

POPULATION.

ON the 26th January, 1788, Captain Phillip arrived in Sydney Harbour, bringing with him an establishment of about 1,030 people all told. Settlement soon spread from the parent colony, first to Tasmania in 1803, and afterwards to other parts of the continent and to New Zealand. At the end of 1899 the population of Australasia had increased to 4,482,980 persons, thus distributed:—

State.	Males.	Females.	Total.
New South Wales	729,005	627,645	1,356,650
Victoria	580,660	582,800	1,163,460
Queensland	267,340	215,060	482,400
South Australia	194,560	176,140	370,700
Western Australia	112,290	58,740	171,030
Tasmania	98,640	83,660	182,300
Commonwealth	1,982,435	1,744,045	3,726,480
New Zealand	398,680	357,820	756,500
Australasia	2,381,115	2,101,865	4,482,980

If to these numbers, which principally comprise the people of European descent, there be added an estimated population of 200,000 Australian aborigines in an uncivilised state in Western Australia, South Australia, and Queensland, and of nearly 40,000 Maoris in New Zealand, the total population of Australasia at the end of 1899 would be about 4,723,000.

The growth of the population of Australasia from the date of the first settlement is shown in the following table. An official enumeration of the people was made in most of the years quoted:—

Year.	Population of Australasia.	Annual Increase per cent.	Year.	Population of Australasia.	Annual Increase per cent.
1788	1,030	.....	1891*	3,809,895	3·34
1801	6,508	15·13	1892	3,967,050	2·10
1811	11,525	11·94	1893	4,044,790	1·96
1821	35,610	5·88	1894	4,123,700	1·95
1831	79,306	8·34	1895	4,201,280	1·88
1841	211,095	10·28	1896	4,278,590	1·84
1851	430,596	7·36	1897	4,358,380	1·86
1861*	1,252,994	11·30	1898	4,419,490	1·40
1871*	1,924,770	4·39	1899	4,482,980	1·44
1881*	2,742,550	3·60			

* Census population.

The high rate of increase of 11·30 per cent. from 1851 to 1861 was, of course, due to the gold discovery, which proved a strong incentive to emigration to these colonies. The high annual increase between 1831 and 1841 was owing to the policy of State-aided immigration which was then in vogue. Prior to this period the high average arose from the small number of people on which the increase was calculated.

The population of Australasia, as shown by the census of 1891, had increased threefold since 1861, and nearly twofold since 1871, while the annual rate of increase for the whole thirty years was 3·78 per cent. Taking the states individually, the rate of increase for Queensland was the highest—a circumstance partly to be attributed to the large numbers introduced under the system of State-aided immigration which has prevailed in that colony for many years; but the largest numerical increase was that of New South Wales. The population of each state (exclusive of aborigines, a few in New South Wales and Victoria excepted) at the last four census periods, and at the end of 1899, is shown below:—

State.	1861.	1871.	1881.	1891.	1899.	Annual Increase per cent., 1861-1899.
New South Wales ...	350,860	503,981	751,468	1,132,234	1,356,650	3·55
Victoria	540,322	731,528	862,346	1,140,405	1,163,400	2·00
Queensland	30,059	120,104	213,525	393,718	482,400	7·43
South Australia	126,830	185,626	279,865	320,431	370,700	2·81
Western Australia...	15,691	25,353	29,708	49,782	171,030	6·36
Tasmania	90,211	101,785	115,705	146,667	182,300	1·83
Commonwealth ...	1,153,973	1,668,377	2,252,617	3,183,237	3,726,480	3·07
New Zealand	99,021	256,393	489,933	626,658	756,500	5·39
Australasia	1,252,994	1,924,770	2,742,550	3,809,895	4,482,980	3·34

In order to show the great differences in the growth of the population of the individual states during the last ten years, the appended table has been prepared, giving the population at the end of each year since 1890.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
1890	1,121,860	1,133,270	392,960	319,410	46,290	145,290	626,050	3,785,130
1891	1,162,880	1,157,050	400,130	325,580	53,280	152,610	631,060	3,885,590
1892	1,193,780	1,165,270	409,040	336,750	58,670	153,110	650,430	3,967,050
1893	1,218,150	1,170,070	417,970	346,910	65,060	154,370	672,260	4,044,790
1894	1,244,460	1,173,090	428,540	352,030	82,070	157,380	686,130	4,123,700
1895	1,269,230	1,173,650	441,110	356,600	101,240	160,740	698,710	4,201,280
1896	1,286,970	1,164,510	450,300	358,690	137,950	166,010	714,160	4,278,590
1897	1,311,040	1,163,420	460,430	360,910	161,920	171,600	729,060	4,353,380
1898	1,333,840	1,160,190	471,510	365,160	168,130	177,200	743,460	4,419,490
1899	1,356,650	1,163,400	482,400	370,700	171,030	182,300	756,500	4,482,980

The total populations, at the end of each of the last ten years, of the six states which form the Australian Commonwealth are given below :—

1890	3,159,080	1895	3,502,750
1891	3,251,530	1896	3,564,430
1892	3,316,620	1897	3,629,320
1893	3,372,530	1898	3,676,030
1894	3,437,570	1899	3,726,480

The populations quoted for the various colonies for the years 1891 to 1899 differ slightly from estimates previously published. During February, 1900, a conference of Statisticians, held in Sydney, agreed upon certain estimates of population as at 31st December, 1899, and in consequence an adjustment has been made to place the populations for each year between 1891 and 1899 on a uniform basis with those adopted by the conference. The differences chiefly arose on account of larger allowances for unrecorded departures by sea being made than had formerly been the case.

The following table gives the total increase in each colony during the thirty-nine years, 1861-99, distinguishing the natural increase arising from the excess of births over deaths from the increase caused by the excess of arrivals over departures :—

State	Excess of—		Total Increase.
	Births over Deaths.	Immigration over Emigration.	
New South Wales.....	658,764	349,340	1,008,104
Victoria	614,404	11,149	625,553
Queensland	200,328	254,016	454,344
South Australia	213,007	33,581	246,588
Western Australia.....	27,694	128,109	155,803
Tasmania.....	81,398	13,127	94,525
New Zealand	406,917	269,872	676,789
Australasia	2,202,512	1,059,194	3,261,706

The information conveyed by the above figures is important, as illustrating not only the movement of population but also the effect upon immigration of local influences, such as the attraction of liberal land laws, the fertility of the soil, the permanence of employment, and the policy of assisted immigration. But a bare statement of the gross increase to each state from immigration is apt to be misleading, since the original density of population must be deemed a factor affecting

the current of immigration. The following figures show the density of population in each state at the time of taking the census on the four last occasions and at the close of 1899 :—

State.	1861.	1871.	1881.	1891.	1899.
New South Wales.....	1·13	1·62	2·42	3·65	4·34
Victoria	6·15	8·32	9·81	12·98	13·23
Queensland	0·04	0·18	0·32	0·59	0·72
South Australia	0·14	0·20	0·31	0·35	0·41
Western Australia.....	0·02	0·03	0·03	0·05	0·18
Tasmania	3·44	3·88	4·41	5·59	6·95
New Zealand	0·95	2·45	4·69	6·00	7·24
Australasia	0·41	0·63	0·89	1·24	1·45

At the close of the year 1899 the population of Australasia, including the native races, only reached a density of 1·53 persons per square mile—a rate which is far below that of any other civilised country; and excluding Australian aborigines and Maoris, the density was not more than 1·45 per square mile. But a comparison of the density of population in Australasia with that in older countries of the world is of little practical use, beyond affording some indication of the future of these states when their population shall have reached the proportions to be found in the old world. The latest authoritative statements give the density of the populations of the great divisions of the world as follows :—

Continent.	Area in square Miles.	Population.	Persons per square Mile.
Europe.....	3,742,000	372,925,000	99·66
Asia	17,101,000	830,558,000	48·57
Africa	11,510,000	170,050,000	14·77
America	14,805,000	132,718,000	8·96
Australasia and Pacific Islands.	3,457,000	5,907,000	1·71
Polar Regions.....	1,732,000	82,000	0·05
The World	52,347,000	1,512,240,000	28·89

From the earliest years of settlement there was a steady if not a powerful stream of immigration into these colonies, but in 1851, memorable for the finding of gold, the current was swollen by thousands of men in the prime of life who were attracted to the shores of Australia by the hope of speedily acquiring wealth. By far the greater number of these new arrivals settled in the new colony of Victoria, which had just been separated from New South Wales, and for some years afterwards Victoria had an unprecedented addition to its population. The vast changes which took place will be evident when it is stated that in 1850, just prior to the gold rush, the population of the northern and southern portions of New South Wales was:—

Port Phillip (afterwards Victoria)	76,162
Remaining portion of the Colony	189,341

While five years afterwards the population of the two colonies was:—

Victoria	364,324
New South Wales	277,579

Victoria enjoyed the advantage in population and increased its lead yearly until 1871, when its inhabitants exceeded in number those of New South Wales by no less than 229,654. But from that time almost every year showed a nearer approach in the numbers of the inhabitants of the two colonies, until at the census of 1891 Victoria had only a lead of 8,171, while at the end of that year New South Wales had the greater population by about 5,800. By the end of 1899 the parent colony had, as previously mentioned, increased its lead to over 193,000. In considering the question of increase of population, attention should be paid to the density as well as to the actual number of the population; in regard to the case in point, the density of Victoria is 13·23 per square mile, and in New South Wales only 4·34.

New Zealand and Queensland, and Western Australia also in recent years, likewise owe much of their remarkable progress to the discovery of gold. In New Zealand the gold fever broke out in 1861, when the population numbered only 99,021, and the period of its activity extended over many years. At the end of 1899 the population had reached 756,500 souls, exclusive of Maoris, or seven and a half times that of 1861. In Queensland the attractive force of the gold-fields was exerted at a later date, and it may still be considered a powerful factor in stimulating the growth of population in that colony; while the development of Western Australia during the eight years ending 1898 was wholly due to the gold deposits discovered in that colony, the population increasing from the small number of 46,290 at the end of 1890 to 168,130 at the end of 1898. The great rush of miners to Western Australia has for the present ceased, as the net immigration for 1899 was only 50; but no one who knows the vast mineral possibilities of the colony will be surprised if fresh discoveries should at any time be made, and immigration on a large scale again set in.

Much of the increase of population, especially in the colonies of New South Wales, Queensland, and New Zealand, was due to the State policy of assisted immigration. The following table shows the number of all immigrants introduced into the colonies either wholly or partly at the expense of the state, up to the end of 1899 :—

State.	Prior to 1881.	1881 to 1899.	Total.
New South Wales	177,234	34,738	211,972
Victoria	140,102	.....	140,102
Queensland	52,399	112,714	165,113
South Australia	88,050	7,298	95,348
Western Australia.....	889	5,994	6,883
Tasmania.....	18,965	2,734	21,699
New Zealand	*100,920	14,658	*115,578
Australasia	578,559	178,136	756,695

* Exclusive of a number prior to 1870, of which no record can be found.

Queensland and Western Australia are the only states that at present assist immigrants ; New South Wales ceased to do so in 1888, Victoria practically ceased assisted immigration in 1873, South Australia in 1886, Tasmania in 1891, and New Zealand in 1891.

The following table shows the increase of population by excess of immigration over emigration for the four decennial periods ended 1890, and for the period of nine years 1891 to 1899 :—

State.	1851-60.	1861-70.	1871-80.	1881-90.	1891-99.
New South Wales.....	123,097	45,539	109,341	164,205	30,255
Victoria	398,753	38,935	*12,672	112,097	*127,221
Queensland	†	68,191	73,849	101,525	10,451
South Australia	33,024	17,949	34,569	*17,004	*1,933
Western Australia.....	6,870	5,319	*339	10,170	112,686
Tasmania.....	6,767	*3,228	*1,427	5,572	12,209
New Zealand.....	44,742	118,637	132,976	9,453	25,377
Australasia	613,253	291,342	336,297	386,018	61,824

* Denotes excess of emigrants. † Included in New South Wales figures.

Taking the nineteen years from 1881, it will be seen from the next table that no colony exhibits uniformity in the immigration returns, all of the provinces even showing an excess of departures in one or more years ; but, with the exception of Victoria and South Australia, the

colonies all show substantial increases from immigration over the whole period. If the results for the last nine years be compared, it will be found that Victoria lost 127,221 persons by an excess of emigration, while, on the other hand, Western Australia gained 112,686 persons during the same period. South Australia also lost to the extent of 1,933 persons, the remaining colonies all gaining slightly. Dealing with the year 1899, the exodus from Victoria was sufficient to more than counterbalance the arrivals in all the other colonies, so that for the first time in the history of Australasia there was displayed the remarkable fact of the departures exceeding the arrivals.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
1881	16,673	4,976	4,009*	12,055	401	1,166	1,970	33,232
1882	16,034	6,563	17,043	3,679 ^o	94	587	2,375	39,017
1883	27,278	6,597	34,371	4,266	436	689	8,657	82,294
1884	23,944	8,525	18,620	275	871	816	7,724	60,775
1885	24,829	9,027	7,056	9,280*	1,628	388 ^o	2,757	35,629
1886	18,073	15,436	7,695	8,819*	3,738	302 ^o	199*	35,622
1887	7,202	15,445	11,527	3,008 ^o	2,049	1,797	211	35,223
1888	6,633	25,757	5,651	8,325 ^o	1,196*	383 ^o	10,548 ^o	17,589
1889	8,241	9,794	4,340	2,346*	578	1,172	701*	21,073
1890	15,298	9,977	769*	1,857	1,571	418	2,793 ^o	25,559
1891	17,848	3,906	2,375*	350 ^o	6,073	4,583	3,745*	25,940
1892	5,269	13,760*	727	4,341	4,473	2,396 ^o	4,953	2,153
1893	50	15,244*	231	4,013	5,223	1,885*	10,410	2,798
1894	2,529	15,803*	1,891	1,338*	15,968	96	2,260	5,598
1895	910	17,510*	2,848	2,034*	18,401	381	897	3,893
1896	2,927 ^o	25,604*	818	3,875 ^o	35,948	2,568	3,270	10,198
1897	1,087	17,274*	1,240	3,298 ^o	22,592	2,853	2,758	9,958
1898	3,239	14,707 ^o	3,390	12	3,958	3,379	2,689	1,960
1899	2,250	11,220*	3,135	596	50	2,630	1,885	674*

* Denotes excess of departures.

