paragraphs 253 and 254.

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 as 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

646. Of complaints classed under the head of "Constitutional Diseases," the most prominent are phthisis and other tubercular diseases, and cancer; also rheumatism, gout, and diabetes mellitus. Under this class there were, in 1892, 245 deaths per 100,000 of the population, or 6 more than the average of the decade 1881-90, and 30 above the average of the decade 1871-80. Of the 245 deaths per 100,000 referred to, 136 resulted from phthisis, or pulmonary consumption; 58 were set down to cancer; 34 to tabes mesenterica, acute hydrocephalus, and other tubercular or scrofulous diseases; and 17 to other constitutional diseases. Constitutional diseases.

647. Phthisis, or pulmonary consumption, caused 1,581 deaths in 1892, or 98 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 1892 eight diseases stood before it), but this complaint causes barely 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, Phthisis.

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* Page 186.

† See table following paragraph 613 *ante*.

‡ During recent years heart diseases (undefined) have sometimes caused more deaths than diarrhœa.

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 proportion to the total population, in 1860 and each subsequent fifth year, also in 1891 and 1892:—

DEATHS FROM PHTHISIS IN VICTORIA, 1860 TO 1892.

Year.	Deaths from Phthisis.		Year.	Deaths from Phthisis.	
	Total Number.	Number per 10,000 Persons Living.*		Total Number.	Number per 10,000 Persons Living.*
1860 ...	772	14·46	1890 ...	1,631	14·58
1865 ...	741	12·12	1891 ...	1,483	12·93
1870 ...	888	12·45	1892 ...	1,581	13·60
1875 ...	1,027	13·04			
1880 ...	1,175	13·82			
1885 ...	1,384	14·46	Total in 33 years	35,015	13·42

NOTE.—Deaths registered as occurring from hæmoptysis are included in this table.

Death rate from phthisis.

648. The death rate from phthisis fell with tolerable steadiness from 1860 to 1871, but since that period there has, on the whole, been a gradual increase. During the whole period of thirty-three years the deaths from this complaint were in the proportion of 13·42 to every 10,000 persons living; during the first ten of those years that proportion was about 12·68, in the second ten it was 12·64, in the third ten it was 14·25, and in the last three it was 13·70. In regard to the increased rate since 1870, it will 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 1892 (13·60 per 10,000), although higher than in the previous year, was lower than that in 1890, 1885, or 1880.

Deaths of males and females from phthisis.

649. Phthisis in Victoria generally affects males more heavily than females. In 1892, 936 of the former, and 645 of the latter, died of that complaint; the males being in the proportion of 15·42, but the females of only 11·61, per 10,000 of their respective sexes living.

Ages at death from phthisis.

650. The following table gives the number of deaths from phthisis at each age in 1892; also the proportion which such deaths bore to the total deaths from all causes in 1892 and in the decennial period 1881-90:—

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* For figures of mean population used in making these calculations, see table "Breadstuffs Available for Consumption" in Part "Production" in the second volume.

† In 1871, the proportion of persons living between the ages referred to was 45 per cent., and in 1891 48½ per cent., of the whole population.

Deaths from Phthisis, 1892 and 1881-90.—Ages at Death.

Ages.	Number who Died from Phthisis, 1892.			Percentage of Deaths from Phthisis to those from all Causes.	
	Males.	Females.	Total.	1892.	Ten Years: 1881-90.
Under 5 years ...	11	13	24	·44	·40
5 to 10 „ ...	4	4	8	1·92	2·40
10 „ 15 „ ...	5	16	21	8·57	7·91
15 „ 20 „ ...	33	48	81	20·25	21·96
20 „ 25 „ ...	105	121	226	39·24	31·91
25 „ 35 „ ...	271	217	488	35·06	31·42
35 „ 45 „ ...	158	104	262	25·46	22·16
45 „ 55 „ ...	133	66	199	16·21	15·33
55 „ 65 „ ...	154	42	196	9·89	9·06
65 „ 75 „ ...	55	12	67	3·71	3·32
75 years and upwards	7	2	9	·69	·74
Total	936	645	1,581	9·97	9·30

Phthisis most fatal to adults.

651. 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 1892, at all the age-periods except 5 to 10, 15 to 20, and 75 and upwards, was considerably above the average. In the year under review, about one-third of the deaths in the colony between the ages of 20 and 35, about one-fifth of those between 15 and 20, about one-fourth of those between 35 and 45, and nearly a sixth of those between 45 and 55, were caused by phthisis.

Phthisis in Melbourne and country.

652. Of the 1,581 deaths from phthisis in 1892, 925 occurred in Melbourne and suburbs (Greater Melbourne) and 656 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 1861, 1865, and each subsequent fifth year, also for 1891 and 1892 :—

Deaths from Phthisis per 10,000 Persons Living in and outside Greater Melbourne, 1861 to 1892.

Year.	Greater Melbourne.	Extra-Metropolitan Districts.
1861	23·44	10·63
1865	22·11	8·57
1870	22·49	8·56
1875	21·46	9·25

DEATHS FROM PHTHISIS PER 10,000 PERSONS LIVING IN AND OUTSIDE GREATER MELBOURNE, 1861 TO 1892—*continued.*

Year.	Greater Melbourne.	Extra-Metropolitan Districts.
1880	23·95	8·92
1885	23·92	9·12
1890	20·02	10·59
1891	17·27	9·68
1892	19·21	9·63
Mean of 32 years	21·91	9·14

Death rate from phthisis in England.

653. In England and Wales, in the twenty-five years ended with 1891, the death rate from phthisis, per 10,000 persons living, ranged from 25·39 in 1867 to 15·68 in 1888, the mean of the first five years of the period having been as high as 23·96, whilst that of the last five years was as low as 16·07.* 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 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.

Phthisis among Chinese

654. Of the 171 Chinese who died in Victoria in 1892, 23, or 13 per cent., fell victims to phthisis. In the ten years ended with 1890 16 per cent. of the deaths of Chinese were from phthisis.

Phthisis among Aborigines.

655. Although only 3 out of the 19 deaths of Aborigines in 1892 were set down to phthisis, it is stated on good authority that phthisis is the chief cause of the death of the Australian Aborigines, who, when once affected, very seldom recover.

Phthisis in Australasian colonies.

656. Over a series of years the rate of mortality from phthisis has been much higher in Victoria than in any other of the Australasian colonies, excepting Queensland, where the proportion is unduly

* See Fifty-third Report of the Registrar-General of England, page xl., where it is stated that nearly one-third of the apparent decrease in the death-rate from phthisis is due to a large number of deaths formerly classed as resulting from that complaint being now set down to bronchitis, which disease consequently appears to have become more fatal than formerly. Thus the death rate from diseases of the respiratory system (except croup) rose from 33·94 in 1866-70 to 36·39 in 1886-90 per 10,000 living.

swelled by the high mortality among the Polynesians.* The figures of the other colonies exhibit more variation from year to year than those of Victoria, and Queensland is the only colony besides Victoria in which the rate habitually exceeds 13 per 10,000 :—

DEATHS FROM PHTHISIS IN AUSTRALASIAN COLONIES, 1873 TO 1891.

Period.	Deaths from Phthisis.					
	Annual Number.	Per 10,000 Persons Living.	Annual Number.	Per 10,000 Persons Living.	Annual Number.	Per 10,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.†	
1873 to 1880 ...	1,055	13·10	671	8·22	233	12·52
1885	1,384	14·44	1,078	11·58	593	19·20
1890	1,631	14·58	1,029	9·34	515	13·35
1891	1,483	12·93	1,053	9·21	501	12·38

Period.	Deaths from Phthisis.					
	Annual Number.	Per 10,000 Persons Living.	Annual Number.	Per 10,000 Persons Living.	Annual Number.	Per 10,000 Persons Living.
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 to 1880 ...	223	9·84	110	10·25	328	8·44
1885	307	9·80	145	10·97	514	9·08
1890	294	9·29	138	9·60	520	8·38
1891	329	10·36	134	9·00	495	7·86

NOTE.—In Western Australia, the deaths from phthisis in the last seven years were as follow :—29 in 1885, 24 in 1886, 46 in 1887, 42 in 1888, 39 in 1889, 43 in 1890, and 49 in 1891 ; the proportions per 10,000 of the population being respectively 8·51, 6·45, 11·03, 9·93, 9·06, 8·97, 9·56 ; average of seven years 9·07.

Tubercular diseases.

657. 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, 17,590 in the ten years 1881 to 1890, 1,962 in 1891, and 1,972 in 1892. These numbers furnish proportions per 10,000 of the population of 16·38 deaths annually at the first period,

* 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. Nearly half the deaths from phthisis in 1884 and 1885, nearly two-fifths in 1886 and 1887, nearly one-third in 1889, nearly one-fourth in 1890, and more than one-third in 1891, were of Polynesians, although they form a very small section (about 2½ per cent.) of the total population. Excluding the Polynesians from the calculation, the death rate from phthisis in Queensland in 1886 was only 9·2, in 1887 only 10·2, in 1888 only 8·75, in 1889 only 8·87, in 1890 only 10·47, and in 1891 only 7·94 per 10,000. The general death rate of Polynesians in Queensland during 1890 was as high as 48, and during 1891 it was 62 per 1,000.

† For an interesting report on the causes and methods of prevention of tuberculosis, see *Victorian Year-Book* for 1890-91, Vol. I., paragraph 647.

17·57 at the second, 17·11 at the third, and 16·96 at the last, 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.		Deaths from Tubercular Diseases per 10,000 persons living.
Austria (principal towns)	72·20	Denmark (towns)	30·42
Austria	38·39	Spain (towns)	29·24
Belgium (towns)	35·11	Scotland	25·93
Germany (principal towns)	34·40	Italy	25·54
Massachusetts	34·25	Ireland	22·43
Switzerland (towns)	32·50	Switzerland	21·79
Sweden (towns)	31·61	England and Wales	21·09
Scotland (8 towns)	31·12	Holland	19·73
Prussia	30·88	Spain	12·32
Belgium	30·48		

Deaths from cancer in Victoria.

658. Next to phthisis, the most fatal of the constitutional diseases is cancer. This complaint caused 684 deaths in 1892, or 15 less than in the previous year. Cancer in a fatal form has apparently been fast increasing of late years, for during the ten years ended with 1880 it caused only one death in every 41 from all causes, but in the ten years ended with 1890 the proportion had risen to 1 in 29; 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 the last three years the average rate of 5·86 was reached. The following table shows the annual number of deaths from cancer, and the number per 10,000 persons living, in the three decades ended with 1890, and in each of the last three years:—

DEATHS FROM CANCER, 1861 TO 1892.

Period.	Annual Deaths from Cancer.			
	Total Number.			Number per 10,000 Persons Living.
	Males.	Females.	Total.	
1861 to 1870 ...	68	70	138	2·23
1871 to 1880 ...	158	138	296	3·73
1881 to 1890 ...	253	233	486	4·95
1890	338	288	626	5·60
1891	407	292	699	6·09
1892	359	325	684	5·88
Total in 32 years ...	5,549	5,035	10,584	4·01

* See Dr. Raseri's paper, page 193. The diseases referred to are there termed "Tubercolosi diffusa, Tisi polmonare, Tubercolosi meningea, ed Idrocefalo."

