

period of the first discovery of gold in 1851 to the end of 1873 :—

					£
Silver	...	...	...	...	6,798
Tin ...	...	...	...	...	305,886
Copper	...	...	...	...	5,840
Antimony	...	...	...	...	86,163
Lead ...	...	...	...	...	3,090
Iron ...	...	...	...	...	288
Coal ...	...	...	...	...	3,870
Lignite	...	...	...	...	1,933
Kaolin	...	...	...	...	7,444
Flagging	...	...	...	...	32,688
Slates	...	...	...	...	728
Magnesite	...	...	...	...	12
Diamonds	...	...	...	...	103
Sapphires	...	...	...	...	180
					<hr/>
	Total	...	...	...	£455,023
					<hr/>

Patents.

252. The number of patents for inventions applied for since the year 1854 has been 1,880. Of these 146 were applied for in the year under review, and 122 in the preceding year.

Copyrights.

253. The copyrights registered amounted to 225 in 1873, and 308 in 1872. The total number registered since the Copyright Act first came into operation in 1870 has been 1,181.

PART IX.—VITAL STATISTICS.

Registrar-
General's
Report.

254. By the eleventh section of the Registration of Births, Deaths, and Marriages Statute 1865 (28 Vict. No. 246) it is enacted that the Registrar-General shall send in annually to the Chief Secretary a report and general abstract of the number of Births, Deaths, and Marriages registered in the preceding year, and that such report and abstract shall be laid before Parliament.

Contents of
Part IX.

255. Although the general charge of the registrations is, as I mentioned in the second paragraph to this Report,

still vested in the Registrar-General, the preparation of the report and abstract under the Registration Statute, being matters of a purely statistical character, have, on the division of the department, naturally passed to the Government Statist. As the holder of that office, I propose to fulfil the obligation thus imposed upon me in the present portion of this work and in the part of the Statistics to which it relates. The latter, as I have already explained, has been detained by circumstances beyond my control, but will be printed and laid before Parliament as soon as possible. In addition to the returns of Births, Deaths, and Marriages, statements relating to the Statistics of Charitable Institutions, Gaols, &c., throughout the colony are included in the tables, as likewise are Meteorological Abstracts furnished by the Government Astronomer.

256. The statistics of Friendly Societies have usually been published in this Part ; but, in the absence of power under the Statute to compel the societies to furnish returns at the appointed time, or even at any time, joined to the fact that this year the General Statistics are published at a much earlier date than they have been on any former occasion, I have found it impossible to get the Friendly Societies' statistics prepared in time for embodiment in the work. I propose therefore to publish them in a separate form at as early a date as possible.

Friendly Societies.

257. In the tables of Births, Deaths, and Marriages the Urban districts have been separated from the Extra-urban, and the former have been further subdivided into the Metropolitan, embracing the city of Melbourne and the surrounding towns, boroughs, and villages, together with their intermediate spaces, extending for a distance of ten miles in each direction ; and the Extra-metropolitan, embracing all cities, towns, and boroughs throughout the colony except those within ten miles of Melbourne. The Extra-urban districts embrace all parts of the colony not included in the limits of cities, towns, and boroughs.

Metropolitan, urban, and extra-urban districts.

258. The number of marriages celebrated in 1873 was 4,974, as against 4,791 in the previous year. The excess in favor of the year under review was thus 183.

Marriages, 1873.

Marriages
and popu-
lation.

259. More marriages took place in 1873 than in any year since the first settlement of the colony. As compared with the population, however, the number was exceeded in all the years of the last decenniad, except 1871 and 1872. This will be seen by the following figures:—

MARRIAGES AND POPULATION, 1864-1873.

Year.	Estimated Average Population.	Total Number of Marriages	Per 1,000 of the Population.	
			Number of Marriages.	Number of Persons Married.
1864 ...	589,160	4,554	7.73	15.46
1865 ...	616,375	4,497	7.29	14.58
1866 ...	634,077	4,253	6.71	13.42
1867 ...	649,826	4,490	6.91	13.82
1868 ...	671,222	4,692	6.99	13.98
1869 ...	696,942	4,735	6.79	13.58
1870 ...	709,839	4,732	6.67	13.34
1871 ...	738,725	4,693	6.35	12.70
1872 ...	760,991	4,791	6.30	12.60
1873 ...	780,362	4,974	6.37	12.74

Marriage
rate in Vic-
toria and
England.

260. During the whole period of ten years the marriages averaged annually 6.78, and the persons married 13.56, per 1,000 of the population. The rate in Victoria is not nearly so high as that prevailing in England and Wales, where, in the thirty-three years ended 1870, the marriages averaged 8.24, and the persons married 16.48, to every 1,000 persons living.

Marriages in
town and
country
districts.

261. In the Metropolitan districts the marriages in 1873 were in the proportion of 9.55 to every 1,000 of the inhabitants; in the towns outside Melbourne and suburbs they were in that of 9.4 per 1,000 living; and in the country districts in that of 2.65 per 1,000 living. To account for the low marriage rate in country districts it will at once be remembered that marriages, even of persons whose ordinary abode is the country, generally take place in the towns.

Marriages at
different
seasons.

262. Marriages in Victoria are almost invariably most numerous in the autumn, rather less so in the spring, still less so in the summer, and least of all in the winter.

The following are the percentages in each quarter calculated over a a period of ten years :—

AVERAGE PROPORTION OF MARRIAGES IN EACH QUARTER.

			Per Cent.
Quarter ended 31st March	...	...	24·88
„ 30th June	...	...	25·91
„ 30th September	...	...	23·98
„ 31st December	...	...	25·23
			<hr/> 100·00 <hr/>

263. In the year under review the order differed slightly from the above, the marriages being more numerous in the winter quarter than in the summer. The following are the numbers in the four quarters :—March quarter, 1,079 ; June quarter, 1,382 ; September quarter, 1,168 ; December quarter, 1,345.

Marriages in four quarters of 1873.

264. By far the largest number of marriages are, as may be supposed, contracted between bachelors and spinsters ; the next largest are those between bachelors and widows ; somewhat, although not very much, less are those between widowers and spinsters ; and least of all are those between widowers and widows. The following are the proportions of each condition during ten years :—

Former condition of persons married.

FORMER CONDITION OF PERSONS MARRIED.

			Per Cent.
Bachelors and spinsters	...	...	80·60
Bachelors and widows	...	...	8·08
Widowers and spinsters	...	...	7·27
Widowers and widows	...	...	4·05
			<hr/> 100·00 <hr/>

265. In 1873, 4,013, or 80·68 per cent., of the marriages were between bachelors and spinsters ; 377, or 7·58 per cent., were between bachelors and widows ; 370, or 7·44 per cent., were between widowers and spinsters ; and 214, or 4·30 per cent., were between widowers and widows.