The great bulk of the movement of population within recent years, shown above, is only intercolonial; and it is evident that immigrants are not attracted to these colonies from abroad, the long sea voyage and cost of passage probably being the chief deterring reasons.

AGES OF THE PEOPLE.

At the census of 1891 the average age of the population of Australasia was 24.4 years; the average age of the males was 25.5 years, and that of the females 23.3 years. The oldest population was that of Victoria, with an average of 25.6 years; and the youngest that of Queensland, with an average of 23.7 years.

The following table shows the number of males at the close of 1899 at the dependent ages from infancy to 15 years; at the supporting ages

from 15 to 65 ; in the old-age group, from 65 years upwards ; and at the military ages from 20 to 40 years :—

State.	Dependent Ages, up to 15 years.	Supporting Ages, 15 and under 65.	Old Ages, 65 and over.	Military Ages, 20 to 40 years.
New South Wales	261,355	444,000	23,650	251,290
Victoria	181,500	363,920	35,180	200,130
Queensland	86,270	174,360	6,710	103,650
South Australia	74,370	113,490	6,700	62,940
Western Australia.....	32,260	78,420	1,610	45,610
Tasmania.....	36,880	57,890	3,870	31,980
Commonwealth	672,635	1,232,080	77,720	695,600
New Zealand	138,690	245,150	14,840	119,200
Australasia	811,325	1,477,230	92,560	814,800

The above figures, except those relating to old ages, are deduced from the proportions which existed at the last census ; but there is reason to believe that these proportions have changed in consequence of the falling birth-rate, and that when the next census is taken the age constitution of the people will be found to have materially altered. The figures for the old ages represent the survivors of those who were 56 years and upwards at the census of 1891. It would appear that there are in the Commonwealth nearly 696,000 men who could be called upon to perform military service, as well as over 119,000 in New Zealand.

The female population of Australasia may be conveniently grouped into three divisions, namely, dependent ages, from infancy to 15 years ; reproductive ages, from 15 to 45 ; and those over 45 years of age. The numbers of each class, as well as those of 65 years and upwards, in the several provinces at the close of 1899, are shown below :—

State.	Dependent Ages, up to 15 years.	Reproductive Ages, 15 and under 45.	Ages of 45 years and over.	Old Ages, 65 years and over.
New South Wales.. ..	259,350	291,350	76,945	16,250
Victoria	210,100	282,420	90,280	24,960
Queensland	91,640	100,470	22,950	4,090
South Australia	71,280	78,880	25,980	6,520
Western Australia	24,570	27,380	6,790	610
Tasmania.....	34,290	37,050	12,320	3,020
Commonwealth	691,230	817,550	235,265	55,450
New Zealand	136,010	170,680	51,130	9,470
Australasia	827,240	988,230	286,395	64,920

The above figures are based on the proportions existing at the last census, as in the case of the preceding table for males, and are open to question for the reasons specified in connection with that table.

BIRTHS.

The total number of births in each colony, and the rate per thousand of the population during the year 1899 are shown in the following table:—

State.	Births.			Birth-rate.
	Males.	Females.	Total.	
New South Wales.....	18,613	17,848	36,461	27·10
Victoria	15,785	15,223	31,008	26·69
Queensland	7,128	5,771	13,899	29·14
South Australia.....	4,852	4,570	9,422	25·61
Western Australia	2,636	2,538	5,174	30·51
Tasmania	2,415	2,259	4,674	26·00
New Zealand	9,724	9,111	18,835	25·11
Australasia.....	61,153	58,320	119,473	26·84

The birth-rate of Australasia in 1899 was identical with that of 1898, viz., 26·84. In Victoria, South Australia, and Western Australia there was an increase in the rate during 1899, but the other colonies still manifest a tendency to fall. For the year 1898 the birth-rates in the various colonies were, New South Wales 27·39, Victoria 25·97, Queensland 29·90, South Australia 24·71, Western Australia 30·10, Tasmania 26·26, and New Zealand 25·75.

The number of births in each colony and in the whole of Australasia, in quinquennial periods from 1861 to 1895, and in the four years 1896-99, was as follows:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-99.
New South Wales ..	79,958	92,643	106,543	127,572	158,965	188,300	197,566	140,456
Victoria	123,353	131,052	136,363	132,347	140,258	172,307	180,552	124,058
Queensland	11,761	22,622	29,279	37,535	48,979	70,150	72,863	56,162
South Australia	30,472	35,067	36,398	46,310	56,618	53,200	53,093	38,002
Western Australia ..	3,352	3,724	4,033	4,611	5,446	7,696	10,242	16,945
Tasmania	15,454	14,679	15,313	17,165	21,425	23,710	24,794	18,540
New Zealand	26,611	46,770	59,891	88,205	96,482	94,071	91,410	75,139
Australasia	200,961	346,557	387,820	453,745	528,173	609,434	630,820	475,882

The average birth-rates of each colony for the same periods were as follow:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-99.
New South Wales ..	42·71	40·70	39·05	38·53	37·65	36·36	32·85	27·92
Victoria	43·30	39·27	35·69	31·43	30·76	32·72	31·08	26·77
Queensland	43·07	43·91	40·81	36·72	36·37	35·81	35·16	30·46
South Australia	44·14	40·60	37·24	38·23	38·52	34·48	31·24	26·24
Western Australia ..	30·07	33·86	31·30	32·97	34·57	36·88	30·77	28·05
Tasmania	33·80	29·65	29·72	31·54	35·02	34·59	32·18	27·01
New Zealand	38·22	42·28	40·02	41·32	36·60	31·22	27·06	25·78
Australasia	41·92	39·84	37·34	36·38	35·21	34·43	31·52	27·35

It is a matter of common knowledge that for some years past the birth-rate has been declining in the colonies, and so important is the subject not only as regards the growth of the population, but also as affecting general progress, that in 1899 the author made a special investigation into the question of childbirth in Australia, but more particularly with reference to New South Wales. The conclusions arrived at with respect to that colony, however, may be held to obtain for all the others, seeing that the conditions of living do not differ materially in any of them. During the course of the investigation it was found, first, that for all women the proportion of fertile marriages is decreasing; second, that amongst fertile women the birth-rate is much reduced as compared with what it was twenty years ago, and third, that Australian-born women are not so fertile as the European women who have emigrated to the colonies, although how far this is due to natural sterility, and how far to prevention, it is impossible to say. It was also found that the decline had been persistent and regular since 1881, and this restriction of births in a young country like Australia, where immigration is discouraged, is a matter which must have far-reaching results, although its economic effects are only beginning to be seen, and should claim the serious consideration of all thoughtful people.

Particulars relating to illegitimate births will be found in the chapter headed "Social Condition."

DEATHS.

The following table shows the total number of deaths and the rate per thousand of the population during the year 1899:—

State.	Deaths.			Death-rate.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	9,131	6,770	15,901	12·62	10·89	11·82
Victoria	9,286	7,292	16,578	16·00	12·54	14·27
Queensland	3,943	2,201	6,144	14·90	10·36	12·88
South Australia	2,424	2,054	4,478	12·59	11·71	12·17
Western Australia	1,513	811	2,324	13·49	14·13	13·70
Tasmania	1,192	1,012	2,204	12·28	12·24	12·26
New Zealand	4,464	3,216	7,680	11·29	9·07	10·24
Australasia	31,953	23,356	55,309	13·51	11·20	12·43

The death-rates for 1899, with the exception of New Zealand, show a satisfactory decline as compared with those of 1898, but still they are not so low as those of 1897. The rate of 1898 for Australasia, which was 13·36, was abnormally high, and was due to the large number of deaths of young children from scarlet fever, measles, and whooping-cough, which were epidemic in the colonies in that year. The rates of

1898 are quoted for the sake of comparison, and were—New South Wales 12·60, Victoria 16·07, Queensland 13·40, South Australia 13·03, Western Australia 16·46, Tasmania 13·53, and New Zealand 9·84 per thousand. Comparing the death-rate of males and females separately, New Zealand shows the lowest rates amongst both sexes, and New South Wales, which has the lowest general rate but one, is only fourth amongst males and third amongst females, while Queensland, which has the third highest general rate, stands second amongst the female rates. Western Australia exhibits the very unusual occurrence of the female rate exceeding the male; this fact is difficult to account for, and seems to show that the female population is under-estimated.

The number of deaths in each colony and in the whole of Australasia, in quinquennial periods from 1861 to 1895, and in the four years 1896-99, is shown in the following table:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-99.
New South Wales ..	31,561	36,466	40,909	53,250	66,103	71,457	76,802	62,665
Victoria.....	49,452	55,136	59,759	62,811	66,811	84,648	82,056	66,115
Queensland	5,751	9,312	12,869	17,284	25,731	28,040	26,581	23,455
South Australia	10,840	12,963	15,475	18,026	21,616	19,361	20,535	17,337
Western Australia..	1,399	1,711	2,068	2,003	2,709	3,332	5,430	9,703
Tasmania	6,953	6,962	8,060	8,004	9,790	10,389	10,123	8,411
New Zealand	10,001	13,323	19,354	25,254	29,074	29,746	33,525	27,951
Australasia	115,957	135,878	153,494	187,623	221,834	246,973	255,052	215,637

The average death-rates of each colony for the periods shown in the above table are given below; but the statement does not afford a just comparison between the colonies, as no account is taken of the ages of the people:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-99.
New South Wales ..	16·36	16·05	14·99	16·09	15·66	13·80	12·77	11·95
Victoria.....	17·36	16·52	15·64	14·92	14·65	16·07	14·10	14·19
Queensland	21·06	18·07	17·94	16·90	19·10	15·52	12·82	12·72
South Australia	15·70	15·01	15·83	14·90	14·71	12·55	12·08	11·97
Western Australia..	16·31	15·55	16·03	14·32	17·19	15·97	16·31	16·06
Tasmania	15·20	14·06	15·64	16·52	16·00	15·16	13·14	12·23
New Zealand	14·36	12·05	12·93	11·83	11·00	9·87	10·14	9·59
Australasia	16·75	15·62	15·26	15·04	14·70	13·05	12·74	12·29

If this table be compared with that showing the birth-rates, it will be observed that the experience of Australasia corresponds with that of other countries, viz., that a low birth-rate and a low death-rate accompany each other, so that although the birth-rate has been declining it has had an effect in reducing the death-rate, and the balance in favour of births has not been reduced as much as it might have been. From the next table, which shows the mean natural increase in various countries during the decennial period 1889-98, it will be seen that the case of Australasia is much better than that of any of the countries of the United Kingdom or Europe, for notwithstanding that the birth-rate of these countries in some cases is higher, the death-rate is so much higher as to more than outweigh any advantage in that respect.

Country.	Birth-rate.	Death-rate.	Excess of Births per 1,000 Inhabitants.
New South Wales	31·76	12·63	19·13
Victoria.....	30·24	14·67	15·57
Queensland.....	34·46	13·23	21·23
South Australia.....	30·07	11·99	18·08
Western Australia.....	29·42	16·32	13·10
Tasmania.....	30·90	13·16	17·74
New Zealand.....	27·52	9·78	17·74
Australasia	30·68	12·85	17·83
England and Wales	30·28	18·35	11·93
Scotland	30·71	18·79	11·92
Ireland.....	22·98	18·11	4·87
United Kingdom.....	29·45	18·37	11·08
Denmark	30·42	17·80	12·62
Norway	30·24	16·50	13·74
Sweden	27·41	16·35	11·06
Austria	37·39	27·30	10·09
Hungary	40·95	30·58	10·37
Switzerland	28·20	19·69	8·51
German Empire.....	36·20	22·69	13·51
Prussia.....	36·90	22·26	14·64
The Netherlands	32·79	18·93	13·86
Belgium	29·10	19·42	9·68
France	22·41	21·67	0·74
Italy	36·90	24·94	11·96

If the year 1898 only had been taken as the basis of comparison, the gain by natural increase to Australasia would have been in some instances below that of the European countries, but the death-rate of 1898 in Australasia was abnormally high, and much above the average for the ten years.

INDEX OF MORTALITY.

So far consideration has only been given to the actual death-rates as they are obtained by taking the proportion which the number of deaths bears to the number of inhabitants. It is well known, however, that the death-rate of a country is affected by more than the salubrity of its climate, the degree of perfection to which the sanitary condition of its cities and towns and villages has been brought, and the nature of the industrial pursuits of its people. It is known that the ages of the people considerably affect the death-rate of a country, that, for instance, one which has a large proportion of young people will, other things being equal, have a lower death-rate than another which has a comparatively large proportion of old persons, and it is this fact that statistical science now seeks to take into account in establishing the rates of mortality of the various countries of the world. In order to have a comparison of the mortality of the principal countries on a uniform basis, the International Statistical Institute, in its 1895 session, held at Berne, decided to recommend the population of Sweden, in five age-groups, as ascertained at the census of 1890, as the standard population, by which the index of mortality should be calculated. Applying the co-efficient of mortality in each age-group in the colonies to the age constitution of the standard population, the "index of mortality," as distinguished from the actual "death-rate," is found as given below for each of the five years 1894-98. How greatly the ages of the people of a country affect its mortality will be evident from the fact that whereas in 1898 the death-rates of the colonies ranged from 9.84 in New Zealand to 16.46 in Western Australia, a difference of 6.62 per thousand, the range of the indexes of mortality was only 4.61 per thousand, namely, from 14.94 in New Zealand to 19.55 in Victoria.

State.	1894.	1895.	1896.	1897.	1898.
New South Wales	16.32	15.69	16.45	14.97	17.03
Victoria	15.96	16.39	16.48	16.00	19.55
Queensland	16.29	15.21	16.73	16.11	19.07
South Australia	14.61	14.36	14.44	14.55	16.35
Western Australia	16.65	18.86	17.48	18.47	17.05
Tasmania	14.74	13.40	13.89	13.66	15.86
New Zealand	14.44	13.98	13.01	13.53	14.94
Australasia	15.68	15.49	15.71	15.17	17.42

It should be remembered, in comparing these indexes of mortality, that the age constitution of each colony during each of the five years taken has been assumed to be that which existed at the census of 1891; but, as has been pointed out before, there is little doubt that this has since changed, and the comparison is probably most unfair to Victoria.

AGES AT DEATH.