659. Cancer is a complaint which generally affects females more than males.* In the thirty-two years to which the table relates, 91 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 the year 1892, 91 females died of cancer to every 100 males, females over the age of 30 in the total population being in the proportion of 80 to every 100 males.

Proportions of the sexes who died of cancer.

660. Judging from the experience of the ten years ended with 1891, cancer is much more fatal in Victoria than in any other Australasian colony except Tasmania, the rate in which differs but little from the Victorian rate. 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:—

Cancer in Australasian colonies.

DEATHS FROM CANCER IN AUSTRALASIAN COLONIES, 1882 TO 1891.

Colony.	Period.	Annual Deaths from Cancer.	
		Number.	Proportion per 10,000 Persons Living.
Victoria	1882 to 1884	423	4·64
	1885	445	4·65
	1890	626	5·60
	1891	699	6·09
New South Wales	1882 to 1884	221	2·65
	1885	267	2·87
	1890	392	3·56
	1891	516	4·51
Queensland	1882 to 1884	73	2·69
	1885	53	1·71
	1890	117	3·03
	1891	134	3·31
South Australia	1882 to 1884	95	3·16
	1885	100	3·19
	1890	129	4·08
	1891	156	4·92

* 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, of 74 at the census of 1881, and of 80 at the census of 1891, to every 100 males.

Deaths from Cancer in Australasian Colonies, 1882 to 1891—*continued*.

Colony.	Period.	Annual Deaths from Cancer.	
		Number.	Proportion per 10,000 Persons Living.
Western Australia	1882 to 1884	10	3·08
	1885	17	4·99
	1890	15	3·15
	1891	20	3·90
Tasmania...	1882 to 1884	64	5·14
	1885	60	4·54
	1890	79	5·50
	1891	68	4·57
New Zealand	1882 to 1884	165	3·12
	1885	177	3·13
	1890	295	4·75
	1891	295	4·68

Deaths from cancer in England and Wales.

661. In England and Wales there has for years past been a progressive increase in the death rate from cancer. This rate, in the five years ended with 1890, was much higher than that prevailing 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	1881 to 1885 ...	5·48
1866 to 1870 ...	4·04	1886 to 1890 ...	6·32
1871 to 1875 ...	4·46		
1876 to 1880 ...	4·95	Mean ...	4·82

Deaths from cancer in various countries.

662. 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 and New Zealand than any except Ireland and Prussia; less fatal in New South Wales and South Australia than in any except Prussia; and, apparently, less fatal in Queensland than in any one of the countries referred to:—

* See Forty-sixth Annual Report of the Registrar-General of England, page xviii; also *Victorian Year-Book*, 1887-8, Vol. I., paragraph 699.

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

663. Any part of the body is liable to be affected by cancer. The affected part is seldom mentioned in the Victorian returns, but the Registrar-General of Ireland† succeeded in obtaining information as to the seat of the complaint in 1,810 out of 2,145 fatal cases which occurred in Ireland during 1890. The figures are rearranged in the following table, the sexes being distinguished, and the number placed in the order of the frequency of their occurrence in different parts of the body:— Seat of cancer.

Seat of Cancer in Males and Females.

Males.			Females.		
Part affected.	Deaths from Cancer.		Part affected.	Deaths from Cancer.	
	Number.	Proportions per Cent.‡		Number.	Proportions per Cent.‡
Stomach ...	276	36·36	Stomach ...	255	24·26
Liver	73	9·62	Breast ...	236	22·46
Lips	66	8·69	Uterus ...	166	15·79
Face	55	7·25	Liver	106	10·09
Rectum ...	51	6·72	Intestines ...	45	4·28
Tongue ...	41	5·40	Rectum ...	45	4·28
Throat	37	4·87	Face	39	3·71
Jaw	30	3·95	Leg	33	3·14
Intestines ...	28	3·69	Throat ...	28	2·66
Hand	21	2·76	Pylorus ...	18	1·71
Neck	20	2·64	Neck	14	1·33
Leg	18	2·37	Tongue ...	12	1·14
Penis	11	1·45	Hand	10	·95
Eye	10	1·32	Eye	9	·86
Pylorus ...	10	1·32	Lips	9	·86
Head	4	·53	Jaw	9	·86
Breast	4	·53	Foot	9	·86
Foot	4	·53	Head	8	·76
Total ..	759	100·00	Total ...	1,051	100·00
Parts unspecified	179	...	Parts unspecified	156	...
Grand Total ...	938	...	Grand Total ...	1,207	...

* See Dr. Raseri's paper, page 193.
† See 27th Report of the Registrar-General of Ireland, page 17.
‡ These calculations have been made in the office of the Government Statist, Melbourne.

Parts most frequently affected.

664. It appears from the figures that in both sexes the stomach is the part most liable to cancer, next the liver in men, also in women after the breast and uterus. The much greater frequency of cancer on the lips, tongue, throat, and jaw in men than in women would seem to point to smoking as a probable exciting cause. It would be interesting to know whether cancer of these parts occurs more commonly to smokers than to non-smokers.

Developmental diseases.

665. Developmental diseases,* Class V., caused 102 deaths in 1892 to every 100,000 of the population. Of these 49 were due to diseases peculiarly affecting infants, such as premature birth and malformations, and 53 to old age. The rate of mortality from the whole class in 1892—viz., 102 per 100,000—appears to have been 4 below the average of the ten years 1881-90, but 26 above that of the ten years ended with 1880; the increase, as compared with the last named period, being chiefly confined to deaths from old age. The death rate from this class of complaints is always much higher in England than in Victoria.

Local diseases.

666. 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 1892, 7,702 deaths, or 49 per cent. of the deaths from all causes, were ascribed to them, as against 47 per cent. in the ten years 1881 to 1890. The deaths from diseases placed in this class in 1892 were in the proportion to every 100,000 of the population of 662, or 29 below the average of the decade. A fifth of these diseases were due to affections of the brain and nerves; over a sixth to those of the circulatory system, including heart disease; between a fourth and a third to lung and throat diseases—viz., croup, bronchitis, pneumonia, pleurisy, etc.; rather over a fifth to diseases of the digestive organs; $5\frac{3}{4}$ per cent. to diseases of the urinary organs; $1\frac{1}{2}$ per cent. to accidents of childbirth; and the remainder to diseases of the generative, locomotive, and integumentary systems; of the organs of special sense; and of the lymphatic and ductless glands. In the year under review the death rates from complaints classed under all the principal sub-classes of local diseases, except diseases of the nervous, respiratory, locomotive, and integumentary systems and childbirth, in which there was a falling-off, especially in the last named, were above the average of the ten years ended with 1890, and, with the same exceptions, they were even higher still than in the earlier period 1871-80. In England, the death rate from local diseases is, on

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* 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.

the average, fully 40 per cent. higher than the death rate from that class of complaints in Victoria.

667. The mortality from diseases of the respiratory system in 1892 was much below the average. The proportion in 1892 was 181 deaths to every 100,000 persons living, while it was 213 in the ten years 1881-90, and 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, both 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 2,108, being equal to not quite one-eighth of the total mortality; and of these pneumonia caused 921, bronchitis 678, congestion of the lungs 132, and croup 117. Of those who died from these complaints, 752 were under 5 years—about three-fifths of these being under 1 year—and 901 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 3,689 deaths in 1892 (or 491 less than in 1891) were from diseases particularly affecting the organs of respiration, which is equal to nearly one-fourth of the total mortality. Diseases of respiratory system.

668. Bronchitis and pneumonia, with congestion of the lungs, caused 11,477 deaths in the ten years ended with 1880, 16,404 in the ten years ended with 1890, and 1,731 in 1892, which numbers furnish proportions per 10,000 of the population of 14·40 deaths annually for the first period, of 16·38 annually for the second period, and of 14·89 for 1892. The complaints referred to are, according to the following figures, much less fatal here than in any of the countries named, 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		

* See paragraph 646 *ante*.

† See Dr. Raseri's paper, page 193. The complaints referred to are there termed "Bronchite Polmonite."

Deaths in childbed.

669. 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 childbearing without specific disease, it is set down under the head of Childbirth, Class VI., Sub-class 9; but, if it should arise from Puerperal Fever, it is placed under that head, Class I., Sub-class 6. In 1892 the proportion of deaths of child-bearing women to the number of children born was lower than that recorded in 1891, and was also lower than the average of either of the decennial periods ended with 1890, 1880, or than that of the septennial period ended with 1870. The proportions which prevailed in each of those periods, and in the last two years, are shown in the following table:—

DEATHS OF WOMEN IN CHILDBIRTH, 1864 TO 1892.*

Period.	Number of Mothers who died annually of—			Deaths of Mothers to every 10,000 Children born alive.
	Childbirth.	Puerperal Fever (Metria).	Total.	
1864-70 ...	108	20	128	49·06
1871-80 ...	127	46	173	64·38
1881-90 ...	121	64	185	59·19
1891	125	67	192	49·86
1892	113	61	174	45·99

Deaths in childbed in Victoria and United Kingdom.

670. The proportion of women dying in childbed during the period of twenty-seven years ended with 1890 was 1 to 171 births, and in 1892 the proportion was 1 to every 217 births. In the decennial period ended with 1890, the proportion was 1 to every 169 births; in that ended with 1880, it was as high as 1 to every 155 births; and in the septennial period 1864-70 it was as low as 1 to every 204 births. The average proportions for the two latest periods are much higher than those in England and Wales, where, in the ten years ended with

* For number in each year see *Victorian Year-Book*, 1890-91, Vol. I., table following paragraph 657.

1889, 206 births occurred to each recorded death of a mother.* In Scotland, 1 woman died in childbirth to every 149 births in 1874, and 1 to every 197 births during 1889; and in Ireland, during the ten years, 1869-78, 1 woman died in childbirth to every 151 births, and in 1890, 1 to every 152.

Deaths from childbirth in Women's Hospital.

671. In the Midwifery Department of the Melbourne Women's Hospital, 920 women were confined, and 873† infants were born alive, during the year ended 30th June, 1892. Eleven deaths of mothers occurred during or shortly after parturition, or 1 death of a mother to every 84 deliveries, or to every 79 births, as compared with 1 such death to 170 deliveries, or 159 births, in 1890-91; to 89 deliveries, or 83 births, in 1889-90; to every 76 deliveries, or 71 births, in 1888-9; and 1 to every 168 deliveries, or 158 births, in 1887-8. The average in the hospital during the five years referred to (viz., 1 to every 117 births) was nearly twice that for the whole colony, where a proportion of 1 to every 202 births prevailed during the corresponding period; 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.

Deaths in childbed in Australasian colonies.

