

are—that he must be a colonist in the strict sense of the term, must not be less than 12 or more than 13½ years of age, must be in good health and perfectly free from any physical defect or disease, and must be able to pass a preliminary examination in English, Arithmetic, Elementary Algebra, Elementary Geometry, French, and Scripture History, obtaining not less than two-fifths of the whole number of marks assigned in each subject; and a second examination in any two of the following subjects, viz., Elementary Mathematics, Latin, Geography, and the outlines of English History. When a cadet is entered, he will be required to pay annually the sum of £70 for a period of two years, to be spent on board the *Britannia* training ship, besides expenses of outfit and of all necessary books and instruments, during which time he must pass four examinations in seamanship and study. He is subsequently to pay £50 per annum until he passes his final examination for the rank of lieutenant.*

PART IV.—VITAL STATISTICS.

351. In pursuance of the provisions of Act 28 Vict. No. 268, records are kept of all marriages, births, and deaths which are known to occur in Victoria. The marriages are recorded by registrars of marriages or clergymen throughout the colony, and the births and deaths by deputy registrars. The marriage registrations are made in triplicate, one copy being forwarded to the Registrar-General, one retained by the lay registrar or officiating clergyman, as the case may be, and the third given to the parties married. The birth and death registrations are made in duplicate, one copy being forwarded to the Registrar-General and the other retained by the deputy registrar.

Registration system for marriages, births, and deaths.

352. It is found convenient to deal with the records according to the periods in which the marriages, births, and deaths are registered, rather than those in which they occur. And—since the registration of a death should in all cases precede burial, and the registration of a marriage is simultaneous with the marriage itself—the registrations in the former case closely, and in the latter case entirely, agree with the actual occurrences during any period. In the case of births, however, there is a wider margin, since the legal limit of registration extends to two months, and may in special cases extend to twelve months, after the date of birth; the effect of which is, not that the

Time of registration dealt with in compiling statistics.

* For latest regulations respecting naval cadetships for the colonies, containing full particulars of the clothing, books, and instruments required by cadets and of the examinations, &c., see *Government Gazette* of the 30th June, 1881.

numbers in one period differ much from those in another not distant period of similar duration, but that, in view of the length of time over which the non-registration of a birth is permitted to extend, and the natural tendency of some persons to postpone whatever is not absolutely necessary to be done on a particular day, a certain number of births escape registration altogether.

Marriages,
1882.

353. The marriages celebrated in Victoria during 1882 numbered 6,309, as against 5,896 in the previous year. The excess in favour of 1882 was thus 413.

Marriages,
1882 and
former
years.

354. More marriages took place in 1882 than in any previous year. The number solemnized annually had been almost stationary during the seven years prior to 1880, but in that year an advance was made which has been more than sustained since. In 1877, for the first time, the marriages numbered more than 5,000; and in 1882, for the first time, they exceeded 6,000.*

Marriage
rate.

355. The number of marriages compared with the total population is generally called the marriage rate. This for many years had been declining in Victoria, for, whilst in the three years prior to 1863 it was above 8 per 1,000 of both sexes and all ages, from 1863 to 1865 it was between 7 and 8, and between 1868 and 1878 it was between 6 and 7, per 1,000. It reached its lowest point, 5·98, in 1879, but since then it has gradually revived, and in 1882 amounted to 7·08, this being a higher rate than had prevailed in any one of the previous sixteen years except 1868, when the rate was also 7·08 per 1,000. The following table gives the number of marriages and number of persons married per 1,000 of the population during each of the twenty-three years ended with 1882 :—

ANNUAL MARRIAGE RATE, 1860 TO 1882.

Year.	Per 1,000 of the Mean Population.	
	Number of Marriages.	Number of Persons Married.
1860	8·15	16·30
1861	8·21	16·42
1862	8·26	16·52
1863	7·51	15·02
1864	7·77	15·54
1865	7·36	14·72
1866	6·76	13·52
1867	6·97	13·94
1868	7·08	14·16
1869	6·89	13·78
1870	6·63	13·26
1871	6·37	12·74
1872	6·36	12·72

* For the number of marriages during each year since the first settlement of Port Phillip, see Statistical Summary of Victoria (first folding sheet) *ante*.

ANNUAL MARRIAGE RATE, 1860 TO 1882—*continued.*

Year.	Per 1,000 of the Mean Population	
	Number of Marriages.	Number of Persons Married.
1873	6.50	13.00
1874	6.33	12.66
1875	6.33	12.66
1876	6.21	12.42
1877	6.31	12.62
1878	6.20	12.40
1879	5.98	11.96
1880	6.22	12.44
1881	6.79	13.58
1882	7.08	14.17
Mean of twenty-three years	6.78	13.56

356. It has been shown, upon more than one occasion,* that the frequency of marriage is not dependent upon the numbers of the total population, still less upon the number of marriageable women, but almost entirely upon the number of marriageable men the community contains, the tendency of whom to marry is modified by their habits and occupations, and upon the view they take of their future prospects. Thus men have a greater tendency to marry in prosperous than in dull times, and the men of a rural, and especially of an agricultural, community, have a greater tendency to marry than those of an urban one. To demonstrate this, the following table has been constructed, showing the proportion of marriages to the population, to the number of single men, and to the number of single women, in each of the last five census years :—

Marriage rate at various periods.

PROPORTION OF MARRIAGES TO POPULATION† AND TO SINGLE MEN AND WOMEN, 1854 TO 1881.

Year of Census.	Exclusive of Chinese and Aborigines.				
	Population.	Number of Marriages.	Proportion of Marriages per 1,000 of the—		
			Population.	Marriageable Men.	Marriageable Women.
1854	234,361	3,696	15.77	52.16	245.04
1857	383,668	4,465	11.64	46.79	169.66
1861	513,896	4,528	8.81	42.34	122.36
1871	712,263	4,715	6.62	52.43	72.11
1881	849,438	5,732	6.75	57.40	48.02

* See *Victorian Year-Book*, 1879-80, pages 103 and 104; same work, 1880-81, pages 199 and 200; and same work, 1881-2, pages 165 and 166.

† The populations in this table are those returned at the respective censuses, the Chinese and Aborigines being excluded; and the marriages are those (exclusive of marriages of Chinese and Aborigines) which took place in the twelve months of which the date of each census was the middle. The proportions of the latter to the former, therefore, differ slightly from those in the previous table, the calculations in which are based upon the total mean populations and all the marriages in the calendar year.

Reasons for
fluctuations
in marriage
rate.

357. The numbers in the last column but two, and those in the last column, show such a falling-off that, if the proportion that marriages bear to the total population or to the number of single females, were to be accepted as an index of the prosperity of the community, an alarming amount of depression would be indicated. The figures in the last column but one, however, tell a very different tale, and exhibit just such fluctuations as might have been expected from the changes which took place in the circumstances of the population between the different periods. Thus, in 1854, there was a very large influx to the colony of single adult males, some of whom brought money with them, which they saw, or thought they saw, every prospect of speedily increasing, whilst others actually did make money very quickly, and consequently the proportion who married was high, but, doubtless, not so high as it would have been had it not been for the discomfort of living in tents and other privations incident to a life on the early gold-fields, to which a large portion of the community was then subjected. By 1857 immigration had for the time been overdone, the result being that the gold obtained was very much less in proportion to the number of miners at work than it had been, whilst the discomforts of a gold-fields life were as great as ever, and so the rate naturally declined. By 1861 the yield of gold had seriously diminished, and as persons had not yet turned, to any great extent, to other pursuits, much distress was experienced, and the rate fell to a minimum. By 1871, and in a greater degree by 1881, a large proportion of the population had settled on farms, whilst some, unable to obtain congenial occupation, had left the colony; tents had almost disappeared from the gold-fields; the miners were, for the most part, working for wages, and did not, as formerly, rush about from place to place; manufactures had been started, and had made considerable progress, and, accordingly, the rate improved. In 1871 it was higher than at any previous period of the colony's history, and in 1881 it was still higher than in 1871.

Probability
of female
marriage
rate reviv-
ing.

358. The decline in the female marriage rate shown in the last column of the table will be better realized when it is considered that in 1854 about 1 in 4 of all the spinsters and widows in the colony married in the year—which proportion, three years after, had fallen to 1 in 6; ten years later it had fallen to 1 in 8; ten years still later it had fallen to 1 in 14; and ten years later, viz., in 1881, it had reached the exceedingly low point of 1 in 21. The tide has probably now turned; the youthful native-born male population is growing up to manhood, and is commencing to fill the gap in early adult life caused by the passing on to later periods of the immigrants who, at the time of the discovery

of the first gold-fields, came to Victoria unaccompanied by persons at younger ages to supply their places as they passed onward or disappeared altogether from the scene; and it may be expected that, if the colony continues to enjoy a fair amount of prosperity, the marriages will increase in proportion to the available females, as they have already done in proportion to the available males.

359. The following table gives a statement of the number of marriages to every 1,000 of the population of the various Australasian colonies for each year from 1865 to 1881, except Western Australia, for which colony it is given for the last ten of those years:—

Marriage rates in Australasian colonies.

MARRIAGE RATES IN AUSTRALASIAN COLONIES, 1865 TO 1881.*

Year.	Number of Marriages † per 1,000 of Mean Populations.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1865 ...	7·36	8·90	13·27	9·45	...	6·27	10·47
1866 ...	6·76	8·22	11·61	8·12	...	5·93	10·32
1867 ...	6·97	7·79	9·54	8·20	...	6·10	9·69
1868 ...	7·08	8·17	8·33	7·37	...	6·57	9·35
1869 ...	6·89	7·98	8·31	6·78	...	6·44	8·32
1870 ...	6·63	7·79	7·80	6·90	...	6·62	7·62
1871 ...	6·37	7·73	8·06	6·77	...	5·90	7·15
1872 ...	6·36	7·42	8·70	7·20	5·56	6·17	6·85
1873 ...	6·50	7·97	9·66	8·00	6·25	6·36	7·91
1874 ...	6·33	7·59	8·62	8·00	6·96	6·83	8·87
1875 ...	6·33	7·73	8·63	8·01	7·26	6·63	8·94
1876 ...	6·21	7·49	7·57	8·49	7·07	7·13	8·25
1877 ...	6·31	7·73	7·57	8·66	6·38	7·79	7·63
1878 ...	6·20	7·84	6·98	9·47	6·50	7·96	8·03
1879 ...	5·98	7·55	7·49	8·81	7·57	7·23	7·60
1880 ...	6·22	7·72	6·97	8·69	7·42	7·38	6·71
1881 ...	6·79	8·24	7·71	8·33	6·60	7·30	6·65
Means ...	6·55	7·87	8·64	8·07	6·75	6·74	8·26

360. It will be observed that the mean marriage rate is lower in Victoria than in any one of the neighbouring colonies, and as, during the whole period over which the calculations extend, Victoria has certainly been second to none of the other colonies in point of wealth and prosperity, this may create surprise in the minds of those who fail to realize the fact that marriage rates, calculated upon the total population, do not afford an indication of the amount of prosperity in a community so

Reasons for marriage rates being higher in other colonies than in Victoria.

* For the number of marriages in the various colonies during the ten years ended with 1882, see General Summary of Australasian Statistics (third folding sheet) ante.

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

much as of the proportion which single men at marriageable ages bear to the population as a whole. In civilized countries the age at which four-fifths of the males who marry enter the marriage state is between 20 and 35 years. It naturally follows, therefore, that on the number of males at such ages the number of marriages mainly depends. Prior to the taking of the last census it was mentioned as probable that there had been a falling-off in the male population of Victoria at those ages; and, as was anticipated, the census disclosed the fact that Victoria had, in proportion to the total population, a smaller number of males between 20 and 40 than any of the other colonies.* The explanation of the higher proportion of males at the period named in the other colonies is to be found mainly in the fact that they—especially New South Wales, Queensland, South Australia, and New Zealand—have, for years past, introduced large numbers of adults at the cost of the State, and, as is always the case when immigration is subsidized, these have been accompanied or followed by a steady stream of unassisted immigrants. Besides, not one of the neighbouring colonies has been subjected, in the early years of its history, to so large an influx of adult male immigrants unaccompanied by persons at younger ages, followed by a cessation of immigration, as has taken place in Victoria at and since the time of the early gold discoveries. This colony, however, as the young population is growing to a marriageable age, is rapidly assuming a normal condition, and this is already bringing about an improvement in the marriage rate, which, with perhaps occasional brief interruptions, will assuredly continue until marriages bear as high a proportion to the total population as they do in any of the neighbouring colonies.

Comparison
of marriage
rates of
colonies
in 1881 and
former
years.

361. It will further be noticed that the marriage rate in Victoria declined with much regularity throughout the period to which the table refers until it reached a minimum in 1879. Since then, however, it has gradually recovered itself, as already stated.† In all the other colonies, except New South Wales and Queensland, the rate was lower in 1881 than in the previous year, whilst in New Zealand it was lower than in any year of the period. The last named, in which, a few years since, the marriage rate was higher than in any other Australasian colony, had fallen in 1880 and 1881 to the lowest position but one, which is a remarkable instance of a high marriage rate coincident with an influx of adult immigrants, and a low one consequent upon such influx being stopped.‡

* See figures following paragraph 74 *ante*.

† See paragraph 355 *ante*.

‡ Such an event was foreshadowed by the present writer in a paper read by him before the Melbourne Social Science Congress on the 25th April, 1880, in the following words:—"A depression in the marriage rate, it may be anticipated, will before long overtake several of the neighbouring colonies wherein marriages now bear a high proportion to the population, but which proportion must inevitably decline upon the cessation of the stream of adult immigrants which now flows towards their shores."

362. 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 seventeen years :—

Order in 1881.	Order in a Series of Years.
1. New South Wales.	1. Queensland.
2. South Australia.	2. New Zealand.
3. Queensland.	3. South Australia.
4. Tasmania.	4. New South Wales.
5. Victoria.	5. Western Australia.
6. New Zealand.	6. Tasmania.
7. Western Australia.	7. Victoria.

363. It will be noticed that Victoria, which for some years had been at the bottom of the list, had risen in 1881 above Western Australia and New Zealand, also that besides Victoria, New South Wales, South Australia, and Tasmania occupy higher positions in the list for 1881 than they do in that for a series of years.

364. The following table shows the number of marriageable men and women in each Australasian colony according to the returns of the census of 1881. The Chinese and Aborigines are excluded in all the colonies, and the unmarried (never married) are distinguished from the widowed :—

MARRIAGEABLE MEN AND WOMEN IN EACH AUSTRALASIAN COLONY, 1881.

Colony.	Exclusive of Chinese and Aborigines.					
	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 ...	87,071	12,796	99,867	97,667	21,711	119,378
New South Wales ...	90,597	9,848	100,445	68,206	16,064	84,270
Queensland* ...	26,177	2,237	28,414	14,420	3,077	17,497
South Australia ...	29,365	2,790	32,155	26,711	5,860	32,571
Western Australia ...	4,858	539	5,397	2,501	508	3,009
Total ...	238,068	28,210	266,278	209,505	47,220	256,725
Tasmania ...	11,089	2,378	13,467	12,733	2,974	15,707
New Zealand ...	60,123	4,964	65,087	37,126	7,296	44,422
Grand Total ...	309,280	35,552	344,832	259,364	57,490	316,854

365. It will be observed that there were more bachelors in New South Wales than in Victoria, and thus, although widowers in the latter were more numerous than in the former, the whole number of marriageable men was greater in New South Wales than in this colony.

* In Queensland, South Sea Islanders are excluded as well as Chinese and Aborigines.

Proportion
of single
women to
single men.

366. Victoria, Tasmania, and South Australia 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:—

SINGLE WOMEN PER 10,000 SINGLE MEN LIVING IN EACH COLONY, 1881.

1. Victoria ...	11,954	5. New Zealand ...	6,825
2. Tasmania ...	11,664	6. Queensland ...	6,158
3. South Australia ...	10,135	7. Western Australia ...	5,575
4. New South Wales ...	8,390		

Marriage
rates in
census year.

367. The following figures show the proportion of marriages in each colony during the census year to the total population, exclusive of Chinese and Aborigines. In consequence of these exclusions, the figures necessarily differ somewhat from those given for 1881 in the table following paragraph 359 *ante*, and the positions of Queensland and South Australia are reversed; those of the other colonies, however, remaining unchanged:—

MARRIAGES* PER 1,000 OF THE POPULATION† OF EACH COLONY, 1881.

1. New South Wales ...	8.50	5. Victoria ...	6.94‡
2. Queensland ...	8.42	6. New Zealand ...	6.76
3. South Australia ...	8.37	7. Western Australia ...	6.66
4. Tasmania ...	7.45		

Proportion of
marriages
to single
men.

368. Comparing the marriages with the marriageable men, which is the most correct way of computing the marriage rate, South Australia—essentially an agricultural community §—stood first in 1881, and Western Australia last, the proportion in the latter being little more than half that in the former. In this respect Victoria occupied the fifth position, as in the case of the marriage rate calculated upon the whole population:—

MARRIAGES PER 1,000 MARRIAGEABLE MEN LIVING IN EACH COLONY, 1881.

1. South Australia ...	71.78	5. Victoria ...	59.04‡
2. Tasmania ...	63.56	6. New Zealand ...	50.41
3. New South Wales ...	62.56	7. Western Australia ...	36.50
4. Queensland ...	59.94		

* The marriages in 1881 numbered as follow in the different colonies:—Victoria, 5,896; New South Wales, 6,284; Queensland, 1,703; South Australia, 2,308; Western Australia, 197; Tasmania, 856; New Zealand, 3,281. It has not been possible to eliminate the marriages of Chinese and Aborigines, as they are not kept separate in any of the colonies except Victoria. Their numbers, however, are but few.

† Exclusive of Chinese and Aborigines. The following are the numbers:—Victoria, 849,438; New South Wales, 739,620; Queensland, 202,296; South Australia, 275,724; Western Australia, 29,563; Tasmania, 114,861; New Zealand, 484,929.

‡ These proportions differ slightly from those given in the table following paragraph 356 *ante*, where the comparisons are made with the marriages which took place in the twelve months of which the census was at the middle, instead of the calendar year 1881, which has here been adopted uniformly for all the colonies. The marriages also in the former table were exclusive of those of Chinese and Aborigines, which is not the case here.

§ According to the latest returns, South Australia had over 8 acres in cultivation per head of the population, or more than twice as much per head as any other Australasian colony. Tasmania stood next to South Australia with a little over 3 acres per head.

369. Women would appear to have a smaller chance of getting married in Victoria than in any other Australasian colony, as in 1881 the proportion of marriages to those of them who were marriageable was much lower here than in any of the other colonies. The colony which stood highest in this respect was Queensland, where nearly 1 in 10 of the single women married in the year, or about twice the proportion obtaining in Victoria :—

Proportion of marriages to single women.

MARRIAGES PER 1,000 MARRIAGEABLE WOMEN LIVING IN EACH COLONY, 1881.

1. Queensland	...	97·33	5. Western Australia...	65·47
2. New South Wales	...	74·57	6. Tasmania...	54·50
3. New Zealand	...	73·86	7. Victoria ...	49·39*
4. South Australia	...	70·86		

370. In 1881, the marriage rate of the colonies situated upon the Australian continent was higher than in any of the other years named in the following table, and, notwithstanding the decline in the marriage rate experienced in New Zealand, which has been already referred to,† this was also the case as regards the continental colonies with the addition of that colony and Tasmania.

Marriage rates in Australia and Australasia.

MARRIAGE RATES IN AUSTRALIA AND AUSTRALASIA, 1873 TO 1881.

Year.	Number of Marriages ‡ per 1,000 of Mean Population.	
	Continent of Australia.	Australia with Tasmania and New Zealand.
1873	7·35	7·38
1874	7·07	7·32
1875	7·12	7·38
1876	6·93	7·15
1877	7·05	7·18
1878	7·08	7·27
1879	6·88	7·01
1880	7·15	7·08
1881	7·62	7·41
Means	7·14	7·24

371. 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

Marriage rates in certain British possessions.

* See footnote (‡) to preceding page.

† See paragraph 361 *ante*.

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

in Barbadoes is explained by the fact that the negro population as a rule ignore the marriage ceremony. The same circumstance, to a greater or less extent, doubtless also affects the marriage rate in Trinidad, and perhaps also in the Mauritius, although the low marriage rate in the latter would, to a certain extent, be accounted for by the fact that the large imported Cooly population is for the most part comprised of males, the females introduced being extremely few:—

MARRIAGE RATES IN CERTAIN BRITISH POSSESSIONS.

	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—		
Mauritius ...	1871-75	2.5	St. Vincent	1872-76	6.3
Seychelles ...	1875-77	8.7	Barbadoes ...	1872-77	3.7
Bermudas ...	1871-75	8.3	Grenada ...	1871-75	5.6
West Indies—			Dominica ...	1871-75	6.9
St. Lucia ...	1878-79	5.2	Trinidad ...	1871-75	3.8

Marriage rates in European countries.

372. The following table gives for each of the thirteen years ended with 1880 a statement of the marriage rates in British and such foreign countries as the information is available for. The figures have been taken from the reports of the Registrar-General of England:—

MARRIAGE RATES IN EUROPEAN COUNTRIES, 1868 to 1880.

Year.	Number of Marriages* per 1,000 of Mean Populations.													
	England and Wales.	Scotland.	Ireland.†	Denmark.	Sweden.	Austria.	Hungary.	German Empire.‡	Belgium.	The Netherlands.	France.	Switzerland.	Spain.	Italy.§
1868 ...	8.1	6.7	5.1	7.3	5.5	9.3	13.7	8.8	7.3	7.7	7.9	6.7	6.7	7.2
1869 ...	8.0	6.7	5.0	7.4	5.7	10.4	11.0	8.9	7.4	7.8	8.2	7.2	8.1	8.0
1870 ...	8.1	7.2	5.3	7.4	6.6	9.7	9.8	7.4	7.0	7.9	6.0	7.0	6.3	7.3
1871 ...	8.4	7.1	5.4	7.3	6.5	9.5	10.4	8.0	7.4	8.0	7.2	7.3	...	7.5
1872 ...	8.8	7.5	5.0	7.5	7.0	9.2	10.8	10.3	7.8	8.2	9.8	7.8	...	7.5
1873 ...	8.8	7.8	4.8	8.1	7.3	9.3	11.3	10.0	7.8	8.5	8.9	7.6	...	7.9
1874 ...	8.6	7.6	4.6	8.2	7.3	9.0	10.7	9.6	7.6	8.3	8.3	8.3	...	7.6
1875 ...	8.4	7.4	4.5	8.5	7.0	8.5	11.0	9.1	7.3	8.3	8.4	9.0	...	8.4
1876 ...	8.4	7.5	5.0	8.5	7.1	8.2	9.9	8.5	7.2	8.2	7.9	8.1	...	8.1
1877 ...	7.9	7.2	4.6	8.1	6.9	7.4	9.1	8.0	6.9	8.0	7.6	7.9	...	6.8
1878 ...	7.6	6.8	4.7	7.4	6.5	7.5	9.3	7.7	6.7	7.7	7.6	7.4	...	7.1
1879 ...	7.2	6.5	4.3	7.3	6.3	7.6	10.2	7.5	6.7	7.6	...	6.9	...	7.5
1880 ...	7.4	6.7	3.8	7.6	6.3	7.5	9.1	7.5	7.1	7.5	...	6.8	...	6.9
Means ...	8.1	7.1	4.8	7.7	6.6	8.7	10.5	8.6	7.2	8.0	8.0	7.5	7.0	7.5

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

† The low marriage rate in Ireland is partly attributed to defective registration, particularly as regards 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.

‡ The figures for the years from 1868 to 1871 refer to Prussia only.

§ In Italy, the civil became the only legal form of marriage in 1866, and the low rate (5.6) recorded in that and subsequent years is attributed to the non-registration of marriages solemnized only in churches. The number of such marriages, which was very great in 1866 and 1867, has, however, been decreasing—hence the apparent increase during the earlier years.

373. It will be observed that in the last year named the marriage rates in all the European countries were below the average. In Austria the rate had been decreasing steadily since 1869; in England, Germany, and France since 1872; in Scotland, Sweden, and the Netherlands since 1873; in Switzerland and Italy since 1875; and in Denmark since 1876. Moreover, although a universally low marriage rate prevailed in 1879, still lower rates prevailed in 1880 in Ireland, Austria, Hungary, Switzerland, the Netherlands, and Italy, whilst in Sweden and Germany the rates remained unchanged; but a marked improvement took place in Belgium, and a slight one in England, Scotland, and Denmark. It may be remarked that in England the marriage rate was lower in 1880 than in any other year since registration began except 1879.

Low European marriage rates.

374. The mean marriage rate in Central Europe, as shown by the figures for Hungary, Germany, and Austria, is much higher than in the other portions; whilst the rates in England and Wales and in France and Holland come next. All these rates exceed 8 per 1,000. The lowest rates prevail in Ireland* and Sweden. In only three of the Australasian colonies, viz., Queensland, New Zealand, and South Australia, did the mean marriage rate, during the seventeen years ended with 1881, exceed 8 per 1,000, the rate in the first two being considerably greater than, and in the last about the same as, in England, Holland, and France. The average rate in New South Wales is rather higher than in Denmark and Switzerland, which stand next below France and Holland in regard to the marriage rate, whilst the rates in Tasmania and Western Australia are slightly higher than, and the rates in Victoria is about the same as, the rate in Sweden.

Australasian and European marriage rates compared.

375. The following, according to the reports of the Registrar-General of England, is the marriage rate of the United Kingdom during the ten years ended with 1880. If, however, the registrations in Ireland are defective, as is alleged,* some disturbance to the calculations must result therefrom. It will be observed that the rate in 1880 was higher than in 1879, but lower than in any other year named:—

Marriage rate in United Kingdom.

MARRIAGE RATE IN THE UNITED KINGDOM, 1871 TO 1880.

				Marriages per 1,000 of the Population.			
1871	...	...	8·21	1878	...	...	7·09
1872	...	...	7·98	1879	...	...	6·69
1873	...	...	8·03	1880	...	...	6·83
1874	...	...	7·79				—
1875	...	...	7·67	Mean	...	...	7·53
1876	...	...	7·70				—
1877	...	...	7·32				

* See footnote (†) to table following paragraph 372 ante.

Marriage rates in town and country.

376. 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 1882 it was in country towns over three times, and in the metropolis about three and a quarter times, as high as in rural districts, as will be seen by the following table, which contains a statement of the marriages celebrated in that year in the three classes of districts, together with the estimated mean populations of such divisions :—

MARRIAGES IN URBAN AND COUNTRY DISTRICTS, 1882.

Districts.	Estimated Mean Population.	Marriages, 1882.	
		Total Number.	Number per 1,000 of the Population.
Melbourne and suburbs	291,464	3,070	10·53
Towns outside Melbourne and suburbs ...	198,839	1,952	9·82
Country districts	400,167	1,287	3·22
Total	890,470	6,309	7·08

Marriages in each quarter.

377. Marriages in Victoria have generally been most numerous in the autumn quarter, next in the spring quarter, next in the summer quarter, and least numerous in the winter quarter. In 1882, however, the number in the winter was greater than in the summer quarter. The following table shows the number and percentage of marriages in each quarter of that year and the mean percentage in each quarter of a previous decenniad :—

MARRIAGES IN EACH QUARTER.

Seasons.	Quarter ended on the last day of—	Year 1882.		Percentage in Ten Years: 1871 to 1880.
		Number of Marriages.	Percentage.	
Summer ...	March	1,448	22·95	24·43
Autumn ...	June	1,730	27·42	26·19
Winter ...	September	1,514	24·00	23·81
Spring ...	December	1,617	25·63	25·57
	Year	6,309	100·00	100·00

Former condition of persons married.

378. About four-fifths of the unions which take place are between bachelors and spinsters; and the next most numerous are generally those between widowers and spinsters, although they have sometimes been exceeded by marriages between bachelors and widows. Marriages

between widowers and widows are generally somewhat less than a twentieth of the whole. The following are the number and percentage in each of these groups during 1882 and the percentage during a previous decennial period :—

FORMER CONDITION OF PERSONS MARRIED.

Previous Condition.	Year 1882.		Percentage in Ten Years : 1871 to 1880.
	Number of Marriages.	Percentage.	
Bachelors and spinsters	5,344	84·70	80·59
Bachelors and widows	337	5·34	7·10
Widowers and spinsters	418	6·63	7·75
Widowers and widows	210	3·33	4·56
Total	6,309	100·00	100·00

379. Divorced persons marrying are classed as bachelors and spinsters, unless in cases where they had become widowers or widows before contracting the marriage from which they were released by divorce. Eight divorced males and one divorced female were married in 1882; six of the divorced males married spinsters, and two widows. The divorced female married a bachelor. Divorced persons.

380. The persons returned at the census of 1881 as living in a state of divorce numbered 19, viz., 9 males and 10 females. Of the former, 4 were farmers or gardeners, 1 was a merchant, 1 a shopkeeper, 1 a cabinetmaker, 1 a bootmaker, and 1 a maltster. Of the females, 1 was an innkeeper, 1 a farmer, 1 a tailoress, 1 a needlewoman, 1 of independent means, 2 were washerwomen, and 3 were merely performing domestic duties.* Divorced persons, 1881.

381. 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. Five males and 11 females availed themselves of this provision in 1882. The former, of whom 3 married spinsters, and 2 widows, had not heard of their former wives for 7, 10, 15, 16, and 45 years respectively. Of the females, 9 married bachelors, and 2 widowers; 4 had not heard of their former husbands for 7 years, 2 for 9 years, 2 for 11 years, 1 for 16 years, 1 for 21 years, and in the case of one the number of years was not stated. In the previous year, 4 deserted males and 10 deserted females remarried. Deserted husbands and wives.

* For further particulars respecting these divorced persons, see General Report on the Census of 1881, paragraph 314.

Remarriages. 382. In 1882, 628 widowers and 547 widows re-entered the marriage state. During the last nine years more widowers have remarried than widows. Formerly it was different. In the eight years ended with 1873 the widowers re-entering the marriage state numbered 4,344, and the widows 4,618, and at earlier periods in the history of the colony the preponderance of remarriages of widows over those of widowers was even greater than this. Such a preponderance would be likely to happen only in a country in which females are much less numerous than males; and the reverse having been the case of late years, would afford indirect proof, if such were needed, that the proportion of marriageable females to marriageable males in the population has increased, a circumstance which has been disclosed by the results of the last census.* In England and Wales, during the twenty years ended with 1874, 48 per cent. more widowers remarried than widows, the number of the former being 490,912, that of the latter 332,428. The following is a statement of the number of widowers and widows who remarried in Victoria during each of the seventeen years ended with 1882 :—

REMARRIAGES, 1866 TO 1882.

Year.	Number of Remarriages of—		Year.	Number of Remarriages of—	
	Widowers.	Widows.		Widowers.	Widows.
1866 ...	487	498	1875 ...	614	583
1867 ...	504	591	1876 ...	678	623
1868 ...	558	623	1877 ...	666	600
1869 ...	553	563	1878 ...	634	585
1870 ...	547	595	1879 ...	637	553
1871 ...	587	605	1880 ...	603	520
1872 ...	522	552	1881 ...	679	551
1873 ...	586	591	1882 ...	628	547
1874 ...	602	593	Total ...	10,085	9,773

Marriages of Aborigines. 383. The marriages of 5 Aboriginal males with Aboriginal females are included in the returns of 1882, and also the marriage of an Englishman with an Aboriginal female. In the previous year, 6 Aboriginal males married Aboriginal females.

Marriages of Chinese. 384. Ten Chinese males were married in Victoria in the year 1882, as against 4 in 1881, 13 in 1880, 11 in 1879, 13 in 1878, and 20 in 1877. During the sixteen years prior to the year under review, 258 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 :—

* According to the census returns, there were in Victoria, in 1881, nearly 120 marriageable females to every 100 marriageable males.—See table following paragraph 364 *ante*; also figures following paragraph 366.

NATIONALITY OF WOMEN MARRYING CHINESE, 1866 TO 1882.

Birthplace of Wives.	Number of Marriages of Chinese Males.		
	Sixteen Years : 1866 to 1881.	Year 1882.	Total : 1866 to 1882.
Victoria	108	9	117
Other Australian colonies ...	45	...	45
England and Wales ...	51	1	52
Scotland	15	...	15
Ireland	24	...	24
Other British possessions ...	1	...	1
France	1	...	1
Germany	2	...	2
Spain	1	...	1
The United States	1	...	1
China	4	...	4
At sea	5	...	5
Total	258	10	268

385. The marriage ceremony in Victoria may be performed either by the registered clergy of any religious sect or by lay registrars. In 1882, 91 per cent. of the marriages were celebrated according to the former, and 9 per cent. according to the latter, system. Lay marriages, which, for some years previously, had been increasing in numbers, were fewer by 59 in 1882 than in 1881. The following table gives a statement of the number and percentage of marriages celebrated by each religious sect and by lay registrars during 1882, also the percentage in the preceding year and in the ten years ended with 1880:—

MARRIAGES BY DIFFERENT DENOMINATIONS.