A detailed statement of the ages at death of the males who died during the year 1898 in the various colonies is given below. The figures for South Australia in this and subsequent detailed tables refer to the province proper exclusive of the Northern Territory.

Ages at Death.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Total.
Under 1 year	2,431	2,228	804	726	443	312	860	7,804
1 and under 2 years....	534	627	196	133	101	67	117	1,825
2 " 3 "	184	204	79	40	26	24	52	609
3 " 4 "	102	119	62	29	21	3	45	381
4 " 5 "	90	105	38	23	11	12	24	301
5 " 10 "	233	322	114	64	35	31	81	880
10 " 15 "	173	162	62	49	23	30	78	577
15 " 20 "	198	222	101	69	30	35	118	773
20 " 25 "	204	300	176	73	122	49	171	1,155
25 " 30 "	314	329	198	85	127	40	162	1,255
30 " 35 "	339	359	212	85	130	40	154	1,319
35 " 40 "	415	379	213	102	134	30	150	1,432
40 " 45 "	398	329	205	99	100	42	152	1,325
45 " 50 "	371	329	194	100	83	42	180	1,299
50 " 55 "	401	315	184	99	66	49	216	1,330
55 " 60 "	462	436	196	106	62	25	299	1,586
60 " 65 "	572	667	195	131	65	43	335	2,008
65 " 70 "	605	934	189	128	79	75	384	2,394
70 " 75 "	549	831	141	136	49	93	278	2,077
75 years and upwards ..	945	1,326	204	305	66	259	424	3,529
Unspecified	6	10	10	2	20	8	....	56
Total	9,636	10,533	3,771	2,584	1,793	1,318	4,289	33,915

Similar information respecting the deaths of females in 1898 is given in the following table:—

Ages at Death.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Total.
Under 1 year	1,987	1,819	736	525	332	219	650	6,318
1 and under 2 years....	516	623	178	132	83	52	83	1,667
2 " 3 "	201	178	80	35	21	21	39	575
3 " 4 "	107	94	67	23	12	12	27	342
4 " 5 "	86	91	43	21	14	8	23	286
5 " 10 "	229	315	112	65	37	33	85	576
10 " 15 "	146	162	65	48	22	22	64	529
15 " 20 "	218	241	61	67	20	50	145	392
20 " 25 "	286	279	84	87	62	39	149	986
25 " 30 "	290	379	91	80	55	48	128	1,071
30 " 35 "	307	370	96	83	46	44	115	1,061
35 " 40 "	302	372	103	88	33	37	121	1,061
40 " 45 "	225	288	106	69	22	32	130	872
45 " 50 "	246	237	66	60	12	31	124	776
50 " 55 "	206	263	76	55	19	27	112	748
55 " 60 "	218	298	85	83	21	31	142	878
60 " 65 "	289	430	107	96	13	44	158	1,137
65 " 70 "	272	487	98	100	14	60	190	1,221
70 " 75 "	259	425	66	123	11	65	137	1,086
75 and upwards	634	818	146	251	23	165	342	2,379
Unspecified	1	3	1	.....	1	1	....	7
Total	7,025	8,162	2,472	2,091	923	1,041	2,064	24,078

The next table shows the ages of all the persons who died during 1898 :—

Ages at Death.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australia.
Under 1 year	4,418	4,017	1,540	1,251	825	531	1,510	14,122
1 and under 2 years....	1,100	1,250	374	205	184	119	200	3,492
2 " 3 "	385	382	159	75	47	45	91	1,184
3 " 4 "	209	213	129	52	33	15	72	723
4 " 5 "	176	196	79	44	25	20	47	587
5 " 10 "	462	637	226	129	72	64	166	1,756
10 " 15 "	319	324	127	97	45	52	142	1,106
15 " 20 "	416	463	162	136	50	85	263	1,575
20 " 25 "	550	579	260	160	124	88	320	2,141
25 " 30 "	604	708	289	165	162	88	290	2,326
30 " 35 "	646	729	308	168	176	84	269	2,380
35 " 40 "	717	751	321	190	107	76	271	2,493
40 " 45 "	623	617	311	168	122	74	282	2,197
45 " 50 "	617	566	260	160	95	73	304	2,075
50 " 55 "	607	568	260	154	85	76	328	2,078
55 " 60 "	680	734	281	189	83	56	441	2,464
60 " 65 "	861	1,097	302	227	78	87	493	3,145
65 " 70 "	877	1,421	287	228	93	135	574	3,615
70 " 75 "	808	1,256	207	259	60	158	415	3,163
75 and upwards	1,579	2,144	350	556	80	424	766	5,903
Unspecified	7	13	11	2	21	9	....	63
Total	16,661	18,695	6,243	4,675	2,716	2,359	7,244	68,593

The above tables, showing the ages at death, are not of much use for comparative purposes, since the rates for each age are not shown. It is, unfortunately, not possible to quote these, as the numbers living at each age are not known with any exactitude, the only figures available being those of the last census, since which time the age constitution of the populations has changed materially. It is, however, possible to give the mortality of infants under 1 year of age, and this may be measured accurately by comparing the deaths with the number of births; moreover, this is a most sensitive and reliable test of the healthiness and sanitary condition of a country, since at this early age children are most susceptible to the attacks of disease. The number under 1 year who died in 1898 was 14,122, or 119·91 per 1,000 births,

while in 1899 there was a fall to 13,153, or 113·13 per 1,000 births. The following table shows for each colony the number of deaths of children under 1 year of age, and the rate per 1,000 births, since 1870, arranged in five-year periods :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-99.
DEATHS under 1 Year.						
New South Wales	11,036	14,626	19,709	21,586	21,930	16,983
Victoria.....	16,981	15,865	17,043	22,582	20,221	14,363
Queensland	3,596	5,068	6,732	8,339	7,496	5,881
South Australia	5,758	6,516	7,594	5,593	5,227	4,355
Western Australia .....	.....	.....	.....	939	1,332	2,800
Tasmania	1,560	1,830	2,331	2,437	2,337	1,895
New Zealand.....	6,390	8,432	8,733	7,924	8,005	6,109
Australasia	45,321	52,337	62,142	69,400	66,548	52,386
RATE per 1,000 Births.						
New South Wales	103·58	114·65	123·98	114·64	111·00	115·98
Victoria.....	124·53	119·87	121·51	131·06	111·81	115·21
Queensland	122·82	135·02	137·45	118·87	102·88	104·71
South Australia	158·20	140·70	134·13	105·13	98·67	114·94
Western Australia .....	.....	.....	.....	109·15	130·05	165·24
Tasmania	101·87	106·61	108·75	102·78	94·26	102·21
New Zealand	106·69	95·60	90·51	84·23	87·57	81·30
Australasia	118·09	116·53	118·88	113·71	105·51	110·11

In spite of all the sanitary improvements that have been effected in recent years, the rate does not seem to have decreased very appreciably in any of the colonies except in South Australia and in New Zealand. In South Australia the rate was very high in the earlier years, the reason given, being that the deaths of several children 1 year old were wrongly included by the registering officers with those under 1 year. In every province except New Zealand, where the mortality has declined more or less regularly over the whole period, the death-rates of infants have risen during the last period ; in Western Australia the increase has been very serious, to the extent of more than one-fourth in five years.

CAUSES OF DEATH.

The system of classifying the causes of death adopted in the Australasian colonies is that arranged by Dr. William Ogle on the basis of the older system of Dr. William Farr, his predecessor as Superintendent of the Statistical Department of the Registrar-General's Office, England. Under this classification deaths are divided into eight classes, namely,

deaths from specific febrile or zymotic diseases, from parasitic diseases, from dietetic diseases, from constitutional diseases, from developmental diseases, from local diseases, from violence, and from ill-defined or unspecified causes. The following were the assigned causes of death of the 33,915 males who died in the colonies during 1898 :—

Classification.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Specific febrile or zymotic diseases—								
Miasmatic diseases.....	875	954	497	204	271	106	253	3,160
Diarrhoeal diseases.....	402	407	192	163	157	71	162	1,554
Malarial diseases.....	15	2	22	2	20	.....	.....	61
Zoogenous diseases.....	5	.....	.....	.....	.....	.....	.....	5
Veneral diseases.....	26	42	25	4	7	4	10	124
Septic diseases.....	54	39	14	16	10	1	19	153
Total.....	1,377	1,444	750	389	465	182	450	5,057
Parasitic diseases.....	45	33	10	4	2	7	15	116
Dietetic diseases.....	127	134	73	25	41	8	44	462
Constitutional diseases.....	1,386	1,668	604	348	139	155	742	5,042
Developmental diseases.....	942	955	195	295	98	241	343	3,009
Local diseases--								
Diseases of nervous system....	934	854	346	234	120	132	465	3,085
Diseases of organs of special sense.....	12	13	7	3	2	3	6	46
Diseases of circulatory system..	788	979	237	235	112	113	489	3,003
Diseases of respiratory system..	1,296	1,404	428	269	189	133	525	4,304
Diseases of digestive system....	997	1,296	406	238	250	113	345	3,645
Diseases of lymphatic system and ductless glands.....	10	13	7	6	3	2	13	54
Diseases of urinary system....	439	443	119	109	58	39	172	1,379
Diseases of organs of generation	3	.....	2	1	.....	1	.....	7
Diseases of organs of locomotion	20	32	11	16	4	5	14	102
Diseases of integumentary system.....	23	32	13	8	1	4	12	93
Total.....	4,522	5,126	1,626	1,119	739	545	2,041	15,718
Violence--								
Accident or negligence.....	668	579	369	182	162	98	385	2,443
Homicide.....	22	12	10	2	.....	2	4	52
Suicide.....	129	102	66	36	27	7	66	433
Execution.....	1	1	.....	.....	.....	.....	2	4
Violent deaths not classified..	6	.....	.....	.....	.....	.....	.....	6
Total.....	826	694	445	220	189	107	457	2,938
Ill-defined and not specified causes..	411	479	68	184	120	73	188	1,523
Grand Total.....	9,636	10,533	3,771	2,584	1,793	1,318	4,280	33,915

It will be seen that local diseases accounted for nearly one-half of the deaths of males, viz., for 15,718, out of 33,915, which is equal to a rate of 67.46 per 10,000 males living. These diseases were far more prevalent in Victoria, where the rate was 88.12 per 10,000, than in any other colony; the nearest approach being in Western Australia, where the rate reached 66.45. The three colonies, New South Wales,

Queensland, and South Australia, with rates of 63·53, 62·89, and 60·56, were close together, while Tasmania followed with 58·33, and New Zealand with 52·55 per 10,000.

Next to local diseases, the febrile or zymotic diseases were the most fruitful sources of death, being responsible for 5,057, equal to 21·70 per 10,000. In Western Australia these diseases flourished to an alarming extent, causing deaths at the rate of 41·81 per 10,000 males living, due to the large number of deaths from typhoid fever. The next colony to this was Queensland, with 29·01, the other colonies showing rates ranging from 11·59 in New Zealand to 24·82 in Victoria.

Constitutional diseases come next with 5,042 deaths, or 21·64 per 10,000, Victoria claiming most deaths with a rate of 28·67, largely caused by the great number of deaths from phthisis; the other colonies follow at fairly regular intervals, with rates increasing from 12·50 in Western Australia to 23·36 in Queensland.

Developmental diseases were assigned as the cause of death in 3,069 cases, or at the rate of 13·17 deaths per 10,000 living. These diseases claimed, proportionally, most victims in Tasmania, where the rate was 25·79, the chief contributing cause being "old age," and as Tasmania has proportionately more old people than any of the other colonies, the high rate is, to some extent, accounted for. The next lowest rate is Queensland, with 7·54, followed by Western Australia with 8·81, and New Zealand with 8·83, while in New South Wales the rate is 13·23, in South Australia 15·96, and in Victoria 16·42.

The deaths from parasitic and dietetic diseases numbered only 568 males, or 2·44 per 10,000 living in Australasia, the variation in the rates for the respective colonies being comparatively small.

No less than 2,938 males, or 12·61 per 10,000, met with violent deaths, the sparsely populated provinces of Queensland and Western Australia showing the highest rates with 17·21 and 17·00 respectively. The rates for the other colonies were fairly uniform, ranging from 11·45 in Tasmania to 11·93 in Victoria.

In 1,523 cases, or nearly 5 per cent. of the total, the causes of death were either not specified, or so ill-defined that classification was impossible.

A classification, similar to that of males, of the causes of death of the 24,678 females who died during 1898 gives the following results:—

Classification.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Specific febrile or zymotic diseases—								
Miasmatic diseases	848	860	467	203	113	97	197	2,785
Diarrhœal diseases	381	339	151	139	78	37	113	1,238
Malarial diseases	1	.....	7	.....	1	.....	.....	9
Veneral diseases	22	28	6	2	4	.....	13	75
Septic diseases	125	109	21	39	15	6	36	351
Total	1,377	1,336	652	383	211	140	359	4,458

Classification.	New South Wales.	Vic-toria.	Queens-land.	South Aus-tralia.	Western Aus-tralia.	Tas-mania.	New Zea-land.	Aus-tralasia.
Parasitic diseases	36	33	7	3	2	....	12	93
Dietetic diseases	50	81	38	17	12	....	20	218
Constitutional diseases	1,041	1,408	317	315	75	163	643	3,062
Developmental diseases	636	610	155	246	65	169	305	2,176
Local diseases—								
Diseases of nervous system	636	713	223	182	59	112	315	2,260
Diseases of organs of special sense	7	14	3	....	1	1	7	33
Diseases of circulatory system	450	726	152	192	41	91	237	1,939
Diseases of respiratory system	801	967	262	189	92	106	311	2,818
Diseases of digestive system ..	737	1,184	329	191	138	81	250	3,010
Diseases of lymphatic system and ductless glands	6	10	4	10	....	5	24	59
Diseases of urinary system	101	210	65	69	18	21	102	666
Diseases of organs of generation	47	35	19	16	5	4	26	152
Diseases of parturition	104	118	60	29	15	25	72	483
Diseases of organs of loco-motion	7	24	8	11	....	2	10	62
Diseases of integumentary system	13	25	11	8	1	....	5	63
Total	3,219	4,026	1,136	887	420	448	1,409	11,545
Violence—								
Accident or negligence	240	210	108	88	34	38	78	796
Homicide	19	10	5	5	4	5	2	50
Suicide	36	27	12	5	3	1	10	94
Total	295	247	125	98	41	44	90	940
Ill-defined and not specified causes	371	421	42	142	97	57	126	1,286
Grand Total	7,025	8,162	2,472	2,091	923	1,041	2,964	24,678

Almost all that has been said in regard to the causes of the deaths of males may, with slight variations, be repeated with equal truth concerning the deaths of females. With a few exceptions, the rates of death from the various causes were less amongst females than amongst males. The exceptions were that in Western Australia, deaths from local diseases amongst females were 78·04 per 10,000, principally owing to the large number of deaths from diseases of the digestive system, whilst amongst males the rate was 66·45 per 10,000; and that in Queensland with a rate of 31·43, in New South Wales with 22·55, and in South Australia with 22·07 per 10,000, zymotic diseases were more fatal to females than to males. The general rate for these diseases for Australasia was identical for both males and females, viz., 21·70 per 10,000.

