

EXPENDITURE ON PUBLIC WORKS.*

Public Works.	Amount Expended.		
	Prior to 1875-6.	During 1875-6.	Total.
	£	£	£
Victorian railways	13,240,656	956,411	14,197,067
Roads and bridges	6,773,818	66,690	6,840,508
Melbourne water supply (Yan Yean)	1,318,423	80,141	1,398,564
Other waterworks	1,427,504	142,354	1,569,858
Other public works	7,244,663	348,596	7,593,259
Total	30,005,064	1,594,192	31,599,256

PART IV.—VITAL STATISTICS.

125. In the tables of births, deaths, and marriages the urban dis-^{Town and country districts.}tricts are separated from the extra-urban; and the former are subdivided into the metropolitan, embracing the City of Melbourne and the surrounding towns, boroughs, and villages, with their intermediate spaces extending for a distance of ten miles in each direction; and the extra-metropolitan, embracing all municipalised cities, towns, and boroughs throughout the colony except those within a distance of ten miles of Melbourne, together with a few towns which were at one time independent municipalities, but have ceased to be so, and have become amalgamated with shires. The extra-urban districts embrace all parts of the colony outside a radius of ten miles from the centre of Melbourne except such as are within the limits of municipalised cities, towns, and boroughs, and of the few unmunicipalised towns alluded to.

126. The number of marriages celebrated in 1876 was 4,949, as^{Marriages, 1876.} against 4,985 in the previous year. The excess in favor of 1875 was thus 36.

127. A statement of the number of marriages in each year since the first settlement of Port Phillip will be found in the Statistical Summary of Victoria (first folding sheet) at the commencement of this work. By this it will be seen that more marriages took place in 1875 than in any former year, also that the marriages in 1876 have been exceeded only in that year and in 1873.^{Marriages, 1876, and former years.}

* The railway expenditure dates from 1858, that of roads and bridges and "other public works" from 1851, that of the Melbourne water supply from 1853, and that of "other waterworks" from 1865.

Marriages,
1873-76.

128. The marriages have, however, fluctuated but little in numbers during the four years ended with 1876, as will be seen by the following figures :—

NUMBER OF MARRIAGES.

1873 ...	...	4,974	1875 ...	...	4,985
1874 ...	...	4,925	1876 ...	...	4,949

Marriage
rate in
Victoria.

129. The marriage rate has been decreasing pretty steadily for years past. This is chiefly no doubt a result of the increasing proportion of persons at unmarriageable ages in the population. The following table gives the number of marriages and the number of persons married per 1,000 of the population during the eleven years ended with 1876 :—

ANNUAL MARRIAGE RATE, 1866 TO 1876.

Year.	Per 1,000 of the Mean Population.		Year.	Per 1,000 of the Mean Population.	
	Number of Marriages.	Number of Persons Married.		Number of Marriages.	Number of Persons Married.
1866 ...	6·71	13·42	1873 ...	6·37	12·74
1867 ...	6·91	13·82	1874 ...	6·17	12·34
1868 ...	6·99	13·98	1875 ...	6·12	12·24
1869 ...	6·79	13·58	1876 ...	5·96	11·92
1870 ...	6·67	13·34			
1871 ...	6·35	12·70	Mean of		
1872 ...	6·30	12·60	eleven years	6·46	12·92

Marriage
rates in
Austral-
asian
colonies.

130. The marriage rate in Victoria is low as compared with that prevailing in all the Australasian colonies except Tasmania and Western Australia. In these two the rate is about equal to that of Victoria. The following figures give the mean marriage rate for all the colonies except Western Australia during the eleven years ended with 1875, and for Western Australia during the four years ended with 1875. The colonies are placed in order according to their marriage rates, the colony with the highest marriage rate being placed first, and that with the lowest last. All the calculations were made in the office of the Government Statist, Melbourne :—

MARRIAGE RATES IN AUSTRALASIAN COLONIES.*

Colony.	Years over which the Average extends.		Annual Marriages† per 1,000 of the Population,
	Number.	Period.	
1. Queensland ...	11	1865 to 1875	9·13
2. New Zealand ...	11	1865 to 1875	8·57
3. New South Wales ...	11	1865 to 1875	7·90
4. South Australia ...	11	1865 to 1875	7·69
5. Victoria ...	11	1865 to 1875	6·58
6. Western Australia ...	4	1872 to 1875	6·52
7. Tasmania ...	11	1865 to 1875	6·33

* For the number of marriages in the various colonies during the four years ended with 1876, see General Summary of Australasian Statistics (third folding sheet) *ante*.

† The numbers in this column doubled give the persons married in every thousand of the population.

131. The marriage rate of Victoria is lower than that of any of the countries of which particulars are given in the following table, except Ireland.* The marriage rate of Queensland is, however, higher than that in any of those countries, the marriage rate of New Zealand is higher than that in most, and the marriage rate of New South Wales is equal to that in several of them :—

Marriage rates in European countries.

MARRIAGE RATES IN EUROPEAN COUNTRIES.

Country.	Years over which the Average extends.		Annual Marriages† per 1,000 of the Population.
	Number.	Period.	
England and Wales	20	1854 to 1873	8·37
Scotland	10	1864 to 1873	7·16
Ireland*	11	1865 to 1875	5·12
Denmark	20	1854 to 1873	7·90
Sweden	20	1854 to 1873	7·07
Austria	20	1854 to 1873	8·67
Prussia	20	1854 to 1873	8·61
The Netherlands	20	1854 to 1873	7·99
France	20	1854 to 1873	7·99
Spain	10	1861 to 1870	7·55
Italy	11	1863 to 1873	7·70

132. As the marriage ceremony is generally performed in towns, whatever may be the ordinary residence of the persons marrying, it is not surprising that the marriage rate is much higher there than in the country ; but in the last three years it has been higher in extra-metropolitan towns than in Melbourne and suburbs, for which circumstance it is not easy to assign a reason. The marriages celebrated in 1876 in metropolitan and extra-metropolitan towns, and in country districts, together with the estimated mean populations of such divisions, were as follow :—

Marriage rates in town and country.

MARRIAGES IN URBAN AND COUNTRY DISTRICTS, 1876.

Districts.	Estimated Mean Population.	Marriages, 1876.	
		Total Number.	Number per 1,000 of the Population.
Melbourne and suburbs	247,079	2,113	8·55
Towns outside Melbourne and suburbs ...	191,038	1,960	10·26
Country districts	392,562	876	2·23
Total	830,679	4,949	5·96

* The registrations in Ireland are admitted by the Registrar-General to be defective. He states that, notwithstanding prosecutions are resorted to to induce a general compliance with the law, numerous cases of neglect to register births and deaths are reported ; that the registration of marriages is also unsatisfactory, owing to some of the clergy declining to sign the necessary certificates.—See 11th Detailed Report of the Registrar-General of Ireland, page 15. He also alludes to the subject in his 12th Annual Report, page 31, and suggests remedies. It is said that an approximation to the correct numbers would be obtained by adding one-third to the registered marriages and births, and one-fourth to registered deaths in that country.—See 29th Report of the Registrar-General of England, page xxiii.

† The numbers in this column doubled give the persons married in every thousand of the population.

‡ In 1873 the marriages in the United Kingdom were in the proportion of 8·03 per 1,000 of the population, viz., England and Wales, 8·80 ; Scotland, 7·79—total Great Britain, 8·67 ; Ireland, 4·82.

Marriages
in each
quarter.

133. Marriages in Victoria are almost invariably most numerous in the autumn and spring quarters, and least numerous in the summer and winter quarters. The following table shows the number and percentage of marriages in each quarter of 1876, and the mean percentage in each quarter of the ten previous years :—

MARRIAGES IN EACH QUARTER.

Seasons.	Quarter ended on the last day of—	Year 1876.		Percentage in Ten Years: 1866 to 1875.
		Number of Marriages.	Percentage.	
Summer ...	March ...	1,188	24·00	24·48
Autumn ...	June ...	1,286	25·99	25·88
Winter ...	September ...	1,204	24·33	23·96
Spring ...	December ...	1,271	25·68	25·68
	Year ...	4,949	100·00	100·00

Former con-
dition of
persons
married.

134. About four-fifths of the unions which take place are between bachelors and spinsters, next most numerous are generally those between bachelors and widows, although in 1876 these were exceeded by marriages of widowers and spinsters. Marriages between widowers and widows are generally somewhat less than a twentieth of the whole. The following are the numbers and percentage in each of these groups during 1876, and the percentage during the previous decennial period :—

FORMER CONDITION OF PERSONS MARRIED.

Previous Condition.	Year 1876.		Percentage in Ten Years: 1866 to 1875.
	Number of Marriages.	Percentage.	
Bachelors and spinsters ...	3,896	78·72	80·33
Bachelors and widows ...	375	7·58	7·91
Widowers and spinsters ...	430	8·69	7·41
Widowers and widows ...	248	5·01	4·35
Total ...	4,949	100·00	100·00

Divorced
persons.

135. 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. Three divorced males and six divorced females were married in 1876. In two of these instances the divorced couple were reunited; the other divorced male married a widow. Three of the divorced females married bachelors and the remaining female a widower.

Marriage of
an Arab and
an Irish-
woman.

136. The group showing the unions of bachelors and spinsters also contains a record of the legal marriage of an Arabian to an Irishwoman, who had previously been united by Mahometan rites.

137. Persons whose wife or husband has 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. Notwithstanding this disability, however, the provision is frequently taken advantage of. It was so in 1876 by two males and four females. Both the former married spinsters; one had not heard of his former wife for twenty and the other for twenty-five years. Two of the deserted females married bachelors, and the two others widowers; the former husbands of three had disappeared for eight and the husband of the remaining one for ten years. These people are tabulated as widowers and widows, since it is only on the assumption that their former helpmate is dead that the law does not prohibit their contracting a fresh union.

Deserted husbands and wives.

138. During the last three 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 circumstance could only happen in a country in which females are scarce as compared with males. 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 eleven years ended with 1876:—

Remarriages.

REMARRIAGES, 1866 TO 1876.

Year.	Number of Remarriages of—		Year.	Number of Remarriages of—	
	Widowers.	Widows.		Widowers.	Widows.
1866 ...	487	498	1873 ...	586	591
1867 ...	504	591	1874 ...	602	593
1868 ...	558	623	1875 ...	614	583
1869 ...	553	563	1876 ...	678	623
1870 ...	547	595			
1871 ...	587	605	Total ...	6,238	6,417
1872 ...	522	552			

139. In the case of all but 30 of the 4,949 marriages which took place in 1876 the age of both bridegroom and bride was specified. In 23 out of the 30 defective entries the age of neither party was given; in two cases the age of the husband was stated, not that of the wife, and

Ages of persons married.

in five instances the age of the wife was given, not that of the husband. The following table shows the ages of the husbands and of the wives in combination :—

AGES OF PERSONS MARRIED, 1876.