Former condition of persons married, 1873.

266. One of the results of the preponderance, in point of numbers, of the male sex over the female is that in this country more widows re-marry than widowers, the proportion in ten years being 12·13 of the former and 11·32 of the latter to every 100 marriages. In England and Wales, on the contrary, more widowers re-marry

Re-marriages

than widows, the respective proportions to every 100 marriages being 13·93 and 9·18.

Marriages of persons under age.

267. Another result, probably also due in part to the inequality of the sexes in Victoria, is that, in proportion to the total numbers married, fewer males and more females marry as minors in the colony than in England and Wales. The returns show that, in Victoria, during ten years, 1·50 per cent. of the bridegrooms, and 26·57 per cent. of the brides, had not attained their twenty-first year, whilst in England and Wales, during ten years, as many as 6·60 per cent. of the bridegrooms, and only 19·91 per cent. of the brides, were under age. The mean of the two sexes marrying under age gives a higher proportion for Victoria (14·032 per cent.) than for England and Wales (13·255 per cent.).

Marriages of minors, 1873.

268. In the year under notice, 103, or 2·07 per cent., of the men, and 1,434, or 28·83 per cent., of the women, married in Victoria were under age. These numbers result in a mean of 15·45 per cent.

Ages of husbands and wives.

269. The following table shows, in combination, the ages of males and females who married during the year :—

AGES OF HUSBANDS AND WIVES IN COMBINATION, 1873.

Ages of Husbands.	Ages of Wives.															Total Husbands.					
	Under 15.	15 to 16.	16 to 17.	17 to 18.	18 to 19.	19 to 20.	20 to 21.	21 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.		60 to 65.	65 to 70.	70 to 75.	Unspecified.	
17 to 18	2	1	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	3
18 ,, 19	5	3	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	8
19 ,, 20	1	3	3	7	7	...	6	2	...	...	...	...	...	...	...	...	...	...	...	29
20 ,, 21	4	8	16	9	10	15	1	...	...	...	...	...	...	...	...	...	...	...	63
21 ,, 25	8	40	89	123	148	148	566	94	19	5	...	...	...	...	...	...	...	...	1	1,241
25 ,, 30 ...	1	7	22	75	113	131	147	650	298	40	7	2	1	...	...	...	...	...	...	...	1,494
30 ,, 35	4	6	22	49	59	44	293	267	114	37	6	5	...	...	...	...	1	...	...	907
35 ,, 40 ...	1	1	5	15	17	20	20	136	135	96	64	20	1	...	...	...	...	...	...	...	531
40 ,, 45	2	2	3	10	5	52	73	62	62	49	12	1	2	...	...	...	...	...	335
45 ,, 50	1	1	4	2	10	17	28	30	35	17	5	...	...	...	...	...	...	150
50 ,, 55	1	...	6	11	15	19	20	11	8	3	2	...	...	...	...	96
55 ,, 60	1	1	2	2	5	8	4	5	...	...	...	...	...	28
60 ,, 65	1	1	1	2	2	4	1	...	1	...	...	13
65 ,, 70	1	...	1	2	2	1	2	...	...	...	...	9
70 ,, 75	1	...	2	...	...	1	1	...	...	5
Unspecified	1	1	3	3	1	...	...	...	...	...	...	...	...	...	...	...	53	...	62
Total Wives	2	23	84	221	335	392	377	1,735	900	377	228	141	59	23	16	3	2	2	54	...	4,974

270. In 4,911 instances out of the 4,974 marriages which took place the age of both husband and wife was specified. In 1,143 of these cases the husband and wife were of the same age, in 3,480 cases the husband was older than the wife, and in 288 cases the wife was older than the husband.

Relative ages
of husbands
and wives.

271. A few rather curious inequalities of age appear in several of the columns, although these instances are not so striking as some which have occurred in other years; as, for instance, two youths between 19 and 20 years of age marry women between 25 and 30; a man between 30 and 35 chooses a partner between 65 and 70; a man between 25 and 30 selects one between 45 and 50; and, on the other hand, a man between 35 and 40 marries a girl under 15, and a man between 65 and 70 marries a woman between 25 and 30.

Inequalities
of age.

272. 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. This return is, however, it may be presumed, 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, on which all males and all females entering the married state are required to affix their signatures.

Signing with
marks.

273. In England and Wales, taking the experience of ten years, 23.29 per cent. of all the males, and 32.5 per cent. of all the females, who married signed the register with marks, and therefore, it may be assumed, were unable to write. In Victoria, during ten years, 7.74 per cent. of the bridegrooms, and 15.78 per cent. of the brides, signed with marks, and therefore were doubtless in like manner defective in point of education.

Signing with
marks in
Victoria and
England.

274. The number of persons in Victoria signing with marks differs according to the religious denomination. The following table shows the proportion of those so signing to the total numbers married according to the

Signing with
marks by
persons of
different
sects.

forms of each sect, also the proportions so signing to the total married by Lay Registrars :—

SIGNING MARRIAGE REGISTER WITH MARKS ; EXPERIENCE
OF TEN YEARS.

Marriages performed according to the usages of the—	Number of Marriages.	Signing with Marks.				
		Total Number.		Number in every 100 Married.		
		Men.	Women.	Men.	Women.	Mean.
Church of England	11,619	711	1,432	6·12	12·32	9·22
Presbyterian Church	9,707	505	1,114	5·20	11·48	8·34
Wesleyan Church ...	6,666	407	729	6·11	10·94	8·52
Independent Church	2,247	101	252	4·50	11·21	7·85
Baptist Church ...	1,418	68	108	4·80	7·62	6·21
Lutheran Church ...	560	8	30	1·43	5·36	3·39
Unitarian Church ...	32	...	2	...	6·25	3·12
Calvinistic Methodists	87	...	9	...	10·34	5·17
Other Protestants ...	337	33	33	9·79	9·79	9·79
Roman Catholics ...	10,073	1,515	3,033	15·04	30·11	22·57
Jews ...	194	3	8	1·55	4·12	2·83
Lay Registrars ...	2,724	183	458	6·72	16·81	11·76
Total ...	45,664	3,534	7,208	7·74	15·78	11·76

Different sects compared.

