363. The following is a summary of the pensions and superannuation allowances, of all descriptions, payable out of the general revenue during the year 1882–3 :—

SUMMARY OF PENSIONS AND RETIRING ALLOWANCES PAYABLE * FROM THE REVENUE, 1882–3.

	£	s.	d.
Former Ministers of the Crown	1,800	0	0
Lady Darling and Mrs. Petrie	1,100	0	0
Former judges of County Courts ...	3,000	0	0
„ officers of the Civil Service ...	32,276	8	4
„ „ Lunacy department	297	7	4
„ police	10,000	0	0†
Allowances voted by Parliament... ...	12,095	9	1
Total	£60,569	4	9‡

364. Retiring allowances, pensions, and gratuities to officers to be thereafter appointed in the public service were abolished on the 24th December, 1881, by Act 45 Vict. No. 710. Judges of the Supreme Court, officers and members of the police force, and persons then employed in the public service, are specially exempted from the operation of the Act.

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PART III.—VITAL STATISTICS.

365. 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 by 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.

366. 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,

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* The amounts actually paid were, owing to the deaths of recipients, in some instances less, and, owing to the payment of arrears, in some instances more, than these.

† These figures represent the amount payable from the general revenue, which consist of the usual endowment of £2,000 and an additional amount of £8,000 which was voted by Parliament. For total of retiring allowances to the police from all sources, see paragraph 359 *ante.*

‡ Not including a retiring allowance of £500 per annum paid to Mr. G. W. Rusden, late Clerk of Parliaments.

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 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,
1883.

367. The marriages celebrated in Victoria during 1883 numbered 6,771, as against 6,309 in the previous year. The excess in favour of 1883 was thus 462.

Marriages,
1883 and
former
years.

368. More marriages took place in 1883 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 1882, for the first time, the marriages exceeded 6,000 ; and in 1883, as already stated, they amounted to 6,771.*

Marriage
rate.

369. 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 1883 amounted to 7·38, this being the highest rate that has prevailed during the last nineteen years. The following table gives the number of marriages and number of persons married per 1,000 of the population during each of the twenty-four years ended with 1883 :—

ANNUAL MARRIAGE RATE, 1860 TO 1883.

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

* 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 1883—*continued.*

Year.	Per 1,000 of the Mean Population.	
	Number of Marriages.	Number of Persons Married.
1872	6·36	12·72
1873	6·50	13·00
1874	6·33	12·66
1875	6·33	12·66
1876	6·21	12·42
1877	6·31	12·62
1878	6·20	12·40
1879	5·98	11·96
1880	6·22	12·44
1881	6·79	13·58
1882	7·08	14·17
1883	7·38	14·76
Mean of twenty-four years ...	6·90	13·80

370. 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, which are based upon the total mean populations and all the marriages in the calendar year.

‡ Comprising bachelors of 20 and upwards, and widowers at all ages.

§ Comprising spinsters of 15 and upwards, and widows at all ages.

Reasons for fluctuations in marriage rate.

371. 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 the marriage rate was higher than at any previous period of the colony's history, and in 1881 it was still higher than in 1871.

Probability of female marriage rate reviving.

372. The decline in the female marriage rate shown in the last column of the table will be better realized when it is considered that in 1854 about 1 in 4 of all the spinsters and widows in the colony married in the year—which proportion, three years after, had fallen to 1 in 6 ; four years later it had fallen to 1 in 8 ; ten years still later it had fallen to 1 in 14 ; and ten years later, viz., in 1881, it had reached the exceedingly low point of 1 in 21. The tide 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.

373. 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 1882, except Western Australia, for which colony it is given for the last eleven of those years :— *Marriage rates in Australasian colonies.*

MARRIAGE RATES IN AUSTRALASIAN COLONIES, 1865 TO 1882.*

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
1882	7·08	8·69	8·56	8·73	7·07	8·03	7·07
Means ...	6·58	7·92	8·63	8·11	6·79	6·81	8·19

374. 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 much as of the proportion which single men at marriageable ages bear *Reasons for marriage rates being higher in other colonies than in Victoria.*

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* For the number of marriages in the various colonies during the eleven years ended with 1883, see General Summary of Australasian Statistics (third folding sheet) *ante.*

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

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 in the other colonies of males at the period named is to be found mainly in the fact that they—especially New South Wales, Queensland, South Australia, and New Zealand—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 1882 and
former
years.

375. In 1882 the marriage rates in all the colonies compare favorably with those in previous years, but most especially those in New South Wales and Tasmania, which, with one exception in the case of the former, were the highest recorded in the eighteen years named in the table; in Queensland also the marriage rate was much higher than in any other year since 1875. In New Zealand, on the other hand, the rate, although higher than in the two years immediately preceding, was considerably lower than in the majority of the other years shown. The marriage rate in the last named colony, which, a few years since, was higher than in any other Australasian colony, had fallen in 1882 to the lowest position; 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.†

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* See figures following paragraph 87 *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."

376. 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 eighteen years :—

<div style="margin-left:2em">

Order in 1882.
1. South Australia.
2. New South Wales.
3. Queensland.
4. Tasmania.
5. Victoria.
6. { New Zealand. / Western Australia.

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

Order of colonies in respect to marriage rates.

377. It will be noticed that Victoria, which for some years had been at the bottom of the list, had risen in 1882 above Western Australia and New Zealand; also that besides Victoria, New South Wales, South Australia, and Tasmania occupy higher positions in the list for 1882 than they do in that for a series of years.

Positions of colonies as regards marriage rates.

378. 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 :—

Single men and women in Australasian colonies.

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

379. 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.

Victoria and New South Wales compared.

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

380. 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	

381. 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 373 *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	

382. 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 370 *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 9 acres in cultivation per head of the population, or nearly three times as much per head as any other Australasian colony. Tasmania stood next to South Australia with a little over 3 acres per head.

383. According to the census, women would appear to have a smaller Proportion of marriages to single women. chance of getting married in Victoria than in any other Australasian colony, as the proportion of marriages to those of them who were marriageable was found to be 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 :—

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	

384. In 1882 the marriage rate of the colonies situated upon the Marriage rates in Australia and Australasia. 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, 1873 TO 1882.

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
1882	8·02	7·86
Means ...	7·23	7·30

385. Returns of marriages, births, and deaths are obtainable for few Marriage rates in certain British possessions. 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

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* See footnote (‡) to preceding page.
† See paragraph 375 *ante.*
‡ The numbers doubled give the *persons* married per 1,000 of the population.

to hand, or can be gathered from their official reports. The low rate 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.

386. 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.	TheNetherlands.	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 a low rate was recorded in that and subsequent years in consequence of the non-registration of marriages solemnized only in churches. The number of such marriages, however, afterwards decreased, and since then the registration of marriages has been less imperfect.

387. It will be observed that in the last year named the marriage Low European marriage rates. 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.

388. The mean marriage rate in Central Europe, as shown by the Australasian and European marriage rates compared. 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 of the population. 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 eighteen years ended with 1882, exceed 8 per 1,000, the rate in the first two being considerably higher than, and in the last about the same as, in England, Holland, and France. The average rate in New South Wales is rather above that 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.

389. The following, according to the reports of the Registrar-General Marriage rate in United Kingdom. of England, is the marriage rate of the United Kingdom during the twelve years ended with 1882. 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 1882, although higher than the unusually low rates which had prevailed in the three previous years, was still below the average of the whole period :—

MARRIAGE RATE IN THE UNITED KINGDOM, 1871 TO 1882.

	Marriages per 1,000 of the Population.		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	1881	7·01
1875	7·67	1882	7·17
1876	7·70		
1877	7·32	Mean ...	7·46

* See footnote (†) to table following paragraph 386 *ante*.

390. 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 1883 it was in country towns over five times, and in the metropolis over four 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, 1883.

Districts.	Estimated Mean Population.	Marriages, 1883.	
		Total Number.	Number per 1,000 of the Population.
Melbourne & suburbs(Greater Melbourne)	304,409	3,317	10·90
Extra-Metropolitan towns	193,464	2,426	12·54
Country districts	419,437	1,028	2·45
Total	917,310	6,771	7·38

391. 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 1883, however, the number was least in the autumn quarter, and highest in the spring and summer quarters.   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 1883.		Percentage in Ten Years: 1871 to 1880.
		Number of Marriages.	Percentage.	
Summer ...	March	1,732	25·58	24·43
Autumn ...	June	1,623	23·97	26·19
Winter ...	September ...	1,657	24·47	23·81
Spring ...	December ...	1,759	25·98	25·57
	Year ...	6,771	100·00	100·00

392. 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 1883 and the percentage during a previous decennial period :—

FORMER CONDITION OF PERSONS MARRIED.

Previous Condition.	Year 1883.		Percentage in Ten Years : 1871 to 1880.
	Number of Marriages.	Percentage.	
Bachelors and spinsters	5,753	84·97	80·59
Bachelors and widows	319	4·71	7·10
Widowers and spinsters	456	6·73	7·75
Widowers and widows	243	3·59	4·56
Total	6,771	100·00	100·00

393. 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. Seven divorced men and six divorced women were married in 1883; four of the former married spinsters, one a divorced woman, one a deserted wife, and one a widow. Three of the divorced women married bachelors, two widowers, and one, as already stated, married a divorced man. *Divorced persons.*

394. 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.*

395. 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. Two deserted wives availed themselves of this provision in 1883. One of these married a bachelor, and the other a man who had been divorced; one had not heard of her former husband for 7 years, and the other for 19 years. In the previous year, 5 deserted husbands and 11 deserted wives remarried. *Deserted husbands and wives.*

* For further particulars respecting these divorced persons, see General Report on the Census of 188 paragraph 314.

Remarriages. 396. In 1883, 699 widowers and 562 widows re-entered the marriage state. During the last ten 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 fact of the reverse having been the case of late years, would afford indirect proof, if such were needed, that the proportion of marriageable females to marriageable males in the population has increased, a circumstance which 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 eighteen years ended with 1883 :—

REMARRIAGES, 1866 TO 1883.

Year.	Number of Remarriages of—		Year.	Number of Remarriages of—	
	Widowers.	Widows.		Widowers.	Widows.
1866 ...	487	498	1876 ...	678	623
1867 ...	504	591	1877 ...	666	600
1868 ...	558	623	1878 ...	634	585
1869 ...	553	563	1879 ...	637	553
1870 ...	547	595	1880 ...	603	520
1871 ...	587	605	1881 ...	679	551
1872 ...	522	552	1882 ...	628	547
1873 ...	586	591	1883 ...	699	562
1874 ...	602	593			
1875 ...	614	583	Total ...	10,784	10,335

Marriages of Aborigines. 397. The marriages of 4 Aboriginal males with Aboriginal females are included in the returns of 1883. In the previous year there were 6 marriages of Aborigines, the bridegroom in one case being an Englishman.

Marriages of Chinese. 398. Eight Chinese males were married in Victoria in the year 1883, as against 10 in 1882, 4 in 1881, 13 in 1880, 11 in 1879, 13 in 1878, and 20 in 1877. During the seventeen years prior to the year under review, 268 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 :—

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* According to the census returns, there were in Victoria, in 1881, nearly 120 marriageable females to every 100 marriageable males.—See table following paragraph 378 *ante;* also figures following paragraph 380.

NATIONALITY OF WOMEN MARRYING CHINESE, 1866 TO 1883.

Birthplace of Wives.	Number of Marriages of Chinese Males.		
	Seventeen Years: 1866 to 1882.	Year 1883.	Total : 1866 to 1883.
Victoria	117	7*	124
Other Australian colonies ...	45	1	46
England and Wales	52	...	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	268	8	276

399. The marriage ceremony in Victoria may be performed either by the registered clergy of any religious sect or by lay registrars. In 1883, 92 per cent. of the marriages were celebrated according to the former, and 8 per cent. according to the latter, system. Lay marriages, which, for some years previously, had been increasing in numbers, were in 1883 fewer by 23 than in 1882, and fewer by 82 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 1883, also the percentage in the preceding year and in the ten years ended with 1880:—

Marriages by different sects.

MARRIAGES BY DIFFERENT DENOMINATIONS.

Marriages performed according to the usages of the—	Marriages in 1883.		Percentage of Marriages in—	
	Number.	Percentage.	1882.	Ten Years: 1871–80.
Church of England	1,895	27·99	28·04	24·63
Presbyterians	1,293	19·10	18·67	20·46
Wesleyans	1,047	15·46	16·06	16·38
Bible Christians	133	1·96	1·87	1·69
Independents	339	5·01	5·32	5·42
Baptists	327	4·83	4·25	3·70
Lutherans	60	·89	·81	1·02
Unitarians	1	·01	...	·02
Society of Friends	...	...	...	·01
Calvinistic Methodists ...	2	·03	·06	·16
Roman Catholics	1,006	14·86	14·06	17·21
Jews	27	·40	·41	·42
Other sects	76	1·12	1·13	1·06
Lay registrars	565	8·34	9·32	7·82
Total	6,771	100·00	100·00	100·00

* In two of these cases the wife was stated to be of Chinese parentage.

Duplicate marriages.

400. 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.

Sects of Aboriginals married.

401. Of the 4 Aboriginal marriages which took place in 1883, 2 were solemnized according to the rites of the Moravians, and 2 according to those of the Presbyterians.

Sects of Chinese married.

402. Of the marriages of Chinese in 1883, 2 were celebrated according to the rites of the Church of England, 2 according to those of the Presbyterians, 1 according to those of the Wesleyans, 1 according to those of the Independents, and 2 were performed by lay registrars.

Marriages by different sects.

403. 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.

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

405. The numbers of either sex who evinced their want of elementary Signing with marks. education by signing the marriage register with a mark instead of in writing were as follow in 1883, the proportion of those who signed with marks to the total numbers married being also shown :—

SIGNING MARRIAGE REGISTER WITH MARKS, 1883.

Persons Married.	Numbers Married.	Signing with Marks.	
		Total Number.	Number in every 100 Married.
Bridegrooms	6,771	209	3·09
Brides	6,771	235	3·47
Mean	6,771	222	3·28

406. In proportion to the total numbers married, an evident increase Increased numbers signing in writing. has taken place of late years in the number of both males and females signing the marriage register in writing. With few exceptions, a constant improvement has been apparent from year to year—nearly every year, as compared with its predecessor, showing a smaller proportion of persons signing with marks. In 1883, the proportion of men signing with marks was slightly higher than in 1881 or 1882, and the proportion of women was higher than in 1882; but, with these exceptions, the proportions for 1883 are lower than those for any other year. Generally, more males than females sign in writing, but an exception to this rule

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

Numbers Signing with Marks per 100 Married, 1873 to 1883.

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
1883	...	...	3·09	...	3·47	...	3·28

Signing with marks, 1853 to 1872.　407. 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.　408. The marriages in which marks instead of writing were made use of in 1883 numbered 382, but in only 62 of these, or not quite a sixth, did both parties use marks. In the 320 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 109 marriages could neither party write.

Signatures of Aborigines.　409. One of the 4 Aboriginal males and two of the 4 Aboriginal females married in 1883 signed in writing; all the remainder signed with marks.

Signing with marks in each sect.　410. 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 1883 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 1883.			Ten Years : 1871 to 1880.		
	Men.	Women.	Mean.	Men.	Women.	Mean.
Church of England ...	2·06	1·95	2·00	4·54	6·11	5·33
Presbyterians ...	2·01	2·01	2·01	3·67	5·97	4·82
Wesleyans	2·67	2·96	2·82	} 4·15	5·33	4·74
Bible Christians ...	1·50	1·50	1·50			
Independents	3.24	2·95	3·10	3·37	5·49	4·43
Baptists	2·45	2·45	2·45	3·48	5·22	4·35
Lutherans	1·67	...	·84	1·77	4·13	2·95
Calvinistic Methodists ...	...	...	...	1·22	6·10	3·66
Roman Catholics ...	5·78	6·06	5·92	10·14	15·43	12·79
Jews	...	...	...	·95	·47	·71
Other sects	3·95	7·89	5·92	7·01	3·79	5·40
Lay registrars ...	5·84	9·56	7·70	6·60	12·93	9·77
Total ...	3·09	3·47	3·28	5·31	7·93	6·62

411. It will be observed that the proportion of those signing with marks is higher amongst marriages performed according to the rites of the Roman Catholic Church than amongst those celebrated by any other religious denomination, but that the numbers in 1883 show a very considerable improvement as compared with the decennial period. The proportion so signing amongst civil marriages, although usually lower, was in 1883 considerably higher than amongst marriages by Roman Catholics. *Roman Catholic and civil marriages.*

412. In 14 marriages by Unitarians which took place in the thirteen years ended with 1883, not one instance occurred of either of the parties signing with a mark; this sect, therefore, finds no place in the above table. In 96 marriages by Calvinistic Methodists, all but two of the males signed in writing, but 5 of the females signed with marks. In the 282 marriages of Jews only 3 persons signed with marks. *Marriages by Unitarians, Calvinists, and Jews.*

413. 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 *Signing with marks in Australasian colonies.*

percentages for the six years 1877 to 1882 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 1882.

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
	1882	2·88	3·27	3·07
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
	1882	2·50	4·97	3·73
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
	1882	4·43	5·14	4·78
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
	1882	5·09	6·16	5·62
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
	1882	5·16	9·89	7·52

Victoria the least illiterate colony.

414. By these figures it appears that the proportion of persons able to sign in writing is almost always larger in this than in any other colony. Next to Victoria in this respect is New Zealand, in which, in 1882, the proportion of males signing in writing was even larger than

in this colony. The colonies, generally, show improvement from year to year, and there is every reason to expect that in all the colonies, as the children educated under the compulsory systems established arrive at marriageable ages, it will become a rare occurrence for a marriage to be attested otherwise than in writing.

415. 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	1879	7·6	15·3	11·4
Ireland	1879	28·0	32·9	30·4

416. 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.*

417. 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 bridegrooms and brides in combination.

418. The age of both bride and bridegroom was specified in the case of all but 42 of the 6,771 marriages which took place in 1883.* In 34 of the defective entries the age of neither party was given; in 3 cases the age of the husband was stated, but not that of the wife; and in 5 instances the age of the wife was given, but not that of the husband. The following table shows the ages of the husbands and of the wives in combination :—

AGES OF BRIDEGROOMS AND BRIDES IN COMBINATION, 1883.

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.	70 to 75.	Unspecified.	
17 to 18 years...								1												1
18 to 19 „ ...	1		1	5	3	3	1													14
19 to 20 „ ...			1	1	6	14	4	10												36
20 to 21 „ ...			2	6	7	26	22	36	4		1									104
21 to 25 „ ..		5	31	70	180	260	245	1301	200	28	6	2								2328
25 to 30 „ ...		4	5	50	93	167	189	1144	550	71	15	3	2						2	2295
30 to 35 „ ...			1	11	24	26	41	320	249	85	34	11	6							808
35 to 40 „ ...		1		6	3	6	15	119	117	70	44	14	5	1						401
40 to 45 „ ...				1	3	4	6	41	71	43	44	27	15	1	1		1		1	259
45 to 50 „ ...				1		2	3	28	38	43	33	23	25	5	1					202
50 to 55 „ ...					2	2		8	14	11	29	30	26	17	1	2				142
55 to 60 „ ...					1		1	6	6	11	11	15	11	11	7	3		1		84
60 to 65 „ ...								1	4	3	5	7	3	4	3					30
65 to 70 „ ...								1		2	3	3	4	1	3					17
70 to 75 „ ...								1		2	2			3	1	1				10
75 to 80 „ ...													1							1
Unspecified ...						1	3	1											34	39
Total Brides	1	10	41	151	322	511	530	3018	1253	369	227	135	98	43	17	6	1	1	37	6771

NOTE.—This table may be read thus :—Two men between 50 and 55 married girls between 18 and 19; two women between 45 and 50 married men between 25 and 30, &c.

Relative ages of husband and wife.

419. An examination of the 6,729 cases in which the ages of both parties are specified will show that in 2,095 instances, or 31 per cent. of the whole, both parties to the marriage were about the same age; in 489 instances, or 7 per cent. of the whole, the wife was older than the husband; and in 4,145 instances, or 62 per cent. of the whole, the husband was older than the wife.