Deaths from violence were not nearly so frequent amongst females, the rate being only about one-third that of males, viz., 4·58, ranging from 2·59 in New Zealand to 7·62 in Western Australia. The number of females who died from ill-defined causes was very nearly the same as that of males—the rate being 6·26 per 10,000. In the following table

the general rates for deaths from each class of diseases in Australasia during 1898, amongst males, females, and all persons are shown :—

DEATH-RATE per 10,000 Living.

Diseases.	Males.	Females.	Total.
Zymotic	21·70	21·70	21·70
Parasitic	0·50	0·45	0·48
Dietetic	1·94	1·06	1·53
Constitutional	21·64	19·29	20·54
Developmental	13·17	10·59	11·96
Local	67·46	56·20	62·18
Violent	12·61	4·58	8·85
Ill-defined	6·54	6·26	6·41

The next table, which combines the deaths of males and females previously shown, gives the causes of death of all persons who died during 1898 :—

Classification.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
Specific febrile or zymotic diseases—								
Miasmatic diseases	1,723	1,814	964	407	384	203	450	5,945
Diarrhoeal diseases	783	746	343	302	235	108	275	2,792
Malarial diseases	16	2	29	2	21	..	..	70
Zoogcnous diseases	5	..	..	..	..	..	..	5
Venereal diseases	48	70	31	6	11	4	29	199
Septic diseases	179	148	35	55	25	7	55	504
Total	2,764	2,780	1,402	772	676	322	809	9,515
Parasitic diseases	81	66	17	7	4	7	27	209
Dietetic diseases	177	215	111	42	58	8	64	670
Constitutional diseases	2,427	3,076	921	663	214	318	1,385	9,004
Developmental diseases	1,578	1,565	350	541	163	400	648	5,245
Local Diseases—								
Diseases of nervous system	1,500	1,567	569	416	179	244	780	5,345
Diseases of organs of special sense	10	27	10	3	3	4	13	79
Diseases of circulatory system	1,238	1,705	439	427	153	204	776	4,942
Diseases of respiratory system	2,187	2,431	690	453	281	239	836	7,122
Diseases of digestive system	1,784	2,480	735	429	438	194	595	6,655
Diseases of lymphatic system and ductless glands	16	23	11	16	3	7	37	113
Diseases of urinary system	630	653	154	168	76	60	274	2,045
Diseases of organs of generation	50	35	21	17	5	5	26	159
Diseases of parturition	164	118	60	29	15	25	72	483
Diseases of organs of locomotion	27	56	19	27	4	7	24	164
Diseases of integumentary system	36	57	24	16	2	4	17	156
Total	7,741	9,152	2,762	2,006	1,159	993	3,450	27,263
Violence—								
Accident or negligence	908	789	477	270	196	136	463	3,239
Homicide	41	22	15	7	4	7	6	102
Suicide	165	129	78	41	30	8	76	527
Execution	1	1	..	..	..	..	2	4
Violent deaths not classified	6	..	..	..	..	..	..	6
Total	1,121	941	570	318	230	151	547	3,878
Ill-defined and not specified causes	782	900	110	326	217	160	314	2,809
Grand Total	16,661	18,695	6,243	4,675	2,716	2,359	7,244	58,593

SPECIFIC FEBRILE OR ZYMOTIC DISEASES.

The deaths from specific febrile or zymotic diseases were very numerous in 1898, including 16·24 per cent. of the total causes, and representing 21·70 deaths per 10,000 of the population. Under this class are included the highly infectious diseases—measles, scarlet fever, whooping-cough, and diphtheria—which are especially fatal to children, and which together carried off 6·62 per 10,000 of the whole population during 1898; diarrhœal diseases, chiefly fatal to persons at the extremes of life; and typhoid (enteric) fever, whose ravages are very severe.

It would be interesting to compare the fatality of these diseases in the various colonies, stated in proportion to the number of cases occurring, but unfortunately the necessary information is lacking. In some of the colonies legal enactments provide for the notification of infectious diseases, but they are not rigidly enforced, and doubtless many cases escape notice.

In New South Wales, since the beginning of 1898, under the provisions of the Public Health Act of 1896, notification of the three diseases scarlet fever, diphtheria, and typhoid has been compulsory, and careful record has been kept of the number of cases and deaths, the averages for the two years 1898 and 1899 being shown below:—

Disease.	Number of cases notified.	Number of Deaths.	Fatality per cent.
Scarlet Fever	3,865	34	0·9
Diphtheria	1,117	85	7·6
Typhoid	3,042	248	8·2

The number of deaths shown above differs from the number registered, since the Board of Health only accepts medically certified cases. The experience of London during the nine years 1891-99 is also given.

AVERAGES of nine years, 1891-99.

Disease.	Number of cases notified.	Number of Deaths.	Fatality per cent.
Scarlet Fever	21,973	872	4·0
Diphtheria	11,646	2,259	19·4
Typhoid	3,432	599	17·4

MEASLES.

Measles, which is mainly a children's disease, was the cause in 1898 of the deaths of 1,507 persons, equal to a rate of 3·44 per 10,000 living. The following tables show the number of deaths in each colony from this disease, the death-rate per 10,000 living, and the proportion per cent. of deaths from this cause to total deaths in five-year periods since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales .....	.....	311	200	293	885	516
Victoria.....	1,809	271	386	148	696	681
Queensland	179	36	102	4	302	138
South Australia	356	18	240	8	291	54
Western Australia .....	.....	1	129	nil.	27	35
Tasmania	132	3	66	1	49	46
New Zealand	*359	10	246	85	526	58
Australasia .....	.....	650	1,369	539	2,776	1,528

DEATH-RATE per 10,000 living.						
New South Wales .....	.....	0·94	0·47	0·57	1·47	1·32
Victoria	4·73	0·66	0·81	0·28	1·20	1·95
Queensland	2·50	0·35	0·76	0·02	1·46	1·01
South Australia	3·64	0·15	1·63	0·05	1·74	0·51
Western Australia .....	.....	0·07	8·19	0·00	0·81	0·81
Tasmania	2·56	0·06	1·08	0·01	0·64	0·91
New Zealand	*2·90	0·05	0·93	0·28	1·59	0·27
Australasia .....	.....	0·52	0·91	0·30	1·39	1·18

PROPORTION per cent. of Deaths to Total Deaths.						
New South Wales .....	.....	0·58	0·30	0·41	1·15	1·10
Victoria	3·03	0·43	0·58	0·17	0·85	1·37
Queensland	1·39	0·21	0·40	0·01	1·14	0·50
South Australia	2·30	0·10	1·11	0·04	1·43	0·43
Western Australia .....	.....	0·05	4·76	0·00	0·50	0·47
Tasmania	1·64	0·03	0·67	0·01	0·48	0·74
New Zealand.....	*2·15	0·04	0·85	0·29	1·57	0·29
Australasia .....	.....	0·35	0·62	0·22	1·09	0·95

* Four years, 1872-75.

With regard to the diseases which are almost solely confined to children, the true rates are somewhat obscured by stating the proportion of deaths to the whole population, since the prevalence of the diseases will vary in each colony according to proportional number of young children in each. It has, however, been necessary to state them as above, because there is no means of making an accurate estimate of the numbers living at the ages most affected. Comparing the rates as they appear, it will be seen that measles has been more prevalent since 1891 than during the preceding fifteen years, and that it seems to be most common in the first four colonies shown in the table. Although the disease is in evidence every year, it usually occurs as an epidemic, and, according to the records, the outbreaks occur with more or less regularity and severity about every five years. Measles was epidemic in nearly all the colonies in 1875 (when the attack was very severe), in 1880, in 1884 (when Western Australia suffered heavily), in 1889, in 1893, and in 1898.

SCARLET FEVER.

Scarlet fever was epidemic in 1898, the deaths resulting from it numbering 236, or at the rate of 0·54 per 10,000. In the table below is shown the number of deaths in each colony, the rates, and the proportion of total deaths, arranged quinquennially since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales .....	.....	1,295	476	404	460	210
Victoria	1,455	2,646	282	148	172	173
Queensland	77	37	19	73	31	88
South Australia	626	520	141	27	56	26
Western Australia .....	.....	.....	.....	nil.	1	2
Tasmania	72	304	49	9	8	14
New Zealand	*58	383	312	96	40	8
Australasia .....	.....	5,185	1,279	757	768	521

DEATH-RATE per 10,000 living.

New South Wales .....	.....	3·91	1·13	0·78	0·76	0·54
Victoria	3·81	6·44	0·59	0·28	0·30	0·50
Queensland	1·07	0·36	0·14	0·40	0·15	0·64
South Australia	6·40	4·30	0·96	0·17	0·33	0·24
Western Australia .....	.....	.....	.....	0·00	0·03	0·05
Tasmania	1·40	5·59	0·80	0·13	0·08	0·28
New Zealand	*0·47	1·79	1·13	0·32	0·12	0·04
Australasia .....	.....	4·20	0·86	0·43	0·38	0·40

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
PROPORTION per cent. of Deaths to Total Deaths.						
New South Wales .....	.....	2.43	0.72	0.57	0.60	0.45
Victoria	2.43	4.21	0.42	0.17	0.21	0.35
Queensland	0.60	0.21	0.07	0.26	0.12	0.51
South Australia	4.05	2.88	0.65	0.14	0.27	0.20
Western Australia .....	.....	.....	.....	0.00	0.02	0.03
Tasmania	0.89	3.38	0.50	0.09	0.08	0.23
New Zealand	*0.35	1.52	1.07	0.32	0.12	0.04
Australasia .....	.....	2.79	0.58	0.31	0.30	0.33

* Four years, 1872-75.

The rate of mortality from scarlet fever for the first ten years shown in the table was much higher than that recorded for measles, but, in spite of the highly infectious nature and difficulty of isolation of the former disease, the death-rate has since been consistently lower than that of the latter. From 1871 to 1880 the rate of mortality from scarlet fever was high, but during the next five years a great decrease was manifested, and later there was a further decline, while during the last thirteen years the rate has been practically constant, but with a tendency to rise in Victoria, Queensland, and Tasmania. In Victoria the extremely high rate for 1876-80 was caused by a very virulent outbreak of the disease in 1876, and in Tasmania an outbreak in 1877 largely increased the rate; in fact, during the three years 1875, 1876, and 1877 all the colonies were more or less affected by an epidemic of scarlet fever. In Queensland the disease has never been very prevalent, and in Western Australia it is virtually unknown.

WHOOPIING-COUGH.

A curious fact in connection with whooping-cough, the third of the diseases of infancy and childhood, is that the mortality resulting from it is higher in the case of girls than of boys. During 1898 whooping-cough was responsible for 578 deaths (245 males and 333 females), equal to 1.32 deaths per 10,000 of the population, the male rate being 1.05 and the female 1.62. The table below shows the number of deaths in

each colony since 1870, the rates and the proportion of total deaths :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales .....	.....	676	632	979	1,157	354
Victoria	1,053	921	701	691	851	149
Queensland	117	198	184	306	381	253
South Australia	181	211	341	263	279	129
Western Australia .....	.....	nil.	19	65	57	20
Tasmania	99	84	59	89	79	14
New Zealand	*465	589	592	443	752	32
Australasia .....	.....	2,679	2,528	2,836	3,556	951

DEATH-RATES per 10,000 living.

New South Wales .....	.....	2·04	1·50	1·89	1·92	0·91
Victoria	2·76	2·24	1·47	1·31	1·46	0·43
Queensland	1·63	1·94	1·37	1·69	1·84	1·85
South Australia	1·85	1·74	2·32	1·70	1·67	1·21
Western Australia .....	.....	0·00	1·21	3·12	1·71	0·46
Tasmania	1·92	1·54	0·96	1·30	1·03	0·28
New Zealand	*3·75	2·76	2·24	1·47	2·28	0·15
Australasia .....	.....	2·15	1·69	1·60	1·78	0·74

PROPORTION per cent. of Deaths to Total Deaths.

New South Wales .....	.....	1·27	0·96	1·37	1·51	0·76
Victoria	1·76	1·47	1·05	0·82	1·04	0·30
Queensland	0·91	1·15	0·72	1·09	1·43	1·46
South Australia	1·17	1·17	1·58	2·94	1·37	1·02
Western Australia .....	.....	0·00	0·70	1·95	1·05	0·27
Tasmania	1·23	0·93	0·60	0·86	0·78	0·23
New Zealand	*2·78	2·33	2·04	1·49	2·24	0·16
Australasia .....	.....	1·43	1·14	1·15	1·40	0·59

* Four years, 1872-75.

The death-rate from whooping-cough, which has never been remarkably high, declined after the second quinquennium (1876-80), and thenceforward remained fairly constant during the next fifteen years. For the last three years, however, the returns show a further gratifying decrease, in spite of the fact that the disease was mildly epidemic in most of the colonies in 1898. Generally speaking, whooping-cough seems to have been most prevalent in New South Wales, South Australia, and New Zealand; but, on the whole, the rates up to the last period are very even amongst themselves in all the colonies. In Western Australia the rate rose regularly to a maximum during 1886-90—a very severe epidemic being experienced in 1886—and then declined.

DIPHTHERIA.

Diphtheria, the last of the febrile diseases mentioned which mainly affect children, caused, in 1898, a total of 578 deaths, at the rate of 1·32 per 10,000 persons living. In the following table is shown the number of deaths in each colony, the death-rate, and the proportion borne to total deaths since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales .....	.....	1,109	1,005	1,325	1,753	461
Victoria.....	1,609	1,431	681	1,885	994	596
Queensland	246	170	224	530	551	143
South Australia	379	329	387	570	513	81
Western Australia .....	.....	11	28	19	38	69
Tasmania	124	329	96	182	208	36
New Zealand	*535	316	525	542	577	168
Australasia .....	.....	3,695	2,946	5,053	4,634	1,554

DEATH-RATE per 10,000 living.