672. In proportion to the number of confinements, deaths of lying-in women appear to be on the average more common in Victoria than in any other Australasian colony.‡ In 1891, however, the proportion was higher in South Australia and New Zealand, and very much higher in Queensland, than it was in Victoria. The following table contains a statement of the deaths recorded as having occurred from childbirth and metria in the Australasian colonies according to the average of two periods since 1872, and in each of the last two years, also the proportion of such deaths to every 10,000 children born alive in each colony:—

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* 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.

† There were 7 cases of twins.

‡ It is certain that in most, if not all, countries many deaths occurring from circumstances connected with childbirth are not certified to by medical men as due to that cause. For remarks on this subject, see *Victorian Year-Book*, 1889-90, Volume I., paragraph 719.

Deaths from Childbirth and Puerperal Fever (or Metria) in Australasian Colonies, 1873 to 1891.

Period.	Deaths from Childbirth and Puerperal Fever.					
	Annual Number.	Per 10,000 Children Born Alive.	Annual Number.	Per 10,000 Children Born Alive.	Annual Number.	Per 10,000 Children Born Alive.
	Victoria.		New South Wales.		Queensland.	
1873 to 1880...	186	69·50	128*	51·17*	39	55·91
1881 to 1890...	185	59·28	148	42·70	64	54·14
1890 ...	199	52·96	183	46·97	74	48·03
1891 ...	192	49·86	165	41·82	92	62·52
Sums and Means	3,532	63·09	2,416	46·22	1,052	55·33
	South Australia.		Tasmania.		New Zealand.	
1873 to 1880...	42	49·33	21	63·60	76	48·06
1881 to 1890...	48	44·09	15	33·89	106	55·78
1890 ...	38	36·67	17	35·32	99	54·16
1891 ...	61	56·81	18	36·21	95	51·99
Sums and Means	883	46·97	339	46·52	1,767	52·33

Note.—In Western Australia 6 deaths of child-bearing women occurred in 1887, 3 in 1888, 4 in 1889, 3 in 1890, and 6 in 1891, or at the rates of 36·7, 19·8, 25·1, 19·2, and 33·6 per 10,000 births, respectively.

Low death rate from childbirth in colonies, 1891.

673. The above figures show that, in proportion to the children born alive, the number of deaths of child-bearing women in 1891 was below the average of the ten years ended with 1890 in all the colonies except Queensland, South Australia and Tasmania. In those colonies the rates were above the average.

Deaths from child-bearing in various countries.

674. Comparing the deaths of child-bearing women in Victoria with every 10,000 of the population, the proportions annually were 2·17 for the decennial period 1871 to 1880, 1·85 for the decennial period 1881 to 1890, and 1·50 for 1892. 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:—

* Average of years 1875-80.

Annual Death Rate from Diseases of Pregnancy and Child-bearing in Various Countries, 1881-4.*

	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

675. 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 ten years it fell to as low as 97, and in 1892 to 90. The last-named rate is higher by nearly one-half than the rate prevailing in England and Wales, where it averages only 63½. The greater frequency of violent deaths in Victoria than in England appears in all classes of such deaths, those from accidents and executions being generally, in proportion to population, about a third more numerous, suicides half as numerous again, and homicides twice as numerous. Violent deaths.

676. The number of violent deaths recorded in Victoria during 1892 was 1,047, of which 874, or 83 per cent., were ascribed to accident; 38, or 3½ per cent., to homicide; and 134, or 13½ per cent., to suicide. 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-three per cent. of the deaths from accidents in 1892 were due to fractures, 25 per cent. to drowning, and 11 per cent. to burns and scalds. Allowing for increase of population, homicides were 6 above, and suicides 2 above, the average of the ten years ended with 1890. The following table shows the number of deaths and the exact modes of death under Violent deaths, 1892 and previous years.

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* See Dr. Raseri's paper, page 193; the complaints referred to are there termed "Malattie di gravidanza, parto e puerperio."

† See table following paragraph 613 *ante*.

the heads of accident and suicide, also the number of deaths from homicide and execution, during the year 1892 and the ten years ended with 1890, the sexes of those who died being distinguished:—

Violent Deaths.

Causes of Death.	Year 1892.			Ten Years: 1881 to 1890.		
	Males.	Females.	Total.	Males.	Females.	Total.
Accidents:—						
Fractures and contusions	333	41	374	3,175	389	3,564
Gunshot wounds ...	12	3	15	138	12	150
Cuts, stabs, etc. ...	6	1	7	94	30	124
Burns and scalds ...	48	55	103	400	541	941
Sunstroke	11	4	15	161	72	233
Lightning	1	...	1	23	3	26
Poison	14	12	26	142	62	204
Snake, insect—bite ...	3	3	6	32	6	38
Drowning	192	28	220	1,691	373	2,064
Suffocation... ...	59	36	95	402	246	648
Others	7	5	12	222	60	282
Total ...	686	188	874	6,480	1,794	8,274
Homicide	18	20	38	163	127	290
Suicide:—						
Gunshot wounds ...	22	1	23	196	7	203
Cuts, stabs, etc. ...	13	2	15	159	22	181
Poison	22	9	31	122	61	183
Drowning	19	6	25	153	53	206
Hanging	29	3	32	258	20	278
Otherwise	6	2	8	41	9	50
Total ...	111	23	134	929	172	1,101
Execution	1	...	1	13	...	13
Grand Total ...	816	231	1,047	7,585	2,093	9,678

Violent deaths in proportion to total deaths.

677. During the ten years ended with 1890, 80,559 males and 59,157 females died of specified causes; and it results from these figures, and those in the foregoing table, that, of the males, 1 in every 11 died a violent death; 1 in every 13 died of an accident; 1 in every 494 was a victim to homicide; 1 in every 87 committed suicide; and 1 in every 6,197 was executed. Of the females, 1 in every 28 died a violent death; 1 in every 33 died of an accident; 1 in every 466 died by the hand of another; 1 in every 344 committed suicide; but, happily, not one was executed.

678. Males are much more subject to violent deaths than females. Of those who so died in 1892, 816, or 78 per cent., belonged to the male, and 231, or 22 per cent., to the female sex. These proportions are identical with those which prevailed during the ten years ended with 1890. Violent deaths of males and females.

679. 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; and about one-third more males are murdered than females. Only 1 woman has been executed in the colony since its first settlement; but in the 41½ years since Victoria has been an independent colony as many as 140 males have been executed. Violent deaths: proportion of males and females.

680. 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. Burns and scalds.

681. One hundred and thirty-four persons took their own lives in 1892, as compared with 119 in 1891, 123 in 1890, and 143 in 1889. During the ten years ended with 1890 the mean annual number of deaths by suicide was 110. Suicidal deaths.

682. Hanging is the most common mode by which men commit suicide, shooting the next, cutting or stabbing and drowning, with almost equal frequency, the next, and taking poison the next. In 1892, however, as many men committed suicide by poison as by shooting, which is an unusual circumstance. Females most frequently take their lives by drowning or by taking poison, next by stabbing or hanging, but only seven times in the 172 cases which occurred during the ten years ended with 1890 by shooting. It may be mentioned that suicide by shooting is much more common now than formerly, the cases in that decennial period being nearly three times as numerous as in the preceding one. Modes of suicide in Victoria.

683. 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 Modes of suicide in England.

of each method follows substantially the same order as that obtaining in Victoria:—

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

Suicides of Chinese.

684. Suicide frequently occurs amongst the Chinese. Seven men of this race committed that act in 1891, and one in 1892. Of the 8 referred to, all but two hanged themselves. The total number of Chinese males in the colony was, according to the census of 1891, 8,772; so that those who committed suicide during 1891 were in the proportion of 1 in about 1,250, and during 1892 1 in about 8,800. In the general male population the proportion of persons committing self-destruction averages 1 in about 5,650.

Suicides in Australasian colonies.

685. According to the results in the following table, it would appear that, in proportion to population, suicide over a series of years 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 average annual suicides and their proportion to every 100,000 of the population during the nineteen years ended with 1891, divided into two periods of eight and ten years, also during each of the last two years, recorded in all the Australasian colonies except Western Australia, for which the information is obtainable for only four of those years:—

Deaths from Suicide in Australasian Colonies, 1873 to 1891.

Period.	Deaths from Suicide.					
	Annual Number.	Per 100,000 Persons Living.	Annual Number.	Per 100,000 Persons Living.	Annual Number.	Per 100,000 Persons Living.
	Victoria.		New South Wales.		Queensland.	
1873 to 1880	99	12·3	58	9·3	25	13·2
1881 to 1890	110	11·2	95	10·1	47	15·0
1890 ...	123	11·0	118	10·7	67	17·4
1891 ...	119	10·4	119	10·4	73	18·0
Mean of 19 years ...	105	11·6	81	9·8	39	14·4
	South Australia.		Tasmania.		New Zealand.	
1873 to 1880	19	8·2	7	6·4	32	8·4
1881 to 1890	28	9·2	7	5·3	53	9·3
1890 ...	22	7·0	17	11·8	64	11·8
1891 ...	31	9·8	9	6·0	56	8·9
Mean of 19 years ...	24	8·8	7	5·8	44	8·9

Note.—In Western Australia, there were recorded 5 suicides in 1888, 1889, and 1890, and 6 in 1891; the proportions per 100,000 of the population being 11·9, 11·7, 10·4 and 11·7 respectively.

Proportion of suicides in different colonies.

686. It will be observed that, according to the records of the ten years 1881-90, the suicides which take place annually in Queensland are on the average equivalent to $1\frac{1}{2}$ per 10,000 persons living; those in Victoria, New South Wales, and Western Australia* are somewhat above, and those in South Australia and New Zealand somewhat below, 1 per 10,000; whilst those in Tasmania averaged only one-half that proportion. In 1891 suicides were above the average in all the colonies except Victoria and New Zealand, in the former it was below and in the latter just up to the average.

Suicides in various countries.

687. By the following figures, which have been derived from various sources, it appears that suicide is more common in seven countries out of Australasia than in Queensland, in ten than in Western Australia, Victoria, New South Wales, New Zealand, or South Australia, whilst there are only eight out of the twenty-two countries named in which suicide is less common than it is in Tasmania:—

* According to the average of only 4 years.

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	South Australia ...	9·2
Denmark	25·8	Bavaria	9·1
Schleswig-Holstein ...	24·0	Sweden	8·1
German Empire ...	20·8	England and Wales ...	7·9
France	20·5	Norway	7·5
Switzerland	20·2	Tasmania	5·3
Austria	15·9	Hungary	5·2
Queensland	15·0	Italy	4·5
Hanover	14·0	Scotland	4·0
Prussia	13·3	Netherlands ...	3·6
Belgium	13·0	United States ...	3·5
Western Australia ...	11·3	Russia	2·9
Victoria	11·2	Ireland	2·5
New South Wales ...	10·1	Spain	1·4
New Zealand	9·3		

Violent deaths in Australasian colonies.

688. According to the following figures, violent deaths in Victoria, during the eight years ended with 1890 as also in 1890 and 1891, occurred in a higher proportion to the population than in South Australia, Tasmania, and New Zealand, but were less common than in any of the other Australasian colonies, except on one occasion (1890) when Western Australia had a lower proportion :—

Violent Deaths in Australasian Colonies, 1882 to 1891.