Marriages performed according to the usages of the—	Marriages celebrated in—			
	Year 1882.		Percentage in—	
	Number.	Percentage.	1881.	Ten Years : 1871-80.
Church of England	1,769	28·04	26·34	24·63
Presbyterians	1,178	18·67	18·13	20·46
Wesleyans	1,013	16·06	16·32	16·38
Bible Christians	118	1·87	2·19	1·69
Independents	336	5·32	4·68	5·42
Baptists	268	4·25	4·02	3·70
Lutherans	51	·81	·98	1·02
Unitarians ... ..	...	...	·07	·02
Society of Friends ... ..	...	...	...	·01
Calvinistic Methodists	4	·06	·13	·16
Roman Catholics	887	14·06	14·74	17·21
Jews	26	·41	·31	·42
Other sects	71	1·13	1·12	1·06
Lay registrars	588	9·32	10·97	7·82
Total	6,309	100·00	100·00	100·00

386. It should be mentioned that, occasionally, a marriage is performed twice over, viz., by a lay registrar and a clergyman, or by

clergymen of two different denominations. It is not always easy to detect these cases in the registers, but the circumstance occurs too seldom to cause any serious disturbance in the marriage statistics. Three such instances were discovered in the returns for 1882, in two of which the parties, who had been previously united by lay registrars, were married a second time according to the Jewish rites; and in the remaining case the ceremony, which had been performed by a Roman Catholic clergyman, was re-solemnized by one of the Baptist Church.

Sects of
Aboriginals
married.

387. Of the 6 Aboriginal marriages which took place in 1882, 3 were solemnized according to the rites of the Moravians, 2 according to those of the Presbyterians, and 1 according to those of the Church of England.

Sects of
Chinese
married.

388. Of the marriages of Chinese in 1882, 3 were celebrated according to the rites of the Church of England, 3 according to those of the Presbyterians, 2 according to those of the Wesleyans, and 2 were performed by lay registrars.

Marriages
by different
sects.

389. The returns of the census of 1881 afford an opportunity of comparing the number of marriages performed according to the rites of each particular denomination with the numbers of that denomination in the population, and by taking the mean of the returns of that census and the preceding one, and of the marriages which were performed in the interval which elapsed between the two censuses, the same information is obtained extending over a period of ten years. The result is given in the following table:—

PROPORTION OF MARRIAGES TO NUMBERS OF EACH DENOMINATION.

Religious Denomination.	Persons of each Denomination 1881.	Marriages celebrated annually, 1880 to 1882.		Persons of each Denomination (mean of 1871 and 1881).	Marriages celebrated annually, 1871 to 1880.	
		Mean Number.	Proportion per 1,000 persons living.		Mean Number.	Proportion per 1,000 persons living.
Church of England ...	311,291	1,554·3	5·00	284,563	1,226·4	4·31
Presbyterians ...	132,591	1,107·0	8·35	122,787	1,018·6	8·30
Wesleyans ...	108,393	936·3	8·64	99,209	815·5	8·22
Bible Christians ...	6,660	117·3	17·57	5,427	84·0	15·48
Independents ...	19,878	286·3	14·40	19,034	269·8	14·17
Baptists ...	20,373	234·0	11·49	18,342	184·0	10·03
Lutherans ...	11,149	57·3	5·14	10,854	50·8	4·68
Unitarians ...	942	2·0	2·12	979	·9	·92
Society of Friends ...	282	...	...	308	·4	1·30
Calvinistic Methodists	712	6·3	8·85	1,072	8·2	7·65
Roman Catholics ...	203,480	828·3	4·07	187,050	856·8	4·58
Jews ...	4,330	24·0	5·54	3,950	21·1	5·34
Other sects ...	8,465	69·3	...	7,430	52·8	...
Residue ...	33,800*	607·7†	...	35,932*	389·1†	...
Total...	862,346	5,830·3	6·76	796,937	4,978·4	6·25

* Including Pagans, those of no denomination and of no religion, and the unspecified.

† Marriages by lay registrars.

390. It will be observed that the denominations which solemnize most marriages in proportion to their numbers in the population are the Bible Christian, the Independent, and the Baptist, in the order named. In all these cases the proportion in the three years of which the census year is the middle, viz., 1880 to 1882, was higher than that shown for the decenniad. In proportion to their respective numbers, the marriages performed in the three years named according to the rites of the Church of England, the Lutherans, and the Jews were more numerous, and those according to the rites of the Wesleyans, Presbyterians, and Calvinistic Methodists were much more numerous, than those performed according to the rites of the Roman Catholic Church; but, according to the average of the decenniad, a larger proportion of marriages were solemnized according to the rites of the Roman Catholic Church than according to those of the Church of England.

Sects which perform most marriages and vice versa.

391. 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 1882, the proportion of those who signed with marks to the total numbers married being also shown:—

Signing with marks.

SIGNING MARRIAGE REGISTER WITH MARKS, 1882.

Persons Married.	Numbers Married.	Signing with Marks.	
		Total Number.	Number in every 100 Married.
Bridegrooms	6,309	182	2·88
Brides	6,309	206	3·27
Mean	6,309	194	3·07

392. In proportion to the total numbers married, an evident increase has taken place of late years in the number of both males and females signing the marriage register in writing. In 1879 the proportion of females signing with marks was slightly greater than in 1878, and in 1881 slightly greater than in 1880, and in 1880 the proportion of males so signing was greater than in 1878 and 1879; but, with these exceptions, a constant improvement has been apparent from year to year—each year, as compared with its predecessor, showing a smaller proportion of persons signing with marks. Generally, more males than females sign in writing, but an exception to this rule took

Increased numbers signing in writing.

place in 1880, as will be seen by the following figures, which show the proportions for the last ten years :—

NUMBERS SIGNING WITH MARKS PER 100 MARRIED,
1873 TO 1882.

Year.	Men.	Women.	Mean.
1873	6·55	9·97	8·26
1874	6·52	9·91	8·22
1875	5·48	9·43	7·46
1876	5·31	7·50	6·41
1877	5·04	6·02	5·53
1878	4·12	5·30	4·71
1879	3·81	5·60	4·71
1880	4·18	4·09	4·12
1881	2·90	4·16	3·53
1882	2·88	3·27	3·07

Signing with marks, 1853 to 1872.

393. A very much more decided improvement is shown by comparing these results with those of the twenty years prior to 1873, which embrace the whole period from 1853, when the registration system was inaugurated in Victoria, to the end of 1872. In this period 86,062 marriages were registered, with the result that 7,902 of the bridegrooms and 17,824 of the brides signed the register with marks. These numbers give the following proportions as the average for the twenty years :—

NUMBERS SIGNING WITH MARKS PER 100 MARRIED,
1853 TO 1872.

Men.	Women.	Mean.
9·18	20·71	14·95

Cases of both signing with marks.

394. The marriages in which marks instead of writing were made use of in 1882 numbered 352, but in only 36 of these, or rather more than a tenth, did both parties use marks. In the 316 other instances either the husband or the wife signed in writing. Thus, whereas the marriages in which one or both could not write amounted to about an eighteenth of the whole, in the case of only about 1 in every 175 marriages could neither party write.

Signatures of Aborigines.

395. In the case of the 5 Aboriginal males and 6 Aboriginal females married in 1882, all signed with marks except two of the males and three of the females.

Signing with marks in each sect.

396. 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 1882 and the average of the ten years ended with 1880. Considerable improvement will be noticed in respect to all the principal sects :—

SIGNING WITH MARKS IN EACH SECT.

Marriages performed according to the usages of the—	Number Signing with Marks in every 100 Married.					
	Year 1882.			Ten Years : 1871 to 1880.		
	Men.	Women.	Mean.	Men.	Women.	Mean.
Church of England ...	1·75	2·09	1·92	4·54	6·11	5·33
Presbyterians ...	2·12	2·38	2·24	3·67	5·97	4·82
Wesleyans ...	3·16	2·47	2·81	} 4·15	5·33	4·74
Bible Christians ...	2·54	2·54	2·54			
Independents ...	2·38	2·68	2·53	3·37	5·49	4·43
Baptists ...	1·12	2·24	1·68	3·48	5·22	4·35
Lutherans ...	...	...	...	1·77	4·13	2·95
Calvinistic Methodists ...	...	...	...	1·22	6·10	3·66
Roman Catholics ...	4·95	5·07	5·00	10·14	15·43	12·79
Jews ...	...	...	...	·95	·47	·71
Other sects ...	2·82	4·23	3·52	7·01	3·79	5·40
Lay registrars ...	5·78	8·50	7·14	6·60	12·93	9·77
Total ...	2·88	3·27	3·07	5·31	7·93	6·62

397. It will be observed that the proportion of those signing with marks is higher amongst marriages performed according to the rites of the Roman Catholic Church than amongst those celebrated by any other religious sect, but that the numbers in 1882 show a very considerable improvement as compared with the decennial period. The proportion so signing amongst civil marriages, although usually lower, was in 1882 considerably higher than amongst marriages by Roman Catholics, but these also show some improvement in this respect of late years.

398. In the 13 marriages by Unitarians which took place in the twelve years ended with 1882, not one instance occurred of either of the parties signing with a mark; this sect therefore finds no place in the above table. In the 94 marriages by Calvinistic Methodists, all but two of the males signed in writing, but 5 of the females signed with marks. In the 255 marriages of Jews only 3 persons signed with marks.

Signing with marks in Australasian colonies.

399. 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 1877 to 1881 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, 1877 TO 1881.

Colony.	Year.	Number Signing with Marks to every 100 Married.		
		Men.	Women.	Mean.
1. Victoria ...	1877	5·04	6·02	5·53
	1878	4·12	5·30	4·71
	1879	3·81	5·60	4·71
	1880	4·18	4·09	4·13
	1881	2·90	4·16	3·53
2. New Zealand ...	1877	3·95	8·54	6·25
	1878	2·96	6·85	4·90
	1879	3·31	6·41	4·86
	1880	2·77	5·38	4·08
	1881	3·20	6·79	4·99
3. South Australia ...	1877	6·14	7·89	7·01
	1878	5·09	7·00	6·04
	1879	6·48	6·93	6·70
	1880	5·19	6·81	6·00
	1881	4·37	6·85	5·61
4. New South Wales ...	1877	8·45	11·07	9·76
	1878	7·71	8·52	8·11
	1879	6·86	8·31	7·58
	1880	6·07	7·27	6·67
	1881	5·52	8·35	6·93
5. Queensland ...	1877	7·78	14·15	10·97
	1878	6·23	13·30	9·76
	1879	6·86	11·97	9·41
	1880	5·82	12·09	8·95
	1881	4·93	9·92	7·42

Victoria the least illiterate colony.

400. By these figures it appears that the proportion of both males and females able to sign in writing is greater in this than in any other colony. The colonies, generally, show improvement from year to year, but the reverse was the case in New Zealand in the last of the years

named. As regards Victoria, there is every reason to expect that as the children educated under the compulsory system established in 1873 arrive at marriageable ages it will become a rare occurrence for a marriage to be attested otherwise than in writing.

401. No returns are at hand showing the manner in which the marriage registers are signed in British colonies other than those named. The following, however, taken from the reports of the Registrars-General, are the proportions using marks in England, Scotland, and Ireland:—

Signing with marks in the United Kingdom.

SIGNING WITH MARKS IN THE UNITED KINGDOM.

Country.	Year.	Number Signing with Marks to every 100 Married.		
		Men.	Women.	Mean.
England and Wales ...	1880	14·0	18·6	16·3
Scotland	1875	8·6	16·9	12·7
Ireland	1879	28·0	32·9	30·4

402. From the figures it would seem that Scotland is before and Ireland much behind England in point of adult education, but that all are very far behind even the most backward of the Australasian colonies. In England, in 1880, the greatest proficiency amongst men was attained in the Westmoreland district, where the percentage signing with marks was only 5·6 ; but even this shows more illiteracy amongst males than was found to exist in the same year in any of the colonies named except New South Wales and Queensland. As regards females, the highest state of proficiency prevailed in the Rutland district, where the percentage signing with marks was 4·7, which, although lower than in the other Australasian colonies, was not so low as the proportion prevailing in Victoria.

Illiteracy in United Kingdom and colonies compared.

403. Of other countries, the only one respecting which similar particulars are at hand is France, where, according to the returns of 1877, illiteracy—by the marriage register test—is somewhat more prevalent amongst males, and very much more so amongst females, than in England and Wales, but in both cases is considerably lower than in Ireland. In France, the proportions signing with marks in every 100 marriages during 1877 were — males, 18·52 ; females, 29·60 ; mean, 24·06.

Signing with marks in France.

Ages of
bride-
grooms
and brides
in combina-
tion.

404. The age of both bride and bridegroom was specified in the case of all but 52 of the 6,309 marriages which took place in 1882.* In 39 of the defective entries the age of neither party was given; in 3 cases the age of the husband was stated, not that of the wife; and in 10 instances the age of the wife was given, 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, 1882.

Ages of Bridegrooms.	Ages of Brides.																Total Bridegrooms.		
	14 to 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.	Unspecified.
17 to 18 years...	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	1
18 to 19 „	2	2	2	1	1	1	...	...	...	...	...	...	...	...	...	...	9
19 to 20 „	3	8	7	8	7	3	...	...	...	...	...	...	...	...	...	...	36
20 to 21 „	3	6	22	21	10	36	5	...	...	...	...	...	...	...	...	...	103
21 to 25 „	...	7	12	88	164	248	230	1144	205	17	4	1	2	...	...	...	...	1	2123
25 to 30 „	1	4	10	41	76	136	190	1038	503	54	17	8	2	...	...	...	...	1	2081
30 to 35 „	1	...	4	10	22	31	35	299	226	79	31	13	3	1	...	...	...	...	755
35 to 40 „	...	1	1	5	13	19	20	120	127	73	29	15	3	1	...	...	...	1	428
40 to 45 „	1	1	4	3	9	64	53	43	49	21	10	1	...	...	...	...	259
45 to 50 „	...	1	...	...	...	4	4	16	37	35	35	30	20	3	...	...	...	...	185
50 to 55 „	1	1	14	17	18	15	27	18	13	5	2	...	...	131
55 to 60 „	1	...	...	2	7	3	6	14	11	11	10	6	...	...	71
60 to 65 „	1	...	1	1	3	8	8	7	6	3	6	1	...	45
65 to 70 „	3	3	1	...	4	3	5	3	2	...	...	24
70 to 75 „	2	...	...	1	1	1	2	...	1	...	...	8
75 to 80 „	1	...	...	...	...	...	1
Unspecified	1	1	...	5	3	...	...	...	...	...	...	...	...	...	...	39	49
Total Brides	2	13	37	163	311	478	510	2743	1184	326	195	142	81	43	21	17	1	42	6309

NOTE.—This table may be read thus :—A man between 45 and 50 married a girl between 15 and 16; two women between 45 and 50 married men between 21 and 25, &c.

Relative
ages of
husband
and wife.

405. An examination of the 6,297 cases in which the ages of both parties are specified will show that in 1,846 instances, or 30 per cent. of the whole, both parties to the marriage were about the same age; in 459 instances, or 7 per cent. of the whole, the wife was older than the husband; and in 3,952 instances, or 63 per cent. of the whole, the husband was older than the wife.

Age at which
marriage is
contracted.

406. The next table has been designed for the purpose of showing the age at which males and females generally marry, the information

* There is no reason to suppose that in Victoria the age of either party to a marriage is often wrongly stated, and the cases in which the age is not specified are but few. It may, however, not be amiss to quote the following from the 41st report of the Registrar-General of England, page xv:—“I should be glad if the clergy, at the time of registering the marriage, would state that it is of considerable importance, not only to the parties themselves that their precise ages should be returned either for tracing pedigree or for proof of personal identification in establishing title to property—but that such particulars would also enhance the values of these national records for purposes of statistical investigation.”

being given for the year 1882 and for the decennial period 1871 to 1880 :—

PROPORTION OF MALES AND FEMALES MARRYING AT DIFFERENT AGES, 1871-80 AND 1882.

Ages.	Bridegrooms.			Brides.		
	Numbers, 1882.	Proportions per 1,000.		Numbers, 1882.	Proportions per 1,000	
		Year 1882.	Ten Years, 1871-80.		Year 1882.	Ten Years, 1871-80.
Under 15 years ...	...	...	...	2	.32	.48
15 to 16 „ ...	...	...	...	13	2.07	2.71
16 to 17 „ ...	...	...	.02	37	5.90	12.74
17 to 18 „ ...	1	.16	.46	163	26.01	36.74
18 to 19 „ ...	9	1.44	1.57	311	49.63	62.69
19 to 20 „ ...	36	5.75	6.33	478	76.27	80.93
20 to 21 „ ...	103	16.45	16.79	510	81.38	86.94
21 to 25 „ ...	2,123	339.14	281.06	2,743	437.69	375.69
25 to 30 „ ...	2,081	332.43	295.83	1,184	188.93	174.64
30 to 35 „ ...	755	120.61	165.38	326	52.02	69.13
35 to 40 „ ...	428	68.37	97.22	195	31.12	44.26
40 to 45 „ ...	259	41.37	59.54	142	22.66	26.44
45 to 50 „ ...	185	29.55	37.58	81	12.92	14.99
50 to 55 „ ...	131	20.93	20.49	43	6.86	6.79
55 to 60 „ ...	71	11.34	9.92	21	3.35	3.03
60 to 65 „ ...	45	7.19	4.96	17	2.71	1.16
65 to 70 „ ...	24	3.83	1.85	1	.16	.40
70 and upwards ...	9	1.44	1.00	...	...	.24
Total ...	6,260*	1,000.00	1,000.00	6,267*	1,000.00	1,000.00

407. The large proportion of both sexes marrying at between 21 and 30 years of age is very marked. Owing, no doubt, to the relatively larger numbers in the population, the proportions at these ages in 1882 are much higher than those relating to the decennial period. Frequency of marriage at 21 to 30.

408. Boys not under 14 and girls not under 12 years of age may, with the consent of their parents or guardians, legally marry in Victoria; but, as a matter of fact, marriages are seldom contracted at such early ages. One of the males, however, who married in 1882 had not reached his eighteenth year, and 15 of the females had not reached their sixteenth; as many as 149 of the males, or 1 in every 42, and no fewer than 1,514 of the females, or not quite a fourth, had not attained the full age of 21 years. These proportions fluctuate from year to year. Marriages of minors.

409. From the experience of Victoria in the last ten years, it would appear that, in proportion to the total numbers marrying, more females Victoria and England.

* The bridegrooms and brides of unspecified ages being omitted, these numbers are less than those in the last table, the bridegrooms by 49 and the brides by 42. The reason of the bridegrooms being fewer than the brides is that the age was not stated in the case of seven more of the former than of the latter.

but fewer males marry under age in this colony than in England and Wales. 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 1882.	Ten Years: 1871 to 1880.	Ten Years: 1871 to 1880.
Bridegrooms ...	2·38	2·52	7·95
Brides ...	24·16	28·32	21·96
Mean ...	13·27	15·42	14·96

Marriage
rate of
minors.

410. As the proportion of minors at marriageable ages existing in the population may vary greatly in different countries, and in the same country at different times, it will readily be understood that a comparison of the marriages of minors with the total number of marriages does not afford an infallible test of the tendency to marry under age, to determine which accurately the number of minors marrying should be compared with the number of marriageable minors in the population. This has been done for the last two census periods, the mean number of minors who married in the census year and in the year immediately preceding and following it being compared with the marriageable minors returned at the census, and the result is given in the following table:—

MARRIAGES OF MINORS, 1871 AND 1881.

Census Years.	Number of Marriageable Minors returned at Census.		Mean Annual Number of Minors who Married.*		Proportion of Minors who Married to every 1,000 Marriageable Minors Living.	
	Males Aged 17 to 21.	Females Aged 15 to 21.	Males.	Females.	Males.	Females.
1871 ...	19,816	30,306	85	1,305	4·29	43·05
1881 ...	37,675	57,863	151	1,420	4·01	24·54

Decreasing
tendency to
marry under
age.

411. According to the table, the proportion of both males and females marrying under age has become reduced during the interval between the censuses. The reduction in the proportion of male minors marrying is but slight, but that of the female minors is very striking, and is no doubt attributable to the area of selection having been widened by the increase which has taken place in the number of marriageable females at the older ages.

* Mean of the years 1870 to 1872 and of the years 1880 to 1882.

412. By means of the returns of the recent census, it has been possible to analyze still further the marriages of minors, and to show the proportion of the males and females who contract them at each year of age to the total number of males and females living at the same age. Similar results for England and Wales are available,* and are contrasted in the following table with the results relating to Victoria :—

Ages of minors marrying in Victoria and England.

AGES OF MINORS † MARRYING IN VICTORIA AND ENGLAND AND WALES.

Age last Birthday.	Victoria.				Proportion of Marriages per 1,000 Marriageable Minors			
	Marriageable Minors at Census of 1881.		Minors who Married. (Mean of Three Years, 1880-82.)		Males.		Females.	
	Males.	Females.	Males.	Females.	Victoria. (Mean of 1880 to 1882.)	England and Wales. (Mean of 1870 to 1872)	Victoria. (Mean of 1880 to 1882.)	England and Wales. (Mean of 1870 to 1872.)
15	...	10,076	...	11	...	...	1.09	.18
16	...	10,209	...	39	...	.02	3.82	1.53
17	9,718	10,100	3	146	.31	.41	14.45	9.33
18	9,763	9,966	10	282	1.02	4.04	28.29	36.39
19	9,580	9,352	36	443	3.76	20.34	47.37	72.46
20	8,614	8,160	102	499	11.84	52.98	61.15	105.84
Total...	37,675	57,863	151	1,420	4.01	18.32	24.54	34.08

413. It appears that in the case of both males and females the tendency to marry under age is much greater in England and Wales than in Victoria. This, as regards females, is the reverse of the result obtained by comparing the marriages of those under 21 with the total number married. ‡ The English proportions relating to males are higher at each age than those of Victoria, but in the first three years of minority the Victorian proportions relating to females are higher than those of England. This, however, is much more than made up in the three succeeding years.

Marriage rate of minors lower in Victoria than England.

414. The returns of the Australasian censuses of 1881 give information respecting the conjugal condition of the people living within the borders of the various colonies. These will here be grouped so as to enable the results to be easily compared.

Conjugal condition in Australasian colonies.

415. 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 Australasian colonies.

* See 35th Annual Report of the Registrar-General of England, page xii.
 † In this table, and that following paragraph 410, marriageable minors have been considered to be males from 17 to 21, females 15 to 21. In England there were 4 marriages of males at 16, but there were none at that age in Victoria.
 ‡ See table following paragraph 409 ante.

HUSBANDS AND WIVES IN EACH AUSTRALASIAN COLONY, 1881.

Colony.	Husbands.			Wives.		
	Under 21 Years.	Over 21 Years.	Total.	Under 21 Years.	Over 21 Years.	Total.
Victoria ...	283	124,371	124,654	3,006	123,036	126,042
New South Wales ...	408	109,810	110,218	4,040	103,793	107,833
Queensland ...	118	30,004	30,122	1,285	28,839	30,124
South Australia ...	95	43,860	43,955	1,344	42,339	43,683
Western Australia ...	15	4,260	4,275	207	3,769	3,976
Total ...	919	312,305	313,224	9,882	301,776	311,658
Tasmania* ...	73	17,671	17,744	607	16,527	17,134
New Zealand... ..	97	73,234	73,331	2,374	70,433	72,807
Grand Total ...	1,089	403,210	404,299	12,863	388,736	401,599

Proportion
of wives to
husbands.

416. Victoria is the only one of the Australasian colonies in which wives exceeded husbands. In Queensland the numbers were equal, but 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.

1. Victoria	10,111	5. New South Wales ...	9,773
2. Queensland	10,000	6. Tasmania	9,656
3. South Australia	9,938	7. Western Australia ...	9,301
4. New Zealand	9,928		

Proportion
of husbands
under and
over 21.

417. According to the ages of those living in the marriage state, the tendency of males to marry under age would appear to be greatest in Tasmania, and least in New Zealand, Victoria standing above the latter colony and South Australia. The following is the order in which the colonies stand 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.

	Under 21 Years.	Over 21 Years.
1. Tasmania	41	9,959
2. Queensland	39	9,961
3. New South Wales	37	9,963
4. Western Australia... ..	35	9,965
5. Victoria	23	9,977
6. South Australia	22	9,978
7. New Zealand	13	9,987

* In this line the numbers under and over 21 have been partly estimated.

Proportion of
births to
population
and to mar-
ried women.

422. Birth rates, based upon a comparison of the number of events with the total population, are, like marriage rates calculated upon a similar basis, apt to mislead, unless the population is in a normal condition. It must be quite evident that, if there is not a sufficient proportion of married women at the fruitful or child-bearing ages in a community, the birth rate is not likely to be high, but that an excess of such women would probably cause a high birth rate. This will be made apparent by the following table, which shows the birth rate, calculated upon the total population and upon the number of married women at the child-bearing period of life, in the last two census years :—

PROPORTION OF BIRTHS TO POPULATION AND TO MARRIED
WOMEN.

Year of Census.	Enumerated Population.	Married Women under 45 Years of Age.	Legitimate Births.*	Proportion of Legitimate Births.	
				Per 1,000 of the Population.	Per 1,000 Married Women under 45 Years of Age.
1871	731,528	88,561	26,805	36·64	302·67
1881	862,346	84,831	25,675	29·77	302·66

Reason for
decline of
birth rate.

423. It will be noticed that the married women at reproductive ages were fewer by 3,730 in 1881 than in 1871, that the proportion of births to such women, viz., 302 $\frac{2}{3}$ per 1,000, was exactly the same in both years, but that the proportion of births to the total population was considerably less in 1881 than in 1871. Thus, while the birth rate, based upon a comparison of the births with the married women, remained perfectly steady, that rate based upon a comparison of the births with the population showed a falling-off of nearly 7 per 1,000. The reduction in the birth rate, calculated in the ordinary way, which has been noticed for years past, is therefore conclusively shown to be due to a deficiency in the community of married women at the fruitful period of life.

Birth rates
in Austral-
asian
colonies.

424. Returns of the births in all the Australasian colonies are available to the end of 1881, and from these and the mean populations of the respective colonies during each year the birth rates have been calculated in the office of the Government Statist, Melbourne. The following table gives the birth rates of the different colonies for each year from 1865 to 1881, or as many years between those periods as the figures are available for :—

* In both cases, 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 1881.*

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	42.99	43.65	43.90	...	32.56	41.12
1866	39.76	40.22	44.86	42.38	...	29.15	42.89
1867	39.75	41.67	45.66	41.87	...	30.34	42.18
1868	41.08	40.43	43.03	41.51	...	30.03	42.14
1869	37.89	40.41	42.83	39.03	...	28.27	41.90
1870	38.07	39.76	43.51	38.48	...	30.18	42.32
1871	37.15	39.42	43.25	38.34	...	30.16	40.64
1872	36.33	38.27	40.70	37.60	32.42	29.44	39.50
1873	36.71	39.01	40.82	36.42	31.43	29.43	39.00
1874	34.46	38.75	41.11	38.22	33.71	29.72	40.27
1875	33.94	37.83	38.90	35.70	28.72	29.88	40.23
1876	33.61	37.69	37.48	37.71	33.98	30.11	41.73
1877	32.17	36.92	36.75	37.36	33.07	30.21	41.28
1878	32.36	37.36	35.77	38.23	31.11	32.27	42.14
1879	32.18	37.72	36.74	38.96	34.38	32.05	40.32
1880	30.75	39.04	36.92	38.94	32.35	32.91	40.78
1881	31.24	38.00	37.19	38.66	33.67	33.40	37.95
Means ...	35.87	39.15	40.54	39.02	32.48	30.59	40.96

425. The birth rates of almost all the colonies are low as compared with those quoted for the early years named in the table. In Victoria they were never so low as in the last two of the years named, which has already been accounted for by the falling-off shown to have taken place in the number of mothers. It is probable that the birth rate in Tasmania, which has revived since 1873, and was higher in 1881 than in any previous year, was for a time affected by a similar cause. Diminished birth rate in all the colonies.

426. 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 seventeen years. It will be observed that Victoria is absolutely last on the list for 1881, and stands fifth in the seventeen-year series:— Order of colonies in respect to birth rates.

ORDER OF AUSTRALASIAN COLONIES IN REFERENCE TO BIRTH RATES.

Order in 1881.	Order in a Series of Years.
1. New South Wales.	1. New Zealand.
2. New Zealand.	2. Queensland.
3. Queensland.	3. New South Wales.
4. South Australia.	4. South Australia.
5. Western Australia.	5. Victoria.
6. Tasmania.	6. Western Australia.
7. Victoria.	7. Tasmania.

427. In the Australasian colonies, taken as a whole, the birth rate had from 1873 to 1877 shown a marked decline. There has, Birth rate in Australia and Aus-

* For the number of births in the various colonies during the ten years ended with 1882, see General Summary of Australasian Statistics (third folding sheet) ante.

however, been a slight improvement since 1877, as will be seen by the following figures :—

BIRTH RATE IN AUSTRALIA AND AUSTRALASIA, 1873 TO 1881.

Year.	Number of Births per 1,000 of Mean Populations.	
	Continent of Australia.	Australia with Tasmania and New Zealand.
1873	37·36	37·19
1874	36·46	36·70
1875	35·29	35·82
1876	35·20	36·04
1877	34·15	35·16
1878	34·31	35·51
1879	34·55	35·42
1880	35·33	36·20
1881	35·22	35·63
Means	35·32	35·96

Birth rates in British possessions.

428. The birth rates in certain British colonies outside Australasia, including all those for which the information is available, are shown in the following table. 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.
Ceylon	1867-76	27·7
Straits Settlements	1873-7	9·3*
Hong Kong	1875	13·8
Mauritius	1876-7	36·5
Seychelles	1875-7	37·4
Bermudas	1871-5	37·8
British Guiana	1871-9	35·5
West Indies—		
Bahamas	1874-5	39·0
Jamaica	1878-80	34·9
St. Lucia	1869-79	46·4†
St. Vincent	1870-9	46·0
Barbadoes	1872-8	43·2
Grenada	1871-5	45·2
Antigua	1875-6	40·4
Montserrat	1874-5	48·8
Dominica	1871-6	31·0
Trinidad	1880	34·9

Birth rates in European countries.

429. A statement of the birth rates in British and certain Foreign countries for each of the thirteen years ended with 1880, or such of those years as the information is available for, is given in the following table. The figures have been taken from the reports of the Registrar-General of England :—

* Registrations incomplete.

† Including still births.

BIRTH RATES IN EUROPEAN COUNTRIES, 1868 TO 1880.

Year.	Number of Births per 1,000 of Mean Populations.													
	England and Wales.	Scotland.	Ireland.*	Denmark.	Sweden.	Austria.	Hungary	German Empire.†	Belgium.	The Netherlands.	France.	Switzerland.	Spain.	Italy.
1868	35.8	35.3	26.7	31.2	27.5	39.3	42.4	36.8	31.5	34.7	25.7	30.2	34.4	35.3
1869	34.8	34.3	26.7	29.5	28.2	40.2	42.6	37.7	31.6	34.5	25.7	30.9	35.7	37.0
1870	35.2	34.6	27.7	30.5	28.3	40.5	41.7	38.1	32.3	35.9	25.5	31.3	35.4	36.7
1871	35.0	34.5	28.1	30.2	30.4	39.9	43.0	33.8	31.0	35.3	22.6	30.5	...	37.0
1872	35.8	35.0	27.8	30.3	30.0	39.9	41.0	39.4	32.3	35.8	26.8	31.3	...	37.8
1873	35.5	34.9	27.1	30.7	30.8	40.3	42.2	39.7	32.5	36.0	26.1	31.2	...	36.3
1874	36.2	35.7	26.6	30.8	30.9	40.1	42.7	40.1	32.6	36.1	26.2	31.9	...	34.9
1875	35.5	35.4	26.1	31.8	31.0	40.4	45.2	40.6	32.5	36.3	26.0	33.5	...	37.7
1876	36.6	35.9	26.4	32.5	30.7	40.6	45.6	40.8	33.2	36.8	26.3	32.9	...	39.0
1877	36.2	35.6	26.2	31.7	30.9	39.1	43.3	40.3	32.3	36.3	25.6	32.1	...	36.7
1878	35.9	35.3	25.1	31.6	29.7	38.9	42.8	38.8	31.5	35.8	25.2	31.5	...	35.9
1879	35.0	34.7	25.2	31.9	30.5	39.6	45.3	38.8	31.5	37.4	...	30.5	...	37.1
1880	34.2	34.0	24.0	31.8	29.4	37.3	42.9	37.7	31.3	35.6	...	29.6	...	33.6
Means	35.5	35.0	26.4	31.1	29.9	39.7	43.1	39.6	32.0	35.9	25.6	31.3	35.1	36.5

430. It is reasonable to suppose that the averages in this table will follow a similar order to those in the table of marriage rates,‡ and this is found to be the case, except in respect to three countries, viz., France, Spain, and Italy. The discrepancy may be only apparent in the case of Spain, as the average is for no more than three years, and in Italy it is satisfactorily explained by the circumstance that many marriages have not been registered ;§ but as regards France no such explanation can be given, and the fact remains that, whilst it has a comparatively high marriage rate, its birth rate is lower than that of any other European country, and is but little above its own death rate.|| It will be remarked that in 1880 the birth rate in most of the countries named was unusually low ; thus in England, Ireland, Scotland, Austria, Germany, Switzerland, and Italy, it was lower than in any previous year shown, in Belgium it was the lowest with one exception, and in Sweden and Holland with three exceptions.

