

SECTION V.

VITAL STATISTICS.

NOTE.—The rates quoted throughout this Section for the years 1902 to 1912 have been calculated in accordance with the corrected populations as determined by the results of the Census of 1911.

§ 1. Births.

1. Male and Female Births, 1902 to 1912.—The total number of male and female births registered in the Commonwealth during the years 1902 to 1912 is as shewn in the two tables hereunder:—

TOTAL MALE BIRTHS, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Territory.	C'wealth.
1902 ...	19,322	15,583	7,279	4,579	3,241	2,604	8	...	52,616
1903 ...	18,377	15,115	6,427	4,464	3,433	2,570	20	...	50,406
1904 ...	19,857	15,313	7,134	4,665	3,666	2,702	21	...	53,358
1905 ...	20,206	15,523	6,978	4,491	3,862	2,812	23	...	53,895
1906 ...	21,066	15,716	7,280	4,605	4,043	2,792	12	...	55,514
1907 ...	21,604	15,986	7,451	4,675	3,962	2,797	14	...	56,489
1908 ...	21,605	16,071	7,677	4,924	3,993	2,818	25	...	57,113
1909 ...	22,464	16,096	7,954	5,224	3,884	2,849	11	...	58,482
1910 ...	23,368	16,412	8,260	5,395	3,855	2,888	28	...	60,206
1911 ...	24,383	16,934	8,703	5,615	4,124	2,716	16	(a) 17	62,508
1912 ...	26,524	18,226	9,576	6,168	4,469	3,016	23	20	68,022

(a) Part of New South Wales prior to 1911.

TOTAL FEMALE BIRTHS, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Territory.	C'wealth.
1902 ...	18,513	14,878	6,937	4,348	2,991	2,481	12	...	50,160
1903 ...	17,589	14,454	6,194	4,011	3,266	2,510	13	...	48,037
1904 ...	18,810	14,450	6,948	4,435	3,510	2,590	12	...	50,755
1905 ...	19,295	14,584	6,648	4,341	3,720	2,445	13	...	51,046
1906 ...	19,882	15,128	6,739	4,316	3,757	2,541	13	...	52,376
1907 ...	20,597	15,379	7,089	4,536	3,750	2,494	13	...	53,858
1908 ...	20,853	15,026	7,153	4,832	3,762	2,797	9	...	54,432
1909 ...	21,318	15,448	7,598	4,840	3,718	2,651	16	...	55,589
1910 ...	22,076	15,025	7,909	5,145	3,730	2,698	12	...	56,595
1911 ...	23,154	16,092	8,231	5,442	3,967	2,721	15	(a) 13	59,685
1912 ...	25,337	17,570	9,162	5,911	4,220	2,837	10	19	65,066

(a) Part of New South Wales prior to 1911.

2. Total Births, 1902 to 1912.—While the total number of births for the Commonwealth was higher in 1912 than in any of the preceding ten years, the following table of particulars discloses also the fact that the excess of births in 1912 over those in 1902 was very unequally distributed between the States:—

TOTAL BIRTHS, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North-Terr.	Fed'l Terr.	C'wealth.
1902 ...	37,835	30,461	14,216	8,927	6,232	5,085	20	...	102,776
1903 ...	35,966	29,569	12,621	8,475	6,699	5,080	33	...	98,443
1904 ...	38,667	29,763	14,082	9,100	7,176	5,292	33	...	104,113
1905 ...	39,501	30,107	13,626	8,832	7,582	5,257	36	...	104,941
1906 ...	40,948	30,844	14,019	8,921	7,800	5,333	25	...	107,890
1907 ...	42,201	31,365	14,540	9,211	7,712	5,291	27	...	110,347
1908 ...	42,458	31,097	14,830	9,756	7,755	5,615	34	...	111,545
1909 ...	43,782	31,544	15,552	10,064	7,602	5,500	27	...	114,071
1910 ...	45,444	31,437	16,169	10,540	7,585	5,586	40	...	116,801
1911 ...	47,537	33,026	16,984	11,057	8,091	5,437	31	(a) 30	122,193
1912 ...	51,861	35,796	18,738	12,079	8,689	5,853	33	39	133,088

(a) Part of New South Wales prior to 1911.

3. *Birth Rates, 1902 to 1912.*—(i.) *Crude Birth Rate.* The birth rate for the whole Commonwealth during 1911 was higher than in any of the preceding ten years, an uninterrupted increase having been experienced since 1907. The increase shown by the 1912 figures over those of 1911 is, however, to some extent fictitious. The law relating to Maternity Allowances which came into force on 10th October, 1912, had the effect of materially diminishing the period between the dates of birth and the dates of registration, so that probably about 6000 births were registered during the last three months of the year which, under ordinary circumstances, would not have been registered before the beginning of 1913. The very high masculinity of the population accounts for the low birth rate experienced in the Northern Territory:—

CRUDE BIRTH RATE (a), COMMONWEALTH, 1902 to 1912 (b).

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	North-Terr.	Federal.	Cwlth.
1902 ...	27.23	25.23	27.85	25.08	30.44	29.08	4.37	...	26.71
1903 ...	25.44	24.53	24.53	23.84	30.50	28.16	7.58	...	25.29
1904 ...	26.85	24.74	26.99	25.49	30.67	28.92	7.82	...	26.41
1905 ...	26.85	24.96	25.76	24.54	30.74	28.50	8.72	...	26.23
1906 ...	27.21	25.41	26.15	24.57	30.66	28.94	6.29	...	26.57
1907 ...	27.34	25.59	26.79	25.05	30.18	28.63	7.06	...	26.76
1908 ...	26.99	25.07	26.79	25.81	30.08	28.95	9.30	...	26.59
1909 ...	27.40	25.01	27.29	25.91	28.87	29.91	7.63	...	26.69
1910 ...	27.83	24.51	27.33	26.50	27.99	29.25	11.75	...	26.73
1911 ...	28.60	25.01	27.65	26.89	28.21	28.57	9.34	(d) 16.85	27.21
1912 ...	29.86	26.39	29.67	28.65	28.83	30.53	9.82	19.15	28.65
Density (c) (No. per square mile) ...	5.74	15.71	0.95	1.13	0.31	7.52	0.007	2.13	1.59

(a) Number of births per 1,000 of the mean annual population. (b) Rates corrected in view of Census Returns, 1911. (c) On 31st December, 1912. (d) Part of New South Wales prior to 1911.

The population density of each State and of the Commonwealth has been given for the purpose of considering the influence, if any, of concentration of population on birth rate, in connection with the disparities of the rate in different parts of Australia.

(ii.) *Objections to Crude Birth Rate.* The figures just given represent the "crude birth rate," *i.e.*, the number of births per thousand of mean annual population. The number of births per thousand of the female population of child-bearing ages, *i.e.*, from 15 to 45, furnish a more significant rate. This calculation has been made for the four last Census periods, and covers in each case the Census year together with the year immediately preceding and the year immediately following. The following results have been obtained for the four Census periods:—Total births per 1000 women (married and unmarried) of ages 15 to 45:—Years 1880-82, 169.69; years 1890-92, 158.81; years

1900-02, 117.26; years 1910-12, 117.22. Nuptial births per 1000 married women of ages 15 to 45:—Years 1880-82, 320.96; years 1890-92, 332.03; years 1900-02, 235.84; years 1910-12, 236.06.

4. **Birth Rates of Various Countries.**—A comparison with other countries shows that the Australian States occupy a very low position, which is, however, fortunately counterbalanced by a still lower position in regard to their death rates, as will be seen from the table hereinafter in the section dealing with "Deaths."

CRUDE BIRTH RATE (a) OF VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Russia, European ...	1905	44.8	Commonwealth ...	1912	28.7
Rumania ...	1911	43.0	South Australia ...	1912	28.7
Bulgaria ...	1908	40.4	German Empire ...	1911	28.6
Jamaica ...	1911	39.0	Netherlands... ..	1911	27.8
Chile ...	1911	38.5	Denmark ...	1911	26.8
Ceylon ...	1911	37.9	New Zealand ...	1912	26.5
Servia ...	1911	36.2	Victoria ...	1912	26.4
Hungary ...	1911	35.0	Norway ...	1911	25.9
Japan ...	1909	34.2	Scotland ...	1911	25.6
Italy ...	1911	31.5	Switzerland ...	1910	25.0
Austria ...	1911	31.4	United Kingdom ...	1911	24.4
Spain ...	1911	31.2	England and Wales ...	1911	24.4
Tasmania ...	1912	30.5	Sweden ...	1911	23.8
New South Wales ...	1912	29.9	Belgium ...	1910	23.7
Queensland ...	1912	29.7	Ireland ...	1911	23.2
Prussia ...	1911	29.4	Canada (Ontario) ...	1911	21.7
Finland ...	1911	29.1	France ...	1911	18.7
Western Australia ...	1912	28.8			

(a) Number of births per 1000 of the mean population.

5. **Masculinity at Birth.**—The masculinity of births, *i.e.*, the number of males per 100 females, registered during the last eleven years in the several States of the Commonwealth has, apart from the Northern Territory, the figures for which are useless for comparative purposes on account of the smallness of the returns on which they are based, varied from 99.82 in Tasmania in 1911 to 115.01 in Tasmania in 1905. The following table, which gives the values for the States and Commonwealth for 1902 to 1912, shows the remarkable fact that for the Commonwealth there was a steady increase of masculinity from 1902 to 1906, with a sharp decrease in 1907, a further increase in 1908, 1909, 1910, and a rapid decrease in 1911 and 1912:—

MASCULINITY (a) OF BIRTHS REGISTERED, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Vict.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Territory.	C'wealth.
1902 ...	104.37	104.74	104.93	105.31	108.36	104.96	66.67	...	104.90
1903 ...	104.48	104.57	103.76	111.29	105.11	102.39	153.85	...	104.93
1904 ...	105.57	105.97	102.68	105.19	104.44	104.32	175.00	...	105.13
1905 ...	104.72	106.44	104.96	103.46	103.82	115.01	176.92	...	105.58
1906 ...	105.96	103.89	108.03	106.70	107.61	109.88	92.31	...	105.99
1907 ...	104.89	103.95	105.11	103.06	105.65	112.15	107.69	...	104.89
1908 ...	103.61	106.95	107.33	101.90	106.14	100.75	277.78	...	104.93
1909 ...	105.38	104.19	104.69	107.93	104.46	107.47	68.75	...	105.20
1910 ...	105.85	109.23	104.44	104.86	103.35	107.04	233.33	...	106.38
1911 ...	105.31	105.23	105.10	103.18	103.96	99.82	106.67	(b)130.77	104.73
1912 ...	104.68	103.73	104.52	104.35	105.90	106.31	230.00	105.26	104.54

(a) Number of males to each 100 females. (b) Part of New South Wales prior to 1911.

There is ordinarily a very small difference between the masculinity of nuptial and ex-nuptial births. Thus, according to Bodio, whose figures are quoted in the following

table, for the period about 1887-1891, the masculinity ranged from 108.3 to 103.6, and from 107.9 to 101.6 for total and ex-nuptial births respectively.

MASCULINITY OF BIRTHS IN VARIOUS COUNTRIES.

Country.	Masculinity of Births. (a)		Country.	Masculinity of Births. (a)	
	All Live Births.	Ex-nuptial Live Births.		All Live Births.	Ex-nuptial Live Births.
Spain ...	108.3	107.9	German Empire ...	105.2	104.7
Rumania ...	107.7	103.4	Finland ...	105.0	105.2
Portugal ...	107.5	106.4	Hungary ...	105.0	102.9
Austria ...	105.8	105.5	Sweden ...	105.0	104.3
Italy ...	105.8	104.4	Denmark ...	104.8	105.0
Norway ...	105.8	105.9	Servia ...	104.7	103.5
Ireland ...	105.5	104.8	France ...	104.6	102.9
Netherlands ...	105.5	104.7	Belgium ...	104.5	102.2
Scotland ...	105.5	105.9	Switzerland ...	104.5	101.6
Russia, European ...	105.4	104.5	England ...	103.6	104.4

(a) Number of males to each 100 females.

The masculinity of ex-nuptial births in the Commonwealth was as follows:—

MASCULINITY (a) OF EX-NUPTIAL BIRTHS REGISTERED, COMMONWEALTH, 1902 TO 1912.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	North Territ'y.	Federal Territ'y.	C'wth.
1902 ...	103.67	106.78	100.23	106.91	111.11	93.17	...	...	103.96
1903 ...	97.79	114.83	95.22	100.00	114.29	122.66	...	...	104.10
1904 ...	100.80	108.68	95.77	83.50	107.28	93.71	200.00	...	100.98
1905 ...	102.50	102.52	105.63	96.94	98.75	102.80	...	...	102.44
1906 ...	103.10	102.23	104.17	116.97	118.13	124.82	100.00	...	105.44
1907 ...	104.91	105.59	100.90	113.56	115.94	100.00	...	...	105.11
1908 ...	108.60	105.38	96.83	96.82	89.33	108.51	150.00	...	104.00
1909 ...	105.46	102.16	103.90	105.37	129.14	129.01	66.67	...	106.25
1910 ...	104.96	103.59	100.39	101.33	89.70	106.94	200.00	...	103.05
1911 ...	101.73	106.61	97.94	106.19	108.05	105.67	28.57	(b) ...	103.10
1912 ...	109.83	95.98	97.30	120.85	124.40	82.69	200.00	...	104.05

(a) Number of males to each 100 females. (b) Part of New South Wales prior to 1911.

It is curious to note that while, so far as the total births are concerned, there has always been an excess of male births over female births (excepting Tasmania in 1911), this has not been the case in regard to ex-nuptial births, where in South Australia in 1904 the masculinity was only 83.50. On the other hand it rose as high as 129.14 in Western Australia in 1909. Little weight, however, can be attached to these results on account of the small totals on which they are based, and for the same reason the figures for the Northern Territory are not taken into consideration.

6. Ex-nuptiality of Births.—The total ex-nuptial births fell from 1902 to 1903, then rose rapidly to 1908 and remained almost stationary till 1909, when the number again decreased. The total for 1910 was the lowest number recorded since 1906. (See the table on the following page).

It is, of course, possible that the number of ex-nuptial births is somewhat understated, owing to diffidence in proclaiming the fact of ex-nuptiality, and it is not unlikely that the majority of unregistered births are ex-nuptial.

TOTAL EX-NUPTIAL BIRTHS REGISTERED IN THE COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Fed'l Terr.	C'wealth.
1902 ...	2,497	1,677	859	389	247	311	...	...	5,980
1903 ...	2,413	1,695	857	354	315	285	...	...	5,919
1904 ...	2,755	1,707	971	364	313	308	3	...	6,421
1905 ...	2,912	1,689	950	381	318	290	1	...	6,545
1906 ...	2,882	1,721	1,076	356	373	308	2	...	6,718
1907 ...	2,920	1,764	1,117	378	298	306	...	...	6,783
1908 ...	2,887	1,793	1,118	435	337	294	5	...	6,867
1909 ...	2,821	1,870	1,097	421	346	300	5	...	6,860
1910 ...	2,853	1,759	1,034	455	313	298	9	...	6,721
1911 ...	2,921	1,969	1,057	466	362	290	9	(a)...	7,074
1912 ...	2,904	2,046	1,170	572	377	285	3	1	7,358

(a) Part of New South Wales prior to 1911.