Ages of Husbands.	Ages of Wives.																		Total Husbands.		
	13 to 14.	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	...	...	...	...	...	...	...	...	...	...	...	...	...	2
18 to 19 „	2	1	1	2	1	1	...	...	...	...	...	...	...	...	...	...	...	8
19 to 20 „	1	1	13	5	2	6	...	...	...	...	...	...	...	...	...	...	...	28
20 to 21 „	1	1	8	18	25	13	30	4	...	...	...	...	...	...	...	...	...	...	100
21 to 25 „	5	14	58	121	163	201	595	125	15	1	...	...	...	...	...	...	...	...	1299
25 to 30 „	...	1	3	20	57	107	164	142	576	296	47	11	3	...	...	...	...	...	...	...	1428
30 to 35 „	1	1	2	7	19	27	66	70	256	233	86	38	5	2	...	...	...	...	...	...	813
35 to 40 „	3	11	13	22	30	124	153	87	63	14	7	2	...	...	...	...	...	529
40 to 45 „	2	3	5	4	8	49	63	57	73	47	12	4	5	...	...	...	...	332
45 to 50 „	1	1	5	5	4	17	30	39	31	37	19	7	...	...	...	...	...	196
50 to 55 „	1	...	1	1	6	10	12	12	15	19	7	3	...	1	...	...	88
55 to 60 „	1	...	1	...	...	3	3	5	6	9	17	9	4	1	...	...	...	59
60 to 65 „	2	...	1	...	1	4	3	6	4	2	...	...	...	23
65 to 70 „	1	...	...	...	...	1	...	2	1	1	1	1	...	2	...	1	...	11
70 to 75 „	2	...	...	1	1	...	1	...	...	5
Unspecified	1	1	2	...	1	...	...	...	...	...	...	...	...	23	...	28
Total wives	1	2	11	53	160	313	459	476	1664	919	350	239	135	80	37	17	5	2	1	25	4949

NOTE.—This table may be read thus :—Three men between 40 and 45 married girls between 17 and 18; two women between 50 and 55 married men between 35 and 40, &c.

Marriages of minors.

140. In Victoria, as in England and Wales, boys at the age of 14, girls at the age of 12, may, with consent of their parents or guardians, legally marry; but as a matter of fact persons in this colony very seldom do enter the marriage state at those ages. Occasionally, however, marriages take place, one of the parties to which, generally the female, is only one or two years older than the minimum age at which a legal marriage may be contracted. Such instances occurred in 1876, when a girl aged only 13 and another aged only 14 married men between 30 and 35, and a second girl aged 14 married a man between 25 and 30. The record of other marriages of mere girls appears in the table, viz. :—11 at the age of 15, and 53 at the age of 16. Of the latter, 1 married a man between 55 and 60, and another married a man between 65 and 70. Males do not, as a rule, marry so early as females, although the marriages of 2 youths at 17, and of 8 youths at 18 years of age are recorded in the table. In 1876, the total number of males marrying under 21 years of age was 138, or 1 in every 36, whilst the total number of females so marrying was 1,475, or not far short of 1 in every 3. By a comparison of these proportions with similar ones for the

previous ten years, it would appear that the tendency of both males and females to marry under age is increasing in Victoria.

141. In proportion to the total numbers marrying, more females and fewer males marry under age in Victoria than in England and Wales. This is shown by the figures in the following table:—

Marriages of minors in Victoria and England.

MARRIAGES OF MINORS IN VICTORIA AND ENGLAND AND WALES.

	In every 100 Marriages, Numbers under 21 Years of Age.		
	In Victoria.		In England and Wales.
	Year 1876.	Average of Ten Years: 1866 to 1875.	Average of Ten Years.
Bridegrooms ...	2·79	1·85	6·60
Brides ...	29·80	27·76	19·91
Mean ...	16·295	14·805	13·255

142. The number of Chinese males who married in this colony during the eleven years ended with 1876 was 197. Of these, 107 married with Australian, 43 with English, 21 with Irish, 14 with Scotch females, and only 3 with females of their own nation. The number of such marriages in 1876 was 14, which is a smaller number than that in any year since 1868. The following table shows the number of Chinamen who married and the nationalities of their brides during each of the eleven years:—

Marriages of Chinese.

NATIONALITY OF WOMEN MARRYING CHINESE MALES, 1866 TO 1876.

Birthplace of Wives.	Number of Marriages of Chinese Males.											Total in Eleven Years
	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.	1875.	1876.	
Victoria ...	2	2	2	1	7	12	5	12	7	10	10	70
Other Australian colonies	1	3	2	3	6	8	5	4	2	2	1	37
England ...	4	2	2	5	3	8	6	5	4	2	2	43
Scotland ...	2	...	2	...	...	1	1	3	1	4	...	14
Ireland ...	3	1	3	5	1	3	2	3	...	...	...	21
Other British possessions	...	...	1	...	...	...	...	...	...	...	...	1
France ...	...	...	...	...	1	...	...	...	...	...	...	1
Germany ...	...	...	...	...	...	1	1	...	...	...	...	2
Spain ...	...	...	...	...	...	...	...	...	...	1	...	1
The United States...	...	...	...	...	...	...	...	...	1	...	...	1
China ...	...	1	...	1	...	...	...	1	...	...	...	3
At sea ...	...	...	...	...	...	...	...	1	...	1	1	3
Total in each year	12	9	12	15	18	33	20	29	15	20	14	197

143. Of the marriages which took place in 1876, 93 per cent. were solemnized according to the rites of some religious sect, and 7 per cent. were performed by lay registrars. The number of lay marriages has a

Marriages by different sects.

tendency to increase, as will be seen by the following table, which gives a statement of the number and percentage of marriages celebrated by each religious sect and by lay registrars during 1876 and during the previous eleven years:—

MARRIAGES BY DIFFERENT DENOMINATIONS.

Marriages performed according to the usages of—	Marriages celebrated in—			
	Year 1876.		1865 to 1875.	
	Number.	Percentage.	Number.	Percentage.
Church of England	1,193	24·11	12,753	24·64
Presbyterians	1,037	20·95	10,820	20·90
Wesleyans	950	19·20	8,244	15·92
Independents	250	5·05	2,713	5·24
Baptists	214	4·33	1,704	3·29
Lutherans	52	1·05	564	1·09
Unitarians	1	·02	21	·04
Society of Friends ... ..	...	...	4	·01
Calvinistic Methodists	8	·16	117	·23
Roman Catholic Church	824	16·65	10,898	21·05
Jews	19	·38	203	·39
Others	44	·89	434	·84
Lay registrars	357	7·21	3,292	6·36
Total	4,949	100·00	51,767	100·00

Signing with marks.

144. There are several ways of arriving at an estimate of the proportion of the adult population able to read and write. One method is by the census, when a return of this nature is made respecting every person in the community. It may be presumed, however, that this return is not always reliable, as a very small amount of education, quite insufficient to enable its possessor to make use of it in even the smallest business relations of life, may cause him to feel justified in stating, or may cause others to feel justified in stating for him, that he is able to read and write. A severer test is that of the marriage register, to which all males and all females entering the married state are required to affix their signatures. It may reasonably be supposed that all would sign in writing if able to do so, and therefore that those who sign with marks are unable to write. In 1876 the following are the numbers of both sexes who signed with marks, and their proportion to the total numbers who married:—

SIGNING MARRIAGE REGISTER WITH MARKS, 1876.

	Numbers Married.	Signing with Marks.	
		Total Number.	Number in every 100 Married.
Bridegrooms	4,949	263	5·31
Brides	4,949	371	7·50
Mean	4,949	317	6·405

145. In proportion to the total numbers married a marked increase has taken place of late years in the number of both males and females signing the marriage register in writing. This improvement is apparent from year to year; each year, as compared with its predecessor, showing a smaller proportion of persons signing with marks. The following are the proportions in the last four years:—

Increased numbers signing in writing.

NUMBERS SIGNING WITH MARKS PER 100 MARRIED, 1873 TO 1876.

Year.	Men.	Women.
1873	6.55	9.97
1874	6.52	9.91
1875	5.48	9.43
1876	5.31	7.50

146. Comparing the year 1876 with the average of the previous eleven years a still greater improvement is made evident:—

Signing with marks, 1865 to 1876.

NUMBERS SIGNING WITH MARKS PER 100 MARRIED, 1865 TO 1876.

	Men.	Women.
Eleven years: 1865 to 1875	7.18	13.42
Year 1876	5.31	7.50

147. 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 1876 and the average of the previous eleven years. A marked improvement will be noticed in respect to all the principal sects:—

Signing with marks in each sect.

SIGNING MARRIAGE REGISTER WITH MARKS.

Marriages performed according to the usages of—	Number Signing with Marks in every 100 Married.					
	Year 1876.			1865 to 1875.		
	Men.	Women.	Mean.	Men.	Women.	Mean.
Church of England	4.11	5.87	4.99	5.49	10.57	8.03
Presbyterians	3.95	5.59	4.77	4.99	9.82	7.41
Wesleyans	5.37	4.95	5.16	5.36	9.06	7.21
Independents	1.60	4.80	3.20	5.05	10.03	7.54
Baptists	3.74	5.14	4.44	4.46	7.80	6.13
Lutherans	...	3.85	1.92	1.77	5.50	3.64
Unitarians	...	...	...	...	9.52	4.76
Calvinistic Methodists	...	12.50	6.25	...	10.26	5.13
Roman Catholics	10.32	14.56	12.44	14.23	25.32	19.77
Jews	5.26	...	2.63	1.48	3.45	2.46
Other persuasions	2.27	6.82	4.55	9.22	8.76	8.99
Lay registrars	6.44	13.16	9.80	6.59	16.31	11.45
Total	5.31	7.50	6.41	7.18	13.42	10.30

Cases of both signing with marks.

148. It is evident that, if only one party to a marriage is unable to write, the misfortune is not so great as if both parties are entirely illiterate. The marriages in which marks were made use of in 1876 numbered 559; but in only 75 of these, or about a seventh, did both parties so sign. In the 484 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 11 per cent. of the whole, in the case of only about 2 per cent. of the marriages could neither party write.

Signing with marks in Victoria and England.

149. In England and Wales during 1874, which is the latest date for which the information is available, as many as 18 males and 24 females in every 100 of the same sexes married were unable to write their names on the registers. This indicates that, in the matter of adult elementary education, the mother country is still far behind Victoria.

Births, 1876.

150. The births registered in Victoria during 1876 numbered 26,769, as against 26,720 in 1875. The excess in favor of 1876 was therefore 49.

Births in 1876 and former years.

151. A statement of the number of births in each year since the first settlement of Port Phillip will be found in the Statistical Summary of Victoria (first folding sheet) at the commencement of this work. By this it will be seen that a greater number of births than those in 1876 were registered in 1868 and in each of the five years ended with 1874, but in no other years since the first settlement of the colony.

Annual birth rate, 1866 to 1876.

152. The birth rate, like the marriage rate,* has been decreasing pretty steadily for years past. This will be seen by the following figures:—

ANNUAL BIRTH RATE, 1866 TO 1876.

			Births per 1,000 of Mean Population.				Births per 1,000 of Mean Population.
1866	...	...	39·44	1873	...	...	36·01
1867	...	...	39·41	1874	...	...	33·56
1868	...	...	40·59	1875	...	...	32·78
1869	...	...	37·36	1876	...	...	32·23
1870	...	...	38·25				
1871	...	...	37·07				
1872	...	...	35·95				
						Mean of eleven years	36·38

Birth rates in Australasian colonies.

153. The birth rate is lower in Victoria than in any of the other Australasian colonies except Western Australia and Tasmania. The following table gives the mean rate for all the colonies, except Western Australia, during the eleven years ended with 1875, and for Western Australia during the four years ended with 1875. The colonies are placed in order according to their respective birth rates. All the calculations were made in the office of the Government Statist, Melbourne:—

* See paragraph 129 *ante*.

BIRTH RATES IN AUSTRALASIAN COLONIES.*

Colony.	Years over which the Average extends.		Annual Births per 1,000 of the Population.
	Number.	Period.	
1. Queensland ...	11	1865 to 1875	42·21
2. New Zealand ...	11	1865 to 1875	40·92
3. New South Wales ...	11	1865 to 1875	39·73
4. South Australia ...	11	1865 to 1875	39·22
5. Victoria ...	11	1865 to 1875	37·26
6. Western Australia ...	4	1872 to 1875	31·56
7. Tasmania ...	11	1865 to 1875	29·91

154. By reference to the table showing the marriage rates in Australasian colonies (paragraph 130 *ante*), it may be noticed that the colonies follow precisely the same order in respect to their marriage rates as they do, according to the foregoing table, in respect to their birth rates. Order of marriage and birth rates identical.