Discrepancies between birth and marriage rates in European countries.

431. The birth rate of Victoria, taken over a series of years, approximates to that in Holland, is lower than that in the Central European States and Italy, but higher than that in any of the other countries

Australasian and European birth rates compared.

* It is explained that the low birth rate in Ireland is partly attributable to the small proportion of females in the population at child-bearing ages. (See 15th Detailed Report of the Registrar-General of Ireland, pages 12 and 29.) There is also no doubt, however, that the figures understate the truth, the registration being admittedly defective.

† The figures for the years from 1868 to 1871 refer to Prussia only.

‡ See table following paragraph 372 ante.

§ See footnote (§) to table following paragraph 372 ante.

|| An explanation of the low birth rate in France is given, as follows, by the Registrar-General of England, in his 41st Report, page xlvi :—“The low birth rate in France cannot be attributed to a small proportional number of women at the child-bearing ages, for the proportion is higher in France than in any other country of Europe ; indeed, it is generally recognized to be chiefly, though indirectly, due to the subdivision of land among the peasant proprietors. The better class of the labouring population aspire to become proprietors of small holdings : by thrift and industry they accumulate capital for this purpose, and avoid by their social philosophy the division of their property amongst a large family at their decease.”

named in the last table. In four of the Australasian colonies—viz., New Zealand, Queensland, New South Wales, and South Australia—the rate is about equal to that in Central Europe (excepting Hungary)—the rate in the two former slightly exceeding, and in the two latter nearly equalling, that in Germany or Austria. In Western Australia the rate is about the same as in Belgium, whilst in Tasmania it is lower than in any of the countries named, except Sweden, Ireland, and France.

Birth rate
in United
Kingdom.

432. According to the reports of the Registrar-General of England, the birth rate of the United Kingdom was lower in 1880 than in any year since 1870, as will be seen by the following figures :—

BIRTH RATE IN THE UNITED KINGDOM, 1871 TO 1880.

Births per 1,000 of the Population.			Births per 1,000 of the Population.		
1871	...	35·0	1877	...	34·5
1872	...	34·4	1878	...	34·1
1873	...	34·1	1879	...	33·5
1874	...	34·5	1880	...	32·7
1875	...	34·0		Mean	34·2
1876	...	34·9			

Birth rates
in town and
country,
1882.

433. The following table shows the births and birth rates in the metropolis, the extra-metropolitan towns, and the country districts of Victoria during 1882 ; also the estimated population of such divisions about the middle of that year :—

BIRTHS IN URBAN AND COUNTRY DISTRICTS, 1882.

Districts.	Estimated Mean Population.	Births, 1882.	
		Total Number.	Number per 1,000 of the Population.
Melbourne and suburbs (Greater Melbourne)	291,464	9,576	32·85
Extra-Metropolitan Towns	198,839	5,983	30·09
Country districts ...	400,167	11,188	27·96
Total ...	890,470	26,747	30·04

Birth rates
in town and
country,
1873 to 1882.

434. The next table shows the number of births per 1,000 of the population of the same three divisions of the colony during each of the last ten years :—

BIRTH RATES IN URBAN AND COUNTRY DISTRICTS, 1873 TO 1882.

Year.	Number of Births per 1,000 of the Population.			
	Greater Melbourne.	Extra-Metropolitan Towns.	Country Districts.	Total of Victoria.
1873	34·36	40·18	36·32	36·71
1874	32·98	39·81	32·46	34·46
1875	33·63	38·63	31·54	33·94
1876	33·20	37·80	31·61	33·61
1877	33·09	34·51	30·30	32·17
1878	33·67	35·42	29·89	32·36
1879	33·32	35·65	29·63	32·18
1880	31·19	34·21	28·72	30·75
1881	32·42	34·84	28·66	31·24
1882	32·85	30·09	27·96	30·04

435. It will be noticed that in the earlier years of the period to which the table refers the birth rate of the country districts was about equal to that of the metropolis, whilst the birth rate of the extra-metropolitan towns was very much higher than either. Since 1874, however, the metropolitan rate has been much above that of the country districts, but until 1882 was still below that of the extra-metropolitan towns. In that year, however, a serious falling-off in the birth rate occurred in the extra-metropolitan towns and in the country districts, especially the former, whilst the birth rate in the metropolis rose slightly and was much above that in either of the other districts. Results compared.

436. The mean population, the number of births, and the birth rate during 1882; also the birth rate during the ten years, 1871 to 1880, in the different municipalities, &c., forming the component parts of the district of Greater Melbourne, are shown in the following table:— Birth rates in metropolitan sub-districts.

BIRTH RATES IN GREATER MELBOURNE.

Sub-districts.	Year 1882.			Ten Years : 1871 to 1880.
	Estimated Mean Population.	Births.		Annual Births per 1,000 of Population.
		Total Number.	Number per 1,000 of the Population.	
Melbourne City	64,559	1,678	25·99	27·57
Hotham Town	17,801	640	35·95	34·03
Fitzroy City	23,200	816	35·17	34·57
Collingwood City	24,500	886	36·16	36·28
Richmond City	23,436	814	34·73	35·96
Brunswick Borough	6,027	270	44·80	38·66
Prahran City	25,000	704	28·16	32·38
South Melbourne City*	26,150	873	33·38	32·02
Sandridge Borough	9,029	375	41·53	38·99
St. Kilda Borough	12,411	321	25·86	29·03
Brighton Borough	4,800	156	32·50	31·14
Essendon Borough and Flemington and Kensington Borough }	5,473	167	30·51	37·72
Hawthorn Borough	6,382	169	26·48	34·13
Kew Borough	4,292	102	23·76	26·95
Footscray Borough	5,954	258	43·33	45·62
Williamstown Borough	9,200	302	32·83	38·88
Remainder of district	18,068	526	29·11	25·83
<i>Hospitals, asylums, &c.</i> †	3,704 ‡	519	...	...
Shipping in Hobson's Bay and river	1,478 ‡	...	...	·05
Total	291,464	9,576	32·85	33·50

* Formerly Emerald Hill Town. Proclaimed a city and name changed on the 24th September, 1883.
 † The population given is that of all the institutions, but the Lying-in Hospital is the only one in which births occurred.
 ‡ Census figures.

Birth rates
in sub-dis-
tricts, 1871
to 1880.

437. It will be observed that during the ten years ended with 1880 the births in one municipality only, viz., Footscray, were above 40 per 1,000 of the population ; that in six municipalities, viz., Williamstown, Essendon and Flemington, Sandridge, Brunswick, Collingwood, and Richmond, they were between 35 and 40 per 1,000 ; in six municipalities, viz., Fitzroy, Hotham, Prahran, South Melbourne, Brighton, and Hawthorn, they were between 30 and 35 per 1,000 ; and that in three municipalities, viz., St. Kilda, Melbourne, and Kew, they were below 30 per 1,000. The lowest rate was in "Remainder of District," viz., not quite 26 per 1,000, which was even lower than in the rural districts of the colony.*

Birth rates
in sub-dis-
tricts, 1882.

438. During 1882, the birth rates in Hotham, Fitzroy, Brunswick, South Melbourne, Sandridge, Brighton, and "Remainder of District" were higher, but those in all the other sub-districts were lower, than they were in the previous decenniad. The sub-district with the highest birth rate was Brunswick, and next Footscray, which has also the highest average rate ; those with the lowest rates were Kew, St. Kilda, Melbourne City, Hawthorn, and Prahran, in all of which the rates were even lower than in the "Remainder of District."

Birth rate in
London.

439. The birth rate in London, according to the average of the ten years 1870-79, was 35·4, which was only slightly higher than that of England and Wales during the same period. It was thus about 2 per 1,000 above the average in Melbourne and suburbs.

Birth rates
in British
towns.

440. The latest Report of the Registrar-General of England † contains a statement of the birth rate in twenty-three British towns, in which the rate per 1,000 persons living ranges from 30·3 in Brighton to 41·5 in Salford. In only five of these towns, viz., Brighton, Plymouth, Glasgow, Dublin, and Edinburgh, was the birth rate lower than in Greater Melbourne, as will be seen by the following figures :—

BIRTH RATES IN TWENTY-THREE BRITISH TOWNS, 1880.

	Births per 1,000 of Population.		Births per 1,000 of Population.
Salford ...	41·5	Nottingham ...	35·3
Leicester ...	40·4	Bradford ...	35·3
Birmingham ...	38·4	Bristol ...	35·3
Sheffield ...	38·3	London ...	35·2
Liverpool ...	38·1	Portsmouth ...	34·8
Manchester ...	37·5	Norwich ...	33·9
Wolverhampton ...	37·4	Edinburgh ...	32·8
Hull ...	37·4	Dublin ...	32·1
Sunderland ...	37·4	Glasgow ...	31·9
Leeds ...	37·3	Plymouth ...	31·6
Newcastle-on-Tyne ...	37·1	Brighton ...	30·3
Oldham ...	35·5		

* See table following paragraph 434 *ante*.

† See 43rd Annual Report of Registrar-General, page. cxi : Eyre and Spottiswoode, London, 1882.

441. The same report* contains a statement of the birth rate in twenty-one foreign towns (including two in British India), in which the rate ranges from 22·9 in Geneva to 42·9 in Alexandria. In six of these towns, viz., Geneva, Venice, Bombay, Paris, Turin, and Brussels, the birth rate was lower than in Greater Melbourne, but in all the rest it was higher.

BIRTH RATES IN TWENTY-ONE FOREIGN TOWNS, 1880.

	Births per 1,000 of Population.		Births per 1,000 of Population.
Alexandria ...	42·9	Breslau ...	36·7
Buda-Pesth ...	40·6	Amsterdam ...	36·6
Hamburg (State) ...	39·5	Dresden ...	34·5
Madras ...	39·4	Christiania ...	33·7
The Hague ...	39·3	Brussels ...	31·2
Berlin ...	39·2	Turin ...	29·8
Rotterdam ...	38·3	Paris ...	28·7
Vienna ...	38·3	Bombay ...	26·6
Munich ...	38·2	Venice ...	23·9
Rome ...	37·3	Geneva ...	22·9
Copenhagen ...	36·8		

442. The births of males in Victoria during 1882 numbered 13,612, those of females 13,135. These numbers furnish a proportion of 103·63 boys to 100 girls. In the previous eleven years 151,178 births of males and 144,677 births of females were registered, giving a proportion of 104·49 boys to 100 girls.

443. In every country in which births are registered, it is found that more males are born than females. This was the case in all the Australasian colonies during the period of nine years ended with 1881, although not in every one of those years so far as Western Australia and Tasmania are concerned. The following are the numbers of males per 100 females born in the respective colonies during each year of the period referred to :—

PROPORTION OF MALE TO FEMALE BIRTHS IN AUSTRALASIAN COLONIES, 1873 TO 1881.

Year.	Number of Boys to 100 Girls Born.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1873 ...	102·65	104·38	106·13	102·77	109·04	98·44	103·48
1874 ...	103·94	104·31	105·74	103·44	103·25	107·02	106·83
1875 ...	104·95	102·08	104·01	103·85	98·95	109·51	107·80
1876 ...	105·76	102·47	105·26	101·08	106·76	111·48	106·01
1877 ...	104·19	106·34	106·78	102·91	101·32	105·04	104·59
1878 ...	107·19	106·83	103·89	107·14	101·15	105·52	101·57
1879 ...	104·69	105·71	103·36	102·53	117·59	99·11	105·93
1880 ...	104·44	104·99	103·63	110·98	92·37	101·56	104·71
1881 ...	104·99	105·59	106·64	106·48	108·07	107·41	104·90

* See 43rd Report, page cxiv.

Order of colonies in respect to sexes of those born.

444. In the Australasian colonies, taken as a whole, the proportion during the nine years was 104·79 male to 100 female infants. In the different colonies, the proportions ranged from 105·09 per 100 females in New Zealand to 104·28 per 100 females in Western 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, 1873 TO 1881.

	Boys to 100 Girls.		Boys to 100 Girls.
New Zealand	... 105·09	South Australia	... 104·58
Queensland	... 105·05	Western Australia	... 104·28
Tasmania	... 105·01		
Victoria	... 104·76	Mean	... 104·79
New South Wales	... 104·74		

Births of males and females in British and foreign countries.

445. In England and Wales, during the ten years ended with 1879, 103·9 boys were born to 100 girls, and the Registrar-General of England mentions it as "a curious fact, which has as yet received no certain explanation," that the proportion of male to female births is not only lower than in any other European country, but has been diminishing steadily. In support of which proposition he publishes the following figures* :—

PROPORTION OF MALE TO FEMALE BIRTHS IN CERTAIN COUNTRIES, 1870 TO 1879.

	Boys to 100 Girls.		Boys to 100 Girls.
Italy	... 107·1	Holland	... 106·1
Austria	... 106·8	Belgium	... 105·9
France	... 106·4	Scotland	... 105·7
Switzerland	... 106·3	Ireland	... 105·6
German Empire	... 106·2	England and Wales	... 103·9

PROPORTION OF MALE TO FEMALE BIRTHS IN ENGLAND AND WALES AT DIFFERENT PERIODS.

	Boys to 100 Girls.		Boys to 100 Girls.
1856 to 1860...	... 104·6	1871 to 1875...	... 103·9
1861 to 1865...	... 104·3	1876 to 1880...	... 103·8
1866 to 1870...	... 104·1		

Australasian and other countries compared.

446. It will be observed that the proportion of male to female births in all the Australasian colonies is higher than the proportion in England and Wales, but below that in any of the other countries named.

Twins and triplets.

447. In 1882, 215 twin births and 2 triple births were registered. In the ten years ended with 1880, 2,426 cases of twins and 21 cases of triplets were recorded, the total number of births in the same period having been 268,710. There were thus 266,242 confinements in the ten years, and it follows that 1 mother in every 111 gave birth to twins, and 1 mother in every 12,796 was delivered of three children at a birth.

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

448. The illegitimate children born in 1882 numbered 1,271, or 1 in every 21 births registered. The illegitimate births in 1881 were set down as 1 in 20 ; in 1880 and 1879 as 1 in 21 ; in 1878 as 1 in 24 ; in 1877 as 1 in 26 ; in 1876 as 1 in 27 ; and in 1875 as 1 in 34. In the ten years, 1871–80, out of 268,710 infants born, 9,868 were traced as having been born out of wedlock, which numbers furnish a proportion of 1 illegitimate child to every 27 births.*

Illegitimate births.

449. It was shown in a previous table† that the legitimate births registered in each of the last two census years were in the proportion of 302 $\frac{2}{3}$ to every 1,000 married women living at the reproductive period of life. It follows, therefore, from the number of legitimate births registered in 1882, that, approximately, 84,172 married women at the fruitful or child-bearing age were living in the colony during that year. Assuming that the illegitimate births bear the same proportion to unmarried women, it also follows, from the number of such births in 1882, that, exclusive of public prostitutes (who, as they rarely have children, are omitted from the computation), at least 4,200 single women at the fruitful or child-bearing ages were living in concubinage. The estimated total number of unmarried women and widows between 15 and 45 years of age in 1882 was 107,433. It therefore follows that 1 out of every 25 of these was living immorally.

Women living in concubinage.

450. 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 the last ten years :—

Illegitimacy and concubinage, 1873 to 1882.

ILLEGITIMACY AND CONCUBINAGE, 1873 TO 1882.

Year.	Illegitimate Births.		Women Living in Concubinage (exclusive of Public Prostitutes).	
	Total Number.	Percentage of Total Births.	Estimated Total Number.	Number per 100 Single Women between 15 and 45 Years of Age Living in Victoria.
1873	893	3·18	2,951	4·54
1874	984	3·67	3,251	4·41
1875	779	2·92	2,573	3·36
1876	975	3·64	3,221	4·02
1877	1,010	3·88	3,337	3·85
1878	1,103	4·15	3,644	4·20
1879	1,304	4·86	4,308	4·78
1880	1,254	4·80	4,143	4·39
1881	1,382	5·09	4,564	4·45
1882	1,271	4·75	4,200	3·91
Means	1,096	4·09	3,620	4·19

* For many reasons, statistics of illegitimacy generally understate the truth.—See remarks upon the subject in the *Victorian Year-Book*, 1877–8, paragraph 259.

† See table following paragraph 422 *ante*.

Illegitimacy
in Austral-
asian
colonies.

451. Besides Victoria, the only Australasian colonies which publish statistics of illegitimacy are New South Wales, Queensland, and New Zealand. According to these, which possibly may not in every case represent the whole truth,* illegitimacy was, over a series of years, most rife in New South Wales, next so in Victoria, next in Queensland, and least of all in New Zealand. During the last four years, however, the proportion was even higher in Victoria than in New South Wales. The following table shows the percentage of illegitimate to the total births in the four colonies named during each of the ten years ended with 1880 :—

ILLEGITIMACY IN AUSTRALASIAN COLONIES, 1872 TO 1881.

Year.	Illegitimate Births to every 100 Children Born.			
	Victoria.	New South Wales.	Queensland.	New Zealand.
1872	2·99	4·03	2·92	...
1873	3·18	4·15	2·71	1·42
1874	3·67	4·22	2·76	1·30
1875	2·92	4·20	3·43	1·36
1876	3·64	4·08	3·21	2·23
1877	3·88	4·14	3·64	2·08
1878	4·15	4·03	3·68	2·41
1879	4·86	4·51	4·31	2·30
1880	4·80	4·35	4·31	2·43
1881	5·09	4·26	4·20	2·85
Means	3·92	4·20	3·52	2·04

Concubinage
in Austral-
asian
colonies.

452. A calculation based upon the illegitimate births which occurred in the census year, shows that concubinage is most rife in Queensland, next in New South Wales, and next in Victoria and New Zealand, there being only a fractional difference between these two colonies. In the following table, the colony in which the largest proportion of concubinage exists is placed first, and that in which the smallest proportion exists, last :—

CONCUBINAGE IN AUSTRALASIAN COLONIES, 1881.

Colony.	Single Women between 15 and 45 Years of Age.	Illegitimate Births, 1881.	Single Women living in Concubinage (exclusive of Public Prostitutes).	
			Total Number.	Number per 100 Single Women between 15 and 45.
1. Queensland ...	15,441	345	1,059	6·86
2. New South Wales	71,085	1,236	3,583	5·04
3. Victoria ...	101,451	1,382	4,567	4·50
4. New Zealand ...	38,659	534	1,686	4·36

* See footnote to paragraph 448 ante.

453. The figures in the last column show the proportions which the single women leading a sexually immoral life, without being public prostitutes, bear to the whole number of single women at the fruitful period of life in each colony. These proportions will, perhaps, be better understood if expressed in another manner as follow :—

In Queensland	1 single woman in 13	was living immorally.
In New South Wales	" "	20 " "
In Victoria	" "	22 " "
In New Zealand	" "	23 " "

Proportion of concubinage in each colony.

454. Illegitimacy in England and Wales appears to be commoner than, and in Scotland more than twice as rife as, it is in any of the Australasian colonies named. In Ireland, on the other hand, if the figures are reliable, it is less prevalent than in any of those colonies except New Zealand. This will be observed by comparing the following table with the previous one :—

Illegitimacy in United Kingdom.

ILLEGITIMACY IN ENGLAND, SCOTLAND, AND IRELAND, 1871 TO 1880.

Year.	Illegitimate Births to every 100 Children Born.		
	England and Wales.	Scotland.	Ireland.
1871	5·6	9·5	2·7
1872	5·4	9·1	2·5
1873	5·2	9·0	2·4
1874	5·0	8·7	2·3
1875	4·8	8·6	2·3
1876	4·7	8·6	2·3
1877	4·7	8·4	2·4
1878	4·7	8·4	2·3
1879	4·8	8·5	2·5
1880	4·8	8·4	...
Means	5·0	8·7	2·4

455. 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 1882, in the metropolitan district about 1 birth in 13, in extra-metropolitan towns 1 birth in 21, but in country districts only 1 birth in 43, was registered as illegitimate. In the previous year the proportions were 1 in 12, 1 in 20, and 1 in 37 respectively.

Illegitimacy in town and country.

456. 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, and New Zealand; but not in that of the other Australasian colonies, as in the returns of the latter no distinction is made between the infants born in and those born out of wedlock. By means of such a comparison in regard to the four colonies

Fecundity of women in Australasian colonies.

named, it would appear that the highest degree of fecundity exists in New South Wales, and the lowest in Victoria, this being probably owing to the fact that the married women are, on the average, younger in the former and older in the latter than in the other two colonies. The following table shows the number of married women under 45 years of age, the number of legitimate births in the census year, and the proportion of such births to such women in each of the four colonies :—

PROPORTION OF BIRTHS TO MARRIED WOMEN IN AUSTRALASIAN COLONIES.

Colony.	Married Women under 45 Years of Age.	Legitimate Births, 1881.	
		Total Number.	Number per 100 Married Women under 45.
1. New South Wales ...	80,473	27,757	34·49
2. Queensland ...	24,183	7,875	32·56
3. New Zealand ...	57,464	18,198	31·67
4. Victoria ...	84,831	25,763*	30·37*

Births in each quarter.

457. According to the registrations, births in Victoria are always most numerous in the winter quarter, and next to that in the autumn quarter. The proportion of births in the spring and summer quarters varies in different years, the advantage being generally slightly in favour of the former. The following are the numbers and percentage for 1882 and the percentage for a previous decennial period :—

BIRTHS IN EACH QUARTER.

Seasons.	Quarter ended on the last day of—	Year 1882.		Percentage in Ten Years : 1871 to 1880.
		Number of Births.	Percentage.	
Summer ...	March ...	6,398	23·92	23·74
Autumn ...	June ...	6,805	25·44	25·10
Winter ...	September ...	7,101	26·55	27·15
Spring ...	December ...	6,443	24·09	24·01
	Year ...	26,747	100·00	100·00

Deaths, 1882.

458. The deaths in 1882 numbered 13,634, as against 12,302 in 1881. The increase in the year under notice was thus 1,332.

Deaths, 1882 and former years.

459. Deaths were more numerous in 1882 than in any previous year except 1875, the latter being a year in which measles and scarlatina prevailed in an epidemic form, and as many as 15,287 deaths were recorded. The scarlatina epidemic extended into the succeeding year (1876), in consequence of which, 13,561 deaths occurred or within 73 of the number in the year under review.†

* In consequence of the births here quoted being those for the calendar year, these figures differ slightly from those in table following paragraph 442 *ante*.

† For the number of deaths during each year since the first settlement of Port Phillip, see Statistical Summary of Victoria (first folding sheet) *ante*.

460. The births in 1882 exceeded the deaths by 13,113, or 96 per cent., as against 121 per cent. in 1881. In the seventeen years ended with 1882 the proportion averaged 123 per cent. The following were the births and deaths in each of those seventeen years, and the excess of the former over the latter :—

EXCESS OF BIRTHS OVER DEATHS, 1866 TO 1882.

Year.	Births.	Deaths.	Excess of Births over Deaths.	
			Numerical.	Centesimal.
				Per Cent.
1866	25,010	12,286	12,724	104
1867	25,608	11,733	13,875	118
1868	27,243	10,067	17,176	171
1869	26,040	10,630	15,410	145
1870	27,151	10,420	16,731	161
1871	27,382	9,918	17,464	176
1872	27,361	10,831	16,530	153
1873	28,100	11,501	16,599	144
1874	26,800	12,222	14,578	119
1875	26,720	15,287	11,433	75
1876	26,769	13,561	13,208	97
1877	26,010	12,776	13,234	104
1878	26,581	12,702	13,879	109
1879	26,839	12,120	14,719	121
1880	26,148	11,652	14,496	124
1881	27,145	12,302	14,843	121
1882	26,747	13,634	13,113	96
Total in 17 years	453,654	203,642	250,012	123

461. It will be noticed that the births more than doubled the deaths in all the years except 1875 and 1876, when the mortality was swelled by the presence of epidemics; and in the year under review, when the proportion was lower than in any previous year except 1875.

462. Of the Australasian colonies, New Zealand is the one in which over a series of years the births have always exceeded the deaths by the highest proportion. This is due to the high birth rate and low death rate prevailing in that colony, both of which are favoured by the circumstance that an abnormally large proportion of the population, resulting from the number of immigrants introduced at the expense of the State, consists of persons at the reproductive period of life, which, being also the strongest, is that at which fewest deaths occur. The low death rate is no doubt also promoted by the salubrity of the climate of New Zealand, but still more so by the circumstance of the population being spread over the country or dispersed throughout a number of small towns, instead of being to a great extent crowded into a few large cities, as is too much the case in the other colonies. The position of Victoria in regard to the proportionate increase of births over deaths is above that of Tasmania, but below that of the other colonies. The

Excess of births over deaths.

Years in which births doubled deaths.

Excess of births over deaths in Australasian colonies.

following table shows the percentage of excess of births over deaths in each of the Australasian colonies during the respective years 1873 to 1881, 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,
1873 TO 1881.**

Colony.	Excess of Births over Deaths.									Mean of 9 Years.
	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	
	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.	per cent.
1. New Zealand ...	208	209	153	230	260	283	224	256	241	229
2. South Australia	170	124	84	132	167	148	177	162	167	147
3. New South Wales	182	156	109	108	142	135	164	151	151	144
4. Queensland ...	154	128	63	99	113	75	145	172	148	122
5. Western Australia	94	80	61	140	111	121	138	144	144	114
6. Victoria ...	144	119	75	97	104	109	121	124	121	113
7. Tasmania ...	103	83	49	82	58	106	111	104	126	91

Excess of
births over
deaths in
European
countries.

463. The following table shows the mean annual percentage of excess of births over deaths during a series of years in certain European countries:—

EXCESS OF BIRTHS OVER DEATHS IN EUROPEAN COUNTRIES.

Country.	Years over which the Average extends.		Mean Annual Excess of Births over Deaths.
	Number.	Period.	
England and Wales ...	23	1853 to 1875	per cent. 57
Scotland... ..	22	1855 to 1876	59
Ireland	11	1865 to 1875	57
Denmark	26	1850 to 1875	57
Sweden	26	1850 to 1875	56
Austria	23	1853 to 1875	23
Prussia	23	1853 to 1875	40
The Netherlands	23	1853 to 1875	36
France	23	1853 to 1875	8
Spain	10	1861 to 1870	25
Italy	13	1863 to 1875	23

Excess of
births over
deaths in
Australia
and else-
where.

464. It will be observed that deaths bear a much larger proportion to births in every one of those countries 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 favorable 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. The proportionate excess of births over deaths is highest in Scotland, next highest in England, Ireland, and Denmark; and lowest in France, where the births annually exceed the deaths by only 8 per cent.*

* See also paragraph 430 *ante*.

465. In Victoria, deaths of males in 1882 numbered 7,900, and deaths of females, 5,734. These numbers furnish a proportion of 73 females to every 100 males, as against an average of 75 in the ten years 1871–80. Females in the total population were in the proportion of 90 to every 100 males in 1882 and of about 87 during the decenniad; therefore more males and fewer females died than their relative numbers in the population might have given reason to expect.

466. The following table shows the death rate of males and females, and of both sexes, during each of the past twenty-two years. It will be noticed that the death rate in all the years, except 1861 and 1862, bore more hardly upon males than upon females :—

ANNUAL DEATH RATE, 1861 TO 1882.

Year.	Estimated Mean Population.		Number of Deaths.		Deaths per 1,000 of the Mean Population.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.*
1861 ...	324,988	214,836	6,124	4,398	18·84	20·47	19·49
1862 ...	322,916	225,164	5,900	4,180	18·27	18·56	18·39
1863 ...	325,680	237,280	5,646	3,856	17·34	16·25	16·88
1864 ...	335,272	251,178	5,202	3,685	15·51	14·67	15·15
1865 ...	347,083	264,135	6,158	4,303	17·74	16·29	17·11
1866 ...	353,941	275,097	7,016	5,270	19·82	19·16	19·53
1867 ...	359,642	284,634	6,613	5,120	18·39	17·99	18·21
1868 ...	367,752	295,340	5,865	4,202	15·95	14·23	15·18
1869 ...	379,396	307,806	6,221	4,409	16·40	14·32	15·47
1870 ...	392,159	321,036	6,114	4,306	15·59	13·41	14·61
1871 ...	403,319	333,686	5,845	4,073	14·49	12·21	13·46
1872 ...	409,081	344,117	6,308	4,523	15·42	13·14	14·38
1873 ...	412,597	352,914	6,565	4,936	15·91	13·99	15·02
1874 ...	416,725	360,931	6,994	5,228	16·78	14·48	15·72
1875 ...	419,779	367,558	8,563	6,724	20·40	18·29	19·42
1876 ...	422,931	373,627	7,716	5,845	18·24	15·64	17·02
1877 ...	427,727	380,878	7,345	5,431	17·17	14·26	15·80
1878 ...	433,153	388,313	7,179	5,523	16·57	14·22	15·46
1879 ...	438,563	395,467	7,033	5,087	16·04	12·86	14·53
1880 ...	446,445	403,898	6,610	5,042	14·81	12·48	13·70
1881 ...	456,107	412,835	7,024	5,278	15·40	12·78	14·16
1882 ...	468,468	422,062	7,900	5,734	16·86	13·59	15·31
Average of twenty-two years ...					16·86	14·86	15·91

NOTE.—In 1861, 1866, and 1875, and to a certain extent in the preceding and in the succeeding years, the death rate was swelled by epidemics of measles and scarlatina.

467. It has been held by high authority † that 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

* For total of mean population in each year, see table "Breadstuffs Available for Consumption," in Part Production *post*; for total number of deaths, see Statistical Summary (first folding sheet) at the commencement of this work; or the totals may be obtained by adding the males and females together.

† See page ix of Dr. Farr's letter dated 5th February, 1875, published in the Supplement to the 35th Annual Report of the Registrar-General of England. London: Eyre and Spottiswoode, 1875. Also *Victorian Year-Book*, 1875, paragraph 342; *Victorian Year-Book*, 1876–7, paragraph 169; and *Victorian Year-Book*, 1877–8, paragraph 271.

borne in mind that death rates based merely upon the total population, in common with birth and marriage rates calculated upon a like basis, are not always fair tests of the state of a community. If the proportion of very young or old people is high, the death rate will be also high; but if, on the other hand, the number of persons at the middle ages is excessive, the death rate will be low. It will be remarked that the mortality exceeded 17 per 1,000 seven times in the twenty-two years named in the table, but over the whole period it has averaged below 16 per 1,000. In the last six years it has never been so high as 16 per 1,000, whilst in three of those years it was below 15 and in one below 14 per 1,000.

Low mortality in census years 1871 and 1881.

468. It has happened that the last two census years, viz., 1871 and 1881, were years of exceptionally low mortality. In 1871 the death rate of both males and females was the lowest recorded during the whole period of twenty-one years, after which and the death rate in 1880 the next lowest death rate was in 1881. However satisfactory it may be on general grounds that a low rate of mortality should prevail at any time, 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 census years alone.

Death rates in Australasian colonies.

469. The following table shows the death rates of the different Australasian colonies during the seventeen years ended with 1881 :—

DEATH RATES IN AUSTRALASIAN COLONIES, 1865 TO 1881.*

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	16·41	21·42	14·30	...	13·40	15·13
1866	19·37	17·47	25·67	17·20	...	13·79	12·86
1867	18·06	19·64	17·80	17·48	...	14·48	12·78
1868	15·00	15·83	17·36	14·41	...	14·70	11·94
1869	15·47	14·05	16·20	12·37	...	13·20	11·73
1870	14·61	13·27	14·59	13·94	...	13·88	11·13
1871	13·46	12·54	14·83	12·87	...	13·38	10·13
1872	14·38	14·11	14·97	15·33	14·02	13·79	11·68
1873	15·02	13·84	16·06	13·48	16·24	14·52	12·67
1874	15·72	15·12	17·98	17·05	18·74	16·21	13·05
1875	19·42	18·09	23·80	19·45	17·88	20·00	15·92
1876	17·02	18·11	18·82	16·28	14·18	16·54	12·66
1877	15·80	15·28	17·29	13·99	15·70	19·17	11·47
1878	15·46	15·88	20·41	15·44	14·07	15·66	11·01
1879	14·53	14·29	14·97	14·09	14·46	15·18	12·46
1880	13·70	15·57	13·59	14·85	13·24	16·12	11·46
1881	14·16	15·12	15·02	14·49	13·80	14·77	11·13
Means	15·77	15·56	17·69	15·11	15·23	15·22	12·31

* For the number of deaths in the various colonies during the ten years ended with 1882, see General Summary of Australasian Statistics (third folding sheet) *ante*.