Colony.	Period.	Violent Deaths.	
		Annual Number.	Per 10,000 Persons Living.
Victoria	1882 to 1890	981	9·83
	1890	1,165	10·42
	1891	1,079	9·41
New South Wales... ...	1882 to 1890	1,056	10·88
	1890	1,163	10·56
	1891	1,165	10·19
Queensland	1882 to 1890	543	16·45
	1890	737	19·10
	1891	562	13·88
South Australia	1882 to 1890	227	7·30
	1890	238	7·52
	1891	207	6·52
Western Australia... ...	1882 to 1890	57	15·23
	1890	43	8·97
	1891	61	11·90
Tasmania	1882 to 1890	109	7·99
	1890	138	9·60
	1891	121	8·12
New Zealand	1882 to 1890	526	9·04
	1890	521	8·39
	1891	506	8·03

689. 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	94·6	82·6	2·9	11·0
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.

690. 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 countries in which the proportion of accidents is greatest are Queensland and Western Australia; the country in which the proportion of homicides is greatest is Western Australia; and the countries in which the proportion of suicides is greatest are Austria and Switzerland. Proportion of violent deaths in different countries.

* Not including executions. † Including the Shipping.

Railway accidents.

691. 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-three and a half years ended with 30th June, 1892, embracing the whole period of the existence of railways in Victoria:—

Deaths from Railway Accidents, 1859 to 1891-2.

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 ...	37	...	...	...	3	19	22	1	14	...
1869 to 1878 ...	97	...	1	1	10	38	48	5	35	8
1879 to 1887-8* ...	322	10	14	24	8	126	134	41	111	12
1888-9	78	1	4	5	4	23	27	7	37	2
1889-90	74	1	8	9	9	21	30	7	22	6
1890-91	72	...	3	3	7	14	21	9	37	2
1891-2	52	1	5	6	1	14	15	3	21	7
Total killed ...	732	13	35	48	42	255	297	73	277	37

Persons Injured by Railway Accidents, 1859 to 1891-2.

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 to 1878 ...	165	87	6	93	24	30	54	1	10	7
1879 to 1887-8 ...	1,415	679	142	821	101	369	470	26	36	62
1888-9	358	116	82	198	24	107	131	5	12	12
1889-90... ...	401	20	115	135	49	186	235	5	13	13
1890-91... ...	345	19	82	101	60	133	193	6	8	37
1891-2	342	37	86	123	63	115	178	7	13	21
Total injured	3,110	980	515	1,495	326	985	1,311	51	99	154

Note.—For the number of deaths and injuries from railway accidents in each year from 1869 to 1890-91, see *Victorian Year-Book*, 1892, Volume I., table following paragraph 774.

* The high mortality in this period was chiefly due to the Windsor railway accident, which occurred on the 11th May, 1887. So far as the numbers killed and injured are concerned, this was the worst railway accident which has occurred in Victoria.

692. It will be observed that, in the whole period of thirty-three and a half years, 732 persons were killed and 3,110 were injured on the State lines of railway, and that, exclusive of trespassers, persons crossing the lines, etc., 290 of the former and 1,500 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, 48 were passengers, and as many as 297 railway or contractors' servants; 35 of the former, and 255 of the latter, having suffered in consequence of their own carelessness. The passengers injured numbered 1,495, and the railway servants 1,311; as many as 985 of the latter, but only 515 of the former, suffered from their own action. At crossings, 73 persons were killed, and 51 injured. As many as 277 trespassers were killed; these no doubt include persons who committed suicide by placing themselves in the way of trains. The trespassers injured have numbered 99.

Railway passengers and servants killed and injured.

693. In the nineteen years ended with 1892, embracing the whole period during which the Regulation and Inspection of Mines and Machinery Statutes* have been in operation, 940 persons lost their lives, and 2,100 persons were injured, from accidents connected with gold-mining operations. The following were the numbers and their proportions to the number of miners at work in the periods embracing the first seven and the next ten of those years, also in 1891 and 1892:—

Gold-mining accidents.

DEATHS AND INJURIES FROM GOLD-MINING ACCIDENTS, 1874 TO 1892.

Year.	Miners at work in periods named.	Number of Persons—			Numbers per 1,000 Miners at work—		
		Killed.	Injured.	Total.	Killed.	Injured.	Total.
1874 to 1880...	281,444	430	1,093	1,523	1·47	3·75	5·22
1881 to 1890...	290,194	455	880	1,335	1·57	3·03	4·60
1891 ...	23,763	21	57	78	·88	2·39	3·27
1892 ...	23,370	34	70	104	1·45	2·99	4·44
Mean of 19 years	32,567	49	110	160	1·50	3·41	4·91

NOTE.—For the number of deaths and injuries from gold-mining accidents during each of the eighteen years ended with 1891, see *Victorian Year-Book*, 1892, Volume I., table following paragraph 776.

694. In 1892, both fatal and non-fatal mining accidents numbered 13 more than in the previous year. In neither case, however, was the proportion to the number of miners at work nearly so high as the

Gold-mining accidents, 1892.

* 37 Vict. No. 480, 41 Vict. No. 583, 45 Vict. No. 719, and 47 Vict. No. 783, now consolidated under 54 Vict. No. 1,098.

mean proportion prevailing during the whole period of nineteen years to which the table refers.

Gold-mining accidents in Victoria and England.

695. According to the mean of the nineteen years to which reference is made, 1 gold-miner in every 664 loses his life annually. In 1892 the proportion was as low as 1 in 687. These proportions contrast favourably with the proportions of fatal accidents in the metalliferous mines of Great Britain and Ireland, where, according to the report of 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 1 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 life annually by accident.

Causes of gold-mining accidents.

696. It appears by the following table that, in the nineteen years named, 1,537, or 51 per cent., of the gold-mining accidents in Victoria were caused by the fall of earth or materials; 572, or 19 per cent., by falling down shafts, etc., and cage accidents; 383, or 13 per cent., by explosions, principally of blasting charges; and the balance, or 17 per cent., by timber and truck accidents, machinery in motion, foul air, flooding, and undescribed casualties:—

CAUSES OF GOLD-MINING ACCIDENTS, 1874 TO 1892.

Nature of Accident.	Number of Persons—		
	Killed.	Injured.	Total.
Fall of earth or rock underground...	395	724	1,119
,, ,, on surface	117	83	200
,, materials down shafts, passes, etc.	50	166	216
,, ,, winzes, etc....	2	...	2
Falling down shafts	132	168	300
,, ,, winzes, shoots, etc.	17	87	104
Cage accidents	51	117	168
Truck accidents...	7	51	58
Machinery in motion	23	97	120
Explosion of charges of gunpowder	29	154	183
,, ,, guncotton	1	10	11
,, ,, nitro-glycerine compounds ...	33	84	117
,, stored explosives	7	32	39
,, boilers	2	6	8
,, fire damp	2	23	25
Foul air	12	1	13
Flooding of mines	27	...	27
Undescribed	33	297	330
Total	940	2,100	3,040

Coal mining accidents.

697. Two miners were injured through coal-mining accidents in 1892. During the four years 1889-92 nine persons were injured at coal mines, but there is no record of anyone having been killed in this class of mining during the same period.

Accidents in factories, 1892.

698. Under the *Factories and Shops Act* 1890 (54 Vict. No. 1091) 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 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, 1891 AND 1892.

Nature of Injury.	Males.		Females.	
	1891.	1892.	1891.	1892.
Death	5	2	...	...
Loss of arm or hand ...	2	...	...	...
„ fingers or toes ...	24	20	1	...
Fractures...	13	7	...	...
Lacerations, contusions, etc....	45	32	3	2
Total	89	61	4	2

Ill-defined and unspecified causes of death.

699. In 1892, the year under review, there were no fewer than 1,041 deaths in Victoria from ill-defined or unspecified causes, or $6\frac{1}{2}$ per cent. of the deaths from all causes, as compared with 7 per cent. in 1891 and 1890, $7\frac{3}{4}$ per cent. in the ten years ended with 1890, and 7 per cent. in the ten years ended with 1880. The great majority of these—viz., 947 in 1892—were returned as from atrophy and debility; whilst 9 (in 1892) were set down to tumors, 26 to dropsy, 5 to abscess, 22 to other ill-defined causes, and in 32 cases the causes of death were altogether unspecified.

Atrophy and debility in Victoria.

700. The mortality under the head of atrophy and debility is almost entirely confined to infants and young children—thus, of the 1,041 deaths set down thereto in 1892, 869 were under 5 years, 798 were under 1 year, and 240 were under 1 month, of age. It is probable

that a large number of these deaths might have been returned more definitely if medical men had attached to accuracy of record the importance it merits. The following are the numbers of both sexes recorded as having died from atrophy and debility in each of the last two years; also the averages for three periods between 1867 and 1890:—

ANNUAL DEATHS FROM ATROPHY AND DEBILITY, 1867 TO 1892.

Period	Males.	Females.	Total.
1867-70 (Annual mean) ...	386	345	731
1871-80 „ ...	377	322	699
1881-90 „ ...	557	474	1,031
1891	554	538	1,092
1892	510	437	947

NOTE.—For the number of deaths set down to atrophy and debility in the twenty-four years ended with 1890, see *Victorian Year-Book*, 1890-91, Volume I., table following paragraph 690.

Sex of those who died of atrophy, etc.

701. Notwithstanding the proportions of the sexes of persons at ages likely to be affected by atrophy and debility were about equal, it happened that in every one of the last twenty-six years except the year 1890 more males died than females. During the last two years, females died of these complaints in the proportion of about 92 to every 100 males.

Atrophy and debility in Australasian colonies.

702. The practice of returning atrophy and debility as causes of death appears to be generally no less frequent in most of the other Australasian colonies than in Victoria; but in Queensland for some years past comparatively few deaths were so recorded. The following are the figures for all those colonies during the two years ended with 1891, and the average for the nine years 1882-90:—

DEATHS FROM ATROPHY AND DEBILITY IN AUSTRALASIAN COLONIES, 1882 TO 1891.

Colony.	Period.	Annual Deaths from Atrophy and Debility.	
		Number.	Proportion Per 10,000 Persons Living.
Victoria	1882 to 1890	1,064	10·74
	1890	1,139	10·18
	1891	1,092	9·52
New South Wales ...	1882 to 1890	863	9·03
	1890	701	6·36
	1891	870	7·61

Deaths from Atrophy and Debility in Australasian Colonies, 1882 to 1891—*continued.*

Colony.	Period.	Annual Deaths from Atrophy and Debility.	
		Number.	Proportion Per 10,000 Persons Living.
Queensland	1882 to 1890	233	7·85
	1890	57	1·48
	1891	64	1·58
South Australia	1882 to 1890	287	9·29
	1890	213	6·73
	1891	265	8·35
Western Australia ...	1882 to 1890	42	10·93
	1890	37	7·63
	1891	44	8·59
Tasmania	1882 to 1890	135	9·91
	1890	124	8·63
	1891	152	10·20
New Zealand ...	1882 to 1890	284	4·99
	1890	240	3·87
	1891	269	4·27

Note.—For the number and proportion to population of deaths from atrophy and debility in each Australasian colony during each of the nine years ended with 1890, see *Victorian Year-Book*, 1890-91, Volume I., table following paragraph 692.