155. The birth rate in Victoria is higher than that in France, Ireland, † Denmark, Sweden, Scotland, the Netherlands, or England; is about equal to that in Spain and Italy; is not quite so high as that in Prussia; and not nearly so high as that in Austria, which, of all European countries respecting which returns of a recent date have reached this colony, is that in which the birth rate is the highest. The birth rate in Queensland and New Zealand, however, is higher than that in Austria. The following table gives the average birth rate in all the countries named:— Birth rates in European countries.

BIRTH RATES IN EUROPEAN COUNTRIES.

Country.	Years over which the Average extends.		Annual Births per 1,000 of the Population.
	Number.	Period.	
England and Wales... ..	20	1854 to 1873	34·910
Scotland	5	1869 to 1873	34·600
Ireland †	11	1865 to 1875	26·864
Denmark	20	1854 to 1873	31·570
Sweden	20	1854 to 1873	31·945
Austria	20	1854 to 1873	40·125
Prussia	20	1854 to 1873	37·805
The Netherlands	20	1854 to 1873	34·460
France	20	1854 to 1873	26·115
Spain	10	1861 to 1870	37·150
Italy	11	1863 to 1873	37·310

156. The birth rate in 1876, as in 1875 and 1874, was highest in the extra-metropolitan towns, less high in the metropolis, and lowest of all Birth rates in town and country.

* For the number of births in the various colonies during the four years ended with 1876, see General Summary of Australasian Statistics (third folding sheet) *ante*.

† The registrations in Ireland are admitted by the Registrar-General to be defective. See footnote to paragraph 131 *ante*.

‡ In 1873 the births in the United Kingdom were in the proportion of 34·1 per 1,000 of the population, viz. :—England and Wales, 35·5; Scotland, 34·9; total Great Britain, 35·4; Ireland, 27·1.

in the country districts. It will be remembered that, as regards these divisions of the colony, the marriage rates in 1876* followed the same order as the birth rates, and this was also the case in 1875 and 1874:—

BIRTHS IN URBAN AND COUNTRY DISTRICTS, 1876.

Districts.	Births, 1876.	
	Total Number.	Number per 1,000 of Population.
Melbourne and suburbs	8,202	33·20
Towns outside Melbourne and suburbs ...	7,303	38·23
Country districts	11,264	28·69
Total	26,769	32·23

NOTE.—For mean population of the different groups of districts, see table following paragraph 132 *ante*.

Birth rates
in metro-
politan sub-
districts.

157. The following table shows the mean population, the number of births, and the birth rate during 1876, also the birth rate during the quinquennial period 1871 to 1875, in the different municipalities, &c., forming the component parts of the district of Melbourne and suburbs:—

BIRTH RATES IN MELBOURNE AND SUBURBS, 1871 TO 1876.

Sub-districts.	Year 1876.			Five Years: 1871 to 1875.
	Estimated Mean Population.	Births.		Births per 1,000 of Mean Population during the period.
		Total Number.	Number per 1,000 of the Population.	
Melbourne City †	62,000	2,067	33·34	35·63
Hotham Town	18,000	542	30·11	34·51
Fitzroy Town	17,000	598	35·18	33·11
Collingwood City	21,800	799	36·65	37·48
Richmond Town	19,000	757	39·84	35·63
Brunswick Borough	5,200	215	41·35	38·47
Prahran Town	16,520	542	32·81	33·20
Emerald Hill Town	24,500	732	29·88	34·23
Sandridge Borough	7,500	296	39·47	38·33
St. Kilda Borough	9,500	300	31·58	28·94
Brighton Borough	3,800	119	31·32	35·63
Essendon and Flemington Borough	3,100	124	40·00	40·86
Hawthorn Borough	4,500	150	33·33	38·49
Kew Borough	3,600	83	23·06	28·86
Footscray Borough	4,220	218	51·66	48·03
Williamstown Borough	7,800	315	40·38	40·23
Remainder of district	17,000	345	20·29	23·17
Shipping in Bay and River	2,039 ‡	...	...	...
Total	247,079	8,202	33·20	34·28

* See paragraph 132 *ante*.

† The Lying-in Hospital is in Melbourne City; 388 births took place in it in 1876, and 2,138 births in the previous five years.

‡ Figures showing population of shipping at last Census (2nd April 1871.)

158. It will be noticed that during the quinquennial period 1871 to 1875 the highest birth rate was in Footscray, the next in Essendon and Flemington and Williamstown; that omitting the shipping, in which no births occurred, the lowest birth rate was in the unincorporated portion of the district, the next in Kew, and the next in St. Kilda.

Sub-districts in which birth rates are highest and lowest.

159. In all parts of the world where the births are registered it is found that more males are born than females; in Victoria during 1876 the former numbered 13,759, and the latter 13,010. These numbers furnish a proportion of 106 boys to 100 girls. In the eleven years ended with 1876 the average of Victoria was 104 boys to 100 girls, which corresponds exactly with the average of England and Wales over a series of years.

Births of males and females.

160. In 197 instances twins were born during 1876, and in two instances triplets. In the eleven years ended with that year, 2,760 cases of twins, and 21 cases of triplets have been recorded, the total number of births in the same period having been 294,184. There were thus 291,382 confinements in the eleven years, and it follows that 1 mother in every 106 gave birth to twins, and 1 mother in every 13,875 brought forth three children at a birth.

Twins and triplets.

161. The children recorded as being born out of wedlock in 1876 numbered 975, or 1 to every 27 births. In the last eleven years, out of 294,184 infants born, 8,804 have been set down as illegitimate, which numbers furnish a proportion of 1 illegitimate child to every 33 births. If the fact of a birth being illegitimate is always duly entered, illegitimacy is much less rife here than in England and Wales, since in the latter, during the ten years ended with 1873, 1 child out of every 17 born was registered as illegitimate.

Illegitimate births.

162. According to a calculation, the basis of which I have more than once explained on former occasions,* it follows, from the number of births of legitimate children, that, approximately, 85,694 married women at the fruitful or child-bearing age were living in the colony during 1876, and, from the number of births of illegitimate children, that, exclusive of public prostitutes, who rarely have children, 3,239 single women, at a similar period of life, were living in concubinage. The total number of single women between 15 and 45 years of age may be estimated to have been 80,585 during the year. It therefore follows that 1 out of every 25 of these was living immorally.

Women living in concubinage.

* See *Victorian Year-Book*, 1873, paragraph 286, and *Victorian Year-Book*, 1874, paragraph 490.

Illegitimacy
in town and
country.

163. As will readily be supposed, the proportion of illegitimate births is much greater in town than in country districts. In Melbourne and suburbs it is especially great, the ratio in 1876 being 1 illegitimate child to every 17 children born, which is as high a proportion as that in England and Wales. In the extra-metropolitan towns the ratio was 1 illegitimate child to every 30 children born, or in all the urban districts taken together 1 illegitimate child to every 21 children born. The proportion in the extra-urban districts was 1 illegitimate child to every 48 children born.

Births in
each quar-
ter.

164. In Victoria births 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 favor of the former. In England and Wales births are likewise more numerous in winter than at any other season. The following are the figures and percentage for 1876, and the percentage for the previous decennial period :—

BIRTHS IN EACH QUARTER.

Seasons.	Quarter ended on the last day of—	Year 1876.		Percentage in Ten Years: 1866 to 1875.
		Number of Births.	Percentage.	
Summer ...	March ...	6,381	23·84	23·51
Autumn ...	June ...	6,710	25·06	25·06
Winter ...	September ...	7,257	27·11	27·25
Spring ...	December ...	6,421	23·99	24·18
	Year ...	26,769	100·00	100·00

Deaths, 1876.

165. The deaths in 1876 numbered 13,561, as against 15,287 in the previous year. The mortality in 1875 was the highest ever recorded in Victoria, the next highest being in 1876. After these two years the greatest number of deaths occurred in 1866 (12,286), the next in 1874 (12,222), the next in 1860 (12,061). In no other years than these did the deaths number as high as 12,000.*

Excess of
births over
deaths.

166. The births in 1876 exceeded the deaths by 13,208, or 97 per cent. In the eleven years ended with 1876 the proportion was 129 per cent. The following were the births and deaths in each of those eleven years, and the excess of the former over the latter. It will be noticed that the births more than doubled the deaths in all the years except the last two :—

* 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 1876.

Year.	Births.	Deaths.	Excess of Births over Deaths.	
			Numerical.	Centesimal.
1866 ...	25,010	12,286	12,724	per cent. 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
Mean ...	26,744	11,678	15,066	129

167. Males contributed 7,716, and females 5,845, to the total mortality. These numbers furnish a proportion of 76 females to 100 males. In the total population it has been already stated* that the proportion was 84 females to 100 males, so that more males and fewer females died than might have been expected from their relative numbers living.

168. The death rate of males and females is given in the following table for each of the eleven years ended with 1876; also the mean number of males and females living, and the number of males and females who died in each of those years. It will be observed that in every year the death rate of males was higher than that of females:—

ANNUAL DEATH RATE,† 1866 TO 1876.

Year.	Estimated Mean Population.		Number of Deaths.		Deaths per 1,000 of the Mean Population.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
1866 ...	356,460	277,617	7,016	5,270	19.68	18.98	19.37
1867 ...	362,417	287,409	6,613	5,120	18.25	17.81	18.06
1868 ...	371,817	299,405	5,865	4,202	15.77	14.03	15.00
1869 ...	384,267	312,675	6,221	4,409	16.19	14.10	15.25
1870 ...	390,480	319,359	6,114	4,306	15.66	13.48	14.68
1871 ...	404,983	333,742	5,845	4,073	14.43	12.20	13.43
1872 ...	415,605	345,386	6,308	4,523	15.18	13.10	14.23
1873 ...	424,729	355,633	6,565	4,936	15.45	13.88	14.74
1874 ...	434,073	364,615	6,994	5,228	16.11	14.34	15.30
1875 ...	442,623	372,411	8,563	6,724	19.35	18.06	18.76
1876 ...	451,134	379,545	7,716	5,845	17.10	15.40	16.33
Mean of eleven years ...					16.63	14.98	15.89

* See paragraph 32 ante.

† For total of mean population in each year, see table following paragraph 281 post; for total number of deaths, see Statistical Summary (first folding sheet) at commencement of this work; or the totals may be obtained by adding the males and females together.

Normal
death rate.

169. I mentioned last year* that it had been stated by Dr. William Farr, F.R.S., of the General Register Office, London, † who is probably the highest living authority on matters of Vital Statistics, that the annual death rate of a country ‡ may be expected to amount to 17 per 1,000 persons living; but that any excess over this rate is due to causes foreign to the mortality of human nature, which it is possible to repel by proper expedients. This dictum is, it may be presumed, based upon the supposition that the population of such a country is in a normal condition as regards age, and that it does not contain an excess of the young or the very old, or both, in which cases the mortality would assuredly be added to; nor an absence of these elements, in which event it would as certainly be diminished. Be this as it may, the mortality of England and Wales has always been much above this rate, and over the 37 years ended with 1874 it averaged 22·3 per 1,000.§ In Victoria the annual mortality rarely reaches so high as 17 per 1,000. It did so only in three years out of the eleven referred to in the last table, and over the whole period the yearly average has been under 16 per 1,000. It will be noticed that in 1876 the mortality of males exceeded 17, but that of females was under 16, and the whole mortality was only 16½ per 1,000.

Death rates
in Austral-
asian colo-
nies.