470. Considerable fluctuations in the death rates will be noticed from year to year, there being in this respect, however, evidently some connexion between the different colonies, especially those on the Australian continent. Thus a high rate of mortality prevailed in all the continental colonies in 1866 and 1867, which in Queensland extended also to 1868, and was caused by the presence of a severe epidemic of measles and scarlatina; Tasmania and New Zealand appear on this occasion to have escaped, as their death rates were not affected. In 1875 and 1876 the same complaints caused a high death rate in all the colonies of the group, New Zealand, however, having been affected only in the first of these years, whereas Queensland and Tasmania were affected not only in both of them but also in 1877, and the former also in 1878. In like manner, low death rates prevailed in all the colonies about 1870 and 1871, extending in the case of some of them to 1872, also about 1880 and 1881.

Fluctuations in the death rate coincident in different colonies.

471. In the seventeen years over which the observations extend, the normal death rate of 17 per 1,000 persons living was reached in Queensland nine times, in Victoria, New South Wales, and South Australia four times, in Tasmania twice, and in New Zealand not at all. In the last nine of those years it was reached twice in Western Australia. Queensland is the only colony in which, over a series of years, the death rate has exceeded 17 per 1,000.

Normal death rate in colonies.

472. The following is the order of the colonies in reference to their respective death rates in the last year shown in the table, and according to the average of the whole period of seventeen years. The colony with the lowest rate is placed first, and that with the highest last. It will be noticed that Victoria occupies the fourth place in the list for 1881, and the sixth in that showing the average over a series of years:—

Order of colonies in respect to death rates.

ORDER OF AUSTRALASIAN COLONIES IN REFERENCE TO DEATH RATES.

Order in 1881.	Order over a Series of Years.
1. New Zealand.	1. New Zealand.
2. Western Australia.	2. South Australia.
3. South Australia.	3. Tasmania.
4. Victoria.	4. Western Australia.
5. Tasmania.	5. New South Wales.
6. Queensland.	6. Victoria.
7. New South Wales.	7. Queensland.

473. 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 nine years ended with 1881:—

Death rate in Australia and Australasia.

DEATH RATE IN AUSTRALIA AND AUSTRALASIA, 1873 TO 1881.

Year.	Number of Deaths per 1,000 of Mean Population.	
	Continent of Australia.	Australia with Tasmania and New Zealand.
1873	14·43	14·20
1874	15·73	15·36
1875	19·08	18·63
1876	17·12	16·37
1877	15·23	14·77
1878	15·72	14·94
1879	14·06	13·84
1880	14·47	14·01
1881	14·62	14·01
Means	15·61	15·13

Normal death rate in Australia and Australasia.

474. It will be noticed that only in 1875 and 1876 did the mortality on the Australian continent exceed 17 per 1,000, and only in the first of these years did it exceed that rate upon the continent combined with the colonies of Tasmania and New Zealand. It will also be noticed that in the last three years the rate was comparatively low.

Death rates in certain British possessions.

475. The following table shows the death rates in as many British colonies outside Australasia as the particulars are available for. In many cases the average extends only over a short period, and in few, if any, of the colonies are the conditions affecting the duration of human life similar to those prevailing in the Australasian group:—

DEATH RATES IN BRITISH POSSESSIONS.

Colonies.	Years.	Number of Deaths per 1,000 of the Population.
Ceylon	1867-76	21·62
Straits Settlements	1873-7	19·96
Hong Kong	1879-81	28·00
Mauritius	1871-7	28·34
Seychelles	1875-7	22·40
St. Helena	1871-5	13·21
Bermudas	1871-5	24·07
British Guiana	1871-9	34·47
West Indies—		
Bahamas	1874-5	22·60
Jamaica	1878-80	24·10
St. Lucia	1869-79	28·40
St. Vincent	1870-9	28·40
Barbadoes	1872-8	23·76
Grenada	1871-5	27·82
Antigua	1875-6	32·87
Montserrat	1874-5	20·44
Dominica	1871-6	18·53
Trinidad	1871-6	34·14

476. In all the European countries of which the information is at hand, except Ireland, the mean annual death rates are much higher than in any of the Australasian colonies. In Ireland the average rate is apparently the same as in Queensland; but this may perhaps not really be the case, it being an admitted fact that the registrations of Ireland are defective. Omitting Ireland, it will be observed from the following table that in not one of the countries do the figures show an approach to so low a death rate as 17 per 1,000 in any year, except Sweden, during the three years 1871 to 1873, and only in one of these did the rate actually fall as low as 17 per 1,000; whilst in Hungary, on the other hand, the average death rate per 1,000, extending over a series of years, amounts to considerably more than twice that proportion:—

Death rates
in European
countries.

DEATH RATES IN EUROPEAN COUNTRIES, 1868 to 1880.

Years.	Number of Deaths per 1,000 of Mean Population.													
	England and Wales.	Scotland.	Ireland.*	Denmark.	Sweden.	Austria.	Hungary.	German Empire.†	Belgium.	The Netherlands.	France.	Switzerland.	Spain.	Italy.
1868	21·9	21·2	15·8	19·3	21·0	29·3	33·8	27·3	21·7	24·8	24·0	...	32·6	30·5
1869	22·3	23·0	16·4	19·1	22·3	28·9	32·0	25·9	21·8	23·0	23·5	...	32·6	27·7
1870	22·9	22·2	16·7	19·1	19·8	29·2	32·6	25·9	23·3	25·7	28·3	25·8	30·1	29·8
1871	22·6	22·2	16·4	19·5	17·2	30·0	39·0	28·4	28·5	29·4	34·8	27·6	...	30·0
1872	21·3	22·3	18·1	18·3	16·3	32·4	42·3	29·0	23·2	25·7	22·0	22·2	...	30·7
1873	21·1	22·4	18·3	18·6	17·2	38·5	65·1	28·2	21·5	24·0	23·3	22·7	...	30·0
1874	22·3	23·3	17·3	19·9	20·3	31·3	42·6	26·7	20·5	22·6	21·5	22·3	...	30·3
1875	22·8	23·4	18·5	21·0	20·2	29·7	37·2	27·6	22·7	25·4	23·1	24·1	...	30·7
1876	21·0	21·0	17·3	19·7	19·5	29·4	35·0	26·3	21·9	23·3	22·7	24·2	...	28·7
1877	20·4	20·8	17·5	18·7	18·5	31·1	36·3	26·6	21·1	22·0	21·7	23·5	...	28·1
1878	21·7	21·4	18·6	18·5	18·0	31·1	37·6	26·2	21·5	22·8	22·6	23·4	...	28·8
1879	20·9	20·2	19·6	19·7	16·9	29·4	36·4	25·6	21·9	22·4	...	22·6	...	29·9
1880	20·6	20·7	19·3	20·4	18·1	29·6	38·6	26·1	22·4	23·6	...	21·9	...	30·5
Means	21·6	21·9	17·7	19·4	18·9	30·8	39·1	26·9	22·5	24·2	24·3	23·7	31·8	29·8

NOTE.—The mortality of Sweden was increased by small-pox in 1874; that of Austria by cholera in 1873; that of Hungary by cholera in 1873 and 1874; that of Prussia (now German Empire) by war in 1870 and 1871, and by cholera in 1873; that of Belgium by small-pox in 1871; that of the Netherlands by small-pox in 1871; that of France by war in 1870 and 1871.

* The registrations in Ireland are admitted to be defective.—See 11th Detailed Report of the Registrar-General of Ireland, page 15; also his 12th Report, page 31.

† The figures for the years from 1868 to 1871 refer to Prussia only.

Death rate
in United
Kingdom.

477. 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 by the registrations in Ireland it would appear that the death rate there was always considerably lower than in the other two countries. There is little doubt, however, that the Irish registrations do not express the whole truth, the effect of which is that the death rate of the United Kingdom, taken as a whole, is made in each year to seem to be somewhat lower than that of England, which, probably, is really not the case. The figures for each of the ten years ended with 1880 were as follow :—

DEATH RATE IN THE UNITED KINGDOM, 1871 TO 1880.

			Deaths per 1,000 of the Population.				Deaths per 1,000 of the Population.
1871	...	...	22·6	1878	...	...	21·2
1872	...	...	20·9	1879	...	...	20·5
1873	...	...	20·8	1880	...	...	20·4
1874	...	...	21·6				—
1875	...	...	22·2	Mean	...	...	21·1
1876	...	...	20·5				—
1877	...	...	20·0				

Death rates
in town and
country,
1882.

478. In every country the death rate is higher in towns than it is in the extra-urban districts. This circumstance, although no doubt partly attributable to the superior healthfulness and immunity from contagion prevailing in the latter, is also to a great extent due to the fact that hospitals and charitable institutions, which are frequented by patients from the country as well as by town residents, are generally situated in the towns; and further, that outside of charitable institutions many persons die who have come from the country on the approach of serious illness for the sake of the superior nursing and medical attendance to be obtained in town. In 1882, the death rate was somewhat higher in Melbourne and suburbs than in the country towns, but in both it was more than twice as high as in the country districts. The following are the figures for that year :—

DEATHS IN URBAN AND COUNTRY DISTRICTS, 1882.

Districts.	Estimated Mean Population.	Deaths, 1882.	
		Total Number.	Number per 1,000 of the Population.
Melbourne and suburbs (Greater Melbourne)	291,464	6,127	21·02
Extra-metropolitan Towns	198,839	3,862	19·42
Country districts ...	400,167	3,645	9·11
Total ...	890,470	13,634	15·31

479. The number of deaths per 1,000 of the estimated population of the metropolitan towns (Greater Melbourne), the extra-metropolitan towns, and the country districts of Victoria is given in the following table for each of the last ten years:—

Death rate in town and country, 1873 to 1882.

DEATH RATES IN URBAN AND COUNTRY DISTRICTS, 1873 TO 1882.

Years.	Number of Deaths per 1,000 of the Estimated Population.			
	Greater Melbourne	Extra-Metropolitan Towns.	Country Districts.	Total of Victoria.
1873 ...	19·86	18·50	9·65	15·02
1874 ...	21·27	20·47	9·09	15·71
1875 ...	25·82	26·03	11·24	19·42
1876 ...	21·84	23·00	10·45	17·02
1877 ...	21·18	20·07	9·86	15·80
1878 ...	20·12	20·21	9·83	15·46
1879 ...	19·23	18·65	9·17	14·53
1880 ...	18·70	17·65	8·13	13·70
1881 ...	19·32	19·55	7·88	14·16
1882 ...	21·02	19·42	9·11	15·31

NOTE.—In 1875, and to a certain extent in the preceding and succeeding years, the death rate was swelled by epidemics of measles and scarlatina.

480. It will be noticed that in six of the years, including 1882, the death rate in Melbourne and suburbs was above that in the other town districts; but in the other four years the death rate in the extra-metropolitan towns was the higher. The greater mortality in proportion to population prevailing in the urban than in the country districts is very striking in all the years. In the former the mortality was invariably much above the normal 17 per 1,000 persons living, whilst in country districts it was always very considerably below that rate.

Normal death rate in town and country.

481. The following table shows the mean population, the number of deaths, and the proportion of the latter to the former, in 1882, also the number of deaths to every 1,000 persons living during the period of ten years commencing with 1871 and ending with 1880, 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 where they occurred, and are shown separately near the end of the table:—

Death rates in Melbourne and suburbs.

DEATH RATES IN GREATER MELBOURNE.

Sub-districts.	Year 1882.			Ten Years: 1871 to 1880.
	Estimated Mean Population.	Deaths.		Annual Deaths per 1,000 of Population.
		Total Number.	Number per 1,000 of the Population.	
Melbourne City	64,559	1,161	17·98	16·71
Hotham Town	17,801	293	16·46	17·34
Fitzroy City	23,200	475	20·47	18·63
Collingwood City	24,500	446	18·20	20·14
Richmond City	23,436	443	18·90	17·44
Brunswick Borough	6,027	127	21·07	14·62
Prahran City	25,000	381	15·24	16·89
South Melbourne City*... ..	26,150	474	18·13	16·53
Sandridge Borough	9,029	166	18·38	17·46
St. Kilda Borough	12,411	192	15·47	14·01
Brighton Borough	4,800	79	10·23	14·00
Essendon Borough, and Fleming- ton and Kensington Borough {	5,473	56	16·46	17·84
Hawthorn Borough	6,382	84	13·16	16·94
Kew Borough	4,292	56	13·05	11·84
Footscray Borough†	5,954	98	16·46	16·75
Williamstown Borough	9,200	193	20·98	17·94
Remainder of district	18,068	256	14·17	11·85
<i>Hospitals, asylums, &c.</i> ‡	3,704§	1,138	...	...
Shipping in Hobson's Bay and river	1,478§	9	6·09	4·09
Total	291,464	6,127	21·02	20·39

Death rates
in 1882 and
series of
years.

482. It will be observed that in 1882 the death rate in ten of the sub-districts, viz., Melbourne, Fitzroy, Richmond, and South Melbourne Cities, and Brunswick, Sandridge, St. Kilda, Kew, and Williamstown Boroughs, and the "Remainder of district," the mortality was above the average of the decennial period, the excess being especially large in the case of Fitzroy, Brunswick, and Williamstown. On the other hand, in Brighton and Hawthorn the rate of mortality in 1882 was much below the average. It will be remembered that in the previous year the death rates were below the average in nearly every sub-district of Greater Melbourne.

Places in
which death
rate was
highest and
lowest.

483. The only sub-district which, according to the average of ten years, had a higher death rate than 20 per 1,000, is the low-lying and still imperfectly drained locality of Collingwood; the next highest

* See first footnote to table following paragraph 436 *ante*.

† A portion of Footscray Borough containing about 50 inhabitants was severed therefrom and added to "Remainder of district" on the 29th December, 1881.

‡ Includes the Melbourne, Alfred, Lying-in, and Children's Hospitals, the Immigrants' Home, and the Carlton Lunatic Asylum (closed in 1873)—all situated in Melbourne City; the Benevolent Asylum, which is on the boundary between Hotham Town and Melbourne City; the Metropolitan Lunatic Asylum, which is in Kew Borough; and the Yarra Bend Lunatic Asylum and the Austin Hospital for Incurables, which are in "Remainder of district."

§ Census figures.

death rate prevailed in the neighbouring city of Fitzroy, the next in the shipping town of Williamstown, and the next in the rural boroughs of Essendon and Flemington. In 1882, the highest death rate was in Brunswick, followed by Williamstown, Fitzroy, and Richmond, in the order named; but the rates in Collingwood, and Essendon and Flemington were comparatively low. During the period of ten years, after the shipping, the lowest death rate was in Kew and the "Remainder of district"; the next in Brighton and St. Kilda; and the next in Brunswick. In 1882 the lowest rates were in Brighton, Kew, Hawthorn, and the "Remainder of district."

484. The death rate of Greater Melbourne, taken as a whole, in the calculation of which the deaths in charitable institutions are included, was 21 per 1,000 persons living in 1882, and a fraction over 20 per 1,000 in the period of ten years. During the last-named period the annual death rate was over 17 per 1,000 in 7 out of the 18 sub-districts, viz., Collingwood, Fitzroy, Williamstown, Essendon and Flemington, Sandridge, Richmond, and Hotham; and during 1882 it was over 17 per 1,000 in all those sub-districts, except Essendon and Flemington, and Hotham, and was also above 17 per 1,000 in Brunswick, South Melbourne, and Melbourne. In considering the death rates of the individual districts, the hospitals, asylums, &c., have been excluded.

Sub-districts with death rates over 17 per 1,000

485. The average mortality of Greater Melbourne is lower than that of most towns in the United Kingdom. In the following list, which shows the death rate of 23 such towns, the only town with a lower average death rate than it is Portsmouth :—

Death rates in towns of United Kingdom.

DEATH RATES IN 23 BRITISH TOWNS, 1870 TO 1879.

	Annual Deaths per 1,000 of the Population.	Annual Deaths per 1,000 of the Population.	
Portsmouth ...	20·2	Leicester ...	25·2
Brighton ...	20·8	Bradford ...	25·7
Edinburgh ...	20·8*	Sheffield ...	25·8
Plymouth ...	22·3	Oldham ...	26·5
London ...	22·8	Leeds ...	26·5
Nottingham ...	23·2	Newcastle-on-Tyne ...	26·6
Bristol ...	23·7	Salford ...	27·8
Norwich ...	23·8	Liverpool ...	29·1
Hull ...	24·0	Dublin ...	29·6
Glasgow ...	24·2*	Manchester ...	29·9*
Birmingham ...	24·4		
Sunderland ...	24·6	Mean of towns named	24·40
Wolverhampton ...	24·7		

486. The death rate in Greater Melbourne is also lower than that in any of the 30 foreign towns named in the following list, except Philadelphia, Baltimore, and Christiania :—

Death rates in foreign towns.

* Average of years 1876 to 1879.

DEATH RATES IN 30 FOREIGN TOWNS, 1880.*

	Annual Deaths per 1,000 of the Population.	Annual Deaths per 1,000 of the Population.
Philadelphia ...	19·3	Stockholm ... 28·8
Baltimore ...	19·7	Paris ... 29·0
Christiania ...	20·3	Berlin ... 29·9
Geneva ...	22·9	Breslau ... 31·0
The Hague ...	23·1	Rome ... 32·0
Brooklyn ...	23·4	Bombay ... 32·7
Rotterdam ...	24·2	Munich ... 33·5
Dresden ...	24·9	Trieste ... 36·0
Copenhagen ...	25·0	Buda-Pesth ... 37·3
Hamburg (State) ...	26·0	Madrid ... 40·1
Calcutta ...	26·8	Alexandria ... 42·5
Vienna ...	27·2	Madras ... 44·8
Amsterdam ...	27·2	St. Petersburg ... 46·1
Venice ...	27·6	
Brussels ...	28·0	
New York ...	28·5	Mean of towns named 29·6
Turin ...	28·8	

Deaths in
each month.

487. The mortality of Victoria is usually 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 a series of years, the months in which most deaths occur appear to be January, March, April, and February, in the order named, but in the year under review more deaths occurred in March than in January. The number of deaths in each month of 1882, and their percentage to the total number in the year, also the percentage of the deaths in each month of the decenniad ended with 1880 to the total number of deaths during the same period, will be found in the following table :—

DEATHS IN EACH MONTH.

Months.	Year 1882.		Percentage in Ten Years: 1871 to 1880.
	Number of Deaths.	Percentage.	
January ...	1,358	9·96	10·29
February ...	1,205	8·84	9·09
March ...	1,419	10·41	10·17
April ...	1,281	9·39	9·73
May ...	1,160	8·50	8·55
June ...	1,051	7·71	7·44
July ...	1,071	7·85	7·89
August ...	1,036	7·59	7·37
September...	910	6·67	6·81
October ...	876	6·45	7·09
November ...	1,100	8·07	7·12
December ...	1,167	8·56	8·45
Total ...	13,634	100·00	100·00

* Taken from the Forty-third Report of the Registrar-General of England, page cxiv.

488. 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 occur during that period. Next to the summer the autumn quarter is the most fatal, probably in part owing to the circumstance that some who had become debilitated during the summer linger on for some months later. In the United Kingdom, on the contrary, the greatest mortality occurs in the winter, and the least in the summer quarter. A statement of the relative mortality of the different seasons in Victoria, according to the experience of the past year and a previous decenniad; 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:—

Deaths at different seasons.

RELATIVE MORTALITY OF EACH QUARTER IN VICTORIA, ENGLAND, SCOTLAND, AND IRELAND.

Seasons.*	Melbourne, Victoria.	Greenwich, England.	Deaths per 100 at all Seasons.					
			Victoria.		England and Wales.	Scotland.	Ireland.	
			Year 1882.	Average of Ten Years: 1871 to 1880.	Average of Thirty-one Years.	Average of Ten Years.	Average of Five Years.	
	Mean Temperature in Shade.							
	°	°						
Summer ...	65·2	60·5	29·21	29·55	23·24	22·34	20·21	
Autumn ...	53·8	44·3	25·60	25·72	24·65	24·71	23·45	
Winter ...	50·2	40·0	22·11	22·07	27·49	27·95	30·19	
Spring ...	60·3	52·8	23·08	22·66	24·62	25·00	26·15	
Year ...	57·6	49·4	100·00	100·00	100·00	100·00	100·00	

489. The deaths of Chinese recorded in 1882 amounted to 164, one being a female, and those of Aborigines to 15. The former furnishes a proportion of 13·5 and the latter of 19·23 to every 1,000 of their numbers.† At the same time the proportion of deaths of all races to every 1,000 of the population was 15·31.

Deaths of Chinese and Aborigines.

490. The low mortality of the Chinese is accounted for by the fact that the Chinese population in Victoria consists almost entirely of persons at the middle or strongest period of life. In 1882 only one of the Chinese who died was under 25 years of age, the oldest was said to be between 75 and 80. Of the Aborigines who died three were under 5 and one was stated to have attained the age of 80.

Ages at death of Chinese and Aborigines.

* 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.

† On the 3rd April, 1881, the Chinese numbered 12,128; Aborigines, 780.

Deaths at
each age,
1882.

491. The following table shows the number of deaths at various periods of age registered in Victoria during the year 1882, and the proportion of the deaths at each age to the total at all ages :—

DEATHS AT EACH AGE, 1882.

Ages.	Number of Deaths at each Age, 1882.			Percentage of Deaths at each Age.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years ...	2,762	2,332	5,094	34·96	40·67	37·36
5 years to 10 years ...	205	189	394	2·59	3·30	2·89
10 " 15 " ...	175	147	322	2·22	2·56	2·37
15 " 20 " ...	198	202	400	2·51	3·52	2·93
20 " 25 " ...	279	267	546	3·53	4·66	4·01
25 " 35 " ...	470	463	933	5·95	8·07	6·84
35 " 45 " ...	620	498	1,118	7·85	8·69	8·20
45 " 55 " ...	1,030	525	1,555	13·04	9·16	11·40
55 " 65 " ...	1,028	441	1,469	13·01	7·69	10·77
65 " 75 " ...	693	377	1,070	8·77	6·57	7·85
75 years and upwards ...	440	293	733	5·57	5·11	5·38
Total ...	7,900	5,734	13,634	100·00	100·00	100·00

Proportion of
deaths at
different
ages.

492. It will be noticed that over a third of the males and over two-fifths of the females who died had not reached their fifth year, that a fourth of the males and nearly a third of the females were between 5 and 45 years of age, that more than a fourth of the males but only a sixth of the females were between 45 and 65 years of age, and that a seventh of the males and a ninth of the females were over 65 years of age ; also that, as a rule, the females who died were younger than the males—about half the former being under and half over 20 years of age, whilst about half the latter were under and half over 35 years of age.

Proportion of
deaths at
each age to
population.

493. It was mentioned in a former paragraph* that death rates based upon the population of a country are apt to mislead, unless the ages of the persons of whom that population is composed are taken into account. The exact ages of the population of Victoria having been ascertained at the censuses of 1871 and 1881, an opportunity is afforded of securing an accurate result by comparing at each age the numbers of the population with the deaths. This has been done for males and females in quinquennial periods up to 75 years of age for the year 1881, and for the mean of the antecedent period of ten years, and the results are shown in the following table :—

* See paragraph 467 *ante*.

PROPORTION OF DEATHS AT EACH AGE TO POPULATION,
1871-80 AND 1881.

Ages.	Mean Population.		Deaths.		Deaths per 1,000 Living at each Age.	
	Ten years: 1871 to 1881*	Year 1881.	Mean of 10 years: 1871 to 1880.	Year 1881.	Mean of 10 years: 1871 to 1880.	Year 1881.
MALES.						
Under 5 years	58,391	57,846	2,764·3	2,368	47·34	40·94
5 to 10 "	54,196	54,888	330·6	176	6·10	3·21
10 to 15 "	48,671	54,765	160·7	124	3·30	2·26
15 to 20 "	37,855	50,523	167·7	187	4·43	3·70
20 to 25 "	32,298	41,449	173·9	255	5·38	6·15
25 to 30 "	28,179	27,482	189·3	222	6·72	8·08
30 to 35 "	27,945	22,633	237·5	208	8·50	9·19
35 to 40 "	30,919	23,434	322·0	233	10·42	9·95
40 to 45 "	30,412	25,948	425·2	337	13·98	12·99
45 to 50 "	25,223	28,596	436·3	430	17·30	15·04
50 to 55 "	21,505	26,863	436·0	538	20·28	20·03
55 to 60 "	12,353	16,299	350·0	468	28·33	28·71
60 to 65 "	9,190	12,313	323·1	462	35·16	37·51
65 to 70 "	4,605	6,305	249·9	343	54·28	54·40
70 to 75 "	2,845	3,764	200·6	300	70·50	79·71
75 and upwards	1,980	2,999	248·7	373	...	...
All ages ...	426,567	456,107	7,015·8	7,024	16·45	15·40
FEMALES.						
Under 5 years	57,055	56,359	2,407·1	2,038	42·19	36·16
5 to 10 "	53,708	54,496	322·3	201	6·00	3·69
10 to 15 "	48,248	54,222	159·1	115	3·30	2·12
15 to 20 "	39,741	51,908	170·6	210	4·29	4·05
20 to 25 "	34,371	43,868	185·4	263	5·39	6·00
25 to 30 "	26,194	27,025	202·4	219	7·73	8·10
30 to 35 "	23,027	21,954	216·0	219	9·38	9·98
35 to 40 "	22,598	21,571	249·4	247	11·04	11·45
40 to 45 "	19,595	21,329	246·9	275	12·60	12·89
45 to 50 "	15,403	19,684	213·8	270	13·88	13·72
50 to 55 "	11,912	15,507	177·1	235	14·87	15·15
55 to 60 "	6,951	9,256	145·0	185	20·86	19·99
60 to 65 "	5,394	7,116	153·8	193	28·51	27·13
65 to 70 "	2,846	3,864	118·0	174	41·46	45·03
70 to 75 "	1,923	2,562	111·4	162	57·93	63·23
75 and upwards	1,406	2,114	162·9	272	...	...
All ages ...	370,372	412,835	5,241·2	5,278	14·15	12·78

494. It has already been stated that 1881 was a year of exceptionally low mortality.† It is therefore not surprising to find that in the case of both males and females the death rate in it was lower than the mean death rate of the previous decenniad. This was specially marked at the younger ages, the mortality at under 5 being upwards of 6 per 1,000 and at from 5 to 10 nearly 3 per 1,000 less in 1881 than in the

Death rate in 1881 and previous decenniad compared.

* The figures in this column, being derived from the numbers returned at the censuses of 1871 and 1881, 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, 1880.

† See paragraph 468 ante.

decennial period. A reduced mortality, however, did not occur at all the age-periods, the death rate in 1881 being higher than in the previous decenniad at from 20 to 35 and 55 to 75 in the case of males; and at from 20 to 45, 50 to 55, and 65 to 75 in the case of females.

Death rates of males and females at different ages compared.

495. The total mortality of males exceeded that of females by about $2\frac{1}{3}$ per 1,000 in the decennial period, and by nearly $2\frac{2}{3}$ per 1,000 in 1881. At some of the ages, however, the death rate of females was the greater. This was the case at from 20 to 40 in the decennial period, and at from 5 to 10, 15 to 20, and 25 to 40 in 1881. In the former, moreover, the death rate of females at from 10 to 15 was exactly equal to that of males at the same ages.

Death rates at different ages, 1861 to 1881.

496. In the following table the death rates of males and females at quinquennial periods of age up to 25 years of age, and at decennial periods after that age, during the decenniad ended with 1880, are compared with similar results during the decenniad ended with 1870, the increase or decrease of the rate at each age being also shown:—

DEATH RATE AT EACH AGE IN THE LAST TWO DECENNIADS.

Ages.	Number of Deaths per 1,000 Males and Females Living at different Ages.					
	Males.			Females.		
	Mean of 10 years, 1861 to 1870.	Mean of 10 years, 1871 to 1880.	Increase + Decrease —	Mean of 10 years, 1861 to 1870.	Mean of 10 years, 1871 to 1880.	Increase + Decrease —
Under 5 years ...	55·08	47·34	— 7·74	49·66	42·19	— 7·47
5 to 10 „ ...	7·52	6·10	— 1·42	6·95	6·00	— ·95
10 to 15 „ ...	3·27	3·30	+ ·03	3·25	3·30	+ ·05
15 to 20 „ ...	4·22	4·43	+ ·21	3·65	4·29	+ ·64
20 to 25 „ ...	5·50	5·38	— ·12	5·89	5·39	— ·50
25 to 35 „ ...	7·85	7·60	— ·25	8·28	8·50	+ ·22
35 to 45 „ ...	12·09	12·18	+ ·09	11·12	11·76	+ ·64
45 to 55 „ ...	17·52	18·67	+ 1·15	13·20	14·31	+ 1·11
55 to 65 „ ...	29·71	31·24	+ 1·53	21·98	24·20	+ 2·22
65 to 75 „ ...	53·79	60·47	+ 6·68	43·10	48·10	+ 5·00
75 to 85 „ ...	111·71	114·80	+ 3·09	93·02	102·94	+ 9·92
All ages ...	16·68	16·45	— ·23	16·13	14·15	— 1·98

Decrease in total mortality.

497. The whole mortality of both males and females, especially the latter, was less in proportion to population in the decenniad ended with 1880 than in that ended with 1870.

Increase or decrease of death rate, 1861 to 1880.

498. In the second decenniad, as compared with the first, a substantial decrease took place in the death rate of children under 5, and a less marked one in that of children from 5 to 10; also a slight decrease in the death rate of males at from 20 to 35, and of females at from 20 to 25, but at all the other ages—especially the higher ones—the death rate of both males and females was greater at the latter period than at the former.

499. As compared with their respective numbers in the population, the mortality of males was greater than that of females in the first decenniad at all the ages except from 20 to 35, and in the second decenniad at all the ages except from 10 to 15 (when the mortality of the two sexes was identical) and from 20 to 35.

Death rate of males greater than of females at most ages.

500. In the next table the death rates of males and females at different ages in Victoria, England and Wales, and France are compared—the observations for Victoria extending over 20 years, those for England and Wales over 40 years, and those for France over 10 years :—

Death rate in Victoria, England, and France.

DEATH RATE IN VICTORIA, ENGLAND, AND FRANCE.

Ages.	Number of Deaths per 1,000 of the Population.					
	Males.			Females.		
	Victoria. Mean of 20 years.	England and Wales. Mean of 40 years.	France. Mean of 10 years.	Victoria. Mean of 20 years.	England and Wales. Mean of 40 years.	France. Mean of 10 years.
Under 5 years ...	51.21	71.6	84.55	45.92	61.7	75.45
5 to 10 „ ...	6.81	8.3	10.49	6.47	8.0	11.04
10 to 15 „ ...	3.28	4.6	5.36	3.27	4.8	6.41
15 to 20 „ ...	4.32	6.4	10.34	3.97	7.0	8.41
20 to 25 „ ...	5.44	8.6		5.64	8.2	
25 to 35 „ ...	7.72	9.7	10.02	8.39	9.7	9.69
35 to 45 „ ...	12.13	13.2	10.96	11.44	12.2	11.03
45 to 55 „ ...	18.09	18.7	14.76	13.75	15.6	14.88
55 to 65 „ ...	30.48	32.6	29.19	23.09	28.1	27.27
65 to 75 „ ...	57.13	67.1	60.69	45.60	59.7	63.49
75 to 85 „ ...	113.25	147.2	160.22	97.98	134.3	153.76
All ages ...	16.56	23.2	23.80	15.14	21.1	23.19

501. It will be observed that in Victoria the total mortality of males is less by 7 per 1,000 than that of England or France ; and the total mortality of females is less by 6 per 1,000 than that of England, and by 8 per 1,000 than that of France. At none of the age-periods is the mortality of either males or females as high in Victoria as in England ; but it is higher than in France in the case of the males at from 35 to 65, and in the case of the females at from 35 to 45.

Death rate in Victoria less than in England and France.

502. It is very commonly believed that the conditions of life in Victoria are more fatal to children than those conditions in older countries ; but the figures in the table prove the fallacy of this opinion so far as England and France are concerned—the low mortality in Victoria, as compared with that obtaining in either of those countries, being especially marked at the age-periods under 10 years.

Death rate of children less in Victoria than in England or France.

Death rate of males and females in three countries compared.

503. According to the table, the death rate of females exceeds that of males at from 20 to 35 in Victoria, at from 10 to 20 in England and Wales, and at from 5 to 15, from 35 to 55, and from 65 to 75 in France; moreover, in England and Wales, at from 25 to 35 the death rate of males and females is equal. At all other periods of life the death rate of males exceeds that of females in the countries named.

Infantile mortality, 1882.

504. The death rate of infants in 1882 was higher than in any year since 1866.* The total number who died under 1 year of age was 3,722, and as the births numbered 26,747, it follows that 1 infant died to every 7 births, or 13·91 infants to every 100 births. In the sixteen years 1866 to 1881, the proportion of infants dying before completing their first year was 12·34 to every 100 births.*

Mortality of male and female infants.

505. It has been already stated that more boys are born than girls, but the balance of the sexes is to a certain extent maintained by more male than female infants dying. This is shown in the following table, which contains a statement for the 11 years ended with 1881 and for the year 1882 of the number of births of boys and girls, the number of deaths of each before completing their first year, and the proportion of the deaths of infants of either sex to the number of births of infants of the same sex:—

MORTALITY OF MALE AND FEMALE INFANTS, 1871 TO 1882.