(i.) *Rate of Ex-nuptiality, 1902 to 1912.* The rate of ex-nuptiality, *i.e.*, the percentage of ex-nuptial to total births, shews on the whole a slight increase from 1902 to 1905, with a decrease during the last seven years, as the subjoined table shews:—

PERCENTAGE OF EX-NUPTIAL ON TOTAL BIRTHS, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Fed'l Terr.	C'wealth.
	%	%	%	%	%	%	%		%
1902 ...	6.60	5.51	6.04	4.36	3.96	6.12	...	...	5.82
1903 ...	6.71	5.73	6.79	4.18	4.70	5.61	...	...	6.01
1904 ...	7.12	5.74	6.90	4.00	4.36	5.82	9.09	...	6.17
1905 ...	7.37	5.61	6.97	4.36	4.19	5.52	2.78	...	6.24
1906 ...	7.04	5.58	7.68	3.99	4.78	5.78	8.00	...	6.23
1907 ...	6.92	5.62	7.68	4.10	3.86	5.73	...	...	6.15
1908 ...	6.80	5.77	7.54	4.44	4.35	5.24	14.71	...	6.16
1909 ...	6.44	5.94	7.05	4.18	3.95	5.45	18.52	...	6.01
1910 ...	6.28	5.60	6.39	4.32	4.13	5.33	22.50	...	5.75
1911 ...	6.14	5.96	6.22	4.21	4.47	5.33	29.03	(a)...	5.79
1912 ...	5.60	5.72	6.24	4.74	4.34	4.87	9.09	2.56	5.53

(a) Part of New South Wales prior to 1911.

A comparison of greater significance is obtained by calculating the number of ex-nuptial births per thousand of the single and widowed female population between the ages of 15 and 45. The calculation has been made for the last four Census periods, and covers in each case the Census year, together with the year immediately preceding and the year immediately following. The number of ex-nuptial births per 1000 unmarried women of ages 15 to 45 has been found to be as follows:—Years 1880-82, 14.49; years 1890-92, 15.93; years 1900-02, 13.30; years 1910-12, 12.53.

(ii.) *Comparison of Rates.* Since the rate of ex-nuptiality might appear to increase by the mere decrease in the general birth rate, the following table has been prepared:—

CRUDE EX-NUPTIAL, NUPTIAL AND TOTAL BIRTH RATES, (a), COMMONWEALTH, 1902 TO 1912 (b).

Births.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.
Ex-nuptial	1.55	1.52	1.63	1.64	1.65	1.64	1.64	1.60	1.54	1.57	1.58
Nuptial ...	25.16	23.77	24.78	24.59	24.92	25.12	24.95	25.09	25.19	25.64	27.07
Total ...	26.71	25.29	26.41	26.23	26.57	26.76	26.59	26.69	26.73	27.21	28.65

(a) Number of births per 1000 of mean population. (b) Rates corrected in view of Census Returns, 1911.

(iii.) *Ex-nuptiality—Rates of Various Countries.* The rate for the Commonwealth is higher than that for England and Wales, slightly lower than that for Scotland, and considerably below the rates for many of the countries for which returns are available, as the table hereunder shews. The rates shewn below refer to three triennial periods, 1880-2, 1890-2, and 1900-2, and are given per thousand of the unmarried and widowed female population:—

EX-NUPTIAL BIRTHS PER THOUSAND OF UNMARRIED AND WIDOWED FEMALE POPULATION IN VARIOUS COUNTRIES.

Country.	Rate.			Country.	Rate.		
	1880-2.	1890-2.	1900-2.		1880-2.	1890-2.	1900-2.
	%	%	%		%	%	%
Ireland	4.4	3.9	3.8	Belgium	20.0	20.6	17.8
Netherlands	9.7	9.0	6.8	France	17.6	17.7	19.1
England and Wales	14.1	10.5	8.5	Italy	25.4	...	19.4
New Zealand	13.4	9.0	8.9	Russia	25.8	25.1	23.7
Switzerland	10.8	10.0	9.8	Denmark	26.9	24.5	24.2
Commonwealth	14.5	15.9	13.3	Sweden	22.6	22.9	24.3
Scotland	21.4	17.1	13.4	German Empire	29.6	28.7	27.4
Spain	16.0	17.5	15.5	Austria	43.4	42.7	40.1
Norway	19.7	16.9	17.2				

It may be added that the general circumstances in Australia with regard to opportunity for marriage are probably relatively easy as compared with those in older established countries.

7. **Multiple Births.**—Among the total number of 133,088 births registered in the Commonwealth in 1912 there were 130,376 single births, 2664 twins, and 48 triplets. The number of cases of twins was 1334, four children being still-born, and the number of cases of triplets 16. The total number of mothers was, therefore, 131,725, the proportion of mothers of twins being one in every 99, and of mothers of triplets one in every 8233 of total mothers. The proportion of multiple births is a fairly constant one. In 1907 they numbered 1043 out of a total of 109,306, or one in 105; in 1908, 1065, or one in 104; in 1909, 1142, or one in 99; in 1910, 1189, or one in 99, in 1911, 1236, or one in 98, and in 1912, 1350, or one in 98. The number of cases of triplets is so small that a slight alteration in the total will completely change the proportion. Thus, there were 14 cases in 1907, or one in 7872 of total mothers, as compared with one in 18,415 in 1908; one in 8066 in 1909, one in 8893 in 1910, one in 8639 in 1911, and one in 8233 in 1912.

8. **Ages of Parents.**—The relative ages of the parents of children registered in 1912 have been tabulated, twins and triplets being distinguished from single births, and are shewn for single ages and for every State in "Bulletin of Population and Vital Statistics, No. 30; Commonwealth Demography, 1912 and previous years." In the present work the exigencies of space allow only the insertion of corresponding tables shewing the relative ages of parents in groups of five years. It will be seen from the tables that the largest number of single births occurred where the ages of both father and mother were between 25 and 29, while the largest number of twin births occurred where the ages of both father and mother were between 30 and 34. The largest number of mothers was found at ages 25 to 29.

(a) AGES OF PARENTS IN CASES OF SINGLE BIRTHS, COMMONWEALTH, 1912.

Age.	Total Fathers.	Ages of Mothers.									
		Under 15.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and Upwds.	Not Stated.	
Ages of Fathers.	Under 20 ...	436	1	305	121	8	1	...	...	...	...
	20 to 24 ...	13,217	1	2,489	8,629	1,871	189	29	4	1	4
	25 to 29 ...	31,480	2	1,310	12,891	14,356	2,516	361	35	2	7
	30 to 34 ...	29,850	...	324	5,046	12,394	10,247	1,674	150	8	7
	35 to 39 ...	22,293	...	125	1,602	5,330	8,411	6,181	624	19	1
	40 to 44 ...	14,690	...	33	476	1,878	4,153	5,389	2,684	69	8
	45 to 49 ...	7,509	...	8	172	654	1,434	2,675	2,248	316	2
	50 to 54 ...	2,678	...	7	56	214	434	787	970	208	2
	55 to 59 ...	654	...	...	13	56	96	227	196	65	1
	60 to 64 ...	219	...	2	9	24	41	53	66	24	...
	65 & upwards ...	83	...	...	1	7	24	21	24	6	...
Not stated ...	28	...	...	5	4	10	2	2	1	4	
Mothers of nuptial children ...	123,137	4	4,603	29,021	36,796	27,556	17,399	7,003	719	36	
Mothers of ex-nuptial children	7,239	20	1,977	2,776	1,302	583	374	140	22	45	
Total mothers	130,376	24	6,580	31,797	38,098	28,139	17,773	7,143	741	81	

(b) AGES OF PARENTS OF TWINS, COMMONWEALTH, 1912.

Age.	Total Fathers.	Ages of Mothers.							
		Under 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 & upwards.	
Ages of Fathers.	Under 20 ...	3	3	...	...	...	...	...	...
	20 to 24 ...	89	14	48	24	2	1	...	...
	25 to 29 ...	267	12	89	135	29	1	1	...
	30 to 34 ...	298	1	29	103	140	25	...	...
	35 to 39 ...	271	2	7	48	107	100	6	1
	40 to 44 ...	202	...	9	17	59	88	29	...
	45 to 49 ...	96	...	1	9	21	40	23	2
	50 to 54 ...	37	...	1	1	5	16	12	2
	55 to 59 ...	9	...	...	...	2	3	4	...
	60 to 64 ...	2	...	...	...	...	...	2	...
	65 and upwards ...	1	...	...	...	1	...	...	...
Mothers of nuptial twins	1,275	32	184	337	366	274	77	5	
Mothers of ex-nuptial ..	59	4	23	10	12	7	3	...	
Total mothers	1,334	36	207	347	378	281	80	5	

(c) AGES OF PARENTS OF TRIPLETS, COMMONWEALTH, 1912.

Age.	Total Fathers.	Ages of Mothers.					
		Under 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.
Ages of Fathers.	20 to 24 ...	1	...	1	...	...	...
	25 to 29 ...	...	...	...	...	...	...
	30 to 34 ...	2	...	...	2	...	...
	35 to 39 ...	6	...	...	...	4	2
	40 to 44 ...	4	...	...	...	1	1
	45 to 49 ...	2	...	...	...	...	1
Mothers of nuptial triplets ...	15	...	1	2	5	4	3
Mothers of ex-nuptial triplets	1	1	...	...	...	...	...
Total mothers	16	1	1	2	5	4	3

9. Birthplaces of Parents.—The relative birthplaces of the parents of children whose births were registered during the year 1912 will be found tabulated in the Bulletin before-mentioned. A summary of the results of the tabulation is here given:—

BIRTHPLACES OF PARENTS OF CHILDREN, COMMONWEALTH, 1912.

Birthplaces.	Fathers			Mothers of Nuptial Children.			Mothers of Ex-nuptial Children.		
	Single Births.	Twins.	Trip-lets.	Single Births.	Twins.	Trip-lets.	Single Births.	Twins.	Trip-lets.
AUSTRALASIA—									
Commonwealth of									
Australia—									
N. South Wales	38,134	373	3	41,431	404	2	2,666	19	...
Victoria ...	33,549	342	7	32,964	359	9	1,925	20	...
Queensland ...	10,384	114	...	13,039	130	1	996	4	1
South Australia	12,760	152	2	13,092	156	2	606	5	...
Western Australia	1,381	13	...	1,912	19	1	147	1	...
Tasmania ...	5,585	58	...	5,871	57	...	367	3	...
North. Territory	4	...	...	11	...	...	2	...	...
New Zealand ...	1,339	15	...	1,298	10	...	78	1	...
EUROPE—									
England... ..	11,136	109	2	7,324	89	...	234	5	...
Wales	338	4	...	252	2	...	7	...	...
Scotland... ..	2,709	28	...	1,831	18	...	67	1	...
Ireland	2,182	24	1	1,343	13	...	47	...	...
Isle of Man ...	25	...	...	20	...	...	...	...	...
Other European Brit- ish Possessions...	46	1	...	17	...	...	1	...	...
Austria-Hungary ...	84	...	...	48	...	...	...	...	...
Belgium... ..	5	...	...	3	...	...	...	...	...
Denmark	219	1	...	67	1	...	1	...	...
France	62	...	...	36	...	...	2	...	...
Germany	1,004	17	...	509	4	...	8	...	...
Greece	52	...	...	17	...	...	...	...	...
Italy	291	3	...	172	2	...	5	...	...
Netherlands ...	29	...	...	10	...	...	...	...	...
Norway	113	...	...	24	...	...	1	...	...
Portugal... ..	2	...	...	2	...	...	...	...	...
Russia	176	3	...	98	3	...	1	...	...
Spain	27	...	...	14	...	...	1	...	...
Sweden	193	2	...	27	...	...	...	...	...
Switzerland ...	43	...	...	21	...	...	...	...	...
Other European Countries	38	...	...	16	...	...	...	...	...
ASIA—									
British India ...	160	3	...	76	1	...	1	...	...
Ceylon	16	...	...	4	...	...	...	...	...
Hong Kong	2	...	...	4	...	...	...	...	...
Straits Settlements	7	...	...	4	...	...	...	...	...
Other Asiatic British Possessions	3	...	...	...	...	...	1	...	...
Afghanistan ...	2	...	...	...	...	...	...	...	...
Arabia	2	...	...	...	...	...	...	...	...
China	165	2	...	49	1	...	2	...	...
Japan	16	1	...	8	...	...	2	...	...
Java	4	...	...	1	...	...	...	...	...
Philippine Islands	4	1	...	1	...	...	...	...	...
Syria	119	1	...	106	1	...	1	...	...
Other Asiatic Coun- tries	8	...	...	3	...	...	...	...	...

BIRTHPLACES OF PARENTS OF CHILDREN—Continued.

Birthplace.	Fathers.			Mothers of Nuptial Children.			Mothers of Ex-nuptial Children.		
	Single Births.	Twins.	Trip-lets.	Single Births.	Twins.	Trip-lets.	Single Births.	Twins.	Trip-lets.
AFRICA—									
Cape of Good Hope	9	...	...	12	...	...	1	...	...
Mauritius	28	...	...	6	...	...	...	...	...
Natal	5	...	...	4	...	...	...	...	...
S. Africa (undefined)	65	1	...	75	...	...	1	...	...
Other African British Possessions	3	...	...	...	...	...	...	...	...
Egypt	5	...	...	3	...	...	1	...	...
Other African Countries	9	...	...	3	...	...	1	...	...
AMERICA—									
Canada	87	...	...	34	2	...	4	...	...
Jamaica	2	1	...	1	...	...	...	...	...
Newfoundland	3	...	...	1	...	...	...	...	...
Other American British Pos.	6	...	...	...	...	...	...	...	...
Argentine Republic	2	...	...	1	...	...	...	...	...
Brazil	1	...	...	1	...	...	...	...	...
Chile	4	...	...	...	...	...	...	...	...
Mexico	2	...	...	...	...	...	...	...	...
Peru	1	...	...	1	...	...	...	...	...
United States of America	195	3	...	102	...	...	1	...	...
Other American Countries	57	...	...	22	...	...	3	...	...
POLYNESIA—									
Fiji	30	1	...	24	1	...	1	...	...
Friendly Islands	...	...	...	1	1	...	...	...	...
Other Polynesian British Pos.	1	...	...	...	...	...	...	...	...
New Caledonia	14	...	...	9	1	...	8	...	...
New Hebrides	3	1	...	1	...	...	...	...	...
Samoa	3	...	...	2	...	...	...	...	...
Other Polynesian Islands	...	...	...	2	...	...	...	...	...
South Sea Islands (so described)	16	...	...	1	...	...	1	...	...
At Sea	137	1	...	80	...	...	8	...	...
Unspecified	26	...	...	26	...	...	40	...	...
Total	123,137	1,275	15	123,137	1,275	15	7,239	59	1

10. Occupations of Fathers.—A summary of the occupations of the fathers of all nuptial children, whose births were registered in 1912, will be found in the following table. The figures include all the States and Territories of the Commonwealth:—

OCCUPATIONS OF FATHERS OF ALL NUPTIAL CHILDREN, COMMONWEALTH, 1912.