Age at which marriage is contracted.

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

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* 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 1883 and for the decennial period 1871 to 1880 :—

PROPORTION OF MALES AND FEMALES MARRYING AT DIFFERENT AGES, 1871–80 AND 1883.

Ages.	Bridegrooms.			Brides.		
	Numbers, 1883.	Proportions per 1,000.		Numbers, 1883.	Proportions per 1,000.	
		Year 1883.	Ten Years, 1871–80.		Year 1883.	Ten Years, 1871–80.
Under 15 years ...	...	...	...	1	·15	·48
15 to 16 ,, ...	...	...	...	10	1·50	2·71
16 to 17 ,, ...	...	...	·02	41	6·09	12·74
17 to 18 ,, ...	1	·15	·46	151	22·42	36·74
18 to 19 ,, ...	14	2·08	1·57	322	47·82	62·69
19 to 20 ,, ...	36	5·35	6·33	511	75·88	80·93
20 to 21 ,, ...	104	15·45	16·79	530	78·70	86·94
21 to 25 ,, ...	2,328	345·81	281·06	3,018	448·17	375·69
25 to 30 ,, ...	2,295	340·91	295·83	1,253	186·07	174·64
30 to 35 ,, ...	808	120·02	165·38	369	54·80	69·13
35 to 40 ,, ...	401	59·56	97·22	227	33·71	44·26
40 to 45 ,, ...	259	38·47	59·54	135	20·05	26·44
45 to 50 ,, ...	202	30·01	37·58	98	14·55	14·99
50 to 55 ,, ...	142	21·09	20·49	43	6·38	6·79
55 to 60 ,, ...	84	12·48	9·92	17	2·52	3·03
60 to 65 ,, ...	30	4·46	4·96	6	·89	1·16
65 to 70 ,, ...	17	2·53	1·85	1	·15	·40
70 and upwards ...	11	1·63	1·00	1	·15	·24
Total ...	6,732*	1,000·00	1,000·00	6,734*	1,000·00	1,000·00

421. 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 1883 are much higher than those relating to the decennial period.

Frequency of marriage at 21 to 30.

422. 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 1883 had not reached his eighteenth year, and 11 of the females had not reached their sixteenth ; as many as 155 of the males, or 1 in every 43, and no fewer than 1,566 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.

423. From the experience of Victoria during recent years, it would appear that, in proportion to the total numbers marrying, more females

Marriages of minors in 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 39 and the brides by 37. The reason of the bridegrooms being fewer than the brides is that the age was not stated in the case of two 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 1883.	Ten Years: 1871 to 1880.	Ten Years: 1871 to 1880.
Bridegrooms ...	2·30	2·52	7·95
Brides	23·26	28·32	21·96
Mean	12·78	15·42	14·96

424. 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

425. 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 only 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.

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

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

| Age last Birthday. | Victoria. | | | | Proportion of Marriages per 1,000 Marriageable Minors | | | |
| | Marriageable Minors at Census of 1881. | | Minors who Married. (Mean of Three Years, 1880–82.) | | 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

427. It appears that in the case of both males and females the tendency Marriage rate of minors lower in Victoria than England. 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.

428. The returns of the Australasian censuses of 1881 give infor- Conjugal condition in Australasian colonies. mation 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.

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

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* See 35th Annual Report of the Registrar-General of England, page xii.

† In this table, and that following paragraph 424, 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 423 *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.

430. 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
2. Queensland ...	...	10,000
3. South Australia	...	9,938
4. New Zealand ...	...	9,928
5. New South Wales	...	9,773
6. Tasmania ...	...	9,656
7. Western Australia	...	9,301

Proportion of husbands under and over 21.

431. 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.

432. By the same test, the tendency of women to marry under age would appear to be greatest in Western Australia and Queensland, and least in Victoria—the first two being the colonies in which the proportion of females to the total population is lowest, and the last the colony in which it is highest. The following is the order of the colonies in this respect, the colony in which the proportion of wives under age was greatest being placed first, and that in which it was least last:— *Proportion of wives under and over 21.*

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

	Under 21 Years.	Over 21 Years.
1. Western Australia...	521	9,479
2. Queensland	426	9,574
3. New South Wales	375	9,625
4. Tasmania...	354	9,646
5. New Zealand	326	9,674
6. South Australia	308	9,692
7. Victoria	238	9,762

433. The births registered in Victoria during 1883 numbered 27,541, as against 26,747 in 1882. The increase in the year under review, as compared with the previous one, was thus 794. *Births, 1883.*

434. During the last 15 years, the number of births in Victoria has remained almost stationary, and although some improvement was shown in the year under review, even the number in that year was exceeded in 1873—ten years previously—when 28,100 births, or 559 more than in 1883, were registered.* *Births in 1883 and former years.*

435. The birth rate has been declining steadily for many years past. It recovered itself slightly in 1881, but again fell, and in 1883 was lower than in any previous year. The following are the figures for the last twenty-four years:— *Birth rate.*

ANNUAL BIRTH RATE, 1860 TO 1883.

	Births per 1,000 of Mean Population.		Births per 1,000 of Mean Population.
1860	42·81	1873	36·71
1861	43·46	1874	34·46
1862	44·50	1875	33·94
1863	42·46	1876	33·61
1864	43·79	1877	32·17
1865	42·40	1878	32·36
1866	39·76	1879	32·18
1867	39·75	1880	30·75
1868	41·08	1881	31·24
1869	37·89	1882	30·04
1870	38·07	1883	30·02
1871	37·15		
1872	36·33	Mean of 24 years ...	36·96

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* For number of births in each year, see Statistical Summary of Victoria (first folding sheet) *ante.*

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Proportion of births to population and to married women. 436. 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. 437. 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 Australasian colonies. 438. Returns of the births in all the Australasian colonies are available to the end of 1882, 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 1882, or as many years between those periods as the figures are available for :—

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* 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 1882.*

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
1882 ...	30·04	37·16	35·85	37·40	35·84	33·50	37·32
Means ...	35·55	39·06	40·27	38·89	32·79	30·76	40·76

439. During recent years the birth rates in the majority of the colonies have been low as compared with those quoted for the early years named in the table. In Victoria and New Zealand the birth rate in 1882 was the lowest during the whole period to which the table refers ; in New South Wales and Queensland it was the lowest with one exception ; and in South Australia with three exceptions. On the other hand, the birth rates in Tasmania and Western Australia were higher in 1882 than in any of the previous years. The diminished birth rate in Victoria has already been accounted for by the falling-off shown to have taken place in the number of mothers ; and it is probable that the low birth rates now prevailing in some of the other colonies are due to a similar cause. *Diminished birth rate in all the colonies.*

440. 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 eighteen years. It will be observed that Victoria is absolutely last on the list for 1882, but stands fifth in the eighteen-year series :— *Order of colonies in respect to birth rates.*

ORDER OF AUSTRALASIAN COLONIES IN REFERENCE TO BIRTH RATES.

Order in 1882.
1. South Australia.
2. New Zealand.
3. New South Wales.
4. Queensland.
5. Western Australia.
6. Tasmania.
7. Victoria.

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

* For the number of births in the various colonies during the eleven years ended with 1883, see General Summary of Australasian Statistics (third folding sheet) *ante.*

441. On the continent of Australia, taken as a whole, the birth rate was lower in 1882 than in any of the previous nine years, except 1877. On the Australian continent, combined with Tasmania and New Zealand, the birth rate in 1882 was the lowest during the whole period of ten years. This will be seen by the following figures :—

Birth Rate in Australia and Australasia, 1873 to 1882.

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
1882	34·18	34·73
Means	35·21	35·84

442. 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

* Registrations incomplete.   † Including still-births.

443. A statement of the birth rates in British and certain Foreign Birth rates in European countries. countries for each of the fourteen years ended with 1881, 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 :—

BIRTH RATES IN EUROPEAN COUNTRIES, 1868 TO 1881.

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	34·9	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	24·7	31·8	29·4	37·3	42·9	37·7	31·3	35·6	...	29·6	...	33·6
1881 ...	33·9	33·7	24·5	...	...	...	...	...	...	...	...	...	...	...
Means ...	35·4	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

444. It is reasonable to suppose that the averages in this table will Discrepancies between birth and marriage rates in European countries. 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

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* 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 386 *ante.*

§ See footnote (§) to table following paragraph 386 *ante.*

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. Moreover, in England, Scotland, and Ireland, in 1881, it was even lower·than in 1880.

Australasian and European birth rates compared. 445. The birth rate of Victoria, taken over a series of years, approximates to that in England and Holland, is lower than that in the Central European States and Italy, but higher than that in any of the other countries 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 somewhat higher than 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. 446. According to the reports of the Registrar-General of England, the birth rate of the United Kingdom was lower in 1882 than in any year since 1870, as will be seen by the following figures :—

BIRTH RATE IN THE UNITED KINGDOM, 1871 TO 1882.

	Births per 1,000 of the Population.			Births per 1,000 of the Population.
1871	35·0	1878	34·1
1872	34·4	1879	33·5
1873	34·1	1880	32·7
1874	34·5	1881	32·5
1875	34·0	1882	32·2
1876	34·9		
1877	34·5	Mean ...	34·0

Birth rates in town and country, 1883. 447. The following table shows the births and birth rates in the metropolis, the extra-metropolitan towns, and the country districts of Victoria during 1883 ; also the estimated population of such divisions about the middle of that year :—

* 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."

BIRTHS IN URBAN AND COUNTRY DISTRICTS, 1883.

Districts.	Estimated Mean Population.	Births, 1883.	
		Total Number.	Number per 1,000 of the Population.
Melbourne and suburbs (Greater Melbourne)	304,409	10,093	33·15
Extra-Metropolitan Towns	193,464	6,204	32·07
Country districts ...	419,437	11,244	26·81
Total ...	917,310	27,541	30·02

448. The next table shows the number of births per 1,000 of the *Birth rates in town and country, 1873 to 1883.* population of the same three divisions of the colony during each of the last eleven years :—

BIRTH RATES IN URBAN AND COUNTRY DISTRICTS, 1873 TO 1883.

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	31·35	27·41	30·04
1883 ...	33·15	32·07	26·81	30·02

449. It will be noticed that in the first two years of the period to which *Results compared.* 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 and the subsequent year, however, owing to a falling-off in the birth rate of the extra-metropolitan towns and in the country districts— especially the former—and a slight increase in that of the metropolis, the rate in the last-named division was much above that in either of the other districts.

450. The mean population, the number of births, and the birth rate *Birth rates in metropolitan sub-districts.* during 1883 ; 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 Greater Melbourne.

Sub-districts.	Year 1883.			Ten Years: 1871–80.
	Estimated Mean Population.	Births.		Annual Births per 1,000 of Population.
		Total Number.	Number per 1,000 of the Population.	
Melbourne City	65,791	1,665	25·30	27·57
Hotham Town	18,250	664	36·39	34·03
Fitzroy City	23,200	785	33·84	34·57
Collingwood City	25,100	913	36·37	36·28
Richmond City	25,465	880	34·56	35·96
Brunswick Borough	6,434	255	39·63	38·66
Prahran City	25,300	828	32·73	32·38
South Melbourne City *	28,000	1,020	36·43	32·02
Port Melbourne Borough † ...	9,029	364	40·31	38·99
St. Kilda Borough	13,346	332	24·88	29·03
Brighton Borough	4,861	142	29·21	31·14
Essendon Borough	3,500	111	31·71	} 37·72
Flemington & Kensington Borough	3,350	132	39·40	
Hawthorn Borough	7,011	205	29·23	34·13
Kew Borough	4,689	102	21·75	26·95
Footscray Borough	7,000	254	36·29	45·62
Williamstown Borough	9,320	332	35·62	38·88
Northcote Borough ... } Remainder of district ... }	19,661	568	28·89	25·83
Hospitals, asylums, &c. ‡	3,624	541	...	...
Shipping in Hobson's Bay and river	1,478	...	...	·05
Total	304,409	10,093	33·15	33·50

Birth rates in sub-districts, 1871 to 1880.

451. 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, Port Melbourne, 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-districts, 1883.

452. During 1883, the birth rates in Hotham, Collingwood (slightly), Brunswick, Prahran (slightly), South Melbourne, Port Melbourne, and " Remainder of District" were higher, but those in all the other sub-districts were lower, than they were in the decennium ended with 1880.

* Formerly called Emerald Hill.
† Formerly called Sandridge.
‡ The population given is that of all the institutions, but the Lying-in Hospital is the only one in which births occurred.
§ See table following paragraph 448 *ante.*

The sub-district with the highest birth rate was Port Melbourne, closely followed by Brunswick and Flemington; those with the lowest rates were Kew, St. Kilda, and Melbourne City, in all of which the rates were even lower than in the "Remainder of District."

453. 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 rate in London.

454. The forty-third 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. The birth-rate in Greater Melbourne was lower than in any of those towns except Brighton, Plymouth, Glasgow, Dublin, and Edinburgh, as will be seen by the following figures :— Birth rates in British towns.

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		

455. 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 foreign towns.

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		

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

456. The births of males in Victoria during 1883 numbered 14,109, those of females 13,432. These numbers furnish a proportion of 105·04 boys to 100 girls, as against a proportion of 103·63 in 1882. In the ten years 1871–80, 137,275 births of males and 131,435 births of females were registered, giving a proportion of 104·45 boys to 100 girls.

457. 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 ten years ended with 1882, 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 1882.

Year.	Number of Boys to 100 Girls Born.						
	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
1873 ...	102·65	104·38	106·13	102·77	109·04	98·44	103·48
1874 ...	103·94	104·31	105·74	103·44	103·25	107·02	106·83
1875 ...	104·95	102·08	104·01	103·85	98·95	109·51	107·80
1876 ...	105·76	102·47	105·26	101·08	106·76	111·48	106·01
1877 ...	104·19	106·34	106·78	102·91	101·32	105·04	104·59
1878 ...	107·19	106·83	103·89	107·14	101·15	105·52	101·57
1879 ...	104·69	105·71	103·36	102·53	117·59	99·11	105·93
1880 ...	104·44	104·99	103·63	110·98	92·37	101·56	104·71
1881 ...	104·99	105·59	106·64	106·48	108·07	107·41	104·90
1882 ...	103·63	103·23	107·55	106·36	110·64	104·81	104·46

458. In the Australasian colonies, taken as a whole, the proportion during the ten years was 104·67 male to 100 female infants. In the different colonies, the proportions ranged from 105·31 per 100 females in Queensland to 104·6 per 100 females in Victoria and New South Wales. 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 1882.

	Boys to 100 Girls.		Boys to 100 Girls.
Queensland	105·30	Victoria	104·64
New Zealand ...	105·03	New South Wales ...	104·59
Tasmania	104·99		
Western Australia ...	104·91	Mean	104·67
South Australia ...	104·75		

459. 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 statement 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			

460. 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. *Australasian and other countries compared.*

461. In 1883, 183 twin births but no triple births were registered, as against 215 twin births and 2 triple births in 1882. 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. *Twins and triplets.*

462. The illegitimate children born in 1883 numbered 1,292, or 1 in every 21 births registered. Those in 1882 were set down as 1 in 21 ; in 1881 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.*

463. 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 302⅔ to every 1,000 married women living at the reproductive period of life. It follows, therefore, from the number of legitimate births registered in 1883, that, approximately, 86,728 married women at *Women living in concubinage.*

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

† 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 436 *ante*.

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 1883, that, exclusive of public prostitutes (who, as they rarely have children, are omitted from the computation), at least 4,268 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 1883 was 114,763. It therefore follows that 1 out of every 27 of these was living immorally.

Illegitimacy and concubinage, 1873 to 1883.

464. 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 eleven years :—

ILLEGITIMACY AND CONCUBINAGE, 1873 TO 1883.

Year.	Illegitimate Births.		Women Living in Concubinage (exclusive of Public Prostitutes).	
	Total Number.	Percentage of Total Births.	Estimated Total Number.	Number per 100 Single Women between 15 and 45 Years of Age Living in Victoria.
1873	893	3·18	2,951	4·54
1874	984	3·67	3,251	4·41
1875	779	2·92	2,573	3·36
1876	975	3·64	3,221	4·02
1877	1,010	3·88	3,337	3·85
1878	1,103	4·15	3,644	4·20
1879	1,304	4·86	4,308	4·78
1880	1,254	4·80	4,143	4·39
1881	1,382	5·09	4,551	4·49
1882	1,271	4·75	4,200	3·91
1883	1,292	4·69	4,268	3·72
Means ...	1,114	4·14	3,679	4·15

Illegitimacy in Australasian colonies.

465. 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 five 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 eleven years ended with 1882 :—

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* See footnote to paragraph 462 *ante*.

ILLEGITIMACY IN AUSTRALASIAN COLONIES, 1872 TO 1882.

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
1882	4·75	4·24	4·40	2·87
Means ...	3·99	4·20	3·60	2·13

466. 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 slight difference between the two last-named 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.*

CONCUBINAGE IN AUSTRALASIAN COLONIES, 1881.

Colony.	Single Women between 15 and 45 Years of Age.	Illegitimate Births, 1881.	Single Women living in Concubinage (exclusive of Public Prostitutes).	
			Total Number.	Number per 100 Single Women between 15 and 45.
1. Queensland ...	15,441	345	1,059	6·86
2. New South Wales	71,085	1,263	3,665	5·16
3. Victoria ...	101,451	1,382	4,551	4·49
4. New Zealand ...	38,659	534	1,686	4·36

467. 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 :— *Proportion of concubinage in each colony.*

In Queensland	1 single woman in 13 was living immorally.
In New South Wales	„ „ 19 „ „
In Victoria	„ „ 22 „ „
In New Zealand	„ „ 23 „ „

468. Illegitimacy in England and Wales appears to be commoner than, and in Scotland more than twice as rife as, it is in any of *Illegitimacy in United Kingdom.*

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 ENGLAND, SCOTLAND, AND IRELAND, 1871 TO 1882.

Year.	Illegitimate Births to every 100 Children Born.		
	England and Wales.	Scotland.	Ireland.
1871	5·6	9·5	2·7
1872	5·4	9·1	2·5
1873	5·2	9·0	2·4
1874	5·0	8·7	2·3
1875	4·8	8·6	2·3
1876	4·7	8·6	2·3
1877	4·7	8·4	2·4
1878	4·7	8·4	2·3
1879	4·8	8·5	2·5
1880	4·8	8·4	2·5
1881	4·9	8·3	2·5
1882	4·9	8·1	2·7
Means	5·0	8·6	2·4

Illegitimacy in France. 469. Statistics of illegitimacy in France for the years 1873 to 1881 were quoted by M. Toussaint Loua, Director of the Bureau of General Statistics of France, in a paper read by him before the Statistical Society of Paris on the 21st March, 1883.* By M. Loua's figures, which are subjoined, it appears that illegitimacy in France is not so rife as in Scotland, but is more so than in England, Ireland, or any of the Australasian colonies:—

ILLEGITIMACY IN FRANCE, 1873 TO 1881.

Year.	Illegitimate Births to every 100 Children Born.	Year.	Illegitimate Births to every 100 Children Born.
1873	7·46	1879	7·07
1874	7·26	1880	7·41
1875	7·03	1881	7·48
1876	6·96		
1877	7·08	Mean	7·22
1878	7·25		

Illegitimacy in town and country. 470. 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 1883, in the metropolitan district about 1 birth in 14, in extra-metropolitan towns 1 birth in 17, but in country districts only 1 birth in 44, was registered as illegitimate. In the previous year the proportions were 1 in 13, 1 in 21, and 1 in 43 respectively.

* See *Journal de la Société de Statistique de Paris*, vingt-quatrième année, page 160: Berger-Levrault, Paris, 1883.

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

PROPORTION OF BIRTHS TO MARRIED WOMEN IN AUSTRALASIAN COLONIES.