Year.	Births.		Deaths at under 1 Year of Age.			
			Total Number.		Number per 100 Births.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1871 ...	14,000	13,382	1,710	1,404	12·21	10·49
1872 ...	13,831	13,530	1,801	1,533	13·02	11·33
1873 ...	14,234	13,866	1,679	1,502	11·80	10·83
1874 ...	13,659	13,141	1,839	1,502	13·46	11·43
1875 ...	13,683	13,037	2,071	1,740	15·14	13·35
1876 ...	13,759	13,010	1,637	1,343	11·90	10·32
1877 ...	13,272	12,738	1,838	1,461	13·85	11·47
1878 ...	13,752	12,829	1,763	1,499	12·82	11·68
1879 ...	13,727	13,112	1,817	1,402	13·24	10·69
1880 ...	13,358	12,790	1,669	1,436	12·49	11·23
1881 ...	13,903	13,242	1,696	1,423	12·20	10·75
Sums and Means }	151,178	144,677	19,520	16,245	12·91	11·23
1882 ...	13,612	13,135	2,049	1,673	15·05	12·74

Mortality of male greater than of female infants.

506. According to a previous paragraph,† the births of male infants in a series of years were in the proportion of about 104½ 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

* See table following paragraph 513 *post*.

† See paragraph 442 *ante*.

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 in favour of male infants), the greater tendency of boys than of girls to die before completing one year of life may be considered to be invariable.

507. In proportion to every 1,000 born, the number of male infants dying varied from 118 in 1873 to 151 in 1875 and over 150 in 1882, and that of female infants dying from 103 in 1876 to 134 in 1875 and 127 in 1882—the number dying per 1,000 births during the 11 years ended with 1881 being 129 of the former and 112 of the latter. The high mortality of infants in 1875 was caused by an epidemic of measles. The next year was one in which the general mortality was much increased by an epidemic of scarlatina, but infants under 1 year appear not to have been at all affected thereby, as their mortality in 1876 was remarkably low. The high infantile mortality in 1882 is exceptional, as in that year no such epidemics were prevalent.

Proportion of infants dying to births.

508. 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 1882 and the 11 years ended with 1881 are shown in the following table, together with the proportion of deaths at each of those periods of age and the number at each such period to every 100 births. It will be noticed that in 1882 the mortality at nearly all periods under 1 year was much above the average:—

Deaths of infants at different ages.

AGE AT DEATH OF MALE AND FEMALE INFANTS, 1871 TO 1882.

Ages.		Deaths at under 1 Year of Age.				
		Year 1882.			Average of 11 Years, 1871 to 1881.	
		Number.	Percentage at each Age.	Number per 100 Births.	Percentage at each Age.	Number per 100 Births.
Boys.						
Under 1 month	...	659	32·16	4·84	34·23	4·42
1 to 3 months	...	368	17·96	2·70	17·30	2·23
3 to 6	„	439	21·43	3·23	19·43	2·51
6 to 12	„	583	28·45	2·28	29·04	3·75
Total	...	2,049	100·00	15·05	100·00	12·91
GIRLS.						
Under 1 month	...	492	29·41	3·75	30·81	3·46
1 to 3 months	...	308	18·41	2·34	17·23	1·94
3 to 6	„	378	22·59	2·88	20·14	2·26
6 to 12	„	495	29·59	3·77	31·82	3·57
Total	...	1,673	100·00	12·74	100·00	11·23

More deaths
of male
than female
infants at
all ages.

509. During the period of 11 years the deaths of male infants exceeded those of female infants at each of the periods of age. This was more especially the case in the first month of life, when the excess of the former was fully a third; in the next two months this excess was reduced to about a fifth, in the next three months to about a seventh, and in the next six months to something less than a tenth.

Periods at
which
infants die.

510. Over a third of the male and nearly a third of the female infants who died did so in the first month after birth; about a sixth of both males and females died in the next two months; about a fifth of both males and females died in the next three months; between a third and a fourth of the males and nearly a third of the females died in the next six months.

Deaths in
first month
and second
six months
of life.

511. More male infants died in the first month of life than in the whole of the second six months, but the female infants who died in the second six months slightly exceeded those who died in the first month.

Probable
mortality
of infants.

512. As a practical result of these calculations, it may be mentioned that of every 20,000 newly-born boys and girls in equal numbers, 442 of the former and 346 of the latter may be expected to die before they are a month old; 223 more boys and 194 more girls may be expected to die between 1 month and 3 months of age; 251 more boys and 226 more girls between 3 and 6 months; 375 more boys and 357 more girls between 6 and 12 months. At the end of a year it is probable that 1,291 of the boys and 1,123 of the girls will have died, and 8,709 of the former and 8,877 of the latter will be still living.

Infantile
mortality in
Australasian
colonies.

513. It has been pointed out in previous issues of this work that, in proportion to the number of infants born, the number who die before completing one year of life is greater in South Australia* than in any of the other Australasian colonies. This proportion in that colony, in the last three years of which the records are at hand, was considerably below the average, but was still above that in any of the other colonies. The infantile death rate in the last of those years, calculated in a similar manner, was also below the average in all the other colonies except New South Wales, as will be seen by the following table, which gives the number of births, the number of deaths of infants under one year, and the proportion of the latter to the former, in each of the colonies of the group, except Western Australia (which does not publish any statement of the number of infants who die), for each of the sixteen years ended with 1881. All the calculations were made in the office of the Government Statist, Melbourne:—

* The high infantile death rate in South Australia was first pointed out in a paper, by the present writer, read before the Adelaide Philosophical Society (now the Royal Society of South Australia) on the 19th March, 1878. Up to that date the fact seems to have been entirely unsuspected, and its announcement caused considerable discussion, together with some alarm, in that colony.

INFANTILE MORTALITY IN AUSTRALASIAN COLONIES.

Year.	Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.	
		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.
VICTORIA.			NEW SOUTH WALES.			QUEENSLAND.			
1866	25,010	3,838	15.35	16,950	1,939	11.44	4,127	690	16.72
1867	25,608	3,534	13.80	18,317	2,269	12.39	4,476	578	12.91
1868	27,243	3,054	11.21	18,485	1,791	9.69	4,460	552	12.38
1869	26,040	3,284	12.61	19,243	1,858	9.66	4,654	528	11.35
1870	27,151	3,203	11.80	19,648	1,867	9.50	4,905	526	10.72
1871	27,382	3,114	11.37	20,143	1,812	9.00	5,205	516	9.91
1872	27,361	3,334	12.19	20,250	2,116	10.45	5,265	578	10.98
1873	28,100	3,181	11.32	21,444	1,985	9.26	5,720	701	12.26
1874	26,800	3,341	12.47	22,178	2,428	10.95	6,383	776	12.16
1875	26,720	3,811	14.26	22,528	2,695	11.96	6,706	1,025	15.28
1876	26,769	2,980	11.13	23,298	2,629	11.28	6,903	994	14.40
1877	26,010	3,299	12.68	23,851	2,785	11.68	7,169	1,058	14.76
1878	26,581	3,262	12.27	25,328	3,126	12.34	7,397	1,234	16.68
1879	26,839	3,219	11.99	26,933	2,886	10.72	7,870	917	11.65
1880	26,148	3,105	11.86	28,162	3,200	11.36	8,196	865	10.55
1881	27,145	3,119	11.49	28,903	3,341	11.56	8,220	918	11.17
Sums and means	426,907	52,678	12.34	355,661	38,727	10.89	97,656	12,456	12.76
SOUTH AUSTRALIA.			TASMANIA.			NEW ZEALAND.			
1866	6,782	1,178	17.37	2,805	264	9.41	8,466	849	10.03
1867	7,041	1,254	17.81	2,971	267	8.98	8,918	873	9.79
1868	7,247	1,084	14.96	2,990	351	11.73	9,391	899	9.57
1869	6,976	911	13.06	2,859	291	10.18	9,718	957	9.85
1870	7,021	1,031	14.68	3,054	298	9.76	10,277	956	9.30
1871	7,082	961	13.57	3,053	260	8.52	10,592	882	8.33
1872	7,105	1,145	16.12	3,010	306	10.17	10,795	1,074	9.95
1873	7,107	990	13.93	3,048	266	8.73	11,222	1,213	10.81
1874	7,696	1,319	17.13	3,097	321	10.36	12,844	1,394	10.85
1875	7,408	1,343	18.13	3,105	407	13.11	14,438	1,816	12.58
1876	8,224	1,228	14.93	3,149	286	9.08	16,168	1,673	10.35
1877	8,640	1,212	14.03	3,211	365	11.37	16,856	1,527	9.06
1878	9,282	1,466	15.79	3,502	375	10.71	17,770	1,486	8.36
1879	9,902	1,217	12.29	3,564	384	10.77	18,070	1,941	10.74
1880	10,262	1,393	13.57	3,739	420	11.23	19,341	1,805	9.33
1881	10,708	1,364	12.74	3,918	405	10.34	18,732	1,731	9.24
Sums and means	128,483	19,096	14.86	51,075	5,266	10.31	213,598	21,076	9.87

514. The colonies named in the table stand in the following order in regard to the death rate of infants—the colony with the lowest average death rate being placed first, and the one with the highest last. The second and third colonies have nearly the same average rates, as also have the fourth and fifth, whilst the rate in South Australia is much the highest :—

Order of colonies in respect to infantile mortality.

ORDER OF COLONIES IN REFERENCE TO INFANTILE MORTALITY.

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

Infantile
mortality
in United
Kingdom
and France.

515. In England and Wales, the infantile mortality, although greater than in any of the colonies, is only slightly above that in South Australia, deaths at under 1 year of age having occurred during the ten years 1870 to 1879 in the proportion of 15·0 to every 100 births. In Scotland, the infantile death rate, during the four years 1870 to 1873, was a fraction higher than that in Victoria, being in the proportion of 12·55 to every 100 births. In Ireland, during the three years 1875 to 1877, the returns show only 9·5 deaths of infants to 100 births, but the registrations of Ireland are admittedly so defective that but little reliance can be placed on calculations based thereon. In France, during the year 1879, infants under 1 year died in the proportion of 15·7 per 100 births, or a higher rate than in the United Kingdom or any of its divisions. In the urban districts of France the proportion was 17·5, and in the rural districts 15·0, per 100 births. The percentage of illegitimate infants who died was 29·8, whilst that of legitimate infants was only 14·7.*

Infantile
mortality in
Melbourne
and
country.

516. The infantile mortality of large towns is naturally always greater than that in country districts. Thus the deaths at under 1 year of age in Melbourne and suburbs (Greater Melbourne) during the ten years ended with 1882 averaged 17 per 100 births, whilst in the extra-metropolitan districts of Victoria the mortality of infants at the same period of life averaged only 10 per 100 births. The following table shows the death rate of infants in the metropolis and in the other districts of the colony during each of the ten years named:—

INFANTILE MORTALITY IN AND OUTSIDE OF GREATER MELBOURNE,
1873 TO 1882.

Year.	Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.	
		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.
	Greater Melbourne.			Victoria, outside Greater Melbourne.		
1873 ...	8,007	1,277	15·95	20,093	1,904	9·48
1874 ...	7,946	1,480	18·63	18,854	1,861	9·87
1875 ...	8,227	1,546	18·79	18,493	2,265	12·25
1876 ...	8,202	1,339	16·33	18,567	1,641	8·84
1877 ...	8,295	1,407	16·96	17,715	1,892	10·68
1878 ...	8,636	1,297	15·02	17,903	1,965	10·98
1879 ...	8,829	1,467	16·61	18,010	1,752	9·73
1880 ...	8,645	1,439	16·65	17,503	1,666	9·52
1881 ...	9,237	1,514	16·39	17,908	1,605	8·96
1882 ...	9,576	1,857	19·39	17,171	1,865	10·86
Sums and means }	85,600	14,623	17·08	182,217	18,416	10·11

* See Mons. E. Cheysson's paper on the mortality of infants, *Journal de la Société de Statistique de Paris* for January, 1883, page 7.

517. As compared with the births, the infantile mortality of Greater Melbourne is, on the average, higher than that of Portsmouth, London, Brighton, Bristol, Plymouth, Wolverhampton, or Sunderland, but is less than that of thirteen other English towns of which particulars are available. The following are the towns in question, arranged in order according to the infantile death rate prevailing within their respective limits; the town with the lowest death rate being placed first, and that with the highest last. It is a remarkable fact that a low infantile death rate prevails in London, whilst that in Liverpool is higher than in any other large town in England :—

Infantile mortality in English towns.

INFANTILE MORTALITY IN TWENTY TOWNS OF ENGLAND, 1870 TO 1879.

Deaths under 1 Year of Age to 100 Births.			Deaths under 1 Year of Age to 100 Births.		
Portsmouth	...	14·4	Newcastle-on-Tyne	...	18·1
London	...	16·0	Nottingham	...	18·4
Brighton	...	16·1	Salford	...	18·6
Bristol	...	16·2	Manchester	...	19·0
Plymouth	...	16·3	Norwich	...	19·1
Wolverhampton	...	16·9	Bradford	...	19·1
Sunderland	...	17·0	Leeds	...	19·5
Birmingham	...	17·7	Leicester	...	21·9
Hull	...	17·8	Liverpool	...	22·2
Sheffield	...	17·9			
Oldham	...	17·9	Mean of towns named	...	17·4

518. In the Lying-in Hospital, Melbourne, 279 children were born alive during the six months ended with 30th June, 1882, and of these, 32, or over 11½ per cent., died before leaving the institution, 14 having died within 48 hours of their birth. In the previous twelve months, 11½ per cent.; in 1880, 5½ per cent.; in 1879, 8 per cent.; in 1878, 6½ per cent.; in 1877, 7 per cent.; and in 1876 and 1875, 9 per cent., of the infants born in the Lying-in Hospital died therein. It may be pointed out, however, 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 infants in Lying-in Hospital.

519. In the year 1882, deaths of male children under 5 years of age numbered 2,762, and deaths of female children under that age numbered 2,332—the former being in the proportion of about 35 per cent. and the latter of about 41 per cent. to the total number of deaths at all ages. These proportions are somewhat higher than similar ones for 1881, but lower than those for any other year since 1870. The following table shows the number of such deaths at each year of age and their proportion to the deaths at all ages in 1882 and in each of the previous 11 years :—

Deaths of children under 5.

DEATHS OF CHILDREN UNDER 5 YEARS OF AGE, 1871 TO 1882.

Years.	Years of Age at Death (last birthday).					Total Deaths under 5 Years.	
	0.	1.	2.	3.	4.	Number.	Proportion per 100 Deaths at All Ages.
MALES.							
1871 ...	1,710	463	135	79	77	2,464	42·15
1872 ...	1,801	486	155	120	102	2,664	42·23
1873 ...	1,679	456	186	146	97	2,564	39·06
1874 ...	1,839	504	184	159	128	2,814	40·43
1875 ...	2,071	917	383	234	217	3,822	44·78
1876 ...	1,637	511	312	261	210	2,931	38·04
1877 ...	1,838	512	216	123	108	2,797	38·08
1878 ...	1,763	465	176	140	87	2,631	36·65
1879 ...	1,817	353	159	117	94	2,540	36·12
1880 ...	1,669	414	156	103	74	2,416	36·55
1881 ...	1,696	357	141	102	72	2,368	33·71
Means ...	1,775	494	200	144	115	2,728	39·40
1882 ...	2,049	400	134	87	92	2,762	34·96
FEMALES.							
1871 ...	1,404	413	136	94	68	2,115	51·93
1872 ...	1,533	473	155	106	94	2,361	52·20
1873 ...	1,502	427	160	132	119	2,340	47·41
1874 ...	1,502	472	171	135	99	2,379	45·58
1875 ...	1,740	864	408	256	169	3,437	51·22
1876 ...	1,343	469	275	217	177	2,481	42·46
1877 ...	1,461	484	171	148	102	2,366	43·57
1878 ...	1,499	481	204	108	95	2,387	43·22
1879 ...	1,402	353	156	100	89	2,100	41·28
1880 ...	1,436	386	143	89	51	2,105	41·75
1881 ...	1,423	331	124	95	65	2,038	38·61
Means ...	1,477	468	191	135	103	2,374	45·93
1882 ...	1,673	358	121	94	86	2,332	40·67

High mortality of infants, 1882.

520. The number of infants (under 1 year) who died in 1882 was greater, in the case of both males and females, than in any other year of the previous 11 years except 1875, which is the more remarkable, as, at all the other ages under 5 years, the mortality of both sexes in 1882 was very much below the average.

More boys die than girls.

521. During the 11 years ended with 1881, deaths of boys under 5 exceeded those of girls under 5 by about 4,000, or 15 per cent. The former in all the years bore a smaller proportion to the total deaths of males than the latter did to the total deaths of females, a circumstance no doubt mainly due to the small proportion of old people in the female as compared with that in the male population. In none of the years did the mortality of boys under 5 exceed 45 per cent., but in three of them that of girls under 5 exceeded 50 per cent., of the whole mortality of their respective sexes. The epidemic period, the centre of which

was 1875, is easily recognised by the increased mortality which occurred thereat.

522. The average number of boys and girls at each year of age under 5, living during the period of 11 years ended with 1881, are compared in the next table with the average number of deaths of boys and girls at those ages which occurred annually during the same period :—

NUMBER AND DEATHS OF CHILDREN UNDER 5 YEARS OF AGE, 1871 TO 1881.

Age last Birthday.	Males.				Females.			
	Mean Number of Children living at each age, 1871 & 1881.	Mean Annual Number of Deaths at each age, 1871 to 1881.	Percentage of Deaths at each age.	Number of Deaths per 1,000 Children living.	Mean Number of Children living at each age, 1871 & 1881.	Mean Annual Number of Deaths at each age, 1871 to 1881.	Percentage of Deaths at each age.	Number of Deaths per 1,000 Children living.
0 ...	12,152	1,775	65·07	146·07 *	11,809	1,477	62·22	125·07 *
1 ...	11,228	494	18·11	43·99	11,004	468	19·71	42·53
2 ...	11,943	200	7·33	16·75	11,635	191	8·04	16·42
3 ...	11,807	144	5·28	12·20	11,469	135	5·69	11·77
4 ...	11,261	115	4·21	10·21	11,138	103	4·34	9·25
Total ...	58,391	2,728	100·00	46·72	57,055	2,374	100·00	41·61

523. During the period to which the table refers, the mean number of children of both sexes under 5 living was 115,446, and the mean number of deaths of such children was 5,102, whence it results that 44 in every 1,000 children under 5, or about 1 in 23, died annually. In every 1,000 boys the proportion who died annually was 47, or 1 in 21; in every 1,000 girls it was 42, or 1 in 24.

524. Of every 1,000 boys under 1 year of age, 146, and of every 1,000 girls under 1 year of age, 125, died annually. These are larger proportions than those quoted in the table showing the comparison of deaths of children under 1 with the births, the proportions in which were 129 deaths of male infants and 112 deaths of female infants to every 1,000 births of infants of those sexes respectively.

525. In proportion to their respective numbers in the population, more boys than girls died at every year of age, the difference per 1,000 living being as much as 21 at under 1,† but only about 1½ at from 1 to 2, and less than 1 at subsequent ages.

526. 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.

* These results, being based upon infants living instead of births, are naturally in excess of those in total line of last column of table following paragraph 508 ante.

† See also paragraph 510 ante.

Proportion of
deaths of
children at
each age.

527. Of the whole number of children who died before they attained the age of 5, nearly two-thirds, viz., 65 per cent. of the boys and 62 per cent. of the girls, were under 1 year of age; less than a fifth of the boys and about a fifth of the girls were between 1 and 2; about a fourteenth of the boys and about a twelfth of the girls were between 2 and 3; 1 in 19 of the boys and 1 in 18 of the girls were between 3 and 4; 1 in 24 of the boys and 1 in 23 of the girls were between 4 and 5.

Probable
mortality of
children
under 5.

528. It results from actuarial calculations based upon the figures in this and a previous table* that of every 20,000 boys and girls in equal numbers born in Victoria, 1,291 boys and 1,123 girls may be expected to die before they complete a year of life, 374 more boys and 369 more girls before they complete 2 years, 138 more boys and 139 more girls before they complete 3 years, 99 more boys and 98 more girls before they complete 4 years, and 83 more boys and 76 more girls before they complete 5 years. At the end of that period it is probable that 1,985 of the boys and 1,805 of the girls will have died; and 8,015 of the boys and 8,195 of the girls will be still living.

Deaths of oc-
togenarians.

529. The persons who died at the age of 80 or upwards numbered 380 in 1882, as against 358 in 1881, 262 in 1880, 245 in 1879, and 217 in 1878. Those in 1882 consisted of 220 males and 160 females. 15 of the males and 11 of the females had passed the age of 90, and 4 of the males and 2 of the females had passed the age of 100. The following are the exact ages of such persons in 1882, 1881, and the ten years ended with 1880:—

DEATHS OF OCTOGENARIANS, 1871 TO 1882.

Years of Age.	Year 1882.		Year 1881.		Ten years, 1871-80.	
	Males.	Females.	Males.	Females.	Males.	Females.
80	38	31	42	23	211	121
81	34	16	35	24	100	74
82	44	17	17	18	102	79
83	20	17	21	16	80	59
84	22	16	22	11	93	68
85	16	11	13	6	78	64
86	13	15	11	14	52	47
87	4	7	10	11	55	35
88	4	10	1	4	47	34
89	2	5	2	6	33	20
90	8	4	4	7	22	30
91	2	2	3	6	7	10
92	3	3	6	4	12	14
93	2	2	1	3	8	5
94	3	1	4	2	10	6
95	1	...	3	...	13	9
96	...	...	2	...	9	4
97	...	...	...	...	3	4
98	...	1	...	...	5	2

* See paragraph 512, also table following paragraph 508 *ante*, from which probable deaths at under 1 year of age have been deduced. Probability of deaths at other ages under 5 has been calculated from the numbers in the last table.

DEATHS OF OCTOGENARIANS, 1871 TO 1882—*continued.*

Years of Age.	Year 1882.		Year 1881.		Ten Years, 1871-80.	
	Males.	Females.	Males.	Females.	Males.	Females.
99	...	...	2	...	6	...
100	1	1	...	1	2	4
101	...	...	...	...	1	2
102	1	...	...	...	3	...
103	...	1	...	1	1	1
104	...	...	...	...	2	1
105	...	...	1	...	1	...
106	2	...	...	...	...	1
110	...	...	...	1	...	...
114	...	...	...	...	...	1
Unspecified	...	...	...	...	135*	98*
Total	220	160	200	158	1,091	793

530. In the 10 years ended with 1880, 1,091 males and 793 females Deaths of octogenarians, 1870 to 1880. died in Victoria at the age of 80 or upwards. The deaths of males and females at all ages during the same period numbered 70,158 and 52,412 respectively, therefore 1 male in every 64, and 1 female in every 66, lived to be upwards of 80 years of age. In the 8 years ended with 1880, that age was attained by 956 males, or 1 in 61, and by 695 females, or 1 in 63. In the same 8 years, 370 of the males, or 1 in 157, and 294 of the females, or 1 in 149, lived to be 85 years of age or upwards; 105 of the males, or 1 in 552, and 94 of the females, or 1 in 466, lived to be 90 years of age or upwards; 46 of the males, or 1 in 1,261, and 29 of the females, or 1 in 1,511, lived to be 95 years of age or upwards; and 10 of the males, or 1 in 5,800, and 10 of the females, or 1 in 4,382, lived to be upwards of 100 years of age.

531. The average age at death in 1882 was 29·74 years, or 29 years and 9 months. For males the average age was 32·04 years, or 32 years and about half a month, and for females, 26·58 years, or 26 years and 7 months. The average age at which both males and females die in Victoria has a tendency to advance from year to year, as will be seen by the following figures :— Average age at death.

AVERAGE AGE AT DEATH IN VICTORIA.

			Males.		Females.
			—		—
			Years.		Years.
23 years—1852 to 1875	...	...	21·70	...	15·01
Year 1875	...	...	24·28	...	18·23
„ 1876	...	...	26·81	...	21·84
„ 1877	...	...	28·60	...	23·06
„ 1878	...	...	29·54	...	23·24
„ 1879	...	...	30·65	...	24·71
„ 1880	...	...	30·72	...	25·35
„ 1881	...	...	32·63	...	25·98
„ 1882	...	...	32·04	...	26·58

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

Classification
of causes of
death.

532. The causes of death in Victoria, as in the United Kingdom, are arranged in classes and orders, according to the system proposed by the late Dr. William Farr, F.R.S., then of the General Register Office, London, in conjunction with Dr. Marc d'Espine, and first made public by the former in his report, dated 15th February, 1856, to the International Statistical Congress held in Paris in 1855-6.

Nosological
Index.

533. A Nosological Index was compiled by the present writer some years since, under the sanction of the then Registrar-General, Mr. W. H. Archer, to be used in connexion with this classification, in order to facilitate the bringing of all the circumstances resulting in death under one or other of the heads in the list, 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.

Victorian
index used
throughout
Australasia.

534. Since the introduction of this system into Victoria in 1861, it has been adopted in all the Australasian colonies, and, as a consequence, the Nosological Index referred to has also come into use throughout the group.*

Causes of
death classi-
fied.

535. 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 1882, also the total number who died from each cause during the twenty-eight years and a half ended with 1881 :—

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT.
(28½ Years : 1853 to 1881 ; and Year 1882.)

Class.	Order.	Causes of Death.	Number of Deaths.			
			28½ Years : 1853-1881	Year 1882.		
				Total. †	Chinese.	Aborigines.
		All causes	298,204	13,634	164	15
		Specified causes	296,501	13,600	160	15
		CLASSES.				
I.	...	ZYMOTIC DISEASES :—Zymotici (ζύμη, leaven). Diseases that are either epidemic, endemic, or contagious, induced by some specific body, or by the want of, or by the bad quality of, food	88,499	2,819	6	2
II.	...	CONSTITUTIONAL DISEASES : — Cachectici (καχεξία, bad habit of body). Sporadic diseases ; affecting several organs in which new morbid products are often deposited ; sometimes hereditary	40,070	2,085	47	2

* A copy of this Nosological Index was appended to the *Victorian Year-Book*, 1877-8, pp. 303 to 335.
† The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*

(28½ Years: 1853 to 1881; and Year 1882.)

Class.	Order.	Causes of Death.	Number of Deaths.			
			28½ Years: 1853-1881	Year 1882.		
				Total. *	Chinese.	Aborigines.
CLASSES—<i>continued.</i>						
III.	...	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	101,903	5,774	66	4
IV.	...	DEVELOPMENTAL DISEASES:— Metamorphici (μεταμόρφωσις, change of form). Special diseases, the incidental result of the formative, reproductive, and nutritive processes	41,913	2,081	16	6
V.	...	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	24,116	841	25	1
ORDERS.						
I.	1	<i>Miasmatic diseases:—</i> Miasmatici (μίασμα, stain; defilement)	81,062	2,449	5	2
	2	<i>Enthetic diseases:—</i> Enthetici (ἐνθετος, put in; implanted)	806	32	...	...
	3	<i>Dietic diseases:—</i> Dietici (δίαιτα, way of life; diet)	4,944	255	...	...
	4	<i>Parasitic diseases:—</i> Parasitici (παράσιτος, parasite)	1,687	83	1	...
II.	1	<i>Diathetic diseases:—</i> Diathetici (διάθεσις, condition; diathesis)	8,410	517	12	1
	2	<i>Tubercular diseases:—</i> Phthisisici (φθίσις, wasting away)	31,660	1,568	35	1
III.	1	<i>Brain diseases:—</i> Cephalici (κεφαλή, head) ...	32,152	1,498	8	...
	2	<i>Heart diseases:—</i> Cardiaci (καρδία, heart) ...	14,028	889	12	1
	3	<i>Lung diseases:—</i> Pneumonici (πνεύμων, lung)	29,031	1,868	26	2
	4	<i>Bowel diseases:—</i> Enterici (έντερον, intestine)	21,353	1,135	11	1
	5	<i>Kidney diseases:—</i> Nephritici (νεφρός, kidney)	3,501	311	4	...
	6	<i>Gennetic diseases:—</i> Aidoici (αἰδοῖα, pudenda)	503	19	...	...
	7	<i>Bone and muscle diseases:—</i> Myostici (μῦς, muscle; ὀστέον, bone)	702	33	...	...
	8	<i>Skin diseases:—</i> Chrotici (χρῶς, skin) ...	633	21	5	...
IV.	1	<i>Developmental diseases of children:—</i> Paidiaci (παῖδια, youth)	13,874	537	...	...
	2	<i>Developmental diseases of women:—</i> Gyniaci (γυνή, woman)	2,985	118	...	...
	3	<i>Developmental diseases of old people:—</i> Geratici (γῆρας, old age)	4,665	491	7	6

* The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*
(28½ Years: 1853 to 1881; and Year 1882.)

Class.	Order.	Causes of Death.	Number of Deaths.				
			28½ Years: 1853-1881	Year 1882.			
				Total. *	Chinese.	Aborigines.	
ORDERS— <i>continued.</i>							
IV.	4	<i>Diseases of nutrition</i> :—Atrophici (ἀτροφία, atrophy)	20,389	935	9	...	
V.	1	<i>Accident</i> :—Tychici (τύχη, chance) ...	21,648	741	15	1	
	2	<i>Battle</i> :—Polemici (πόλεμος, battle; fight) ...	...	...	...	...
	3	<i>Homicide</i> :—Androphonici (άνήρ, man; φονεύω, I kill)	509	17	...	...
	4	<i>Suicide</i> :—Autophonici (αὐτός, self; φονεύω, I kill)	1,885	83	10	...	
	5	<i>Execution</i> :—Demiotici (δημιώτης, executioner)	74	...	...	...
DISEASES, ETC.							
I.	1	Small-pox	21	2	...	...
		Chicken-pox	42	...	...	...
		Measles	4,161	15	...	...
		Scarlatina	8,796	89	...	...
		Diphtheria	8,146	122	...	...
		Quinsy	617	10	...	...
		Croup	4,260	42	...	...
		Whooping-cough	4,644	109	...	...
		Typhoid fever, &c.	11,694	472	3	...	
		Erysipelas	1,152	61	...	1	
		Metria	789	59	...	...
		Carbuncle, boil, &c.	80	6	...	...
		Influenza, coryza, catarrh	907	28	...	...
		Dysentery	12,623	182	2	...	
		Diarrhœa	18,989	968	...	1	
		Cholera	1,351	65	...	...
		Ague	100	4	...	...
		Remittent fever	704	5	...	...
		Rheumatism	1,485	81	...	...
		Miasmatic diseases not classed	501	29	...	...
		2	Syphilis	630	23
			Gonorrhœa, stricture of the urethra	174	9
			Glanders	2
		3	Privation	448	18
			Want of breast-milk	2,290	155
			Purpura and scurvy	296	8
			Alcoholism	1,880	73
Other dietic diseases	30		1	...	...
4	Thrush	1,014	25	...	...
	Worms, &c.	61	...	...	...
	Hydatids	592	58	1	...		
	Other parasitic diseases	20	...	...	...
II.	1	Gout	194	16	...	...
		Dropsy... ..	2,146	85	...	1	
		Cancer... ..	4,967	373	12	...	

*The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*
(28½ Years: 1853 to 1881; and Year 1882.)

Class.	Order.	Causes of Death.	Number of Deaths.			
			28½ Years: 1853-1881	Year 1882.		
				Total. *	Chinese.	Aborigines.
DISEASES, ETC.—<i>continued.</i>						
II.	1	Tumor	456	34	...	...
		Polypus	11	...	...	...
		Noma	67	...	...	...
		Mortification	400	7	...	...
		Other diathetic diseases	169	2	...	...
	2	Scrofula	1,068	39	2	...
		Tabes mesenterica	2,333	87	...	...
		Phthisis	23,067	1,274	32	1
		Hydrocephalus	4,401	145	...	...
		Other tubercular diseases	791	23	1	...
III.	1	Cephalitis	4,961	240	1	...
		Apoplexy	5,497	318	2	...
		Paralysis	2,796	176	...	...
		Insanity †	262	2	...	...
		Chorea	48	2	...	...
		Epilepsy	1,211	97	...	...
		Convulsions	10,143	306	...	...
		Other diseases of the nervous system	7,234	357	5	...
	2	Pericarditis	786	40	1	...
		Aneurism	1,614	73	3	1
		Other diseases of the circulatory system	11,628	776	8	...
	3	Laryngitis	912	45	...	...
		Bronchitis	9,289	610	4	...
		Pleurisy	1,645	123	2	...
		Pneumonia	12,021	758	12	2
		Congestion of the lungs, pulmonary apoplexy	2,822	228	2	...
		Asthma	769	53	4	...
		Other diseases of the respiratory system	1,573	51	2	...
	4	Gastritis	2,852	171	...	...
		Enteritis	5,304	253	1	1
		Peritonitis	1,689	84	3	...
		Ascites	444	14	1	...
		Ulceration of intestines	420	19	1	...
		Hernia	434	17	...	...
		Ileus	859	57	...	...
		Intussusception	197	9	...	...
		Stricture of intestines	88	3	...	...
		Fistula	41	3	...	...
		Stomach diseases undefined	1,397	82	...	...
		Pancreas disease	16	...	...	...
		Hepatitis	2,347	85	1	...
		Jaundice, gallstone	950	50	...	...
		Liver disease undefined	4,217	284	4	...
		Spleen disease	98	4	...	...
	5	Nephritis	405	39	...	...
		Ischuria	70	5	...	...
		Nephria	1,140	149	4	...
		Diabetes	246	18	...	...