Occupations.	Number of Fathers.	Occupations.	Number of Fathers.
CLASS I.—PROFESSIONAL.			
General Government	708	Hay, Corn, etc.	258
Local Government	144	Other Vegetable Matter not else- where included	156
Defence	217	Wood and Coal	285
Law and Order	1,219	Stone, Clay, and Glass	32
Religion	382	Gold, Silver, and Precious Stones	9
Charities	6	Ironmongery	250
Health	925	Merchants, Importers	570
Literature	179	Shopkeepers and Assistants	1,104
Science	117	Dealers and Hawkers	368
Civil Engineering, Architecture, and Surveying	394	Agents and Brokers	578
Education	788	Clerks, Bookkeepers, etc.	3,154
Fine Arts	146	Commercial Travellers, Salesmen	1,463
Music	186	Others engaged in Commercial Pursuits	1,023
Amusements	511	Speculators on Chance Events	45
		Storage	9
Total Professional	5,922	Total Commercial	16,598
CLASS II.—DOMESTIC.			
Hotelkeepers and Assistants	902	CLASS IV.—TRANSPORT AND COMMUNICATION.	
Others engaged in providing board and lodging	248	Railway Traffic	4,300
House Servants	224	Tramway Traffic	1,125
Coachmen and Grooms... ..	273	Road Traffic	5,826
Hairdressers	622	Sea and River Traffic	1,774
Laundrymen	56	Postal Service	491
Others engaged in domestic service	274	Telegraph and Telephone Service	508
		Messengers, etc.	28
Total Domestic	2,599	Total Transport & Communication	14,052
CLASS III.—COMMERCIAL.			
Banking and Finance	497	CLASS V.—INDUSTRIAL.	
Insurance and Valuation	523	Books and Publications	972
Landed and House Property	157	Musical Instruments	66
Property Rights not elsewhere clsd.	7	Prints, Pictures and Art Materials	71
Books, Publications, Advertising	197	Ornaments and Small Wares	75
Musical Instruments	20	Equipment for Sports and Games	6
Prints, Pictures and Art Materials	3	Medals, Type, and Dies	35
Ornaments and Small Wares	12	Watches, Clocks, and Scientific Instruments	137
Sports and Games	3	Surgical Instruments	2
Watches, Clocks, Jewellery	14	Arms and Ammunition	13
Surgical Instruments	1	Engines, Machines, Tools, and Implements	1,281
Machinery	70	Carriages and Vehicles	944
Carriages and Vehicles	35	Harness, Saddlery & Leatherware	484
Harness, Saddlery & Leatherware	2	Ships, Boats, etc.	126
Ships, Boats, Marine Stores	1	Furniture	637
Building Materials	28	Building Materials	751
Furniture	55	Chemicals and By-Products	52
Chemicals and By-products	10	Textile Fabrics	53
Paper and Stationery	54	Dress	2,053
Textile Fabrics	657	Fibrous Materials	75
Dress	166	Animal Food	442
Fibrous Materials	11	Vegetable Food	1,570
Animal Food	2,395	Groceries, Drinks, Narcotics, and Stimulants	507
Vegetable Food	673	Animal Matter, not elsewhere clsd.	447
Groceries, Drinks, Narcotics, and Stimulants... ..	1,355	Workers in wood, not elsewhere clsd	136
Living Animals	208	Vegetable Produce for Fodder	7
Leather, Raw Materials	40		
Wool and Tallow	100		

OCCUPATIONS OF FATHERS OF ALL NUPTIAL CHILDREN—Continued.

Occupations.	Number of Fathers.	Occupations.	Number of Fathers.		
Paper	20	CLASS VI.—AGRICULTURAL, PASTORAL, MINING, ETC.	19,848		
Stone, Clay, Glass, etc. ...	708			Agricultural	3,878
Jewellery and Precious Stones ...	240			Pastoral	1,416
Metals, other than Gold & Silver ...	3,600			Dairy, Farming	385
Gas, Electric Lighting, etc. ...	699			Bees, Fisheries, and Wild Animals ...	884
Building—				Forestry	144
Builders	592			Water Conservation and Supply ...	7,518
Stonemasons	316			Mines and Quarries	34,073
Bricklayers	730			Total Primary Producers	
Carpenters	3,372				
Slaters	41	CLASS VII.—INDEFINITE.			
Plasterers	327	Independent Means, having no			
Painters	1,411	specific occupation	112		
Plumbers	854	Occupation not stated	39		
Signwriters	64	Total Indefinite	151		
Others	9				
Roads, Railways, Earthworks ...	320	CLASS VIII.—DEPENDENTS.			
Disposal of the Dead	35	Dependent on State,	1		
Disposal of Refuse	222	Dependent Relatives	7		
Other Industrial Workers—		Total Dependents	8		
Manufacturers, etc.	397	Total all Occupations	124,427		
Engineers, Firemen	3,143				
Contractors	1,384				
Labourers, undefined	21,366				
Others	222				
Total Industrial	51,024				

11. **Mothers' Age, Duration of Marriage, and Issue.**—A tabulation has been made shewing, in age-groups, the duration of marriage and issue of mothers. The total number of nuptial confinements in 1912 was 124,427, viz., 123,137 single births, 1275 cases of twins, and 15 cases of triplets. From this number 364 mothers must be deducted, in whose case the necessary particulars either as to date of marriage or as to previous issue were not stated. The tables refer, therefore, to a total of 124,063 mothers. They exclude children by former marriages and still-born children, but include ex-nuptial children, previous issue by the same father. The tables cannot be given *in extenso*, but the following are their most salient features. The complete tabulations are shewn in "Commonwealth Bulletin of Population and Vital Statistics, No. 30; Commonwealth Demography, 1912, and previous years."

DURATION OF MARRIAGE AND ISSUE OF MOTHERS OF ALL AGES.

COMMONWEALTH, 1912.

Duration of Marriage.	Total Mothers.	Total Issue.	Average Number of Children.	Duration of Marriage.	Total Mothers.	Total Issue.	Average Number of Children.
Years.				Years.			
0-1 ...	21,360	21,640	1.03	17-18 ...	1,655	11,890	7.18
1-2 ...	9,470	10,556	1.12	18-19 ...	1,370	10,288	7.51
2-3 ...	10,165	18,254	1.80	19-20 ...	1,195	9,535	7.99
3-4 ...	10,378	21,843	2.10	20-21 ...	1,061	8,808	8.30
4-5 ...	9,283	23,600	2.54	21-22 ...	917	8,139	8.87
5-6 ...	8,478	24,544	2.90	22-23 ...	748	6,754	9.03
6-7 ...	7,267	24,047	3.31	23-24 ...	507	4,691	9.25
7-8 ...	6,449	23,706	3.68	24-25 ...	392	3,896	9.94
8-9 ...	5,549	22,389	4.03	25-26 ...	292	3,068	10.51
9-10 ...	4,554	19,838	4.37	26-27 ...	171	1,818	10.63
10-11 ...	4,620	21,599	4.68	27-28 ...	96	1,063	11.07
11-12 ...	4,110	21,019	5.11	28-29 ...	54	636	11.78
12-13 ...	3,835	20,950	5.46	29-30 ...	25	295	11.80
13-14 ...	3,084	18,070	5.86	30-31 ...	13	165	12.69
14-15 ...	2,675	16,535	6.18	31-32 ...	1	13	13.00
15-16 ...	2,308	14,916	6.46	32-33 ...	6	73	12.17
16-17 ...	1,975	13,711	6.94				
				Total	124,063	408,349	3.29

AGES AND ISSUE OF MOTHERS, COMMONWEALTH, 1912.

Ages of Mothers.	Total Mothers.	Total Issue.	Average Number of Children.	Ages of Mothers.	Total Mothers.	Total Issue.	Average Number of Children.
Under 20 years	4,608	5,539	1.20	40-44 years ...	7,071	49,005	6.93
20-24 years ...	29,098	50,987	1.75	45 yrs. and over	721	6,269	8.69
25-29 " ...	37,036	97,698	2.64				
30-34 " ...	27,834	106,259	3.81				
35-39 " ...	17,645	92,592	5.25	All ages ...	124,063	408,349	3.29

PREVIOUS ISSUE OF MOTHERS OF VARIOUS AGES, COMMONWEALTH, 1912.

Previous Issue.	Mothers' Ages.							
	Under 20 Years.	20-24 Years.	25-29 Years.	30-34 Years.	35-39 Years.	40-44 Years.	45 Years and Over.	Total.
0	3,789	14,836	10,394	3,926	1,403	316	28	34,692
1	745	8,791	9,417	4,661	1,638	336	21	25,609
2	68	3,921	7,680	5,122	2,077	465	16	19,349
3	6	1,215	5,104	4,565	2,334	584	39	13,847
4	...	269	2,739	3,785	2,385	742	34	9,954
5	...	49	1,156	2,811	2,203	754	38	7,011
6	...	15	383	1,691	2,032	784	73	4,978
7	...	2	123	799	1,477	802	59	3,262
8	...	...	28	333	985	738	93	2,177
9	...	...	10	132	581	630	81	1,434
10	...	...	...	42	303	394	80	819
11	...	...	1	14	137	248	69	469
12	...	...	1	2	60	158	40	261
13	...	...	...	1	11	68	28	108
14	...	...	...	...	11	34	15	60
15	...	...	...	...	5	11	4	20
16	...	...	...	...	2	5	1	8
17	...	...	...	...	1	2	2	5
Total Mothers	4,608	29,098	37,036	27,834	17,645	7,071	721	124,063

The tables show a fairly regular increase in the number of children up to the period where the marriage has lasted twenty years, and it appears that the average interval between successive confinements up to that period was rather more than two and a half years. The average number of children of all marriages was 3.29, the corresponding figure for 1911 having been 3.34, and for 1910, 3.41.

A similar table has been prepared showing the previous issue of mothers of twins and triplets, from which it appears that 277 mothers had twins at their first confinement; 206 at their second; 213 at their third; 164 at their fourth; 122 at their fifth; 78 at their sixth; 79 at their seventh; 44 at their eighth; 27 at their ninth; 22 at their tenth; 11 at their eleventh; 5 at their twelfth; 4 at their thirteenth; 1 at her fourteenth; and one at her fifteenth.

Of the fifteen cases of triplets 2 occurred at the first confinement; 2 at the second; 3 at the third; 2 at the fourth; 2 at the fifth; 2 at the seventh; 1 at the ninth; and 1 at the fifteenth.

12. **Interval between Marriage and First Birth.**—The following table shews the interval between marriage and first birth. Twins and triplets are included, the eldest born only being enumerated.

INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH, COMMONWEALTH, 1912.

Interval.	Number of First Children.	Interval.	Number of First Children.	Interval.	Number of First Children.
Under 1 month	525	11 months	2,063	11 years	36
1 month	658	1 year	8,518	12 "	32
2 months	936	2 years	2,507	13 "	28
3 "	1,221	3 "	943	14 "	7
4 "	1,444	4 "	469	15 "	17
5 "	1,793	5 "	276	16 "	11
6 "	2,267	6 "	183	17 "	9
7 "	1,904	7 "	120	18 "	8
8 "	1,656	8 "	80	19 "	5
9 "	3,802	9 "	71	20 "	1
10 "	3,034	10 "	66	21 "	2
				Total	34,692

Of these 34,692 children 17,698 were males and 16,994 were females; the masculinity of first births was therefore 104.14 as compared with 104.54 for total births.

The previous issue of mothers of ex-nuptial children is not recorded, but for the purposes of the following table all ex-nuptial births have been assumed to be first births. The table shews the ages of mothers of ex-nuptial births, of nuptial births occurring less than nine months after marriage, and of nuptial births occurring nine months or more after marriage. A comparison of the combined total of the first two columns with the total of nuptial children born nine months or more after marriage, reveals the fact that for all ages the ratio of the two was approximately as 25 is to 28. At all ages up to and including 21, however, there was a great preponderance of ex-nuptial births and of births following on ante-nuptial conception. It must, of course, be understood that a certain number of premature births are necessarily included among the births which occurred less than nine months after marriage, but there is no means of arriving at the proportion of those births.

AGES OF MOTHERS AND INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH, etc.

COMMONWEALTH, 1912.

Age of Mother at Birth of Child.	Ex-nuptial Births.	Nuptial Births less than nine months after Marriage.	Total of two preceding columns.	Nuptial Births nine months after Marriage and later.	Total Nuptial First Births.	Nuptial First Births and Ex-nuptial Births.
Years.						
12 ...	1	...	1	...	...	1
13 ...	1	...	1	1	1	2
14 ...	18	3	21	...	3	21
15 ...	87	23	110	3	26	113
16 ...	198	133	331	18	151	349
17 ...	394	408	802	102	510	904
18 ...	600	960	1,560	281	1,241	1,841
19 ...	703	1,288	1,991	569	1,857	2,560
20 ...	629	1,337	1,966	983	2,320	2,949
21 ...	673	1,552	2,225	1,351	2,903	3,576
22 ...	578	1,375	1,953	1,920	3,295	3,873
23 ...	496	1,216	1,712	2,098	3,314	3,810
24 ...	423	900	1,323	2,104	3,004	3,427
25 ...	338	718	1,056	2,023	2,741	3,079
26 ...	310	578	888	1,863	2,441	2,751
27 ...	273	427	700	1,623	2,050	2,323

AGES OF MOTHERS AND INTERVAL BETWEEN MARRIAGE AND FIRST
BIRTH—Continued,

Age of Mother at Birth of Child.	Ex-nuptial Births.	Nuptial Births less than nine months after Marriage.	Total of two preceding columns.	Nuptial Births nine months after Marriage and later.	Total Nuptial First Births.	Nuptial First Births and Ex-nuptial Births.
Years.						
28 ...	203	365	568	1,422	1,787	1,990
29 ...	188	248	436	1,127	1,375	1,563
30 ...	165	191	356	987	1,178	1,343
31 ...	96	140	236	742	882	978
32 ...	134	143	277	673	816	950
33 ...	100	88	188	504	592	692
34 ...	100	74	174	384	458	558
35 ...	90	66	156	368	434	524
36 ...	77	52	129	269	321	398
37 ...	89	30	119	220	250	339
38 ...	69	22	91	181	203	272
39 ...	56	21	77	174	195	251
40 ...	47	13	60	104	117	164
41 ...	22	16	38	63	79	101
42 ...	35	10	45	54	64	99
43 ...	24	2	26	25	27	51
44 ...	15	4	19	25	29	44
45 ...	9	1	10	14	15	24
46 ...	7	...	7	4	4	11
47 ...	1	...	1	5	5	6
48 ...	2	...	2	2	2	4
49 ...	2	...	2	2	2	4
50 ...	1	...	1	...	...	1
Not stated	45	...	45	...	...	45
Total ...	7,299	12,404	19,703	22,288	34,692	41,991

13. Interval between Birth and Registration of Birth.—Information was obtained during 1912 as to the period elapsing between birth and registration. The maximum number registered was forty-one days after birth, while in the case of ex-nuptial births the greatest number of children was registered within two days after birth.