Colony.	Married Women under 45 Years of Age.	Legitimate Births, 1881.	
		Total Number.	Number per 100 Married Women under 45.
1. New South Wales ...	80,473	27,730	34·46
2. Queensland	24,183	7,875	32·56
3. New Zealand	57,464	18,198	31·67
4. Victoria	84,831	25,763*	30·37*

472. Another method of determining the fecundity of women is to find the average number of children born to a marriage, which may be ascertained approximately by dividing the legitimate births in any year by the number of marriages in the preceding year. The following is the result of such a calculation for Victoria during the ten years ended with 1883:—

CHILDREN TO A MARRIAGE, 1874 TO 1883.

Year.	Legitimate Births.	Marriages in Year prior to that in first Column.	Average number of Children to a Marriage.
1874	25,816	4,974	5·19
1875	25,941	4,925	5·27
1876	25,794	4,985	5·17
1877	25,000	4,949	5·05
1878	25,478	5,103	4·99
1879	25,535	5,092	5·01
1880	24,894	4,986	4·99
1881	25,763	5,286	4·87
1882	25,476	5,896	4·32
1883	26,249	6,309	4·16
Sums and Mean ...	255,946	52,505	4·87

* In consequence of the births here quoted being those for the calendar year, these figures differ slightly from those in table following paragraph 436 *ante*.

Decrease in proportion of children born.

473. The figures show a steady diminution in the proportion of children born, amounting in the ten years to one child per marriage. It is evident that if the births increased with the marriages as they should do, the proportions would remain steady; but this is shown not to be the case. There are, however, many matters affecting the birth rates of infants respecting which it is not possible to obtain precise information. The result is pointed out in the last column of the table, but the causes by which such a result was produced can only be guessed at.

Births in each quarter.

474. 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 1883 and the percentage for a previous decennial period :—

BIRTHS IN EACH QUARTER.

Seasons.	Quarter ended on the last day of—	Year 1883.		Percentage in Ten Years : 1871 to 1880.
		Number of Births.	Percentage.	
Summer ...	March	6,371	23·13	23·74
Autumn ...	June	7,199	26·14	25·10
Winter ...	September ...	7,295	26·49	27·15
Spring ...	December ...	6,676	24·24	24·01
	Year	27,541	100·00	100·00

Deaths, 1883.

475. The deaths in 1883 numbered 13,006, as against 13,634 in 1882. The decrease in the year under notice was thus 628.

Deaths, 1883 and former years.

476. Deaths were more numerous in 1883 than in any previous year except 1882, 1876, and 1875. The high mortality in the two last-named years, in which respectively 13,561 and 15,287 deaths were recorded, was due to the prevalence of measles and scarlatina in an epidemic form.*

Excess of births over deaths.

477. The births in 1883 exceeded the deaths by 14,535, or 112 per cent., as against 96 per cent. in 1882. In the eighteen years ended with 1883 the proportion averaged 122 per cent. The following were the births and deaths in each of those eighteen years, and the excess of the former over the latter :—

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

EXCESS OF BIRTHS OVER DEATHS, 1866 TO 1883.

Year.	Births.	Deaths.	Excess of Births over Deaths.	
			Numerical.	Centesimal.
				Per Cent.
1866 ...	25,010	12,286	12,724	104
1867 ...	25,608	11,733	13,875	118
1868 ...	27,243	10,067	17,176	171
1869 ...	26,040	10,630	15,410	145
1870 ...	27,151	10,420	16,731	161
1871 ...	27,382	9,918	17,464	176
1872 ...	27,361	10,831	16,530	153
1873 ...	28,100	11,501	16,599	144
1874 ...	26,800	12,222	14,578	119
1875 ...	26,720	15,287	11,433	75
1876 ...	26,769	13,561	13,208	97
1877 ...	26,010	12,776	13,234	104
1878 ...	26,581	12,702	13,879	109
1879 ...	26,839	12,120	14,719	121
1880 ...	26,148	11,652	14,496	124
1881 ...	27,145	12,302	14,843	121
1882 ...	26,747	13,634	13,113	96
1883 ...	27,541	13,006	14,535	112
Total in 18 years	481,195	216,648	264,547	122

478. It will be noticed that the births more than doubled the deaths in all the years except 1882, 1876, and 1875. *Years in which births doubled deaths.*

479. 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 following table shows the percentage of excess of births over deaths in each of the Australasian colonies during the respective years 1873 to 1882, 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.*

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* In the ten years 1873 to 1882, 96,710 State-assisted immigrants arrived in New Zealand.

EXCESS OF BIRTHS OVER DEATHS IN AUSTRALASIAN COLONIES, 1873 TO 1882.

Colony.	Excess of Births over Deaths.										
	1873.	1874.	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	Mean of 10 Yrs.
	Per Cent.	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	233	229
2. South Australia	170	124	84	132	167	148	177	162	167	147	147
3. New South Wales	182	156	109	108	142	135	164	151	151	132	143
4. Queensland ...	154	128	63	99	113	75	145	172	148	99	120
5. Western Australia	94	80	61	140	111	121	138	144	144	153	118
6. Victoria ...	144	119	75	97	104	109	121	124	121	96	111
7. Tasmania ...	103	83	49	82	58	106	111	104	126	112	93

Excess of births over deaths in European countries.

480. 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.	
			Per Cent.
England and Wales	23	1853 to 1875	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 elsewhere.

481. 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.*

Deaths of males and females.

482. In Victoria, deaths of males in 1883 numbered 7,410, and deaths of females, 5,596. These numbers furnish a proportion of 75 females to every 100 males, as against a proportion of 73 in 1882, and an average of 75 in the ten years 1871-80. Females in the total popu-

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* See also paragraph 444 *ante.*

ation were in the proportion of 90 to every 100 males in the last two years, 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.

483. The following table shows the death rate of males and females, and of both sexes, during each of the past twenty-three 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.*

ANNUAL DEATH RATE, 1861 TO 1883.

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
1883 ...	483,960	433,350	7,410	5,596	15·31	12·91	14·18
Average of twenty-three years ...					16·76	14·75	15·85

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.

484. 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 borne in mind that death rates based merely upon the total population, in common with birth and marriage rates calculated upon a like basis, *Normal death rate.*

* 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 the late 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.

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-three years named in the table, but over the whole period it has averaged below 16 per 1,000. In the last seven years it has never been so high as 16 per 1,000, whilst in four of those years it was below 15 and in one below 14 per 1,000.

Low mor-
tality in
census
years 1871
and 1881.

485. 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 the census years alone.

Death rates
in Austral-
asian colo-
nies.

486. The following table shows the death rates of the different Australasian colonies during the eighteen years ended with 1882 :—

DEATH RATES IN AUSTRALASIAN COLONIES, 1865 TO 1882.*

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
1882	15·31	16·03	17·99	15·15	14·16	15·79	11·19
Means	15·75	15·59	17·71	15·12	15·13	15·25	12·24

* For the number of deaths in the various colonies during the eleven years ended with 1883, see General Summary of Australasian Statistics (third folding sheet) *ante.*

487. Considerable fluctuations in the death rates will be noticed from year to year, there being in this respect 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.}*

488. In the eighteen years over which the observations extend, the normal death rate of 17 per 1,000 persons living was reached in Queensland ten times, in Victoria, New South Wales, and South Australia four times, in Tasmania twice, and in New Zealand not at all. In the last ten 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.}*

489. 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 eighteen 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 1882, 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 1882.	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. New South Wales.	6. Victoria.
7. Queensland.	7. Queensland.

490. 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 ten years ended with 1882 :— *{Death rate in Australia and Australasia.}*

DEATH RATE IN AUSTRALIA AND AUSTRALASIA, 1873 TO 1882.

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
1882	15·81	14·99
Means	15·63	15·11

Normal death rate in Australia and Australasia.

491. It will be noticed that in 1875 and 1876 the mortality on the Australian continent exceeded 17 per 1,000, but in no other years; also that it exceeded that rate upon the continent combined with the colonies of Tasmania and New Zealand only in 1875. It will further be noticed that a marked increase took place in 1882 on the comparatively low rates which prevailed in the three preceding years.

Death rates in certain British possessions.

492. 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

493. In all the European countries of which the information is at **Death rates in European countries.** 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 in any year show an approach to so low a death rate as 17 per 1,000, 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, 1868 to 1881.

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
1881 ...	18·9	19·3	17·5	...	...	...	...	...	...	...	...	...	...	...
Means ...	21·4	21·7	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.

494. According to the reports of the Registrars-General of England **Death rate in United Kingdom.** and Scotland, the death rate of the latter country approximates very

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* 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.

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 twelve years ended with 1882 were as follow :—

DEATH RATE IN THE UNITED KINGDOM, 1871 TO 1882.

	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	1881		18·7
1875	22·2	1882		19·2
1876	20·5			
1877	20·0	Mean		20·7

Death rates in town and country, 1883.

495. 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 1883, the death rate was somewhat higher in Melbourne and suburbs than in the country towns, but in both it was much more than twice as high as in the country districts. The following are the figures for that year :—

DEATHS IN URBAN AND COUNTRY DISTRICTS, 1883.

Districts.	Estimated Mean Population.	Deaths, 1883.	
		Total Number.	Number per 1,000 of the Population.
Melbourne and suburbs (Greater Melbourne)	304,409	5,923	19·46
Extra-metropolitan Towns	193,464	3,640	18·81
Country districts ...	419,437	3,443	8·21
Total ...	917,310	13,006	14·18

496. 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 eleven years:—

DEATH RATES IN URBAN AND COUNTRY DISTRICTS, 1873 TO 1883.

Years.	Number of Deaths per 1,000 of the Estimated Population.			
	Greater Melbourne	Extra-Metropolitan Towns.	Country Districts.	Total of Victoria.
1873 ...	19·86	18·50	9·65	15·02
1874 ...	21·27	20·47	9·09	15·71
1875 ...	25·82	26·03	11·24	19·42
1876 ...	21·84	23·00	10·45	17·02
1877 ...	21·18	20·07	9·86	15·80
1878 ...	20·12	20·21	9·83	15·46
1879 ...	19·23	18·65	9·17	14·53
1880 ...	18·70	17·65	8·13	13·70
1881 ...	19·32	19·44	7·90	14·16
1882 ...	21·02	20·24	8·93	15·31
1883 ...	19·46	18·81	8·21	14·18

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.

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

498. The following table shows the mean population, the number of deaths, and the proportion of the latter to the former, in 1883, 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 GREATER MELBOURNE.

Sub-districts.	Year 1883.			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	65,791	999	15·18	16·71
Hotham Town	18,250	332	18·19	17·34
Fitzroy City	23,200	401	17·28	18·63
Collingwood City	25,100	488	19·44	20·14
Richmond City	25,465	450	17·67	17·44
Brunswick Borough	6,434	108	16·78	14·62
Prahran City	25,300	375	14·82	16·89
South Melbourne City†	28,000	493	17·61	16·53
Port Melbourne Borough ‡ ...	9,029	164	18·16	17·46
St. Kilda Borough	13,346	162	12·14	14·01
Brighton Borough	4,861	73	15·02	14·00
Essendon Borough	3,500	43	12·29 ⎫	17·84
Flemington and Kensington Borough	3,350	56	16·72 ⎭	
Hawthorn Borough	7,011	85	12·13	16·94
Kew Borough	4,689	44	9·38	11·84
Footscray Borough	7,000	97	13·86	16·75
Williamstown Borough ...	9,320	134	14·38	17·94
Northcote Borough ... ⎫ Remainder of district ... ⎭	19,661	252	12·82	11·85
Hospitals, asylums, &c. §	3,624‖	1,157	...	...
Shipping in Hobson's Bay and river	1,478‖	10	6·77	4·09
Total	304,409	5,923	19·46	20·39

Death rates in 1883 and series of years.

499. It will be observed that in 1883 the death rate in eight of the sub-districts, viz., Hotham Town, Richmond and South Melbourne Cities, and Brunswick, Port Melbourne, and Brighton Boroughs, the "Remainder of district" and the Shipping, was above the average of the decennial period, the excess being especially large in the case of Brunswick. On the other hand, in Hawthorn, Essendon and Flemington, Footscray, Williamstown, Kew, Prahran, and St. Kilda, the rate of mortality in 1883 was much below the average.

Places in which death rate was highest and lowest.

500. 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

* In order to compare the death rate with density of population, see paragraph 100 *ante*.

† Formerly called Emerald Hill.

‡ Formerly called Sandridge.

§ Includes the Melbourne, Alfred, Lying-in, Children's, and Homœopathic 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 borough of Williamstown, and the next in the rural boroughs of Essendon and Flemington. In 1883 the highest death rate was in Collingwood, followed by Hotham, Port Melbourne, Richmond, and South Melbourne, in the order named; but the rates in Fitzroy, Williamstown, 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 1883 the lowest rate was also in Kew; then in Hawthorn, St. Kilda, Essendon, and the "Remainder of district."

501. The death rate of Greater Melbourne taken as a whole, in the calculation of which the deaths in charitable institutions are included, was 19½ per 1,000 persons living in 1883, 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 1883 it was over 17 per 1,000 in all those sub-districts, except Essendon and Flemington, and Williamstown, and was also above 17 per 1,000 in South Melbourne. It will be borne in mind that the deaths in hospitals, asylums, &c., are excluded from the returns of individual districts. *Sub-districts with death rates over 17 per 1,000.*

502. 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	24·4
Wolverhampton	24·7		

* Average of years 1876 to 1879.

Death rates in foreign towns.

503. 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 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. Petersburgh ...	46·1
Venice	27·6		
Brussels	28·0		
New York	28·5	Mean of towns named	29·6
Turin	28·8		

Death rates in Victorian towns.

504. Of the 5 principal towns in Victoria next in importance to Melbourne, 3 had in 1883 higher, and 2 had lower, death rates than that city. In none of them, however, was the death rate as high as in the majority of British and Foreign towns just referred to, as will be seen by the following figures :—

DEATH RATES IN 6 VICTORIAN TOWNS, 1883.

	Deaths per 1,000 of the Population.		Deaths per 1,000 of the Population.
Castlemaine	15·25	Melbourne	19·46
Ballarat	16·29	Stawell	21·79
Sandhurst	18·24	Geelong	21·92

Deaths in each month.

505. 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, and more in December than in either February or April. The number of deaths in each month of 1883, and their percentage to the total number in the year, also the percentage of the deaths in each month of the decennium ended with 1880 to the total number of deaths during the same period, will be found in the following table :—

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

Deaths in each Month.

Months.	Year 1883.		Percentage in Ten Years: 1871 to 1880.
	Number of Deaths.	Percentage.	
January	1,331	10·23	10·29
February	1,157	8·89	9·09
March	1,365	10·49	10·17
April	1,134	8·72	9·73
May	1,155	8·88	8·55
June	956	7·35	7·44
July	945	7·27	7·89
August	1,004	7·72	7·37
September...	909	6·99	6·81
October	936	7·20	7·09
November	932	7·17	7·12
December	1,182	9·09	8·45
Total	13,006	100·00	100·00

506. In Victoria the summer is the most trying portion of the year, espe- cially 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 decennium; 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.
	Mean Temperature in Shade.		Year 1883.	Average of Ten Years: 1871 to 1880.	Average of Thirty-one Years.	Average of Ten Years.	Average of Five Years.
Summer ...	65·2°	60·5°	29·62	29·55	23·24	22·34	20·21
Autumn ...	53·8	44·3	24·95	25·72	24·65	24·71	23·45
Winter ...	50·2	40·0	21·98	22·07	27·49	27·95	30·19
Spring ...	60·3	52·8	23·45	22·66	24·62	25·00	26·15
Year ...	57·6	49·4	100·00	100·00	100·00	100·00	100·00

* 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.

507. The deaths of Chinese recorded in 1883 amounted to 180, all males, and those of Aborigines to 25. The former furnishes a proportion of 14·8 and the latter of 32·0 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 14·18.

508. The mortality of the Chinese would doubtless have been higher but for the fact that the Chinese population in Victoria consists almost entirely of persons at the middle or strongest period of life. In 1883, with the exception of three infants, not one of the Chinese who died was under 20 years of age, the two oldest were said to be over 80. Of the Aborigines who died, three were under 5, and three were stated to have attained the age of 80.

509. The following table shows the number of deaths at various periods of age registered in Victoria during the year 1883, and the proportion of the deaths at each age to the total at all ages :—

DEATHS AT EACH AGE, 1883.

Ages.	Number of Deaths at each Age, 1883.			Percentage of Deaths at each Age.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years ...	2,393	2,037	4,430	32·29	36·40	34·06
5 years to 10 years ...	219	193	412	2·96	3·45	3·17
10 „ 15 „ ...	143	156	299	1·93	2·78	2·30
15 „ 20 „ ...	193	241	434	2·60	4·31	3·34
20 „ 25 „ ...	288	269	557	3·89	4·81	4·28
25 „ 35 „ ...	479	488	967	6·46	8·72	7·44
35 „ 45 „ ...	589	494	1,083	7·95	8·83	8·33
45 „ 55 „ ...	982	580	1,562	13·25	10·36	12·01
55 „ 65 „ ...	1,021	472	1,493	13·78	8·44	11·48
65 „ 75 „ ...	645	374	1,019	8·71	6·68	7·83
75 years and upwards ...	458	292	750	6·18	5·22	5·76
Total ...	7,410	5,596	13,006	100·00	100·00	100·00

510. It will be noticed that nearly a third of the males and over a third of the females who died had not reached their fifth year, that a fourth of the males and a third of the females were between 5 and 45 years of age, that more than a fourth of the males and nearly a fifth of the females were between 45 and 65 years of age, and that a seventh of the males and an eighth 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 25 years of age, whilst about half the latter were under and half over 35 years of age.

511. It was mentioned in a former paragraph † that death rates based upon the population of a country are apt to mislead, unless

* On the 3rd April, 1881, the Chinese numbered 12,128 ; Aborigines, 780.
† See paragraph 484 *ante.*

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 :—

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

* 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.

Death rate in 1881 and previous decennium compared.

512. 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 decennium. 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 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 decennium 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.

513. 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.

514. 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 decennium ended with 1880, are compared with similar results during the decennium 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 DECENNIA.

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

* See paragraph 485 *ante.*

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

516. In the second decennium, 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 than at the former period.

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

518. 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 are for the year 1883 and for the decennium ended with 1880; those for England and Wales extend over 40 years, and those for France over 10 years :—

DEATH RATE IN VICTORIA, ENGLAND, AND FRANCE.

Ages.	Number of Deaths per 1,000 of the Population.							
	Victoria.				England and Wales.		France.	
	Year 1883.		Average of 10 years: 1871 to 1880.		Average of 40 years.		Average of 10 yrs.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
All ages ...	15·31	12·91	16·45	14·15	23·2	21·1	23·80	23·19
Under 5 years...	41·15	36·11	47·34	42·19	71·6	61·7	84·55	75·45
5 to 10 „ ...	3·91	3·52	6·10	6·00	8·3	8·0	10·49	11·04
10 to 15 „ ...	2·56	2·83	3·30	3 30	4·6	4·8	5·36	6·41
15 to 20 „ ...	3 59	4·57	4·43	4·29	6·4	7·0 ⎫	10·34	8·41
20 to 25 „ ...	5·72	5·40	5·38	5·39	8·6	8·2 ⎭		
25 to 35 „ ...	8·03	8·65	7·60	8·50	9·7	9·7	10 02	9 69
35 to 45 „ ...	12·37	11·64	12·18	11·76	13·2	12·2	10·96	11·03
45 to 55 „ ...	17·85	15·51	18·67	14·31	18·7	15·6	14·76	14·88
55 to 65 „ ...	31·54	25·58	31·24	24·20	32·6	28·1	29·19	27·27
65 to 75 „ ...	54·44	50·97	60·47	48·10	67·1	59·7	60·69	63·49
75 to 85 „ ...	...	...	114·80	102·94	147·2	134·3	160·22	153·76

519. Comparing the Victorian figures for 1883 with those for the decennial period ended with 1880, it is found that in the single year the mortality of males and females at all ages, and from infancy up to 15

Q

years, was below the average; that the mortality of males was also below the average at from 15 to 20, from 45 to 55, and from 65 to 75; and the mortality of females was below the average at from 35 to 45; but that at from 20 to 35, and from 55 to 65, the mortality of both males and females was above the average.