170. The following table shows the death rates in the different Australasian colonies during a series of years ended with 1875. It will be observed that the death rates in Victoria, New South Wales, and South Australia are about equal; that the two colonies in which the death rate is to a marked extent lower than in these three, are New Zealand and Tasmania; that the average death rate in Western Australia is nearly up to, and that of Queensland is above, 17 per 1,000. The colonies are placed in order according to their respective death rates, the colony with the lowest death rate being placed first, and that with the highest death rate last. All the calculations were made in the office of the Government Statist, Melbourne:—

DEATH RATES IN AUSTRALASIAN COLONIES.||

Colony.	Years over which the Average extends.		Annual Deaths per 1,000 of the Population.
	Number.	Period.	
1. New Zealand	11	1865 to 1875	12·70
2. Tasmania	11	1865 to 1875	14·69
3. South Australia	11	1865 to 1875	15·26
4. New South Wales	11	1865 to 1875	15·41
5. Victoria	11	1865 to 1875	15·92
6. Western Australia	4	1872 to 1875	16·69
7. Queensland	11	1865 to 1875	18·21

* See *Victorian Year-Book*, 1875, paragraph 342.

† See page ix of Dr. Farr's letter dated 5th February 1875, published in the Supplement to the Thirty-fifth Annual Report of the Registrar-General of England: London, Eyre and Spottiswoode, 1875.

‡ Dr. Farr refers particularly to England, but his argument would appear to apply to any country in which the climatic conditions are similar to those of England.

§ See Thirty-seventh Annual Report of the Registrar-General of England, pages lviii and lx: London, Eyre & Spottiswoode, 1876.

|| For the number of deaths in the various colonies during the four years ended with 1876, see General Summary of Australasian Statistics (third folding sheet) *ante*.

171. In all the European countries respecting which the information is at hand, except Ireland, the death rate is much higher than in any of the Australasian colonies. In Ireland the death rate is apparently lower than that in Queensland; but this may perhaps not really be the case, it being an admitted fact that the registrations of Ireland are defective* :—

Death rates in European countries.

DEATH RATES IN EUROPEAN COUNTRIES.

Country.	Years over which the Average extends.		Annual Deaths per 1,000 of the Population.
	Number.	Period.	
England and Wales ...	20	1854 to 1873	22·260
Scotland ...	5	1869 to 1873	22·400
Ireland* ...	11	1865 to 1875	17·100
Denmark ...	20	1854 to 1873	20·040
Sweden ...	20	1854 to 1873	20·115
Austria ...	20	1854 to 1873	32·085
Prussia ...	20	1854 to 1873	27·150
The Netherlands ...	20	1854 to 1873	25·715
France ...	20	1854 to 1873	24·480
Spain ...	10	1861 to 1870	29·740
Italy ...	11	1863 to 1873	30·170

NOTE.—The mortality of Denmark was increased by war in 1864; that of Sweden by cholera in 1857 and 1866; that of Austria by the same cause in 1866 and 1873, also by war in 1866; that of Prussia by cholera in 1866, and by war in 1866, 1870, and 1871; that of the Netherlands by cholera in 1859 and 1866, and by smallpox in 1871; that of France by smallpox in 1865 and 1866, and by war in 1870 and 1871.

172. By a comparison of this table with that showing the birth rates in European countries *ante*, it will be found that almost invariably the highest death rate prevails in those countries which boast the highest birth rate. This is apparently a natural law, and is explained chiefly by the fact that the mortality is swelled by the large number of infants who die. In Victoria $12\frac{1}{2}$, and in England $15\frac{1}{2}$ infants in every 100 born, die before they are a year old.

High birth rate and death rate concurrent.

173. The mortality of the towns is always greater than that of the country districts. In Melbourne and suburbs the mortality is generally somewhat higher than it is in the extra-metropolitan towns; but this was not the case in 1876, owing no doubt to the fact that before the year commenced the scarlatina epidemic which prevailed in the colony during that and the previous year had well nigh expended its force in and around Melbourne, but had not done so in the country districts. The following are the figures for the different groups of districts during 1876 :—

Deaths in town and country.

* The registrations in Ireland are admitted by the Registrar-General to be defective. See footnote to paragraph 131 *ante*.

In 1873 the deaths in the United Kingdom were in the proportion of 20·8 per 1,000 of the population, viz. :—England and Wales, 21·1; Scotland, 22·4; total Great Britain, 21·3; Ireland, 18·3.

DEATHS IN URBAN AND COUNTRY DISTRICTS, 1876.

Districts.	Deaths, 1876.	
	Total Number.	Number per 1,000 of the Population.
Melbourne and suburbs	5,396	21·84
Towns outside Melbourne and suburbs ...	4,443	23·26
Country districts	3,722	9·48
Total	13,561	16·33

NOTE.—For mean population of urban and country districts, see table following paragraph 132 *ante*.

Large mortality in towns accounted for.

174. Taking all the urban districts together, the mortality is equal to 22·46 to every 1,000 of the population. The mortality of extra-urban districts is no doubt much reduced, and that of urban districts proportionately augmented, owing to the fact that persons who, under ordinary circumstances, live in the country districts are in the habit, on the outbreak of illness which promises to be dangerous, of moving to the towns, and that many of them end their days there. This practice no doubt arises partly in consequence of the hospitals, wherein 1,537 deaths, or 16 per cent. of those which occurred in the urban districts during 1876, being generally situated in the towns, and partly because, even out of hospitals, the medical attendance and nursing sick persons would receive in towns might reasonably be supposed to be superior to that they would be able to obtain in country districts.

High death rate in towns.

175. In towns the annual mortality is always much above the normal 17 per 1,000 persons living,* and in country districts it is always very considerably below this rate.

Death rates in metropolitan sub-districts.

176. The following table shows the mean population, the number of deaths, and the death rate in 1876, and the death rate during the quinquennial period 1871 to 1875, in the different municipalities, &c., forming the component parts of the district of Melbourne and suburbs:—

DEATH RATES IN MELBOURNE AND SUBURBS, 1871 TO 1876.

Sub-districts.	Year 1876.			Five Years: 1871 to 1875.
	Mean Population.	Deaths.		
		Total Number.	Number per 1,000 of Population.	Deaths per 1,000 of Mean Population during the period.
Melbourne City †	62,000	1,865	30·08	27·78
Hotham Town ‡	18,000	372	20·67	23·35
Fitzroy Town	17,000	339	19·94	19·08

* See paragraph 169 *ante*.

† The following institutions are, or were till closed, situated in Melbourne City:—The Melbourne, Alfred, Lying-in, and Children's Hospitals, the Immigrants' Home, the Nursery Industrial Schools, the Melbourne Gaol, and the Carlton Lunatic Asylum; 833 deaths took place in these in 1876, and 3,543 in the previous five years.

‡ The Benevolent Asylum is in Hotham Town; 84 deaths took place in it in 1876, and 468 in the previous five years.

DEATH RATES IN MELBOURNE AND SUBURBS, 1871 TO 1876—
continued.

Sub-districts.	Year 1876.			Five Years : 1871 to 1875.
	Mean Population.	Deaths.		Deaths per 1,000 of Mean Population during the period.
		Total Number.	Number per 1,000 of Population.	
Collingwood City	21,800	435	19·95	20·67
Richmond Town	19,000	403	21·21	17·17
Brunswick Borough	5,200	77	14·81	15·57
Prahran Town	16,520	350	21·19	17·05
Emerald Hill Town*	24,500	396	16·16	17·23
Sandridge Borough	7,500	131	17·47	17·29
St. Kilda Borough	9,500	171	18·00	13·66
Brighton Borough	3,800	63	16·58	13·61
Essendon and Flemington Borough	3,100	52	16·77	17·91
Hawthorn Borough	4,500	94	20·89	17·35
Kew Borough †	3,600	152	42·22	27·52
Footscray Borough	4,220	86	20·38	15·94
Williamstown Borough	7,800	167	21·41	17·80
Remainder of district ‡	17,000	228	13·41	15·55
Shipping in Bay and River § ...	2,039*	15	7·36	5·10
Total	247,079	5,396	21·84	20·52

177. During the quinquennial period ended with 1875 the highest death rate was in Melbourne, which is partly accounted for by the fact of the hospitals and several other institutions, in which the death rate is above the average, being situated within the city; the next highest death rate was in Kew, but here the mortality was augmented by that which occurred in the Metropolitan Lunatic Asylum; the next was in Hotham, in which borough the mortality was increased by that which took place in the Benevolent Asylum; the next was in Collingwood, and the next in Fitzroy. The lowest death rate was in the shipping; the next in Brighton and St. Kilda; the next in the unincorporated portion of the district, and this notwithstanding the Yarra Bend Lunatic Asylum, in which the mortality is always high, is situated in this sub-district; the next was in Brunswick, and the next in Footscray.

Sub-districts in which death rate is highest and lowest.

178. The annual death rate was above 17 || per 1,000 persons living in Melbourne, Kew, Hotham, Collingwood, Fitzroy, Essendon and Flemington, Williamstown, Hawthorn, Sandridge, Emerald Hill,

Sub-districts in which death rate is above 17 per 1,000.

* The two Orphanages and the Industrial Schools are in Emerald Hill Town; 19 deaths took place in these during 1876, and 159 in the previous five years.

† The Metropolitan Lunatic Asylum is situated in Kew Borough; 108 deaths took place in it in 1876, and 220 in the previous five years.

‡ The Yarra Bend Lunatic Asylum and Pentridge Penal Establishment are in "Remainder of district;" 39 deaths took place in them during 1876, and 396 in the previous five years.

§ In H.M.V.S. *Nelson* and the Penal Hulk *Success* 1 death occurred in 1876, and 7 deaths in the previous five years. The population given is that of the shipping at last Census (2nd April 1871).

|| See paragraph 169 *ante*.

Richmond, and Prahran; and below 17 per 1,000 persons living in all the other sub-districts.

Deaths in
each month.

179. The first five months and the last month in the year are usually those in which the mortality in Victoria is greatest. In 1876, however, the order was disturbed by the scarlatina epidemic, to which allusion has already been made.* In consequence of this the mortality of each of the first seven months of the year was greater than that in December. The following are the deaths in each month, and their percentage to the total mortality in 1876, also the percentage of the deaths in each month during the decade preceding that year to the total number of deaths which occurred in the same period:—

DEATHS IN EACH MONTH.

	Year 1876.		Percentage in Ten Years: 1866 to 1875.
	Number of Deaths.	Percentage.	
January	1,313	9·68	10·79
February	1,197	8·83	9·38
March	1,450	10·69	10·62
April	1,296	9·56	9·74
May	1,300	9·59	8·54
June	1,190	8·77	7·38
July	1,138	8·39	7·58
August	995	7·34	6·96
September... ..	917	6·76	6·56
October	883	6·51	6·82
November	870	6·42	6·84
December	1,012	7·46	8·79
Year	13,561	100·00	100·00

Deaths at
each season
in Victoria
and Eng-
land.

180. The relative mortality of the different seasons is very different in Victoria from that prevailing in England and Wales. Thus the greatest mortality occurs in the summer quarter in Victoria, and in the winter quarter in England and Wales; the next greatest mortality is in the autumn quarter in Victoria, and the next generally in the spring quarter; but in England and Wales the mortality of the autumn quarter is nearly identical with that of the spring. The period of least mortality in Victoria is usually the winter quarter, and in England and Wales the summer quarter; but in Victoria during 1876, owing to the disturbing element of which mention has been more than once made,† the spring and winter quarters changed places, the deaths in the latter having been greater than those in the former. A statement of the relative mortality of the different seasons in Victoria, according to the experience of the past year and the preceding ten years, and in England and Wales,

* See paragraph 173 ante.

† See paragraphs 173 and 179 ante.

according to the experience of thirty-one years, will be found in the following table :—

RELATIVE MORTALITY OF EACH QUARTER IN VICTORIA AND ENGLAND AND WALES.