INTERVAL BETWEEN BIRTH AND REGISTRATION, COMMONWEALTH, 1912.

Interval.	Nuptial Births.	Ex-Nuptial Births.	Total Births.	Interval.	Nuptial Births.	Ex-Nuptial Births.	Total Births.
Under 1 day ...	327	89	416	16 days ...	1,856	199	2,055
1 day ...	800	237	1,037	17 " ...	1,801	200	2,001
2 days ...	920	373	1,293	18 " ...	1,849	212	2,061
3 " ...	911	258	1,169	19 " ...	1,836	182	2,018
4 " ...	992	198	1,190	20 " ...	1,908	166	2,074
5 " ...	988	132	1,120	21 " ...	2,044	153	2,197
6 " ...	994	127	1,121	22 " ...	1,897	143	2,040
7 " ...	982	133	1,115	23 " ...	1,822	125	1,947
8 " ...	1,052	120	1,172	24 " ...	1,899	123	2,022
9 " ...	1,131	117	1,248	25 " ...	1,991	113	2,104
10 " ...	1,271	128	1,399	26 " ...	2,045	113	2,158
11 " ...	1,461	162	1,623	27 " ...	2,131	103	2,234
12 " ...	1,640	170	1,810	28 " ...	2,260	99	2,359
13 " ...	1,843	175	2,018	29 " ...	2,269	81	2,350
14 " ...	1,813	179	1,992	30 " ...	2,347	103	2,450
15 " ...	1,743	164	1,907	31 " ...	2,456	97	2,553

INTERVAL BETWEEN BIRTH AND REGISTRATION, COMMONWEALTH,
1912—Continued.

Interval.	Nuptial Births.	Ex-Nuptial Births.	Total Births.	Interval.	Nuptial Births.	Ex-Nuptial Births.	Total Births.
32 days ...	2,333	103	2,436	55 days ...	1,918	59	1,977
33 " ...	2,412	112	2,524	56 " ...	1,987	66	2,053
34 " ...	2,493	98	2,591	57 " ...	1,978	60	2,038
35 " ...	2,641	98	2,739	58 " ...	2,076	76	2,152
36 " ...	2,744	87	2,831	59 " ...	2,050	63	2,113
37 " ...	2,973	78	3,051	60 " ...	1,484	47	1,531
38 " ...	3,258	102	3,360	61 to 69 days	1,986	89	2,075
39 " ...	3,497	106	3,603	70 " 79 "	736	42	778
40 " ...	3,851	121	3,972	80 " 89 "	384	29	413
41 " ...	4,407	124	4,531	90 " 99 "	229	13	242
42 " ...	3,714	95	3,809	100 " 109 "	156	12	168
43 " ...	2,707	62	2,769	110 " 119 "	105	9	114
44 " ...	2,458	52	2,510	120 " 129 "	67	9	76
45 " ...	2,259	60	2,319	130 " 139 "	59	9	68
46 " ...	2,155	54	2,209	140 " 149 "	67	6	73
47 " ...	1,960	39	1,999	150 " 159 "	46	3	49
48 " ...	1,951	55	2,006	160 " 169 "	48	1	49
49 " ...	1,885	57	1,942	170 " 179 "	49	2	51
50 " ...	1,859	56	1,915	180 " 365 "	241	23	264
51 " ...	1,754	67	1,821	Not stated	3	1	4
52 " ...	1,732	48	1,830				
53 " ...	1,851	47	1,898				
54 " ...	1,838	44	1,882				
				Total Births	125,730	7,358	133,088

§ 2. Marriages.

1. **Marriages, 1902 to 1912.**—The number of marriages registered in the Commonwealth in 1912 was 42,147, the highest number ever recorded. There has been a steady increase in the annual number of marriages in each State since 1903, and the crude marriage-rate increased similarly in all the States until 1907, with the exception of Western Australia. In 1908 all the States, with the exception of New South Wales and Tasmania, had a lower marriage rate than in 1907, but the rate recovered in 1909 and the three following years, and was considerably higher in 1912 than in 1907 in all the States. The number of marriages in each State since 1902 is shown below. The rate for 1912 was the highest ever experienced in the Commonwealth.

TOTAL MARRIAGES, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Victoria.	Qld.	S. Aust.	W. Aust.	Tas.	North Terr.	Federal Terr.	C'wealth.
1902 ...	10,486	8,477	3,243	2,376	2,024	1,313	7	...	27,926
1903 ...	9,759	7,605	2,933	2,260	2,064	1,344	12	...	25,977
1904 ...	10,422	8,210	3,078	2,526	2,088	1,350	8	...	27,682
1905 ...	10,970	8,774	3,173	2,594	2,123	1,365	5	...	29,004
1906 ...	11,551	8,930	3,588	2,679	2,261	1,399	2	...	30,410
1907 ...	12,187	9,575	4,105	3,070	2,114	1,410	9	...	32,470
1908 ...	12,641	9,335	4,009	3,112	2,012	1,432	10	...	32,551
1909 ...	13,025	9,431	4,543	3,275	1,997	1,494	10	...	33,775
1910 ...	14,307	10,239	4,768	3,661	2,107	1,493	17	...	36,592
1911 ...	15,278	11,088	5,167	4,036	2,421	1,477	10	a) 5	39,482
1912 ...	16,666	11,738	5,627	4,056	2,524	1,506	24	6	42,147

(a) Part of New South Wales prior to 1911.

2. **Marriage Rates, 1902 to 1912.**—The number of marriages registered per thousand of mean population is shown in the following table for the same period:—

CRUDE MARRIAGE RATE (a), COMMONWEALTH, 1902 to 1912 (b).

Year.	N.S.W.	Victoria.	Qld.	S. Aust.	W. Aust.	Tas.	Nthn. Terr.	Federal Territory.	C'wealth.
1902 ...	7.55	7.02	6.35	6.68	9.89	7.50	1.53	...	7.26
1903 ...	6.90	6.31	5.70	6.36	9.40	7.45	2.76	...	6.67
1904 ...	7.24	6.83	5.90	7.08	8.92	7.98	1.90	...	7.02
1905 ...	7.46	7.28	6.00	7.21	8.61	7.40	1.21	...	7.25
1906 ...	7.68	7.86	6.69	7.88	8.89	7.59	0.50	...	7.49
1907 ...	7.89	7.81	7.56	8.35	8.27	7.63	2.35	...	7.87
1908 ...	8.03	7.53	7.24	8.23	7.80	7.64	2.74	...	7.76
1909 ...	8.15	7.48	7.97	8.43	7.59	7.85	2.83	...	7.90
1910 ...	8.76	7.98	8.06	9.21	7.77	7.82	5.00	...	8.37
1911 ...	9.19	8.40	8.41	9.81	8.44	7.76	3.01	(c) 2.81	8.79
1912 ...	9.60	8.65	8.91	9.62	8.37	7.86	7.14	2.95	9.07

(a) Number of marriages (not persons married) per 1000 of mean annual population. (b) Rate corrected in view of Census Returns, 1911. (c) Part of New South Wales prior to 1911.

As in some international tabulations the marriage rates are calculated per 1000 of the unmarried population of 15 years and over, the corresponding rates have been worked out for the Commonwealth for the four last Census periods. The figures comprise in each case the Census year with the year immediately preceding and the year immediately following, and are as follows:—Years 1880-82, 48.98; years 1890-92, 45.74; years 1900-02, 42.14; years 1910-12, 50.10. These rates refer, of course, to persons married and not to marriages, as do the rates in the preceding table.

3. **Marriage Rates in Various Countries.**—A comparison of the Australian marriage rate with that of European countries shews it to be considerably below the rates prevailing in the East of Europe, above those of Central and Western Europe, and much higher than those of the North of Europe:—

CRUDE MARRIAGE RATES.—VARIOUS COUNTRIES.

Country.	Year.	Crude Marriage Rate.	Country.	Year.	Crude Marriage Rate.		
Rumania	1911	10.5	Russia ...	...	1905	7.8
Servia	1911	10.3	Austria ...	...	1911	7.6
Canada (Ontario)	1911	10.2	England and Wales ...	...	1911	7.6
New South Wales	1912	9.6	Italy ...	...	1911	7.5
South Australia	1912	9.6	Switzerland ...	...	1910	7.3
Hungary	1911	9.3	United Kingdom ...	...	1911	7.3
Commonwealth	1912	9.1	Denmark ...	...	1911	7.2
Bulgaria	1908	8.9	Netherlands ...	...	1911	7.2
Queensland	1912	8.9	Spain ...	...	1911	7.1
Japan	1909	8.8	Scotland ...	...	1911	6.7
New Zealand	1912	8.8	Norway ...	...	1911	6.3
Victoria	1912	8.7	Finland ...	...	1911	6.0
Western Australia	1912	8.4	Sweden ...	...	1911	5.9
Prussia	1911	8.0	Chile ...	...	1911	5.7
Belgium	1910	7.9	Ireland ...	...	1911	5.4
German Empire	1911	7.9	Ceylon ...	...	1911	5.2
Tasmania	1912	7.9	Jamaca ...	...	1911	4.3
France	1911	7.8				

4. **Age at Marriage.**—(a) The age at marriage of bridegrooms and brides will be found in the following table, the previous conjugal condition of the contracting parties being distinguished. It will be seen that no less than 1735 males were married during 1912 who were less than twenty-one years of age, of whom one was a widower. The corresponding number of females was 8605, of whom one was a widow. At the other extreme there were twenty-four men of sixty-five years and upwards, who described themselves as bachelors, and two spinsters of corresponding ages.

AGES AND CONJUGAL CONDITION OF PERSONS MARRIED, 1912.
COMMONWEALTH.

Age at Marriage.	Bridegrooms.				Brides.			
	Bachelors	Widowers	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
14 years	...	...	...	...	10	...	...	10
15 "	...	...	...	...	69	...	...	69
16 "	6	...	...	6	321	...	...	321
17 "	35	...	...	35	1,037	...	...	1,037
18 "	197	...	...	197	1,788	1	...	1,789
19 "	541	...	...	541	2,533	...	...	2,533
20 "	955	1	...	956	2,846	...	...	2,846
21 "	2,348	1	...	2,349	4,454	7	...	4,461
22 "	2,805	4	1	2,810	3,834	12	6	3,852
23 "	3,371	10	...	3,381	3,696	17	5	3,718
24 "	3,587	13	...	3,600	3,360	24	7	3,391
25 "	3,486	20	3	3,509	2,883	47	7	2,937
26 "	3,384	26	4	3,414	2,386	43	14	2,443
27 "	2,981	39	6	3,026	2,020	70	23	2,113
28 "	2,654	33	12	2,699	1,634	60	16	1,710
29 "	2,145	33	12	2,190	1,275	70	21	1,366
30 "	1,757	52	10	1,819	1,064	67	29	1,160
31 "	1,370	53	6	1,429	746	62	16	824
32 "	1,287	69	16	1,372	697	81	24	802
33 "	932	50	14	996	504	69	8	581
34 "	815	56	18	889	427	88	20	535
35 "	754	74	10	838	380	84	12	476
36 "	640	62	7	709	332	73	11	416
37 "	457	79	15	551	265	78	14	357
38 "	473	79	10	562	235	83	14	332
39 "	378	94	8	480	177	90	13	280
40 "	332	81	9	422	145	69	11	225
41 "	223	73	9	305	87	64	7	158
42 "	246	79	6	331	104	68	5	177
43 "	197	73	5	275	79	65	3	147
44 "	136	64	5	205	81	61	6	148
45 "	174	66	6	246	64	64	5	133
46 "	130	66	14	210	49	37	5	91
47 "	94	77	6	177	32	37	2	71
48 "	107	87	5	199	33	66	5	104
49 "	78	74	5	157	27	41	4	72
50 "	88	80	6	174	25	40	2	67
51 "	48	69	2	119	10	28	1	39
52 "	48	59	6	113	14	33	4	51
53 "	31	43	2	76	10	18	1	29
54 "	25	60	4	89	9	20	...	29
55 "	24	63	2	89	6	23	1	30
56 "	22	55	...	77	6	18	1	25
57 "	16	39	3	58	8	20	...	28
58 "	22	43	2	67	8	16	1	25
59 "	8	25	...	33	2	6	...	8
60 "	8	35	1	44	2	15	...	17
61 "	11	19	1	31	2	9	...	11
62 "	5	30	1	36	5	5	...	10
63 "	9	23	1	33	2	11	...	13
64 "	6	18	...	24	1	11	...	12
65 "	6	20	...	26	...	13	...	13
66 "	4	17	...	21	...	8	...	8
67 "	3	21	...	24	1	6	...	7
68 "	3	11	...	14	...	7	...	7
69 "	1	14	...	15	...	8	...	8
70 "	1	17	...	18	...	3	...	3

AGES AND CONJUGAL CONDITION OF PERSONS MARRIED, 1912—Continued.
COMMONWEALTH.

Age at Marriage.	Bridegrooms.				Brides.			
	Bachelors	Widowers	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
71 years ...	...	10	...	10	1	1	...	2
72 " ...	3	9	...	12	...	2	...	2
73 " ...	2	9	...	11	...	...	...	...
74 " ...	...	9	...	9	...	...	...	...
75 " ...	1	7	...	8	...	1	...	1
76 " ...	...	2	...	2	...	1	...	1
77 " ...	...	4	...	4	...	1	...	1
78 " ...	...	4	...	4	...	1	...	1
79 " ...	...	3	...	3	...	1	...	1
80 " ...	...	3	...	3	...	...	...	...
81 " ...	...	2	...	2	...	...	...	...
82 " ...	...	1	...	1	...	1	...	1
85 " ...	...	1	...	1	...	...	...	...
Not stated ...	10	1	...	11	12	...	...	12
Total ...	39,480	2,414	253	42,147	39,798	2,025	324	42,147

(b) The relative ages of bridegrooms and brides are shown for single years in "Bulletin of Population and Vital Statistics, No. 30"; a condensation into age-groups of five years is here given:—

RELATIVE AGES OF PERSONS MARRIED, COMMONWEALTH, 1912.

Ages.	Total Bridegrooms.	Ages of Brides.								
		Under 15.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and Upwds.	Not Stated.
Under 20 ...	779	2	522	223	27	3	1	1	...	...
20 to 24 ...	13,096	5	3,232	7,909	1,673	212	47	11	6	1
25 to 29 ...	14,838	2	1,479	7,107	5,014	968	211	48	8	1
30 to 34 ...	6,505	...	362	2,033	2,349	1,299	363	77	20	2
35 to 39 ...	3,140	...	109	651	967	765	459	144	45	...
40 to 44 ...	1,538	...	22	218	324	345	321	211	97	...
45 to 49 ...	989	1	18	85	135	179	243	168	157	...
50 to 54 ...	571	...	4	30	46	72	129	114	176	...
55 to 59 ...	324	...	...	7	20	35	54	49	159	...
60 to 64 ...	168	...	...	2	9	14	19	17	107	...
65 and upwards ...	188	...	...	3	4	10	11	15	145	...
Not stated ...	11	...	1	...	1	...	...	...	1	8
Total Brides ...	42,147	10	5,749	18,268	10,569	3,902	1,861	855	921	12

5. **Previous Conjugal Condition.**—In a previous table the total number of bachelors and spinsters, widowed and divorced persons, who were married during the year 1912, was shown. In the following table the relative conjugal condition of the contracting parties is given:—

RELATIVE CONJUGAL CONDITION OF PERSONS MARRIED, COMMONWEALTH, 1912.