275. If the figures in the first nine lines be combined so as to give the total of the Protestant sects, the proportions signing with marks in every 100 marriages solemnized by Protestant clergymen will be found to be 5·61 of the men, and 11·35 of the women, or a mean of 8·48. This is about the average which prevails in the marriages performed by Presbyterians and Wesleyans ; but in marriages according to the rites of the Church of England and of "Other Protestants" the proportion signing with marks is greater ; and in marriages according to the rites of the Independents, Baptists, Lutherans, Unitarians, and Calvinistic Methodists the proportion is less than the average of Protestant marriages. Fewer persons, on the average, married according to the rites of the Jews signed with marks than those of any other religious sect. More persons, on the average, married by Lay Registrars signed with marks than those married according to the usages of any religious denomination

except the Roman Catholics. A much larger number of persons, on the average, married according to the rites of the Roman Catholics signed with marks than of those married in any other manner.

276. Three hundred and twenty-six of the men, and 496 of the women, out of a total of 4,974 of either sex married, signed with marks in the year under review. The proportions of those unable to sign in writing were therefore 6.55 per cent. of the men, and 9.97 per cent. of the women, resulting in a mean of 8.26 per cent. All the numbers show considerable improvement upon the results of the ten years as given in the table.

Proportions signing with marks, 1873.

277. In 612 instances, during the year under notice, one out of the two parties to a marriage signed with a mark and the other in writing, and in 105 instances both signed with marks ; thus in all the marriages except about 2 per cent. either the husband or the wife was able to write.

Cases in which one or both signed with marks.

278. The births registered in 1873 numbered 28,100. This was the largest number of births ever registered in the colony in one year, and exceeded by 739 the number registered in 1872.

Births, 1873.

279. The estimated average population, the number of births, and the proportion of the latter to the former, during each of the last ten years, were as follow. It will be observed that the birth rate has been declining pretty steadily for years past, and was lower in the last two years than in any others of the decenniad.

Birth rate, 1864-1873.

BIRTHS AND POPULATION, 1864-1873.

Year.	Estimated Average Population.	Births.	
		Total Number.	Number per 1,000 of Population.
1864 ...	589,160	25,680	43.59
1865 ...	616,375	25,915	42.04
1866 ...	634,077	25,010	39.44
1867 ...	649,826	25,608	39.41
1868 ...	671,222	27,243	40.59
1869 ...	696,942	26,040	37.36
1870 ...	709,839	27,151	38.25
1871 ...	738,725	27,382	37.07
1872 ...	760,991	27,361	35.95
1873 ...	780,362	28,100	36.01

Birth rate in
Victoria and
England.

280. The birth rate for the whole period of ten years was 38·77 per 1,000, or, in other words, 1 child was born alive to every 26 persons living. In England and Wales the average birth rate extending over a series of years was 33·64 per 1,000, or 1 child was born alive to every 30 persons living.

Birth rate in
towns and
country.

281. The births in Melbourne and suburbs, in the year under review, were in the proportion of 34·36 to every 1,000 of the population. In the town districts outside Melbourne and suburbs they were in the proportion of 40·98 to every 1,000 of the population, and in the country districts they were in the proportion of 34·40 to every 1,000 of the population. The fact that the birth rate of the metropolis is no higher than that of the country districts is a remarkable one, and merits investigation.

Proportion of
males and
females
born.

282. The number of males and females born, and the proportion of the former to the latter, in each of the last ten years, were as follow:—

BIRTHS OF MALES AND FEMALES, 1864-1873.

Year.	Males Born.	Females Born.	Males Born to every 100 Females.
1864 ...	13,241	12,439	106·45
1865 ...	13,265	12,650	104·86
1866 ...	12,670	12,340	102·67
1867 ...	13,093	12,515	104·62
1868 ...	13,841	13,402	103·28
1869 ...	13,225	12,815	103·20
1870 ...	13,997	13,154	106·41
1871 ...	14,000	13,382	104·62
1872 ...	13,831	13,530	102·22
1873 ...	14,234	13,866	102·65

Males and
females
born in
Victoria and
England.

283. In the whole period of ten years the proportion was 104·07 males to 100 females. The relative proportion of males and females born does not differ much from that of England and Wales, where the ratio in the ten years ended 1867 was 104·4 males to 100 females.

Twins and
triplets.

284. In 263 instances twins were born during the year under notice, and in 3 instances triplets. In the last ten

years 2,729 cases of twins, and 25 cases of triplets, have been recorded out of 265,490 births. Thus one mother in every 96 gave birth to twins, and one mother in every 10,508 brought forth three children at a birth.

285. The number of children recorded as being born out of wedlock in the year under review was 893, or 1 in every 31 born. In the past ten years the number was 7,477, or 1 in every 35 born. In England and Wales the proportion of illegitimate children during a series of years was 1 in every 16 born. It is possible, however, that the fact of a child being born out of wedlock is more often concealed here than there.

286. By the number of legitimate births the number of married women at childbearing ages can be ascertained approximately, as also by the number of illegitimate births can the number of unmarried women living irregularly. An estimate based upon the returns of the census of 1871 shows that the legitimate births in Victoria are in the proportion of 301 to every 1,000 married women living between the ages of 15 and 45, and this proportion applied to the returns of the year under review gives the number of married women living at those ages as 90,389. If children are born to women living in concubinage in the same proportion as they are to women living in wedlock, the number of illegitimate children born would show that 2,967 women were living in the former state during the year. The average number of unmarried women in the colony between the ages of 15 and 45 I estimate to have been 65,405 in 1873. It would therefore follow that 1 out of every 22 of this number was leading an irregular life.

287. As may be supposed, the proportion of illegitimate births is greater in town than in country districts. In the metropolis and suburbs it is especially great, the ratio in the year under review being 1 illegitimate child to every 19 children born. In the other urban districts the ratio was 1 illegitimate child to every 41 children born, or, in all the town districts taken together, 1 illegitimate child to every 26 children born. The proportion

in the extra-urban districts was 1 illegitimate child to every 45 children born.

Births at
different
seasons,
1864-1873.

288. Births are most frequent in the winter season, both in this colony and in England and Wales. This, as regards Victoria, has been proved by the experience of the last ten years, in every one of which the births have been greatest in the quarter ended 30th September. The following are the figures for each quarter of the whole decenniad and the percentage :—

BIRTHS IN EACH QUARTER, 1864-1873.

Quarter ended—		Number of Births.		Proportions per Cent.
31st March	...	62,195	...	23·43
30th June	...	66,110	...	24·90
30th September	...	72,405	...	27·27
31st December	...	64,780	...	24·40
Total	...	265,490	...	100·00

Births in
each quar-
ter, 1873.

289. During the year under review the births numbered 6,815 in the quarter ended 31st March, 6,932 in the quarter ended 30th June, 7,558 in the quarter ended 30th September, and 6,795 in the quarter ended 31st December.