New South Wales .....	.....	3·35	2·39	2·56	2·91	1·18
Victoria.....	4·21	3·48	1·43	3·58	1·71	1·71
Queensland	3·43	1·66	1·66	2·93	2·66	1·05
South Australia	3·88	2·72	2·63	3·69	3·06	0·76
Western Australia .....	.....	0·79	1·78	0·91	1·14	1·59
Tasmania	2·41	6·05	1·57	2·66	2·70	0·71
New Zealand	*4·32	1·48	1·99	1·80	1·75	0·78
Australasia .....	.....	2·96	1·96	2·85	2·32	1·20

PROPORTION per cent. of Deaths to Total Deaths.

New South Wales .....	.....	2·08	1·52	1·85	2·28	0·99
Victoria.....	2·69	2·28	1·02	2·23	1·21	1·20
Queensland	1·91	0·98	0·87	1·89	2·07	0·83
South Australia	2·45	1·83	1·79	2·94	2·52	0·64
Western Australia .....	.....	0·55	1·03	0·57	0·70	0·94
Tasmania	1·54	3·66	0·98	1·75	2·05	0·58
New Zealand	*3·20	1·25	1·81	1·82	1·72	0·83
Australasia .....	.....	1·97	1·33	2·05	1·82	0·97

* Four years, 1872-75.

The present rates for diphtheria, as compared with those of twenty or twenty-five years ago, show a decrease. The decline, however, has been by no means regular, owing to the fact that this disease, in common with the others affecting children, sometimes occurs as an epidemic. Thus the increase in the rates during 1886-90 over those prevailing in the previous five years was due to an epidemic in nearly all the provinces in 1890.

The decreased mortality during the last twenty years, from the four diseases just mentioned, together with croup, represents a gain of about 8 children to the population in every 10,000 persons living. This improvement is very gratifying, since it may be taken that cases of these diseases, which are particularly liable to be attended with dangerous after-effects in the shape of lung and other local troubles, are not so numerous, and that in consequence the general health of the people is better. Tasmania seems to have suffered most from diphtheria, followed closely by Victoria, South Australia, and New South Wales, while West Australia has been the most immune. The rate in Tasmania during 1876-80 was very heavy, each one of the five years showing a high rate, which suddenly decreased in 1881, and has remained much lower ever since.

CROUP.

Croup, although classed as a disease of the respiratory system, was formerly classified with the zymotic diseases, and is included here on account of its similarity to diphtheria, and the confusion which often arises between them, and of the deaths set down to a combination of both. It is a disease that may be said to affect children only, and in 1898 caused the death of 212, or 0.48 per 10,000 of the population. In the subsequent table is shown the number of deaths in each colony, the death-rate, and the proportion to total deaths since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales .....	.....	968	971	951	683	214
Victoria	647	1,250	795	1,209	458	144
Queensland	273	324	483	382	239	80
South Australia	258	330	443	192	145	30
Western Australia .....	.....	24	31	45	64	21
Tasmania	80	76	113	112	101	18
New Zealand	*281	277	334	340	304	121
Australasia .....	.....	3,249	3,170	3,231	1,994	628

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
DEATH-RATE per 10,000 living.						
New South Wales .....	.....	2·92	2·31	1·84	1·14	0·55
Victoria	1·69	3·04	1·66	2·30	0·79	0·41
Queensland	3·81	3·17	3·59	2·11	1·15	0·59
South Australia	2·64	2·74	3·01	1·24	0·87	0·28
Western Australia .....	.....	1·72	1·97	2·16	1·92	0·48
Tasmania	1·55	1·40	1·85	1·63	1·31	0·36
New Zealand	*2·27	1·30	1·26	1·13	0·92	0·56
Australasia .....	.....	2·61	2·11	1·83	1·00	0·49

PROPORTION per cent. of Deaths to Total Deaths.

New South Wales .....	.....	1·82	1·47	1·33	0·89	0·46
Victoria	1·08	1·99	1·19	1·43	0·56	0·29
Queensland	2·12	1·87	1·88	1·36	0·90	0·46
South Australia	1·67	1·83	2·05	0·99	0·71	0·24
Western Australia .....	.....	1·20	1·14	1·35	1·18	0·28
Tasmania	0·99	0·85	1·15	1·08	1·00	0·29
New Zealand	*1·68	1·10	1·15	1·14	0·91	0·60
Australasia .....	.....	1·73	1·43	1·31	0·78	0·39

* Four years, 1872-75.

Generally speaking, deaths from this disease show a steady and consistent fall from the earliest period, although in some of the colonies, especially Victoria and South Australia, the rates fluctuate slightly. The greatest decline has taken place in New South Wales, Victoria, Queensland, and South Australia, until at the present time croup is about equally prevalent in all the provinces. If croup and diphtheria be taken together, as they usually are, the rates generally have declined to the extent of nearly 4 per 1,000 during the last twenty years.

DIARRHOEAL DISEASES.

Diarrhoeal diseases, comprising cholera, diarrhoea, and dysentery, carry off mostly young children and old persons. In 1898 these diseases were fatal to 2,792 persons, equal to a death-rate of 6·37 per 10,000 living.

The number of deaths in each colony, the rates, and the proportion of total deaths in quinquennial periods since 1870, are shown below.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales .....	.....	3,913	4,775	4,323	3,794	2,482
Victoria	6,030	5,006	4,886	5,489	3,290	1,770
Queensland	1,618	2,469	3,833	2,865	2,125	1,131
South Australia	1,628	1,620	2,105	1,388	1,079	799
Western Australia .....	.....	140	106	251	323	528
Tasmania	437	512	474	605	354	208
New Zealand	°1,528	2,375	1,879	1,789	1,280	866
Australasia .....	.....	16,035	18,058	16,710	12,245	7,784

DEATH-RATES per 10,000 living.						
New South Wales .....	.....	11·82	11·34	8·34	6·31	6·36
Victoria	15·78	12·18	10·23	10·42	5·65	5·06
Queensland	22·56	24·15	28·46	15·85	10·25	8·27
South Australia	16·65	13·39	14·32	8·99	6·44	7·49
Western Australia .....	.....	10·01	6·73	12·03	9·70	12·15
Tasmania	8·48	9·41	7·75	8·83	4·59	4·11
New Zealand	°12·33	11·13	7·11	5·94	3·87	4·00
Australasia .....	.....	12·86	12·04	9·44	6·13	6·02

PROPORTION per cent. of Deaths to Total Deaths.						
New South Wales .....	.....	7·35	7·22	6·05	4·94	5·30
Victoria	10·09	7·97	7·31	5·30	4·01	3·57
Queensland	12·57	14·28	14·90	10·22	7·99	6·53
South Australia	10·52	8·99	9·74	7·17	5·30	6·30
Western Australia .....	.....	6·99	3·91	7·53	5·95	7·16
Tasmania	5·42	5·69	4·84	5·82	3·50	3·35
New Zealand	°9·14	9·40	6·46	6·01	3·82	4·27
Australasia .....	.....	8·55	8·14	6·77	4·80	4·86

* Four years, 1872-75.

The death-rates generally show a marked tendency to decline, having decreased by over 50 per cent. during the last twenty years. The most noticeable improvement is in the case of Queensland, where, during the earlier periods, a large number of men, in the outlying portions of the colony, died from dysentery, probably brought on by impure water, improper food, and insufficient protection from the weather, while at the present time similar conditions are causing a high rate in Western Australia. That temperature and climate have an effect on the death-rates from these diseases is proved from the fact that they are much

more prevalent and more fatal in summer than in any other season of the year, and that in Tasmania and New Zealand, where the climate is mild and genial, the rates are much lower than in Queensland and Western Australia, where the climate is very warm, and in some parts tropical, while the other colonies, whose climates are fairly temperate, show rates between the two extremes.

The decline in the number of deaths from diarrhœa may be in part due to the fact that of late years more skilful diagnosis in some cases makes possible the ascription of death to ailments of which diarrhœa may be only a symptom.

TYPHOID (ENTERIC) FEVER.

Seeing that typhoid is entirely a filth disease, the poison of which is propagated by sewage, and that perhaps no disease is more affected by sanitary improvements in the way of drainage, it is a matter of very great regret that the annual mortality from it should be so heavy. In 1898 typhoid was responsible for 1,735 deaths in Australasia, or at the rate of 3·96 per 10,000 living, as against the English rate of 1·82, which was the highest recorded there for five years. The table below shows the number of deaths from this disease in each colony, the death-rates, and the proportion borne to the total deaths, arranged in five-year periods since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales .....	.....	1,722	2,132	2,307	1,533	1,223
Victoria	1,799	2,174	2,364	3,209	1,571	1,139
Queensland	424	525	1,303	990	513	462
South Australia	372	446	632	566	369	344
Western Australia .....	.....	.....	.....	59	500	1,103
Tasmania	156	184	213	401	230	175
New Zealand.....	*632	739	626	674	561	350
Australasia .....	.....	5,790	7,270	8,206	5,277	4,796
DEATH-RATE per 10,000 living.						
New South Wales .....	.....	5·20	5·06	4·46	2·55	3·14
Victoria	4·71	5·29	5·18	6·09	2·70	3·26
Queensland	5·91	5·14	9·67	5·48	2·48	3·38
South Australia	3·80	3·69	4·30	3·67	2·20	3·23
Western Australia .....	.....	.....	.....	2·83	15·02	25·38
Tasmania	3·03	3·38	3·48	5·85	2·99	3·45
New Zealand.....	*5·10	3·46	2·37	2·24	1·70	1·62
Australasia	4·69	4·90	4·64	2·64	3·71

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
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PROPORTION per cent. of Deaths to Total Deaths.

New South Wales	3·23	3·23	3·23	2·00	2·61
Victoria	3·01	3·46	3·54	3·79	1·91	2·30
Queensland	3·29	3·04	5·06	3·53	1·93	2·67
South Australia	2·40	2·47	2·92	2·92	1·81	2·71
Western Australia .....	.....	.....	.....	1·77	9·21	14·95
Tasmania	1·94	2·05	2·18	3·86	2·27	2·82
New Zealand	3·78	2·92	2·15	2·27	1·67	1·73
Australasia .....	.....	3·12	3·32	3·32	2·07	2·99

° Four years, 1872-1875.

It will be observed that the rates over the whole period covered by the table show a decline, and that although there has been an increase during the last three years, there was a marked decrease during the preceding five years. Notwithstanding the epidemic nature of the disease, the rates do not fluctuate greatly. In 1889 there was an epidemic of enteric fever in New South Wales, Victoria, Queensland, and Tasmania, which helped to keep up the rates for 1886-90. During the two periods of the last eight years the rates in all the colonies, excluding Western Australia, were fairly uniform, only ranging in 1891-95 from 1·70 in New Zealand to 2·99 in Tasmania, and in 1896-98 from 1·62 in New Zealand to 3·45 in Tasmania. Since the epidemics of 1887 and 1889 in Tasmania, typhoid seems to have been more prevalent there than in the other provinces, although Victoria and Queensland are not far behind. The case of Western Australia, where typhoid is the cause of 15 per cent. of all deaths, deserves particular notice, the death-rate being as high as 25·38 per 10,000 living, having risen from 2·83 in the short space of ten years. In 1895 Western Australia had its maximum typhoid death-rate with 35·46 per 10,000, but with improved sanitation the rate has since year by year declined. Prior to 1894, the year in which the gold-rush may be said to have commenced, the disease was little known in the western colony. In England and Wales since the measures which have been taken to improve the drainage and water supply the rate has steadily dropped from 3·74 in 1871-75 to 1·68 in 1896-98.

PARASITIC DISEASES.

The deaths from parasitic diseases in Australasia during 1898 numbered 209, and comprised 0·36 per cent. of the total causes of death, equal to a death-rate of 0·48 per 10,000 living. The chief

disease of this group is hydatids, which was responsible for 147 deaths, or 0·34 per 10,000 of the population, and was most common in Victoria and New South Wales, where the rates were 0·46 and 0·43 respectively.

DIETETIC DISEASES.

Dietetic diseases in 1898 carried off 670 persons, or at the rate of 1·53 per 10,000 living, and were the cause of 1·14 per cent. of the total deaths, the chief contributing causes being privation and intemperance.

CONSTITUTIONAL DISEASES.

The next class of diseases is the constitutional, which caused in 1898 9,004 deaths, or 15·37 per cent. of the total, giving an average of 20·54 per 10,000 living. Of these diseases, phthisis and cancer stand out most prominently, and deserve special consideration.

PHTHISIS.

Phthisis claims more victims in the colonies than any other disease, but notwithstanding this fact the death-rates are lower than in the other countries of the world. This is all the more pleasing when it is considered that the Australian climate is undoubtedly favourable to people suffering from pulmonary complaints, and that thereby many persons afflicted with the disease, or predisposed to it, are attracted to this country in the hope of obtaining relief. It is estimated that of the total persons who die of phthisis, 7 per cent. do so after less than five years' residence in the colonies. In 1898 phthisis caused 4,181 deaths in Australasia, equal to a rate of 9·54 per 10,000 living. The following table shows the number of deaths from this disease in each colony, the death-rates, and the proportion of total deaths since 1870, arranged in five-year periods:—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales	2,532	3,363	4,805	5,127	5,198	3,079
Victoria	4,594	5,397	6,428	7,662	7,751	4,323
Queensland	784	1,330	2,332	2,412	2,266	1,283
South Australia	872	1,244	1,558	1,640	1,667	933
Western Australia	*89	120	135	194	250	283
Tasmania	522	536	658	671	658	373
New Zealand.....	*1,080	1,805	2,418	2,529	2,693	1,716
Australasia .....	.....	13,795	18,334	20,235	20,483	11,990

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
DEATH-RATE per 10,000 living.						
New South Wales	9·28	10·16	11·41	9·90	8·64	7·90
Victoria	12·02	13·13	14·10	14·55	13·32	12·37
Queensland	10·93	13·01	17·31	13·35	10·93	9·39
South Australia	8·92	10·28	10·60	10·63	9·95	8·75
Western Australia	*8·58	8·58	8·57	9·30	7·51	6·51
Tasmania	10·13	9·85	10·76	9·79	8·54	7·36
New Zealand	*8·72	8·46	9·15	8·39	8·15	7·93
Australasia	10·09	11·06	12·22	11·43	10·25	9·27

PROPORTION per cent. of Deaths to Total Deaths.