Conjugal Condition.	Total Bridegrooms.	Brides.			
		Spinsters.	Widows.	Divorced.	
Bridegrooms {	Bachelors ...	39,480	37,914	1,315	251
	Widowers ...	2,414	675	680	59
	Divorced ...	253	209	30	14
Total Brides ...	...	42,147	38,798	2,025	324

6. Birthplaces of Persons Married.—Information as to the birthplaces of persons who were married in 1912 was not obtained in the State of Western Australia; the following figures refer, therefore, only to New South Wales, Victoria, Queensland, South Australia, Tasmania and Northern Territory and Federal Territory. As might be expected, there were more brides than bridegrooms who were natives of the Commonwealth. In "Bulletin No. 30, Commonwealth Demography," the relative birthplaces of bridegrooms and brides will be found tabulated.

BIRTHPLACES OF PERSONS MARRIED, 1912.

COMMONWEALTH (a).

Birthplaces.	Bridegrooms.	Brides.	Birthplaces.	Bridegrooms.	Brides.
AUSTRALASIA—			ASIA—cont.—		
New South Wales ...	12,538	13,992	Philippine Islands ...	3	1
Victoria ...	10,752	11,229	Syria ...	14	12
Queensland... ..	3,839	4,625	Other Asiatic Countries	3	1
South Australia ...	3,878	4,009	AFRICA—		
Western Australia ...	55	43	Cape of Good Hope... ..	1	2
Tasmania ...	1,634	1,746	Mauritius	5	1
Northern Territory ...	5	20	Natal	2	...
New Zealand ...	573	376	Transvaal	1	...
EUROPE—			S. Africa (Undefined)	27	13
England	3,794	2,186	Other African British Possessions ...	1	...
Wales	91	48	Other African Countries ...	1	...
Scotland	908	607	AMERICA—		
Ireland	519	401	Canada	36	9
Isle of Man	8	3	Newfoundland	2	...
Other European British Possessions ...	8	4	Other American British Possessions ...	2	3
Austria-Hungary ...	22	5	Argentine Republic... ..	1	...
Belgium	4	2	Brazil	2	...
Denmark	54	12	Chile	2	...
France	29	13	Mexico	1	...
Germany	235	70	United States	106	27
Greece	11	1	Other American Countries ...	16	11
Italy	49	21	POLYNESIA—		
Netherlands	25	3	Fiji	10	9
Norway	26	3	Friendly Islands ...	1	...
Portugal	1	...	Papua	1	1
Russia	70	21	Other Polynesian British Possessions ...	4	1
Spain	3	1	New Caledonia	7	10
Sweden	45	6	New Hebrides	2	1
Switzerland	9	3	Samoa ... ..	...	1
Other European Countries ...	11	1	Other Polynesian Islands ...	2	1
ASIA—			South Sea Islands (so described) ...	3	1
British India	45	21	At sea	31	24
Ceylon	6	2	Not stated	22	11
Hong Hong	2	...	Total ...		
Straits Settlements ...	7	...		39,623	39,623
Other Asiatic British Possessions ...	1	...			
Arabia	2	...			
China	45	6			
Japan	7	3			
Java	3	...			

(a) Exclusive of Western Australia.

7. **Occupations and Ages of Bridegrooms.**—A tabulation has been made of the occupations and ages of all males married in the Commonwealth in the years 1907 to 1912. In "Bulletin No. 30" the 1912 tabulation is shewn for orders of occupations: here it is repeated for classes only, with a subdivision of the Industrial class and of the class of Primary Producers. The average ages of the persons falling under those twelve subdivisions were determined, and it appears that, apart from the Indefinite class, which consists chiefly of persons who have retired from business and who are living on their own means, and where a high average age may naturally be expected, the average age ranges from 27.58 in the Manufacturing class to 32.09 years in the Pastoral class. The averages for five years 1907-1911 have been added for the purposes of comparison. The results obtained are shewn in the following table:—

OCCUPATIONS AND AGES OF BRIDEGROOMS, COMMONWEALTH, 1912.

Ages at Marriage.	Professional.	Domestic.	Mercantile.	Transport and Communication.	Industrial.			Primary Producers.				Indefinite.
					Manu- facturing.	Building and Construction.	Indefinite Industrial Workers.	Agricultural.	Pastoral.	Mines and Quarries.	Other Primary Producers.	
16 years ...	...	...	1	1	1	...	3	...	...	...	...	...
17 " ...	...	1	2	4	10	4	11	1	...	1	...	1
18 " ...	3	3	23	29	47	11	60	4	3	13	...	1
19 " ...	14	16	66	70	104	48	156	29	7	29	1	1
20 " ...	20	18	136	119	190	84	253	67	8	54	8	...
21 " ...	78	44	311	312	447	185	621	171	35	122	21	2
22 " ...	100	72	414	367	464	226	696	233	54	140	21	3
23 " ...	145	67	529	400	592	279	801	304	69	160	29	3
24 " ...	197	77	597	414	587	300	780	372	89	157	26	4
25 " ...	223	70	619	388	536	288	711	427	72	144	27	4
26 " ...	223	79	596	404	512	266	691	389	88	133	24	9
27 " ...	192	79	555	303	422	226	630	385	76	130	26	2
28 " ...	222	64	431	264	393	208	542	347	94	110	17	7
29 " ...	149	50	369	242	303	151	416	321	76	93	17	3
30 " ...	134	37	328	191	242	109	372	259	63	68	14	2
31 " ...	106	35	261	148	192	74	245	231	75	50	10	2
32 " ...	116	29	219	151	163	87	264	204	75	48	12	4
33 " ...	67	24	185	97	116	59	208	155	46	31	5	3
34 " ...	64	25	179	82	102	46	157	141	51	32	9	1
35 to 39 years	256	89	540	263	324	190	628	533	151	131	27	8
40 " 44 "	124	63	263	104	138	96	305	267	72	84	10	12
45 " 49 "	62	34	163	99	110	69	182	156	59	41	11	3
50 years and upwards	102	35	189	84	149	111	214	191	65	52	10	49
Not stated	2	...	5	...	...	1	2	1	...	...	...	...
Total	2,602	1,011	6,981	4,536	6,164	3,118	8,948	5,188	1,328	1,822	325	124
Average age—years (1912)	30.75	30.29	29.45	28.70	27.58	30.33	28.57	30.85	32.09	28.94	29.54	41.90
" " (1907-1911)	31.12	30.32	29.73	28.65	28.27	29.11	28.83	30.99	32.50	29.14	29.43	41.60

The average age at marriage of brides has slowly risen from 25.56 years in 1907 to 25.74 years in 1912. The figures for the six years are:—1907, 25.56 years; 1908, 25.67 years; 1909, 25.74 years; 1910, 25.77 years; 1911, 25.74 years; and 1912, 25.74 years. For the five years 1907-11 the average age was 25.70 years, compared with 25.74 years in 1912.

8. **Fertility of Marriages.**—The quotient obtained by division of the nuptial births registered, say during the five years 1908 to 1912, by the number of marriages registered during the five years 1903 to 1907, i.e., the period antecedent by five years to the period of the births, has been called the "fertility of marriages." This works out at 3.87, or in other words, the number of children to be expected from every marriage in the

Commonwealth is under four. This method, while not professing any claim to accuracy, generally furnishes results which agree fairly well with those found by more elaborate and careful investigation, but in this instance it is, owing chiefly to the fictitious increase in the number of births shewn in 1912, rather higher than for a number of years past. For the period 1907-11 the result was 3.43.

9. **Registration of Marriages.**—In all the States of the Commonwealth marriages may be celebrated either by ministers of religion, whose names are registered for that purpose with the Registrar-General, or by certain civil officers, in most cases district registrars. The percentage of marriages celebrated by ministers of religion has increased from 96.47 per cent. in 1902 to 96.81 per cent. in 1912. The figures for the individual States in 1912 were: New South Wales, 97.90 per cent.; Victoria, 97.70 per cent.; Queensland, 95.27 per cent.; South Australia, 95.73 per cent.; Western Australia, 89.58 per cent.; and Tasmania, 98.80 per cent. The registered ministers in 1912 belonged to more than forty different denominations, some of which, however, can hardly be regarded as having any valid existence. A number of these have been omitted from the tabulation, and are bracketed under the heading "Other Christians." The figures for 1912 are shewn in the following table:—

MARRIAGES IN EACH DENOMINATION, COMMONWEALTH, 1912.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N. Ter.	Fed. Ter.	Com'-wealth.
Church of England ...	6,972	3,193	1,530	900	1,023	513	14	4	14,149
Roman Catholic Church ...	2,923	1,976	1,093	401	434	209	5	1	7,042
Presbyterian Church of Aust. ...	2,330	2,306	801	212	226	170	...	1	6,046
Methodist Church ...	2,297	1,735	960	1,321	388	271	1	...	6,973
Congregational Church ...	1,058	1,142	156	267	84	149	...	...	2,856
Baptist Church ...	281	519	290	298	50	151	...	...	1,589
Church of Christ ...	206	260	15	182	22	3	...	...	688
Lutheran Church ...	44	78	172	220	5	...	...	...	519
Greek Orthodox Church ...	3	2	...	...	...	...	...	...	5
Unitarian Church ...	28	2	...	6	...	...	...	...	36
Salvation Army ...	56	53	42	42	11	12	...	...	216
Seventh-Day Adventists ...	13	13	6	9	5	2	...	...	48
Other Christians ...	45	150	290	23	2	5	...	...	515
Hebrew ...	60	38	5	2	10	1	...	...	116
Registrar's Office ...	350	270	266	173	263	18	4	...	1,344
Unspecified ...	...	1	1	...	1	2	...	...	5
Total ...	16,666	11,738	5,627	4,056	2,524	1,506	24	6	42,147

10. **Mark Signatures.**—The marriage registers afford some clue, even if an imperfect one, to the illiteracy of the adult population, since a small and constantly diminishing percentage of bridegrooms and brides sign the registers with marks.

(i.) *Males and Females, 1902 to 1912.* For a number of years, with the exception of 1905, 1908, 1910, and 1912, mark signatures by males have been slightly more numerous than those by females, the percentages for the Commonwealth during the past eleven years having been as follows:—

PERCENTAGE OF MARK SIGNATURES AT MARRIAGE, COMMONWEALTH, 1902 to 1912.

Year. ...	1902.	1903.	1904.	1905.	1906.	1907.	1908	1909.	1910.	1911.	1912.
Male...	1.21	1.17	0.95	0.91	0.92	0.81	0.71	0.65	0.56	0.56	0.43
Female	1.11	1.02	0.91	0.93	0.86	0.70	0.73	0.62	0.59	0.54	0.45

(ii.) *Mark Signatures in Commonwealth States, 1902 to 1912.* The following table shews that while the Tasmanian percentage has been the highest, and the Victorian the lowest, in each of the eleven years under review, there has been a marked decrease in every State:—

PERCENTAGE OF MARK SIGNATURES AT MARRIAGE, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W	Vic.	Q'land.	S. Aust.	W. Aust	Tas.	North. Terr.	Fed. Terr.	C'wealth.
1902 ...	1.22	0.61	1.93	1.12	0.69	3.12	14.29	...	1.16
1903 ...	1.10	0.60	1.86	1.22	0.75	2.38	20.83	...	1.10
1904 ...	0.90	0.54	1.72	0.65	0.53	2.85	...	...	0.93
1905 ...	1.12	0.44	1.39	0.83	0.57	2.12	...	...	0.92
1906 ...	0.94	0.43	1.67	0.65	0.66	2.18	25.00	...	0.89
1907 ...	0.87	0.36	1.14	0.55	0.64	2.02	...	...	0.76
1908 ...	0.79	0.33	1.20	0.56	0.82	1.57	...	...	0.72
1909 ...	0.60	0.22	1.16	0.55	0.68	2.07	30.00	...	0.64
1910 ...	0.61	0.29	0.92	0.44	0.52	1.17	29.41	...	0.58
1911 ...	0.54	0.22	0.84	0.46	0.78	1.96	15.00	(a)...	0.55
1912 ...	0.33	0.27	0.60	0.54	0.61	1.29	25.00	...	0.44

(a) Part of New South Wales prior to 1911.

A complete disappearance of mark signatures is hardly to be expected, for the available information tends to shew that two-thirds of those who sign with marks are natives of their respective States, who apparently have not made use of the advantages offered to them by the State schools.

§ 3. Deaths.

1. *Male and Female Deaths, 1902 to 1912.*—The total number of deaths registered in the Commonwealth from 1902 to 1912 inclusive, gives an annual average of 26,621 males and 19,591 females, the details being as follow:—

MALE DEATHS, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Fed. Terr.	C'wealth.
1902 ...	9,535	9,152	3,924	2,316	1,832	1,044	73	...	27,876
1903 ...	9,428	8,626	3,951	2,171	1,829	1,136	71	...	27,212
1904 ...	8,733	7,992	3,259	2,019	1,823	1,061	52	...	24,939
1905 ...	8,709	8,273	3,499	2,003	1,728	1,061	38	...	25,311
1906 ...	8,715	8,342	3,212	2,053	1,878	1,118	56	...	25,374
1907 ...	9,444	7,977	3,482	1,998	1,866	1,083	89	...	25,939
1908 ...	9,298	8,816	3,500	2,029	1,800	1,112	77	...	26,632
1909 ...	9,184	8,070	3,419	2,080	1,671	1,030	60	...	25,514
1910 ...	9,339	8,128	3,594	2,163	1,760	1,098	72	...	26,154
1911 ...	9,973	8,355	4,060	2,179	1,923	1,037	59	(a) 5	27,591
1912 ...	11,094	9,072	4,305	2,409	2,210	1,130	61	4	30,285
Rate.(b) 1912	12.17	13.40	12.56	11.24	12.84	11.50	22.04	3.61	12.51

(a) Part of New South Wales prior to 1911. (b) Number of deaths per 1000 of mean population.