Deaths, 1873.

290. The deaths registered in the year numbered 11,501. The births, as already stated, having been 28,100, the excess of births over deaths was 16,599, or 144 per cent.

Excess of
births over
deaths.

291. In all years the births in Victoria have been largely in excess of the deaths. During the ten years ended 1873 the former numbered 265,490, and the latter 106,734. The total excess of births was therefore 158,756, or 149 per cent. In England and Wales, during a series of years, the average excess of births over deaths was 55 per cent., or not nearly half so high as the average excess prevailing in Victoria.

Deaths of
males and
females.

292. Males contributed 6,565, and females 4,936, to the mortality of the year. These figures furnish proportions relatively to that mortality of 57 and 43 per cent. respectively. The proportions of males and females in

the total population during the year were respectively 54 per cent. and 46 per cent., so that more males and fewer females died than might have been expected from the relative numbers living.

293. The following table shows the average population of each year, distinguishing males and females, the number of deaths of males and females in each year, and the proportion that the numbers of either sex who died bore to the total number of the same sex living in each year :—

DEATHS AND POPULATION, 1864-1873.

Year.	Estimated Mean Population.			Deaths.					
				Total Number.			No. per 1,000 of Population.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females	Total.
1864	336,627	252,533	589,160	5,202	3,685	8,887	15·45	14·59	15·08
1865	349,662	266,713	616,375	6,158	4,303	10,461	17·61	16·13	16·97
1866	356,460	277,617	634,077	7,016	5,270	12,286	19·68	18·98	19·37
1867	362,417	287,409	649,826	6,613	5,120	11,733	18·25	17·81	18·06
1868	371,817	299,405	671,222	5,865	4,202	10,067	15·77	14·03	15·00
1869	384,267	312,675	696,942	6,221	4,409	10,630	16·19	14·10	15·25
1870	390,480	319,359	709,839	6,114	4,306	10,420	15·66	13·48	14·68
1871	404,983	333,742	738,725	5,845	4,073	9,918	14·43	12·20	13·43
1872	415,605	345,386	760,991	6,308	4,523	10,831	15·18	13·10	14·23
1873	424,729	355,633	780,362	6,565	4,936	11,501	15·45	13·88	14·74

294. It will be observed that in the first six years of the ten the death rate was higher than in the year under review, that it was exceptionally high in 1866 and 1867, and exceptionally low in 1871; also that in each of the years the mortality bore more heavily upon males than upon females.

295. The average annual death rate extending over the whole ten years was 16·29 per 1,000 as regards males, 14·68 per 1,000 as regards females, and 15·58 per 1,000 as regards both sexes. In England and Wales, in thirty-one years, the average annual death rate was 23·34 per 1,000, and 21·49 per 1,000 as regards males and females

respectively, and 22·4 per 1,000 as regards both sexes combined.

296. The death rate differs in different districts of the colony, as will be seen by the following figures, which show the mortality in the urban districts, distinguishing the metropolitan and the extra-metropolitan, and the extra-urban districts, during the year 1873:—

DEATHS IN URBAN AND COUNTRY DISTRICTS, 1873.

Districts.	Estimated Mean Population.	Deaths, 1873.	
		Total Number.	Number per 1,000 of the Population.
Urban-metropolitan ...	233,047	4,628	19·86
„ Extra-metropolitan...	191,946	3,623	18·87
Extra-urban ...	355,369	3,250	9·14
Total ...	780,362	11,501	14·74

297. Taking all the urban districts together, the mortality is equal to 19·41 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 coming to the towns, and that many of them end their days there. This practice no doubt arises partly in consequence of all the hospitals, wherein 1,462 deaths, or 18 per cent. of those which occurred in the urban districts during 1873, being 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 of a superior description to that they would be able to obtain in country districts.

298. The following table shows the deaths in each month during the year under review, and the proportion

Deaths in town and country districts.

Large mortality in towns accounted for.

Deaths in each month.

of the deaths in each month to the total deaths in the year, placed side by side with a similar calculation extending over a period of ten years :—

DEATHS IN EACH MONTH.

Months.	Deaths, 1873.	Percentage of Deaths occurring in each Month to the Total Deaths	
		Year 1873.	Mean of Ten Years.
January	1,044	9·08	10·72
February	919	7·99	9·52
March	1,048	9·11	10·70
April	1,163	10·11	9·76
May	945	8·22	8·93
June	801	6·96	7·74
July	1,000	8·69	7·42
August	835	7·26	6·89
September	868	7·55	6·35
October	933	8·11	6·65
November	838	7·29	6·58
December	1,107	9·63	8·74
Total	11,501	100·00	100·00

299. The mortality is generally highest in the summer season ; but this peculiarity has not been so strikingly marked as usual in the year under review. The relative mortality in it was below the average in January, February, March, May, and June, and above the average in the other seven months. Mortality at different seasons.

300. The returns of the Registrar-General for England and Wales do not distinguish the mortality in each month, Mortality at each season in Victoria and England.

but instead the mortality of each quarter is given. The quarterly returns of mortality in Victoria are compared in the following table with the returns for the corresponding periods of the year in England and Wales, the returns of Victoria being for ten years, those of England and Wales for thirty-one years :—

MORTALITY AT DIFFERENT SEASONS IN VICTORIA AND ENGLAND AND WALES.

Quarter ended—				Deaths per 100 at all Seasons.	
Victoria.		England and Wales.		Victoria (average of 10 years).	England and Wales (average of 31 years).
31st March ...	30th September ...	30th June ...	31st December ...	30·94	23·24
30th June ...	31st December ...	31st March ...	30th June ...	26·43	24·65
30th September ...	31st March ...	30th June ...	31st December ...	20·66	27·49
31st December ...	30th June ...	31st March ...	30th June ...	21·97	24·62
Total ...				100·00	100·00

Results compared.

301. By these figures it would appear that the greatest mortality occurs in the summer quarter in Victoria, and in the winter quarter in England and Wales ; that the next greatest mortality is in the autumn quarter in Victoria, and the next in the spring quarter, but that in England and Wales the mortality of the autumn and spring quarters is nearly identical ; and that the period of least mortality in Victoria is the winter quarter, and in England and Wales the summer quarter.

Deaths in each quarter, 1873.

302. In the year under review the percentage of deaths in the four quarters respectively was 26·18, 25·29, 23·50, and 25·03. The mortality was thus more evenly spread over the whole year than usual.

Population and deaths at each age.

303. In the following table the deaths of males and females in 1873, at each year of age, are 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, 1873, WITH PROPORTIONS.
NUMBERS.