* The Chinese and Aborigines are included in this column.

† Deaths from this cause are now usually returned under other heads.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*
(28½ Years : 1853 to 1881 ; and Year 1882.)

Class.	Order.	Causes of Death.	Number of Deaths.			
			28½ Years : 1853-1881	Year 1882.		
				Total. *	Chinese.	Abori- gines.
		<i>DISEASES, ETC.—continued.</i>				
III.	5	Stone, gravel	110	11	...	...
		Cystitis	352	25	...	...
		Other diseases of the urinary organs	1,178	64	...	...
	6	Ovarian dropsy	112	5	...	...
		Other diseases of the generative organs	391	14	...	...
	7	Arthritis	144	9	...	...
		Ostitis, periostitis	42	4	...	...
		Other diseases of the locomotive system	516	20	...	...
	8	Phlegmon, whitlow	52	1	...	...
		Ulcer	199	5	...	...
		Other diseases of the skin	382	15	5	...
IV.	1	Premature birth... ..	5,662	347	...	...
		Cyanosis	376	20	...	...
		Spina bifida	243	10	...	...
		Other malformations	705	25	...	...
		Teething	6,877	135	...	...
		Other developmental diseases of children	11	...	...	...
	2	Paramenia	97	1	...	...
		Childbirth	2,887	117	...	...
		Other developmental diseases of adults	1	...	...	...
	3	Old age	4,665	491	7	6
	4	Atrophy and debility	20,389	935	9	...
V.	1	Fractures, contusions, &c.	7,555	342	10	...
		Wounds	551	24	...	...
		Burns and scalds	2,282	70	1	...
		Sunstroke	430	17	...	...
		Struck by lightning	45	...	...	...
		Poison	395	16	...	...
		Snake or insect bite	77	5	...	...
		Drowning	4,923	186	3	1
		Suffocation	1,601	66	...	...
		Other or unspecified accidents	3,789	15	1	...
	3	Murder and manslaughter	509	17	...	...
	4	Wounds	556	20	...	...
		Poison	349	15	...	...
		Drowning	370	13	...	...
		Hanging	538	33	10	...
		Suicide by other means	72	2	...	..
	5	Judicial hanging	74	...	...	...
...	...	<i>Causes not specified</i>	1,703	34	4	...

Causes of
death in
order of
fatality.

536. The next table shows the same causes of death, arranged in the order of their fatality, during 1882, with the numbers who died from each cause in that year, and during the twenty-eight years and a half ended with 1881, also the order of fatality of the different causes during that period :—

* The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN ORDER OF FATALITY.

(28½ Years : 1853 to 1881 ; and Year 1882.)

Order of Fatality.		Causes of Death in Order of Fatality, 1882.	Number of Deaths.	
28½ Years : 1853-1881.	Year 1882.		28½ Years : 1853-1881.	Year 1882.
1	1	Phthisis	23,067	1,274
4	2	Diarrhœa	18,989	968
3	3	Atrophy and debility	20,389	935
8	4	Diseases of the organs of circulation not classed	11,628	776
6	5	Pneumonia	12,021	758
2	6	Accidents	21,648	741
10	7	Bronchitis	9,289	610
20	8	Old age	4,665	491
7	9	Typhoid fever, &c.	11,694	472
18	10	Cancer	4,967	373
13	11	Diseases of the nervous system not classed ...	7,234	357
15	12	Premature birth	5,662	347
16	13	Apoplexy	5,497	318
9	14	Convulsions	10,143	306
24	15	Diseases of the liver not classed	4,217	284
17	16	Enteritis	5,304	253
19	17	Cephalitis	4,961	240
28	18	Congestion of lungs, pulmonary apoplexy ...	2,822	228
5	19	Dysentery	12,623	182
26	20	Childbirth and metria	3,676	176
29		Paralysis	2,796	176
27	21	Gastritis	2,852	171
32	22	Want of breast-milk	2,290	155
47	23	Nephria	1,140	149
22	24	Hydrocephalus	4,401	145
23	25	Croup	4,260	142
14	26	Teething	6,877	135
37	27	Pleurisy	1,645	123
12	28	Diphtheria	8,146	122
21	29	Whooping-cough	4,644	109
44	30	Epilepsy	1,211	97
11	31	Scarlatina	8,796	89
31	32	Tabes mesenterica	2,333	87
30	33	Hepatitis	2,347	85
33		Dropsy	2,146	85
36	34	Peritonitis	1,689	84
34	35	Suicide	1,885	83
41	36	Diseases of the stomach not classed	1,397	82
40	37	Rheumatism	1,485	81
35	38	Alcoholism	1,880	73
38	39	Aneurism	1,614	73
42	40	Cholera	1,351	65
45	41	Diseases of the urinary organs not classed ...	1,178	64
46	42	Erysipelas	1,152	61
60	43	Hydatids	592	58
53	44	Ileus	859	57
43	45	Malformations	1,324	55
57	46	Asthma	769	53
39	47	Diseases of the respiratory system not classed	1,573	51
50	48	Jaundice, gall-stone	950	50
51	49	Laryngitis	912	45
56	50	Pericarditis	786	40
48	51	Scrofula	1,068	39
69	52	Nephritis	405	39
64	53	Tumor	456	34

CAUSES OF DEATH IN ORDER OF FATALITY—*continued.*
(28½ Years: 1853 to 1881; and Year 1882.)

Order of Fatality.		Causes of Death in Order of Fatality, 1882.	Number of Deaths.	
28½ Years: 1853-1881.	Year 1882.		28½ Years: 1853-1881.	Year 1882.
54	54	Venereal diseases	804	32
63	55	Miasmatic diseases not classed	501	29
52	56	Influenza, coryza, catarrh	907	28
49	57	Thrush	1,014	25
73		Cystitis	352	25
55	58	Tubercular diseases not classed	791	23
61	59	Diseases of locomotive system not classed	516	20
68	60	Ulceration of intestines	420	19
65	61	Privation	448	18
76		Diabetes	246	18
62	62	Murder, manslaughter, and justifiable homicide	509	17
67		Hernia	434	17
79	63	Gout	194	16
25	64	Measles	4,161	15
72		Skin diseases not classed	382	15
66	65	Ascites	444	14
71		Diseases of the organs of generation not classed	391	14
83	66	Stone, gravel	110	11
59	67	Quinsy	617	10
78	68	Intussusception	197	9
81		Arthritis	144	9
74	69	Purpura and scurvy	296	8
70	70	Mortification	400	7
88	71	Carbuncle, boil	80	6
58	72	Remittent fever	704	5
77		Ulcer	199	5
82	73	Ovarian dropsy	112	5
90		Ischuria	70	5
84	74	Ague	100	4
85		Spleen disease	98	4
95	75	Ostitis, periostitis	42	4
87		Stricture of the intestines	88	3
96	76	Fistula	41	3
75		Insanity	262	2
80	77	Diathetic diseases not classed	169	2
94		Chorea	48	2
98	78	Small-pox	21	2
86		Paramenia	97	1
93	79	Phlegmon, whitlow	52	1
97		Dietic diseases not classed	30	1
89	...	Execution	74	...
91	...	Noma	67	...
92	...	Worms	61	...
95	...	Chicken-pox	42	...
99	...	Parasitic diseases not classed	20	...
100	...	Pancreas disease	16	...
101	...	Polypus	11	...
102		Developmental diseases of children not classed	11	...
103	...	Glanders	2	...
	...	Developmental diseases of women not classed	1	...
		Deaths from specified causes	296,501	13,600
		Deaths from unspecified causes	1,703	34
		Deaths from all causes	298,204	13,634

537. The fatality of the different circumstances which cause death in this colony, as compared with the fatality resulting from similar causes in England and Wales, is shown by the following table, in which the number of persons dying from each cause in either country is compared with the number of persons living in the same country. The totals of each class and order are given, as also are some of the principal diseases. The Victorian results relate to the year 1882 and to the twenty-seven years and a half ended with 1880, and the results for England and Wales to the thirty years ended with 1879:—

Death rate from various causes in Victoria and England.

ANNUAL DEATH RATE FROM EACH GROUP OF CAUSES AND CERTAIN DISEASES IN VICTORIA AND ENGLAND AND WALES.

Class.	Order.	Causes of Death.	Number of Annual Deaths per 100,000 of Mean Population.		
			Victoria.		England and Wales.
			Year 1882.	Average of 27½ Years: 1853 to 1880.	Average of 30 Years: 1850 to 1879.
		All causes	1,531·10	1,665·42	2,210·51
		Specified causes	1,527·28	1,655·66	2,189·90
		CLASSES.			
I.	...	Zymotic diseases	316·57	501·33	484·57
II.	...	Constitutional diseases	234·15	222·04	410·87
III.	...	Local diseases	648·42	562·81	872·15
IV.	...	Developmental diseases	233·70	233·95	346·49
V.	...	Violent deaths	94·44	135·53	75·82
		ORDERS AND DISEASES.*			
I.	1	Miasmatic diseases	275·02	459·99	458·80
		Measles	1·68	23·88	41·37
		Scarlatina	9·99	50·74	} 100·60
		Diphtheria	13·70	46·79	
		Croup	15·95	24·09	22·80
		Whooping-cough	12·24	26·08	51·90
		Typhoid fever, &c.	53·01	66·07	46·94†
		Dysentery	20·44	72·86	6·03
		Diarrhœa	108·71	106·71	87·22
		Metria (see also Childbirth and metria <i>infra</i>)	6·63	4·14	6·16
	2	Enthetic diseases (venereal diseases, &c.)	3·59	4·46	7·88
	3	Dietic diseases (privation, want of breast-milk, alcoholism, &c.)	28·64	27·51	11·83
	4	Parasitic diseases (thrush, hydatids, &c.)	9·32	9·37	6·06
II.	1	Diathetic diseases	58·06	46·27	82·31
		Dropsy	9·55	12·15	34·48
		Cancer, &c.	41·89	29·45	38·96
	2	Tubercular diseases	176·07	175·77	328·56
		Phthisis	143·07	127·38	249·14
		Hydrocephalus	16·28	24·71	36·27

* Particulars respecting some of the principal diseases only are given.

† The death rate from typhoid fever is given for the ten years ended with 1879. Prior to 1870, it was not separated from typhus in the English returns.

ANNUAL DEATH RATE FROM EACH GROUP OF CAUSES AND CERTAIN DISEASES IN VICTORIA AND ENGLAND AND WALES—*continued.*

Class.	Order.	Causes of Death.	Number of Annual Deaths per 100,000 of Mean Population.		
			Victoria.		England and Wales.
			Year 1882.	Average of 27½ Years: 1853 to 1880.	Average of 30 Years: 1850 to 1879.
		ORDERS AND DISEASES— <i>continued.</i>			
III.	...	Diseases of the systems—			
	1	Nervous (brain diseases, &c.) ...	168·22	179·08	280·80
	2	Circulatory (heart diseases, &c.)	99·83	76·81	102·38
	3	Respiratory (lung diseases, &c.)...	209·78	159·56	339·02
	4	Digestive (stomach, bowels—diseases, &c.)	127·46	118·37	100·47
	5	Urinary (kidney, bladder—diseases, &c.)	34·93	18·73	29·69
	6	Generative (ovarian dropsy, &c.)	2·13	2·86	5·70
	7	Locomotive (arthritis, ostitis, &c.)	3·71	3·94	8·01
	8	Integumentary (phlegmon, ulcer, &c.)	2·36	3·46	6·08
IV.	...	Developmental diseases—			
	1	Of children (malformation, teething, &c.)	60·31	78·28	85·00
	2	Of women	13·25	16·45	11·23
		Childbirth (see also Childbirth and metria <i>infra</i>)	13·14	15·92	10·79
	3	Of old people (old age) ...	55·14	24·75	133·02
	4	Diseases of nutrition (atrophy and debility)	105·00	114·48	117·24
V.	1	Accident or negligence	83·21	121·85	} 75·82
	3	Homicide	1·91	2·87	
	4	Suicide	9·32	10·39	
	5	Execution ... ..	...	·42	
I. IV.	1 } 2 }	Childbirth and metria	19·77	20·06	16·95

Results compared.

538. 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:—Some of the zymotic diseases— notably dysentery, diarrhœa, and typhoid fever, diseases of the dietic order (including want of breast-milk and alcoholism), and diseases of the parasitic order (including thrush, hydatids, &c.); diseases of the stomach and bowels; violence; and the consequences of childbirth. From every other cause shown, also from all causes combined, the death rate is on the average higher in England and Wales than in Victoria.

Zymotic diseases.

539. The death rate from zymotic diseases was, as in the three previous years, considerably below the average. Ever since the abatement of the fatal epidemics of measles and scarlatina, which commenced in 1874, and continued until 1876, the death rate from this class

of complaints has been decreasing, and, although on the average as high as in England, it has been in the last six years much lower than in that country. This decrease in 1882 occurred in all miasmatic complaints except diarrhœa and metria, and in complaints of the dietic and parasitic orders; the rate of mortality under the last two heads, however, being only slightly below the average. Diarrhœa, which, of all zymotic diseases, is the most fatal in Victoria, where also it is on the average much more prevalent than in England, caused more deaths in 1882 than any other disease except phthisis, and thus rose from the fourth—its usual position—to the second place on the list showing the diseases in order of their fatality.* The mortality from metria, which, as in the previous year, was especially high, will be referred to hereafter.†

540. The following is a statement of the death rate from zymotic diseases over a series of years in all the Australasian colonies except Western Australia, respecting which no information is at hand. The colonies are placed in order according to the rate prevailing in each:—

Zymotic diseases in Australasian colonies.

ORDER OF COLONIES IN REFERENCE TO MORTALITY FROM ZYMOTIC DISEASES.

Colony.	Years over which the Observations extend.	Deaths from Zymotic Diseases per 10,000 Persons Living.
1. Queensland	1868 to 1878	53·8
2. Victoria	1868 to 1878	43·4
3. South Australia	1869 to 1878	39·1
4. New South Wales	1868 to 1878	38·1
5. New Zealand	1872 to 1878	33·1
6. Tasmania	1868 to 1878	29·2

541. It should be mentioned that the period named in the table can hardly be considered an average one, as it embraces the years from 1874 to 1876, in which epidemics of measles and scarlatina prevailed, which increased the death rate, it is true, more or less in all the colonies, but pressed with especial weight upon Victoria. In the six years ended with 1881 the mortality from zymotic diseases in Victoria was at the rate of 38·6 per 10,000, or slightly above that in New South Wales, and in the last two years it was at the rate of 28·3 per 10,000, or below that in any of the other colonies.

Period unfavorable to Victoria.

* See table following paragraph 536 ante.
 † See paragraph 569 et seq. post.

Zymotic
diseases
affecting
children.

542. The following table shows the number of deaths from zymotic diseases particularly affecting children which occurred during the nineteen years ended with 1882:—

DEATHS FROM ZYMOTIC DISEASES CHIEFLY AFFECTING CHILDREN,
1864 TO 1882.

Year.	Number of Deaths from—							Total.
	Measles.	Scarlatina.	Diph- theria.	Croup.	Whooping- cough.	Dysentery.	Diarrhoea.	
1864 ...	7	278	451	160	25	243	528	1,692
1865 ...	11	215	391	171	304	402	864	2,358
1866 ...	427	462	331	132	365	525	1,027	3,269
1867 ...	630	621	334	115	205	430	986	3,321
1868 ...	24	460	451	194	243	220	640	2,232
1869 ...	24	224	493	162	100	306	858	2,167
1870 ...	3	24	418	99	50	244	706	1,544
1871 ...	4	27	255	90	318	316	626	1,636
1872 ...	7	135	320	121	227	424	747	1,981
1873 ...	1	188	420	142	299	357	629	2,036
1874 ...	256	120	375	159	151	325	846	2,232
1875 ...	1,541	985	239	135	58	509	1,002	4,469
1876 ...	5	2,240	201	173	13	202	675	3,509
1877 ...	6	183	359	315	245	254	963	2,325
1878 ...	5	136	336	331	291	197	877	2,173
1879 ...	3	61	337	275	193	140	698	1,707
1880 ...	252	26	198	156	179	122	604	1,537
1881 ...	62	86	114	125	167	115	671	1,340
1882 ...	15	89	122	142	109	182	968	1,627
Total in } 19 years }	3,283	6,560	6,145	3,197	3,542	5,513	14,915	43,155

Children's
zymotic
diseases,
1882.

543. The mortality in 1882 from the seven diseases named in the table was much above that in the previous year—in which, however, the mortality from them was unusually low—and was also above that in 1880, but was below that in any other year shown except 1870. The increase, as compared with 1881, occurred principally in deaths from diarrhoea and dysentery. Slight increases also occurred in deaths from scarlatina, diphtheria, and croup, but deaths from measles and whooping-cough were fewer than in 1881.

Typhoid
fever.

544. Deaths from typhoid fever in 1882 numbered 472, which was 121, or about a third, more than in 1881. The mortality from this complaint was the highest since 1878, in which, as well as in the previous year, it was unusually high; as compared with population, it was exceeded in those two years and in 1875, 1874, 1870, and 1867, but in no other years. The following table shows the number of deaths from typhoid fever, and their proportion to the population, during each of the past sixteen years:—

DEATHS FROM TYPHOID FEVER, 1867 TO 1882.

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.
1867	455	7.06	1876	375	4.71
1868	295	4.45	1877	532	6.58
1869	360	5.24	1878	532	6.48
1870	416	5.83	1879	438	5.25
1871	269	3.65	1880	297	3.49
1872	323	4.29	1881	351	4.04
1873	282	3.68	1882	472	5.30
1874	470	6.04			
1875	455	5.78	Mean ...	395	5.11

545. In England and Wales the mortality from typhoid fever has been considerably reduced of late years. During the ten years ended with 1879 the mean death rate therefrom was 4.69 per 10,000 persons living, which is even lower than in Victoria. In the years 1879 and 1880 it fell to 2.92 and 3.20 respectively per ten thousand,* or lower than it has ever been in this colony.

Typhoid fever in England and Wales.

546. The following table shows the mortality from typhoid fever in all the Australasian colonies except Western Australia during the nine years ended with 1881, or during as many of those years as the information is available for:—

Typhoid fever in Australasian colonies.

DEATHS FROM TYPHOID FEVER IN AUSTRALASIAN COLONIES, 1873 TO 1881.

Year.	Number of Deaths from Typhoid Fever.					
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.
1873 ...	282	3.68	...	...	67	4.78
1874 ...	470	6.05	...	...	78	5.03
1875 ...	455	5.78	298	5.00	158	9.16
1876 ...	375	4.71	401	6.49	72	3.91
1877 ...	532	6.58	375	5.81	105	5.38
1878 ...	532	6.48	441	6.50	197	9.53
1879 ...	438	5.25	265	3.71	132	6.16
1880 ...	297	3.49	240	3.33	54	2.43
1881 ...	351	4.04	266	3.49	85	3.85
Total...	3,732	5.12	2,286	4.90	948	5.58
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	68	3.48	24	2.32	127	4.41
1874 ...	97	4.82	44	4.22	161	5.05
1875 ...	94	4.53	50	4.81	340	9.47
1876 ...	92	4.22	26	2.49	195	5.03
1877 ...	84	3.63	41	3.86	133	3.26
1878 ...	106	4.37	50	4.61	131	3.11
1879 ...	101	3.97	38	3.42	208	4.64
1880 ...	63	2.39	29	2.55	177	3.73
1881 ...	85	2.95	33	2.81	137	2.78
Total...	790	3.82	335	3.45	1,609	4.61

* The English figures quoted are those of enteric, or typhoid, and simple continued fever, which probably correspond with fevers tabulated as typhoid in Victoria. These fevers in England were not separated from typhus until 1870, the latter being a disease which, it is said, does not exist in Victoria.

Deaths from typhoid fever in the colonies, 1881.

547. In all the colonies except New Zealand the death rate from typhoid fever was slightly higher than in the previous year, but was still below the average in 1881. Usually it appears to be more fatal in Queensland, Victoria, and New South Wales than it is in the other three colonies.

Constitutional diseases—phthisis.

548. The death rate from Constitutional Diseases, Class II., was somewhat above the average. By far the most fatal complaint under this head is phthisis or pulmonary consumption, which in 1882 caused 1,274 deaths, a larger number than had ever been previously set down to it in one year. Except during the prevalence of epidemics, phthisis is the occasion of more deaths than any other disease; in 1882, diarrhoea, closely followed by atrophy and debility, stood next to phthisis on the list of causes of death,* but neither of these complaints caused more than three-fourths of the number of deaths set down to the latter. It should also be borne in mind, as showing its baneful effects as compared with those of the other diseases named, that these are complaints usually attacking infants and young children, whilst the majority of the victims of phthisis are at the adult period of life.

Deaths from phthisis.

549. The following table shows the number of deaths from phthisis and their proportions to the total population in each of the last twenty-two years:—

DEATHS FROM PHTHISIS IN VICTORIA, 1861 TO 1882.

Year.	Deaths from Phthisis.		Year.	Deaths from Phthisis.	
	Total Number.	Number per 10,000 Persons Living.†		Total Number.	Number per 10,000 Persons Living.†
1861 ...	753	13·94	1873 ...	945	12·34
1862 ...	707	12·90	1874 ...	1,011	13·00
1863 ...	717	12·74	1875 ...	1,027	13·04
1864 ...	686	11·70	1876 ...	1,010	12·68
1865 ...	741	12·12	1877 ...	1,088	13·46
1866 ...	782	12·43	1878 ...	1,124	13·68
1867 ...	793	12·31	1879 ...	1,058	12·69
1868 ...	746	11·25	1880 ...	1,175	13·82
1869 ...	893	12·99	1881 ...	1,199	13·80
1870 ...	888	12·45	1882 ...	1,274	14·31
1871 ...	841	11·41			
1872 ...	876	11·63	Total in {		
			22 years }	20,334	12·75

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

Death rate from phthisis.

550. By the figures in the table it appears that the death rate from phthisis fell with tolerable steadiness from 1861 to 1871, but since that period there has been a gradual increase. During the whole period of 22 years the deaths from this complaint were in the proportion of 12·75

* See table following paragraph 536 *ante*.

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

per 10,000 persons living ; during the first 11 of those years that proportion was 12·38 and in the last 11 years it was 13·13. In 1882 the rate was higher than in any previous year, and for the first time exceeded 14 per 1,000.

551. In the *Victorian Year-Book* for 1873* the announcement was hazarded that although the death rate from phthisis, calculated upon the total population, appeared to be tolerably even from year to year, yet the disease was actually increasing in Victoria, and this conclusion was arrived at by an impression, for which there were good grounds, that persons at ages most subject to be attacked by phthisis were not so numerous in the population as they had been, and consequently the death rate from phthisis, if it pressed upon such persons with no more severity than formerly, ought to have declined, which it had not done. To test the accuracy of this assumption, the following table has been prepared, which shows the numbers living at different ages according to the returns of the last three censuses, the mean number of deaths from phthisis in their respective census years and the years before and after them, and the proportion of the deaths at each age to the numbers living at the same age :—

Death rate from phthisis at different ages.

PROPORTION OF DEATHS FROM PHTHISIS TO POPULATION AT DIFFERENT AGES AT LAST THREE CENSUSES.

Ages.	Enumerated Population.			Mean Annual Number of Deaths from Phthisis.			Proportion of Deaths from Phthisis per 10,000 of the Population.		
	1861.	1871.	1881.	1860-2.	1870-2.	1880-2.	1861.	1871.	1882.
MALES.									
0 to 15 years ...	90,024	155,498	167,019	23	19	29	2·55	1·22	1·74
15 „ 20 „ ...	16,850	26,264	49,445	13	15	34	7·72	5·71	6·88
20 „ 25 „ ...	33,513	24,004	40,593	41	45	86	12·23	18·75	21·19
25 „ 35 „ ...	103,462	62,132	50,115	171	138	152	16·53	22·21	30·33
35 „ 45 „ ...	53,628	73,281	49,382	116	160	124	21·63	21·83	25·11
45 „ 55 „ ...	21,605	38,663	54,793	50	86	157	23·14	22·24	28·65
55 „ 65 „ ...	7,414	15,073	28,013	19	42	88	25·63	27·86	31·41
65 and upwards	2,155	6,135	12,723	5	12	23	23·20	19·56	18·08
Total ...	328,651	401,050	452,083	438	517	693	13·33	12·89	15·33
FEMALES.									
0 to 15 years ...	89,297	153,278	164,743	33	15	29	3·70	·98	1·76
15 „ 20 „ ...	16,343	28,292	51,191	23	35	64	14·07	12·37	12·50
20 „ 25 „ ...	22,688	25,418	43,324	43	49	91	18·95	19·28	21·00
25 „ 35 „ ...	46,858	49,495	48,946	116	109	130	24·76	22·02	26·56
35 „ 45 „ ...	22,639	41,570	42,816	58	90	103	25·62	21·65	24·06
45 „ 55 „ ...	9,196	19,896	34,735	23	39	72	25·01	19·60	20·72
55 „ 65 „ ...	3,541	8,563	16,126	8	9	23	22·59	10·51	14·26
65 and upwards	1,109	3,966	8,382	2	5	11	18·03	12·61	13·12
Total ...	211,671	330,478	410,263	306	351	523	14·46	10·62	12·75

* See *Victorian Year-Book* 1873, paragraph 321.

Decrease of
males at
phthisical
ages.

552. From 25 to 55 may be considered to be essentially the phthisical ages.* It is found that a gradual falling-off, dating from 1861, has taken place in the numbers of the male population at these ages, whilst at the same ages the deaths of males from phthisis have been more numerous at each successive census period. The figures are as follow :—

		Number of Males living between 25 and 55.	Number of Deaths of Males from Phthisis between 25 and 55.
1861	...	178,695	337
1871	...	174,076	384
1881	...	154,290	433

Increase of
phthisis
amongst
males.

553. The increase of phthisis amongst the male population is strikingly shown by these figures. The number at the phthisical ages was smaller in 1871 than in 1861 by 4,619, and yet the deaths from phthisis at those ages increased by 47; the number was smaller in 1881 than in 1871 by 19,786, and yet the deaths from phthisis increased by 49.

Increase of
phthisis
amongst
females.

554. In the case of the females the figures in the table also show an increase in the mortality from phthisis at the phthisical ages, although not so marked as in the case of the males, and appearing to date only from 1871. Between that period and 1881 there was an actual decrease in the female population at only one of the age-groups, viz., from 25 to 35—the falling-off being 549; but concurrently with this there was in the same group an increase of 20 in the deaths from phthisis. At the whole period of life which has been taken as the representative one, viz., from 25 to 55, the female population increased, but the mortality from phthisis increased in a still faster ratio, the proportion being 1 death from phthisis in 466 females living in 1871, and 1 in 415 in 1881.

Relative
death rate
from
phthisis
amongst
males and
females.

555. By means of the calculations in the table, it is elicited that the mortality of males from phthisis at from 15 to 20 is only about half that of females; that at from 20 to 45 the mortality of males and females from that complaint relatively to their respective numbers is about equal; and that after 45 phthisis presses much more hardly upon males than females. As regards the effects of the complaint upon the population at all ages, it is shown that in 1861 it affected females more than males, but in 1871 and 1881 the reverse was the case, males being much the more heavily affected.

Ages at
death from
phthisis.

556. The following table gives the number of deaths from phthisis at each age in 1882; also the proportion which such deaths bore to the total deaths from all causes in 1882 and in the ten years ended with 1880 :—

* According to the table, this is strictly true in regard to females, but from 55 to 65 is the period at which the proportion of males dying from phthisis was highest. The present argument, however, is not affected by this circumstance.

DEATHS FROM PHTHISIS, 1882.—AGES AT DEATH.

Ages.	Number who Died from Phthisis, 1882.			Percentage of Deaths from Phthisis to those from all Causes.	
	Males.	Females.	Total.	1882.	Ten Years: 1871-80.
Under 5 years ...	13	8	21	.41	.51
5 to 10 „ ...	6	4	10	2.54	1.40
10 „ 15 „ ...	8	21	29	8.98	5.15
15 „ 20 „ ...	33	66	99	24.75	21.22
20 „ 25 „ ...	91	93	184	33.70	32.22
25 „ 35 „ ...	176	133	309	33.12	29.18
35 „ 45 „ ...	128	95	223	19.95	20.27
45 „ 55 „ ...	166	73	239	15.37	13.69
55 „ 65 „ ...	95	21	116	7.90	8.30
65 „ 75 „ ...	26	12	38	3.55	2.97
75 years and upwards... ..	1	4	5	.68	.83
Unspecified	1	...	1	...	...
Total	744	530	1,274	9.34	8.29

557. If the figures in the last two columns of the table be compared, it will be noticed that in 1882 the proportion of deaths from phthisis occurring between the ages of 15 and 35 was much above the average. Moreover, from the last column it may be found that, whilst at all ages phthisis causes on the average 1 death in 12, it causes a much higher relative mortality at the adult period of life. At from 15 to 20, and 35 to 45, about 1 in 5 ; at from 20 to 25, about 1 in 3 ; at from 25 to 30, nearly 1 in 3 ; at from 45 to 55, about 1 in 7, of the total deaths being due to its effects.

Phthisis most fatal to adults.

558. In proportion to population, the deaths from phthisis have always been much more numerous in Melbourne and suburbs (Greater Melbourne) than in the remainder of the colony, as will be seen by the following figures, which give the results for twenty-two years:—

Phthisis in Melbourne and country.

DEATHS FROM PHTHISIS PER 10,000 PERSONS LIVING IN AND OUTSIDE GREATER MELBOURNE, 1861 TO 1882.

Year.	Greater Melbourne.	Extra-Metropolitan Districts.	Year.	Greater Melbourne.	Extra-Metropolitan Districts.
1861 ...	23.44	10.63	1873 ...	20.51	8.77
1862 ...	24.64	8.71	1874 ...	22.04	8.94
1863 ...	23.71	8.79	1875 ...	21.46	9.25
1864 ...	20.08	8.70	1876 ...	22.46	8.28
1865 ...	22.11	8.57	1877 ...	22.74	9.29
1866 ...	20.42	9.53	1878 ...	22.62	9.63
1867 ...	21.56	8.87	1879 ...	21.77	8.45
1868 ...	20.83	7.63	1880 ...	23.95	8.92
1869 ...	23.87	8.83	1881 ...	22.71	9.45
1870 ...	22.49	8.56	1882 ...	23.09	10.03
1871 ...	22.08	7.20			
1872 ...	18.69	8.62	Means	22.15	8.88

Apparent
inconsist-
ency
explained.

559. It will be observed that in 1882 the death rate from phthisis both in Greater Melbourne and in the extra-metropolitan districts was somewhat below that in 1861, which may appear inconsistent with the fact that, as shown in a previous table,* the whole death rate from phthisis in 1882 was greater than that in 1861. This is not, however, necessarily the case. It may sometimes happen that whilst two fractions are less respectively than two other fractions, the ratio of the sum of the numerators to the sum of the denominators of the first pair may nevertheless be greater than the ratio of the like terms of the second pair.†

Death rate
from
phthisis in
England.

560. In England and Wales, in the 16 years ended with 1880, the death rate from phthisis, per 10,000 persons, ranged from 18.75 in 1880 to 26.53 in 1866, the mean of the whole period being 22.81.‡ The average rate is much higher than that of Victoria, but appears to be about equal to that of Greater Melbourne. It may be remarked that there is no doubt the death rate from phthisis in the latter, and to a certain extent in the whole colony, has for years past been swelled by the presence of persons who started from Europe whilst suffering from the disease in an advanced stage having been 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.

561. Of the Chinese who died in Victoria in 1882, 32, or 20 per cent., fell victims to phthisis. Of those of all nationalities who died, the proportion from this complaint was 9 per cent.; but it must be remembered that the Chinese in Victoria, with the exception of a very small number of children and old people, are all at the ages at which attacks of phthisis are most common.

Phthisis
among
Aborigines.

562. Only 1 out of the 15 deaths of Aborigines in 1882 was set down to phthisis. Mr. Henry Jennings, Vice-Chairman of the Board for the Protection of the Aborigines, in his report dated 1st July, 1879,§ however, says—"Lung disease" (with which he probably includes phthisis) "is the chief cause of the death of the Aborigines, who, when once affected, very seldom recover;" and Mr. Richard Bennet, in an article entitled *Some Account of Central Australia*,|| says, with reference to the Australian Aborigines generally, "From

* See table following paragraph 549 *ante*.

† An instance of this is cited by Mr. T. B. Sprague, Vice-President of the Institute of Actuaries, London, in an article entitled "*Does Vaccination afford any protection against Small Pox?*" in which he points out that the figures, taken as a whole, show the rate of mortality among the vaccinated to be much less than that among the unvaccinated; but when the cases are divided into those under and over 2 years of age, in each such division the rate of mortality of the vaccinated is greater than that of the unvaccinated.—See *Journal of the Institute of Actuaries*, vol. xx., page 228. C. & E. Layton, London, 1878.