Seasons.	Victoria.		England and Wales.		Deaths per 100 at all seasons.		
	Quarter ended on the last day of—				Victoria.		England and Wales.
	Year 1876.		Average of Ten Years: 1866 to 1875.		Average of Thirty-one Years.		
Summer ...	March ...	September ...	29·20	30·80	23·24		
Autumn ...	June ...	December ...	27·92	25·67	24·65		
Winter ...	September ...	March ...	22·49	21·09	27·49		
Spring ...	December ...	June ...	20·39	22·44	24·62		
	Year ...	...	100·00	100·00	100·00	

181. The deaths of males and females in 1876 at each year of age are, in the following table, placed side by side with the estimated numbers of either sex at the same ages in the population. The percentage of those who died at each age to the total number of deaths, and the percentage of those living at each age to the total numbers living, are also shown :—

Population and deaths at each age.

POPULATION AND DEATHS AT EACH AGE, 1876.

Ages.	Estimated Mean Population at each Age, 1876.			Number of Deaths at each Age, 1876.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years ...	66,317	66,344	132,661	2,935	2,482	5,417
5 years to 10 years ...	60,226	60,803	121,029	612	617	1,229
10 " 15 " ...	48,407	48,885	97,292	241	242	483
15 " 25 " ...	56,527	61,676	118,203	363	377	740
25 " 35 " ...	69,881	56,856	126,737	409	422	831
35 " 45 " ...	82,422	47,747	130,169	791	532	1,323
45 " 55 " ...	43,489	22,849	66,338	980	426	1,406
55 " 65 " ...	16,963	9,830	26,793	678	336	1,014
65 " 75 " ...	5,684	3,682	9,366	446	223	669
75 and upwards ...	1,218	873	2,091	261	188	449
Total ...	451,134	379,545	830,679	7,716	5,845	13,561

PROPORTIONS PER CENT.

Under 5 years ...	14·70	17·48	15·97	38·04	42·46	39·94
5 years to 10 years ...	13·35	16·02	14·57	7·93	10·56	9·06
10 " 15 " ...	10·73	12·88	11·71	3·12	4·14	3·56
15 " 25 " ...	12·53	16·25	14·23	4·71	6·45	5·46
25 " 35 " ...	15·49	14·98	15·26	5·30	7·22	6·13
35 " 45 " ...	18·27	12·58	15·67	10·25	9·10	9·76
45 " 55 " ...	9·64	6·02	7·99	12·70	7·29	10·37
55 " 65 " ...	3·76	2·59	3·22	8·79	5·75	7·48
65 " 75 " ...	1·26	·97	1·13	5·78	3·81	4·93
75 and upwards ...	·27	·23	·25	3·38	3·22	3·31
Total ...	100·00	100·00	100·00	100·00	100·00	100·00

Deaths at different ages.

182. About half the males who died during the year 1876 were under 15 years of age, and more than half the females were under 10 years of age. It always happens that both males and females under 5 and above 45 years of age die in larger proportions than their numbers in the population, but at ages between 5 and 45 the proportions dying of either sex are smaller than the corresponding numbers at the same ages in the population.

Death rate at different ages in Victoria and England.

183. In 1876 the death rate of males under 5 years of age, and between 45 and 75 years of age, exceeded that of females at the same periods of life. At the age periods between 5 and 25 the death rate of males and females was about equal, but at the age periods between 15 and 45, and over 75, the death rate of females exceeded that of males. These proportions differ from those obtained during the ten years which intervened between the censuses of 1861 and 1871, which are the ten years referred to below, in which the death rate of males exceeded that of females at all periods of life except between the ages of 25 and 35. In England and Wales, according to the experience of 30 years, the death rate of males exceeds that of females at all periods except those between 10 years and 35 years. The following table gives the result of the calculations for Victoria during 1876, and during the ten years 1861 and 1871, and for England and Wales during a period of 30 years:—

MORTALITY PER 1,000 LIVING AT DIFFERENT AGES IN VICTORIA AND ENGLAND.

Ages.	Number of Deaths to every 1,000 Living, at each Age.					
	Victoria.				England and Wales.	
	Year 1876.		Average of 10 Years.		Average of 30 Years.	
	Males.	Females.	Males.	Females.	Males.	Females.
All ages	17·10	15·40	16·68	16·13	23·33	21·51
Under 5 years	44·26	37·41	55·08	49·66	72·42	62·46
5 years to 10 years	10·16	10·15	7·52	6·95	8·79	8·67
10 „ 15 „	4·98	4·95	3·27	3·25	4·95	5·10
15 „ 25 „	6·42	6·11	4·95	4·81	7·90	8·22
25 „ 35 „	5·85	7·42	7·85	8·28	9·93	10·15
35 „ 45 „	9·60	11·14	12·09	11·12	13·03	12·30
45 „ 55 „	22·53	18·64	17·52	13·20	18·16	15·67
55 „ 65 „	39·97	34·18	29·71	21·98	31·53	28·56
65 „ 75 „	78·47	60·56	53·79	43·10	68·54	57·52
75 and upwards*	214·29	215·35	111·71	93·02	147·74	135·36

Death rate of males and females.

184. In Victoria the death rate of males during 1876 exceeded that which prevailed in the ten years respecting which the rate is given at

* The figures in this line relating to England and Wales apply to males and females at from 75 to 80 only. The Victorian returns apply to all over 75.

the periods 5 to 25 and 45 and upwards, but was lower at the other periods. The death rate of females during 1876 exceeded that in the same decenniad at the periods 5 to 25 and 45 and upwards; it was about equal to that in the decenniad at the period 35 to 45, but was below it at the remaining periods.

185. At all periods of life the death rate of both males and females in Victoria during the decenniad just referred to was lower than that in England and Wales; but in 1876 the death rate of males and females at the periods 5 to 10 and 45 and upwards was higher than that in England and Wales, and the death rate of males at the period 10 to 15 was about equal to that in England and Wales.

Death rates in Victoria and England.

186. At the age of 80 or upwards, 186 persons died in 1875, and 203 persons in 1876. Of the latter, 112 were males and 91 were females; 31 had passed the age of 90, and 2 the age of 100. The following were the exact ages recorded in the registers:—

Deaths of octogenarians.

NUMBER DYING AGED 80 OR UPWARDS, 1876.

Years of Age.	Males.	Females.	Years of Age.	Males.	Females.	Years of Age.	Males.	Females.
80	20	19	88	1	3	97	...	1
81	10	10	89	6	3	98	1	...
82	16	9	90	4	7	99	1	...
83	10	10	92	1	4	100	...	1
84	15	5	93	1	2	106	...	1
85	10	8	94	1	...		—	—
86	5	1	95	...	4	Total	112	91
87	8	3	96	2	...		—	—

187. The causes of the deaths of these persons were as follow. It will be observed that 91, or 45 per cent. of the total number, were set down to old age:—

Causes of death of octogenarians.

CAUSES OF DEATH OF PERSONS AGED 80 OR UPWARDS, 1876.

	Males.	Females.		Males.	Females.
Erysipelas ...	...	1	Mortification	...	1
Carbuncle, boil	...	1	Brain diseases	...	19
Influenza ...	...	2	Heart diseases	...	5
Dysentery and diarrhoea	4	1	Lung diseases	...	16
Cholera ...	1	...	Stomach diseases	...	2
Rheumatism	2	...	Kidney diseases	...	5
Privation ...	1	...	Ulcer ...	...	1
Intemperance	...	1	Old age	...	48
Gout ...	1	...	Accidents ...	...	2
Dropsy	4	3	Unspecified cause	...	1
Cancer	2	1	Total	...	112
Tumor	...	1		...	91

188. In 1876 the mortality of infants was below the average. The numbers dying under 1 year of age amounted to 2,980; and, as the births numbered 26,769, it follows that 1 infant died to every 9 births, or 11.13 infants to every 100 births. In the decennial period 1866 to 1875 the proportion of infants dying before completing their first year was 12.60 to every 100 births.

Infantile mortality, 1876.

Infantile mortality in England and Australasian colonies.

189. The death rate of infants, although much lower than that of England and Wales, already stated to have been 15·5* to every 100 births, appears to be higher in Victoria than in several of the neighboring colonies. According to the returns of the ten years ended with 1875 it is higher than that of New South Wales, Tasmania, or New Zealand, is about equal to that of Queensland, but is very much lower than that of South Australia, which, of all the Australasian colonies which publish returns from which the information can be deduced, is the one in which the largest number of infants die in proportion to the number born. No comparison in this matter can be made with Western Australia, as the statistics of that colony do not contain any record of the number of infants who die. The following table 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 in the group, except Western Australia, for each of the ten years ended with 1875. This is the first year in which such a table has been published. All the calculations were made in the office of the Government Statist, Melbourne :—

INFANTILE MORTALITY IN AUSTRALASIAN COLONIES.

Year.	Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.		Births.	Deaths at under 1 Year of Age.	
		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.		Total Number.	Number to 100 Births.
VICTORIA.									
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
Sums and means }	267,415	33,694	12·60	199,186	20,760	10·42	51,901	6,470	12·47
NEW SOUTH WALES.									
QUEENSLAND.									
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
Sums and means }	71,465	11,216	15·69	29,992	3,031	10·10	106,661	10,913	10·23

* See paragraph 172 ante.

190. In regard to the mortality of infants, the colonies stand in the following order—the one with the lowest death rate being placed first, and the one with the highest death rate last. Western Australia is omitted, as its position in respect to infantile mortality is not known:—

ORDER OF COLONIES IN REGARD TO INFANTILE MORTALITY.

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

191. In the Lying-in Hospital, Melbourne, 388 children were born alive during 1876, and of these, 34, or nearly 9 per cent., died before leaving the institution. In 1875, 9 per cent., and in 1874, 7 per cent., of the infants born in the Lying-in Hospital died therein.

192. The average age at death during 1876 was 26·81 years, or about 26 years and 10 months, for males; and 21·84 years, or 21 years and 10 months, for females. In the previous year the average for males was 24·28 years, and for females 18·23 years; and in the twenty-three years ended with 1875 the average for males was 21·7 years, and for females 15·01 years.

193. The following are the causes of death, arranged in the order of their fatality during 1876, with the numbers who died from each cause, also the number of deaths from each cause during the twenty-two years and a half ended with 1875, and the order of fatality of the different causes during that period:—

CAUSES OF DEATH IN ORDER OF FATALITY.

(22½ Years : 1853 to 1875, and Year 1876.)

Order of Fatality.		Causes of Death in Order of Fatality, 1876.	Number of Deaths.	
22½ Years: 1853-1875.	Year 1876.		22½ Years: 1853-1875.	Year 1876.
13	1	Scarlatina	6,064	2,240
2	2	Phthisis	16,413	1,010
1	3	Accidents	17,379	685
4	4	Diarrhœa	14,501	675
3	5	Atrophy and debility	16,251	649
9	6	Diseases of the organs of circulation not classed	7,834	600
7	7	Pneumonia	8,631	530
12	8	Bronchitis	6,273	461
8	9	Convulsions	8,320	380
6	10	Typhoid fever, &c.	9,169	375
18	11	Apoplexy	3,674	318
22	12	Cancer	2,904	303
14	13	Diseases of the nervous system not classed ...	5,504	290
16	14	Premature birth	3,866	284
21	15	Cephalitis	3,393	277
25	16	Old age	2,670	269
24	17	Diseases of the digestive organs not classed ...	2,708	258
5	18	Dysentery	11,593	202

CAUSES OF DEATH IN ORDER OF FATALITY—*continued.*
(22½ Years: 1853 to 1875, and Year 1876.)