Death rate in Victoria less than in England and France.

520. It will be observed that, in Victoria, over a series of years, 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 of children less in Victoria than in England or France.

521. 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 males and females in three countries compared.

522. According to the table, the death rate of females exceeds that of males at from 20 to 35 in Victoria (during a term of years), at from 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 Victoria at from 10 to 15 years, and 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, 1883.

523. The death rate of infants in 1882 was exceptionally high, but in 1883 it was below the average, it having been exceeded in only four previous years since 1866.* The total number who died under 1 year of age was 3,150, and as the births numbered 27,541, it follows that 1 infant died to every 9 births, or 11·44 infants to every 100 births. In the seventeen years, 1866 to 1882, the proportion of infants dying before completing their first year was 12·43 to every 100 births.*

Mortality of male and female infants.

524. 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 13 years ended with 1883, 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 :—

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* See table following paragraph 532 *post.*

MORTALITY OF MALE AND FEMALE INFANTS, 1871 TO 1883.

Year.	Births.		Deaths at under 1 Year of Age.			
			Total Number.		Number per 100 Births.	
	Boys.	Girls.	Boys.	Girls.	Boys.	Girls.
1871 ...	14,000	13,382	1,710	1,404	12·21	10·49
1872 ...	13,831	13,530	1,801	1,533	13·02	11·33
1873 ...	14,234	13,866	1,679	1,502	11·80	10·83
1874 ...	13,659	13,141	1,839	1,502	13·46	11·43
1875 ...	13,683	13,037	2,071	1,740	15·14	13·35
1876 ...	13,759	13,010	1,637	1,343	11·90	10·32
1877 ...	13,272	12,738	1,838	1,461	13·85	11·47
1878 ...	13,752	12,829	1,763	1,499	12·82	11·68
1879 ...	13,727	13,112	1,817	1,402	13·24	10·69
1880 ...	13,358	12,790	1,669	1,436	12·49	11·23
1881 ...	13,903	13,242	1,696	1,423	12·20	10·75
Sums and Means }	151,178	144,677	19,520	16,245	12·91	11·23
1882 ...	13,612	13,135	2,049	1,673	15·05	12·74
1883 ...	14,109	13,432	1,702	1,448	12·06	10·78

525. 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 of the years deaths of male infants very much exceeded those of female infants; and as the numbers living were about equal (the excess, if any, being slightly in favour of male infants), the greater tendency of boys than of girls to die before completing one year of life may be considered to be invariable.

Mortality of male greater than of female infants.

526. In proportion to every 1,000 born, the number of male infants dying varied from 118 in 1873 to 151 in 1875, and that of female infants dying from 103 in 1876 to 134 in 1875—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 was exceptional, as in that year no such

Proportion of infants dying to births.

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* See paragraph 456 *ante.*

epidemics were prevalent. It was not sustained in 1883, the infantile mortality in that year having been lower than in most of the preceding years, as already stated.

Deaths of infants at different ages.

527. 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 1883 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 1883 the mortality at nearly all periods under 1 year was below the average :—

AGE AT DEATH OF MALE AND FEMALE INFANTS.

Ages.	Deaths at under 1 Year of Age.				
	Year 1883.			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 ...	588	34·55	4·17	34·23	4·42
1 to 3 months ...	292	17·16	2·07	17·30	2·23
3 to 6 „ ...	368	21·62	2·60	19·43	2·51
6 to 12 „ ...	454	26·67	3·22	29·04	3·75
Total ...	1,702	100·00	12·06	100·00	12·91
GIRLS.					
Under 1 month ...	413	28·52	3·07	30·81	3·46
1 to 3 months ...	279	19·27	2·08	17·23	1·94
3 to 6 „ ...	340	23·48	2·53	20·14	2·26
6 to 12 „ ...	416	28·73	3·10	31·82	3·57
Total ...	1,448	100·00	10·78	100·00	11·23

More deaths of male than female infants at all ages

528. During the period of 11 years the deaths of male infants exceeded those of female infants at each of the age-periods. This was more especially the case in the first month of life, when the excess of the former was 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.

529. Over a third of the male and nearly a third of the female infants who died before they were a year old did so in the first month after birth; about a sixth of both males and females 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.

Periods at which infants die.

530. 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.

Deaths in first month and second six months of life.

531. 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.

Probable mortality of infants.

532. 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. The proportion in that colony, which in the three years 1879 to 1881 had shown improvement, again rose in 1882 above the average. The infantile death rate in 1882, calculated in a similar manner, was also above the average in all the other colonies except New Zealand, 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 seventeen years ended with 1882. All the calculations were made in the office of the Government Statist, Melbourne :—

Infantile mortality in Australasian colonies.

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* 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
1882	26,747	3,722	13·91	29,702	3,897	13·12	8,518	1,188	13·95
Sums and means	453,654	56,400	12·43	385,363	42,624	11·06	106,174	13,644	12·85
	SOUTH AUSTRALIA.			TASMANIA.			NEW ZEALAND.		
1866	6,782	1,178	17·37	2,805	264	9·41	8,466	849	10·03
1867	7,041	1,254	17·81	2,971	267	8·98	8,918	873	9·79
1868	7,247	1,084	14·96	2,990	351	11·73	9,391	899	9·57
1869	6,976	911	13·06	2,859	291	10·18	9,718	957	9·85
1870	7,021	1,031	14·68	3,054	298	9·76	10,277	956	9·30
1871	7,082	961	13·57	3,053	260	8·52	10,592	882	8·33
1872	7,105	1,145	16·12	3,010	306	10·17	10,795	1,074	9·95
1873	7,107	990	13·93	3,048	266	8·73	11,222	1,213	10·81
1874	7,696	1,319	17·13	3,097	321	10·36	12,844	1,394	10·85
1875	7,408	1,343	18·13	3,105	407	13·11	14,438	1,816	12·58
1876	8,224	1,228	14·93	3,149	286	9·08	16,168	1,673	10·35
1877	8,640	1,212	14·03	3,211	365	11·37	16,856	1,527	9·06
1878	9,282	1,466	15·79	3,502	375	10·71	17,770	1,486	8·36
1879	9,902	1,217	12·29	3,564	384	10·77	18,070	1,941	10·74
1880	10,262	1,393	13·57	3,739	420	11·23	19,341	1,805	9·33
1881	10,708	1,364	12·74	3,918	405	10·34	18,732	1,731	9·24
1882	10,844	1,647	15·19	4,043	419	10·36	19,009	1,678	8·83
Sums and means	139,327	20,743	14·89	55,118	5,685	10·31	232,607	22,754	9·78

Order of colonies in respect to infantile mortality.

533. 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 REFERENCE TO INFANTILE MORTALITY.

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

534. In England and Wales, the infantile mortality, although higher 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.*

535. The infantile mortality of large towns is naturally always above that in country districts. Thus the deaths at under 1 year of age in Melbourne and suburbs (Greater Melbourne) during the eleven years ended with 1883 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 eleven years named :—

INFANTILE MORTALITY IN AND OUTSIDE OF GREATER MELBOURNE, 1873 TO 1883.

Year.	Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.	
		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.
	Greater Melbourne.			Victoria, outside Greater Melbourne.		
1873 ...	8,007	1,277	15·95	20,093	1,904	9·48
1874 ...	7,946	1,480	18·63	18,854	1,861	9·87
1875 ...	8,227	1,546	18·79	18,493	2,265	12·25
1876 ...	8,202	1,339	16·33	18,567	1,641	8·84
1877 ...	8,295	1,407	16·96	17,715	1,892	10·68
1878 ...	8,636	1,297	15·02	17,903	1,965	10·98
1879 ...	8,829	1,467	16·61	18,010	1,752	9·73
1880 ...	8,645	1,439	16·65	17,503	1,666	9·52
1881 ...	9,237	1,514	16·39	17,908	1,605	8·96
1882 ...	9,576	1,857	19·39	17,171	1,865	10·86
1883 ..	10,093	1,603	15·89	17,448	1,547	8·87
Sums and means	95,693	16,226	16·96	199,665	19,963	10·00

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

536. As compared with the births, the infantile mortality of Greater Melbourne is, on the average, higher than that of Portsmouth, London, Brighton, Bristol, Plymouth, or Wolverhampton, but is less than that of fourteen 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 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	Nottingham	18·4
London	16·0	Salford	18·6
Brighton	16·1	Manchester	19·0
Bristol	16·2	Norwich	19·1
Plymouth	16·3	Bradford	19·1
Wolverhampton	16·9	Leeds	19·5
Sunderland	17·0	Leicester	21·9
Birmingham	17·7	Liverpool	22·2
Hull	17·8		
Sheffield	17·9		
Oldham	17·9	Mean of towns named	17·4
Newcastle-on-Tyne	18·1		

537. In the Lying-in Hospital, Melbourne, 538 children were born alive during the year ended with 30th June, 1883, and of these, 38, or over 7 per cent., died before leaving the institution, 8 having died within 48 hours of their birth. In the previous eighteen months, 11½ per cent. ; in the year 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.

538. In the year 1883, deaths of male children under 5 years of age numbered 2,392, and deaths of female children under that age numbered 2,037—the former being in the proportion of about 32 per cent. and the latter of about 36 per cent. to the total number of deaths at all ages. These proportions are much 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 1883 and in each of the previous 12 years :—

DEATHS OF CHILDREN UNDER 5 YEARS OF AGE, 1871 TO 1883.

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
1883 ...	1,702	358	123	114	95	2,392	32·28
FEMALES.							
1871 ...	1,404	413	136	94	68	2,115	51·93
1872 ...	1,533	473	155	106	94	2,361	52·20
1873 ...	1,502	427	160	132	119	2,340	47·41
1874 ...	1,502	472	171	135	99	2,379	45·58
1875 ...	1,740	864	408	256	169	3,437	51·22
1876 ...	1,343	469	275	217	177	2,481	42·46
1877 ...	1,461	484	171	148	102	2,366	43·57
1878 ...	1,499	481	204	108	95	2,387	43·22
1879 ...	1,402	353	156	100	89	2,100	41·28
1880 ...	1,436	386	143	89	51	2,105	41·75
1881 ...	1,423	331	124	95	65	2,038	38·61
Means ...	1,477	468	191	135	103	2,374	45·93
1882 ...	1,673	358	121	94	86	2,332	40·67
1883 ...	1,448	310	125	86	68	2,037	36·40

539. 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.

More boys die than girls.

Number of children under 5 and their deaths.

540. 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.	Per-centage of Deaths at each age.	Number of Deaths per 1,000 Children living.	Mean Number of Children living at each age, 1871 & 1881.	Mean Annual Number of Deaths at each age, 1871 to 1881.	Per-centage of Deaths at each age.	Number of Deaths per 1,000 Children living.
0 ...	12,152	1,775	65·07	146·07 *	11,809	1,477	62·22	125·07 *
1 ...	11,228	494	18·11	4·399	11,004	468	19·71	42·53
2 ...	11,943	200	7·33	16·75	11,635	191	8·04	16·42
3 ...	11,807	144	5·28	12·20	11,469	135	5·69	11·77
4 ...	11,261	115	4·21	10·21	11,138	103	4·34	9·25
Total ...	58,391	2,728	100·00	46·72	57,055	2,374	100·00	41·61

Proportion of children dying annually.

541. 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.

Proportion of infants dying annually.

542. 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.†

More boys died than girls.

543. 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.

Boys and girls dying under 1.

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

Proportion of deaths of children at each age.

545. 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

* 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 527 *ante*.
† See table following paragraph 527 *ante*.   ‡ See also paragraph 528 *ante*.

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.

546. 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. {.margin-note: Probable mortality of children under 5.}

547. The persons who died at the age of 80 or upwards numbered 355 in 1883, as against 380 in 1882, and 358 in 1881. Those in 1883 consisted of 198 males and 157 females. 19 of the males and 21 of the females had passed the age of 90, and 4 of the males but not 1 of the females had passed the age of 100. The following are the exact ages of such persons in the three years named and in the ten years ended with 1880 :— {.margin-note: Deaths of octogenarians.}

DEATHS OF OCTOGENARIANS, 1871 TO 1883.

Years of Age.	Year 1883.		Year 1882.		Year 1881.		Ten Years, 1871–80.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
80	29	30	38	31	42	23	211	121
81	12	16	34	16	35	24	100	74
82	40	26	44	17	17	18	102	79
83	34	23	20	17	21	16	80	59
84	21	13	22	16	22	11	93	68
85	16	13	16	11	13	6	78	64
86	10	3	13	15	11	14	52	47
87	5	4	4	7	10	11	55	35
88	10	5	4	10	1	4	47	34
89	2	3	2	5	2	6	33	20
90	5	5	8	4	4	7	22	30
91	2	1	2	2	3	6	7	10
92	1	4	3	3	6	4	12	14
93	3	3	2	2	1	3	8	5
94	1	3	3	1	4	2	10	6
95	2	2	1	...	3	...	13	9
96	1	...	...	...	2	...	9	4
97	...	...	...	...	...	...	3	4
98	...	...	...	1	...	...	5	2
99	...	3	...	...	2	...	6	...
100	1	...	1	1	...	1	2	4
101	...	...	...	...	...	...	1	2
102	1	...	1	...	...	...	3	...
103	2	...	...	1	...	1	1	1

* See paragraph 531, also table following paragraph 527, *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 1883—*continued.*

Years of Age.	Year 1883.		Year 1882.		Year 1881.		Ten Years, 1871–80.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
104	...	...	...	...	...	...	2	1
105	...	...	...	...	1	...	1	...
106	...	...	2	...	...	...	...	1
110	...	...	...	...	...	1	...	...
114	...	...	...	...	...	...	...	1
Unspecified	...	...	...	...	...	...	135*	98*
Total	198	157	220	160	200	158	1,091	793

Deaths of octogenarians, 1871 to 1880. 548. In the 10 years ended with 1880, 1,091 males and 793 females died in Victoria at the age of 80 or upwards. The deaths of males and females at all ages during the same period numbered 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.

Average age at death. 549. The average age at death in 1883 was 30·73 years, or 30 years and 9 months. For males the average age was 33·13 years, or 33 years and 1 month, and for females, 27·55 years, or 27 years and 6 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 in Victoria.

	Males.	Females.
	Years.	Years.
23 years—1852 to 1875	21·70 ...	15·01
Year 1875	24·28 ...	18·23
„ 1876	26·81 ...	21·84
„ 1877	28·60 ...	23·06
„ 1878	29·54 ...	23·24
„ 1879	30·65 ...	24·71
„ 1880	30·72 ...	25·35
„ 1881	32·63 ...	25·98
„ 1882	32·04 ...	26·58
„ 1883	33·13 ...	27·55

Classification of causes of death. 550. 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,

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

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.

551. 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.* {.margin: Nosological Index.}

552. 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.† {.margin: Victorian index used throughout Australasia.}

553. 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 1883, also the total number who died from each cause during the twenty-seven and a half years ended with 1880 :— {.margin: Causes of death classified.}

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT.
(27½ Years : 1853 to 1880 ; and Year 1883.)

Class.	Order.	Causes of Death.	27½ Years: 1853–1880	Number of Deaths. Year 1883.		
				Total. ‡	Chinese.	Aborigines.
		All causes	285,902	13,006	180	25
		Specified causes	284,227	12,990	180	25
		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	86,062	2,728	16	...
II.	...	CONSTITUTIONAL DISEASES : — Cachectici (καχεξία, bad habit of body). Sporadic diseases ; affecting several organs in which new morbid products are often deposited ; sometimes hereditary	38,118	2,069	47	6

* A copy of this Nosological Index was appended to the *Victorian Year-Book*, 1877–8, pp. 303 to 335.

† In New South Wales this Index has been reprinted, not only without acknowledgment, but with the addition of an ingeniously worded preface signed " E. G. Ward, Registrar-General," wherein, amongst other statements leading up to the inference that the work had been compiled either by or under the direction of Mr. Ward, a hope is expressed that the Index might be found of service not only to the officers in his Department, *for whose use it was specially designed*, but to the medical profession of New South Wales. However gratifying it may be to find that a work compiled in the statistical department of this colony is being used with advantage in New South Wales, disapproval must still be expressed at the unfair manner in which an officer of that colony has attempted to claim credit for its production, in which labour, as a matter of fact, no one out of Victoria had any hand whatever.

‡ The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*

(27½ Years: 1853 to 1880; and Year 1883.)

Class.	Order.	Causes of Death.	27½ Years: 1853–1880	Year 1883. Total. *	Year 1883. Chinese.	Year 1883. Aborigines.
		CLASSES—continued.				
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	96,617	5,412	74	10
IV.	...	DEVELOPMENTAL DISEASES :—Metamorphici (μεταμόρφωσις, change of form). Special diseases, the incidental result of the formative, reproductive, and nutritive processes	40,163	1,873	16	9
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	23,267	908	27	...
		ORDERS.				
I.	1	*Miasmatic diseases:* — Miasmatici (μίασμα, stain; defilement)	78,966	2,354	12	...
	2	*Enthetic diseases:* — Enthetici (ἔνθετος, put in ; implanted)	765	54	1	...
	3	*Dietic diseases:*—Dietici (δίαιτα, way of life ; diet)	4,722	241	3	...
	4	*Parasitic diseases:*— Parasitici (παράσιτος, parasite)	1,609	79	...	...
II.	1	*Diathetic diseases:*—Diathetici (διάθεσις, condition; diathesis)	7,944	583	15	...
	2	*Tubercular diseases:* — Phthisisici (φθίσις, wasting away)	30,174	1,486	32	6
III.	1	*Brain diseases:*—Cephalici (κεφαλή, head) ...	30,743	1,434	12	1
	2	*Heart diseases:*—Cardiaci (καρδία, heart) ...	13,186	837	20	...
	3	*Lung diseases:*—Pneumonici (πνεύμων, lung)	27,392	1,655	26	3
	4	*Bowel diseases:*—Enterici (ἔντερον, intestine)	20,320	1,121	12	6
	5	*Kidney diseases:*—Nephritici (νεφρός, kidney)	3,215	298	1	...
	6	*Gennetic diseases:*—Aidoici (αἰδοῖα, pudenda)	491	13	...	...
	7	*Bone and muscle diseases:*—Myostici (μῦς, muscle ; ὀστέον, bone)	676	22	1	...
	8	*Skin diseases :*—Chrotici (χρώς, skin) ...	594	32	2	...
IV.	1	*Developmental diseases of children:*—Paidiaci (παιδία, youth)	13,438	467	...	1
	2	*Developmental diseases of women:*—Gyniaci (γυνή, woman)	2,824	121	...	...
	3	*Developmental diseases of old people :*— Geratici (γῆρας, old age)	4,249	486	9	6

* The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*

(27½ Years: 1853 to 1880; and Year 1883.)

Class.	Order.	Causes of Death.	27½ Years: 1853–1880	Year 1883.		
				Total. *	Chinese.	Aborigines.
		ORDERS—*continued.*				
IV.	4	*Diseases of nutrition:*—Atrophici (ἀτροφία, atrophy)	19,652	799	7	2
V.	1	*Accident:*—Tychici (τύχη, chance) ...	20,918	782	20	...
	2	*Battle:*—Polemici (πόλεμος, battle ; fight) ...	...	...	...	...
	3	*Homicide:*—Androphonici (ἀνήρ, man ; φονεύω, I kill)	493	22	...	...
	4	*Suicide :*—Autophonici (αὐτὸς, self ; φονεύω, I kill)	1,783	103	7	...
	5	*Execution :* — Demiotici (δημιώτης, executioner)	73	1	...	...
		DISEASES, ETC.				
I.	1	Small-pox	21	...	...	...
		Chicken-pox	40	1	...	...
		Measles	4,099	7	...	...
		Scarlatina	8,710	59	...	...
		Diphtheria	8,032	131	...	...
		Quinsy	611	10	1	...
		Croup ...	4,135	167	...	...
		Whooping-cough	4,477	48	...	...
		Typhoid fever, &c.	11,343	661	4	...
		Erysipelas	1,065	31	...	...
		Metria ...	711	43	...	...
		Carbuncle, boil, &c.	71	1	...	...
		Influenza, coryza, catarrh	893	23	1	...
		Dysentery	12,508	139	2	...
		Diarrhœa	18,318	885	2	...
		Cholera	1,290	46	...	...
		Ague ...	97	2	...	...
		Remittent fever	695	4	...	...
		Rheumatism	1,382	75	2	...
		Miasmatic diseases not classed	468	21	...	...
	2	Syphilis	594	49	1	...
		Gonorrhœa, stricture of the urethra	169	5	...	...
		Glanders	2	...	...	...
	3	Privation	433	22	3	...
		Want of breast-milk	2,160	127	...	...
		Purpura and scurvy	285	12	...	...
		Alcoholism	1,815	80	...	...
		Other dietic diseases	29	...	...	...
	4	Thrush	984	21	...	...
		Worms, &c.	61	1	...	...
		Hydatids	544	56	...	...
		Other parasitic diseases ...	20	1	...	...
II.	1	Gout ...	179	18	...	...
		Dropsy...	2,085	63	1	...
		Cancer...	4,616	450	12	...