New South Wales	6·19	6·31	7·27	7·17	6·77	6·58
Victoria	7·69	8·59	9·62	9·05	9·45	8·73
Queensland	6·09	7·69	9·06	8·60	8·52	7·41
South Australia	5·63	6·90	7·21	8·47	8·19	7·35
Western Australia	*5·13	5·99	4·98	5·82	4·60	3·84
Tasmania	6·48	5·96	6·72	6·46	6·50	6·01
New Zealand	*6·46	7·14	8·32	8·50	8·03	8·47
Australasia	6·61	7·35	8·26	8·19	8·04	7·49

* Four years, 1872-75.

For the first half of the period covered by the table, phthisis seems to have been on the increase; but since 1885 it has steadily decreased, and the mortality rate is now lower than that of England—where the rate is over 13 per 10,000 living—or of any European country. This decline is very satisfactory, inasmuch as it shows the result of the more skilful treatment consequent on the careful study which has been made of the disease during recent years, and proves the usefulness of the preventive measures which have been taken against it. Phthisis has always been most prevalent in Victoria, but the death-rate in Queensland is rather high, owing to the peculiar liability of natives of the Pacific Islands to succumb to attacks of the disease. The returns show that the deaths from consumption of these persons in Queensland are out of all proportion to their number in the population. Western Australia has, on the whole, had the lowest rate, and at the present time the rate is little more than half that of Victoria. New South Wales, Tasmania, and New Zealand also show satisfactory rates.

CANCER.

Next to phthisis, cancer is the most deadly of the constitutional diseases, and in 1898 was the cause of the death of 2,616 persons, or at the rate of 5·97 per 10,000 living. In the table below are shown the number of deaths in each colony from cancer, the death-rates, and the proportion of deaths to total deaths since 1870 :—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales	772	934	1,146	1,876	2,587	2,021
Victoria	1,245	1,712	2,065	2,799	3,621	2,427
Queensland	125	225	336	508	731	599
South Australia	199	352	475	592	803	555
Western Australia	*16	23	52	85	102	136
Tasmania	249	255	308	341	371	275
New Zealand	*262	526	806	1,270	1,725	1,255
Australasia .....	.....	4,027	5,188	7,471	9,940	7,268

DEATH-RATE per 10,000 living.

New South Wales	2·83	2·82	2·72	3·62	4·30	5·18
Victoria	3·26	4·16	4·53	5·32	6·22	6·94
Queensland	1·74	2·20	2·49	2·81	5·53	4·38
South Australia	2·04	2·91	3·23	3·84	4·79	5·21
Western Australia	*1·54	1·64	3·30	4·07	3·06	3·13
Tasmania	4·83	4·69	5·04	4·98	4·82	5·43
New Zealand	*2·11	2·46	3·95	4·22	5·22	5·80
Australasia	2·76	3·23	3·46	4·22	4·97	5·62

PROPORTION per cent. of Deaths to Total Deaths.

New South Wales	1·89	1·75	1·73	2·63	3·37	4·32
Victoria	2·08	2·73	3·09	3·31	4·41	4·90
Queensland	0·97	1·30	1·31	1·81	2·75	3·46
South Australia	1·29	1·95	2·20	3·06	3·94	4·37
Western Australia	*0·92	1·15	1·92	2·55	1·88	1·84
Tasmania	3·09	2·84	3·15	3·28	3·66	4·43
New Zealand	*1·57	2·08	2·77	4·27	5·15	6·19
Australasia	1·81	2·15	2·34	3·03	3·90	4·54

* Four years, 1872-75.

It will be observed that with some slight irregularity the death-rate from cancer has steadily risen in all the colonies over the whole period covered by the table, the largest increases being shown by Victoria and New Zealand. For the first half of the period Tasmania had the highest rate, but so rapid has been the progress of the disease in Victoria and New Zealand that the rates in both of these colonies are now higher than that of Tasmania. With the exception of the period from 1881 to 1890, Western Australia has always shown the lowest rates.

Although part of the increase may arise from the fact that more skilful diagnosis in recent years enables cancer to be ascribed as the cause of death in obscure malignant diseases more often than was formerly the case, yet after making due allowance on this score, the conclusion must inevitably be arrived at that the spread of the disease in these colonies is a dread reality.

DEVELOPMENTAL DISEASES.

The deaths from developmental diseases in 1898 were 5,245 (8·95 per cent. of the total), or 11·96 per 10,000 persons living, and of these deaths, 2,910, or 6·64 per 10,000 living, were ascribed to the vague cause, old age. Premature birth was set down as the cause of death of 1,465 infants, a mortality equal to 12·44 per thousand children born alive, or 1 in every 80.

LOCAL DISEASES.

Local diseases in 1898 were the cause of 46·53 per cent. of the total deaths, and averaged 62·18 per 10,000 living. This group comprises diseases of the various systems and special organs of the body, the principal being diseases of the nervous system and of the circulatory system, which are further considered below. Under this heading also are classified diseases of the respiratory system, which caused 7,122 deaths, equal to 16·24 per 10,000; of the digestive system, responsible for 6,655 deaths, or 15·18 per 10,000; and of the urinary system, the deaths from which numbered 2,035, equal to a rate of 4·66 per 10,000.

DISEASES OF THE NERVOUS SYSTEM.

It has been asserted that coincident with the advance of civilisation there has been an increase in diseases of the nerves and brain, but from the figures in the following table showing for each colony the number of deaths, the death-rates, and the proportion of deaths to total deaths since 1870, it will be seen that such has not been the case. Moreover, it has been ascertained that deaths from apoplexy and convulsions in proportion to population are now less frequent than formerly. In 1898 the total deaths from diseases of the nerves and brain numbered 5,345, or at the rate of 12·19 per 10,000 living.

POPULATION.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales	5,881	6,844	8,522	8,432	8,256	4,797
Victoria	6,503	7,029	7,414	8,585	7,852	4,481
Queensland	1,656	2,190	2,684	3,005	2,778	1,706
South Australia	2,068	2,249	2,645	2,177	2,127	1,264
Western Australia	*230	309	296	379	510	487
Tasmania	1,133	1,238	1,577	1,388	1,210	685
New Zealand	*1,850	2,614	3,244	3,320	3,528	2,274
Australasia .....	.....	22,473	26,382	27,286	26,261	15,694

DEATH-RATE per 10,000 living.

New South Wales	21·56	20·67	20·23	16·28	13·73	12·30
Victoria	17·02	17·10	16·26	16·30	13·49	12·82
Queensland	23·09	21·42	19·93	16·63	13·40	12·48
South Australia	21·15	18·59	17·99	14·11	12·70	11·86
Western Australia	*22·17	22·09	18·79	18·16	15·32	11·21
Tasmania	21·99	22·75	25·78	20·25	15·70	13·52
New Zealand	*14·93	12·25	12·27	11·02	10·67	10·51
Australasia	18·61	18·02	17·59	15·42	13·14	12·13

PROPORTION per cent. of Deaths to Total Deaths.

New South Wales	14·38	12·85	12·89	11·80	10·75	10·25
Victoria	10·88	11·19	11·10	10·14	9·57	9·05
Queensland	12·87	12·67	10·43	10·72	10·45	9·85
South Australia	13·36	12·48	12·24	11·24	10·44	9·96
Western Australia	*13·25	15·43	10·93	11·37	9·39	6·60
Tasmania	14·06	13·76	16·11	13·36	11·95	11·04
New Zealand	*11·07	10·35	11·16	11·16	10·52	11·22
Australasia	12·19	11·98	11·89	11·05	10·30	9·80

* Four years 1872-75.

A study of the table shows that the death-rate for diseases of the nervous system in Australasia has decreased by over one-third during the last twenty-five years, representing a gain of 6 persons to the population in every 10,000 living. Amongst the various colonies the rates are now remarkably even, only ranging from 10·51 in New Zealand, which has always had the lowest rate, to 13·52 in Tasmania, which has always had the highest, whereas twenty years ago the range between the same colonies was from 12·25 to 22·75.

DISEASES OF THE CIRCULATORY SYSTEM.

Diseases of the heart, which now command more attention than previously on account of their more frequent occurrence, and also on account of the better knowledge of the organ which now exists, were responsible in 1898 for 4,940 deaths, or 11·27 per 10,000 living. The following table shows the number of deaths in each colony from these diseases, the death-rates, and the proportion of total deaths since 1870:—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales	2,197	2,755	3,262	4,289	4,826	3,317
Victoria	3,138	3,666	4,453	6,198	7,365	4,745
Queensland	444	586	991	1,406	1,575	1,319
South Australia	649	934	1,180	1,359	1,605	1,159
Western Australia	°102	147	201	239	408	459
Tasmania	499	578	700	799	875	612
New Zealand	°795	1,422	1,762	2,234	2,767	2,178
Australasia .....	.....	10,038	12,549	16,574	19,421	13,789

DEATH-RATE per 10,000 living.

New South Wales	8·05	8·32	7·74	8·23	8·02	8·51
Victoria	8·21	8·92	9·77	11·77	12·66	13·58
Queensland	6·19	5·73	7·36	7·78	7·60	9·65
South Australia	6·64	7·72	8·03	8·81	9·58	10·87
Western Australia	°9·83	10·51	12·76	11·45	12·26	10·56
Tasmania	9·69	10·62	11·44	11·66	11·36	12·08
New Zealand	*6·42	6·66	6·67	7·58	8·37	10·06
Australasia	7·53	8·09	8·37	9·36	9·72	10·66

PROPORTION per cent. of Deaths to Total Deaths.

New South Wales	5·37	5·17	4·93	6·00	6·28	7·09
Victoria	5·25	5·84	6·67	7·32	8·98	9·58
Queensland	3·45	3·39	3·85	5·01	5·93	7·62
South Australia	4·19	5·18	5·46	7·02	7·88	9·14
Western Australia	°5·88	7·34	7·42	7·17	7·51	6·22
Tasmania	6·19	6·43	7·15	7·69	8·64	9·86
New Zealand	°4·76	5·63	6·06	7·68	8·25	10·74
Australasia	4·94	5·38	5·66	6·71	7·62	8·61

* Four years, 1872-75.

It will be seen that deaths from the diseases of the organs of circulation have steadily and rapidly increased during the last twenty-five years. It is questionable whether the increase shown is not partly due to more skilful diagnosis, as many deaths formerly attributed to old age are now assigned to some more definite cause. The highest death-rates prevail in Victoria and Tasmania, which is, perhaps, explained by the fact that diseases of the heart mainly affect persons of middle and later life, and these two colonies have the largest proportional numbers of old people. New South Wales and Queensland have the lowest rates; while the other three colonies, South Australia, Western Australia, and New Zealand, are all fairly equal.

DEATHS IN CHILDBIRTH.

Included under the heading of local diseases are diseases of parturition, which, together with puerperal fever, a septic disease of the zymotic group, comprise the causes of death of women in childbed. In 1898, deaths from these diseases averaged 1 in every 170 births, which differs slightly from the ratio to confinements, as some births are multiple. The table below gives the number of deaths from these diseases in each colony since 1872, and the deaths per 1,000 births, the usual method of stating the rate:—

State.	1873-77.	1878-82.	1883-87.	1888-92.	1893-97.	1898.
NUMBER of Deaths.						
New South Wales	448	555	833	824	1,336	256
Victoria	997	899	895	916	943	170
Queensland	189	244	311	368	317	62
South Australia	208	255	241	217	263	60
Western Australia	32	27	31	25	58	26
Tasmania	123	74	88	88	106	29
New Zealand.....	367	435	582	464	459	91
Australasia .....	.....	2,489	2,981	2,902	3,482	694
DEATH-RATE per 1,000 Births.						
New South Wales	6.43	3.99	4.79	4.24	6.96	7.07
Victoria	7.42	6.74	5.96	4.96	5.61	5.63
Queensland	5.75	6.07	5.33	5.00	4.43	4.45
South Australia	5.32	5.00	4.22	4.06	5.13	6.71
Western Australia	7.48	5.54	4.86	3.01	4.32	5.23
Tasmania	7.88	3.94	3.85	3.62	4.39	6.33
New Zealand.....	5.13	4.68	5.99	5.06	4.96	4.80
Australasia .....	.....	5.18	5.27	4.60	5.68	5.89

* 1875-77.

The rate showed a tendency to decline up till 1893, since when it has risen. The statistics presented above, however, are not as reliable as they might be, for the reason that medical attendants do not take sufficient care when furnishing the certificate required of them by law to state the real cause of death; for instance, it is believed that the word *puerperal* is omitted in many cases, especially of pyæmia and septicæmia where death occurred in childbirth. The New South Wales returns since 1892 have been compiled with great care, and are perhaps nearest to the truth, while the Victorian figures are also fairly reliable.

DEATHS FROM VIOLENCE.

Deaths by violence in 1898 numbered 3,878, equal to 6·62 per cent. of the total deaths, or at the rate of 8·85 per 10,000 living. Of these, more than 83 per cent. were the results of accidents or negligence, and nearly 14 per cent. were due to suicide; further information with respect to which will be found in the chapter "Social Condition."

ACCIDENTS.

The total number of persons who died in 1898 from accidents was 3,239, or 7·39 per 10,000 living. The following table shows the number of deaths in each colony from this cause, the death-rates, and the proportion of total deaths since 1870:—

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
NUMBER of Deaths.						
New South Wales	2,982	3,569	4,174	4,542	4,520	2,978
Victoria	3,908	3,539	3,662	4,612	4,262	2,392
Queensland	1,134	1,389	1,874	2,639	2,349	1,473
South Australia	610	877	919	1,038	912	689
Western Australia	*106	184	184	277	400	535
Tasmania	492	497	441	551	500	384
New Zealand.....	*1,259	2,200	2,216	2,369	2,494	1,457
Australasia .....	.....	12,255	13,470	16,028	15,437	9,908

DEATH-RATE per 10,000 living.