‡ See Forty-third Report of the Registrar-General of England, page 75.

§ See Fifteenth Report of the Board, Parliamentary Paper No. 68, Session 1879.

|| See *Victorian Review* for April 1880, page lxxv.

my experience among the blacks, I believe nine-tenths of them die of consumption."

563. The rate of mortality from phthisis in Victoria would appear, by the calculations in the following table, to have been, over a series of years, slightly above that in Queensland, and much higher than in any other of the Australasian colonies. It will be observed that the figures of the other colonies in the several years exhibit more variation than those of Victoria, also that Queensland is the only colony besides Victoria in which the rate in any of the years exceeded 13 per 10,000 * :—

Phthisis in Australasian colonies.

DEATHS FROM PHTHISIS IN AUSTRALASIAN COLONIES, 1873 TO 1881.

Year.	Number of Deaths from Phthisis.					
	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	945	12·34	...	...	145	10·35
1874 ...	1,011	13·00	...	...	163	10·51
1875 ...	1,027	13·04	614	10·31	228	13·22
1876 ...	1,010	12·68	616	9·96	260	14·12
1877 ...	1,088	13·46	597	9·24	225	11·53
1878 ...	1,124	13·68	652	9·62	263	12·72
1879 ...	1,058	12·69	746	10·45	281	13·12
1880 ...	1,175	13·82	803	11·13	301	13·56
1881 ...	1,199	13·80	874	11·45	292	13·21
Total...	9,637	13·17	4,902	10·31	2,158	12·48
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	153	7·84	115	11·10	206	7·16
1874 ...	179	8·89	101	9·69	270	8·47
1875 ...	209	10·07	114	10·97	339	9·45
1876 ...	226	10·36	102	9·75	307	7·92
1877 ...	203	8·78	127	11·95	326	7·98
1878 ...	267	11·00	115	10·60	326	7·73
1879 ...	271	10·66	90	8·09	399	8·90
1880 ...	277	10·51	113	9·95	447	9·42
1881 ...	274	9·49	115	9·80	468	9·28
Total...	2,059	9·73	992	10·21	3,088	8·48

564. With reference to the high death rate from phthisis shown by the returns of Victoria as compared with that shown by those of the neighbouring colonies, it should be pointed out that, under the varying terms used by medical men to indicate the complaint, it is apt to be

Phthisis returns of other colonies perhaps not reliable.

* It is pointed out by the Registrar-General of Queensland, in recent Annual Reports, that the death rate from phthisis in that colony is considerably swelled by the prevalence of the disease amongst the Polynesians, nearly one-third of such deaths in 1880 having been caused by phthisis. Excluding the Polynesians from the calculation, the death rate from phthisis in Queensland in 1880 was only 8·25 per 10,000.

wrongly classed by inexpert or careless tabulators. The very care exercised in Victoria to place under the proper head all the deaths which really result from phthisis may possibly be the cause of this colony getting the credit of being more subject to that complaint than other countries wherein the same care may not always be exercised. The unevenness of the figures relating to some of the colonies causes them to be regarded with a certain amount of suspicion.

Deaths from
cancer.

565. Next to phthisis, the most fatal of the constitutional diseases is cancer. This complaint caused 373 deaths in 1882, which was 10 less than the number in 1879 or 1880, but was in excess of that in any other year. Cancer in a fatal form has been much increasing of late years; it stood tenth in 1882, and eighth or ninth in the three previous years, in the list of causes of death*—its usual place being the eighteenth; and since 1866 the death rate from it has increased steadily from less than 2 to upwards of 4 per 10,000 of the population. The following table shows the number of deaths from cancer, and the number per 10,000 persons living, in each of the last twenty-two years:—

DEATHS FROM CANCER, 1861 TO 1882.

Years.	Deaths from Cancer.					
	Total Number.			Number per 10,000 Persons Living.		
	Males.	Females.	Total.			
1861	52	50	102	1·89
1862	30	50	80	1·46
1863	58	45	103	1·83
1864	55	72	127	2·17
1865	81	70	151	2·47
1866	52	64	116	1·84
1867	63	57	120	1·87
1868	95	88	183	2·76
1869	85	99	184	2·68
1870	109	105	214	3·00
1871	100	93	193	2·62
1872	130	96	226	3·00
1873	122	128	250	3·27
1874	146	122	268	3·45
1875	168	140	308	3·91
1876	150	153	303	3·80
1877	169	160	329	4·07
1878	182	132	314	3·82
1879	205	178	383	4·59
1880	202	181	383	4·50
1881	172	179	351	4·04
1882	208	165	373	4·19
Total in 22 years...			2,634	2,427	5,061	3·18

* See table following paragraph 536 *ante*.

566. Cancer is a complaint which generally affects females more than males. In the twenty-two years of which mention is made in the table, 92 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 has over the whole period* been considerably below the proportion named. The year 1882 was an exceptional one in this respect, as in it only 79 females died of cancer to 100 males, or a considerably smaller proportion than females at the ages referred to bore to males at like ages in the general population.

Proportions
of the sexes
who died of
cancer.

567. The death rate in 1882 under Class III., local diseases, was much above the average. This was chiefly attributable to the unusual fatality attending diseases of the respiratory, circulatory, and urinary systems. Diseases of the digestive organs were also above, but those affecting the nervous, generative, locomotive, and integumentary systems were below, the average. Nervous diseases formerly caused most deaths in this class, but their fatality during the last four years has not been so great as that of diseases of the respiratory system, in which are included pneumonia, bronchitis, and congestion of the lungs, which in 1882 together caused 1,596 deaths, or more than one-ninth of the total mortality, and stood fifth, seventh, and eighteenth respectively in the list of causes of death.† Besides that from diseases of the respiratory system, the increased mortality in 1882, as also in the four previous years, was most marked in the case of diseases of the circulatory and urinary systems—the rate from the latter in 1882 being much greater than in England. Under the latter head the most fatal complaint is nephria (Bright's disease), which caused 149 deaths in 1882 as compared with 140 in 1881; it was the twenty-third most fatal cause in 1882, whereas its usual place is the forty-seventh.†

Local dis-
eases.

568. Under Class IV., developmental diseases, the death rate from those peculiar to children, Order 1, from those peculiar to women, Order 2, and from diseases of nutrition, which are also those of children chiefly, Order 4, was much below the average; but the death rate from old age, Order 3, which has for some years past been increasing, was considerably above the average. The increased death rate from old age is easily accounted for by the circumstance that those remaining in the colony of the large number of immigrants who arrived at or about the times of the early gold discoveries are gradually reaching the age when they may be expected to die off; whilst the diminished death rate of infants from premature birth, teething, and other complaints under Order 1, is

Develop-
mental
diseases.

* Females were in the proportion of 64 at the census of 1861, and of 91 at the census of 1881, to every 100 males.

† See table following paragraph 536 *ante*.

probably due to the changed circumstances of the colony, which admit of mothers living in greater comfort, and infants being treated with more care and attention than they were formerly. The deaths from premature birth numbered 347 in 1882, which gives a proportion of over 9 per cent. of the total deaths under 1 year, and amounts to $1\frac{1}{3}$ per cent. of the total births recorded. The principal diseases under Orders 2 and 4, viz., childbirth and atrophy, will be next referred to.*

Deaths in
childbed.

569. The death rate from a given complaint is usually ascertained by comparing the number of deaths from it with the number of persons living, but the death rate of women in childbed is better realized by comparing the number of deaths of parturient women with the total number of births. Such deaths are classified in two ways. If the death is supposed to occur merely from the consequences of child-bearing without specific disease, it is set down as of Childbirth, Class IV., Order 2; but, if it should arise from puerperal fever, it is placed under the head of Metria, Class I., Order 1. In 1882 the proportion of deaths from child-bearing to the number of children born, although much lower than in 1881, was higher than in any other year named in the following table except 1878, 1877, 1875, and 1874:—

DEATHS OF WOMEN IN CHILDBIRTH, 1864 TO 1882.

Year.	Number of Mothers who died of—			Deaths of Mothers to every 10,000 Children Born Alive.
	Childbirth.	Metria.	Total.	
1864	100	21	121	47·12
1865	99	24	123	47·46
1866	112	26	138	55·18
1867	117	20	137	53·51
1868	110	23	133	48·82
1869	105	18	123	47·23
1870	115	9	124	45·67
1871	90	12	102	37·25
1872	123	16	139	50·80
1873	127	44	171	60·85
1874	142	109	251	93·66
1875	154	83	237	88·70
1876	117	48	165	61·64
1877	131	42	173	66·51
1878	149	49	198	74·49
1879	123	38	161	59·99
1880	111	20	131	50·09
1881	155	78	233	85·84
1882	117	59	176	65·80
Total in nineteen years	2,297	739	3,036	60·03

* See next paragraph and paragraph 575 post.

570. It is a remarkable fact that at or about the three periods during the last eighteen years at which epidemics of measles and scarlatina have prevailed in Victoria, viz., 1866-7, 1874-5, and 1881-2, the mortality of child-bearing women has largely increased. Whether this is only a coincidence, or whether there is any connexion between the two circumstances, is a matter which merits the consideration of the medical faculty. It should be mentioned that the last visitation differed somewhat from the two previous ones, as the epidemic was solely one of measles, and deaths of child-bearing women did not increase in numbers concurrently with it, but in the year following that in which it was at its worst.

Increase of deaths in childbed at epidemic periods.

571. The proportion of women dying in childbed during the whole period of nineteen years was 1 to 166 births, but in 1882 the proportion was as high as 1 to every 152 births. In 1881, the proportion was 1 to every 116 births; in 1880, 1 to every 200 births; in 1879, 1 to every 166 births; in 1878, 1 to every 134 births; in 1877, 1 to every 150 births; and in 1876, 1 to every 162 births; in 1875, 1 to every 113 births; and in 1874, 1 to every 107 births. All these proportions, except that for 1880, are higher than those in England and Wales, where, in the thirty-four years ended with 1880, 207 births occurred to each death of a mother. In Scotland, 1 woman is stated to have died in childbirth to every 207 births during 1873, and to every 149 in 1874; and in Ireland, during the ten years, 1869-78, 1 to every 151 births.

Deaths in childbed in Victoria and United Kingdom.

572. In the Melbourne Lying-in Hospital, 299 women were confined, and 279 infants were born alive, in the first six months of 1882; five deaths of mothers occurred during or shortly after parturition; thus 1 death of a mother occurred to every 60 deliveries, or to every 56 births. In this institution, in 1881, 1 death of a mother took place to every 29 deliveries or 27 births; in 1880, 1 to 98 deliveries or 89 births; in 1879, 1 to 71 deliveries or 67 births; in 1878, 1 to 92 deliveries or 86 births; in 1877, 1 to 65 deliveries or 61 births; in 1876, 1 to 68 deliveries or 65 births; in 1875, 1 to 67 deliveries or 62 births; and in 1874, 1 to 64 deliveries or 60 births. 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 of women in Lying-in Hospital.

573. Deaths of lying-in women appear to be more common in Victoria than in any other Australasian colony. It should, however, be mentioned that the fact of a woman dying in childbed is not always at

Deaths in childbed in Australasian colonies.

once discoverable from the death registers. Whether from a desire to conceal the fact of their losing patients in this manner, or from inadvertence, medical men frequently enter the cause of death as debility, exhaustion, blood-poisoning, phlebitis, embolism, peritonitis, &c., omitting to state that these circumstances were consequent upon child-bearing until specially asked whether this was the case. The causes of death of females at child-bearing ages should be carefully scrutinized, and inquiries made respecting all entries which appear doubtful. It is questionable whether in some of the other colonies this scrutiny is as close as it is in Victoria, and hence it is probable that the full extent of the mortality in childbirth occurring in such colonies is not known. The following table contains a statement of the deaths recorded as having occurred from childbirth and metria in all the Australasian colonies except Western Australia during the nine years ended with 1881, and the proportion of such deaths to every 10,000 children born alive in each colony :—

DEATHS FROM CHILDBIRTH AND METRIA IN AUSTRALASIAN
COLONIES, 1873 TO 1881.

Year.	Number of Deaths from Childbirth and Metria.					
	Total.	Per 10,000 Children Born Alive.	Total.	Per 10,000 Children Born Alive.	Total.	Per 10,000 Children Born Alive.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	171	60·85	...	...	23	40·21
1874 ...	251	93·66	...	...	33	51·70
1875 ...	237	88·70	149	66·14	37	55·17
1876 ...	165	61·64	186	79·84	43	62·29
1877 ...	173	66·51	113	47·38	53	73·93
1878 ...	198	74·49	103	40·67	46	62·19
1879 ...	161	59·99	90	33·42	38	48·28
1880 ...	131	50·09	127	45·10	42	51·24
1881 ...	233	85·84	117	40·35	70	85·15
Total...	1,720	71·31	885	50·41	385	58·91
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	22	30·96	26	85·30	52	46·34
1874 ...	38	49·38	20	64·58	74	57·61
1875 ...	54	72·89	32	103·06	93	64·41
1876 ...	49	59·58	20	63·51	74	45·77
1877 ...	45	52·08	25	77·86	74	43·90
1878 ...	41	44·17	16	45·69	85	47·83
1879 ...	50	50·49	11	30·86	81	44·83
1880 ...	39	38·00	18	48·14	76	39·29
1881 ...	62	57·90	14	35·73	92	49·11
Total...	400	50·61	182	61·64	701	48·78

574. The connexion between the prevalence of measles and scarlatina and of those circumstances which cause the deaths of women in childbed is exemplified in the returns of the neighbouring colonies as well as in those of Victoria ; 1875 and 1876 being about the years in which these epidemics were at their height, concurrently with the greatest mortality occurring to child-bearing women.

Increase of deaths in childbed during epidemics in all the colonies.

575. In proportion to population, deaths under the head of atrophy and debility in 1882, although not up to the average of the 27½ years, 1853 to 1880, were much above the average of late years. The mortality under this head is almost entirely confined to young children and infants—thus, of the 935 set down thereto in 1882, 806 were under 5 years, 749 were under 1 year, 334 were under 1 month, of age. It is probable, however, that the causes of death amongst children are too often loosely given, and that sufficient pains are not taken to ascertain the primary disease. As a knowledge of the causes of death in childhood is a matter of extreme importance, it is to be desired that medical men should, where possible, define these deaths more accurately. The following are the numbers of both sexes recorded as having died from atrophy and debility in each of the sixteen years ended with 1882 :—

Atrophy and debility.

DEATHS FROM ATROPHY AND DEBILITY, 1867 TO 1882.

Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1867	399	347	746	1876	344	305	649
1868	337	328	665	1877	344	304	648
1869	386	337	723	1878	389	311	700
1870	422	368	790	1879	407	304	711
1871	368	311	679	1880	369	324	693
1872	354	338	692	1881	392	345	737
1873	378	336	714	1882	493	442	935
1874	402	337	739				
1875	413	349	762	Total in sixteen years	6,197	5,386	11,583

576. Notwithstanding the proportions of the sexes of persons at ages to be affected by atrophy and debility were about equal, it will be observed that in every one of the years more males died than females. During the whole period of sixteen years, females died of these complaints in the proportion of 87 to every 100 males.

Sex of those who died of atrophy, &c.

577. Deaths from external causes, Class V., in proportion to population, were formerly twice as numerous in Victoria as in England and Wales ; but in recent years the proportion has fallen considerably. Over a series of 27 years, the average annual number of violent deaths per 100,000 of the population was 136, but during the last ten years it was only 108, and in the year under review it fell to as low as 94. This

Violent deaths.

last-named rate, however, is higher by about a fourth than the prevailing in England and Wales, where it averages only 76.

Violent
deaths, 1871
to 1882.

578. Of the 841 violent deaths recorded in Victoria during 1882, 741, or 88 per cent., were ascribed to accident; 17, or 2 per cent., to homicide; 86, or 10 per cent., to suicide; but not one to execution. Deaths from accidents were more numerous formerly than those from any single disease, and more recently than those from any disease except phthisis, but in 1882 they had fallen to the sixth place on the list.* Forty-six per cent. of the deaths from accident in that year were due to fractures, and 25 per cent. to drowning. Homicides and suicides were much below the average; the latter numbered only 83, whereas in each of the three previous years they exceeded 100. The following table shows the number of deaths and the exact modes of death under the heads of accident and suicide, also the number of deaths from homicide and execution, during 1882 and the decenniad ended with 1880, the sexes of those who died being distinguished:—

VIOLENT DEATHS.

Causes of Death.	Year 1882.			Ten Years: 1871 to 1880.		
	Males.	Females.	Total.	Males.	Females.	Total.
Accidents:—						
Fractures and contusions	310	32	342	2,911	241	3,152
Gunshot wounds ...	10	1	11	} 226	36	262
Cuts, stabs, &c. ...	11	2	13			
Burns and scalds ...	27	43	70	371	514	885
Sunstroke ...	9	8	17	158	60	218
Lightning ...	...	...	...	22	3	25
Poison ...	12	4	16	112	66	178
Snake, insect—bite ...	5	...	5	24	13	37
Drowning ...	153	33	186	1,558	379	1,937
Suffocation ...	39	27	66	409	216	625
Others ...	11	4	15	97	31	128
Total ...	587	154	741	5,888	1,559	7,447
Homicide ...	13	4	17	123	67	190
Suicide:—						
Gunshot wounds ...	9	...	9	69	...	69
Cuts, stabs, &c. ...	6	5	11	164	21	185
Poison ...	11	4	15	144	44	188
Drowning ...	9	4	13	151	66	217
Hanging ...	31	2	33	233	23	256
Otherwise ...	2	...	2	31	5	36
Total ...	68	15	83	792	159	951
Execution ...	...	...	...	19	...	19
Grand Total ...	668	173	841	6,822	1,785	8,607

* See table following paragraph 536 *ante*.

579. During the ten years ended with 1880, 69,916 males and 52,328 females died of specified causes ; and it results from these figures, and those in the foregoing table, that, of the males, 1 in every 10 died a violent death ; 1 in every 12 died of an accident ; 1 in every 568 was a victim to homicide ; 1 in every 88 committed suicide ; and 1 in every 3,680 was executed. Of the females, 1 in every 29 died a violent death ; 1 in every 34 died of an accident ; 1 in every 781 died by the hand of another ; 1 in every 329 committed suicide ; but, happily, not one was executed.

Violent deaths in proportion to total deaths.

580. Males are much more subject to violent deaths than females. Of those who so died in 1882, 668, or 79 per cent., belonged to the male, and 173, or 21 per cent., to the female, sex.

Violent deaths of males and females.

581. 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 is murdered, about 3 males are murdered ; where 1 female commits suicide, 5 males do so. Only 1 woman has been executed in the colony since its first settlement ; but in the 31½ years since Victoria has been an independent colony as many as 120 males were executed.

Violent deaths : proportion of males and females.

582. 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 bear more hardly upon males than upon females.

Burns and scalds.

583. Eighty-three persons took their own lives in 1882, and 102 in the previous year. During the ten years ended with 1880 the mean annual number of deaths by suicide was 95.

Suicidal deaths.

584. Hanging is the most common mode by which men commit suicide, cutting or stabbing the next, drowning and taking poison with almost equal frequency the next, shooting the next. Females most frequently take their lives by drowning, next so by taking poison, next by hanging or stabbing, but not once in the 174 cases named in the table by shooting.

Modes of committing suicide.

585. Suicide frequently occurs amongst the Chinese. Ten men of this race committed that act in 1882, all by hanging. The total number of Chinese males in the colony is about 12,000 ; so that those who committed suicide during the year were in the proportion of about 1 in 1,200.

Suicides of Chinese.

586. According to the results in the following table, it would appear that, in proportion to population, suicide is more common in Victoria than in any other Australasian colony except Queensland. It should,

Suicides in Australasian colonies.

however, be stated that the death records frequently do not upon the surface show that the death has been suicidal, and close examination, with sometimes further inquiry, is therefore necessary to determine that fact. It is hence likely that the full extent to which suicide prevails in some of the colonies is not ascertained. The following are the suicides and their proportion to every 100,000 of the population during the nine years ended with 1881 recorded in all the Australasian colonies except Western Australia :—

DEATHS FROM SUICIDE IN AUSTRALASIAN COLONIES,
1873 TO 1881.

Year.	Number of Deaths from Suicide.					
	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.	Total.	Per 100,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	97	12·7	41	7·5	22	15·7
1874 ...	97	12·5	64	11·2	10	6·4
1875 ...	91	11·6	55	9·2	23	13·3
1876 ...	100	12·6	61	9·9	24	13·0
1877 ...	92	11·4	66	10·2	27	13·8
1878 ...	87	10·6	48	7·1	29	14·0
1879 ...	108	13·0	62	8·6	40	18·7
1880 ...	118	13·9	68	9·4	22	9·9
1881 ...	102	11·7	83	10·9	21	9·5
Total ...	892	12·2	548	9·3	218	12·7
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	10	5·1	6	5·8	20	7·0
1874 ...	22	10·9	6	5·8	20	6·3
1875 ...	24	11·5	6	5·8	29	8·1
1876 ...	15	6·9	6	5·7	42	10·8
1877 ...	17	7·3	10	9·4	32	7·8
1878 ...	18	7·4	8	7·4	37	8·8
1879 ...	18	7·1	5	4·5	42	9·4
1880 ...	25	9·5	8	7·0	38	8·0
1881 ...	34	11·8	6	5·1	42	8·5
Total ...	183	8·6	61	6·3	302	8·3

Proportion
of suicides
in different
colonies.

587. It will be observed that, according to the records, the suicides which take place annually in Victoria and Queensland are almost invariably above 1 per 10,000 persons living, but those which take

place in the other colonies are generally below that proportion, which indeed was not once reached in Tasmania, only once in New Zealand, and only thrice in New South Wales and South Australia, during the nine years named in the table.

588. In England and Wales* during the 16 years ended with 1880, suicidal deaths per 100,000 of the living population ranged from 6·2 in 1867 to 8 in 1879, the proportion over the whole period being 6·9. This is a lower proportion than that obtaining in any of the Australasian colonies except Tasmania.

Suicides in England and Wales.

589. Statistics of suicide in a number of countries have been collected with much care by Dr. Enrico Morselli, Professor of Psychological Medicine in the Royal University of Turin. Dr. Morselli arrives at the conclusion that suicide is increasing in almost every country; that “religion and morals have never reached the root of the calamity”; that the sole preventive, not only against suicide but against madness, would consist in “diminishing the struggle for life amongst men, and in developing in man the well ordering sentiments and ideas by which to reach a certain aim in life; in short, to give force and energy to the moral character.” From his work on the subject, the following proportions have been abstracted †:—

Suicides in Foreign countries.

DEATHS FROM SUICIDE IN FOREIGN COUNTRIES.

	Deaths from Suicide per 100,000 Persons Living.		Deaths from Suicide per 100,000 Persons Living.
Saxony	31·1	Norway	7·5
Denmark	25·8	Belgium	6·9
Schleswig-Holstein	24·0	Hungary	5·2
Austria	21·2	Italy	3·7
France	15·0	Netherlands	3·6
Hanover	14·0	United States	3·5
Prussia	13·3	Russia	2·9
Bavaria	9·1	Spain	1·4
Sweden	8·1		

590. It will be observed that, in proportion to population, suicide is more rife in Saxony, Denmark, Schleswig-Holstein, Austria, France, Hanover, and Prussia than in Queensland, Victoria, or New South Wales, and in these countries, with the addition of Bavaria, than in South Australia and New Zealand; whilst Tasmania stands not only below these, but also below Sweden, Norway, and Belgium. The only countries quoted which stand below any of the Australasian colonies in point of frequency of suicide are Hungary, Italy, the Netherlands, the United States, Russia, and Spain.

Suicides in Australasia and Foreign countries.

* See Forty-third Report of the Registrar-General of England, page lxxvi.

† see *Suicide*, by Henry Morselli, M.D. Table IV., page 30. London: Kegan Paul & Co., 1881.

Violent
deaths in
Victoria and
European
countries.

591. It will be readily believed that violent deaths are not so frequent in Victoria now as in the early days of the gold discoveries. By the following figures, however, which, with the exception of those in the first line, have been extracted from the appendix to the 40th Report of the Registrar-General of England, such deaths appear still to be more common there than in any European country. Fatal accidents seem to occur with more frequency in Victoria than in any of the countries, and suicides than in any except Switzerland and Prussia. Homicide, relatively to population, appears to be more prevalent than in the United Kingdom, Norway, Sweden, Prussia, and Belgium, but to be much less rife than in Switzerland, Finland, Bavaria, or Italy. It must be remembered, however, that the proportions in the table (except in the case of Victoria) have been calculated in relation to the events occurring in one year only, and might not hold good if those in a series of years were taken into account:—

DEATH RATE FROM VIOLENCE IN VICTORIA AND IN CERTAIN EUROPEAN COUNTRIES.*

Countries.	Proportion to 100,000 Living of Deaths from—			
	Violence of all kinds.	Accident and Negligence.	Homicide.	Suicide.
Victoria	107·8	93·5	2·4	11·9
Switzerland	92·4	68·9	3·9	19·6
United Kingdom†	77·5	69·7	1·6	6·2
England and Wales ...	75·7	66·7	1·7	7·3
Scotland	72·0	68·2	·1	3·7
Ireland	39·1	35·3	1·7	2·1
Norway	72·4	64·1	1·3	7·0
Finland	62·6	55·7	3·5	3·4
Sweden	61·9	50·7	2·0	9·2
Prussia	61·6	46·1	2·1	13·4
Bavaria	51·9	37·7	3·9	10·3
Belgium	48·3	38·5	1·6	8·2
Austria	47·1	...	...	11·3
Italy	24·0	14·9	5·4	3·7

Railway
accidents.

592. 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 twenty-four years ended with 1882, embracing the whole period of the existence of railways in Victoria:—

* The proportions have been calculated upon the occurrences in Victoria during the ten years, 1871 to 1880, in Norway during 1873, in Scotland during 1875, in Finland during 1874, in Prussia during 1875, and in other countries during 1876. The figures in the last column often differ from those of Dr. Morselli (*ante*), which have been calculated over a series of years.

† Including the shipping.

DEATHS AND INJURIES FROM RAILWAY ACCIDENTS, 1859 TO 1882.

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.

PERSONS KILLED.

1859 to 1868	37	...	...	...	3	19	22	1	14	...
1869	4	...	...	...	...	2	2	...	1	1
1870	2	...	...	...	...	1	1	...	1	...
1871	6	...	...	...	...	2	2	...	2	2
1872	3	...	...	...	...	...	...	...	3	...
1873	...	...	...	...	...	...	...	...	...	...
1874	10	...	...	...	4	...	4	1	4	1
1875	11	...	...	...	...	6	6	...	4	1
1876	23	...	...	...	3	10	13	2	6	2
1877	22	...	1	1	3	10	13	...	8	...
1878	16	...	...	...	...	7	7	2	6	1
1879	21	...	...	...	1	8	9	2	9	1
1880	18	...	...	...	...	7	7	3	6	2
1881	34	4	4	8	...	14	14	3	8	1
1882	38	1	1	2	...	22	22	3	9	2
Total killed	245	5	6	11	14	108	122	17	81	14

PERSONS INJURED.

1859 to 1868	84	22	2	24	5	45	50	1	7	2
1869	...	...	...	...	...	...	...	...	...	...
1870	4	...	...	...	4	...	4	...	...	...
1871	3	...	...	...	...	1	1	...	1	1
1872	32	28	2	30	1	1	2	...	...	...
1873	1	...	...	...	...	1	1	...	...	...
1874	1	...	...	...	...	1	1	...	...	...
1875	8	...	...	...	6	1	7	...	1	...
1876	27	1	1	2	4	15	19	...	5	1
1877	49	36	...	36	3	5	8	1	2	2
1878	40	22	3	25	6	5	11	...	1	3
1879	45	7	2	9	11	20	31	3	1	1
1880	20	5	...	5	1	7	8	2	3	2
1881	64	46	4	50	1	10	11	...	2	1
1882	261	210	5	215	13	25	38	1	2	5
Total injured	639	377	19	396	55	137	192	8	25	18

593. It will be observed that, in the whole period of twenty-four years, 245 persons were killed and 639 were injured on the State lines of railway, and that, exclusive of trespassers, persons crossing the lines, &c., 114 of the former and 156 of the latter met their death or injury in consequence of their own misconduct or want of caution.

Railway passengers and servants killed and injured.

Eleven passengers and as many as 122 railway or contractors' servants were killed throughout the period, 6 of the former, and 108 of the latter, having been so in consequence of their own carelessness. The passengers injured numbered 396, and the railway servants 192; as many as 137 of the latter, but only 19 of the former, suffered from their own action. At crossings only 17 persons were killed and 8 injured, which must be considered very small numbers, taking into account the many level crossings on the lines. As many as 81 trespassers were killed; these no doubt included persons who committed suicide by placing themselves in the way of trains. The trespassers injured numbered less than a third of those killed.

Serious railway accidents, 1881 and 1882.

594. There were several serious railway accidents in 1881 and 1882. The most fatal accident which has ever taken place in the colony occurred on the 30th August of the former year at Jolimont, when the Brighton express train got off the line through the tire of a wheel breaking, in consequence of which three carriages were precipitated over a low embankment, causing loss of life to 4 persons, and injury of a more or less serious character to 39 others. A collision had previously occurred at Beaufort on the 26th January of the same year, caused by the driver of a goods train losing control of his train, which resulted in injuries to 7 persons. In 1882 the first important accident took place at Windsor on the 18th March, in consequence of a driver allowing his train to enter the station in defiance of signals, whereby a collision ensued with a stationary train, which resulted in injury to 30 persons, but was unaccompanied with loss of life; but the most serious accident occurred on the 2nd December of that year between the Burnley and Hawthorn stations, caused by a collision on the same line of rails between a special train from Box Hill and an ordinary train from Melbourne, four of the carriages being completely wrecked, whilst the casualties amounted to 1 killed and 178 injured. The total amount paid for compensation and other incidental expenses in respect of these accidents was £18,207 for the Windsor accident, £45,307 for the Jolimont accident, and about £120,000 for the Hawthorn accident.*

Mining accidents.

595. In the nine years ended with 1882, embracing the whole period the Regulation of Mines Statute 1873 (37 Vict. No. 480) has been in operation, 573 persons lost their lives, and 1,331 persons were injured from accidents connected with mining operations. The follow-

* See also Part "Interchange" *post*.

ing were the numbers in each year and their proportion to the number of miners at work :—

DEATHS AND INJURIES FROM MINING ACCIDENTS, 1874 TO 1882.

Year.	Average Number of Miners at work.	Number of Persons—			Numbers per 1,000 Miners at work—		
		Killed.	Injured.	Total.	Killed.	Injured.	Total.
1874	46,512	90	245	335	1.93	5.26	7.20
1875	42,058	83	217	300	1.97	5.15	7.13
1876	41,531	55	170	225	1.32	4.10	5.42
1877	38,860	64	154	218	1.65	3.96	5.61
1878	37,212	40	106	146	1.07	2.85	3.92
1879	37,195	48	112	160	1.29	3.01	4.30
1880	38,076	50	89	139	1.32	2.34	3.65
1881	38,436	72	108	180	1.87	2.81	4.68
1882	37,446	71	130	201	1.90	3.47	5.37
Means	39,703	64	148	212	1.61	3.73	5.34

596. In 1882, fatal mining accidents were fewer by 1 than in 1881, but more numerous than in any other year since 1875, and non-fatal ones more numerous than in any other year since 1877. Twenty-three of the deaths in 1882 were caused by the flooding of mines, it being the first occasion during the last nine years that such accidents have taken place. In comparison with earlier years, the persons killed and injured in and in connexion with mines have lately much diminished both in numbers and in proportion to the miners at work.

Mining accidents, 1882.

597. In the nine years to which reference is made, 1 miner in every 620 lost his life annually. This proportion contrasts favorably with a similar one for Great Britain and Ireland, where, according to the report of Her Majesty's Inspectors of Mines for 1879, 1 person in every 490 employed in and about mines lost his life by accident during the year. This is exclusive of accidents in coal mines, in respect to which the proportion of fatal accidents is much higher.

Mining accidents in Victoria and England.

598. It appears by the following table that, in the nine years named, 942, or 50 per cent., of the mining accidents in Victoria were caused by the fall of earth or materials ; 287, or 15 per cent., by falling down shafts, &c. ; and 236, or 12 per cent., by explosions :—

Causes of mining accidents.

CAUSES OF MINING ACCIDENTS, 1874 TO 1882.

Nature of Accident.	Number of Persons—		
	Killed.	Injured.	Total.
Fall of earth or rock underground	228	416	644
" " on surface	85	66	151
" materials down shafts	31	99	130
" " " passes or jump-ups... ..	1	16	17
Falling down shafts	80	111	191
" " winzes or shoots	10	47	57
" and slipping underground ... ..	...	23	23
" " at surface ... ..	...	16	16
Cage accidents	32	69	101
Timber accidents	9	18	27
Truck accidents ... ..	...	31	31
Machinery in motion	15	55	70
Explosion of blasts—gunpowder	14	100	114
" " guncotton	1	10	11
" " dynamite	3	7	10
" " lithofracteur	6	13	19
" " rockburster ... ..	...	2	2
" " other explosives, or not named	3	17	20
" explosives not blasts	5	28	33
" boilers	1	5	6
" fire damp	1	20	21
Foul air	4	...	4
Flooding of mines	23	...	23
Undescribed	21	162	183
Total	573	1,331	1,904

Causes of death of octogenarians.