* The Chinese and Aborigines are included in this column.

CAUSES OF DEATH IN CLASSIFIED ARRANGEMENT—*continued.*
(27½ Years: 1853 to 1880; and Year 1883.)

Class.	Order.	Causes of Death.	27½ Years: 1853-1880	Year 1883. Total. *	Year 1883. Chinese.	Year 1883. Aborigines.
		DISEASES, ETC.—*continued.*				
II.	1	Tumor	428	38	2	...
		Polypus	11	...	...	...
		Noma	66	...	...	...
		Mortification	390	14	...	...
		Other diathetic diseases	169	...	...	...
	2	Scrofula	1,034	24	...	...
		Tabes mesenterica	2,262	108	1	...
		Phthisis	21,868	1,212	31	6
		Hydrocephalus	4,242	121	...	...
		Other tubercular diseases	768	21	...	...
III.	1	Cephalitis	4,708	228	2	...
		Apoplexy	5,193	353	3	...
		Paralysis	2,610	176	2	...
		Insanity †	255	...	...	...
		Chorea	45	1	...	...
		Epilepsy	1,162	75	1	...
		Convulsions	9,859	262	...	...
		Other diseases of the nervous system	6,911	339	4	1
	2	Pericarditis	747	48	1	...
		Aneurism	1,547	63	2	...
		Other diseases of the circulatory system	10,892	726	17	...
	3	Laryngitis	881	49	1	...
		Bronchitis	8,736	571	2	...
		Pleurisy	1,546	106	4	...
		Pneumonia	11,373	638	10	3
		Congestion of the lungs, pulmonary apoplexy	2,621	200	3	...
		Asthma	715	40	1	...
		Other diseases of the respiratory system	1,520	51	5	...
	4	Gastritis	2,706	182	...	...
		Enteritis	5,116	225	1	...
		Peritonitis	1,606	101	6	1
		Ascites	436	11	...	...
		Ulceration of intestines	399	28	1	...
		Hernia	405	26	...	...
		Ileus	822	53	...	...
		Intussusception	179	6	...	...
		Stricture of intestines	78	8	...	...
		Fistula	41	1	...	...
		Stomach diseases undefined	1,342	71	...	...
		Pancreas disease	13	...	...	...
		Hepatitis	2,247	55	2	...
		Jaundice, gallstone	900	46	...	...
		Liver disease undefined	3,935	304	2	5
		Spleen disease	95	4	...	...
	5	Nephritis	377	26	...	...
		Ischuria	65	6	...	...
		Nephria	1,000	146	...	...
		Diabetes	234	24	...	...

* 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.*
(27½ Years : 1853 to 1880; and Year 1883.)

Class.	Order.	Causes of Death.	27½ Years: 1853–1880	Year 1883. Total. *	Year 1883. Chinese.	Year 1883. Aborigines.
		DISEASES, ETC.—*continued.*				
III.	5	Stone, gravel	97	8	...	...
		Cystitis	325	25	...	...
		Other diseases of the urinary organs	1,117	63	1	...
	6	Ovarian dropsy	106	5	...	...
		Other diseases of the generative organs	385	8	...	...
	7	Arthritis	137	8	1	...
		Ostitis, periostitis	40	6	...	...
		Other diseases of the locomotive system	499	8	...	...
	8	Phlegmon, whitlow	51	1	...	...
		Ulcer	185	9	...	...
		Other diseases of the skin	358	22	2†	...
IV.	1	Premature birth	5,337	332	...	...
		Cyanosis	357	20	...	...
		Spina bifida	231	10	...	...
		Other malformations	685	17	...	...
		Teething	6,817	88	...	1
		Other developmental diseases of children	11	...	...	...
	2	Paramenia	91	6	...	...
		Childbirth	2,732	115	...	...
		Other developmental diseases of adults	1	...	...	...
	3	Old age	4,249	486	9	6
	4	Atrophy and debility	19,652	799	7	2
V.	1	Fractures, contusions, &c.	7,213	352	13	...
		Wounds	520	24	...	...
		Burns and scalds	2,200	92	...	...
		Sunstroke	412	15	...	...
		Struck by lightning	38	...	...	...
		Poison	378	23	2	...
		Snake or insect bite	72	2	...	...
		Drowning	4,747	197	1	...
		Suffocation	1,555	64	1	...
		Other or unspecified accidents	3,783	13	3	...
	3	Murder and manslaughter	493	22	...	...
	4	Wounds	528	31	1	...
		Poison	331	12	...	...
		Drowning	346	23	...	...
		Hanging	510	34	6	...
		Suicide by other means	68	3	...	...
	5	Judicial hanging	73	1	...	...
	...	*Causes not specified*	1,675	16	...	...

554. The next table shows the same causes of death, arranged in the order of their fatality, during 1883, with the numbers who died from each cause in that year, and during the twenty-seven and a half years ended with 1880, also the order of fatality of the different causes during that period :—

* The Chinese and Aborigines are included in this column.   † Cases of leprosy.

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CAUSES OF DEATH IN ORDER OF FATALITY.
(27½ Years : 1853 to 1880 ; and Year 1883.)

Order of Fatality.		Causes of Death in Order of Fatality, 1883.	Number of Deaths.	
27½ Years: 1853-80.	Year 1883.		27½ Years: 1853-80.	Year 1883.
1	1	Phthisis ...	21,868	1,212
4	2	Diarrhœa	18,318	885
3	3	Atrophy and debility	19,652	799
2	4	Accidents	20,918	782
8	5	Diseases of the organs of circulation not classed	10,892	726
7	6	Typhoid fever, &c.	11,343	661
6	7	Pneumonia	11,373	638
10	8	Bronchitis	8,736	571
21	9	Old age ...	4,249	486
19	10	Cancer ...	4,616	450
16	11	Apoplexy	5,193	353
13	12	Diseases of the nervous system not classed	6,911	339
15	13	Premature birth ...	5,337	332
25	14	Diseases of the liver not classed	3,935	304
9	15	Convulsions	9,859	262
18	16	Cephalitis	4,708	228
17	17	Enteritis ...	5,116	225
28	18	Congestion of lungs, pulmonary apoplexy	2,621	200
27	19	Gastritis ...	2,706	182
29	20	Paralysis...	2,610	176
23	21	Croup ...	4,135	167
26	22	Childbirth and metria	3,443	158
48	23	Nephria ...	1,000	146
5	24	Dysentery	12,508	139
12	25	Diphtheria	8,032	131
32	26	Want of breast-milk	2,160	127
22	27	Hydrocephalus	4,242	121
30	28	Tabes mesenterica	2,262	108
38	29	Pleurisy ...	1,546	106
35	30	Suicide ...	1,783	103
36	31	Peritonitis	1,606	101
14	32	Teething ...	6,817	88
34	33	Alcoholism	1,815	80
40	} 34 {	Rheumatism	1,382	75
44		Epilepsy	1,162	75
41	35	Diseases of the stomach not classed ...	1,342	71
33		Dropsy ...	2,085	63
37	} 36 {	Aneurism	1,547	63
45		Diseases of the urinary organs not classed	1,117	63
11	37	Scarlatina	8,710	59
60	38	Hydatids ...	544	56
31	39	Hepatitis...	2,247	55
55	40	Venereal diseases ...	763	54
53	41	Ileus ...	822	53
39	42	Diseases of the respiratory system not classed	1,520	51
52	43	Laryngitis	881	49
56	} 44 {	Pericarditis	747	48
20		Whooping-cough ...	4,477	48
43	45	Malformations	1,273	47
42	} 46 {	Cholera ...	1,290	46
50		Jaundice, gall-stone	900	46
57	47	Asthma ...	715	40
66	48	Tumor ...	428	38
46	49	Erysipelas	1,065	31
68	50	Ulceration of intestines	399	28

CAUSES OF DEATH IN ORDER OF FATALITY—*continued.*
(27½ Years : 1853 to 1880 ; and Year 1883.)

Order of Fatality.		Causes of Death in Order of Fatality, 1883.	Number of Deaths.	
27½ Years: 1853–80.	Year 1883.		27½ Years: 1853–80.	Year 1883.
67	51	Hernia	405	26
71	51	Nephritis	377	26
73	52	Cystitis	325	25
47	53	Scrofula	1,034	24
76	53	Diabetes	234	24
51	54	Influenza, coryza, catarrh	893	23
62	55	Murder, manslaughter, and justifiable homicide	493	22
65	55	Privation	433	22
72	55	Skin diseases not classed	358	22
49	56	Thrush	984	21
54	56	Tubercular diseases not classed	768	21
63	56	Miasmatic diseases not classed	468	21
78	57	Gout	179	18
69	58	Mortification	390	14
74	59	Purpura and scurvy	285	12
64	60	Ascites	436	11
59	61	Quinsy	611	10
77	62	Ulcer	185	9
61	63	Diseases of locomotive system not classed	499	8
70	63	Diseases of the organs of generation not classed	385	8
80	63	Arthritis	137	8
82	63	Stone, gravel	97	8
85	63	Stricture of the intestines	78	8
24	64	Measles	4,099	7
78	65	Intussusception	179	6
84	65	Paramenia	91	6
89	65	Ischuria	65	6
94	65	Ostitis, periostitis	40	6
81	66	Ovarian dropsy	106	5
58	67	Remittent fever	695	4
83	67	Spleen disease	95	4
82	68	Ague	97	2
94	69	Chicken-pox	40	1
86	69	Execution	73	1
87	69	Carbuncle, boil	71	1
90	69	Worms, &c.	61	1
91	69	Phlegmon, whitlow	51	1
92	69	Chorea	45	1
93	69	Fistula	41	1
97	69	Parasitic diseases not classed	20	1
75	...	Insanity	255	...
79	...	Diathetic diseases not classed	169	...
88	...	Noma	66	...
95	...	Dietic diseases not classed	29	...
96	...	Small-pox	21	...
98	...	Pancreas disease	13	...
99	...	Polypus	11	...
99	...	Developmental diseases of children not classed	11	...
100	...	Glanders	2	...
101	...	Developmental diseases of women not classed	1	...
		Deaths from specified causes	284,227	12,990
		Deaths from unspecified causes	1,675	16
		Deaths from all causes	285,902	13,006

555. 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 years 1882, 1883, and the twenty-seven and a half years ended with 1880, and the results for England and Wales to the thirty years ended with 1879 :—

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 1883.	Year 1882.	Average of 27½ Years: 1853 to 1880.	Average of 30 Years: 1850 to 1879.
		All causes	1,417·84	1,531·10	1,665·42	2,210·51
		Specified causes	1,416·09	1,527·28	1,655·66	2,189·90
		CLASSES.				
I.	...	Zymotic diseases	297·39	316·57	501·33	484·57
II.	...	Constitutional diseases ...	225·55	234·15	222·04	410·87
III.	...	Local diseases	589·99	648·42	562·81	872·15
IV.	...	Developmental diseases ...	204·18	233·70	233·95	346·49
V.	...	Violent deaths	98·98	94·44	135·53	75·82
I.	1	**ORDERS AND DISEASES.*** Miasmatic diseases ...	256·62	275·02	459·99	458·80
		Measles	·76	1·68	23·88	41·37
		Scarlatina	6·43	9·99	50·74	} 100·60
		Diphtheria	14·28	13·70	46·79	
		Croup	18·20	15·95	24·09	22·80
		Whooping-cough ...	5·23	12·24	26·08	51·90
		Typhoid fever, &c. ...	72·05	53·01	66·07	46·94†
		Dysentery	15·15	20·44	72·86	6·03
		Diarrhœa	96·48	108·71	106·71	87·22
		Metria (see also Child-birth and metria *infra*)	4·69	6·63	4·14	6·16
	2	Enthetic diseases (venereal diseases, &c.)	5·89	3·59	4·46	7·88
	3	Dietic diseases (privation, want of breast-milk, alcoholism, &c.)	26·27	28·64	27·51	11·83
	4	Parasitic diseases (thrush, hydatids, &c.)	8·61	9·32	9·37	6·06
II.	1	Diathetic diseases	63·55	58·06	46·27	82·31
		Dropsy	6·87	9·55	12·15	34·48
		Cancer, &c.	53·20	41·89	29·45	38·96
	2	Tubercular diseases ...	162·00	176·07	175·77	328·56
		Phthisis	132·13	143·07	127·38	249·14
		Hydrocephalus ...	13·19	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 1883.	Year 1882.	Average of 27½ Years: 1853 to 1880.	Average of 30 Years: 1850 to 1879.
		ORDERS AND DISEASES—*continued.*				
III.	...	Diseases of the systems—				
	1	Nervous (brain diseases, &c.)	156·33	168·22	179·08	280·80
	2	Circulatory (heart diseases, &c.)	91·24	99·83	76·81	102·38
	3	Respiratory (lung diseases, &c.)	180·42	209·78	159·56	339·02
	4	Digestive (stomach, bowels —diseases, &c.)	122·20	127·46	118·37	100·47
	5	Urinary (kidney, bladder —diseases, &c.)	32·49	34·93	18·73	29·69
	6	Generative (ovarian dropsy, &c.)	1·42	2·13	2·86	5·70
	7	Locomotive (arthritis, ostitis, &c.)	2·40	3·71	3·94	8·01
	8	Integumentary (phlegmon, ulcer, &c.)	3·49	2·36	3·46	6·08
IV.	...	Developmental diseases—				
	1	Of children (malformation, teething, &c.)	50·91	60·31	78·28	85·00
	2	Of women	13·19	13·25	16·45	11·23
		Childbirth (see also Childbirth and metria *infra*)	12·54	13·14	15·92	10·79
	3	Of old people (old age) ...	52·98	55·14	24·75	133·02
	4	Diseases of nutrition (atrophy and debility)	87·10	105·00	114·48	117·24
V.	1	Accident or negligence ...	85·25	83·21	121·85	} 75·82
	3	Homicide...	2·40	1·91	2·87	
	4	Suicide	11·23	9·32	10·39	
	5	Execution	·10	...	·42	
I. IV.	1 } 2 }	Childbirth and metria ...	17·23	19·77	20·06	16·95

556. 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.

Results compared.

Zymotic diseases.

557. The death rate from zymotic diseases in 1883 was, as in the four 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 higher than in England, it has been in the last seven years much lower than in that country. This decrease in 1883 occurred in all miasmatic complaints except typhoid fever 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 the last two years 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 typhoid fever, which was much above that in the previous year, or the average, and that from metria, which, although much lower than in the two previous years, was somewhat above the average, will be referred to hereafter.†

Zymotic diseases in Australasian colonies.

558. The following is a statement of the mortality 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:—

ORDER OF COLONIES IN REFERENCE TO MORTALITY FROM ZYMOTIC DISEASES, 1873–82.

Colony.	Deaths from Zymotic Diseases, 1873–82.		
	Total Number.	Percentage of Total Deaths.	Annual Proportion per 10,000 Persons Living.
1. Queensland	10,245	30·11	52·7
2. Victoria	34,182	26·75	41·7
3. South Australia ...	9,171	25·11	38·6
4. New South Wales ...	23,871	22·73	35·8
5. Tasmania	3,416	19·07	31·2
6. New Zealand ...	12,600	25·20	30·6

Period unfavorable to Victoria.

559. 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,

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* See table following paragraph 554 *ante.*   † See paragraphs 562 and 587 *post.*

which increased the death rate, it is true, more or less in all the colonies, but pressed with especial weight upon Victoria. In the five years ended with 1881 the mortality from zymotic diseases in Victoria was at the rate of 35·35 per 10,000, or slightly below the ten years' average in New South Wales, and in the last two years it was at the rate of about 30 per 10,000, or below that in any of the other colonies.

560. The following table shows the number of deaths from zymotic diseases particularly affecting children which occurred during the twenty years ended with 1883 :— *Zymotic diseases affecting children.*

DEATHS FROM ZYMOTIC DISEASES CHIEFLY AFFECTING CHILDREN, 1864 TO 1883.

Year.	Number of Deaths from—							
	Measles.	Scarlatina.	Diphtheria.	Croup.	Whooping-cough.	Dysentery.	Diarrhœa.	Total.
1864 ...	7	278	451	160	25	243	528	1,692
1865 ...	11	215	391	171	304	402	864	2,358
1866 ...	427	462	331	132	365	525	1,027	3,269
1867 ...	630	621	334	115	205	430	986	3,321
1868 ...	24	460	451	194	243	220	640	2,232
1869 ...	24	224	493	162	100	306	858	2,167
1870 ...	3	24	418	99	50	244	706	1,544
1871 ...	4	27	255	90	318	316	626	1,636
1872 ...	7	135	320	121	227	424	747	1,981
1873 ...	1	188	420	142	299	357	629	2,036
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
1883 ...	7	59	131	167	48	139	885	1,436
Total in 20 years }	3,290	6,619	6,276	3,364	3,590	5,652	15,800	44,591

561. The mortality in 1883 from the seven diseases named in the table was below that in any of the previous years except 1881, when the mortality from them was unusually low. The decrease, as compared with 1882, occurred under all the heads except diphtheria and croup. *Children's zymotic diseases, 1883.*

562. Deaths from typhoid fever in 1883 numbered 661, which was 189 more than in 1882, and as many as 310 more than in 1881. The number of deaths from this complaint in 1883 was by far the highest *Typhoid fever.*

on record ; and, as compared with population, much exceeded that in any previous year since 1866. In 1880 the rate was less than half that in the year under review, but since that time the proportion has steadily increased. The following table shows the number of deaths from typhoid fever, and their proportion to the population, during each of the past eighteen years :—

DEATHS FROM TYPHOID FEVER, 1866 TO 1883.

Year.				Deaths from Typhoid Fever.	
				Total Number.	Number per 10,000 Persons Living.
1866	...	...	...	528	8·39
1867	...	...	...	455	7·06
1868	...	...	...	295	4·45
1869	...	...	...	360	5·24
1870	...	...	...	416	5·83
1871	...	...	...	269	3·65
1872	...	...	...	323	4·29
1873	...	...	...	282	3·68
1874	...	...	...	470	6·04
1875	...	...	...	455	5·78
1876	...	...	...	375	4·71
1877	...	...	...	532	6·58
1878	...	...	...	532	6·48
1879	...	...	...	438	5·25
1880	...	...	...	297	3·49
1881	...	...	...	351	4·04
1882	...	...	...	472	5·30
1883	...	...	...	661	7·21
Mean	...	...	...	417	5·41

Typhoid fever in England and Wales.

563. In England and Wales the mortality from typhoid fever has been considerably reduced of late years. During the ten years ended with 1800 the mean death rate therefrom was 4·30 per 10,000 persons living, which is even lower than in Victoria. In the years 1881 and 1882 it fell to 2·56 and 2·67 respectively per ten thousand,* or lower than it has ever been in this colony.

Typhoid fever in Australasian colonies.

564. The following table shows the mortality from typhoid fever in all the Australasian colonies except Western Australia during the ten years ended with 1882, or during as many of those years as the information is available for :—

* 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 1869, the latter being a disease which, it is said, does not exist in Victoria.

DEATHS FROM TYPHOID FEVER IN AUSTRALASIAN COLONIES, 1873 TO 1882.