Ages.	Estimated Population at each Age, 1873.			Number of Deaths at each Age, 1873 *		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years	62,418	62,147	124,565	2,564	2,340	4,904
5 years to 10 years	56,710	56,986	113,696	318	286	604
10 " 15 "	45,551	45,813	91,364	134	150	284
15 " 25 "	53,236	57,798	111,034	283	296	579
25 " 35 "	65,800	53,262	119,062	483	413	896
35 " 45 "	77,608	44,734	122,342	839	480	1,319
45 " 55 "	40,946	21,410	62,356	782	348	1,130
55 " 65 "	15,963	9,215	25,178	565	239	804
65 " 75 "	5,355	3,457	8,812	365	241	606
75 and upwards	1,142	811	1,953	232	143	375
Total ...	424,729	355,633	780,362	6,565	4,936	11,501

PROPORTIONS PER CENT.

Under 5 years	14.70	17.48	15.95	39.06	47.41	42.64
5 years to 10 years	13.35	16.02	14.57	4.84	5.79	5.25
10 " 15 "	10.73	12.88	11.71	2.04	3.04	2.47
15 " 25 "	12.53	16.25	14.23	4.31	6.00	5.03
25 " 35 "	15.49	14.98	15.26	7.36	8.37	7.79
35 " 45 "	18.27	12.58	15.68	12.78	9.72	11.47
45 " 55 "	9.64	6.02	7.99	11.91	7.05	9.83
55 " 65 "	3.76	2.59	3.23	8.61	4.84	6.99
65 " 75 "	1.26	.97	1.13	5.56	4.88	5.27
75 and upwards	.27	.23	.25	3.53	2.90	3.26
Total ...	100.00	100.00	100.00	100.00	100.00	100.00

* Omitting the unspecified as to age.

304. A reference to the figures in this table will show that nearly half the males and more than half the females who died in the year were under 10 years of age; also that both sexes under 5 years and over 45 years of age died in larger proportions than their numbers in the population, but at ages between 5 and 45 the proportions

Deaths at different ages.

dying of either sex were smaller than the corresponding numbers at the same age in the population.

Deaths at various ages in Victoria and England.

305. It may be observed that the mortality of children under 5 was exceptionally low, and that of persons over 75 was exceptionally high, during the year under review. This will be seen more plainly by an examination of the figures in the following table, which gives the number of deaths of males and females at various ages in every 1,000 of either sex living at the same ages in the colony of Victoria during the year under notice, and during an average of ten years; also in England and Wales, calculated upon an average of thirty years:—

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

Ages.	Number of Deaths to every 1,000 Living at each Age.					
	Victoria.				England and Wales, Average of 30 Years.	
	Year 1873.		Average of 10 Years.			
	Males.	Females.	Males.	Females.	Males.	Females.
All Ages	15·45	13·88	16·68	16·13	23·33	21·51
Under 5 years ...	41·08	37·65	55·08	49·66	72·42	62·46
5 years to 10 years ...	5·61	5·02	7·52	6·95	8·79	8·67
10 „ 15 „ ...	2·94	3·27	3·27	3·25	4·95	5·10
15 „ 25 „ ...	5·31	5·12	4·95	4·81	7·90	8·22
25 „ 35 „ ...	7·34	7·75	7·85	8·28	9·93	10·15
35 „ 45 „ ...	10·81	10·73	12·09	11·12	13·03	12·30
45 „ 55 „ ...	19·10	16·25	17·52	13·20	18·16	15·67
55 „ 65 „ ...	35·39	25·94	29·71	21·98	31·53	28·56
65 „ 75 „ ...	68·16	69·71	53·79	43·10	68·54	57·52
75 and upwards*	203·15	176·32	111·71	93·02	147·74	135·36

* The figures in this line relating to England and Wales apply to males and females at from 75 to 85 only. The Victorian returns apply to all over 75.

Deaths of males and females at different ages.

306. It will be remarked that, in Victoria, the mortality of males in proportion to their numbers in the population is greater than that of females at all periods of life, except between 25 and 35 years of age; but that in England and Wales, relatively to their numbers, the mortality of

females is greater than that of males at the three periods occurring between 10 and 35 years of age, the mortality of males being, however, greater than that of females at all other periods.

307. The fact that the average mortality, both of males and females, at each period of life is lower in Victoria than it is in England and Wales is fully brought out by the figures. This is especially noticeable in regard to children under 5 years and between 5 and 10 years of age, to whom the circumstances and climate of Victoria are by many supposed to be exceptionally fatal, whereas these are in reality much less so than those which prevail in England.

308. Besides the comparison of the deaths of children at each age with the total numbers at the same ages living, a further means of ascertaining the fitness of a country for rearing children in is by comparing the mortality of children dying before they complete their first year with the number of births. This is done in the following table for each of the ten years ending with 1873 :—

MORTALITY OF INFANTS, 1864-1873.

Year.	Number of Births.	Deaths of Infants under 1 Year of Age.	
		Total Number.	Proportion to every 100 Births.
1864	25,680	2,778	10·8
1865	25,915	3,538	13·6
1866	25,010	3,838	15·3
1867	25,608	3,534	13·8
1868	27,243	3,054	11·2
1869	26,040	3,284	12·6
1870	27,151	3,203	11·8
1871	27,382	3,114	11·3
1872	27,361	3,334	12·2
1873	28,100	3,181	11·3
Mean of Ten Years	26,549	3,286	12·4

309. The mortality of infants, calculated upon this principle, is much lower than that of England and Wales, where deaths of children who had not completed their

Mortality of children in Victoria and England.

Mortality of infants.

Infant mortality in Victoria and England.

first year of age amounted in 1869 to 15·6 per cent., and in 1870 to 16 per cent., of the births. These were not years of exceptional mortality, and yet the same proportions have not been reached during even the worst years in Victoria.

Mortality of
male and
female
infants.

310. Both here and in England a larger number of male than of female infants die. In the year under review, the former amounted to 1,679, and the latter to 1,502, which numbers furnish proportions relatively to the births of either sex of 11·80 and 10·82 per cent. respectively. In an average extending over the five previous years the corresponding percentages were 12·65 and 10·97. In England and Wales, during the year 1870, deaths of male children under 1 year were in the proportion of 17·4 per cent. of the births of males, and those of female children under 1 year were in the proportion of 14·5 per cent. of the births of females.

Deaths from
each class of
diseases in
Victoria and
England.

311. The proportion that deaths from each class of diseases bear to the total deaths in Victoria and England and Wales is shown in the following table :—

DEATHS FROM EACH CLASS OF DISEASES, PROPORTION TO DEATHS FROM ALL CAUSES, IN VICTORIA AND ENGLAND AND WALES.