Causes of death of octogenarians.

703. The number of deaths of persons over 80 years of age, and their exact ages at death, have been already quoted for the year 1892, and the two preceding periods of ten and eleven years respectively.* The following table shows the causes of death of these persons:—

Causes of Death of Octogenarians, 1871 to 1892.

Causes of Death.	Year 1892.		Ten Years, 1882-91.		Eleven Years ended with 1881.	
	Males.	Females.	Males.	Females.	Males.	Females.
Influenza, Coryza, Catarrh ...	...	3	44	41	5	11
Diphtheria	...	...	1	...	...	...
Typhoid Fever, etc.	...	...	6	3	3	2
Cholera	1	...	1	4	6	1
Dysentery and Diarrhœa ...	14	14	95	73	51	36
Splenic fever	...	...	1	...	...	...
Venereal Diseases	...	...	4	...	4	...
Erysipelas	2	...	9	3	3	7
Hydatids	...	...	...	...	1	...
Privation	1	...	2	...	3	...
Scurvy	...	...	...	...	1	...

* See table following paragraph 605 *ante*.

Causes of Death of Octogenarians, 1871 to 1892—*continued.*

Causes of Death.	Year 1892.		Ten Years, 1882-91.		Eleven Years ended with 1881.	
	Males.	Females.	Males.	Females.	Males.	Females.
Intemperance	...	...	...	...	2	1
Rheumatism	2	2	10	11	7	4
Gout	...	1	6	3	2	...
Cancer	13	7	64	50	35	13
Tabes Mesenterica	...	...	1	...	...	...
Phthisis	2	1	18	4	3	3
Purpura, Hæmorrhagic Diathesis	...	...	2	...	...	...
Anæmia, Chlorosis, Leucocythæmia	...	...	2	2	...	...
Diabetes Mellitus	...	...	2	2	...	...
Old Age	159	135	1,495	1,249	631	538
Brain Diseases, etc.	43	29	273	194	136	103
Ear and Nose Diseases ...	...	...	...	3	...	...
Heart Diseases, etc.	74	29	287	173	66	46
Lung Diseases, etc.	59	40	402	281	183	116
Quinsy	...	...	1	...	...	1
Stomach Diseases, etc. ...	13	16	107	70	37	21
Kidney Diseases, etc. ...	16	3	113	19	47	1
Genetic Diseases	...	1	1	1	...	1
Bone Diseases	1	...	3	...	...	...
Carbuncle, Boil	...	...	1	1	3	2
Skin Diseases, etc.	...	...	2	1	4	2
Accidents	10	10	72	44	22	18
Suicide	1	...	6	3	4	...
Dropsy	...	...	12	12	20	18
Mortification	...	...	5	2	9	3
Tumour	...	...	5	2	...	3
Abscess, etc.	...	...	1	...	1	...
Unspecified Causes	2	3	10	6	2	...
Total	413	294	3,064	2,257	1,291	951

Complaints most fatal to octogenarians—1871-92.

704. It will be noticed that during the twenty-two years referred to, no complaint was set down except old age in the case of 48 per cent. of the males and 55 per cent. of the females. 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, about one-eighth of both sexes died of diseases of the organs of respiration, chiefly pneumonia and bronchitis, and over one-eleventh died of affections of the brain and nerves.

Sickness and death in general hospitals.

705. There are 42 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, 1892, was 16,653, and the number of deaths was 2,144. There was thus 1 death to every 7·8 discharges during the year 1892, as against 1 death to every 8·3 discharges in 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, 1892, and the proportion of deaths to cases in each hospital during that and the previous year :—

SICKNESS AND MORTALITY IN GENERAL HOSPITALS.

Name of Hospital.	Year ended 30th June, 1892.			Percentage of Mortality to Discharges, Year ended 30th June, 1891.
	Number of Patients Discharged.*	Number of Deaths.	Percentage of Mortality to Discharged.	
Alexandra	35	6	17·14	14·58
Amherst	311	31	9·97	12·05
Ararat†	255	32	12·55	13·14
Bairnsdale	116	21	18·10	7·48
Ballarat	1,350	113	8·37	10·09
Beechworth	661	57	8·62	5·90
Belfast (Port Fairy)† ...	34	7	20·59	13·79
Bendigo	1,343	144	10·72	9·11
Castlemaine	401	59	14·71	15·85
Clunes	102	9	8·82	8·64
Colac	96	10	10·42	16·25
Creswick	166	19	11·45	8·89
Daylesford†	134	35	26·12	7·97
Dunolly	306	37	12·09	10·39
Echuca	324	22	6·79	6·87
Geelong†	636	91	14·31	11·14
Hamilton†	269	32	11·89	16·93
Heathcote	69	7	10·14	11·29
Horsham	152	15	9·87	6·26
Inglewood	358	56	15·64	9·15
Kilmore	141	23	16·31	12·45
Kyneton	438	39	8·90	6·21
Maldon†	53	8	15·09	23·53
Mansfield	121	7	5·79	3·54
Maryborough	318	31	9·75	8·61
Melbourne	4,071	714	17·53	16·42
Melbourne (Alfred) ...	1,414	161	11·39	12·36
Melbourne (Austin)‡ ...	91	69	75·82	67·44
Melbourne (Homœopathic)	755	64	8·48	9·04
Mildura	14	5	35·71	...
Mooroopna	489	40	8·18	8·01
Nhill	127	11	8·66	7·14
Pleasant Creek (Stawell)†	219	36	16·44	15·14
Portland†	19	7	36·84	33·33
Sale	205	21	10·24	7·02
St. Arnaud	312	33	10·58	9·02
Swan Hill	146	10	6·85	8·40
Walhalla	1	...	...	...
Wangaratta	304	31	10·20	9·44
Warracknabeal ...	64	7	10·94	...
Warrnambool† ...	147	17	11·56	7·19
Wood's Point	86	7	8·14	7·69
Total	16,653	2,144	12·87	12·01

* Including deaths. † These institutions are also Benevolent Asylums. ‡ For incurables.

Highest and lowest death rates.

706. In proportion to the cases discharged in 1891-2, the greatest mortality occurred in the Austin (Melbourne),* Portland, Mildura, Daylesford and Belfast (Port Fairy) Hospitals; and the lowest in the Mansfield, Echuca, Swan Hill, Wood's Point, Mooroopna, Ballarat, Melbourne (Homœopathic), and Beechworth Hospitals. It should be borne in mind, however, that the Portland, Daylesford, and Belfast (Port Fairy) Hospitals are also Benevolent Asylums.

Period of residence in hospitals.

707. Taking the General Hospitals as a whole, the average time patients, discharged in 1892, remained in those institutions was 34 days, but the duration of their stay was found to vary according to the complaint, the period of residence having averaged as much as 137 days in the case of patients afflicted with paralysis, and as little as 11 or 12 days in the case of those suffering from epilepsy, intemperance, or measles. In the following table the principal diseases are arranged in order, according to the average number of days the patients suffering from such disease, who were discharged in 1892, were resident in hospital :—

DURATION OF RESIDENCE IN HOSPITALS OF PATIENTS SUFFERING FROM VARIOUS COMPLAINTS, 1892.

Disease.	Average Number of Days.	Disease.	Average Number of Days.
Paralysis	137	Bronchitis	29
Bright's Disease	52	Rheumatic Fever	28
Cancer	47	Ague	28
Diabetes	47	Diseases of Parturition ...	27
Phthisis	46	Diarrhœal Diseases ...	26
Scurvy	45	Diseases of Digestive Organs	25
Atrophy, Debility, and Inanition	45	Influenza	24
Rheumatism	45	Nephritis	23
Gout	41	Apoplexy	23
Typhoid Fever	40	Scarlet Fever	22
Heart Diseases	40	Laryngitis	21
Pleurisy	38	Pneumonia	21
Asthma	36	Erysipelas	21
Puerperal Fever	35	Croup	15
Venereal Disease	31	Diphtheria	14
Whooping Cough	30	Intemperance	12
Diseases of Generative System (chiefly females)	30	Measles	12
		Epilepsy	11
Accidents	30		

Proportions of deaths in hospitals in various countries.

708. The following figures, calculated from numbers given in Dr. Raseri's paper,† show the proportions of deaths to inmates of

* For incurables.

† Page 195.

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
Würtemberg	1882 ...	3·49

Deaths in Victorian and other hospitals.

709. The rate of mortality in hospitals would appear by the figures to be higher in Victoria than in any of the other countries named. 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.

710. The patients discharged* from the Infirmary Department of the Women's Hospital numbered 262 during the year 1890-91, and 254 in 1891-2. The deaths in the same institution numbered 12 in the former, and 11 in the latter year. Therefore, 1 patient in 22 who left the institution in 1890-91, and 1 in 23 who left it in 1891-2 came out of it a corpse.

Deaths of mothers in Women's Midwifery Department.

711. In the Midwifery Department of the Women's Hospital, Melbourne, 848 women were confined in 1890-91, and 920 in 1891-2. Five died in the former period, and 11 in the latter. Thus, 1 woman in 170 died in 1890-91, and 1 woman in 84 in 1891-2. From the founding of the institution to the end of June, 1892, 17,046 women were accouched therein,† of whom 282 died, which is equivalent to 1 death to every 60 confinements.‡

Deaths of infants in Women's Hospital.

712. The infants born alive in the Women's Hospital numbered 795 in the year 1890-91, and 873 during the year 1891-2, and of these

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* 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.
‡ See paragraph 595 *ante*.

25 in the former and 27 in the latter year died before being taken from the institution; thus, 1 infant in 32 died in each year.*

Sickness and deaths in Children's Hospital.

713. In the Melbourne Hospital for Sick Children the discharges numbered 683, and the deaths 59, in the year 1890-91; there were, moreover, 759 discharges, and 67 deaths, during the year 1891-2. These numbers furnish a proportion of 1 death to every 12 patients in 1890-91, and 1 death to every 11 patients in 1891-2.

Sickness and deaths in benevolent asylums.

714. Cases of sickness in benevolent asylums (exclusive of the Melbourne Immigrants' Home) numbered 3,050 in 1890-91, and 2,580 in the year 1891-2; deaths numbered 234 and 260. The deaths were thus to the cases treated in the proportion of 1 to every 13 in 1890-91, and of 1 to 10 in 1891-2.

Sickness and deaths in Immigrants' Home.

715. In the Melbourne Immigrants' Home the cases of sickness in the year 1890-91 amounted to 845, and the deaths to 114, or 1 death to every 7 cases of sickness. In the year 1891-2 the cases of sickness in this institution numbered 665, and the deaths 92, or 1 death to every 7 cases of sickness.