599. The number of deaths of persons over 80 years of age, and their exact ages at death, have been already quoted for 1881, 1882, and the previous ten years.* The following table shows the causes of death of these persons:—

CAUSES OF DEATH OF OCTOGENARIANS, 1871 TO 1882.

Causes of Death.	Ten Years ended with 1880.		Year 1881.		Year 1882.	
	Males.	Females.	Males.	Females.	Males.	Females.
Quinsy ... ..	...	1	...	...	...	...
Diphtheria ... ..	...	...	...	...	1	...
Typhoid Fever, &c.	3	2	...	...	...	...
Erysipelas	2	6	1	1	3	...
Carbuncle, Boil	1	2	2	...	...	1
Influenza, Coryza, Catarrh	4	11	1	...	2	1
Dysentery and Diarrhœa	42	33	9	3	8	9
Cholera	3	1	3	...	...	...
Rheumatism	6	4	1	...	1	1

* See table following paragraph 529 ante.

CAUSES OF DEATH OF OCTOGENARIANS, 1871 TO 1882—*continued.*

Causes of Death.	Ten Years ended with 1880.		Year 1881.		Year 1882.	
	Males.	Females.	Males.	Females.	Males.	Females.
Venereal Diseases	4	...	...	...	...	...
Privation	2	...	1	...	1	...
Scurvy	1	...	...	...	...	...
Intemperance	2	1	...	...	...	...
Hydatid	1	...	...	...	...	...
Gout	2	...	...	...	...	...
Dropsy	16	16	4	2	2	3
Cancer	29	9	6	4	8	3
Tumor ... ..	...	3	...	...	1	...
Mortification	7	3	2	...	1	...
Phthisis	2	3	1	...	1	1
Abscess, &c.	1	...	...	...	...	...
Brain Diseases, &c.	110	83	26	20	16	11
Heart Diseases, &c.	50	37	16	9	9	6
Lung Diseases, &c.	160	100	23	16	42	25
Stomach Diseases, &c.	31	20	6	1	6	4
Kidney Diseases, &c.	34	1	13	...	7	1
Gennetic Diseases ... ..	...	1	...	...	...	...
Skin Diseases, &c.	4	1	...	1	...	...
Old Age	550	441	81	97	105	90
Accidents	19	14	3	4	6	4
Suicide	3	...	1	...	...	...
Unspecified causes	2	...	...	...	...	...
Total	1,091	793	200	158	220	160

600. It will be noticed that during the ten years, 1871-80, in the case of nearly half the males and more than half the females no complaint was set down except old age. It may, moreover, be ascertained from the figures that about a seventh of the males and about an eighth of the females died of diseases of the organs of respiration, chiefly pneumonia and bronchitis; and that about a tenth of both males and females died of affections of the brain and nerves.

Complaints most fatal to octogenarians—1871-80.

601. There are 35 general hospitals in Victoria, 8 of which are also benevolent asylums. The total number of cases of sickness treated in these institutions during the six months ended 30th June, 1882, was 9,154, and the number of deaths was 944. In the year 1881, the cases of sickness treated numbered 14,996, and the deaths 1,634. There was thus 1 death to every 10·3 cases of sickness treated in hospitals during the first half of 1882, as against 1 death to every 10·9 cases of sickness treated therein during the previous year.

Sickness and deaths in general hospitals.

602. The following table gives a list of the various hospitals throughout the colony, also a statement of the number of cases treated, the

Death rate in each hospital.

number of deaths which occurred, in the half-year ended 30th June, 1882, and the proportion of deaths to cases in each hospital during that period and the previous twelve months :—

SICKNESS AND MORTALITY IN GENERAL HOSPITALS.

Name of Hospital.	Half-year ended 30th June, 1882.			Percentage of Mortality to Cases treated, 1881.
	Number of Cases treated.	Number of Deaths.	Percentage of Mortality to Cases treated.	
Alexandra	24	3	12·50	13·64
Amherst	137	13	9·49	11·11
Ararat	350	28	8·00	5·90
Ballarat	894	125	13·98	11·85
Beechworth	517	45	8·70	10·12
Belfast	52	7	13·46	8·69
Bendigo	708	75	10·59	11·64
Castlemaine	430	22	5·12	7·64
Clunes	113	7	6·19	3·76
Colac	5	...	...	...
Creswick	144	10	6·94	8·69
Daylesford	101	11	10·89	9·09
Dunolly	186	12	6·45	10·66
Geelong	485	37	7·63	8·77
Hamilton	209	6	2·87	4·19
Heathcote	57	4	7·02	12·12
Horsham	109	6	5·50	8·07
Inglewood	175	13	7·43	9·71
Kilmore	135	9	6·67	6·87
Kyneton	343	18	5·25	5·88
Maldon	74	11	14·86	17·46
Mansfield	59	2	3·39	5·05
Maryborough	242	20	8·26	7·41
Melbourne	1,975	293	14·84	15·76
Melbourne (Alfred)	645	71	11·01	9·59
Melbourne (Homœopathic)	83	9	10·84	9·59
Mooroopna	181	22	12·15	7·04
Pleasant Creek	113	9	7·97	14·80
Portland	37	2	5·41	10·53
Sale	138	15	10·87	6·90
St. Arnaud	129	16	12·40	9·68
Swan Hill	54	1	1·85	9·76
Wangaratta	122	9	7·38	9·37
Warrnambool	65	8	12·31	10·58
Wood's Point	63	5	7·94	6·86
Total	9,154	944	10·31	10·90

Highest and lowest death rates.

603. In proportion to the cases treated, the greatest mortality occurred in the Maldon, Melbourne, and Ballarat Hospitals; and the least in the Swan Hill, Hamilton, and Mansfield Hospitals. In 1881 the rate of mortality was highest in the Maldon, Melbourne, and Pleasant Creek Hospitals; and lowest in the Clunes, Hamilton, and Mansfield Hospitals.

604. The patients treated in the Hospital for Diseases of Women and Children attached to the Lying-in Hospital numbered 288 in the year 1881, and 207 during the first six months of 1882. The deaths in the same institution numbered 21 in the former and 20 in the latter period. Therefore, 1 patient in 14 died in 1881, and 1 in 10 in the first half of 1882.

Sickness and deaths in hospital for women.

605. In the Melbourne Lying-in Hospital, 677 women were confined in 1881, and 299 in the first six months of 1882. Twenty-three died in the former period, and 5 in the latter. Thus, 1 woman in 29 died in 1881, and 1 woman in 60 in 1882. From the founding of the institution to the end of June, 1882, 10,164 women were accouched therein,* of whom 147 died, or 1 death to every 69 confinements.†

Deaths of mothers in Lying-in Hospital.

606. The infants born alive in the Lying-in Hospital numbered 636 in the year 1881, and 279 during the first six months of 1882, and of these, 54 in the former and 32 in the latter period died before leaving the institution; thus 1 infant in 10 died in 1881, and 1 infant in 9 in 1882.‡

Deaths of infants in Lying-in Hospital.

607. In the Melbourne Hospital for Sick Children, 469 cases were treated, and 34 deaths occurred, in 1881; 281 cases were treated, and 14 deaths occurred, during the first six months of 1882. These numbers furnish proportions of 1 death to every 14 patients in the former and 1 death to every 20 patients in the latter period.

Sickness and deaths in children's hospital.

608. Cases of sickness in benevolent asylums numbered 1,037 in 1881, and 867 in the first six months of 1882; deaths numbered 174 and 103. The deaths were thus to the cases treated in the proportion of 1 to 6 in 1881, and of 1 to 8 in 1882.

Sickness and deaths in benevolent asylums.

609. In the Melbourne Immigrants' Home the cases of sickness in 1881 amounted to 772, and the deaths to 58, or 1 death to every 13 cases of sickness. In the first six months of 1882, the cases of sickness in this institution numbered 357, and the deaths 51, or 1 death to every 7 cases of sickness.

Sickness and deaths in Immigrants' Home.

610. In 1881, the cases of sickness in orphan asylums numbered 121, and the deaths 8. In the first six months of 1882 these numbers were 166 and 5 respectively. Thus, in 1881, 1 death occurred to every 15 cases of sickness, and, in 1882, 1 death to every 30 cases of sickness.

Sickness and deaths in orphan asylums.

611. In hospitals for the insane during 1881 the cases of sickness numbered 1,812, and during 1882 they numbered 1,225. The deaths amounted to 202 at the former period, and 198 at the latter, or an

Sickness and deaths in lunatic asylums.

* Including a few women who were accouched outside the hospital by midwives connected with the institution.

† See paragraph 572 *ante*.

‡ See paragraph 518 *ante*.

average of 1 death to every 9 cases of sickness in 1881, and 1 to every 6 cases in 1882.

Sickness and
deaths in
gaols.

612. In gaols and penal establishments 862 cases of sickness occurred in 1881, and 741 in 1882. The deaths in these two periods respectively were 42 and 31. Thus, 1 death occurred to every 21 cases in 1881, and 1 death to every 24 cases in 1882.

Deaths in
public
institutions.

613. Altogether the number of deaths in penal or charitable institutions during the six months ended 30th June, 1882, was 1,320, being in the proportion of 1 to every $5\frac{1}{6}$ deaths which took place in Victoria during the half-year. The deaths in such institutions in 1881 were in the proportion of 1 to every $5\frac{1}{3}$ deaths; in the four years, 1877-80, in that of 1 to every 6, in 1876 in that of 1 to every $6\frac{1}{2}$, in 1875 in that of 1 to every $7\frac{1}{3}$, and in 1874 and 1873 in that of 1 to every 6 deaths which took place in the whole colony. The following are the names of the institutions and the number of deaths which occurred in each during the first six months of 1882 :—

DEATHS IN PUBLIC INSTITUTIONS, 1882 (FIRST SIX MONTHS).

	Number of Deaths.
General hospitals	944
Hospital for Diseases of Women and Children ...	20
Lying-in Hospital	37*
Hospital for Sick Children	14
Benevolent asylums	103
Melbourne Immigrants' Home	51
Orphan asylums	5
Blind Asylum	2
Deaf and Dumb Asylum	1
Hospitals for the insane	99
Female refuges	3†
Victorian Infant Asylum	4
Industrial and reformatory schools	22‡
Gaols	15
Penal establishments	—
Total	1,320

NOTE.—In 1882 no death occurred in the Eye and Ear Hospital.

Deaths in
public
institutions
in England.

614. In England and Wales during 1880, 1 out of every 10 deaths registered occurred in a workhouse, hospital, or lunatic asylum. Of such deaths, 65 per cent. occurred in the first of these institutions, 26 per cent. in the second, and 9 per cent. in the third.

* This includes the deaths of 32 infants born in the institution.

† This includes the death of 1 infant in the Female Refuge, Madeline-street.

‡ Including deaths of boarded-out children.

615. The householder's schedule used at the census of 1881 contained a column headed "Health," respecting which an instruction was given to the effect that, if any person was unable to follow his usual occupation by reason of illness or accident, or was afflicted with deafmuteism, blindness, lunacy, idiocy, epilepsy, or leprosy,* the name of such infirmity should be entered. As the result of this inquiry, the following information was obtained:—

SICKNESS AND INFIRMITY, 1881.

	Males.	Females.	Total.
Suffering from sickness ...	7,381	5,822	13,203
" " accident ...	1,162	202	1,364
" " deafmuteism ...	168	119	287
" " blindness ...	502	240	742
" " lunacy ...	1,590	1,243	2,833
" " idiocy ...	108	53	161
" " epilepsy ...	176	114	290
" " lameness, mutilation, deformity, &c.†	83	49	132
Total ...	11,170	7,842	19,012

616. The total numbers furnish a proportion of 221 persons suffering from infirmity in every 10,000 of the population, of 247 infirm males in every 10,000 males, of 191 infirm females in every 10,000 females.

617. The sick were in the proportion of 153, and those laid up in consequence of accidents were in that of 16, to every 10,000 of the population. The two combined, representing those entirely disabled for the time being, but not as a rule permanently affected, were thus in the proportion of 169 to every 10,000 living, or 1 in 59. A similar combination gives a proportion of 189 disabled males in every 10,000 males living, or 1 in 53; of 147 disabled females in every 10,000 females living, or 1 in 68.

618. All the Australasian colonies except New South Wales have obtained returns of sickness and accidents, those for New Zealand, however, applying only to persons over 15 years of age, and therefore not comparable with the others. Omitting the two colonies named, Queensland shows the smallest proportion of persons laid up from these causes, and South Australia and Tasmania the largest, next to which comes Victoria. The following are the proportions, the colonies being arranged in order, the one with the lowest ratio of disablement being placed first, and that with the highest last:—

* No case of leprosy was returned either in 1871 or 1881. It is known that this infirmity existed at both periods, to a small extent, among the Chinese; but the sub-enumerators did not distinguish it from ordinary sickness.

† The information in this line was not asked for, and is no doubt incomplete.

SICKNESS AND ACCIDENTS IN AUSTRALASIAN COLONIES, 1881.

	Persons.
1. Queensland had 1 person disabled from sickness or accident in every	211
2. Western Australia " " " " " "	68
3. Victoria " " " " " "	59
4. { South Australia " " " " " "	58
{ Tasmania " " " " " "	58

Disablement
in New
Zealand.

619. New Zealand, as has been just stated, returned those disabled persons only who were over 15 years of age. These were in the very low proportion of 1 in 89 of the population at the same period of life. A proportion calculated upon the Victorian returns at a similar age gives 1 disabled person in 42.

Loss by phy-
sical dis-
ablement.

620. The loss suffered by the community in consequence of physical disablement is probably realized by few. Taking the sick and those suffering from accidents together, there were in Victoria, on the census day, 14,567 persons—viz., 8,543 males and 6,024 females—in a disabled condition; which means that the children were obliged to discontinue their studies, the men their work or business, and the women their household or other duties for that day, on account of illness or bodily injury. Supposing the census day to have been an average one as regards the amount of infirmity prevailing, which there is no reason to believe it was not, there would obviously in one year be an amount of work lost from this cause equal to that of 1 person for 14,567 years, or of 1 male for 8,543 years, and of 1 female for 6,024 years. Or, putting it in other words, there would, if Sundays be included, be 5,316,955 days' work lost on account of illness in the year, viz., 3,118,195 by males, and 2,198,760 by females; or, if Sundays be not included, there would be 4,559,471 days' work lost, viz., 2,673,959 by males and 1,885,512 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, would not be returned, or of the loss to others occasioned by attendance on sick persons, or by reason of deafmuteism, blindness, lunacy, &c.

Disablement
of males
and
females.

621. 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 6·2, or 6·9 days by each male, and 5·3 days by each female. If working days only be considered, each person, on the average, loses by this 5·3 such days, each male losing 5·9 such days, and each female 4·6 such days.

Disablement
at different
ages.

622. The variation in the liability to sickness and accident at different ages may be traced in the following table, which shows the proportion of males and females rendered non-effective by these causes at each quinquennial age-period:—

DISABLEMENT FROM SICKNESS AND ACCIDENTS AT EACH AGE,
3RD APRIL, 1881.

Ages.	Number of Disabled Persons per 10,000 Living at each Age.	
	Males.	Females.
Under 5 years	63·60	53·44
5 to 10	65·62	55·48
10 „ 15	76·98	68·88
15 „ 20	86·80	86·64
20 „ 25	93·10	114·18
25 „ 30	114·11	126·38
30 „ 35	138·56	148·99
35 „ 40	177·15	168·38
40 „ 45	202·99	220·11
45 „ 50	268·35	241·04
50 „ 55	323·56	320·11
55 „ 60	505·49	390·64
60 „ 65	684·32	563·19
65 „ 70	1,027·44	781·44
70 „ 75	1,473·55	1,104·93
75 „ 80	1,975·05	1,494·63
80 and upwards	2,559·42	1,907·07
All ages	188·97	146·83

623. By the proportions in this table it is ascertained that, according to the numbers on the census day found to be laid up by reason of sickness or injury, the amount of physical disablement likely to be experienced both by males and females increases at every period of age from 5 years to the end of life. Disablement increases with age.

624. Members of Friendly Societies, noting the increased tendency to indisposition as age advances, will recognise the desirability of encouraging young men to join their ranks, and the absolute necessity, if they are to remain solvent, of accumulating funds before the members advance in life. The census day being accepted as a normal one in point of the illness prevailing, the figures show that in this colony men between 20 and 25 years age are liable to be laid up for about 3 working days in the year, men between 25 and 30 for 3½ such days, and men between 30 and 35 for 4½ such days; whereas men between 55 and 60 would probably be laid up for 16 working days in the year, men between 60 and 65 for 21½ such days, and men between 65 and 70 for 32 such days. In most Friendly Societies, 18 years of age is the youngest period at which members can be admitted, but in practice few join before 20; the census figures give an experience for males of 20 years of age and upwards of 9·3 days' disablement during the year. It argues well for the effectiveness of the medical examination to which Disablement in friendly societies.

candidates for membership of these bodies are subjected, and of the supervision exercised over members claiming sick pay, that the returns of Friendly Societies show that in 1881 the average amount of sickness for which payment was claimed in the year was only 7·8 working days per member, or $1\frac{1}{2}$ days less than the average shown by the census. It must, however, be borne in mind that the mean age of members of Friendly Societies is in all probability younger than that of the general population over 20; also, that as some members do not draw their sick allowance, the sickness for which payment is made is less than that actually experienced; and, moreover, that members of Friendly Societies are, as a rule, above the average of the population in point of provident habits and regularity of conduct, and that the medical examination which, as has been stated, they are obliged to undergo prior to their being admitted, affords a guarantee that, at that time at any rate, they are also above the average in regard to soundness of health.

Permanent infirmities.

625. The deafmutes, the blind, the lunatics, the idiots, and the crippled, maimed, and deformed persons represent those having some defect or injury which is generally permanent, but which often does not disable them from following some description of labour, and does not always prevent them from earning their own livelihood, although no doubt in most cases it seriously affects their usefulness to the community. These numbered 4,445, viz., 2,627 males and 1,818 females, or 1 person in every 194, 1 male in every 172, and 1 female in every 226.

Deafmuteism.

626. The deaf and dumb were in the proportion of 3·33 per 10,000 persons living; of 3·72 deaf and dumb males per 10,000 males, and of 2·90 deaf and dumb females per 10,000 females. These proportions, stated in other words, are 1 deafmute in 3,005 of the total population, 1 in 2,691 of the males, and 1 in 3,448 of the females.

Increase of deafmuteism.

627. Deafmuteism is increasing in Victoria, which is only natural, considering that the population was formerly, much more than at present, made up of immigrants of whom probably few or none would be deaf and dumb. The increase was much greater between 1861 and 1871 than between 1871 and 1881, as will be seen by the following figures:—

DEAFMUTEISM AT THE LAST THREE CENSUSES.

In 1861 there was 1 deaf mute in every	...	9,005 persons.
„ 1871 „ „ „ „	...	3,621 „
„ 1881 „ „ „ „	...	3,005 „

Deafmuteism in England and Wales.

628. The proportion even now is not nearly so high as that obtaining in England and Wales, where, according to the returns of the census of 1871 (the returns of 1881 not having yet reached this colony), there

was 1 deafmute in every 1,972 of the population; which proportion, however, was not so high as that in 1861, when 1 in every 1,640 of the population of England and Wales was a deaf mute.*

629. Five of the colonies of this group have obtained returns of deafmuteism, those which have not done so being New South Wales and Queensland. In proportion to population, this affliction is found to be more common in Victoria than in New Zealand, Western Australia, or South Australia, but much less so than in Tasmania, in which the proportion was higher than it was in England and Wales in 1871. The following are the proportions in the five colonies named, which are arranged in order, the colony in which deafmuteism is least prevalent being placed first, and the others in succession:—

Deafmuteism
in Austral-
asian
colonies.

DEAFMUTEISM IN AUSTRALASIAN COLONIES, 1881.

1. New Zealand had 1 deafmute in every	...	4,298 persons.
2. Western Australia	” ”	4,244 ”
3. South Australia	” ”	3,448 ”
4. Victoria	” ”	3,005 ”
5. Tasmania	” ”	1,837 ”

630. Blind persons were in the proportion of 8·60 per 10,000 persons living; blind males in that of 11·10 to every 10,000 males; blind females in that of 5·85 to every 10,000 females. There was thus 1 blind person in every 1,162 of mixed sexes, or 1 blind male in every 901 males, and 1 blind female in every 1,709 females.

Blindness.

631. According to the census figures, blindness is increasing in Victoria, the reason probably being similar to that mentioned as having, perhaps, led to the increase of deafmuteism.† As in the case of the latter affliction, the increase was much smaller between 1871 and 1881 than between 1861 and 1871. The proportions at the three periods are subjoined:—

Increase of
blindness.

BLINDNESS AT THE LAST THREE CENSUSES.

In 1861 there was 1 blind person in every	...	4,288 persons.
” 1871	” ”	1,457 ”
” 1881	” ”	1,162 ”

632. The latest return at hand of blindness in England and Wales is that of 1871, when the proportion to the population was 1 in 1,052, or higher than it has ever been in Victoria, not, however, so high as the proportion obtaining in England and Wales in 1861 (1 in 1,037), and not nearly so high as that in 1851 (1 in 979).‡

Blindness in
England and
Wales.

* See General Report on the Census of England and Wales, 1871, page lix. London: Eyre and Spottiswoode, 1873.

† See paragraph 627 *ante*.

‡ See General Report on the Census of England and Wales 1871, page lv.

blindness
in Austral-
asian
colonies.

633. Returns of blindness were obtained by the same five colonies which obtained returns of deafmuteism. It is found that in New Zealand the proportion of blind persons was extremely low, and in South Australia it was lower than in Victoria, but in Western Australia and Tasmania it was enormously high—much higher than in England and Wales. The following are the proportions in these colonies, the colony in which the proportion was lowest being placed first, and the rest in order:—

BLINDNESS IN AUSTRALASIAN COLONIES, 1881.

1. New Zealand had 1 blind person in every	...	3,550 persons.
2. South Australia	„ „	... 1,417 „
3. Victoria	„ „	... 1,162 „
4. Western Australia	„ „	... 725 „
5. Tasmania	„ „	... 625 „

Lunacy.

634. Lunatics were in the proportion of 32·85 per 10,000 of the population, viz., 35·17 male lunatics per 10,000 males living, and 30·30 female lunatics per 10,000 females living. Thus 1 person in every 304, 1 male in every 284, 1 female in every 330, was a lunatic.

Increase of
lunacy.

635. According to the following proportions, lunacy, like deafmuteism and blindness, is increasing in Victoria:—

LUNACY AT THE LAST THREE CENSUSES.

In 1861 there was 1 lunatic in every	...	819 persons.
„ 1871	„ „	... 392 „
„ 1881	„ „	... 304 „

Lunacy in
England and
Wales.

636. From whatever cause, lunacy appears to be much more rife in Victoria than in England and Wales. When the census of 1871 was taken, the proportion in the latter was 1 lunatic in every 574 of the population, which is a much lower proportion than that found to exist in Victoria either at that census or at the census of 1881.*

Lunacy in
Austral-
asian
colonies.

637. The only Australasian colonies besides Victoria which have collected complete returns of lunacy apart from idiocy are New Zealand, South Australia, and Tasmania, in all of which the proportion is lower than in this colony, as will be seen by the following figures:—

LUNACY IN AUSTRALASIAN COLONIES, 1881.

1. New Zealand had 1 lunatic in every	...	437 persons.
2. South Australia	„ „	... 436 „
3. Tasmania	„ „	... 334 „
4. Victoria	„ „	... 304 „

Lunacy in
Queensland.

638. The census returns of Queensland contain a return of the number of lunatics in asylums, but give no account of those in private

* See General Report on the Census of England and Wales, 1871, page lxiv.

houses, gaols, &c. The number was 563, or 1 in 379 of the population, which is a higher proportion than that which the total number of lunatics bore to the population of New Zealand or South Australia, but not so high as that which obtained in the other two colonies furnishing returns.

639. Persons returned as idiots were in the proportion of 1·87 per 10,000 of the population ; 2·38 idiot males per 10,000 males, 1·29 idiot females per 10,000 females. These proportions may be otherwise stated as 1 idiot in every 5,356 persons, 1 idiot male in every 4,186 males, 1 idiot female in every 7,741 females. Idiocy

640. The census of 1871 was the first at which returns of idiocy were obtained in this colony. The proportion then was 1 idiot in every 6,773 persons, or not so high a proportion as that found to exist at the census under review. Increase of idiocy.

641. In England and Wales idiots were combined with imbeciles at the census of 1871, therefore comparison with Victoria, where idiots alone were returned, may not be fair. The proportion of idiots and imbeciles to the population of England and Wales was a very high one, viz., 1 person so afflicted in every 771 persons living.* Idiocy in England and Wales.

642. Idiocy as distinguished from lunacy was not returned in any colony of the group except Victoria, New Zealand, and Tasmania. In the second of these it was much less prevalent, but in the third much more so than in this colony, as is shown by the following proportions :— Idiocy in Australasian colonies.

IDIOTS IN AUSTRALASIAN COLONIES, 1881.

1. New Zealand had 1 idiot in every ...	...	...	8,447 persons.
2. Victoria " " " "	...	...	5,356 "
3. Tasmania " " " "	...	...	1,522 "

643. If idiots be combined with lunatics, the proportion would be 1 in every 288 of the population, as against 1 in every 370 of the population in 1871. Idiocy and lunacy.

644. In England and Wales, according to the census of 1871, the proportion of idiots, imbeciles, and lunatics to the general population was 1 in 331 ; this, it will be observed, is higher than the ratio which idiots and lunatics bore to the population of Victoria in the same year, although not so high as the ratio in 1881. Idiocy and lunacy in England and Wales.

645. The idiots combined with the lunatics give the following results for four of the Australasian colonies, being all those which obtained the information at the census of 1881 :— Idiots and lunatics in Australasian colonies.

* See General Report of the Census of England and Wales, 1871, page lxiii.

IDIOCY AND LUNACY IN AUSTRALASIAN COLONIES, 1881.

1.	New Zealand had 1 idiot or lunatic in every ...	... 416 persons.	
2.	Victoria " " " " ...	... 288	"
3.	Tasmania " " " " ...	... 274	"
4.	Western Australia " " " " ...	... 259	"

Epilepsy. 646. Epileptic persons were in proportion of 3·36 per 10,000 of the population of Victoria, of 3·89 per 10,000 males, and of 2·78 per 10,000 females; or, in other words, 1 person in every 2,974, 1 male in every 2,569, 1 female in every 3,599, was subject to attacks of epilepsy.

Epilepsy in 1871. 647. Statistics of epilepsy were first obtained in this colony in 1871, when the proportion was 1 in every 3,310 of the population, or a lower proportion than that shown in the present returns.

Epilepsy in New Zealand. 648. The census of England and Wales does not supply any information on the subject of epilepsy, and the only Australasian colony, except Victoria, which collects such information appears to be New Zealand, in which, according to the census of 1881, the proportion of epileptic persons was 1 in every 2,525 of the population, thereby showing a higher ratio of epilepsy than that found to prevail in Victoria.

Lameness, mutilation, deformity, &c. 649. No instruction was given the sub-enumerators to obtain returns of mutilated, crippled, and deformed persons, but the schedules contained particulars respecting 132 such persons. It may be supposed that all were not returned, therefore no comparisons with the numbers of the population will be quoted here; it is, however, suggested that at future censuses of this colony an attempt should be made to obtain complete returns of the numbers affected in this manner.

Crippled and deformed persons. 650. Of those returned upon the present occasion, 5 males were set down as having lost an arm, and 7 a leg; 1 male and 1 female as having lost a hand; 5 males as lame, 4 as cripples from birth, 1 as crippled through spine affection, 2 as having a crippled hand, 4 as crippled and sick, and 1 as crippled through accident; 1 female was returned as having lost the use of her hands by lead poisoning, 1 as deformed in the left foot, 1 simply as deformed, and 1 as crippled and paralysed. The remainder, both males and females, were entered merely as crippled.*

Vaccinations. 651. The number of cases of successful vaccination in 1882 was 20,081; and as the number of births was 26,747, it appears that 75 per cent. of the children born were vaccinated. Part of the remainder are accounted for by death—2,644, or 10 per cent., of those born having died

* For the ages, occupations, &c., of those suffering from the various descriptions of infirmity, see Government Statist's General Report on the Census of Victoria, 1881. Ferres, Melbourne, 1883.

before they were 6 months old. In the previous year the vaccinations numbered 27,245, or 100 more than the births, a circumstance due to the alarm occasioned by an outbreak of small-pox, first in Sydney and subsequently on board vessels arriving at Melbourne, which induced a large number of persons at all ages to be vaccinated. In 1880 the vaccinations were equal to about 73 per cent. of the children born, in 1879 and 1878 to 82 per cent., in 1877 to 87 per cent., in 1876 to 80 per cent., in 1875 to 82 per cent., in 1874 to 83 per cent., and in 1873 to something less than 80 per cent.

652. The following are the results of meteorological observations taken at different stations throughout the colony during 1882. These places are arranged in the table in the order of their altitude above the level of the sea. The last two 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, 1882.

METEOROLOGICAL OBSERVATIONS AT VARIOUS STATIONS, 1882.

Stations.	Height above Sea-level.	Temperature in the Shade.		
		Max.	Min.	Mean.
	feet.	°	°	°
Portland	37·0	97·0	32·0	56·5
Melbourne	91·3	110·5	31·5	57·4
Cape Otway	270·0	102·0	39·0	54·9
Wilson's Promontory	300·0	101·0	35·0	55·7
Sandhurst	758·0	111·0	31·0	60·2
Ballarat	1,438·0	107·7	30·0	54·0

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	29·995	185	30·34	·72	5·0
Melbourne	29·902	131	22·39	·68	5·6
Cape Otway	29·726	157	30·36	·82	7·9
Wilson's Promontory	29·585	188	38·78	·77	5·8
Sandhurst	29·216	85	21·62	·72	4·0
Ballarat	28·497	155	25·74	·72	5·3

653. The following are the results for Melbourne in each of the nineteen years ended with 1882:—

Meteorology in Melbourne, 1864 to 1882.

METEOROLOGICAL OBSERVATIONS AT MELBOURNE.—RETURN FOR
NINETEEN 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
Means	105·6	30·1	57·2	29·93	131	25·53	·71	5·9

Observations in 1882 compared with 19-year means.

654. It will be noticed that in 1882, according to observations taken at the Melbourne Observatory, the maximum temperature was 5 degrees, and the minimum temperature about $1\frac{1}{2}$ degrees, above the mean of the maxima and minima in nineteen years; that the mean temperature was slightly above, but the mean atmospheric pressure and the mean relative humidity were somewhat below, the average of the same period; also, that although rain fell on the usual number of days, a smaller amount of cloud prevailed, and the rainfall was over 3 inches below the average.

Observations in 1882 and former years compared.

655. During the period of nineteen years a higher temperature than the maximum of 1882 was experienced in only one, and a higher one than the minimum in only three, different years; the mean temperature was equalled in two and was higher in six years; in only one previous year was the mean atmospheric pressure as low as in 1882; the number of days' rain was an average one, and the amount of rainfall was exceeded in all the other years except three; in only two previous years was the mean relative humidity as low as in 1882.

Fall of snow in Melbourne.

656. It may be remarked that a fall of snow took place on the 26th July, 1882, on which day the lowest temperature in the shade was 37° and the highest 44° . This is a most unusual occurrence in Melbourne;

no other such instance being remembered since the 29th and 30th August, 1849, when snow fell heavily.

657. 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.

PART V.—ACCUMULATION.

658. The coins in circulation in Victoria are in all respects the same as those used in the United Kingdom. The accounts are kept in sterling money (£ s. d.). Coins and accounts.

659. A branch of the Royal Mint was established in Melbourne in 1872. The premises occupy 2 acres 1 rood and 26 perches of land, valued in October, 1880, at £8,500; the original cost of the buildings, machinery, fittings, and furniture, was £68,350.* Royal Mint.

660. From the time of the opening of the Mint to the end of 1882, 5,655,494 ounces of gold were received thereat, valued at £22,661,104. The following table shows the quantity and value of the gold received in each year:— Gold received at Mint.

GOLD RECEIVED AT THE MELBOURNE MINT, 1872 TO 1882.

Year.	Quantity.	Value.
	Ounces.	£
1872	190,738	764,917
1873	221,870	887,127
1874	335,318	1,349,102
1875	489,732	1,947,713
1876	543,199	2,149,481
1877	378,310	1,491,819
1878	569,932	2,267,431
1879	656,556	2,637,738
1880	758,721	3,061,820
1881	692,213	2,792,985
1882	818,905	3,310,971
Total ...	5,655,494	22,661,104

661. It will be observed that more gold was received in 1882 than in any previous year; it exceeded the largest quantity previously Gold received, 1882.

* See Amended Return to an order of the Legislative Assembly, Parliamentary Paper C.—No. 4*. Session 1880.