FEMALE DEATHS, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aus.	Tas.	North Terr.	Fed. Terr.	C'wealth.
1902 ...	7,111	7,025	2,280	1,920	991	870	5	...	20,202
1903 ...	7,069	6,969	2,395	1,702	959	980	7	...	20,081
1904 ...	6,627	6,401	1,991	1,700	994	913	7	...	18,633
1905 ...	6,269	6,403	2,004	1,758	981	783	5	...	18,203
1906 ...	6,260	6,895	1,883	1,819	1,206	893	3	...	18,959
1907 ...	6,967	6,562	2,116	1,738	1,065	915	3	...	19,366
1908 ...	6,757	6,950	2,180	1,805	1,079	1,017	6	...	19,794
1909 ...	6,626	6,366	2,111	1,702	1,033	812	8	...	18,658
1910 ...	6,819	6,604	2,150	1,851	980	1,022	10	...	19,436
1911 ...	7,173	6,861	2,484	1,859	1,000	890	6	(a) 5	20,278
1912 ...	7,768	7,517	2,616	1,927	1,125	927	6	6	21,892
Rate, (b) 1912	9.42	11.07	9.05	9.30	8.70	9.93	10.15	6.46	9.84

(a) Part of New South Wales prior to 1911. (b) Number of deaths per 1000 of mean population.

2. **Male and Female Death Rates, 1912.**—The crude male and female death rates for 1912 only are given, viz., in the last line of the preceding tables. Victoria has the highest rate both for males and for females, while South Australia has the lowest male and Western Australia the lowest female death rate. The rates for the two Territories are based on very small numbers, and comparisons with the States are misleading.

Owing to differences in the age constitution of the six States, the crude rates are not, however, strictly comparable, but for the purposes of calculating the "Index of Mortality" (see page 179) a distribution into five age-groups has, however, been made, and the death rates are shown for males and females in each State in five-year age groups for the three years 1910-1912 on page 174.

3. **Death Rates of Various Countries.**—A comparison with foreign States is, for the same reason, apt to shew the Commonwealth in too favourable a light, but even if an allowance for the different age constitution were made, it would still be found occupying a very enviable position. The following table gives particulars of the death rates of various countries for the latest available years:—

DEATH RATES (a) OF VARIOUS COUNTRIES.

Country.	Year.	Crude Death Rate.	Country.	Year.	Crude Death Rate.
New Zealand ...	1912	8.9	Finland ...	1911	16.5
South Australia ...	1912	10.3	Ireland ...	1911	16.5
Tasmania ...	1912	10.7	Prussia ...	1911	17.2
New South Wales ...	1912	10.9	German Empire ...	1911	17.3
Queensland ...	1912	11.0	France ...	1911	19.6
Western Australia ...	1912	11.1	Italy ...	1911	21.4
Commonwealth ...	1912	11.2	Servia ...	1911	21.8
Victoria ...	1912	12.2	Austria ...	1911	21.9
Canada (Ontario) ...	1911	12.6	Japan ...	1909	22.0
Norway ...	1911	13.2	Jamaica ...	1911	22.1
Denmark ...	1911	13.6	Spain ...	1911	23.2
Sweden ...	1911	13.8	Bulgaria ...	1908	24.3
Netherlands ...	1911	14.5	Hungary ...	1911	25.1
England and Wales ...	1911	14.6	Rumania ...	1911	25.7
United Kingdom ...	1911	14.8	Chile ...	1911	31.1
Scotland ...	1911	15.1	Russia, European ...	1905	31.1
Switzerland ...	1910	15.1	Ceylon ...	1911	34.8
Belgium ...	1910	15.2			

(a) Number of deaths per 1000 of mean population.

4. **Total Deaths, 1902 to 1912.**—The total number of deaths in each of the Commonwealth States during the eleven years 1902 to 1912, is shown below:—

TOTAL DEATHS, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aus.	Tas.	North Terr.	Federal Terr.	C'wealth.
1902 ...	16,646	16,177	6,204	4,236	2,823	1,914	78	...	48,078
1903 ...	16,497	15,595	6,346	3,873	2,788	2,116	78	...	47,293
1904 ...	15,360	14,393	5,250	3,719	2,817	1,974	59	...	43,572
1905 ...	14,978	14,676	5,503	3,761	2,709	1,844	43	...	43,514
1906 ...	14,975	15,237	5,095	3,872	3,084	2,011	59	...	44,333
1907 ...	16,411	14,539	5,598	3,736	2,931	1,998	92	...	45,305
1908 ...	16,055	15,766	5,680	3,834	2,879	2,129	83	...	46,426
1909 ...	15,810	14,436	5,530	3,782	2,704	1,842	68	...	44,172
1910 ...	16,158	14,732	5,744	4,014	2,740	2,120	82	...	45,590
1911 ...	17,146	15,216	6,544	4,038	2,923	1,927	65	(a) 10	47,869
1912 ...	18,862	16,589	6,921	4,336	3,335	2,057	67	10	52,177

(a) Part of New South Wales prior to 1911.

5. **Crude Death Rates, 1902 to 1912.**—The death rate for 1912 shewed an increase on that for 1911 in all the States. The rates are lower than those experienced in 1902 and 1903, but are generally higher than those of any other year of the period, South Australia, Western Australia, and Tasmania being exceptions to this rule. The Commonwealth rate for 1912 was higher than in any of the other years of the period under review excepting the years 1902 and 1903.

CRUDE DEATH RATE (a), COMMONWEALTH, 1902 to 1912 (b).

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North Terr.	Federal Terr.	C'wealth.
1902 ...	11.98	13.40	12.15	11.90	13.79	10.93	17.05	...	12.49
1903 ...	11.67	12.94	12.33	10.90	12.69	11.73	17.91	...	12.15
1904 ...	10.67	11.97	10.06	10.42	12.04	10.79	13.98	...	11.05
1905 ...	10.18	12.17	10.40	10.45	10.98	10.00	10.42	...	10.88
1906 ...	9.95	12.55	9.50	10.66	12.12	10.91	14.84	...	10.92
1907 ...	10.63	11.86	10.31	10.16	11.47	10.81	24.07	...	10.99
1908 ...	10.20	12.71	10.26	10.14	11.17	11.36	22.71	...	11.07
1909 ...	9.89	11.45	9.70	9.74	10.27	9.68	19.22	...	10.33
1910 ...	9.89	11.49	9.71	10.09	10.11	11.10	24.10	...	10.43
1911 ...	10.32	11.52	10.65	9.82	10.19	10.13	19.58	(c) 5.62	10.66
1912 ...	10.86	12.23	10.96	10.28	11.06	10.73	19.95	4.91	11.23

(a) Number of deaths per thousand of mean population for year. (b) Rates corrected in view of Census Returns. (c) Part of New South Wales prior to 1911.

6. **Male and Female Death Rates, 1902 to 1912.**—The rise in the Commonwealth rate from 1905 to 1907 was due to an increase in the female death rate, while the increase in 1908 was practically limited to the male death rate, as the subjoined table shews. The decrease from 1908 to 1909 was fairly equal for the male and female rates, and the increase in 1910 was due to a rise in the female rate. From 1910 to 1911, and again from 1911 to 1912 the increase in the male rate was about one and a half times as strong as that in the female rate.

MALE AND FEMALE DEATH RATES (a), COMMONWEALTH, 1902 to 1912 (b).

Year.	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.	1912.
Male rate	13.83	13.37	12.12	12.14	12.01	12.11	12.24	11.51	11.54	11.82	12.51
F'male "	11.02	10.80	9.88	9.50	9.73	9.77	9.81	9.06	9.24	9.40	9.84
Crude total rate	12.49	12.15	11.05	10.88	10.92	10.99	11.07	10.33	10.43	10.66	11.23

(a) Number of deaths per thousand of mean population. (b) Rates corrected in view of Census Returns.

7. **Infantile Death Rate.**—(i.) *Deaths and Death Rates of Male and Female Infants, 1902 to 1912.* A marked improvement has taken place in the infantile death rate since 1902, in which year it stood at 107.15 per thousand births registered, while in 1912 it had fallen to 71.74 per thousand, a rate lower than that experienced in any previous year, 1909 and 1911 excepted. In the following table, which shews both the total number of deaths of children under one year and the rate per thousand births since 1902, males and females are distinguished. The universal experience that during the first few years of life the excess of male births disappears as a consequence of the higher death rate of male infants is shewn by the fact that out of 628,609 male infants born from 1902 to 1912, 56,200 died during their first year of life, while of 597,599 female infants the number who died was only 44,297:—

**NUMBER OF INFANTILE DEATHS AND RATE OF INFANTILE MORTALITY,
COMMONWEALTH, 1902 to 1912.**

Year.	Registered Deaths under one year.			Rate of Infantile Mortality (a).		
	Males.	Females.	Total.	Males.	Females.	Total.
1902 ...	6,008	5,004	11,012	114.19	99.76	107.15
1903 ...	6,004	4,959	10,963	119.11	103.23	111.36
1904 ...	4,713	3,800	8,513	88.33	74.87	81.77
1905 ...	4,884	3,696	8,580	90.62	72.41	81.76
1906 ...	5,002	3,981	8,983	90.10	76.01	83.26
1907 ...	4,993	3,952	8,945	88.39	73.38	81.06
1908 ...	4,885	3,791	8,676	85.53	69.65	77.78
1909 ...	4,604	3,559	8,163	78.73	64.02	71.56
1910 ...	4,316	3,522	8,738	81.65	67.53	74.81
1911 ...	4,745	3,624	8,369	75.91	60.72	68.49
1912 ...	5,446	4,102	9,548	80.06	63.04	71.74

(a) Number of deaths under 1 year per 1000 births registered.

(ii.) *Infantile Mortality, 1902 to 1912.* Divided among the States and Territories, the rate of infantile mortality during the last eleven years was as follows:—

RATE (a) OF INFANTILE MORTALITY, COMMONWEALTH, 1902 to 1912.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Federal Territory.	Com'-wealth.
1902 ...	109.74	108.60	100.17	93.76	142.01	79.06	200.00	...	107.15
1903 ...	110.35	106.40	119.88	96.76	141.22	110.83	181.82	...	111.36
1904 ...	82.42	77.92	76.13	70.00	113.02	90.70	212.12	...	81.77
1905 ...	80.55	83.30	75.52	72.80	104.19	80.65	111.11	...	81.76
1906 ...	74.53	92.92	74.68	75.66	110.00	90.19	160.00	...	83.26
1907 ...	88.46	72.60	77.65	66.23	97.51	82.97	185.19	...	81.06
1908 ...	75.20	86.05	70.67	69.50	84.72	75.16	58.82	...	77.78
1909 ...	73.87	71.36	71.50	60.91	78.01	64.91	111.11	...	71.56
1910 ...	74.71	76.88	62.90	70.21	78.18	101.68	200.00	...	74.81
1911 ...	69.46	68.70	65.36	60.60	76.01	73.39	96.77	(b) 33.34	68.49
1912 ...	71.00	74.48	71.73	61.68	82.06	66.80	121.21	76.92	71.74

(a) Number of deaths under 1 year per 1000 births registered. (b) Part of New South Wales prior to 1911.

The movement has been a fairly regular one, shewing an increase in the rate during 1902 and 1903, and a fall since the latter year, so that the 1909 rate was lower than that for 1902 in every State. The regrettable increase in the Victorian rate for 1908 over that of 1907 was wholly due to the large mortality caused by the phenomenal heat of January, 1908. With the exception of Queensland, where the 1908 rate was exceptionally low, the 1909 rate was the lowest ever experienced up to that date in any of the States. A further rise occurred in every State in 1910, with the exception of Queensland, which was counterbalanced by a considerable decrease during 1911 in every State

but Queensland. In 1912 the rate shewed a rise in every State except Tasmania, the rise amounting to about 1 per 1000 in South Australia, $1\frac{1}{2}$ per 1000 in New South Wales, and to 6 per 1000 in Victoria, Queensland, and Western Australia. The Commonwealth rate rose by more than 3 per 1000, and was a little higher than in 1909.

(iii.) *Infantile Mortality in Various Countries and Cities.* Compared with European countries the cities and States of the Commonwealth occupy a very enviable position, and it may be pointed out that experience has shewn that a high birth rate is often, though not invariably, accompanied by a high infantile death rate. The figures in the subjoined tables relate to the latest years for which returns are available:—

RATE (a) OF INFANTILE MORTALITY IN VARIOUS COUNTRIES.

Country.	Year.	Rate of Infantile Mortality. (a)	Crude Birth Rate. (b)	Country.	Year.	Rate of Infantile Mortality. (a)	Crude Birth Rate. (b)
New Zealand ...	1912	51	26.5	England and Wales	1911	130	24.4
South Australia ...	1912	62	28.7	Belgium	1910	134	23.7
Norway	1910	67	26.1	Netherlands ...	1911	137	27.8
Tasmania	1912	67	30.5	Servia	1910	138	38.5
New South Wales ...	1912	71	29.9	Italy	1910	142	33.3
Commonwealth ...	1912	72	28.7	Spain	1907	158	33.6
Queensland	1912	72	29.7	Japan	1909	166	34.2
Victoria	1912	74	26.4	Bulgaria	1908	170	40.4
Sweden	1910	75	24.7	Jamaica	1911	187	39.0
Western Australia .	1912	82	28.8	Prussia	1911	188	29.4
Ireland	1911	94	23.2	German Empire ...	1911	192	28.6
Switzerland	1910	105	25.0	Rumania	1911	197	43.0
United Kingdom ...	1910	105	25.0	Austria	1911	207	31.4
Denmark	1911	106	26.8	Hungary	1911	207	35.0
Scotland	1910	108	26.2	Ceylon	1911	218	37.9
France	1910	111	19.6	Russia, European	1904	232	48.5
Finland	1911	114	29.1	Chile	1911	332	38.5
Canada (Ontario) ...	1911	117	21.7				

(a) Number of deaths under 1 year per 1000 births registered. (b) Number of births per 1000 of mean population.

RATE (a) OF INFANTILE MORTALITY IN VARIOUS CITIES.

City.	Year.	Rate of Infantile Mortality. (a)	Crude Birth Rate. (b)	City.	Year.	Rate of Infantile Mortality. (a)	Crude Birth Rate. (b)
Amsterdam	1912	64	23.3	Belfast	1912	129	27.8
The Hague... ..	"	66	23.6	Hamburg	"	130	21.8
Sydney	"	76	29.9	Leipzig	"	133	22.1
Rotterdam	"	79	29.0	Munich	"	134	21.9
Brisbane	"	82	32.8	Prague	"	139	19.9
Stockholm	"	82	21.0	Dublin (Registra- tion area)	"	140	27.4
Melbourne	"	90	27.5	Budapest	"	141	25.5
London	"	91	24.5	Berlin	"	142	20.4
Buenos Aires	"	96	35.3	Vienna	"	149	19.1
Frankfort-on-Maine	"	102	20.9	Cologne	"	152	26.8
Milan	"	102	23.4	Breslau	"	163	26.3
Paris	"	103	16.8	Trieste	"	184	29.7
Christiania	"	107	22.7	Rio de Janeiro ...	"	185	28.2
Copenhagen	"	108	24.9	Montreal	1911	242	37.8
Edinburgh	"	113	20.9	St. Petersburg ...	1912	249	26.5
Toronto	1911	114	22.2	Moscow	"	333	28.9
Dresden	1912	116	20.2				
Glasgow	"	124	28.1				

(a) Number of deaths under 1 year per 1000 births registered. (b) Number of births per 1000 of mean population.