Sickness and deaths in orphan asylums.

716. In 1890-91 the cases of sickness in orphan asylums numbered 21, and the deaths 6. In the year ended 30th June, 1892, these numbers were 21 and 5 respectively. Thus 1 death occurred to every $3\frac{1}{2}$ cases of sickness in 1890-91, and 1 death in every 4 cases in 1891-2.

Sickness and deaths in lunatic asylums.

717. In hospitals for the insane, during 1891 the cases discharged numbered 909, and during 1892 they numbered 824. The deaths amounted to 293 at the former period, and 283 at the latter, or an average of 1 death to every 3 cases of disease in both years.

Sickness and deaths in gaols.

718. In gaols and penal establishments 2,377 cases of sickness occurred in 1891, and 2,931 in 1892. The deaths in the same years were 68 and 55 respectively, exclusive of those by execution. Thus 1 death occurred to every 35 cases of sickness in the former, and 1 in every 53 cases in the latter year.

Deaths in public institutions.

719. Altogether the number of deaths in penal or charitable institutions during 1891-2† was 3,022, being in the proportion of 1 to every 5·2 deaths which took place in Victoria during the year. The deaths in such institutions in the ten years ended with 1890 were in the proportion of 1 to every 6·4 deaths; and in the four years 1877-80, in that of 1 to every 6 deaths which took place in the whole

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* See paragraph 595 *ante*.

† 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, 1892.

colony. The following are the names of the institutions and the number of deaths which occurred in each during the year 1891-2 :—

DEATHS IN PUBLIC INSTITUTIONS, 1891-2.

	Number of Deaths.
General hospitals	2,144
Women's Hospital—	
Infirmary Department	11
Midwifery Department	38*
Hospital for Sick Children	67
Benevolent asylums...	260
Melbourne Immigrants' Home	92
Orphan Asylums	6
Eye and Ear Hospital	1
Royal Victorian Institute for the Blind	1
Hospitals for the insane	283
Female refuges	22†
Victorian Infant Asylum	7
Industrial and reformatory schools	35‡
Gaols (inclusive of Police gaols)	55
Total	3,022

NOTE.—No deaths occurred in 1891-2 in the Deaf and Dumb Institution, or the Penal Establishment.

Sickness and infirmity.

720. The total number of persons returned as suffering from infirmity at the date of the census of 1891 was 23,916, viz., 14,675 males and 9,241 females. These numbers furnish proportions of 210 infirm persons in every 10,000 of the population; or of 245 infirm males in every 10,000 males, and 171 infirm females in every 10,000 females.

Two classes of infirmities.

721. The infirmities are of two classes :—(1) Those causing total disablement for the time being, but from which it is probable complete recovery might take place sooner or later; (2) those of a permanent character, but which would not generally prevent the sufferer from engaging in some kind of bread-winning occupation. Besides these, some persons were returned as suffering from ailments of a minor description, which in a few instances have been considered of sufficient importance to be mentioned in the tables, whilst in others they have been entirely disregarded.

Sickness and accidents.

722. The persons included in the first of these classes are those returned as unable to attend to their ordinary occupations by reason of sickness or accident. These numbered as follow :—

	Males.	Females.	Total.
Disabled from sickness	7,590	5,334	12,924
,, accident	1,379	289	1,668
Total ...	8,969	5,623	14,592

* Including the deaths of 27 infants born in the institution.
† Thirteen of this number were infants, who were admitted with their mothers.
‡ Including deaths of boarded-out and licensed children.

Proportion of disabled persons.

723. The sick were in the proportion of 113 and those laid up in consequence of accidents were in that of 15 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 128 to every 10,000 living, or 1 in 78. A similar combination gives a proportion of 150 disabled males in every 10,000 males living, or 1 in 67; of 104 disabled females in every 10,000 females living, or 1 in 96.

Time lost through disablement.

724. It will be easily realized that the community sustains considerable loss as well as inconvenience in consequence of some portion of its component parts being always laid up on account of illness or bodily injury. Of those so affected, the children are obliged to discontinue their studies, the men their work or business, and the women their household duties as long as the disablement lasts. Taking the sick and those suffering from accidents together, there were on the census day 14,592 persons—viz., 8,969 males and 5,623 females—in a disabled condition. Supposing the census day to have been an average one as regards the amount of infirmity prevailing, there would obviously in one year be an amount of work lost from this cause equal to that of 1 person for 14,592 years, or of 1 male for 8,969 years, and of 1 female for 5,623 years. Or putting it in other words, there would, if Sundays be included, be 5,326,080 days' work lost on account of illness in the year, viz., 3,273,685 by males, and 2,052,395 by females; or, if Sundays be not included, there would be 4,567,296 days' work lost, viz., 2,807,297 by males and 1,759,999 by females. This is altogether irrespective of the loss occasioned by illnesses of a slight or partial character, not serious enough to cause work to be altogether discontinued, which according to instructions were not to be returned, or of the loss to others occasioned by attendance on sick persons, or by reason of deaf-muteism, blindness, lunacy, etc. A consideration of these figures will show that, irrespective of the distress, destitution, and mental suffering occurring amongst families by reason of the deaths of their members, the outbreak of every epidemic disease which visits a country must seriously affect its material wealth and prosperity, and therefore that, on economic as well as on moral grounds, those who promote and enforce sanitary laws and regulations are deserving of high commendation and support.

Average period of disablement.

725. According to the figures, the average number of days' disabling infirmity in the course of one year experienced by each person in the community is 4·67, or 5·47 days by each male and 3·79

days by each female. If working days only be considered, each person on the average loses by this 4 such days, each male losing 4·69 and each female 3·25 such days.

726. All the Australasian colonies took advantage of the taking of the census to obtain returns of sickness and accidents. According to the following figures, the proportion of those disabled from these causes was higher in Victoria than in any other colony :— Sickness and accidents in Australasian colonies.

SICKNESS AND ACCIDENTS IN AUSTRALASIAN COLONIES, 1891.

Colony.	Persons Disabled from Sickness or Accidents.	
	Number.	Persons living to each Disabled Person.
1. Victoria	14,592	78
2. South Australia ...	3,938	81
3. New South Wales ...	11,578	98
4. Queensland	3,746	105
5. Tasmania	1,321	111
6. New Zealand ...	5,076	123
7. Western Australia ...	304	164
Total	40,555	94

727. With reference to the high position of Victoria relatively to several of the other colonies in regard not only to sickness but to most of the other infirmities respecting which information was obtained, it may be remarked that whilst Victoria has made inquiries on these subjects at the last four censuses, some of the other colonies of the group made such inquiries for the first time in 1891. For obvious reasons, a new inquiry is not likely to be so fully or so correctly responded to as one to which both the census collectors and the public have become accustomed, and a first attempt is likely to result in defective information and partial failure, as did the first attempt made in Victoria to obtain particulars of sickness and infirmity 30 years prior to the census which forms the subject of this report, viz., in 1861. It will be readily understood, in regard to such a return as that under notice, that the more accurate and perfect the statistics, the worse position the country to which they relate appears to be in, and the more unfavourably will it seem to compare with other countries in which the returns are of a less complete character. Defective returns in some colonies.

728. Leprosy is included amongst the disabling infirmities, as, although a sufferer from that complaint may not be altogether disabled physically, the necessity of keeping him apart from the remainder of Leprosy.

the population prevents him from rendering any service to the community at large. Only three lepers were returned at the census. These were all Chinese, and were resident at the Leper Station at Point Nepean. Since the census was taken one has died, whilst another man, a European, has been found to be suffering from leprosy, and has been sent to the Nepean Station, where, however, he lives apart from the Chinese lepers. There are thus still three lepers, all male adults, known to exist in the colony.

Lepers in Australasian colonies.

729. Lepers are present in all the Australasian colonies except Tasmania. The existence of 36 has been ascertained, viz., 3 in Victoria (as already stated), 15 in New South Wales, 10 in Queensland, 3 in South Australia, 1 in Western Australia, and 4 in New Zealand; all these are males. The numbers of different races in each colony are as follow:—

LEPERS IN AUSTRALASIAN COLONIES, 1891.—ALL MALES.

Colony.	Race.							
	European.	Australian Aboriginal.	Maori.	South Sea Islands.	Chinese.	Singhalese.	Javanese.	Total.
Victoria	1	...	...	...	2	...	...	3
New South Wales ...	5	...	...	...	9	...	1	15
Queensland ...	2	1	...	3	3	1	...	10
South Australia* ...	...	...	...	...	3	...	...	3
Western Australia ...	...	...	...	...	1	...	...	1
New Zealand ...	...	...	4	...	...	...	...	4
Total	8	1	4	3	18	1	1	36

Proportion of Chinese and European lepers.

730. It will be observed that exactly half the lepers are of Chinese and nearly a fourth of European race. It is believed that in all the colonies an endeavour is made to prevent the lepers from coming in contact with the remainder of the population, but it is stated that in Queensland 2 of the lepers mentioned, viz., 1 white and 1 South Sea Islander, had escaped from the depôt at Friday Island, and are still at large. It was formerly believed that the leprosy with which the Maoris were afflicted was a native malady (*ngere-ngere*), but there now seems to be no doubt that it is true leprosy.†

The partially disabled.

731. The second class of infirmities embraces defects or injuries which are generally permanent, but which often do not disable the

* All in the Northern Territory.

† There is a credible tradition that this complaint (also called *puhipuhi* and *tuwhenna*) was introduced into New Zealand by the marooning of a leper (probably a whaler) at or near Hauraki. Dr. A. Ginders, in a report dated 4th July, 1890, expresses his firm conviction that the disease is true leprosy.

sufferers from following some description of labour, and do not always prevent them from earning their own livelihood. These, with the number of persons affected, were as follow :—

	Males.	Females.	Total.
Sufferers from Paralysis	650	447	1,097
„ „ Epilepsy	203	217	420
„ „ Deaf-muteism	204	160	364
„ „ Blindness	612	383	995
„ „ Eye affections	94	90	184
„ „ Lunacy	2,077	1,693	3,770
„ „ Idiocy and imbecility	214	141	355
„ „ Lameness, Mutilation, Deformity, etc.	1,652	487	2,139
Total	5,706	3,618	9,324

Paralysis.

732. Some of the paralyzed persons were, no doubt, entirely disabled, and therefore might, with propriety, have been placed with the sick in the first class had it been possible to separate them from the partially paralyzed, of whom a considerable number were included in the returns. The number set down as paralyzed, embracing those entirely as well as those only partially affected, furnishes a proportion of 9·62 paralyzed persons to every 10,000 of the population, or 1 in 1,039; or of 10·86 paralyzed males to every 10,000 males, or 1 in 921; and of 8·25 paralyzed females to every 10,000 females, or 1 in 1,213.

Paralysis in Australasian colonies.

733. A return of the number of paralyzed persons was obtained in three of the Australasian colonies besides Victoria. The following are the proportions of such persons to the respective populations of each of those colonies :—

PARALYSIS IN AUSTRALASIAN COLONIES, 1891.