Causes of Death.	Number of Deaths in 1,000 from all Causes.		
	Victoria.		England and Wales.
	Year 1873.	Average of 16 Years.	Average of 10 Years.
Zymotic diseases ...	254·51	304·71	227·43
Constitutional „ ...	139·56	130·56	187·54
Local „ ...	386·39	320·05	388·81
Developmental „ ...	140·69	151·97	161·17
Violence ...	78·85	92·71	35·05
Total ...	1,000·00	1,000·00	1,000·00

Results
compared.

312. Relatively to the total mortality, that from zymotic diseases, including all those of an endemic, epidemic, contagious or infectious character, is greater in Victoria than in England and Wales, as also is that from external

causes and violence ; the mortality from constitutional diseases, including phthisis or consumption, tabes mesenterica, scrofula, &c. ; that from local diseases, being those which have their seat in particular organs ; and that from developmental diseases, being those of growth, nutrition, and decay—is less in Victoria than in England.

313. A better way, however, of ascertaining the relative mortality of the two countries is to compare the deaths from each class of diseases with the total population of each country, and this is done in the following table :—

Deaths from each cause and population in Victoria and England.

DEATHS FROM EACH CLASS OF DISEASES, PROPORTION TO LIVING POPULATION, IN VICTORIA AND ENGLAND AND WALES.

Causes of Death.	Number of Deaths to every 1,000 of Mean Living Population.		
	Victoria.		England and Wales.
	Year 1873.	Average of 16 Years.	Average of 10 Years.
All causes ...	14.74	17.21	22.47
Specified causes ...	14.69	17.04	22.32
Zymotic diseases ...	3.74	5.28	5.07
Constitutional „ ...	2.05	2.21	4.19
Local „ ...	5.67	5.40	8.68
Developmental „ ...	2.07	2.58	3.60
Violence ...	1.16	1.57	.78

314. It will be observed that, in proportion to the population, a lower rate of mortality from all classes of diseases prevailed in Victoria during the year under review than in England, but that, on the average, the mortality from zymotic diseases is somewhat higher, and that from all other classes of diseases is considerably lower, in Victoria than in England ; also that the proportion of violent deaths is always much greater in Victoria than it is in England.

Results compared.

315. Zymotic diseases are generally most prevalent in the summer months and are especially fatal to children. A complaint which forms an exception to this rule is

Deaths from typhoid fever.

typhoid fever, from which adults suffer also, and which is most common in the months of April and May, although sporadic cases occur all the year round. As considerable alarm existed a short time since in respect to this complaint, I have thought it sufficiently important to devote to it a separate table, showing the number of deaths and their proportion to the living population during each each of the last ten years :—

DEATHS FROM TYPHOID FEVER, 1864-1873.

Year.	Estimated Mean Population.	Deaths from Typhoid Fever.	
		Total Number.	Number per 10,000 of Population.
1864	589,160	250	4·24
1865	616,375	291	4·72
1866	634,077	528	8·33
1867	649,826	455	7·00
1868	671,222	295	4·40
1869	696,942	360	5·16
1870	709,839	416	5·86
1871	738,725	269	3·64
1872	760,991	323	4·24
1873	780,362	282	3·61
Mean of Ten Years	684,752	347	5·07

316. It will be noticed that the death rate from this disease differs considerably in different years, it having been lowest in the year under review and highest in the years 1866 and 1867. In the two last-mentioned years the mortality from all causes was also above the average. It is well known that a wide-spread belief gained ground during a portion of the present year (1874) that this complaint was prevailing in the colony to an unusual extent, and in a very fatal form. Whether this supposition was correct, and, if so, to what extent the total mortality of the year will be affected by the disease, cannot be known until after the year has been completed.

Death rate from typhoid fever.

317. The zymotic diseases which frequently prove fatal to children, but more rarely to adults, are measles, scarlatina, diphtheria, whooping cough, dysentery, and diarrhoea. The number of deaths from these, and of those from atrophy and debility (classed under the head of developmental diseases), during the last ten years, are shown in the following table :—

Deaths from diseases affecting children.

DEATHS FROM DISEASES CHIEFLY AFFECTING CHILDREN,
1864-1873.

Year.	Number of Deaths from—						
	Measles.	Scarlatina.	Diphtheria.	Whooping Cough.	Dysentery.	Diarrhoea.	Atrophy and Debility.
1864	7	278	451	25	243	528	602
1865	11	215	391	304	402	864	749
1866	427	462	331	365	525	1,027	817
1867	630	621	334	205	430	986	746
1868	24	460	451	243	220	640	665
1869	24	224	493	100	306	858	723
1870	3	24	418	50	244	706	790
1871	4	27	255	318	316	626	679
1872	7	135	320	227	424	747	692
1873	1	188	420	299	357	629	714
Mean of Ten Years	113·8	263·4	386·4	213·6	346·7	761·1	717·7
Average Number of Deaths per 10,000 of the Population	1·67	3·84	5·64	3·12	5·06	11·12	10·48

318. It will be observed that diarrhoea is the most fatal of all these complaints, and next to it atrophy and debility ; that measles is, on the average, the least fatal of the complaints named, but that in 1866 more deaths occurred from it than from either diphtheria or whooping cough, and in 1867 more deaths occurred from it than from either scarlatina, diphtheria, whooping cough, or dysentery.

Death rate from diseases of children.

319. It will be seen by the following figures that the proportions from these diseases to the living population

Diseases of children in Victoria and England.

differ greatly from the proportions obtaining in England and Wales. The averages are for ten years in Victoria and for five years in England and Wales :—

DEATHS PER 10,000 LIVING.

	Victoria.	England and Wales.
Measles ...	1·67	4·52
Scarlatina ...	3·84	8·57
Diphtheria ...	5·64	1·45
Whooping Cough ...	3·12	5·32
Dysentery ...	5·06	·48
Diarrhœa ...	11·12	10·39
Atrophy and Debility	10·48	14·91

Deaths from
phthisis.

320. Phthisis has within the last ten years caused more than eight thousand deaths in Victoria, and both in the colony and in England is the most fatal of all diseases. The total mortality and the mortality in proportion to the population from this complaint are shown in the following table :—

DEATHS FROM PHTHISIS, 1864-1873.

Year.	Estimated Mean Population.	Deaths from Phthisis.	
		Total Number.*	Number per 10,000 of Population.
1864 ...	589,160	686	11·64
1865 ...	616,375	741	12·02
1866 ...	634,077	782	12·33
1867 ...	649,826	793	12·20
1868 ...	671,222	746	11·11
1869 ...	696,942	893	12·81
1870 ...	709,839	888	12·51
1871 ...	738,725	841	11·38
1872 ...	760,991	876	11·51
1873 ...	780,362	945	12·11
Mean of Ten Years ... }	684,752	819	11·96

* Deaths registered as occurring from hæmoptysis are included in this column.