Order of Fatality.		Causes of Death in Order of Fatality, 1876.	Number of Deaths.	
22½ Years: 1853-1875.	Year 1876.		22½ Years: 1853-1875.	Year 1876.
10	19	Diphtheria	6,601	201
15	20	Enteritis	4,173	188
32	21	Congestion of the lungs, pulmonary apoplexy	1,630	182
23	22	Croup	2,885	173
20	23	Hydrocephalus	3,507	168
26	24	Childbirth and metria	2,615	165
31	25	Paralysis	1,718	163
27	26	Gastritis	1,943	136
39	27	Pleurisy	1,102	115
34	28	Want of breast-milk	1,498	108
35	29	Suicide	1,278	100
29	30	Hepatitis	1,827	95
43		Rheumatism	943	95
59	31	Nephria	506	89
47	32	Erysipelas	783	78
38	33	Aneurism	1,149	75
30	34	Dropsy	1,790	73
36	35	Peritonitis	1,232	70
11	36	Teething	6,396	67
33		Alcoholism	1,499	67
42		Malformations	955	67
48	37	Diseases of the urinary organs not classed ...	767	67
37		Diseases of the respiratory system not classed	1,212	63
45	38	Scrofula	825	61
46		Epilepsy	823	61
55		Ileus	550	61
28	39	Tabes mesenterica	1,891	60
40	40	Diseases of the stomach not classed ...	1,018	59
51	41	Jaundice, gall-stone	648	55
57	42	Pericarditis	537	50
58	43	Asthma	515	48
41	44	Cholera	1,016	45
49		Influenza, coryza, catarrh	746	45
53		Tubercular diseases not classed	589	45
65	45	Hydatids	325	37
71	46	Nephritis	249	36
44	47	Thrush	828	31
54	48	Venereal diseases	558	29
50	49	Laryngitis	665	25
60	50	Diseases of the locomotive system not classed	398	23
66		Ulceration of intestines	311	23
67		Hernia	310	23
69		Tumor	293	23
70	51	Skin diseases	264	21
68	52	Diseases of the organs of generation not classed	300	20
63	53	Privation	344	17
73		Cystitis	185	17
62	54	Ascites	359	16
65		Miasmatic diseases not classed	325	16
56	55	Quinsy	538	15
61		Murder and manslaughter	395	15
19	56	Whooping-cough	3,556	13
52		Remittent fever	636	13
75		Diabetes	163	13

CAUSES OF DEATH IN ORDER OF FATALITY—*continued.*

(22½ Years : 1853 to 1875, and Year 1876.)

Order of Fatality.		Causes of Death in Order of Fatality, 1876.	Number of Deaths.	
22½ Years : 1853-1875.	Year 1876.		22½ Years : 1853-1875.	Year 1876.
79	57	Gout	108	12
77	58	Ulcer	133	11
72	59	Purpura and scurvy	236	8
85		Paramenia	62	8
64	60	Mortification	329	7
83	61	Stone, gravel	69	6
17	62	Measles	3,828	5
80		Ovarian dropsy	83	5
82		Spleen disease	71	5
87		Stricture of the intestines	53	5
89		Ischuria	46	5
71	63	Insanity	249	4
81		Ague	73	4
88		Carbuncle, boil	47	4
90	64	Phlegmon, whitlow	42	4
76		Intussusception	138	3
84	65	Execution	67	3
74		Diathetic diseases not classed	165	2
91		Chicken-pox, &c.	38	2
94	66	Dietic diseases not classed	23	2
94		Ostitis, periostitis	23	2
86	67	Worms	54	1
93		Chorea	33	1
78	...	Arthritis	115	...
86	...	Noma	54	...
92	...	Fistula	34	...
95	...	Smallpox	21	...
96	...	Parasitic diseases not classed	16	...
97	...	Pancreas disease	12	...
98	...	Developmental diseases of children not classed	11	...
99	...	Polypus	7	...
100	...	Glanders	2	...
101	...	Developmental diseases of adults not classed	1	...
Deaths from specified causes			221,559	13,536
Deaths from unspecified causes			1,532	25
Deaths from all causes			223,091	13,561

194. 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 diseases are arranged in classes and orders. The Victorian results relate to the year 1876 and to the twenty-two years and a half ended with 1875, and the results for England and Wales to the twenty-five years ended with 1874:—

Death rate from each group of causes in Victoria and England.

**ANNUAL DEATH RATE FROM EACH GROUP OF CAUSES 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 1876.	Average of 22½ Years: 1853 to 1875.	Average of 25 Years: 1850 to 1874.
		All causes	1,632·52	1,695·14	2,228·28
		Specified causes	1,629·51	1,682·67	2,205·66
I.	...	Zymotic diseases	547·62	526·01	503·87
II.	...	Constitutional diseases	212·36	219·30	420·54
III.	...	Local "	596·98	546·75	849·97
IV.	...	Developmental "	175·88	245·41	355·15
V.	...	Violent deaths	96·67	145·20	76·13
I.	1	Miasmatic diseases	511·51	485·13	478·94
	2	Enthetic "	3·49	4·25	7·47
	3	Dietic "	24·32	27·34	11·36
	4	Parasitic "	8·30	9·29	6·10
II.	1	Diathetic "	50·56	42·91	84·25
	2	Tubercular "	161·80	176·39	336·29
III.	1	Diseases of the nervous system	179·85	180·10	280·79
	2	" circulatory "	87·28	72·30	94·97
	3	" respiratory "	171·43	152·10	327·31
	4	" digestive "	120·02	116·86	100·53
	5	" urinary "	28·05	15·08	27·23
	6	" generative "	3·01	2·91	5·70
	7	" locomotive "	3·01	4·07	7·74
	8	" integumentary "	4·33	3·33	5·70
IV.	1	Developmental diseases of children	50·32	85·27	87·01
	2	" " adults... ..	15·05	16·44	11·63
	3	" " old people	32·38	20·28	137·37
	4	Diseases of nutrition	78·13	123·42	119·14
V.	1	Accident or negligence	82·46	131·99	} 76·13
	3	Homicide	1·81	3·00	
	4	Suicide	12·04	9·70	
	5	Execution	·36	·51	

Death rates from certain causes in Victoria and England.

195. Twenty of the principal causes of death are selected, and the proportion of their victims to the total population of Victoria and of England and Wales are given for the same periods :—

ANNUAL DEATH RATE FROM CERTAIN DISEASES IN VICTORIA AND ENGLAND AND WALES.

Causes of Death.	Number of Annual Deaths per 100,000 of Mean Population.		
	Victoria.		England and Wales.
	Year 1876.	Average of 22½ Years: 1853 to 1875.	Average of 25 Years: 1850 to 1874.
Measles	·60	29·07	42·82
Scarlatina	269·66	46·05	103·80
Diphtheria	24·20	50·13	
Croup	20·83	21·91		24·06
Whooping-cough	1·56	27·01	51·46
Typhoid fever, &c.	45·14	69·64	86·62
Dysentery	24·32	88·05	6·72
Diarrhœa	81·26	110·13	89·06
Dropsy	8·79	13·59	38·51
Cancer, &c.	36·48	22·06	36·92
Phthisis	121·59	124·65	256·72
Hydrocephalus	20·22	26·63	37·07
Brain diseases, &c.	179·85	180·10	280·79
Heart diseases, &c.	87·28	72·30	94·97
Lung diseases, &c.	171·43	152·10	327·31
Stomach, bowels—diseases, &c.	120·02	116·86	100·53
Kidney, bladder—diseases, &c.	28·05	15·08	27·23
Old age	32·38	20·28	137·37
Atrophy and debility	78·13	123·42	119·14
Childbirth and metria	19·86	19·86	17·19

196. Taking the average of a series of years in both countries, it will be found by means of the results shown in the two foregoing tables that the mortality from the following causes is greater in Victoria than in England and Wales:—Zymotic diseases of the miasmatic order (chiefly dysentery and diarrhœa) and of the dietic and parasitic orders, diseases of the digestive system, atrophy and debility, violence, and the consequences of childbirth. The death rate from every other cause shown, also that from all causes, is greater in England and Wales than in Victoria. Results compared.

197. During the twenty-three years and a half which have elapsed since deaths were first registered in Victoria, more deaths have been Phthisis most fatal of all diseases.

caused by accidents than by any regular disease. For a number of the years, however, prior to 1875, more deaths were set down to phthisis than to accidents or to any other cause. But in 1875 the colony was visited by an epidemic of measles, which caused 1,541 deaths, as against 1,027 from phthisis; and in 1876 by an epidemic of scarlatina, which caused 2,240 deaths, as against 1,010 from phthisis. These are, however, exceptional instances, as such epidemics happily occur but seldom. As, moreover, the liability to death from accidents is not now nearly so great as it was formerly, especially in the early days of the goldfields, it may fairly be stated that, taking one year with another, of all the circumstances which cause death, not one is so fatal in Victoria as phthisis.

Death rate
from
phthisis.

198. The uniform rate at which deaths from phthisis occur in Victoria, in proportion to the population, has been pointed out by me in previous Year-Books.* For many years past this proportion has never been so low as 11, or so high as 13, per 10,000 persons living. During the last eleven years the number of deaths and the death rate from this complaint have been as follow :—

DEATHS FROM PHTHISIS, 1866 TO 1876.

Years.	Deaths from Phthisis.	
	Total Number.	Number per 10,000 Persons Living.†
1866	782	12·33
1867	793	12·20
1868	746	11·11
1869	893	12·81
1870	888	12·51
1871	841	11·38
1872	876	11·51
1873	945	12·11
1874	1,011	12·66
1875	1,027	12·60
1876	1,010	12·16
Total in eleven years	9,812	12·13

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

* See my remarks upon the subject of phthisis in this colony in the *Victorian Year-Book*, 1873, paragraph 320 to paragraph 322; in the *Victorian Year-Book*, 1874, paragraphs 512 and 513; and in the *Victorian Year-Book*, 1875, paragraphs 362 and 363.

† For figures of mean population used in making these calculations, see table following paragraph 281 *post.*

199. The following table shows the sexes of those who died of phthisis in 1876, their ages, and the length of time they had lived in the Australasian colonies :—

Age and period of residence in Australasia.

DEATHS FROM PHTHISIS, 1876.—AGE AND PERIOD OF RESIDENCE IN AUSTRALASIAN COLONIES.

Period of Residence in Australasian Colonies.	Age at Death.										Total.
	Under 5 years.	5 to 10.	10 to 15.	15 to 25.	25 to 35.	35 to 45.	45 to 55.	55 to 65.	65 to 75.	75 and upwards.	
MALES.											
Under 1 month	2	3	1	...	...	...	...	6
1 month to 6 months	5	5	2	1	...	...	...	13
6 months to 12 „	3	3	...	2	...	...	...	8
1 year to 2 years	4	8	...	1	...	...	...	13
2 years to 3 „	3	4	1	...	...	...	...	8
3 „ 4 „	2	3	1	...	...	...	...	6
4 „ 5 „	1	4	2	2	...	...	...	9
5 „ 10 „	1	16	13	4	3	1	...	38
10 „ 15 „	4	17	29	9	1	2	...	62
15 „ 20 „	5	12	37	22	3	1	...	80
20 „ 25 „	3	16	59	59	22	9	...	168
25 „ and upwards	5	11	15	26	4	2	63
Not known (not Australians)	1	3	10	6	4	1	...	25
Born there ...	9	3	2	51	19	5	...	...	...	...	89
Not known (no information respecting birthplace)	1	3	2	3	9	2	...	...	20
Total ...	9	3	3	88	120	174	130	61	18	2	608
FEMALES.											
Under 1 month
1 month to 6 months	4	...	...	...	...	...	4
6 months to 12 „
1 year to 2 years	2	3	...	...	...	...	...	5
2 years to 3 „	2	1	...	...	...	...	3
3 „ 4 „	1	...	2	...	...	...	...	3
4 „ 5 „	2	1	...	1	...	...	4
5 „ 10 „	5	8	12	...	...	...	...	25
10 „ 15 „	7	18	11	5	2	...	...	43
15 „ 20 „	5	18	19	12	2	2	...	58
20 „ 25 „	6	17	31	25	7	3	...	89
25 „ and upwards	1	12	14	11	6	1	1	46
Not known (not Australians)	1	1	...	3	...	...	5
Born there * ...	2	5	9	66	15	6	1	...	...	...	104
Not known (no information respecting birthplace)	1	5	5	1	1	...	...	13
Total ...	2	5	9	94	105	103	55	22	6	1	402

* Two of the entries in this line refer to Aboriginal females, one of whom was between 25 and 35, and the other between 35 and 45 years of age.