Year.	Number of Deaths from Typhoid Fever.					
	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.	Total.	Per 10,000 Persons Living.
	VICTORIA.		NEW SOUTH WALES.		QUEENSLAND.	
1873 ...	282	3·68	...	...	67	4·78
1874 ...	470	6·05	...	...	78	5·03
1875 ...	455	5·78	298	5·00	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
1882 ...	472	5·30	450	5·63	166	6·99
Total...	4,204	5·13	2,736	4·99	1,114	5·72
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	68	3·48	24	2·32	127	4·41
1874 ...	97	4·82	44	4·22	161	5·05
1875 ...	94	4·53	50	4·81	340	9·47
1876 ...	92	4·22	26	2·49	195	5·03
1877 ...	84	3·63	41	3·86	133	3·26
1878 ...	106	4·37	50	4·61	131	3·11
1879 ...	101	3·97	38	3·42	208	4·64
1880 ...	63	2·39	29	2·55	177	3·73
1881 ...	85	2·95	33	2·81	137	2·78
1882 ...	146	5·03	36	2·98	128	2·51
Total ...	936	3·94	371	3·40	1,737	4·40

565. In all the colonies except New Zealand the death rate in 1882 from typhoid fever was considerably higher than in the previous year, and in all except that colony and Tasmania it was also much above the average. Usually it appears to be more fatal in Queensland, Victoria, and New South Wales than it is in the other three colonies ; but in 1882 it was nearly as fatal in South Australia as in the two last named. *Deaths from typhoid fever in the colonies, 1882.*

566. The death rate from Constitutional Diseases, Class II., was lower than in 1882, but still slightly above the average. By far the most fatal complaint under this head is phthisis or pulmonary consumption, which in 1883 caused 1,212 deaths, or 62 less than in 1882, but more than in any other previous year. Except during the prevalence of epidemics, phthisis is the occasion of more deaths than any other disease ; in 1883, diarrhœa, 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 *Constitutional diseases— phthisis.*

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* See table following paragraph 554 *ante.*

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

DEATHS FROM PHTHISIS IN VICTORIA, 1861 TO 1883.

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	1874 ...	1,011	13·00
1862 ...	707	12·90	1875 ...	1,027	13·04
1863 ...	717	12·74	1876 ...	1,010	12·68
1864 ...	686	11·70	1877 ...	1,088	13·46
1865 ...	741	12·12	1878 ...	1,124	13·68
1866 ...	782	12·43	1879 ...	1,058	12·69
1867 ...	793	12·31	1880 ...	1,175	13·82
1868 ...	746	11·25	1881 ...	1,199	13·80
1869 ...	893	12·99	1882 ...	1,274	14·31
1870 ...	888	12·45	1883 ...	1,212	13·21
1871 ...	841	11·41			
1872 ...	876	11·63	Total in 23 years	21,546	12·78
1873 ...	945	12·34			

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

Death rate from phthisis.　568. By the figures in the table it appears that the death rate from phthisis fell with tolerable steadiness from 1861 to 1871, but since that period there has on the whole been a gradual increase. During the whole period of 23 years the deaths from this complaint were in the proportion of 12·78 per 10,000 persons living; during the first 11 of those years that proportion was 12·38, and in the last 12 years it was 13·14. In 1883 the rate was, with the exception of 1879, lower than in any year since 1876.

Death rate from phthisis at different ages.　569. 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

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

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

of the last three censuses, the mean number of deaths from phthisis in the 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 :—

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	695	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

570. 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 :— *Decrease of males at phthisical ages.*

	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

571. 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 *Increase of phthisis amongst males.*

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* 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.

1881 than in 1871 by 19,786, and yet the deaths from phthisis increased by 49.

Increase of phthisis amongst females.
572. 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.
573. 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.
574. The following table gives the number of deaths from phthisis at each age in 1883 ; also the proportion which such deaths bore to the total deaths from all causes in 1883 and in the ten years ended with 1880 :—

DEATHS FROM PHTHISIS, 1883.—AGES AT DEATH.

Ages.	Number who Died from Phthisis, 1883.			Percentage of Deaths from Phthisis to those from all Causes.	
	Males.	Females.	Total.	1883.	Ten Years: 1871–80.
Under 5 years	12	4	16	·36	·51
5 to 10 „	2	3	5	1·21	1·40
10 „ 15 „	4	22	26	8·69	5·15
15 „ 20 „	30	57	87	20·04	21·22
20 „ 25 „	83	83	166	29·80	32·22
25 „ 35 „	157	144	301	31·12	29·18
35 „ 45 „	122	97	219	20·22	20·27
45 „ 55 „	152	68	220	14·08	13·69
55 „ 65 „	99	26	125	8·37	8·30
65 „ 75 „	28	10	38	3·73	2·97
75 years and upwards	2	3	5	·67	·83
Unspecified	1	3	4	...	...
Total	692	520	1,212	9·32	8·29

575. If the figures in the last two columns of the table be compared, it will be noticed that in 1883 the proportion of deaths from phthisis occurring between the ages of 15 and 25 was somewhat below, but at most of the other ages—especially between 10 and 15—it was 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 of the deaths are due to this complaint ; at from 20 to 25, about 1 in 3 ; at from 25 to 30, nearly 1 in 3 ; and at from 45 to 55, about 1 in 7.

Phthisis most fatal to adults.

576. Of the 1,212 deaths from phthisis in 1883, 678 occurred in Melbourne and suburbs (Greater Melbourne) and 534 in other parts of the colony. In proportion to population, the deaths from phthisis have always been much more numerous in the metropolis than in the remainder of the colony, as will be seen by the following figures, which give the results for twenty-three years :—

Phthisis in Melbourne and country.

DEATHS FROM PHTHISIS PER 10,000 PERSONS LIVING IN AND OUTSIDE GREATER MELBOURNE, 1861 TO 1883.

Year.	Greater Melbourne.	Extra-Metropolitan Districts.	Year.	Greater Melbourne.	Extra-Metropolitan Districts.
1861 ...	23·44	10·63	1874 ...	22·04	8·94
1862 ...	24·64	8·71	1875 ...	21·46	9·25
1863 ...	23·71	8·79	1876 ...	22·46	8·28
1864 ...	20·08	8·70	1877 ...	22·74	9·29
1865 ...	22·11	8·57	1878 ...	22·62	9·63
1866 ...	20·42	9·53	1879 ...	21·77	8·45
1867 ...	21·56	8·87	1880 ...	23·95	8·92
1868 ...	20·83	7·63	1881 ...	22·71	9·45
1869 ...	23·87	8·83	1882 ...	23·09	10·03
1870 ...	22·49	8·56	1883 ...	22·27	8·71
1871 ...	22·08	7·20			
1872 ...	18·69	8·62	Means	22·15	8·88
1873 ...	20·51	8·77			

577. It will be observed that in 1882 the death rate from phthisis both in Greater Melbourne and in the extra-metropolitan districts was somewhat lower than 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 above that in 1861. The facts, however, are quite compatible. 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

Apparent inconsistency explained.

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* See table following paragraph 567 *ante.*

nevertheless be greater than the ratio of the like terms of the second pair.*

Death rate from phthisis in England.

578. In England and Wales, in the 24 years ended with 1882, the death rate from phthisis, per 10,000 persons, ranged from 26·02 in 1866 to 18·25 in 1881, the mean of the whole period being 22·91.† 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.

579. Of the Chinese who died in Victoria in 1883, 31, or 17 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.

580. Six out of the 25 deaths of Aborigines in 1883 were 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,‡ says—"Lung disease" (with which he probably includes phthisis) "is the chief cause of the death of the Aborigines, who, when once affected, very seldom recover;" and Mr. Richard Bennet, in an article entitled *Some Account of Central Australia,*§ says, with reference to the Australian Aborigines generally, "From my experience among the blacks, I believe nine-tenths of them die of consumption."

Phthisis in Australasian colonies.

581. 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 * :—

DEATHS FROM PHTHISIS IN AUSTRALASIAN COLONIES, 1873 TO 1882.

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
1882 ...	1,274	14·31	927	11·60	404	17·00
Total...	10,911	13·28	5,829	10·47	2,562	12·93
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	153	7·84	115	11·10	206	7·16
1874 ...	179	8·89	101	9·69	270	8·47
1875 ...	209	10·07	114	10·97	339	9·45
1876 ...	226	10·36	102	9·75	307	7·92
1877 ...	203	8·78	127	11·95	326	7·98
1878 ...	267	11·00	115	10·60	326	7·73
1879 ...	271	10·66	90	8·09	399	8·90
1880 ...	277	10·51	113	9·95	447	9·42
1881 ...	274	9·49	115	9·80	468	9·28
1882 ...	341	11·77	127	10·52	438	8·60
Total...	2,400	9·94	1,119	10·21	3,526	8·49

582. 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 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.

Phthisis returns of other colonies perhaps 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, more than two-fifths of such deaths in 1882 having been caused by phthisis. Excluding the Polynesians from the calculation, the death rate from phthisis in Queensland in 1882 was only 10·24 per 10,000.

Deaths from cancer.

583. Next to phthisis, the most fatal of the constitutional diseases is cancer. This complaint caused 450 deaths in 1883, which was a much larger number than in any previous year. Cancer in a fatal form has been much increasing of late years ; it stood tenth in 1882 and 1883, and eighth or ninth in the three previous years, in the list of causes of death*—its usual place being the nineteenth ; and since 1861 the death rate from it has increased steadily from less than 2 to nearly 5 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-three years :—

DEATHS FROM CANCER, 1861 TO 1883.

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
1883	234	216	450	4·90
Total in 23 years...	2,868	2,643	5,511	3·14

Proportions of the sexes who died of cancer.

584. Cancer is a complaint which generally affects females more than males. In the twenty-three 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

* See table following paragraph 554 *ante.*

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

proportion named. In 1883, females dying of cancer were in the proportion of 92 to every 100 males dying of that complaint, whilst in the population, females over 30 were in the proportion of only 75 to every 100 males.

585. The death rate in 1883 under Class III., local diseases, although much lower than in the previous year, was still somewhat above the average. The decreased mortality, as compared with 1882, occurred chiefly under the head of diseases of the respiratory system, the rate of mortality from which, however, was still much above the average; as also was that from diseases of the circulatory and urinary systems. Diseases of the digestive organs were also above, but those affecting the nervous, generative, and locomotive systems were much below, the average. Nervous diseases formerly caused most deaths in this class, but their fatality during the last five 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 1883 together caused 1,409 deaths, or nearly one-ninth of the mortality from all causes, and stood seventh, eighth, and eighteenth respectively in the list of causes of death.* In 1883, as also in the previous five years, a rather high mortality resulted from diseases of the respiratory, circulatory, and urinary systems—the rate from the last named in 1882 and 1883 being much greater than in England. Of complaints of the urinary system, the most fatal is nephria (Bright's disease), which caused 146 deaths in 1883 as compared with 149 in 1882 ; it stood twenty-third in order of fatality during those two years, its usual place being the forty-eighth.*

Local diseases.

586. 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 lower than in 1882, and 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 probably due to the changed circumstances of the colony, which admit of mothers living in greater comfort, and infants being treated

Developmental diseases.

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* See table following paragraph 554 *ante.*

with more care and attention than they were formerly. The deaths of infants born prematurely numbered 332 in 1883, which gives a proportion of nearly 11 per cent. of the total deaths under 1 year, and amounts to 1½ per cent. of the total births recorded. The diseases under Orders 2 and 4, viz., childbirth and atrophy, will be next referred to.*

Deaths in childbed.

587. 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 1883 the proportion of deaths from child-bearing to the number of children born was much lower than in 1881 or 1882, and was also below the average.

DEATHS OF WOMEN IN CHILDBIRTH, 1864 TO 1883.

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
1883	115	43	158	57·37
Total in twenty years	2,412	782	3,194	59·90

Increase of deaths in childbed at epidemic periods.

588. It is a remarkable fact that at or about the three periods during the last twenty years at which epidemics of measles and scarlatina have prevailed in Victoria, viz., 1866–7, 1874–5, and 1881–2, the mortality

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* See next paragraph and paragraph 593 *post.*

of child-bearing women largely increased. Whether this is only a coincidence, or whether there is any connexion between the two circumstances, is a matter which merits the consideration of the medical faculty. It should be mentioned that the 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 most fatal.

589. The proportion of women dying in childbed during the whole period of twenty years was 1 to 167 births, and in 1883 the proportion was 1 to every 174 births. In 1882, the proportion was 1 to every 152 births; in 1881, 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 much 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. *[margin: Deaths in childbed in Victoria and United Kingdom.]*

590. In the Melbourne Lying-in Hospital, 602 women were confined, and 538 infants were born alive, in the year ended 30th June, 1883; seven deaths of mothers occurred during or shortly after parturition; thus 1 death of a mother occurred to every 86 deliveries, or to every 77 births. In this institution, in 1882 (first six months), 1 death of a mother took place to every 60 deliveries or 56 births; in 1881, the unusually high proportion of 1 to 29 deliveries or 27 births; in 1880, 1 to 98 deliveries or 89 births; in 1879, 1 to 71 deliveries or 67 births; 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. *[margin: Deaths of women in Lying-in Hospital.]*

591. 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 *[margin: 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, pyæmia, septicæmia, 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 the entry should be referred back for inquiry in all cases where the death is stated to have occurred from any of the above causes. It is questionable whether in some of the other colonies the scrutiny is as close as it is in Victoria, and hence it is probable that the full extent of the mortality in 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 ten years ended with 1882, 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 1882.

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
1882 ...	176	65·80	118	39·73	49	57·53
Total...	1,896	70·75	1,003	49·08	434	58·77
	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
1882 ...	70	64·55	14	34·63	101	53·14
Total...	470	51·99	196	58·93	802	49·22

592. The connexion between the prevalence of measles and scarla- Increase of deaths in childbed during epidemics in all the colonies. tina 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.

593. In proportion to population, deaths under the head of atrophy Atrophy and debility. and debility in 1883 were much fewer than in 1882 or than the average of the twenty-seven and a half years, 1853 to 1880. The mortality under this head is almost entirely confined to young children and infants—thus, of the 799 set down thereto in 1883, 697 were under 5 years, 624 were under 1 year, 259 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 them more accurately. The following are the numbers of both sexes recorded as having died from atrophy and debility in each of the seventeen years ended with 1883 :—

DEATHS FROM ATROPHY AND DEBILITY, 1867 TO 1883.

Year.	Males.	Females.	Total.	Year.	Males.	Females.	Total.
1867 ...	399	347	746	1877 ...	344	304	648
1868 ...	337	328	665	1878 ...	389	311	700
1869 ...	386	337	723	1879 ...	407	304	711
1870 ...	422	368	790	1880 ...	369	324	693
1871 ...	368	311	679	1881 ...	392	345	737
1872 ...	354	338	692	1882 ...	493	442	935
1873 ...	378	336	714	1883 ...	412	387	799
1874 ...	402	337	739				
1875 ...	413	349	762	Total in seven-	6,609	5,773	12,382
1876 ...	344	305	649	teen years			

594. Notwithstanding the proportions of the sexes of persons at Sex of those who died of atrophy, &c. 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 seventeen years, females died of these complaints in the proportion of 87 to every 100 males.

595. Deaths from external causes, Class V., in proportion to popula- Violent deaths. tion, 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 twenty-seven years, the average annual number of violent deaths per 100,000 of the population was 136, but during the ten years 1871–80 it was only 108, in 1882 it fell to as low as 94, and in the year under review it again rose to 99. These last-named rates,

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

596. Of the 908 violent deaths recorded in Victoria during 1883, 782, or 86 per cent., were ascribed to accident ; 22, or 2 per cent., to homicide; 103, or 11 per cent., to suicide; and 1 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 1883 they had fallen to the fourth place on the list.* Forty-five per cent. of the deaths from accident in that year were due to fractures, and 25 per cent. to drowning. Homicides were slightly below, but suicides were above, the average of the twenty-seven years ended with 1880 ; the latter numbered 103, as against only 83 in the previous year. 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 1883 and the decennium ended with 1880, the sexes of those who died being distinguished :—

VIOLENT DEATHS.

Causes of Death.	Year 1883.			Ten Years : 1871 to 1880.		
	Males.	Females.	Total.	Males.	Females.	Total.
Accidents :—						
Fractures and contusions	316	36	352	2,911	241	3,152
Gunshot wounds ...	7	1	8	} 226	36	262
Cuts, stabs, &c. ...	12	4	16			
Burns and scalds ...	38	54	92	371	514	885
Sunstroke	10	5	15	158	60	218
Lightning	...	...	...	22	3	25
Poison	13	10	23	112	66	178
Snake, insect—bite ...	1	1	2	24	13	37
Drowning	162	35	197	1,558	379	1,937
Suffocation ...	39	25	64	409	216	625
Others	9	4	13	97	31	128
Total ...	607	175	782	5,888	1,559	7,447
Homicide	9	13	22	123	67	190
Suicide :—						
Gunshot wounds ...	15	1	16	69	...	69
Cuts, stabs, &c. ...	13	2	15	164	21	185
Poison	7	5	12	144	44	188
Drowning	16	7	23	151	66	217
Hanging	34	...	34	233	23	256
Otherwise	3	...	3	31	5	36
Total ...	88	15	103	792	159	951
Execution	1	...	1	19	...	19
Grand Total ...	705	203	908	6,822	1,785	8,607

* See table following paragraph 554 *ante*.

597. 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.

598. Males are much more subject to violent deaths than females. Of those who so died in 1883, 705, or 78 per cent., belonged to the male, and 203, or 22 per cent., to the female, sex.

Violent deaths of males and females.

599. 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 32½ years since Victoria has been an independent colony as many as 121 males were executed.

Violent deaths : proportion of males and females.

600. 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.

601. One hundred and three persons took their own lives in 1883, and 83 in the previous year. During the ten years ended with 1880 the mean annual number of deaths by suicide was 95.

Suicidal deaths.

602. Hanging is the most common mode by which men commit suicide, cutting or stabbing usually 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 only once in the 174 cases named in the table by shooting.

Modes of committing suicide.

603. Suicide frequently occurs amongst the Chinese. Seven men of this race committed that act in 1883, viz., 1 by stabbing and the remainder 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 1,700.

Suicides of Chinese.

604. According to the results in the following table, it would appear that, in proportion to population, suicide is more common in Victoria than in any other Australasian colony except Queensland. It should, however, be stated that the death records frequently do not upon the

Suicides in Australasian colonies.

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 ten years ended with 1882 recorded in all the Australasian colonies except Western Australia :—

DEATHS FROM SUICIDE IN AUSTRALASIAN COLONIES, 1873 TO 1882.

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
1882 ...	83	9·3	55	6·9	40	16·8
Total ...	975	11·9	603	9·1	258	13·1
	SOUTH AUSTRALIA.		TASMANIA.		NEW ZEALAND.	
1873 ...	10	5·1	6	5·8	20	7·0
1874 ...	22	10·9	6	5·8	20	6·3
1875 ...	24	11·5	6	5·8	29	8·1
1876 ...	15	6·9	6	5·7	42	10·8
1877 ...	17	7·3	10	9·4	32	7·8
1878 ...	18	7·4	8	7·4	37	8·8
1879 ...	18	7·1	5	4·5	42	9·4
1880 ...	25	9·5	8	7·0	38	8·0
1881 ...	34	11·8	6	5·1	42	8·5
1882 ...	18	6·3	3	2·5	53	10·4
Total ...	201	8·4	64	5·9	355	8·5

Proportion of suicides in different colonies.

605. 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 twice in New Zealand, and only thrice in New South Wales and South Australia, during the

ten years named in the table. The rate in Tasmania, moreover, appears to be much lower than in any of the other colonies.

606. In England and Wales* during the sixteen 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.

607. 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		

608. 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 Austral-asia and Foreign countries.

609. 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

Violent deaths in Victoria and European countries.

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* 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.

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. 610. 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-five years ended with 1883, embracing the whole period of the existence of railways in Victoria :—

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* 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 1883.