New South Wales	10·93	10·78	9·91	8·77	7·51	7·64
Victoria	10·23	8·61	8·03	8·76	7·32	6·84
Queensland	15·81	13·59	13·91	14·60	11·33	10·78
South Australia	6·24	7·25	6·25	6·73	5·45	6·46
Western Australia	°10·22	13·16	11·68	13·28	12·02	12·31
Tasmania	9·55	9·13	7·21	8·04	6·49	7·58
New Zealand.....	°10·16	10·31	8·38	7·86	7·55	6·73
Australasia	10·10	9·83	8·98	9·06	7·72	7·66

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-98.
PROPORTION per cent. of Deaths to Total Deaths.						
New South Wales	7·29	6·70	6·31	6·36	5·89	6·36
Victoria	6·54	5·63	5·48	5·45	5·19	4·84
Queensland	8·81	8·04	7·28	9·41	8·84	8·51
South Australia	3·94	4·87	4·25	5·36	4·48	5·43
Western Australia	*6·11	9·19	6·79	8·31	7·37	7·25
Tasmania	6·10	5·53	4·50	5·30	4·94	6·19
New Zealand.....	*7·53	8·71	7·62	7·96	7·44	7·19
Australasia	6·62	6·53	6·07	6·49	6·06	6·19

* Four years, 1872-75.

The death-rates from accidents have fallen considerably, as the table shows, but they are still by no means low, and none of the colonies exhibits so small a rate as that of England and Wales, viz., 5·5 per 10,000 living. Western Australia and Queensland, which have the most scattered populations, show the largest rates, while New South Wales and Tasmania come next, followed by Victoria, New Zealand, and South Australia, where accidents seem always to have been less frequent than in the other colonies. The most common accidents appear to be fractures, contusions, and drowning, the last mentioned causing a large number of deaths in Queensland every year, the high rate during 1886-90 in that colony being due to the great number of people (340) who were drowned in 1890.

MARRIAGES.

The number of marriages and the marriage-rate per thousand of the population for each colony during the year 1899 are shown below :—

State.	Marriages.	Marriage-rate.
New South Wales	9,275	6·89
Victoria	8,140	7·01
Queensland	3,449	7·23
South Australia	2,276	6·19
Western Australia	1,671	9·85
Tasmania	1,147	6·38
New Zealand	5,461	7·28
Australasia	31,419	7·06

During 1899 the marriage-rate increased in all the colonies with the exception of Western Australia, while in every case it was higher than the average for the preceding ten years. Taken in conjunction with the rise in price of exports, this increase in the marriage-rate may be looked upon as a sure sign of returning prosperity to these colonies.

The number of marriages in each colony and in the whole of Australasia, in quinquennial periods from 1861 to 1895, and in the four years 1896-99, was as follows:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-99.
New South Wales	10,020	18,271	21,210	25,004	35,737	38,071	39,924	35,371
Victoria	22,237	22,902	24,368	25,416	33,589	42,832	37,717	30,839
Queensland	3,689	4,648	6,276	7,466	11,632	15,271	13,526	12,138
South Australia	6,226	6,435	7,472	10,682	12,379	10,334	10,686	8,633
Western Australia	765	828	835	978	1,112	1,495	2,332	6,081
Tasmania	3,340	3,143	3,290	4,087	6,005	4,796	4,524	4,260
New Zealand	7,240	9,955	12,050	16,220	18,102	18,097	20,210	20,323
Australasia	60,417	66,182	75,501	90,753	117,556	131,496	128,919	117,045

The average marriage-rates for each colony during the same periods are given below. The table shows the ratio of marriages to population; to ascertain the ratio of persons married it is necessary to double the figures:—

State.	1861-65.	1866-70.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-99.
New South Wales	9.04	8.04	7.77	7.82	8.46	7.47	6.64	6.74
Victoria	7.31	6.86	6.38	6.02	7.37	8.13	6.48	6.62
Queensland	13.51	9.02	8.75	7.30	8.64	8.45	6.53	6.58
South Australia	9.02	7.45	7.64	8.83	8.42	6.70	6.29	5.96
Western Australia	8.92	7.53	6.48	6.99	7.06	7.16	7.01	10.07
Tasmania	7.30	6.35	6.39	7.51	8.18	7.00	5.87	6.21
New Zealand	10.39	9.00	8.05	7.60	6.85	6.00	6.11	6.97
Australasia	8.73	7.61	7.27	7.28	7.84	7.43	6.44	6.76

During the five years ended 1895 the marriage-rate fell considerably in Australasia. With the exception of New Zealand it was lower in every colony than during the preceding quinquennial period, and lower everywhere than during the five years 1881-85, while during the last four years the rate rose again in every colony except South Australia. This is another proof of the truth of the oft-repeated statement that commercial depression always exerts an adverse influence on the marriage-rate. The abnormal rise in the case of Western Australia is what might be expected from the large number of men whom the industrial activity in that colony has placed in a position to take upon their shoulders the responsibility of a household.

As marriage is the great institution by which the birth-rate is controlled, and through which the population is regulated, it will not be out of place to consider the fertility of marriages in the colonies. The two chief elements influencing this are the age at marriage of the parents, especially of the mother, and the duration of married life. The mean age at marriage of bridegrooms in Australasia is a little over 29 years, and of brides about 24.5 years, and it is known that these ages have been increasing for some years past. As regards the

duration of married life, it is not possible to speak with certainty; all that is known is that the length of lifetime of married persons surpasses that of the unmarried—both male and female. The fertility of marriages is reckoned by the number of children to each marriage; and as the difference between the mean age of mothers and the mean age of brides in Australia is between 5 and 6 years, the average number of children to a marriage has been computed for the following table by dividing the number of legitimate births during each quinquennium by the number of marriages during the preceding five years:—

NUMBER of Children to a Marriage.

State.	1871-75.	1876-80.	1881-85.	1886-90.	1891-95.	1896-99.
New South Wales	5·59	5·76	5·87	5·01	4·80	4·28
Victoria	5·77	5·20	5·26	4·88	3·99	3·86
Queensland	6·12	5·75	6·29	5·76	4·54	4·94
South Australia	5·53	6·06	5·19	4·19	4·97	4·22
Western Australia	4·72	5·32	5·35	6·62	.....	.....
Tasmania	4·68	5·01	5·01	4·56	4·93	4·75
New Zealand.....	5·94	7·15	5·77	5·03	4·86	4·46
Australasia	5·68	5·79	5·59	4·96	4·53	4·26

Western Australia has been excluded from the table during the latter years, as the sudden influx of population into that colony since the discovery of the gold-fields has unduly increased the number of births to be divided by the number of marriages of the preceding five years, and would have the effect of making the marriages of that colony appear more fertile than they really are. Of course, it is admitted that the above means of determining the fecundity of marriages is only tentative; still the results cannot be very far from the truth, as is proved by the case of New South Wales, where accurate computations have shown the number of children to be expected from the present marriages in that colony to be only 4·04. The table shows that, on the whole, the fertility of marriages has been steadily declining since 1885, which bears out what has been before remarked in dealing with this question.

Particulars relative to divorce in the Australasian colonies will be found in the chapter headed "Social Condition."

NATIVE RACES.

At the census of 1891 only 38,879 aborigines were enumerated, of whom 8,280 were in New South Wales, 565 in Victoria, 23,789 in South Australia, and 6,245 in Western Australia. The figures relating to New South Wales and Victoria included all aborigines living in those provinces, but the returns from the other colonies were very imperfect.

The aborigines of Tasmania are extinct, but the Tasmanian census of 1891 enumerated 139 half-castes, who were included in the general population. It has been asserted that there are some 70,000 aborigines in Queensland, but this is a very crude estimate, and may be far wide of the truth. In the case of South Australia, a large number of the aborigines in the Northern Territory are entirely outside the bounds of settlement, and it seems probable that they are as numerous in that colony as in Queensland. The census of Western Australia included only those aboriginals in the employment of the colonists, and as large portions of this, the greatest in area of all the Australasian colonies, are as yet unexplored, it may be presumed that the number of aboriginals enumerated was very far short of the total in the colony. Altogether, the aboriginal population of the continent may be set down at something like 200,000. An approximate census by the police of the aboriginal population, as at the end of 1898, gave the number of blacks and half-castes in New South Wales as 6,891, and a similar enumeration in Western Australia of those in contact with whites as 12,183; while the number in Victoria at the same date was estimated at 449.

The original inhabitants of New Zealand, or Maoris, as they are called, are quite a different race from the aborigines of Australia. They are gifted with a considerable amount of intelligence, are quick at imitation, and brave even to rashness. According to the census of 1881 they numbered 44,097; but, like the Australian aborigines, they appear to be decreasing in number, for the census of 1886 enumerated only 41,432; that of 1891, 41,993; and that of 1896, 39,854, namely, 21,673 males and 18,181 females. In the 1896 figures are included 3,503 half-castes living as members of Maori tribes (1,944 males and 1,559 females), and 20 Morioris at Chatham Islands (11 males and 9 females). Half-castes to the number of 2,259 (1,123 males and 1,136 females), living with Europeans at the time of the census, were enumerated as Europeans. It is said that when the colonists first landed in New Zealand the number of Maoris was fully 120,000, but this, like all other estimates of aboriginal population, is founded on very imperfect information.

ALIEN RACES.

At the census of 1891 the Chinese and half-caste Chinese in the whole group of colonies numbered 42,521, distributed as follows:—

New South Wales	14,156
Victoria	9,377
Queensland	8,574
South Australia.....	3,997
Western Australia	917
Tasmania	1,056
New Zealand.....	4,444
	<hr/>
Australasia.....	42,521

Since 1880 it has been deemed expedient by the Governments of the colonies to enact prohibitive laws against the immigration of Chinese, and their migration from one colony to another. For several years a poll-tax of £10 was imposed, but now, in New South Wales, in accordance with the most recent legislation on the subject, masters of vessels are forbidden under a heavy penalty to bring more than one Chinese to every 300 tons, and a poll-tax of £100 is charged on landing. In Victoria, Queensland, and South Australia no poll-tax is imposed, but masters of vessels may bring only one Chinese to every 500 tons burden. The Western Australian Act was similar to that in the three last-named colonies until recently, but has now been superseded by the Coloured Immigrants Restriction Act. Tasmania allows one Chinese passenger to every 100 tons, and imposes a poll-tax of £10. In New Zealand an Act similar to the Tasmanian Act was in force until 1896, when the poll-tax was raised to £100, and the number of passengers restricted to one for every 200 tons burden. These stringent regulations have had the effect of greatly restricting the influx of this undesirable class of immigrants; but it is to be feared that the census of 1901 will disclose the fact that the Restriction Acts have not been so effectual in shutting out the Chinese from Australasia as the shipping returns of the colonies would lead one to suppose.

The only other alien race which the census of 1891 disclosed to be present in large numbers in Australasia was the Polynesians in Queensland, where they numbered 9,428.

According to a census taken in Queensland on 31st October, 1898, there were in that colony the following numbers of coloured aliens:—

Chinese	8,051
Pacific Islanders	8,617
Japanese	3,247
Javanese, and other Asiatic races	1,438
Total	<u>21,353</u>

Since 1891 there has been an influx of Hindoos and other eastern races sufficiently large to cause a feeling of uneasiness amongst the colonists, and in some of the colonies Parliament dealt with the evil by passing legislation which, in the main, meted out to these immigrants the treatment accorded to the Chinese. But a very large proportion of the Asiatics whose entrance into the colonies it was desired to stop were British subjects, and the Imperial Government refused to sanction any measure directly prohibiting in plain terms the movement of British subjects from one part of the empire to another. Eventually, the difficulty was overcome by the application of an educational test to the coloured races seeking admission to the colonies, whereby they are required to write out in some European language an application to the Colonial Secretary. This provision, which is said to have been effectual in Natal, is taken from an Act in operation in that colony.

An Act applying the educational test has been in force in Western Australia since the beginning of 1898 ; similar Acts have now been passed and are in operation in the other colonies.

NATURALISATION.

The Acts relating to the naturalisation of aliens do not differ very materially in any of the colonies. In New South Wales, Victoria, South Australia, Western Australia, and New Zealand aliens may hold and acquire both real and personal property, but may not qualify for any office nor have any rights or privileges except such as are expressly conferred upon them, while in Queensland and Tasmania they may hold personal property, but lands for twenty-one years only.

In every colony except New South Wales, South Australia, and Queensland every alien of good repute residing within the colony who desires to become naturalised may present a memorial signed by himself, and verified upon oath, stating his name, age, birthplace, residence, occupation, and length of residence in the colony, and his desire to settle therein, together with all other grounds on which he seeks to obtain the rights of naturalisation, and apply for a certificate, which the Governor may grant if he thinks fit. After the letters of naturalisation have been received and the oath of allegiance taken, the holder becomes entitled to all the privileges which are conferred upon subjects of Her Majesty. In New South Wales it is insisted that the applicant must have resided for at least five years before he can be naturalised, and he must present, together with his own statutory declaration stating his name, age, birthplace, occupation and residence, a like declaration of some other person as to his term of residence in New South Wales ; in South Australia six months' residence is compulsory, while in Queensland an Asiatic or African alien must be married and have his wife living in the colony, and must have resided in the colony for three years, when he must present a similar memorial to that cited above. If the application is granted, he becomes entitled to all privileges except that of becoming a member of the Legislature.

In all the colonies any alien woman marrying a natural-born subject becomes and is deemed to be naturalised, and any person resident in the colony who has obtained a certificate of naturalisation in any British possession, and who presents such certificate, and further satisfies the Governor that he is the person named in the certificate, and that such was obtained without fraud, may be granted a certificate of naturalisation without any further residence in the colony being required of him.

The rights of naturalisation are refused the Chinese in some of the colonies, viz., New South Wales, Victoria, Queensland, and Western Australia. Germans have availed themselves most largely of the privileges, having taken out about one-half of the certificates granted.

The number of persons naturalised in Australasia during 1898 was 1,260 ; more than three-quarters took out papers of naturalisation in

the colonies of New South Wales, Victoria, and Queensland. The figures for the other four colonies are small. The following are the returns for each colony :—

State	Germans and other German-speaking nations.	Scandinavians.	Chinese.	Others.	Total.
New South Wales ...	104	38	.....	135	277
Victoria	144	61	.....	129	334
Queensland	222	21	2	97	342
South Australia	49	11	.....	34	94
Western Australia ...	9	10	.....	26	45
Tasmania	4	2	45	4	55
New Zealand.....	31	22	4	56	113
Australasia	563	165	51	481	1,260

CENTRALISATION OF POPULATION.