Mortality
from
phthisis in
Australia.

200. It is very commonly contended, not only that the climate of the Australasian colonies is particularly favorable to the cure of phthisis, but that the complaint is rarely, if ever, met with there, except in the case of persons who were affected with it before their arrival. For the sake of phthisical persons in the mother country and elsewhere, many of whom doubtless expect to obtain relief or cure by going to Australia, it is to be regretted that this theory is not borne out by facts, for of those who died of phthisis in Victoria during 1876, as shown by the above table, 20 per cent were Australians by birth, and of the remainder, the probability is greatly in favor of a large proportion having contracted the complaint in these colonies, since 89 per cent. had taken up their abode there for more than five years, and 81 per cent. for more than ten years, prior to their death. It is thus evident that no immunity is enjoyed, at any rate by this portion of Australia, in regard to the development of phthisis.

Mortality
from
phthisis in
Melbourne
and Eng-
land.

201. It is true that the death rate from this complaint is not so high in Victoria as it is in England, but there are many reasons why this should not be the case, without allowing that the climate and circumstances of the former are any more favorable to consumptive patients than those of the latter; these I fully entered into last year,* when I also showed that, in respect to the mortality from phthisis, it was fairer to compare England and Wales with the district of Melbourne and suburbs, than with the whole of Victoria. In that district the deaths from phthisis, as shown by an average made up from the returns of the last four years, have borne a higher proportion to the mean population of the period than the deaths from phthisis in England and Wales during 1874 bore to the population of that country during the same year. The following are the figures:—

DEATHS FROM PHTHISIS PER 10,000 PERSONS LIVING.

MELBOURNE AND SUBURBS.						
1873	...	20·51	|	1876	...	22·46
1874	...	22·04	|			
1875	...	21·46	|		Mean	21·62
ENGLAND AND WALES.						
1874	21·04

Age at death
from
phthisis.

202. The table following paragraph 199 also shows that 86 per cent. of those who died of phthisis in Victoria during 1876 were between 15 and 55 years of age, that 11 per cent. were upwards of 55 years of age, but that only 3 per cent. were under 15 years of age. Of those at the last-mentioned age, all those whose nationality was known were natives of the Australasian colonies.

* See Victorian Year-Book, 1875, paragraph 363.

203. It is further shown by the same table that 608 of those who died of phthisis in 1876 were males, and 402 were females. These numbers furnish a proportion of 66 females to 100 males. Females in the whole population were in the proportion of 84 females to 100 males. Thus more males and fewer females died of phthisis than might have been expected from their relative numbers in the population. It is probable, however, that males at the phthisical ages bore a higher proportion to the total number of males living in the colony, than females at those ages bore to the total number of females.

Sex of those who died of phthisis.

204. The mortality in 1876 was greatly increased by the prevalence of the scarlatina epidemic, to which reference has several times been made.* This epidemic commenced in 1875, and was continued during 1876. The following are the total deaths set down to its effects in the two years:—

Scarlatina epidemic, 1875 and 1876.

DEATHS FROM SCARLATINA.

1875	...	...	...	...	...	985
1876	...	...	...	...	...	2,240
Total						3,225

205. Estimating the average population of the biennial period at 830,000, it would follow that 1 person in every 257 persons in the colony succumbed to this complaint.

Deaths caused by epidemic.

206. The following are the ages and sexes of the persons who fell victims to this epidemic in the two years; it will be observed that more females died than males, also that 82 per cent. of the deaths were of children between the ages of 1 and 10:—

Age and sex of victims to scarlatina.

AGE AND SEX OF PERSONS WHO DIED OF SCARLATINA, 1875 AND 1876.

Ages.	Number who died of Scarlatina.		
	Males.	Females.	Total.
Under 1 year	83	80	163
1 to 5 years	833	772	1,605
5 to 10	482	567	1,049
10 to 15	122	134	256
15 to 20	37	35	72
Over 20	32	48	80
Total	1,589	1,636	3,225

207. Each year a certain mortality occurs from scarlatina, but the deaths from it in 1876 amounted to a number equivalent to considerably more than a third of the deaths which scarlatina had caused in the previous twenty-two years and a half, and the deaths from it in 1875 and 1876 together amounted to a number equal to considerably more than half the deaths which the complaint had caused in the twenty-one years and a half ended with 1874.

Deaths from scarlatina.

* See paragraphs 173, 179, and 180 ante.

Deaths from measles.

208. In 1874 and 1875 measles prevailed in an epidemic form, and in those two years caused 1,797 deaths, besides a number of deaths from diarrhoea and other complaints which supervened upon measles. This complaint appears to have died out with 1875, as only 5 deaths were set down to it in 1876.

Deaths from diphtheria.

209. Deaths from diphtheria numbered 201 in 1876, which was 38 less than in 1875, and was a smaller number than had taken place in any year since 1858, that being the period at which this complaint first made its appearance in Victoria.

Deaths from whooping-cough.

210. Whooping-cough caused 13 deaths in 1876, as against 58 in 1875. In both years the mortality from this complaint was much below the average.

Deaths from dysentery.

211. An increased mortality from dysentery took place in 1875, but this again fell in 1876. The numbers were 509 in the former, and 202 in the latter year. The mortality from this complaint in 1876 was lower than it had been in any year since deaths were first registered in this colony in 1853.

Deaths from diarrhoea.

212. Deaths from diarrhoea, which numbered 846 in 1874, and 1,002 in 1875, fell to 675 in 1876. The increase in the two first-named years is only what might have been expected in a period when a measles epidemic prevailed. A similar increase took place at the period of the former epidemic of measles in 1866 and 1867.

Deaths from children's zymotic diseases, 1864 to 1876.

213. The following table shows the number of deaths from measles, scarlatina, diphtheria, whooping-cough, dysentery, and diarrhoea, during each of the last thirteen years. The epidemic periods will be readily traced by the increased number of deaths:—

**DEATHS FROM ZYMOTIC DISEASES CHIEFLY AFFECTING CHILDREN,
1864 TO 1876.**

Year.	Number of Deaths from—						
	Measles.	Scarlatina.	Diphtheria.	Whooping-cough.	Dysentery.	Diarrhoea.	Total.
1864	7	278	451	25	243	528	1,532
1865	11	215	391	304	402	864	2,187
1866	427	462	331	365	525	1,027	3,137
1867	630	621	334	205	430	986	3,206
1868	24	460	451	243	220	640	2,038
1869	24	224	493	100	306	858	2,005
1870	3	24	418	50	244	706	1,445
1871	4	27	255	318	316	626	1,546
1872	7	135	320	227	424	747	1,860
1873	1	188	420	299	357	629	1,894
1874	256	120	375	151	325	846	2,073
1875	1,541	985	239	58	509	1,002	4,334
1876	5	2,240	201	13	202	675	3,336
Total in thirteen years	2,940	5,979	4,679	2,358	4,503	10,134	30,593

214. Deaths from typhoid fever were not so numerous in 1876 as they were in 1875 and 1874, but more numerous than in the previous three years. This complaint generally presses more heavily upon females than upon males. In the eleven years ended with 1876 the sexes died of it in nearly equal numbers, whereas such an approach to equality was never reached in the whole population, and in the last four years the females who died of it have actually exceeded the males. The following deaths of males and females from typhoid fever occurred in the eleven years ended with 1876 :—

DEATHS FROM TYPHOID FEVER, 1866 TO 1876.

Year.	Number who died of Typhoid Fever.		
	Males.	Females.	Total.
1866	278	250	528
1867	246	209	455
1868	162	133	295
1869	185	175	360
1870	212	204	416
1871	135	134	269
1872	174	149	323
1873	135	147	282
1874	216	254	470
1875	211	244	455
1876	166	209	375
Total	2,120	2,108	4,228

215. Atrophy and debility, which are termed diseases of nutrition, are very commonly set down as the causes of the deaths of infants and young children. There is reason to believe, however, that the terms are frequently entered as supplying a convenient expression to indicate the cause of death when the nature of the actual complaint is unknown to the medical man. The deaths under this head numbered 649 in 1876, of which 344 were of males, and 305 of females ; 541 were of infants under one year of age, of whom 255 were less than a month old. The following figures express the number of deaths recorded as occurring from these complaints in each of the eleven years ended with 1876 :—

DEATHS FROM ATROPHY AND DEBILITY, 1866 TO 1876.

1866	817	1873	714
1867	746	1874	739
1868	665	1875	762
1869	723	1876	649
1870	790		
1871	679	Total in eleven years	7,976
1872	692		

Deaths in
childbed.

216. The deaths of women from the consequences of childbearing were fewer in 1876 than in 1875, 1874, or 1873, but exceeded those in any other year of the previous decenniad. The following table shows the number of such deaths in each of the last eleven years, and their proportion to the number of births in the same years. Deaths from metria or puerperal fever are distinguished from those which were caused by other circumstances attendant on childbirth :—

DEATHS OF WOMEN IN CHILDBIRTH, 1866 TO 1876.

Year.	Number of Mothers who died of—			Deaths of Mothers to every 10,000 Children Born Alive.
	Childbirth.	Metria.	Total.	
1866	112	26	138	55·18
1867	117	20	137	53·50
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
Total in eleven years	1,312	408	1,720	58·47

Deaths in
childbed in
Victoria
and Eng-
land.

217. Over the whole period of eleven years the proportion of deaths of women in childbed was 1 to every 171 births, but in 1876 the proportion was 1 to every 162 births. In 1875 the proportion was 1 to every 113 births, and in 1874 it was 1 to every 107 births. All these proportions are higher than those obtaining in England and Wales, where, in the twenty-eight years ended with 1874, 200 births occurred on the average to each death of a mother.

Deaths of
women in
Lying-in
Hospital.

218. In 1876, 407 women were confined in the Melbourne Lying-in Hospital, and 388 infants were born alive. Six deaths of mothers occurred during or shortly after delivery. Thus 1 death of a mother occurred to every 65 births.

Violent
deaths,
1876.

219. Deaths from violence in 1876 numbered 803, of which 685 were set down to accidents, 15 to homicide, 100 to suicide, and 3 to execution. In 1875, 911 violent deaths occurred, or 108 more than in the year under review.

Violent
deaths in
detail.

220. 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 1876 and the previous decenniad, the sexes of those who died being distinguished :—

VIOLENT DEATHS, 1866 TO 1876.

Cause of Death.	Year 1876.			Ten Years: 1866 to 1875.		
	Males.	Females.	Total.	Males.	Females.	Total.
Accidents :—						
Fractures, contusions	265	20	285	3,166	239	3,405
Gunshot wounds ...	12	2	14	} 193	29	222
Cuts, stabs, &c. ...	15	1	16			
Burns and scalds ...	36	48	84	398	490	888
Sunstroke ...	20	4	24	125	55	180
Lightning ...	1	...	1	20	5	25
Poison ...	15	5	20	110	50	160
Snake, insect bite ...	4	...	4	29	15	44
Drowning ...	153	27	180	1,679	385	2,064
Suffocation ...	33	16	49	492	227	719
Others ...	6	2	8	83	17	100
Total ...	560	125	685	6,295	1,512	7,807
Homicide ...	9	6	15	130	75	205
Suicide :—						
Gunshot wounds ...	7	...	7	77	1	78
Cuts, stabs ...	19	4	23	137	20	157
Poison ...	12	5	17	131	42	173
Drowning ...	22	10	32	111	56	167
Hanging ...	17	2	19	192	13	205
Otherwise ...	2	...	2	14	5	19
Total ...	79	21	100	662	137	799
Execution ...	3	...	3	32	...	32
Grand Total ...	651	152	803	7,119	1,724	8,843

221. During the eleven years ended with 1876, 73,536 males and 54,513 females died of specified causes; and it results from these figures and those in the above table, that, of the males, 1 in every 9 died a violent death; 1 in every 11 died of an accident; 1 in every 529 was a victim to homicide; 1 in every 88 committed suicide; and 1 in every 2,101 was executed. Of the females, 1 in every 29 died a violent death; 1 in every 33 died of an accident; 1 in every 673 died by the hand of another; 1 in every 398 committed suicide; but, happily, not one was executed.