(iv.) *The Effect of Infantile Mortality on Birth Rate.* It has been contended by certain investigators that the birth-rate question is intimately related to that of infantile mortality, and that in many cases a declining birth rate may be to a large extent accounted for by a decline in the infantile death rate, since, in the case in which an infant has survived, the period elapsing before the birth of the next child is likely to be longer than in the case in which the infant has died. It may indeed be readily admitted that in any community the birth rate may be affected in a definite way by variations of infantile mortality, but careful investigation of the question serves to shew that, whether considered from the theoretical aspect with a view to determining the *maximum* and the *probable* effects which a given change in the rate of infantile mortality would produce in the birth rate, or from the practical point of view by observing the fluctuations in the birth rates of various countries which have been collateral with changes in their rates of infantile mortality, there is little ground for the contention that the rate of infantile mortality is an important factor in determining the variations in the birth rate. One calculation which has been made on the basis of normal Australian conditions indicates that the *maximum* effect of increasing the rate of infantile mortality 100 per cent. would, in the absence of other disturbing causes, be to increase the birth rate by only $3\frac{1}{2}$ per cent., whilst the *probable* effect would be considerably less than this. In other words, the *maximum* effect of an increase in the rate of infantile mortality from 100 to 200 per 1000 births would be to increase the birth rate from say 30 to 31 per 1000 of population. It may be noted too, that although in some countries an increase in birth-rate accompanies an increase in the rate of infantile mortality, in others the birth rate would appear to be quite unaffected by such an increase, while in the case of England and Wales, Scotland, and Ireland, the tendency apparently exhibited is for an increase in the rate of infantile mortality to be associated with a decrease in the birth rate. The conclusion which these results appear to warrant is that although infantile mortality undoubtedly tends on the whole to increase the birth rate, the practical effect produced is so slight that the existence of such a relation may in any instance be quite masked by more important causes of variation.

8. **Deaths in Age-Groups, 1902 to 1912.**—A distribution into age-groups has been made of the 508,329 deaths which occurred in the Commonwealth from 1902 to 1912, and the results are tabulated for each State. It is, however, sufficient here to shew the results for the Commonwealth as a whole, which are as follow:—

DEATHS IN AGE-GROUPS, COMMONWEALTH, 1902 to 1912.

Ages.	Males.	Females.	Total.	Percentage of Total Males.	Percentage of Total Females.	Percentage of Total.
Under 1 year ...	56,200	44,290	100,490	19.19	20.55	19.77
1 year and under 5 ...	16,770	15,232	32,002	5.73	7.07	6.30
5 years and under 20 ...	16,618	14,930	31,548	5.67	6.93	6.21
20 years and under 40 ...	39,533	35,005	74,538	13.50	16.24	14.66
40 years and under 60 ...	59,090	34,583	93,673	20.18	16.05	18.43
60 years and under 65 ...	16,844	10,266	27,110	5.75	4.76	5.33
65 years and over ...	87,200	61,090	148,290	29.78	28.35	29.17
Age not stated ...	572	106	678	0.20	0.05	0.13
Total ...	292,827	215,502	508,329	100.00	100.00	100.00

9. **Deaths at Single Ages and in Age-Groups, 1912.**—The 52,177 deaths which were registered in the Commonwealth in the year 1912 will be found tabulated under single years, and in groups of five years for each State and Territory, in "Bulletin No.

30, Commonwealth Demography, 1912." It has been thought advisable to tabulate the deaths during the first two years of life in greater detail. The first month has, therefore, been shewn in weeks, and the twenty-three months up to the end of the second year in months. This tabulation shews a great number of children dying during the first week, the number gradually diminishing towards the end of the second year. The particulars relating to the Commonwealth are given in the following table:—

DEATHS AT SINGLE AGES AND IN AGE-GROUPS, 1912.

COMMONWEALTH.

Ages.	Males.	Females.	Total.	Ages.	Males.	Females.	Total.
Under 1 week ...	1,670	1,146	2,816	10 years ...	75	73	148
1 week and under 2 ...	330	205	535	11 " ...	81	82	163
2 weeks " " 3 ...	246	168	414	12 " ...	83	68	151
3 " " " 4 ...	205	151	356	13 " ...	76	76	152
				14 " ...	75	79	155
Total under one month ...	2,451	1,670	4,121	Total 10 years and under 15	391	378	769
1 month and under 2 ...	469	371	840	15 years ...	98	72	170
2 months " " 3 ...	301	305	606	16 " ...	101	84	185
3 " " " 4 ...	343	293	641	17 " ...	127	106	233
4 " " " 5 ...	330	239	569	18 " ...	128	111	239
5 " " " 6 ...	295	209	505	19 " ...	150	128	278
6 " " " 7 ...	253	195	448	Total 15 years and under 20	604	501	1,105
7 " " " 8 ...	208	135	403	20 years ...	147	161	308
8 " " " 9 ...	221	155	376	21 " ...	195	146	342
9 " " " 10 ...	178	174	352	22 " ...	164	193	347
10 " " " 11 ...	161	145	309	23 " ...	202	178	380
11 " " " 12 ...	145	143	288	24 " ...	197	175	372
Total under 1 year ...	5,446	4,102	9,548	Total 20 years and under 25	906	843	1,749
12 months and under 13 ...	335	269	604	25 years ...	216	154	370
13 " " " 14 ...	73	96	169	26 " ...	204	173	377
14 " " " 15 ...	72	83	155	27 " ...	213	153	366
15 " " " 16 ...	85	74	159	28 " ...	183	169	352
16 " " " 17 ...	84	64	148	29 " ...	168	186	354
17 " " " 18 ...	49	42	91	Total 25 years and under 30	984	835	1,619
18 " " " 19 ...	99	65	164	30 years ...	222	159	381
19 " " " 20 ...	34	34	68	31 " ...	163	145	308
20 " " " 21 ...	57	41	98	32 " ...	204	175	379
21 " " " 22 ...	44	43	87	33 " ...	211	161	372
22 " " " 23 ...	35	36	71	34 " ...	194	137	331
23 " " " 24 ...	31	22	56	Total 30 years and under 35	994	777	1,771
Total under 2 years ...	6,447	4,971	11,418	35 years ...	233	166	399
2 years ...	369	330	699	36 " ...	204	174	378
3 " ...	238	217	455	37 " ...	235	134	419
4 " ...	168	180	348	38 " ...	235	186	421
Total under 5 years ...	7,222	5,698	12,920	39 " ...	224	165	389
5 years ...	162	132	294	Total 35 years and under 40	1,131	875	2,006
6 " ...	140	124	264				
7 " ...	114	102	216				
8 " ...	83	92	175				
9 " ...	84	77	161				
Total 5 years and under 10	583	527	1,110				

DEATHS AT SINGLE AGES AND IN AGE-GROUPS, 1912—Continued.

Ages.	Males.	Females.	Total.	Ages.	Males.	Females.	Total.
40 years	297	186	483	75 years	477	352	829
41 "	195	153	348	76 "	497	369	866
42 "	281	188	469	77 "	429	293	722
43 "	244	148	392	78 "	474	368	842
44 "	260	181	441	79 "	414	280	694
Total 40 years and under 45	1,277	856	2,133	Total 75 years and under 80	2,281	1,662	3,943
45 years	379	195	574	80 years	425	281	706
46 "	328	149	477	81 "	311	236	549
47 "	294	184	478	82 "	342	281	623
48 "	336	174	513	83 "	281	218	499
49 "	315	209	524	84 "	274	229	503
Total 45 years and under 50	1,655	911	2,566	Total 80 years and under 85	1,633	1,247	2,880
50 years	421	207	628	85 years	221	174	395
51 "	279	193	472	86 "	189	146	335
52 "	371	200	571	87 "	123	120	243
53 "	342	216	558	88 "	103	100	203
54 "	351	211	562	89 "	81	81	162
Total 50 years and under 55	1,824	1,027	2,851	Total 85 years and under 90	717	621	1,338
55 years	333	180	513	90 years	79	72	151
56 "	359	207	566	91 "	39	51	90
57 "	353	162	515	92 "	14	51	65
58 "	350	188	538	93 "	25	42	67
59 "	348	177	525	94 "	33	27	60
Total 55 years and under 60	1,743	914	2,657	Total 90 years and under 95	220	243	463
60 years	416	203	619	95 years	21	12	33
61 "	275	170	445	96 "	21	22	43
62 "	358	226	584	97 "	8	7	15
63 "	359	213	572	98 "	9	8	17
64 "	350	218	568	99 "	4	5	9
Total 60 years and under 65	1,758	1,030	2,788	Total 95 yrs. and under 100	63	54	117
65 years	457	261	718	100 years	3	2	5
66 "	357	217	574	102 "	2	3	5
67 "	367	265	632	103 "	...	1	1
68 "	457	299	756	104 "	1	1	2
69 "	359	305	664	105 "	1	...	1
Total 65 years and under 70	1,997	1,347	3,344	107 "	1	...	1
70 years	500	321	821	108 "	...	1	1
71 "	367	232	599	Total 100 years and over...	8	8	16
72 "	494	332	826	Age not stated	94	18	11
73 "	435	323	758	Total all ages	30,285	21,892	52,177
74 "	404	312	716				
Total 70 years and under 75	2,200	1,520	3,720				

The following tables shew the death rate per 1000 living at each age for the three years 1910, 1911 and 1912. The Northern Territory is included with South Australia, and the Federal Territory with New South Wales:—

AVERAGE ANNUAL DEATH RATES PER 1000 LIVING IN VARIOUS AGE GROUPS, 1910 to 1912.

MALES.

Age Group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.
0 to 4 years	25.40	24.71	23.30	21.30	28.44	24.65	24.71
5 " 9 "	2.11	2.39	2.39	1.85	2.61	2.53	2.26
10 " 14 "	1.75	1.69	1.74	1.40	2.16	1.70	1.72
15 " 19 "	2.42	2.41	2.92	2.43	2.86	2.59	2.52
20 " 24 "	3.37	3.27	4.83	3.00	5.17	3.57	3.65
25 " 29 "	3.91	4.13	5.57	3.57	5.86	4.49	4.35
30 " 34 "	4.90	4.83	5.96	5.40	6.75	3.77	5.20
35 " 39 "	6.08	6.31	7.54	7.15	8.41	6.28	6.68
40 " 44 "	8.25	8.26	9.65	8.31	10.37	6.17	8.58
45 " 49 "	10.91	11.05	13.83	10.27	14.96	9.25	11.58
50 " 54 "	14.78	15.33	17.77	13.02	16.66	14.08	15.36
55 " 59 "	21.93	21.41	23.01	19.99	24.65	16.24	21.67
60 " 64 "	30.99	31.52	31.25	31.94	35.06	28.39	31.38
65 " 69 "	45.80	50.53	51.53	45.94	45.96	38.29	47.69
70 " 74 "	71.49	74.28	70.94	58.38	78.74	58.79	70.88
75 " 79 "	117.05	115.68	112.40	99.49	110.54	108.60	114.04
80 " 84 "	181.34	174.56	190.89	165.68	185.23	148.67	176.32
85 " 89 "	252.58	270.76	202.56	225.42	328.21	313.87	257.73
90 and over	375.35	365.88	272.73	279.57	321.43	465.61	357.11

FEMALES.

0 to 4 years	20.96	19.79	20.07	16.96	21.76	21.27	20.22
5 " 9 "	1.78	2.27	2.29	1.71	2.58	1.88	2.04
10 " 14 "	1.41	1.81	1.45	1.25	1.77	2.51	1.59
15 " 19 "	1.96	2.42	2.20	2.19	2.01	3.47	2.22
20 " 24 "	3.22	3.74	3.76	3.44	3.82	4.09	3.53
25 " 29 "	4.02	4.31	4.68	4.79	4.42	4.66	4.31
30 " 34 "	4.51	4.98	4.46	4.92	4.88	4.93	4.73
35 " 39 "	5.84	6.02	5.79	5.71	6.15	7.68	5.97
40 " 44 "	6.24	6.63	7.11	5.80	6.73	5.67	6.44
45 " 49 "	7.63	8.05	9.07	7.91	8.40	7.02	7.98
50 " 54 "	11.22	11.30	11.73	9.72	11.82	8.76	11.07
55 " 59 "	14.38	15.55	14.13	12.63	14.18	15.80	14.60
60 " 64 "	21.69	22.27	21.64	20.54	20.44	19.50	21.60
65 " 69 "	37.81	36.48	34.69	35.01	34.59	35.09	36.47
70 " 74 "	55.75	58.36	57.82	48.28	54.52	55.11	56.13
75 " 79 "	97.62	98.27	86.11	91.32	92.45	93.30	95.91
80 " 84 "	154.31	157.19	138.33	137.37	144.14	150.77	151.89
85 " 89 "	184.60	225.65	200.82	202.17	186.67	254.45	208.59
90 and over	307.43	361.44	351.52	328.17	358.97	317.88	334.87

PERSONS.

0 to 4 years	23.21	22.29	21.72	19.16	25.15	23.00	22.50
5 " 9 "	1.95	2.33	2.34	1.78	2.60	2.21	2.15
10 " 14 "	1.58	1.75	1.60	1.33	1.97	2.10	1.66
15 " 19 "	2.19	2.42	2.57	2.31	2.45	3.03	2.37
20 " 24 "	3.30	3.51	4.33	3.22	4.60	3.84	3.59
25 " 29 "	3.96	4.22	5.17	4.17	5.29	4.58	4.33
30 " 34 "	4.71	4.92	5.29	5.16	6.00	4.94	4.97
35 " 39 "	5.97	6.16	6.78	6.44	7.51	6.94	6.34
40 " 44 "	7.31	7.44	8.58	7.09	9.06	5.94	7.59
45 " 49 "	9.45	9.59	11.95	9.14	12.73	8.20	9.96
50 " 54 "	13.25	13.40	15.48	11.49	15.64	11.63	13.48
55 " 59 "	18.63	18.52	19.59	16.67	20.87	16.04	18.52
60 " 64 "	26.79	26.86	27.44	26.48	29.25	24.08	26.87
65 " 69 "	42.18	43.26	44.44	40.58	41.22	36.66	42.37
70 " 74 "	64.41	65.98	65.87	53.36	68.67	56.91	63.91
75 " 79 "	108.56	107.11	101.99	95.17	103.30	100.66	105.58
80 " 84 "	169.10	171.29	166.15	150.82	170.12	149.75	164.97
85 " 89 "	217.51	248.40	201.72	211.72	266.67	284.83	232.64
90 and over	337.70	363.94	308.54	307.81	333.33	404.98	345.44

The tables shew a high death rate for children under five years of age, which rapidly diminishes until at ages 10 to 14, a rate of 1.66 per 1000 was experienced, which was the lowest at any age. The rate then gradually increases with increasing age until, at the ages 90 and over, more than one-third die every year.

10. **Deaths of Centenarians, 1912.**—Particulars as to the sixteen persons who died in 1912, aged 100 years and upwards, are given in the following table. It must, of course, be understood that while the Registrars-General of the various States take the greatest care to have statements as to abnormally high ages verified as far as possible, no absolute reliance can be placed on the accuracy of the ages shewn, owing to the well-known tendency of very old people to overstate their ages. The fact must not be lost sight of in connection with this question, that while parish registers in the United Kingdom often date very far back, compulsory registration of births dates practically only from 1874, the Act passed in 1836 having left many loop-holes open for those unwilling to register the births of their children.