321. A remarkable evenness in the mortality from phthisis in relation to the population is observable throughout the decenniad. The average number of deaths over the whole period was within a fraction of 12 per 1,000 persons living, and in not one of the years were the numbers so low as 11 or so high as 13. It must be remembered, however, that the population at the ages most subject to phthisis has decreased during the period, and therefore the complaint is really more fatal now in Victoria than it was some years since.*

Death rate
from
phthisis.

322. The death rate from phthisis in relation to the whole population is very much lower in Victoria than it is in England and Wales, where, in the ten years 1860-1869, the average mortality from this disease was at the rate of 25.47 per 10,000 of the inhabitants of the kingdom. The mortality from phthisis in Melbourne and suburbs compares more nearly with that of England, the deaths from it in the ten years ending with 1873 having been at the annual rate of 21.23 per 10,000 inhabitants. In 1863 deaths from phthisis in Melbourne and suburbs were in the proportion of 23.71 to every 10,000 of the living population, or much above the average.

Death rate
from
phthisis
in Mel-
bourne and
suburbs.

323. Deaths of women in childbirth are classified in two ways, according to the manner in which the death occurs. Should it arise from the consequences of child-bearing, but without specific disease, it is classified simply as childbirth, under the head developmental diseases; but should it be occasioned by puerperal fever or metria, it is classified under the latter term, as a zymotic disease. Metria, as is well known, is a febrile disease of a very malignant character, solely affecting childbearing women, and is believed to be highly contagious, and to be often carried from the bedside of one lying-in woman to that of another by medical men and nurses. The following table gives the number of deaths from these two phases of childbirth in each of the last ten years, and the pro-

Deaths of
women
in child-
birth.

* Between the censuses of 1861 and 1871 the male population between 20 and 35 years of age decreased by 48,766, and the female population between 25 and 30 decreased by 1,394. See Government Statist's Report on the Census of 1871, pp. 12 and 13.—Ferres, Melbourne.

portion of mothers dying to the number of children born :—

DEATHS OF WOMEN IN CHILDBIRTH, 1864-1873.

Year.	Number of Births.	Number of Deaths of Mothers from—			Number of Deaths of Mothers to every 10,000 Children born alive.
		Childbirth.	Metria.	Total.	
1864	25,680	100	21	121	47·12
1865	25,915	99	24	123	47·46
1866	25,010	112	26	138	55·18
1867	25,608	117	20	137	53·51
1868	27,243	110	23	133	48·82
1869	26,040	105	18	123	47·23
1870	27,151	115	9	124	45·67
1871	27,382	90	12	102	37·25
1872	27,361	123	16	139	50·80
1873	28,100	127	44	171	60·85
Mean of Ten Years	26,549	110	21	131	49·34

Deaths from metria, 1873.

324. It will be observed that a considerable increase in the number of deaths from metria took place in 1873, as compared with former years, and that the proportion of mothers who died was greater in that than in any other year of the decenniad.

Deaths in childbirth in Victoria and England.

325. In the ten years the proportion of mothers dying, stated in different words from those which would be used to quote the exact figures in the table, was 1 to every 203 births, and in the year under review it was 1 to every 164 births. In England and Wales, a proportion extending over the twenty-four years, 1847-70, differs slightly from the Victorian average, the figures being 48·98 mothers dying to every 10,000 births, or 1 mother dying to every 204 births.

Deaths in Lying-in Hospital.

326. The mortality of women confined in Maternity Hospitals has been found in all countries to be greater than that of women delivered at home, and the returns of the Melbourne Lying-in Hospital during the year 1873

fully bear out this experience. The number of children born alive in that institution during the year was 375, and the number of deaths of women from childbirth or metria was 14. The proportions therefore were equivalent to those of 373 mothers dying to 10,000 children born alive, or 1 mother dying to every 27 births. This rate of mortality may fairly be considered as enormous.

327. It has been already shown (pars. 312 and 314, *ante*) that, relatively to the population, violent deaths are more frequent in Victoria than in England. These are classified under the heads of Accident, Homicide, Suicide, and Execution. The following are the numbers which occurred in Victoria during the last ten years from each of those causes :—

DEATHS FROM EXTERNAL CAUSES, 1864-1873.

Year.	Number of Deaths from—									
	Accidents.		Homicide.		Suicide.		Executions.		Total.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
1864 ...	591	161	14	2	55	11	4	...	664	174
1865 ...	656	157	19	7	51	13	5	...	731	177
1866 ...	630	139	14	4	68	13	3	...	715	156
1867 ...	601	148	12	12	55	8	5	...	673	168
1868 ...	665	163	12	7	59	8	3	...	739	178
1869 ...	632	134	17	6	53	15	3	...	705	155
1870 ...	641	146	15	14	60	14	5	...	721	174
1871 ...	620	148	13	8	69	21	2	...	704	177
1872 ...	621	138	8	7	62	9	2	...	693	154
1873 ...	602	180	14	6	84	13	5	...	705	199
Total ...	6,259	1,514	138	73	616	125	37	...	7,050	1,712
Both Sexes ...	7,773		211		741		37		8,762	

Violent
deaths of
males and
females.

328. Under all the headings, as will be observed, the deaths of females are much fewer than those of males, and there is no case of a female having been executed during the ten years. The males who died violent deaths were in the proportion of 18·57 to every 100,000 of the living male population, and the females were in the proportion of 5·61 to every 100,000 females living.

Violent
deaths in
Victoria and
England.

329. The following are the average yearly numbers of deaths from violence under each heading in proportion to every 100,000 of the living population of Victoria and England and Wales, the experience in either case being that of ten years :—

VIOLENT DEATHS PER 100,000 OF THE LIVING POPULATION.

				Victoria.		England and Wales.
Accidents	...	...	...	113·52	...	68·53
Homicide	...	...	...	3·08	...	1·95
Suicide ...	...	...	...	10·82	...	6·69
Execution	...	...	...	·54	...	·06
Violent Deaths not classified	...		...	—	...	1·03
				<hr/>		<hr/>
				Total Violent Deaths	...	127·96
					...	78·27
						<hr/>

Death rate in
Hospitals.

330. The total number of cases of sickness treated in all the Hospitals in Victoria during the year was 14,585, and the number of deaths 1,464, or about 1 death to every 10 cases of sickness.