Violent deaths in proportion to population.

222. Males are much more subject to deaths from external causes than females. Of those who died from such causes in 1876, 651, or 81 per cent., belonged to the male, and 152, or 19 per cent., to the female sex.

Violent deaths of males and females.

223. Omitting fractions, it may be stated roughly 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

Violent deaths: proportion of males and females.

murdered, about 2 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. In the eleven years to which reference is made in the table, 35 males were executed.

224. 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.

225. More suicides than usual took place in 1876. The number in that year was 100. The yearly average in the previous decenniad was 80.

226. The most common mode by which men commit suicide is by hanging, the next by cutting or stabbing, the next by taking poison, the next by drowning, the next by shooting. Females most frequently take their lives by drowning, next so by taking poison, next by cutting or stabbing, next by hanging, and only once in the 158 cases named in the table by shooting.

227. There are 32 general hospitals in Victoria, 8 of which are also benevolent asylums. The total number of cases of sickness treated in these institutions during 1876 was 14,774, and the number of deaths was 1,537. In the previous year the cases of sickness treated numbered 14,484, and the deaths 1,485.

228. 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, and the proportion of deaths to cases in each hospital during the year 1876:—

SICKNESS AND MORTALITY IN GENERAL HOSPITALS, 1876.

Name of Hospital.	Number of Cases treated.	Number of Deaths.	Percentage of Mortality.
Alexandra	31	4	12·90
Amherst	260	30	11·54
Ararat	304	19	6·25
Ballarat	1,001	109	10·89
Beechworth	592	45	7·60
Belfast	55	4	7·27
Bendigo	1,280	128	10·00
Castlemaine	882	48	5·44
Clunes	194	7	3·61
Creswick	246	14	5·69
Daylesford	184	16	8·69
Dunolly	284	38	13·38
Geelong	1,150	99	8·61
Hamilton	353	21	5·95
Heathcote	68	7	10·29
Horsham	167	21	12·57
Inglewood	345	23	6·67

Burns and scalds.

Suicides, 1876.

Modes of committing suicide.

Sickness and deaths in general hospitals.

Death rate in each hospital.

SICKNESS AND MORTALITY IN GENERAL HOSPITALS, 1876—*continued.*

Name of Hospital.	Number of Cases treated.	Number of Deaths.	Percentage of Mortality.
Kilmore	136	18	13·23
Kyneton... ..	308	27	8·76
Maldon	54	8	14·81
Mansfield	62	3	4·84
Maryborough	524	47	8·97
Melbourne	3,723	580	15·58
Melbourne (Alfred)	1,035	96	9·28
Pleasant Creek	374	26	6·95
Portland... ..	68	6	8·82
Sale	252	26	10·32
St. Arnaud	189	14	7·41
Swan Hill	180	15	8·33
Wangaratta	320	25	7·81
Warrnambool	82	11	13·41
Wood's Point	71	2	2·82
Total	14,774	1,537	10·40

229. It will be observed that, in proportion to the cases treated, the greatest mortality occurred in the Melbourne Hospital, the next in the Maldon, the next in the Warrnambool, the next in the Dunolly, and the next in the Kilmore Hospital; also that the smallest mortality, in proportion to the cases treated, was in the Wood's Point Hospital, the next in the Clunes, the next in the Mansfield, the next in the Castlemaine, the next in the Creswick, and the next in the Hamilton Hospital.

Hospitals in which death rate was highest and lowest.

230. The patients treated in the Hospital for Diseases of Women and Children attached to the Lying-in Hospital numbered 182 in 1875, and 213 in 1876. The deaths in the same institution numbered 9 in the former, and 7 in the latter year. Therefore, 1 patient in 20 died in 1875, and 1 in 30 in 1876.

Sickness and deaths in hospital for women.

231. In the Melbourne Lying-in Hospital 469 women were confined in 1875, and 407 in 1876. Seven died in the former year, and 6 in the latter. Thus, 1 woman in 67 died in 1875, and 1 woman in 68 in 1876.*

Deaths in Lying-in Hospital.

232. In the Melbourne Hospital for Sick Children 88 cases were treated, and 11 deaths occurred in 1875; 118 cases were treated, and 17 deaths occurred in 1876. These numbers furnish proportions of 1 death to every 8 patients in the former, and 1 death to every 7 patients in the latter year.

Sickness and deaths in children's hospital.

233. Cases of sickness in benevolent asylums numbered 2,252 in 1875, and 2,421 in 1876; deaths numbered 202 and 152. The deaths

Sickness and deaths in benevolent asylums.

* Besides these deaths, which are of women only, 39 infants died in the institution in 1875, and 34 in 1876.

were thus to the cases treated in the proportion of 1 to 11 in the former, and 1 to 16 in the latter year.

Sickness and deaths in Immigrants' Home.

234. In the Melbourne Immigrants' Home the cases of sickness in 1875 amounted to 412 and the deaths to 64, or 1 death to every 6 cases of sickness. In 1876 the cases of sickness in this institution numbered 649, and the deaths 67, or 1 death to every 10 cases of sickness.

Sickness and deaths in orphan asylums.

235. In 1875 the cases of sickness in orphan asylums numbered 796, and the deaths 21. In 1876, these numbers were 449 and 22 respectively. Thus, in 1875, 1 death occurred to every 38 cases of sickness, and, in 1876, 1 death to every 20 cases of sickness.

Sickness and deaths in lunatic asylums.

236. In lunatic asylums during 1875 the cases of sickness numbered 1,610, and during 1876 they numbered 1,779. The deaths amounted to 167 at the former period, and 185 at the latter, or an average of 1 death to about every 10 cases of sickness at both periods.

Sickness and deaths in industrial schools.

237. The cases of sickness treated in the Industrial and Reformatory Schools numbered 2,100 in 1875, and 29 deaths occurred. In 1876, 1,295 cases were treated, and 20 deaths took place. The deaths were, therefore, to the cases of disease in the proportion of 1 to every 72 in the former, and of 1 to every 65 in the latter year.

Sickness and deaths in gaols.

238. In gaols and penal establishments 6,673 cases of sickness occurred in 1875, and 5,363 in 1876. The deaths in these two years respectively were 39 and 62. Thus, 1 death occurred to every 171 cases in 1875, and 1 death to every 87 cases in 1876. The proportions of deaths to cases of sickness are smaller in these than in any other public institutions; but it is also probable that the cases of sickness dealt with are, on the average, of a lighter character than those treated in the other institutions.

Deaths in public institutions.

239. The deaths in public institutions of all descriptions were as follow in 1876:—

DEATHS IN PUBLIC INSTITUTIONS, 1876.

Number of Deaths.		Number of Deaths.	
General hospitals ...	1,537	Hospitals for the insane ...	185
Hospital for Diseases of Women and Children ...	7	Female refuges ...	1
Lying-in Hospital ...	40*	Industrial and reformatory schools ...	20
Hospital for Sick Children ...	17	Gaols ...	53
Benevolent asylums ...	152	Penal establishments ...	9
Melbourne Immigrants' Home	67		
Orphan asylums ...	22	Total ...	2,110

NOTE.—In 1876 no death occurred in the Blind Asylum, the Deaf and Dumb Asylum, or the Eye and Ear Hospital.

Proportion of deaths in public institutions.

240. It will be observed that the number of deaths in public institutions in 1876 was 2,110. This number furnishes a proportion of 1 to

* This includes the deaths of 34 children born in the institution.

every $6\frac{1}{2}$ deaths which took place in Victoria during the year. It thus follows that 10 out of every 65 persons who died in 1876 ended their days in a penal or charitable institution. The deaths in such institutions were in 1875 in the proportion of 1 to every $7\frac{1}{3}$, and in 1874 and 1873 of 1 to every 6 which took place in the whole colony.

241. The number of cases of successful vaccination in 1876 was 21,504; and, as the number of births was 26,769,* it appears that 80 per cent. of the children born were vaccinated. Part of the remainder are accounted for by death—1,463, or $5\frac{1}{2}$ per cent. of those born, having died before they were 3 months old, and 2,061, or 8 per cent., before they were 6 months old. The vaccinations amounted in 1875 to 82 per cent. of the births, in 1874 to 83 per cent., and in 1873 to something less than 80 per cent.

Vaccinations.

242. The following are the results of meteorological observations taken at different stations throughout the colony during 1876. 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, 1876.

METEOROLOGICAL OBSERVATIONS AT VARIOUS STATIONS, 1876.

Stations.	Height above Sea-level.	Temperature in the Shade.		
		Max.	Min.	Mean.
	feet.	°	°	°
Portland	37·0	...	...	61
Melbourne	91·3	111	29	57
Cape Otway	270·0	101	37	55
Sandhurst	758·0	111½	30	59
Ararat	1,050·0	...	...	...
Ballarat	1,438·0	109½	28	55

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	29·98	169	29·29	·79	4·2
Melbourne	29·93	134	24·04	·70	5·8
Cape Otway	29·73	137	31·45	·91	7·6
Sandhurst	29·23	69	14·00	·74	4·7
Ararat ... ..	...	82	19·01	...	...
Ballarat	28·46	102	24·15	·65	5·6

* All these could not be vaccinated within the year, but the deficiency thus caused would probably be about counterbalanced by those born in the former year and vaccinated in 1876.

Meteorology,
1866 to 1876.

243. The following are the results for Melbourne in each of the eleven years ended with 1876 :—

METEOROLOGICAL OBSERVATIONS AT MELBOURNE.—RETURN FOR
ELEVEN 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.	Amount of Cloud.
	Max.	Min.	Mean.					
	°	°	°	inches.	No.	inches.	0-1.	0-10.
1866	108	28	58	29·95	107	22·41	·70	5·5
1867	108	30	58	29·92	133	25·79	·72	5·7
1868	110	27	57	29·98	120	18·27	·70	5·7
1869	108	27	57	29·94	129	24·59	·71	6·0
1870	109	30	57	29·93	129	33·76	·74	5·8
1871	106	32	58	29·92	125	30·17	·74	5·9
1872	103	32½	58	29·92	136	32·52	·74	6·4
1873	102	30	58	29·94	134	25·61	·72	6·0
1874	103	29	57	29·93	134	28·10	·72	6·1
1875	110	31	57	29·89	158	32·87	·72	6·2
1876	111	29	57	29·93	134	24·04	·70	5·8

Meteorology
elsewhere
treated on.

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

PART V.—PRODUCTION.

Disposal of
Crown
lands.

245. An account of the various changes which have taken place in the mode of disposing of the Crown lands of this colony was given in the *Victorian Year-Book*, 1874.* No alteration has been made in the system since the publication of that work.

Land Act
1869.

246. The Land Act now in force is that of 1869 (33 Vict. No. 360). Under this Statute an extent of land not exceeding 320 acres is allowed to be selected by one person. The selection is held under license for three years, within which period the licensee must reside on his selection at least two years and a half, must enclose it, cultivate 1 acre out of every 10 acres, and generally effect improvements to the value of 20s. per acre. The rent payable during this period is 2s. per acre per annum, which is credited to the selector as part payment of the principal. At the expiration of the three years' license, the selector, if he obtain a certificate from the Board of Land and Works that he has

* Paragraphs 366 to 370.