The progress of the chief cities of Australasia has been no less remarkable than that of the colonies themselves, and has no parallel among the cities of the old world. Even in America the rise of the great cities has been accompanied by a corresponding increase in the rural population, but in these colonies, perhaps for the first time in history, was presented the spectacle of magnificent cities growing with marvellous rapidity, and embracing within their limits one-third of the population of the states of which they are the seat of government. The abnormal aggregation of the population into their capital cities is a most unfortunate element in the progress of the colonies, and one which until recently seemed to become every year more marked. Latterly this growth appears to have ceased, and the proportion of population in the capital cities is now less than in 1891.

One satisfactory feature in connection with the growth of population in the chief cities of Australia is that such increase has not taken place through absorption of the rural population. As in all new countries the tendency has been for immigrants to settle in or near the principal towns which mostly lie near the seaboard, and owing to the fact that these colonies possess no good navigable waterways leading from the interior, aggregation of population in the cities tends to be still further accentuated.

The increase in the population of the chief cities of Australasia and the estimated numbers of their inhabitants at the various census periods, and on 31st December, 1899, are shown in the following table, which illustrates the remarkable progress referred to:—

City.	1841.	1851.	1861.	1871.	1881.	1891.	1899.
Sydney	29,973	53,924	95,789	137,776	224,939	383,283	438,300
Melbourne.....	4,479	23,143	139,916	206,780	282,947	490,896	477,790
Brisbane.....	*829	2,543	6,051	15,029	31,109	93,657	110,951
Adelaide.....	†8,480	‡14,577	18,303	42,744	103,864	133,252	149,672
Perth.....	.....	.....	.....	5,244	5,822	8,447	34,610
Hobart .....	.....	.. ..	19,449	19,092	21,118	33,450	41,585
Wellington .....	.....	.....	.....	7,908	20,563	33,224	47,862

* In 1846. † In 1840. ‡ In 1850.

The aggregation of population is most marked in the cases of Melbourne and Adelaide, while Sydney is also conspicuous. The other cities are not so remarkable, the proportion of the people resident in Wellington especially being very small. The proportion of population in each capital compared with that of the whole colony is shown below for the years 1871, 1881, 1891, and 1899:—

City.	1871.	1881.	1891.	1899.
	per cent.	per cent.	per cent.	per cent.
Sydney	27·34	29·93	33·86	32·31
Melbourne	28·27	32·81	43·05	41·07
Brisbane.....	12·51	14·57	23·79	23·00
Adelaide.....	23·03	37·11	41·59	40·38
Perth	20·68	19·60	16·97	20·24
Hobart	18·76	18·25	22·81	22·81
Wellington.....	3·08	4·20	5·30	6·33

Although Wellington is the capital of New Zealand it is exceeded in population by Auckland, and by Dunedin; while Christchurch is very little less. Still, even in the largest of these cities—Auckland—the population is not more than 8·18 per cent., and in the four together is only 25·84 per cent. of that of the whole colony.

The following is a list of the cities and most important towns of Australasia, with their estimated population on 31st December, 1899; in all cases the suburbs are included. In Queensland, the populations quoted are those of the municipalities, except in the case of Brisbane:—

City or Town.	Population.	City or Town.	Population.
New South Wales—		South Australia—	
Sydney	438,300	Adelaide	131,222
Newcastle	55,240	Port Adelaide.....	18,450
Broken Hill	23,900	*Port Pirie.....	8,000
Parramatta	12,500	*Mount Gambier	3,069
Maitland	10,850		
Goulburn	10,720	Western Australia—	
Bathurst	9,450	Perth	34,610
Grafton	6,150	Fremantle	16,013
Orange	6,060	Boulder (and surround- ing mines)	14,952
Tamworth.....	5,740	Kalgoorlie	9,793
Albury	5,500	Coolgardie	5,000
		Albany	3,250
Victoria—		Tasmania—	
Melbourne	477,790	Hobart	41,585
Ballarat	46,410	Launceston	26,105
Bendigo	43,112	Macquarie Harbour ..	25,000
Geelong	23,440	Beaconsfield.....	2,860
Warrnambool	6,600		
Castlemaine	7,990	New Zealand—	
Stawell	5,400	Auckland	52,513
Maryborough	5,156	Dunedin	49,791
Queensland—		Wellington	47,862
Brisbane	110,951	Christchurch	45,340
Rockhampton	19,180	Napier	9,486
Townsville	12,165	Nelson	7,120
Toowoomba	12,500	Wanganui	6,842
Gympie	12,000	Palmerston North	6,263
Maryborough	10,000	Invercargill.....	5,681
Ipswich	7,750	Oamaru	5,411
Mount Morgan	6,400	Thames.....	5,000
Bundaberg	5,000		
Charters Towers	5,000		

* Exclusive of suburbs.

Macquarie Harbour, in Tasmania, embraces the main great mining centres of Queenstown, Zeehan, and Strahan (the port).

The above statement shows clearly where the people have settled, for excluding the capitals, there are only six cities in the whole of Australasia with a population of over 40,000, viz., Newcastle, 55,240; Auckland, 52,513; Dunedin, 49,791; Ballarat, 46,410; Christchurch, 45,340; Bendigo, 43,112; and of these six, three are in New Zealand.

BIRTHPLACES.

One of the subjects of inquiry at the census of 1891, as at previous enumerations, was the birthplaces of the population. The result of the tabulation shows that while there are differences in the component parts of the population in the several colonies, these differences are slight, and the great majority of the people—to the extent, indeed, of fully 95 per cent.—are of British origin. Probably the population of Australasia is more homogeneous than that of most European countries; for even in Queensland, where people of foreign descent are proportionately more numerous than in any of the other colonies, they do not amount to more than 10 per cent. of the total population.

The great majority of the Australasian-born population were natives of the particular colony in which they were enumerated. The percentage of the people born in the colony in which they were resident at the time of the census, of those born in the other six Australasian colonies, and of the total Australasian-born population to the total population of each colony, are shown below:—

State.	Percentage to Total Population of—		
	Natives of Colony of Enumeration.	Natives of other Colonies.	Australasian-born Population.
New South Wales.....	64·51	7·47	71·98
Victoria	62·56	6·75	69·31
Queensland.....	44·95	7·14	52·09
South Australia.....	67·95	3·45	71·40
Western Australia.....	55·89	6·53	62·42
Tasmania.....	73·57	4·97	78·54
New Zealand	58·52	2·54	61·06
Australasia	61·44	5·96	67·40

These figures show that proportionately the largest Australasian-born population is to be found in Tasmania, where more than 73 out of every 100 of the inhabitants were born in the colony, and over 78 per cent. were Australasians. In Queensland, on the contrary, very nearly half the population were natives of countries outside Australasia, and only 45 per cent. were Queenslanders by birth. The low proportion of native-born in the colony in question is no doubt accounted for by the comparatively recent settlement of much of its territory, and the encouragement given to immigrants from the United Kingdom and the Continent of Europe. It will be noticed that New South Wales has proved the most attractive of all the provinces to those born in other parts of Australasia, while New Zealand, from its isolated position and greater distance, has drawn to itself the smallest proportion of Australasian natives.

Next to the Australasian-born population, natives of the United Kingdom were by far the most numerous class in each colony. The following table shows the percentages of natives of England and Wales, Scotland, and Ireland to the total population of each colony :—

State.	Natives of—			
	England and Wales.	Scotland.	Ireland.	United Kingdom.
New South Wales.....	13·71	3·28	6·68	23·67
Victoria	14·29	4·45	7·48	26·22
Queensland.....	19·60	5·69	10·93	36·22
South Australia.....	15·24	2·77	4·48	22·49
Western Australia ...	19·71	2·43	7·03	29·17
Tasmania	11·89	2·62	3·88	18·39
New Zealand	19·04	8·28	7·60	34·92
Australasia	15·51	4·62	7·23	27·36

It was to be expected that the percentage of natives of the United Kingdom would be highest in those colonies which had introduced a large number of assisted immigrants during the last twenty years, namely, in Queensland, New Zealand, and Western Australia, in which colonies the percentage of the native-born population was comparatively low. If the composition of the population of the United Kingdom be taken into consideration, it will be seen that Scotch and Irish colonists are proportionately much more numerous than those of English birth. The distribution of natives of the three kingdoms is very unequal in the different colonies. While natives of England are proportionately more numerous than natives of Scotland and Ireland in South Australia, Western Australia, and Tasmania; Scotsmen are most numerous in New Zealand, and Irishmen in Queensland.

Of foreign countries, the natives of Germany were the most numerous; then follow natives of China, Sweden and Norway, the United States, Denmark, France, Italy, Russia, Switzerland, Austria-Hungary, the Netherlands, Portugal, Spain, and Belgium, while Polynesians are numerous in Queensland. The percentages to the total population of each colony of natives of Germany, of the Scandinavian Kingdoms (Sweden and Norway and Denmark), and of the total foreign-born population, are shown in the subjoined table :—

State.	Percentage of—		
	Germans.	Scandinavians.	Total Foreign-born Population.
New South Wales	0·85	0·43	3·38
Victoria	0·95	0·40	2·98
Queensland	3·79	1·28	8·02
South Australia.....	2·67	0·45	4·88
Western Australia.....	0·58	0·49	3·91
Tasmania.....	0·63	0·23	1·82
New Zealand	0·74	0·76	2·97
Australasia	1·31	0·56	3·74

It will be seen that both Germans and Scandinavians are proportionately most numerous in Queensland, where together they amount to more than 5 per cent. of the population. Germans are also very numerous in South Australia, and Scandinavians in New Zealand.

CONJUGAL CONDITION.

At the Hobart Census Conference, held in 1890, it was decided to tabulate the conjugal condition of the people under the heads of "Never married," "Married," "Widowed," and "Divorced"; but this decision was not adhered to by South Australia and New Zealand, where the divorced were probably included under the heading of unmarried. For the sake of comparison a similar classification has therefore been made in the tabulation of the other colonies. The people who returned themselves as "divorced" on the census schedules of the various colonies were very few in number, and it is reasonable to assume that these numbers were wide of the truth, no doubt owing to the reluctance on the part of many people whose marriage bonds had been severed to return themselves as "divorced" in the census schedules.

The following table shows for each colony the proportion of unmarried, married, and widowed males to total males; of unmarried, married, and widowed females to total females; and of unmarried, married, and widowed persons to total population:—

Percentage of—	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.	Australasia.
MALES—								
Unmarried	69·81	68·31	72·08	68·38	72·63	67·86	70·39	69·57
Married	27·41	28·58	25·90	29·34	24·38	28·99	27·26	27·74
Widowed	2·78	3·11	2·02	2·28	2·99	3·15	2·35	2·69
FEMALES—								
Unmarried	62·89	61·86	62·16	63·07	63·01	63·31	64·93	62·88
Married	32·11	32·07	33·90	31·44	31·95	30·98	30·95	31·97
Widowed	5·00	6·07	3·94	5·49	4·44	5·71	4·12	5·15
PERSONS—								
Unmarried	66·64	65·24	67·80	65·84	69·01	65·72	67·83	66·46
Married	29·56	30·24	29·35	30·34	27·42	29·93	28·09	29·70
Widowed	3·80	4·52	2·85	3·82	3·57	4·35	3·18	3·84

From the foregoing figures it will be seen that unmarried males are largely in excess of unmarried females in each colony. The excess at the end of 1899, supposing the proportions deduced from the census to

still hold good, and the number of unmarried females to 1,000 unmarried males, would be as shown in the following table :—

State.	Excess of Unmarried Males over Unmarried Females.	Number of Unmarried Females to 1,000 Unmarried Males.
New South Wales	114,200	776
Victoria	36,100	909
Queensland	59,000	694
South Australia	21,900	835
Western Australia	44,200	458
Tasmania	14,000	791
New Zealand	48,300	828
Australasia	337,700	798

The proportion of unmarried females is low in Western Australia, which has attracted much population from the other provinces, and is low also in Queensland, while it is high in Victoria, which has lost largely through emigration, and is near the average in the other colonies which have neither lost nor gained population to any extent. This fact shows that the movement of population during the last few years has been chiefly of young unmarried males attracted from one colony to another by the hope of bettering their condition.

The numbers of married males and females, still supposing the census proportions to hold good, are fairly equal in all the colonies, excepting Western Australia, where married males largely preponderate, and Victoria, where the females are in the majority. As regards the other colonies, the married females are more numerous, except in South Australia and Tasmania.

Amongst the widowed, females largely outnumber males, as was to be expected from the higher death-rate and the proportionately larger number of males re-married. Western Australia, however, shows a slight excess of widowers over widows.

SICKNESS AND INFIRMITY.

Inquiries were made in the 1891 census schedules respecting the number of persons suffering from sickness and infirmity, but there is reason to believe that, in some of the colonies at least, the way in which the column was filled in was unsatisfactory. The figures for New South Wales, Victoria, and South Australia may be compared throughout, as the classification adopted was practically the same, and to a certain extent this also holds good of the Western Australian and Tasmanian figures. The returns for Queensland are made in a somewhat indefinite way; and in New Zealand half the number of persons returned as sick

and infirm includes all ages, while the other half only includes the population of 15 years and over. The following table shows the results of the tabulation for each of the colonies:—

Sickness and Infirmity.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand
Sickness—							
Paralysis	851	1,097	*	300	°	*	468
Epilepsy	339	420	°	138	18	37	232
Leprosy	15	3	*	3	*	*	*
Other and undefined	10,117	13,127	*	3,620	487	2,579	†4,404
Total	11,322	14,647	2,969	4,061	505	2,616	5,104
Accidents	1,459	1,668	777	432	62	152	†679
Deaf and dumb	383	364	154	234	11	54	166
Dumb only	9	*	*	°	°	*	*
Deaf only	1,348	627	*	101	°	*	268
Blindness	741	995	199	247	54	165	274
Lunacy	3,129	3,770	1,104	852	129	383	1,798
Idiocy	286	355	*	84	7	46	128
Crippled	1,775	346	*	186	*	*	979
Lost a limb	635	754	°	251	35	*	*
Lost sight of an eye	1,164	1,157	*	339	79	*	*
Total	22,251	24,683	5,203	6,787	882	3,416	9,396

° Included under more general heading. † Of this number, 4,130 persons refer to the population over 15 years only, while 274 persons refer to the whole population. ‡ Population over 15 years only.