Death rate in
Benevolent
Asylums.

331. The cases of sickness in Benevolent Asylums numbered 1,694, and the deaths 168, in the year under review ; the proportion of the latter to the former was thus about 1 to 10.

Death rate in
Immigrants'
Home.

332. In the Melbourne Immigrants' Home no record was kept of the non-fatal cases of sickness which occurred during the year. The number of fatal cases amounted to 65.

Death rate
in Orphan
Asylums.

333. In Orphan Asylums, 413 cases of sickness occurred during the year, and of these 6, or 1 in 69, terminated fatally.

334. The number of cases of sickness in Industrial and Reformatory Schools during the year amounted to 2,670, and the deaths to 37, or about 1 death to every 72 cases of sickness. Death rate in Industrial Schools.

335. The hospital cases in Gaols and Penal Establishments amounted to 6,533 during the year, and the deaths to 35, or 1 death to every 187 cases. Death rate in Gaols, &c.

336. The number of sick cases in Hospitals for the Insane during the year was 1,396, and the total number of deaths was 168. Eleven of these deaths were set down simply to insanity. The deaths resulting from actual sickness therefore numbered 157, or 1 death to every 9 cases. Death rate in Lunatic Asylums.

337. One hundred and eighty-two cases of sickness occurred in the Victorian Artillery Corps during the year, and one of these cases terminated fatally. Death rate in Artillery corps.

338. Fifty-three cases of sickness, but no death, occurred in the Private Lunatic Asylum at Cremorne during the year. Sickness in Cremorne Asylum.

339. In connection with the death rates, the ages of inmates of Hospitals, and of Benevolent, Orphan, and Lunatic Asylums should be considered; these during the year were as follow:— Ages in charitable institutions.

AGES OF INMATES OF CHARITABLE INSTITUTIONS, 1873.

Ages.	Hospitals.	Benevolent Asylums, &c.	Orphan Asylums.	Lunatic Asylums.
Under 5 years ...	284	511	114	...
5 years to 10 years...	556	356	567	44
10 " 15 " ...	835	117	475	45
15 " 25 " ...	2,553	862	25	366
25 " 35 " ...	2,820	2,082	...	816
35 " 45 " ...	3,173	2,104	...	870
45 " 55 " ...	2,191	1,866	...	450
55 " 65 " ...	1,335	1,189	...	179
65 and upwards ...	763	1,297	...	86
Age unknown ...	10	...	...	373
Total ...	14,520	10,384	1,181	3,229

Deaths in
public
institutions.

340. The following is a summary of the deaths which occurred in public institutions during the year under notice :—

DEATHS IN PUBLIC INSTITUTIONS, 1873.

					Number of Deaths.
Hospitals ... ..	...	...	...	...	1,464
Benevolent Asylums, &c.	...	...	...	...	233
Orphan Asylums ... ..	...	...	...	...	6
Hospitals for the Insane	...	...	...	...	168
Blind Asylum ... ..	...	...	...	...	1
Industrial Schools ... ..	...	...	...	...	35
Reformatories ... ..	...	...	...	...	2
Gaols ... ..	...	...	...	...	28
Penal Establishments...	...	...	...	...	7
Total ... ..	...	...	...	...	<u>1,944</u>

Proportion
of deaths
in public
institutions.

341. It will be observed that the number who died in public institutions during the year was 1,944, and as the total number of deaths in the colony in the same period was 11,501, it follows that 1 person out of every 6 persons that died ended his life in a hospital, an asylum, or a gaol.

Vaccinations

342. The number of children vaccinated during the year was 22,376. The births during the year amounted, as has been already stated, to 28,100. By this it would appear that, notwithstanding the penalties provided for non-compliance with the requirements of the Vaccination Statute, not more than 80 per cent. of the children born in Victoria are vaccinated.

Meteor-
ological ob-
servations,
1873.

343. The following is a summary of the meteorological observations taken during the year at stations in different parts of the colony :—

METEOROLOGICAL OBSERVATIONS AT VARIOUS STATIONS, 1873.

Stations.	Height above Sea-level.	Temperature in the Shade.			Mean Atmospheric Pressure.	Days on which Rain fell.	Amount of Rainfall.	Mean Relative Humidity.	Amount of Cloud.
		Max.	Min.	Mean.					
	feet.	°	°	°	inches.	No.	inches.	0-1	0-10
Portland ...	37'0	...	...	62'0	29'994	186	30'77	·789	4'1
Melbourne...	91'3	102'4	30'2	58'0	29'944	134	25'61	·723	6'0
Cape Otway	270'0	100'0	35'0	56'0	29'768	163	32'11	·885	7'4
Sandhurst ...	758'0	105'6	32'4	58'8	29'228	115	20'54	·694	4'9
Ararat ...	1,050'0	...	...	...	...	107	21'45	...	...
Ballarat ...	1,438'0	101'0	27'8	56'0	28'510	119	27'49	·654	6'2

344. The times at which the observations are taken whereby the records of 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. The following are the results for Melbourne in the ten years ending with the one under review :—

Meteor-
ological ob-
servations in
Melbourne.

METEOROLOGICAL OBSERVATIONS, MELBOURNE, 1864-1873.

(Observatory 91·3 feet above 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
1864 ...	96·6	30·5	57·0	29·945	153	27·398	·723	6·1
1865 ...	103·4	30·9	56·5	29·936	139	15·920	·678	5·6
1866 ...	108·2	28·0	57·8	29·954	107	22·410	·697	5·5
1867 ...	108·4	29·7	57·7	29·918	133	25·790	·720	5·7
1868 ...	110·0	27·4	57·1	29·977	120	18·270	·700	5·7
1869 ...	108·4	27·0	57·2	29·938	129	24·586	·710	6·0
1870 ...	109·0	29·6	57·4	29·930	129	33·764	·740	5·8
1871 ...	106·0	32·1	57·7	29·925	125	30·170	·740	5·9
1872 ...	103·3	32·5	57·6	29·923	136	32·521	·740	6·4
1873 ...	102·4	30·2	58·0	29·944	134	25·610	·723	6·0

345. It will be observed that the mean temperature was higher in the year under notice than in any other year of the decenniad ; that the mean atmospheric pressure was higher than in any other year except 1864, 1866, and 1868 ; that rain fell on more days than in any other year except 1864, 1865, and 1872 ; but that the amount of rainfall was exceeded in all the years except 1865, 1866, 1868, and 1869 ; that the mean relative humidity was the same as that in 1864, and was greater than in any other year except the three years ended with 1872 ; also that the amount of cloud was the same as that in 1869, and was exceeded only in 1864 and 1872.

Results compared