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
1883 ...	32	...	5	5	...	9	9	6	10	2
Total killed	277	5	11	16	14	117	131	23	91	16
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
1883 ...	101	67	8	75	7	12	19	2	1	4
Total injured	740	444	27	471	62	149	211	10	26	22

611. It will be observed that, in the whole period of twenty-five years, 277 persons were killed and 740 were injured on the State lines of railway, and that, exclusive of trespassers, persons crossing the lines, &c., 128 of the former and 176 of the latter met their death or

Railway passengers and servants killed and injured.

injury in consequence of their own misconduct or want of caution. Sixteen passengers and as many as 131 railway or contractors' servants were killed throughout the period, 11 of the former, and 117 of the latter, having been so in consequence of their own carelessness. The passengers injured numbered 471, and the railway servants 211 ; as many as 149 of the latter, but only 27 of the former, suffered from their own action. At crossings 23 persons were killed, 6 being in the year under review, and 10 injured. As many as 91 trespassers were killed ; these no doubt included persons who committed suicide by placing themselves in the way of trains. The trespassers injured numbered somewhat more than a fourth of those killed.

Serious rail-way acci-dents, 1881 and 1882. 612. The year 1883 was free from any important railway accident, but serious accidents occurred in 1881 and 1882. The most fatal railway 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. 613. In the ten years ended with 1883, embracing the whole period the Regulation of Mines Statute 1873 (37 Vict. No. 480) has

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* See also portion relating to " Railways " in Part " Interchange " *post*.

been in operation, 632 persons lost their lives, and 1,459 persons were injured from accidents connected with mining operations. The following were the numbers in each year and their proportion to the number of miners at work :—

DEATHS AND INJURIES FROM MINING ACCIDENTS, 1874 TO 1883.

Year.	Average Number of Miners at work.	Number of Persons—			Numbers per 1,000 Miners at work—		
		Killed.	Injured.	Total.	Killed.	Injured.	Total.
1874 ...	46,512	90	245	335	1·93	5·27	7·20
1875 ...	42,058	83	217	300	1·97	5·16	7·13
1876 ...	41,531	55	170	225	1·32	4·10	5·42
1877 ...	38,860	64	154	218	1·65	3·96	5·61
1878 ...	37,212	40	106	146	1·07	2·85	3·92
1879 ...	37,195	48	112	160	1·29	3·01	4·30
1880 ...	38,076	50	89	139	1·31	2·34	3·65
1881 ...	38,436	72	108	180	1·87	2·81	4·68
1882 ...	37,446	71	130	201	1·90	3·47	5·37
1883 ...	33,927	59	128	187	1·74	3·77	5·51
Means ...	39,125	63	146	209	1·61	3·73	5·34

614. In 1883, fatal mining accidents were fewer by 12, and non-fatal ones were fewer by 2, than in 1882. The latter, however, were more numerous than in any other year since 1877. In comparison with that and earlier years, the persons killed and injured in and in connexion with mines have much diminished both in numbers and in proportion to the miners at work.

615. According to the average of the ten years to which reference is made, 1 miner in every 621 loses 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.

616. It appears by the following table that, in the ten years named, 1,029, or 49 per cent., of the mining accidents in Victoria were caused by the fall of earth or materials ; 401, or 19 per cent., by falling down

shafts, cage accidents, &c.; and 253, or 12 per cent., by explosions, principally of blasts:—

CAUSES OF MINING ACCIDENTS, 1874 TO 1883.

Nature of Accident.	Number of Persons—		
	Killed.	Injured.	Total.
Fall of earth or rock underground	246	461	707
„ „ on surface	89	72	161
„ materials down shafts, passes, &c.	36	125	161
Falling down shafts	92	123	215
„ „ winzes, shoots, &c.	13	57	70
Cage accidents	42	74	116
Timber accidents	9	18	27
Truck accidents	...	35	35
Machinery in motion	15	59	74
Explosion of blasts—gunpowder	15	110	125
„ „ guncotton	1	10	11
„ „ nitro-glycerine compounds ...	14	43	57
„ 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	26	219	245
Total	632	1,459	2,091

617. The number of deaths of persons over 80 years of age, and their exact ages at death, have been already quoted for 1881, 1882, 1883, and the previous ten years.* The following table shows the causes of death of these persons:—

CAUSES OF DEATH OF OCTOGENARIANS.

Causes of Death.	Year 1883.		Year 1882.		Year 1881.		Ten Years ended with 1880.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Quinsy	...	...	...	...	...	...	...	1
Diphtheria	...	...	...	1	...	...	...	...
Typhoid Fever, &c. ...	...	1	...	...	...	...	3	2
Erysipelas	...	1	3	...	1	1	2	6
Carbuncle, Boil	...	...	...	1	2	...	1	2

* See table following paragraph 547 *ante.*

CAUSES OF DEATH OF OCTOGENARIANS—*continued.*

Causes of Death.	Year 1883.		Year 1882.		Year 1881.		Ten Years ended with 1880.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Influenza, Coryza, Catarrh	...	...	2	1	1	...	4	11
Dysentery and Diarrhœa ...	11	8	8	9	9	3	42	33
Cholera	...	...	...	...	3	...	3	1
Rheumatism	1	1	1	1	1	...	6	4
Venereal Diseases ...	...	...	...	...	...	...	4	...
Privation...	...	...	1	...	1	...	2	...
Scurvy	...	...	...	...	...	...	1	...
Intemperance	...	...	...	...	...	...	2	1
Hydatid	...	...	...	...	...	...	1	...
Gout	1	...	...	...	...	...	2	...
Dropsy	...	4	2	3	4	2	16	16
Cancer	4	3	8	3	6	4	29	9
Tumor	...	...	1	...	...	...	...	3
Mortification	...	1	1	...	2	...	7	3
Phthisis	...	1	1	1	1	...	2	3
Abscess, &c.	...	...	...	...	...	...	1	...
Brain Diseases, &c. ...	19	13	16	11	26	20	110	83
Heart Diseases, &c. ...	11	10	9	6	16	9	50	37
Lung Diseases, &c. ...	27	25	42	25	23	16	160	100
Stomach Diseases, &c. ...	2	5	6	4	6	1	31	20
Kidney Diseases, &c. ...	7	3	7	1	13	...	34	1
Gennetic Diseases ...	...	...	...	...	...	...	...	1
Skin Diseases, &c. ...	...	...	...	...	...	1	4	1
Old Age	113	77	105	90	81	97	550	441
Accidents	2	4	6	4	3	4	19	14
Suicide	...	...	...	...	1	...	3	...
Unspecified causes ...	...	...	...	...	...	...	2	...
Total	198	157	220	160	200	158	1,091	793

618. 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.

619. The following table shows the number of males over 20 years of age as returned at the last census, the number of males who died at that period of life in the three years of which the census year was the middle, and the average annual proportion of such deaths to the numbers living :— Occupations at death.

Occupations at Death*, 1880 to 1882, in Classified Arrangement. (Males aged Twenty Years and Upwards.)

Occupations.	Number returned at Census (3rd April, 1881).	Number who Died in Three Years, 1880 to 1882.	Annual Number of Deaths per 1,000 Living.
I.—GOVERNMENTAL AND PROFESSIONAL.			
Public officers, civil servants	1,982	75	12·61
Police	1,102	41	12·40
Clergy (including irregular clergy)	884	48	18·10
Lawyers	534	40	24·97
Law clerks	336	13	12·90
Medical men (including irregular practitioners) ...	578	40	23·07
Chemists and druggists	623	51	27·29
School masters, teachers, tutors	2,123	91	14·29
Photographers	182	6	10·99
Music-masters, musicians, vocalists	439	30	22·78
II.—ENGAGED IN ENTERTAINING AND SERVING.			
Hotelkeepers, beer and colonial wine sellers ...	3,102	276	29·66
Servants	3,804	147	12·88
III.—ENGAGED IN COMMERCIAL PURSUITS, AND IN CONVEYANCE OF MEN AND GOODS.			
Capitalists, merchants	1,110	51	15·32
Auctioneers, appraisers, valuers	249	14	18·74
Brokers, commission agents	1,477	71	16·02
Clerks—bank, commercial, and undefined	3,955	267	22·50
Commercial travellers, salesmen	945	38	13·40
Hawkers, pedlers	787	59	24·99
Shopkeepers, pawnbrokers, and other general dealers	3,248	198	20·32
Drapers, mercers, warehousemen, and assistants ...	2,829	135	15·91
Railway officers, clerks, station-masters	451	13	9·61
Railway engine-drivers, stokers, &c.	2,203	64	9·68
Coach, omnibus, cab—proprietors and drivers ...	2,152	101	15·64
Draymen, carriers, carters	4,831	165	11·38
Ship—masters, officers, seamen, servants	2,442	257	35·08
Store labourers, storemen, and others connected with storage	995	30	10·05
IV.—ENGAGED ABOUT LAND AND ANIMALS.			
Engaged in agricultural pursuits	54,123	1,561	9·61
„ pastoral pursuits	6,157	192	10·39
Land surveyors and assistants	231	14	20·20
Land, house—proprietors, agents	1,259	9	2·38
Horsebreakers, grooms (not domestic servants) ...	1,103	93	28·11
Fishermen	481	24	16·63

* Elaborate tables, showing in Classes, Orders, and Sub-Orders the occupations at death at various ages of males in Melbourne and suburbs, in the extra-metropolitan towns, and in extra-urban districts, are given in the Statistical Register of Victoria, 1883, Part "Vital Statistics."

Occupations at Death*, 1880 to 1882, etc.—*continued.*

Occupations.	Males over 20 Years.		
	Number returned at Census (3rd April, 1881).	Number who Died in Three Years, 1880 to 1882.	Annual Number of Deaths per 1,000 Living.
V.—Engaged in Food, Drinks, and Stimulants.			
Cowkeepers, dairymen, milksellers	709	28	13·16
Butchers	3,281	149	15·14
Fishmongers, oyster dealers	201	9	14·93
Millers, corn, flour, meal—merchants, dealers ...	797	27	11·29
Bakers, confectioners	1,942	103	17·68
Greengrocers, fruiterers	361	15	13·85
Brewers, maltsters	503	25	16·57
Wine, spirit—merchants	128	8	20·83
Gingerbeer, aërated waters, cordial—manufacturers ...	247	13	17·54
Grocers, tea dealers	1,626	84	17·22
Tobacco manufacturers, tobacconists	360	12	11·11
VI.—Engaged in Books and Literature.			
Booksellers, stationers, news agents, vendors ...	539	20	12·37
Newspaper proprietors, editors, publishers	260	6	7·69
Printers, compositors	1,284	52	13·50
VII.—Engaged in Industrial Pursuits.			
Watch, clock—makers, jewellers	791	45	18·96
Mechanical engineers, engine and machine workers, agents, dealers	740	20	9·01
Carriage, perambulator—makers, dealers	991	32	10·75
Saddlers, whipmakers	995	48	16·08
Wheelwrights	579	27	15 54
Shipbuilders, shipwrights	412	28	22·65
Sail, tent, tarpaulin—makers	134	10	24·87
Architects	237	15	21·10
Builders, contractors	2,091	103	16·42
Carpenters, joiners	5,784	331	19·08
Bricklayers, masons, slaters, plasterers ·	2,833	218	25·65
Painters, paperhangers, plumbers, glaziers	2,205	131	19·80
Furniture makers, cabinetmakers, upholsterers ...	979	60	20·43
Dyers, scourers	74	8	36·04
Hairdressers, wigmakers	345	24	23·19
Hatters, capmakers, &c.	191	12	20·94
Tailors, clothes dealers, outfitters	1,573	120	25·43
Boot, shoe—makers	4,683	240	17·08
Fellmongers, tanners, curriers, leather manufacturers	1,026	25	8·12
Firewood—dealers, choppers	1,348	38	9·40
Fencers, hurdle makers, splitters	1,336	41	10·23
Turners	129	9	23·26
Coopers	344	23	22·29
Sawyers, sawmill owners	929	37	13·28
Miners	32,545	1,675	17·16
Charcoal burners...	111	5	15·01

* See footnote (*) to preceding page.

Occupations at Death*, 1880 to 1882, etc.—*continued.*

Occupations.	Number returned at Census (3rd April, 1881).	Number who Died in Three Years, 1880 to 1882.	Annual Number of Deaths per 1,000 Living.
	Males over 20 Years.		
VII.—Engaged in Industrial Pursuits—*continued.*			
Quarrymen, stone cutters, dressers (not masons) ...	805	31	12·84
Brick, pottery, china, earthenware—makers	752	41	18·17
Road, railway—labourers, navvies, excavators ...	1,082	17	5·24
Tin, zinc—workers	472	17	12·01
Iron founders, workers	693	29	13·95
Blacksmiths, whitesmiths	3,409	161	15·74
Ironmongers, hardware dealers	465	19	13·62
Labourers (branch undefined)	18,680	2,216	39·54
Engineers, engine-drivers, stokers, firemen (undefined)	1,639	147	29·90
Other occupations	20,046	948	...
Unspecified	5,216	696	...
Total	235,619	12,412	17·56

Results not strictly accurate. 620. It should be mentioned that the comparison between the numbers returned at the census and the numbers dying, as given in the last column, is not entirely fair, as the occupations of the former being returned by the persons themselves are likely to be defined more exactly than those of the latter, which must necessarily be returned by others. This will have the effect of unduly exaggerating the mortality of the more comprehensive groups and reducing that of the others.

621. Combining the occupations embraced in each class, and arranging the results in order of fatality, the classes stand as follow :—

			Deaths per 1,000 living.
1.	Engaged in	industrial pursuits	21·89
2.	„	entertaining and serving	20·42
3.	„	commercial pursuits	17·62
4.	„	professional pursuits	16·51
5.	„	food and drinks	15·53
6.	„	books and literature	12·48
7.	„	on land and with animals	9·96

Occupations in order of fatality. 622. In the next table the several occupations are similarly arranged in order according to the degree of fatality which the figures show to have attended each occupation :—

* See footnote (*) to preceding page.

OCCUPATIONS AT DEATH, 1880 TO 1882, IN ORDER OF FATALITY.
(MALES AGED TWENTY YEARS AND UPWARDS.)

Order of Fatality.	Occupations.	Males over 20 Years.		
		Number returned at Census (3rd April, 1881).	Number who Died in Three Years, 1880 to 1882.	Annual Number of Deaths per 1,000 Living.
1	Labourers (branch undefined) *	18,680	2,216	39·54
2	Dyers, scourers	74	8	36·04
3	Ship—masters, officers, seamen, servants ...	2,442	257	35·08
4	Engineers, engine-drivers, stokers, firemen (undefined) †	1,639	147	29·90
5	Hotel-keepers, beer and colonial wine sellers ...	3,102	276	29·66
6	Horsebreakers, grooms (not domestic servants)...	1,103	93	28·11
7	Chemists and druggists	623	51	27·29
8	Bricklayers, masons, slaters, plasterers	2,833	218	25·65
9	Tailors, clothes dealers, outfitters	1,573	120	25·43
10	Hawkers, pedlers	787	59	24·99
11	Lawyers	534	40	24·97
12	Sail, tent, tarpaulin—makers	134	10	24·87
13	Turners	129	9	23·26
14	Hairdressers, wigmakers	345	24	23·19
15	Medical men (including irregular practitioners)	578	40	23·07
16	Music-masters, musicians, vocalists	439	30	22·87
17	Shipbuilders, shipwrights	412	28	22·65
18	Clerks—bank, commercial, and undefined ‡ ...	3,955	267	22·50
19	Coopers	344	23	22·29
20	Architects	237	15	21·10
21	Hatters, capmakers	191	12	20·94
22	Wine, spirit—merchants	128	8	20·83
23	Furniture makers, cabinetmakers, upholsterers	979	60	20·43
24	Shopkeepers, pawnbrokers, and other general dealers	3,248	198	20·32
25	Land surveyors and assistants	231	14	20·20
26	Painters, paperhangers, plumbers, glaziers ...	2,205	131	19·80
27	Carpenters, joiners	5,784	331	19·08
28	Watch, clock—makers, and jewellers, &c. ...	791	45	18·96
29	Auctioneers, appraisers, valuers	249	14	18·74
30	Brick, pottery, china, earthenware—makers ...	752	41	18·17
31	Clergy (including irregular clergy)	884	48	18·10
32	Bakers, confectioners	1,942	103	17·68
33	Gingerbeer, aërated waters, cordial—manufacturers	247	13	17·54
34	Grocers, tea dealers	1,626	84	17·22
35	Miners	32,545	1,675	17·16
36	Boot, shoe—makers...	4,683	240	17·08
37	Fishermen	481	24	16·63
38	Brewers, maltsters	503	25	16·57
39	Builders, contractors	2,091	103	16·42
40	Saddlers, whipmakers	995	48	16·08
41	Brokers, commission agents	1,477	71	16·02

* See also Pastoral labourers, line 70 ; Store labourers, line 72 ; Agricultural labourers, line 74 ; Road and railway labourers, line 79, &c.

† See also Railway engine-drivers, &c., line 73, and Mechanical engineers, &c., line 76.

‡ See also Law clerks, line 58 ; Government clerks, line 61 ; and Railway clerks, line 74.

OCCUPATIONS, IN ORDER OF FATALITY, ETC.—*continued.*

Order of Fatality.	Occupations.	Males over 20 Years.		
		Number returned at Census (3rd April, 1881).	Number who Died in Three Years, 1880 to 1882.	Annual Number of Deaths per 1,000 Living.
42	Drapers, mercers, warehousemen, and assistants	2,829	135	15·91
43	Blacksmiths, whitesmiths	3,409	161	15·74
44	Coach, omnibus, cab—proprietors, drivers ...	2,152	101	15·64
45	Wheelwrights	579	27	15·54
46	Capitalists, merchants	1,110	51	15·32
47	Butchers	3,281	149	15·14
48	Charcoal burners	111	5	15·01
49	Fishmongers, oyster dealers	201	9	14·93
50	School masters, teachers, tutors	2,123	91	14·29
51	Iron founders, workers	693	29	13·95
52	Greengrocers, fruiterers	361	15	13·85
53	Ironmongers, hardware dealers	465	19	13·62
54	Printers, compositors	1,284	52	13·50
55	Commercial travellers, salesmen	945	38	13·40
56	Sawyers, sawmill owners	929	37	13·28
57	Cowkeepers, dairymen, milksellers	709	28	13·16
58	Law clerks	336	13	12·90
59	Servants	3,804	47	12·88
60	Quarrymen, stone cutters, dressers (not masons)	805	31	12·84
61	Public officers, civil servants, Government clerks	1,982	75	12·61
62	Police	1,102	41	12·40
63	Booksellers, stationers, news agents, vendors ...	539	20	12·37
64	Tin, zinc—workers	472	17	12·01
65	Draymen, carriers, carters	4,831	165	11·38
66	Corn, flour, meal—merchants, dealers, and millers	797	27	11·29
67	Tobacco manufacturers, tobacconists	360	12	11·11
68	Photographers	182	6	10·99
69	Carriage, perambulator—makers, dealers ...	991	32	10·75
70	Engaged in pastoral pursuits...	6,157	192	10·39
71	Fencers, hurdle makers, splitters	1,336	41	10·23
72	Store labourers, storemen, and others connected with storage	995	30	10·05
73	Railway engine-drivers, stokers, &c.	2,203	64	9·68
74 {	Engaged in agricultural pursuits	54,123	1,561	9·61
	Railway officers, clerks, station-masters ...	451	13	9·61
75	Firewood—dealers, choppers...	1,348	38	9·40
76	Mechanical engineers, engine and machine workers, agents, and dealers	740	20	9·01
77	Fellmongers, tanners, curriers, and leather manufacturers	1,026	25	8·12
78	Newspaper proprietors, editors, publishers ...	260	6	7·69
79	Road, railway—labourers, navvies, excavators ...	1,082	17	5·24
80	Land, house—agents, proprietors	1,259	9	2·38
	Other occupations	20,046	948	...
	Unspecified	5,216	696	...
	Total	235,619	12,412	17·56

623. According to this table, death presses more hardly upon labourers (branch undefined) than upon followers of any other occupation; but this is an instance in which fallacious results are doubtless arrived at in consequence of the difference in the manner of describing the occupation during life and after death. Many of the 2,216 undefined labourers who died would probably be returned at the census under the special industry in connexion with which they worked : *e.g.*, store labourers, farm or station labourers, road or railway labourers, &c. The fact of their being entered simply as "labourers" in the death registers would of course swell the mortality under the head of labourers, undefined (line 1), and to the same extent would lower that under the other heads (lines 70, 72, 74, and 79). The same remark applies to engineers, engine-drivers, stokers, &c., undefined (line 4), many of whom at the census would probably be returned in connexion with railways or mechanical engineering, under both of which heads an exceedingly low mortality is shown by the figures (lines 73 and 76). In reference to the high mortality amongst seamen (line 3), it must be remembered that the population with which it is compared is a fluctuating one, and may perhaps on the average be larger than it was at the census ; and, moreover, that ships often leave sick seamen behind them here to be attended to in hospital or otherwise. The mortality really appears to be high amongst hotelkeepers, horse-breakers and grooms, chemists and druggists, bricklayers and masons, tailors, and hawkers (lines 5 to 10). Of members of the learned professions, the greatest mortality appears to attend lawyers (line 11); medical men (line 15) being somewhat less, and clergymen (line 31) very much less, hardly pressed upon. The mortality of clerks (line 18) appears to be high, but this may be swelled by the inclusion of law clerks, who should be grouped as such (line 58), Government clerks, who should be grouped with public officers (line 61), and railway clerks, who should be grouped with railway officers (line 74), in reference to all of whom a very low mortality is shown. The mortality of the police (line 62) is low, but it must be remembered that the retiring age of policemen is 55 years, or sooner if incapacitated from active duty, and it is probable that many who have been in the police force are not attached to it at the time of their death. The occupations in which the mortality is lowest appear to be land and house proprietors (line 80), newspaper proprietors and editors (line 78), and fellmongers and tanners (line 77); but the numbers in these groups* are small, and the results consequently of but doubtful value.