1.	Victoria* had 1 paralyzed person in every		...	1,039 persons
2.	South Australia	„	...	1,068 „
3.	New South Wales	„	...	1,322 „
4.	New Zealand	„	...	1,339 „

Epilepsy.

734. Epileptic persons were in the proportion of 3·68 per 10,000 of the population of Victoria, of 3·39 per 10,000 males, and of 4·00 per 10,000 females; or in other words, 1 person in every 2,715, or 1 male in every 2,948, and 1 female in every 2,497 was subject to attacks of epilepsy.

Epilepsy in Australasian colonies.

735. Statistics of epilepsy were obtained in all the colonies of the Australasian group except Queensland. The following are the proportions of epileptic subjects to the total population of each colony, the colonies being arranged in order according to the amount of epilepsy said to be prevailing in each :—

* See paragraph 727 *ante*.

Epilepsy in Australasian Colonies, 1891.

1. South Australia	had	1	epileptic subject	in every	2,322 persons.
2. New Zealand	,,	,,	,,		2,701 ,,
3. Victoria*	,,	,,	,,		2,715 ,,
4. Western Australia	,,	,,	,,		2,766 ,,
5. New South Wales	,,	,,	,,		3,315 ,,
6. Tasmania	,,	,,	,,		3,964 ,,

Deaf-muteism.

736. The deaf and dumb were in the proportion of 3·19 per 10,000 persons living; of 3·41 deaf and dumb males per 10,000 males, and of 2·95 deaf and dumb females per 10,000 females. These proportions, stated in other words, are 1 deaf-mute in 3,133 of the total population, or 1 in 2,933 of the males, and 1 in 3,387 of the females.

Deaf-muteism in Australasian colonies.

737. In proportion to population, deaf-mutes appear to have been most common in South Australia, and more common than in Victoria not only in that colony but in Queensland, Tasmania, and New South Wales. The following are the proportions :—

Deaf-muteism in Australasian Colonies, 1891.

1. South Australia	had	1	deaf-mute	in every	...	1,369 persons
2. Queensland	,,	1	,,	,,	...	2,557 ,,
3. Tasmania	,,	1	,,	,,	...	2,716 ,,
4. New South Wales	,,	1	,,	,,	...	2,867 ,,
5. Victoria*	,,	1	,,	,,	...	3,133 ,,
6. New Zealand	,,	1	,,	,,	...	3,775 ,,
7. Western Australia	,,	1	,,	,,	...	4,526 ,,

Deaf-muteism in various countries.

738. As compared with most other countries, the proportion of deaf-muteism existing in all the Australasian Colonies is very small. This is shown by the figures in the following list, which has been compiled from the latest and best authorities available :—

Deaf-muteism in Various Countries.

	Deaf-mutes per 10,000 living.
Switzerland	24·52
Grenada, West Indies (1891)	16·54
Austria	13·07
Hungary	12·63
Sweden	10·23
Prussia	10·19
Finland	10·18
Ireland (1891)	9·45
Germany (exclusive of Prussia)	9·31
Norway	8·64
Canada	8·05
Portugal	7·47
South Australia (1891) ...	7·30
United States (1880) ...	6·73
Greece	6·46
France	6·26
Denmark	6·20

	Deaf-mutes per 10,000 living.
England (1881) ...	5·73
Italy	5·37
Scotland (1891) ...	5·28
Spain	4·59
Belgium	4·45
Queensland (1891) ...	3·91
Australia (1891) ...	3·80
Tasmania (1891) ...	3·68
Cape of Good Hope (1891)	3·67
Australasia (1891) ...	3·61
New South Wales (1891)	3·49
Holland	3·35
Victoria (1891) ...	3·19
New Zealand (1891) ...	2·65
Sierra Leone (1891) ...	2·54
Ceylon (1891) ...	2·31
Western Australia (1891)	2·21

* See paragraph 727 *ante*.

739. Blind persons in Victoria were in the proportion of 8·72 per 10,000 persons living; blind males in that of 10·23 to every 10,000 males; blind females in that of 7·07 to every 10,000 females. There was thus 1 blind person in every 1,146 of mixed sexes, or 1 blind male in every 978 males, and 1 blind female in every 1,415 females.* Blindness.

740. The colony which, according to the following figures contained the largest proportion of blind persons was Tasmania, Western Australia standing second, and Victoria third. In New Zealand the proportion of blind persons to the total population appears to be very low indeed:— Blindness in Australasian colonies.

BLINDNESS IN AUSTRALASIAN COLONIES, 1891.

1. Tasmania had 1 blind	person	in	every	...	889 persons
2. Western Australia	„	„		...	922 „
3. Victoria†	„	„		...	1,146 „
4. South Australia	„	„		...	1,297 „
5. New South Wales	„	„		...	1,517 „
6. Queensland	„	„		...	1,978 „
7. New Zealand	„	„		...	2,287 „

741. In regard to the proportion of blindness to the population, New Zealand, Queensland, and New South Wales stand low, and Tasmania and Western Australia stand high as compared with many other countries, whilst Victoria and South Australia occupy a middle position. The following is the latest information available respecting the amount of blindness prevailing in a number of countries:— Blindness in various countries.

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
Sierra Leone	16·04	Belgium	8·11
Spain	14·79	Sweden	8·06
Norway	13·57	Germany (exclusive of Prussia)	7·93
Hungary	13·24	Denmark	7·86
Ireland (1891)	11·35	Italy	7·63
Tasmania „	11·25	Switzerland	7·61
Grenada, West Indies (1891)	10·90	Australia (1891)	7·38
Western Australia „	10·85	Australasia „	7·04
Cape of Good Hope „	10·67	Scotland (1891)	6·95
United States (1880) ...	9·73	New South Wales (1891) ...	6·59
Austria	9·07	Canada	6·19
Greece	8·96	Queensland (1891) ...	5·05
England (1881)	8·79	Holland	4·45
Victoria (1891)	8·72	New Zealand (1891) ...	4·37
South Australia (1891) ...	8·71	Ceylon (1891)	3·37

* In addition to the returns of the blind, 184 persons were stated to be suffering from eye affections. No instruction was given to obtain this information, and it was no doubt incomplete.

† See paragraph 727 *ante*.

Lunacy.

742. The lunatics returned at the census numbered 3,770, viz., 2,077 males and 1,693 females. All of these—except 100, viz., 78 males and 22 females—were detained in the Government lunatic asylums. Lunatics were in the proportion of 33·06 per 10,000 of the population, viz., 34·71 male lunatics per 10,000 males living, and 31·24 female lunatics per 10,000 females living. Thus 1 person in every 302, or 1 male in every 288, and 1 female in every 320 was a lunatic.

Lunacy in Australasian colonies.

743. The census gave a return of the number of lunatics in all the Australasian colonies except Queensland. The proportion to the population appears to have been highest in Victoria and next highest in New Zealand, whilst the proportions were lowest in Western Australia and Tasmania:—

LUNACY IN AUSTRALASIAN COLONIES, 1891.

1. Victoria* had	1 lunatic	in	every	...	...	302 persons
2. New Zealand	,,		,,	...	...	349 ,,
3. New South Wales	,,		,,	...	...	359 ,,
4. South Australia	,,		,,	...	...	376 ,,
5. Tasmania	,,		,,	...	...	383 ,,
6. Western Australia	,,		,,	...	...	386 ,,

Idiots and imbeciles.

744. The persons returned as idiots or imbeciles in Victoria numbered 355, viz., 214 males and 141 females. Of these, 98, viz., 66 males and 32 females, were in the Kew Idiot Asylum. Idiots and imbeciles were in the proportion of 3·11 per 10,000 of the population; 3·58 such males per 10,000 males, 2·60 such females per 10,000 females. These proportions may be otherwise stated as 1 idiot or imbecile person in every 3,212 persons, 1 such male in every 2,796 males, 1 such female in every 3,844 females.

Idiocy and imbecility in Australasian colonies.

745. Idiots and imbeciles, like lunatics, were returned in all the Australasian colonies except Queensland. They seem to have borne the highest proportion to the population in Tasmania, and next in Victoria, the proportions in New Zealand and Western Australia—especially the latter—being very low indeed. The following are the proportions in each of the colonies in which the return was obtained:—

IDIOCY AND IMBECILITY IN THE AUSTRALASIAN COLONIES, 1891.

1. Tasmania had	1 idiot or imbecile	person	in	every	3,188	persons
2. Victoria*	,,	,,	,,	,,	3,212	,,
3. South Australia	,,	,,	,,	,,	3,815	,,
4. New South Wales	,,	,,	,,	,,	3,930	,,
5. New Zealand	,,	,,	,,	,,	4,896	,,
6. Western Australia	,,	,,	,,	,,	7,112	,,

* See paragraph 727 *ante*.

Insanity.

746. Lunacy combined with idiocy and imbecility may be designated insanity. If the combination be made the sufferers in Victoria would number 4,125, viz., 2,291 males and 1,834 females, the proportions being 36·17 insane persons per 10,000 of both sexes, or 1 in 276; 38·29 insane males per 10,000 males, or 1 in 261; 33·84 insane females per 10,000 females, or 1 in 296.

Insanity in Australasian colonies.

747. The idiots and imbeciles being but few in number as compared with the lunatics, the different colonies stand in the same order in reference to the combination of the two as they do in reference to the lunatics when dealt with singly, except in the case of South Australia and Tasmania, which change places. The following are the figures:—

INSANITY IN THE AUSTRALASIAN COLONIES, 1891.

1. Victoria* had 1 lunatic or idiot in every				...	276 persons
2. New Zealand	„	„	„	...	325 „
3. New South Wales	„	„	„	...	329 „
4. Tasmania	„	„	„	...	341 „
5. South Australia	„	„	„	...	342 „
6. Western Australia	„	„	„	...	366 „

Insanity in various countries.

748. By the following figures, which have been derived, where possible, from official sources, it would appear that insanity (embracing lunacy, idiocy, and imbecility) is more prevalent in Victoria than in any of the countries named except Ireland and Scotland. Too much reliance, however, must not be placed upon the figures, for it is probable that in some of the countries named only such insane persons as are confined in asylums are returned, whilst those boarded out, or living at large, or with friends—which would embrace the major portion of the idiots and imbeciles—are altogether ignored:—

INSANITY IN VARIOUS COUNTRIES.

	Insane persons per 10,000 living.		Insane persons per 10,000 living.
Ireland (1891) ...	... 45·04	Grenada, West Indies (1891)	27·81
Scotland „ ...	... 38·43	Western Australia „	27·32
Victoria „ ...	... 36·17	France (1881) ...	... 25·10
Germany (1880) ...	... 33·90	Sweden, Norway, and Denmark (1885) ...	... 20·59
United States (1880)	... 33·67	Austria (1881) ...	... 20·09
England (1881) ...	... 32·53	Italy (1871) ...	... 16·45
Sierra Leone (1891)	... 31·13	Russia „ ...	... 11·08
Scotland (1881) ...	... 31·09	Switzerland (1880)	... 10·89
New Zealand (1891)	... 30·73	Holland and Belgium (1886)	10·09
New South Wales (1891)	... 30·38	Argentine Republic	... 9·50
Tasmania „	... 29·25	Ceylon (1891) ...	... 9·33
South Australia „	... 29·21	Spain and Portugal (1879)	... 6·10
Canada „	... 28·00†		

* See paragraph 727 *ante*.
† Exclusive of idiots and imbeciles.