Fatality of different occupations.

624. There are 36 general hospitals in Victoria, 9 of which are also benevolent asylums. The total number of cases of sickness treated in these institutions during the year ended 30th June, 1883, was 14,649,

Sickness and deaths in general hospitals.

and the number of deaths was 1,546. In the six months ended 30th June, 1882, the cases of sickness treated numbered 9,154, and the deaths 944. There was thus 1 death to every 9·5 cases of sickness treated in hospitals during the year 1883, as against 1 death to every 9·7 cases of sickness treated therein during the previous half-year. The following table gives a list of the various hospitals throughout the colony, also a statement of the number of cases treated, the number of deaths which occurred, in the year ended 30th June, 1883, and the proportion of deaths to cases in each hospital during that period and the previous six months :—

SICKNESS AND MORTALITY IN GENERAL HOSPITALS.

Name of Hospital.	Year ended 30th June, 1883.			Percentage of Mortality to Cases treated, Half-year ending 30th June, 1882.
	Number of Cases treated.	Number of Deaths.	Percentage of Mortality to Cases treated.	
Alexandra	29	3	10·34	12·50
Amherst	234	26	11·11	9·49
Ararat	364	31	8·52	8·00
Ballarat	780	98	12·56	13·98
Beechworth	486	56	11·52	8·70
Belfast	53	6	11·32	13·46
Bendigo	1,163	101	8·68	10·59
Castlemaine	732	47	6·42	5·12
Clunes	188	15	7·97	6·19
Colac	43	7	16·28	...
Creswick	237	23	9·70	6·94
Daylesford	188	22	11·70	10·89
Dunolly	316	24	7·59	6·45
Echuca*	155	7	4·51	...
Geelong	741	79	10·66	7·63
Hamilton	458	21	4·58	2·87
Heathcote	79	10	12·66	7·02
Horsham	218	17	7·80	5·50
Inglewood	347	28	8·07	7·43
Kilmore	151	16	10·60	6·67
Kyneton	497	29	5·83	5·25
Maldon	70	9	12·86	14·86
Mansfield	107	10	9·35	3·39
Maryborough	431	38	8·82	8·26
Melbourne	3,614	550	15·22	14·84
Melbourne (Alfred)	1,099	125	11·37	11·01
Melbourne (Homœopathic)	137	12	8·76	10·84
Mooroopna	354	28	7·91	12·15
Pleasant Creek	58	2	3·45	7·97
Portland	283	26	9·19	5·41
Sale	284	16	5·63	10·87
St. Arnaud	243	27	11·11	12·40
Swan Hill	68	5	7·35	1·85
Wangaratta	246	24	9·76	7·38
Warrnambool	93	6	6·45	12·31
Wood's Point	103	2	1·94	7·94
Total	14,649	1,546	10·55	10·31

* This institution now appears in the list for the first time.

625. In proportion to the cases treated, the greatest mortality occurred in the Colac, Melbourne, Maldon, Heathcote, and Ballarat Hospitals; and the least in Wood's Point, Pleasant Creek, Echuca, and Hamilton Hospitals. In 1882 (first six months) the rate of mortality was highest in the Maldon, Melbourne, and Ballarat Hospitals; and lowest in the Swan Hill, Hamilton, and Mansfield Hospitals. *Highest and lowest death rates.*

626. The patients treated in the Hospital for Diseases of Women and Children attached to the Lying-in Hospital numbered 207 during the first six months of 1882, and 401 during the year 1882–3. The deaths in the same institution numbered 20 in both periods. Therefore, 1 patient in 10 died in the first half of 1882, and 1 in 20 in the year 1882–3. *Sickness and deaths in hospital for women.*

627. In the Melbourne Lying-in Hospital 299 women were confined in the first six months of 1882, and 602 in the year 1882–3. Five died in the former period, and 7 in the latter. Thus, 1 woman in 60 died in 1882 (first six months), and 1 woman in 86 in 1882–3. From the founding of the institution to the end of June, 1883, 10,766 women were accouched therein,* of whom 154 died, or 1 death to every 70 confinements.† *Deaths of mothers in Lying-in Hospital.*

628. The infants born alive in the Lying-in Hospital numbered 279 in the first six months of 1882, and 538 during the year 1882–3, and of these, 32 in the former and 38 in the latter period died before being taken from the institution; thus 1 infant in 9 died in 1882 (first six months), and 1 infant in 14 in 1882–3.‡ *Deaths of infants in Lying-in Hospital.*

629. In the Melbourne Hospital for Sick Children 281 cases were treated, and 14 deaths occurred, in the first six months of 1882; 584 cases were treated, and 54 deaths occurred, during the year 1882–3. These numbers furnish proportions of 1 death to every 20 patients in the former, and 1 death to every 11 patients in the latter, period. *Sickness and deaths in children's hospital.*

630. Cases of sickness in benevolent asylums (exclusive of Melbourne Immigrants' Home) numbered 867 in the first six months of 1882, and 2,690 in the year 1882–3; deaths numbered 103 and 183. The deaths were thus to the cases treated in the proportion of 1 to 8 in the first six months of 1882, and of 1 to 14 in 1882–3. *Sickness and deaths in benevolent asylums.*

631. In the Melbourne Immigrants' Home the cases of sickness in the first half of 1882 amounted to 357, and the deaths to 51, or 1 death to every 7 cases of sickness. In the year ended 30th June, 1883, the cases of sickness in this institution numbered 519, and the deaths 85, or 1 death to every 6 cases of sickness. *Sickness and deaths in Immigrants' Home.*

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

† See paragraph 589 *ante.*   ‡ See paragraph 537 *ante.*

Sickness and deaths in orphan asylums.

632. In the first six months of 1882 the cases of sickness in orphan asylums numbered 166, and the deaths 5. In the year ended 30th June, 1883, these numbers were 169 and 4 respectively. Thus, in 1882 (first six months), 1 death occurred to every 33 cases of sickness, and, in 1882–3, 1 death to every 42 cases of sickness.

Sickness and deaths in lunatic asylums.

633. In hospitals for the insane during 1882, the cases of sickness numbered 1,225, and during 1883 they numbered 1,209. The deaths amounted to 198 at the former period, and 189 at the latter, or an average of 1 death to every 6 cases of sickness in 1882, and 1 to every $6\frac{1}{2}$ cases in 1883.

Sickness and deaths in gaols.

634. In gaols and penal establishments 741 cases of sickness occurred in 1882, and 753 in 1883. The deaths in these two periods respectively were 31 and 39. Thus, 1 death occurred to every 24 cases in 1882, and 1 death to every 19 cases in 1883.

Deaths in public institutions.

635. Altogether the number of deaths in penal or charitable institutions during 1883* was 2,225, being in the proportion of 1 to every 6 deaths which took place in Victoria during the year. The deaths in such institutions in the first six months of 1882 were in the proportion of 1 to every $5\frac{1}{6}$ deaths ; in 1881 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 year 1882–3 :—

DEATHS IN PUBLIC INSTITUTIONS, 1882–3.

	Number of Deaths.
General hospitals	1,546
Hospital for Diseases of Women and Children ...	20
Lying-in Hospital	45†
Hospital for Sick Children	54
Benevolent asylums	183
Melbourne Immigrants' Home	85
Orphan asylums	4
Blind Asylum	2
Eye and Ear Hospital	2
Hospitals for the insane	189
Female refuges	17‡
Victorian Infant Asylum	14
Industrial and reformatory schools	25§
Gaols (exclusive of Police gaols)	37
Penal establishments	2
Total	2,225

NOTE.—In 1882–3 no death occurred in the Deaf and Dumb Asylum.

* The figures relating to hospitals for the insane, industrial and reformatory schools, gaols, and penal establishments are for the year ended 31st December, and those relating to the other institutions are for the year ended 30th June, 1883.
† This includes the deaths of 38 infants born in the institution.
‡ This includes the deaths of 12 infants in the Female Refuge, Madeline-street.
§ Including deaths of boarded-out children.

636. In England and Wales during 1882, 1 out of every 10 deaths registered occurred in a workhouse, hospital, or lunatic asylum. Of such deaths, 63 per cent. occurred in the first of these institutions, 28 per cent. in the second, and 9 per cent. in the third.

637. 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

638. 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.

639. 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.

640. 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

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* 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.

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:—

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. 641. New Zealand, as has just been 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 physical disablement. 642. 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. 643. 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.

644. 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 at different ages.*

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

645. 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.*

646. 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 of age are liable to be laid up for about 3 working days in the year, men between 25 and 30 for 3⅔ such days, and men *Disablement in friendly societies.*

between 30 and 35 for 4⅓ 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 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 1½ 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.

647. 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.

Deafmute-ism.

648. 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.

649. 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 deafmute in every	...	9,005 persons.
„ 1871 „ „ „ „	...	3,621 „
„ 1881 „ „ „ „	...	3,005 „

650. 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 1881 (after a correction being made for omissions), there was 1 deafmute in every 1,746 of the population ; which proportion was about the same as in 1871, when 1 in every 1,748 of the population of England and Wales was a deafmute.* Deafmuteism in England and Wales.

651. 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 that in England and Wales.   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 Australasian 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 „

652. 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.

653. 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 „

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* See General Report on the Census of England and Wales, 1881, page 63. London: Eyre and Spottiswoode, 1883.   † See paragraph 649 *ante.*

Blindness in
England and
Wales.

654. In England and Wales, according to the census of 1881, the proportion of blind persons to the total population was 1 in 1,138, or higher than it has ever been in Victoria ; not, however, so high as the proportion obtaining in England and Wales at the three previous censuses—for in 1871 it was 1 in 1,052; in 1861, 1 in 1,037; and in 1851 as high as 1 in 979.*

Blindness
in Austral-
asian
colonies.

655. 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.

656. 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.

657. 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.

658. From whatever cause, lunacy appears to be much more rife in Victoria than in England and Wales. When the census of 1881 was taken, the proportion in the latter was 1 lunatic in every 502 of the population, which is a much lower proportion than that found to exist in Victoria at the same census.†

Lunacy in
Austral-
asian
colonies.

659. 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   „

* See General Report on the Census of England and Wales, 1881, page 60.
† See General Report on the Census of England and Wales, 1881, page 67.

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

661. Persons returned as idiots were in the proportion of 1·87 per Idiocy. 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.

662. The census of 1871 was the first at which returns of idiocy Increase 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.

663. In England and Wales idiots were combined with imbeciles at Idiocy in England and Wales. the census of 1881, 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 794 persons living.*

664. Idiocy as distinguished from lunacy was not returned in any Idiocy in Australasian colonies. 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 :—

IDIOTS IN AUSTRALASIAN COLONIES, 1881.

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

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

666. In England and Wales, according to the census of 1881, the Idiocy and lunacy in England and Wales. proportion of idiots, imbeciles, and lunatics to the general population was 1 in 307 ; this, it will be observed, is lower than the ratio which idiots and lunatics bore to the population of Victoria in the same year.

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

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* See General Report of the Census of England and Wales, 1881, page 68.

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.

668. 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.

669. 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.

670. 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.

671. 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. There is no doubt 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.

672. 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.

673. The number of cases of successful vaccination in 1883 was 18,536; and as the number of births was 27,541, it appears that 67 per cent. of the children born were vaccinated. Part of the remainder are accounted for by death—2,280, or 8 per cent., of those born having died

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* 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 were equal to about 75 per cent. of the children born; in 1881 they even exceeded the births by 100—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 they were equal to about 73 per cent.; 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.

674. The following are the results of meteorological observations taken at different stations throughout the colony during 1883. These places are arranged in the table in the order of their altitude above the level of the sea. The last three are situated in the interior, but the others are on the sea-board. The times at which the observations for mean temperature and mean atmospheric pressure are obtained differ at the various stations; but a correction is applied, in order to make the results equivalent to those which would be derived from hourly observations taken throughout the day and night :— *Meteorological observations, 1883.*

METEOROLOGICAL OBSERVATIONS AT VARIOUS STATIONS, 1883.

Stations.	Height above Sea-level.	Temperature in the Shade.		
		Max.	Min.	Mean.
	feet.	o	o	o
Portland	37·0	106·0	32·0	57·0
Gabo Island ...	50·0	86·0	38·0	56·8
Melbourne	91·3	104·9	31·7	58·0
Cape Otway ...	270·0	105·0	39·0	55·6
Wilson's Promontory	300·0	100·0	39.0	56·7
Echuca	314·0	103·0	23·0	58·4
Sandhurst	758·0	106·0	32·0	...
Ballarat	1,438·0	101·0	28·0	54·1

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	29·970	183	34·36	·744	5·0
Cape Otway ...	29·875	140	33·15	·877	5·6
Melbourne	29·919	130	23·71	·695	5·9
Wilson's Promontory	29·734	125	32·03	·851	7·9
Gabo Island ...	29·615	180	37·33	·769	6·2
Echuca	29·610	64	16·32	...	...
Sandhurst	...	99	21·79	...	...
Ballarat	28·506	149	27·98	·733	5·3

Meteorology
in Mel-
bourne, 1864
to 1883.

675. The following are the results for Melbourne in each of the twenty years ended with 1883:—

METEOROLOGICAL OBSERVATIONS AT MELBOURNE.—RETURN FOR
TWENTY 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.					
	o	o	o	inches.	No.	inches.	0—1.	0—10.
1864	96·6	30·5	57·1	29·94	144	27·40	·72	6·1
1865	103·4	30·9	56·5	29·94	119	15·94	·68	5·6
1866	108·2	28·0	57·8	29·95	107	22·41	·70	5·5
1867	108·4	29·7	57·7	29·92	133	25·79	·72	5·7
1868	110·0	27·4	57·1	29·98	120	18·27	·70	5·7
1869	108·4	27·0	57·2	29·94	129	24·59	·71	6·0
1870	109·0	29·6	57·4	29·93	129	33·76	·74	5·8
1871	106·0	32·1	57·7	29·93	125	30·17	·74	5·9
1872	103·3	32·5	57·6	29·92	136	32·52	·74	6·4
1873	102·4	30·2	58·0	29·94	134	25·61	·72	6·0
1874	102·7	29·3	56·6	29·93	134	28·10	·72	6·1
1875	110·4	31·1	56·6	29·89	158	32·87	·72	6·2
1876	110·7	29·0	57·0	29·93	134	24·04	·70	5·8
1877	100·7	31·0	56·7	29·99	124	24·10	·70	5·8
1878	103·4	31·1	57·4	29·90	116	25·36	·71	6·0
1879	106·0	30·5	56·8	29·92	127	19·28	·71	5·8
1880	106·5	29·0	57·8	29·92	147	28·48	·72	6·0
1881	99·9	31·9	57·1	29·97	134	24·08	·68	5·9
1882	110·5	31·5	57·4	29·90	131	22·39	·68	5·6
1883	104·9	31·7	58·0	29·92	130	23·71	·69	5·9
Means	105·6	30·2	57·3	29·93	131	25·44	·71	5·9

Observations
in 1883 com-
pared with
20-year
means.

676. It will be noticed that in 1883, according to observations taken at the Melbourne Observatory, the maximum temperature was three-quarters of a degree below, and the minimum temperature about 1½ degrees above, the mean of the maxima and minima in twenty years; that the mean temperature was three-quarters of a degree above, but the mean atmospheric pressure and the mean relative humidity were slightly below, the average of the same period; also, that, although the usual amount of cloud prevailed, rain fell on one day less than usual, and the rainfall was 1¾ inches below the average.

Observations
in 1883 and
former
years com-
pared.

677. During the period of twenty years a higher temperature than the maximum of 1883 was experienced in eleven, and a lower one than the minimum in all but three, of the previous years; the mean temperature was equalled in one but exceeded in no year; the mean atmospheric pressure, the number of days rain, and mean amount of cloud were either about, or only slightly below, the average; the amount of rainfall was exceeded in all the other years except five; in only three previous years was the mean relative humidity lower than in 1883.

678. The mean temperature of Melbourne over a series of years (57·3°) corresponds with that of Bathurst, a town in the interior of New South Wales, situated 2,150 feet above the sea-level, and is about equal to that of Washington (56·9°), Bordeaux (57·0°), Madrid (57·6°), and Marseilles (58·3°). It is lower by 5⅕ degrees than that of Sydney (62·5°), and lower by 7⅓ degrees than that of Adelaide (64·6°).* Mean temperature in Melbourne and elsewhere.

679. The mean rainfall in Melbourne (25·4in.) corresponds approximately with that of Ventnor in England (25·5in.), Bathurst in New South Wales (25·0in.), and Toulouse in France (24·9in.). It is above that in London (24·0in.), Nottingham (23·7in.), or Paris (22·9in.), is nearly 5 inches above that in Adelaide (20·5in.), but is only about half as much as that in Sydney (50·1in.).* Mean rainfall in Melbourne and elsewhere.

680. It may be remarked that a fall of snow took place in Melbourne 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, no other such instance being remembered since the 29th and 30th August, 1849, when snow fell heavily. Fall of snow in Melbourne, 1882.

681. 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 IV.—INTERCHANGE.

682. The weights and measures used in Victoria are in every respect similar to those in use in the United Kingdom. Weights and measures.

683. The returns of imports and exports, as given in the following pages, are arranged according to a system of classification recommended by the Statistical Conference of representatives of the Australasian colonies held in Tasmania in 1875,† the principle kept in view being that articles of a like nature should be classed together, and the form adopted that employed in the tabulation of the Victorian Census Return of Occupations, means being thereby afforded of making calculations in respect to the number of persons in the colony working at the various trades in connexion with which articles are manufactured similar to those imported into and exported from the colony. The year under review is the eighth in which this mode of classification has been used in Victoria. It has met with the approval of eminent Imports and exports classified.

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* The observations, except those for Melbourne and Adelaide, have been taken from a work entitled *Physical Geography and Climate of New South Wales*, by H. C. Russell, F.R.A.S., Government Astronomer of that colony.

† See report of Conference, with introductory letter by the Government Statist of Victoria (Parliamentary Paper No. 11, Session 1875), page 6, paragraph 16; page 9, resolution 6; and page 12, Appendix A; also *Victorian Year-Book*, 1875, paragraphs 96 to 99 and footnotes.