Lameness, mutilation, deformity, etc.

749. The census under review was the first at which an inquiry was made as to the number of crippled, mutilated, or deformed persons in Victoria. Some particulars respecting such persons were voluntarily given in 1871 and 1881, but, as may be supposed, the numbers set down on these occasions fell very short of those actually existing. The following is the return obtained in 1891:—

LAMENESS, MUTILATION, DEFORMITY, ETC.

Nature of Affliction.	Males.	Females.	Total.
Lost an arm	86	12	98
„ both arms	2	...	2
„ „ and one leg ...	1	1	2
„ use of an arm	3	4	7
„ „ and both feet ...	1	...	1
„ a hand	61	4	65
„ use of a hand	2	1	3
„ a leg	146	25	171
„ „ and two fingers ...	1	...	1
„ use of a leg	9	2	11
„ a foot	43	5	48
„ limbs	183	37	220
„ use of limbs	1	3	4
„ an eye	887	256	1,143
„ „ and deaf	2	...	2
„ „ deaf, and a cripple ...	1	...	1
„ „ and fingers	6	...	6
„ „ and injury to leg ...	2	...	2
„ „ and lame	1	...	1
„ „ and nearly blind ...	1	...	1
„ „ and rheumatic ...	1	...	1
Lame	117	83	200
„ and deaf	...	1	1
„ and nearly blind	...	1	1
Injured knee	3	2	5
Bad leg	1	1	2
Cripple	61	34	95
„ and infirm	...	1	1
Contracted sinews	1	...	1
Deformed back	4	...	4
„ foot	5	1	6
„ hip	1	...	1
„ leg	1	...	1
„ eyes	1	...	1
„ undefined	14	8	22
Born with only one arm	...	1	1
„ „ hand ...	1	1	2
Cleft palate	...	1	1
Curatvure of spine	2	2	4
Total	1,652	487	2,139

Proportions of injured and deformed persons.

750. The total number of injured and deformed persons, as given in the table, was in the proportion of 18·76 to every 10,000 of the population, or 1 in 533; the proportion of males so afflicted was 27·61

per 10,000 males living, or 1 in 362; and the proportion of females so afflicted was 8·99 per 10,000 females living, or 1 in 1,113.

751. Besides the maimed and deformed persons to whom reference is made in the table, a number were returned who had received minor injuries or who were only slightly deformed. Amongst these, who were not considered sufficiently important to be tabulated, there were 115 males and 17 females who had lost fingers, and 12 males who had lost toes. Minor injuries.

752. For the first time, in pursuance of a suggestion made by the Government Statist of Victoria in his Report upon the Census of 1881,* all the Australasian colonies except Queensland obtained returns of lameness, mutilation, and deformity in 1891. Comparing the numbers in the different colonies with their respective populations, Victoria, according to the following figures, occupied the lowest position but one, the highest place being occupied by Tasmania, and the lowest by New Zealand:— Lameness, mutilation, etc., in Australasian colonies.

LAMENESS, MUTILATION, AND DEFORMITY IN AUSTRALASIAN COLONIES, 1891.

1. Tasmania had 1 crippled, mutilated, or deformed person in every 104 persons.
2. Western Australia „ „ „ „ 178 „
3. New South Wales „ „ „ „ 312 „
4. South Australia „ „ „ „ 413 „
5. Victoria „ „ „ „ 533 „
6. New Zealand „ „ „ „ 640 „

NOTE.—For further information respecting the sickness and infirmity prevailing see General Report on the Census of Victoria, 1891, pages 141 to 171, by H. H. Hayter, C.M.G., Government Statist, 4to., Brain, Melbourne, 1893.

753. As bearing upon the rate of sickness, as also upon that of the mortality, it is important to consider whether the number of medical men is sufficient to minister to the health of the population. In 1891 there were in Victoria 835 legally qualified medical practitioners, which number gives a proportion of 1 to every 1,366 persons, or to every 105 square miles. The first of these proportions compares most favourably with that in other countries, the only one known to have a higher proportion being 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 countries respecting which the information is at hand, except Sweden, Norway, and Russia. 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.

* See that Report, paragraphs 530 and 540.

Medical Men in proportion to Population and Area in Various Countries.

Countries.	Year.	Medical Men per 100,000 Persons Living.	Countries.	Square Miles to a Medical Man.
Switzerland ...	1880	75	England and Wales ...	3·9
Victoria	1891	73	Belgium	4·7
Italy	1885	60	Italy	6·2
England and Wales ...	1881	58	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	Victoria	105·3
Portugal	1880	18	Russia in Europe ...	148·4
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 kilomètres, which have been converted into square miles on the assumption that one of the former is equal to ·386 of one of the latter.

Meteorological observations, 1892.

754. The following are the results of meteorological observations taken at different stations throughout the colony during 1892. 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 at Various Stations, 1892.

Stations.	Height above Sea-level.	Temperature in the Shade.		
		Max.	Min.	Mean.
	Feet.	°	°	°
Portland	37·0	97·0	32·0	56·2
Gabo Island	50·0	87·0	41·0	57·3
Melbourne	91·3	104·0	31·0	57·4
Cape Otway	270·0	105·0	40·0	55·4
Wilson's Promontory ...	300·0	85·0	36·0	55·8
Echuca	314·0	105·0	31·0	60·8
Bendigo	701·0	104·0	30·0	58·1
Mount Pleasant (Ballarat)	1,636·0	99·5	31·5	52·7

Meteorological Observations at Various Stations, 1892 —*continued.*

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	29·963	190	33·73	0·76	...
Gabo Island	29·883	151	42·26	0·86	...
Melbourne	29·925	124	24·96	0·74	6·1
Cape Otway	29·675	178	33·11	0·82	...
Wilson's Promontory ...	29·605	157	44·99	0·70	...
Echuca	29·634	62	17·51	...	...
Bendigo	29·267	105	26·85	0·67	...
Mount Pleasant (Ballarat)	28·379	179	32·73	0·80	...

755. The following are the results for Melbourne in each of the twenty-nine years ended with 1892:— Meteorology in Melbourne, 1864 to 1892.

Meteorological Observations at Melbourne—Return for Twenty-nine 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
1890	103·4	29·0	58·7	29·92	140	24·24	·72	6·2
1891	103·0	33·9	57·6	29·98	126	26·73	·73	5·8
1892	104·0	31·0	57·4	29·92	124	24·96	·74	6·1
Means	104·7	30·3	57·4	29·94	130	25·54	·71	5·9

Observations in 1892 compared with means.

756. It will be noticed that in 1892, according to the observations taken at the Melbourne Observatory, the mean temperature was identical with, and the mean atmospheric pressure was almost identical with, similar means extending over the 29 years to which the table relates; that whilst rainy days in 1892 were 6 below the average, the amount of rain which fell was less than the average by little more than half an inch, but the mean relative humidity and mean amount of cloud during the year were both slightly above the average.

Observations in 1892 and former years compared.

757. Comparing the meteorological observations made in 1892 with those in the previous 28 years, it is found that the maximum temperature was exceeded in 14, the minimum temperature in 10, and the mean temperature in 12 of those years; that the mean atmospheric pressure was exceeded in 19 of these years; and, moreover, that whilst there were more rainy days in 21, the amount of rainfall was only greater in 15 of those years.

Mean rainfall in Melbourne and elsewhere.

758. The mean rainfall in Melbourne (25·54 in.) corresponds approximately with that of Ventnor in England, and Perth in Western Australia, Goulburn in New South Wales, and Toulouse in France. It is somewhat above that in London, Paris, or Berlin, is 2 inches above that in Hobart, is 4½ inches above that in Adelaide, but is little more than half as much as that in Sydney or Brisbane. The following is the average rainfall in some of the principal Australasian towns and in a few British and foreign towns:—

Average Rainfall in Principal Towns.

Australasian Towns.

Name of City or Town.	Days' Rain.	Rainfall.	Name of City or Town.	Days' Rain.	Rainfall.
		Inches.			Inches.
Brisbane	139	49·37	Melbourne ...	131	25·56
Sydney	147	49·17	Perth	...	25·00
Newcastle	113	46·98	Bathurst ...	73	23·62
Auckland	168	38·29	Hobart	141	23·46
Orange	104	37·71	Warrnambool ...	130	23·12
Dunedin	144	35·90	Wagga Wagga ...	77	22·73
Wellington ...	170	35·68	Bendigo ...	108	21·87
Portland	183	33·00	Geelong ...	92	20·99
Belfast	161	28·43	Adelaide ...	120	21·09
Albury	80	28·36	Echuca	76	20·73
Ballarat	132	27·22	Stawell	100	20·62
Goulburn	84	26·13	Deniliquin ...	64	17·06
Castlemaine ...	122	25·65	Bourke	43	16·15

Average Rainfall in Principal Towns—*continued.*

Extra-Australasian Towns.

Name of City or Town.	Rainfall.	Name of City or Town.	Rainfall.
	Inches.		Inches.
Bombay...	75	Geneva	32
Lake District of Wales ...	75	Rome...	31
New York	47	Dublin	30
Boston	45	Brussels	29
Florence	41	Ventnor (England) ...	25½
Washington	41	Toulouse	24¾
Cork	40	Berlin	24
Naples	39	London	24
Plymouth	39	Paris	23
Milan	38	Marseilles	19
Liverpool	37	Madrid	9
Manchester	33		

Note.—The averages in this table, which in most cases refer to a long series of years, have been derived, for all the towns except Melbourne, Auckland, Dunedin, Wellington, and Ventnor, from a work entitled *Results of Rain, River, and Evaporation Observations made in New South Wales*, by H. C. Russell, C.M.G., Government Astronomer of that colony : Potter, Sydney, 1890.

759. The Board of Visitors to the Melbourne Observatory, in their report dated 12th October, 1891,* state that, as the result of communications from the maker of the great Melbourne telescope, Sir Howard Grubb, with reference to the expediency of erecting a refractor on the equatorial mounting of that instrument, they are now disposed to think it would be better to have a separate instrument, whenever funds can be spared for the purpose.† An interesting report by the Government Astronomer is appended to the Board's report, in which is described a new telescope recently received for stellar photography, to be used in connection with the portion undertaken by Melbourne of the charting of the heavens in accordance with the plans adopted by a Congress recently held in Europe. Mirrors of great telescope.

760. An extended account of the meteorology and climate of Victoria will be found in the *Victorian Year-Book*, 1874, paragraphs 54 to 95. Meteorology elsewhere treated on.

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* Parliamentary Paper, No. 185, Session 1891.

† 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.*