DEATHS OF CENTENARIANS, 1912.—COMMONWEALTH.

MALES.

Age	Locality where Death occurred.	State.	Cause of Death.	Occupation.	Birth-place.	Length of Residence in Commonwealth.
Yrs						
107	Ballarat...	Victoria...	Hypostatic pneumonia	Farmer...	Scotland...	92 years
105	Carcoar...	N.S.W.	Senility...	"	Ireland...	80 "
104	Hobart...	Tasmania...	"	Cook...	England...	Not stated
102	Sydney...	N.S.W.	Cancer of stomach	Seaman*	India...	2 months
102	Grafton...	"	Senility...	Teamster	Ireland...	77 years
100	Hay...	"	Senile myocarditis	None	China...	Not stated
100	Granville	"	Senility...	Farmer	"	"
100	"	"	Carcinoma of mouth	Labourer...	Canada...	62 years

FEMALES.

108	Young...	N.S.W.	Senility...	"	Ireland...	47 years
104	Sydney...	"	"	"	"	Not stated
103	Benalla...	Victoria...	"	"	"	60 years
102	Bathurst	N.S.W.	"	"	"	82 "
102	Adelaide	S. Australia	Diarrhœa	"	England	52 "
102	Scone...	N.S.W.	Senility...	"	Ireland	80 "
100	Grafton...	"	"	"	N.S.W.	Native
100	Devonport	Tasmania...	"	"	Ireland	67 years

* 88 years in the P. and O. Co.'s service.

11. **Length of Residence in the Commonwealth of Persons who Died in 1912.**—The length of residence in the Commonwealth of all persons whose deaths were registered in the year 1912 has been tabulated for all the States, and a summary of the results is shewn below:—

LENGTH OF RESIDENCE IN COMMONWEALTH OF PERSONS WHO DIED IN 1912.

Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.	Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.
Born in the C'wealth...	16,453	13,604	30,057	Resident 25 to 29 years	1,041	605	1,646
Resident under 1 year	403	161	564	" 30 to 34 "	1,045	493	1,538
" 1 year	161	83	247	" 35 to 39 "	680	372	1,052
" 2 years	120	38	158	" 40 to 44 "	853	454	1,317
" 3 "	93	38	131	" 45 to 49 "	961	744	1,705
" 4 "	59	20	79	" 50 to 54 "	1,524	1,099	2,623
" 5 "	57	20	77	" 55 to 59 "	1,652	1,483	3,135
" 6 "	48	18	66	" 60 to 64 "	1,131	970	2,101
" 7 "	31	27	58	" 65 yrs. & over	507	546	1,053
" 8 "	40	11	51	Length of residence not stated...	2,252	591	2,843
" 9 "	27	12	39				
" 10 to 14 years...	217	74	291				
" 15 to 19 "	263	89	352				
" 20 to 24 "	664	320	984				
				Total ...	30,285	21,892	52,177

12. Birthplaces of Persons who Died in 1912.—In the following table are shewn the birthplaces of persons whose deaths were registered in 1912:—

BIRTHPLACES OF PERSONS WHO DIED IN 1912.

COMMONWEALTH.

Birthplaces.	Males.	Females.	Total.	Birthplaces.	Males.	Females.	Total.
AUSTRALASIA—				Philippine Islands	12	...	12
Commonwealth of				Syria ...	10	8	18
Australia—				Other Asiatic			
New South Wales ...	6,396	5,170	11,566	Countries ...	39	2	41
Victoria ...	5,047	4,285	9,332	AFRICA—			
Queensland ...	1,709	1,473	3,182	Cape of Good Hope	3	...	3
South Australia ...	1,533	1,244	2,777	Mauritius ...	11	3	14
Western Australia...	722	552	1,274	Natal ...	1	...	1
Tasmania ...	1,038	879	1,917	Orange River ...	1	...	1
Northern Territory	8	1	9	S.Africa (undefined)	20	12	32
New Zealand ...	145	101	246	Egypt ...	1	...	1
EUROPE—				Other African			
England ...	5,851	3,615	9,466	Countries ...	6	...	6
Wales ...	154	62	216	AMERICA—			
Scotland ...	1,668	1,075	2,743	Barbados ...	1	1	2
Ireland ...	2,883	2,688	5,571	Canada ...	53	14	67
Isle of Man ...	7	7	14	Jamaica...	7	4	11
Other European				Newfoundland ...	6	2	8
Brit'h Possessions	22	14	36	Other American			
Austria-Hungary ...	46	3	49	Brit. Possessions	2	1	3
Belgium ...	8	...	8	Argentine Republic	1	1	2
Denmark ...	93	16	109	Brazil ...	2	1	3
France ...	72	20	92	Chili ...	2	...	2
Germany ...	624	290	914	Mexico ...	1	1	2
Greece ...	16	4	20	United States of			
Italy ...	80	4	84	America ...	90	21	111
Netherlands ...	15	2	17	Other American			
Norway ...	66	3	69	Countries ...	34	9	43
Portugal... ..	9	...	9	POLYNESIA—			
Russia ...	63	10	73	Fiji ...	5	2	7
Spain ...	13	3	16	Papua ...	7	...	7
Sweden ...	139	9	148	Other Polynesian			
Switzerland ...	53	14	67	Brit. Possessions	1	...	1
Other European				New Caledonia ...	5	...	5
Countries ...	6	1	7	New Hebrides ...	8	...	8
ASIA—				Samoa ...	2	...	2
British India ...	82	24	106	Other Polynesian			
Ceylon ...	9	3	12	Islands ...	...	2	2
Straits Settlements	9	1	10	South Sea Islands			
Other Asiatic British				(so described) ...	35	2	37
Possessions ...	6	...	6	At Sea ...	68	32	100
Afghanistan ...	3	...	3	Not stated...	791	196	987
Arabia ...	5	...	5	Total Deaths ...	30,285	21,892	52,177
China ...	395	5	400				
Japan ...	59	...	59				
Java ...	6	...	6				

13. **Occupations of Male Persons who Died in 1912.**—Information as to the occupations of the 30,285 males who died in the Commonwealth in 1912, is contained in the following statement:—

OCCUPATIONS OF DECEASED MALES, 1912.

COMMONWEALTH.

Occupation.	No. of Deaths.	Occupation.	No. of Deaths.
CLASS I.—PROFESSIONAL.		Groceries and stimulants ...	163
General Government ...	103	Living animals... ..	28
Local Government ...	16	Leather, raw material ...	3
Defence ...	48	Wool and tallow ...	13
Law and order ...	185	Hay, corn, etc. ...	36
Religion ...	81	Other vegetable matter ...	14
Charity ...	4	Wood and coal... ..	28
Health ...	157	Stone, clay, glass ...	2
Literature ...	38	Gold, silver, and precious stones ...	1
Science ...	13	Ironmongery ...	27
Civil and mechanical engineering, architecture and surveying ...	80	Merchants ...	98
Education ...	113	Shopkeepers and assistants ...	169
Fine arts ...	39	Dealers and hawkers ...	131
Music ...	31	Agents and brokers ...	128
Amusements ...	98	Clerks, bookkeepers, etc. ...	535
		Commercial travellers and salesmen	164
		Others engaged in commercial pur- suits	91
Total Professional ...	1,006	Speculators on chance events ...	11
		Storage	2
		Total Commercial	2,350
CLASS II.—DOMESTIC.		CLASS IV.—TRANSPORT AND COMMUNICATION.	
Hotelkeepers and assistants ...	257	Railway traffic	361
Others engaged in providing board and lodging... ..	64	Tramway traffic	38
House servants	191	Road traffic	556
Coachmen and grooms	82	Sea and river traffic	593
Hairdressers	74	Postal service	65
Laundrymen	12	Telegraph and telephone service ...	34
Others engaged in domestic occu- pations	109	Messengers, etc.	14
Total Domestic	789	Total Transport & Communication	1,661
CLASS III.—COMMERCIAL.		CLASS V.—INDUSTRIAL.	
Banking and finance	74	Books and publications	143
Insurance and valuation	52	Musical instruments	13
Land and household property ...	41	Prints, pictures, and art materials	12
Books, publications and advertising	42	Ornaments and small wares ...	14
Musical instruments	1	Designs, medals, type	9
Designs, medals, type	1	Watches and clocks	32
Watches, clocks, jewellery ...	3	Surgical instruments	1
Machines, tools, and implements ...	4	Arms and ammunition	4
Carriages and vehicles	4	Engines, machines, tools, etc. ...	102
Building materials	1	Carriages and vehicles	128
Furniture	5	Harness, saddlery, and leatherware	77
Chemicals	1	Ships, boats, and equipment ...	62
Paper and stationery	12	Furniture	97
Textile fabrics	97	Building material	89
Dress	18	Chemicals and by-products ...	4
Fibrous materials	1		
Animal food	276		
Vegetable food	73		

OCCUPATIONS OF DECEASED MALES, 1912—Continued.

Occupation.	No. of Deaths.	Occupation.	No. of Deaths.
INDUSTRIAL—Continued.		CLASS VI.—AGRICULTURAL, PASTORAL, MINING PURSUITS, ETC.	
Textile fabrics	22	Agricultural	2,911
Dress	413	Pastoral	738
Fibrous materials	16	Dairy farming	85
Animal food	24	Bees, fisheries and wild animals	177
Vegetable food	198	Forestry	81
Groceries and stimulants	71	Water conservation and supply	15
Animal matter	65	Mines and quarries	1,862
Workers in wood not elsewhere classed	24		
Fodder	1	Total Primary Producers	5,869
Paper	1		
Stone, clay, glass	86	CLASS VII.—INDEFINITE.	
Jewellery and precious stones	32	Independent means, having no specific occupation	948
Metals, other than gold and silver	387	Occupation unspecified	640
Fuel, light, etc.	47		
Buildings—		Total Indefinite	1,588
Builders	95	CLASS VIII.—DEPENDENTS.	
Stonemasons... ..	98	Dependent relatives (including persons under 20 years of age with no specified occupation)	8,415
Bricklayers	97	Supported by voluntary and State contributions	394
Slaters	4		
Carpenters	507	Total Dependents	8,809
Plasterers	46		
Painters and glaziers	195		
Plumbers	88		
Signwriters	5		
Others	6		
Roads, railways, and earthworks... ..	59		
Disposal of the dead	9		
Disposal of refuse	18		
Other industrial workers—			
Manufacturers	21		
Engineers, firemen	383		
Contractors	172		
Labourers, undefined	4,206		
Others	32		
Total Industrial	8,213	Total Male Deaths	30,285

14. **Index of Mortality.**—The death rates, those for age-groups on pages 171 and 174 excepted, so far shewn are crude rates, *i.e.*, they simply shew the number of deaths per thousand of mean population, without taking the age constitution of that population into consideration. It is, however, a well-known fact that the death rate and age constitution of a people are intimately related, thus, other conditions being equal, the death rate of a country will be lower if it contain a large percentage of young people (*not infants*). In order to have a comparison of the mortality of various countries on a uniform basis, so far as age constitution is concerned, the International Statistical Institute in its 1895 session recommended the universal adoption of the population of Sweden in five age-groups, as ascertained at the Census of 1890, as the standard population by which this "Index of Mortality," as distinguished from the crude death rate, should be ascertained. The calculation for 1912 is shewn below for each of the States and Territories and for the Commonwealth, the distribution of the mean population of 1912 into age-groups being in accordance with the distribution as found at the Census of 1911:—

INDEX OF MORTALITY, 1912.—(STATES AND COMMONWEALTH).

Age-Group.	Mean Popu- lation, 1912, distributed according to Results of Census of 1911.	Number of Deaths, 1912.	No. of Deaths per 1000 of Mean Population, 1912, in each Age-Group.	Age Distribution per 1000 of Standard Population.	Index of Mortality.
NEW SOUTH WALES.					
Under 1 year	47,757	3,687	77.20	25.5	1.97
1 year and under 20	683,907	2,472	3.61	398.0	1.44
20 years " 40	581,870	2,643	4.54	269.6	1.22
40 " " 60	314,155	3,579	11.39	192.3	2.19
60 " and upwards	109,049	6,481	59.43	114.6	6.81
Total	1,736,738	18,862	10.86	1,000.0	13.63
VICTORIA.					
Under 1 year	32,001	2,666	83.08	25.5	2.13
1 year and under 20	522,009	1,856	3.55	398.0	1.41
20 years " 40	429,351	1,987	4.63	269.6	1.25
40 " " 60	273,362	3,243	11.86	192.3	2.28
60 " and upwards	99,484	6,837	68.72	114.6	7.88
Total	1,356,387	16,589	12.23	1,000.0	14.94
QUEENSLAND.					
Under 1 year	17,078	1,348	78.93	25.5	2.01
1 year and under 20	258,730	911	3.52	398.0	1.40
20 years " 40	206,930	1,102	5.33	269.6	1.44
40 " " 60	112,195	1,470	13.10	192.3	2.52
60 " and upwards	36,644	2,090	57.04	114.6	6.54
Total	631,577	6,921	10.96	1,000.0	13.91
SOUTH AUSTRALIA.					
Under 1 year	10,858	745	68.61	25.5	1.75
1 year and under 20	165,109	430	2.60	398.0	1.03
20 years " 40	138,930	619	4.46	269.6	1.20
40 " " 60	77,083	766	9.94	192.3	1.91
60 " and upwards	29,664	1,776	59.91	114.6	6.87
Total	421,644	4,336	10.28	1,000.0	12.76
WESTERN AUSTRALIA.					
Under 1 year	8,058	726	90.10	25.5	2.30
1 year and under 20	110,393	421	3.81	398.0	1.52
20 years " 40	110,683	724	6.54	269.6	1.76
40 " " 60	60,200	780	12.96	192.3	2.49
60 " and upwards	12,092	684	56.57	114.6	6.48
Total	301,426	3,335	11.06	1,000.0	14.55
TASMANIA.					
Under 1 year	5,388	391	72.57	25.5	1.85
1 year and under 20	81,614	279	3.42	398.0	1.36
20 years " 40	53,630	280	4.78	269.6	1.29
40 " " 60	34,072	356	10.45	192.3	2.01
60 " and upwards	11,980	751	62.69	114.6	7.18
Total	191,684	2,057	10.73	1,000.0	13.69
NORTHERN TERRITORY.					
Under 1 year	30	4	133.33	25.5	3.40
1 year and under 20	618	1	1.62	398.0	0.64
20 years " 40	896	9	10.04	269.6	2.71
40 " " 60	1,510	38	25.17	192.3	4.84
60 " and upwards	305	15	49.18	114.6	5.66
Total	3,359	67	19.95	1,000.0	17.23
FEDERAL TERRITORY.					
Under 1 year	47	3	63.83	25.5	1.63
1 year and under 20	835	1	1.20	398.0	0.48
20 years " 40	626	1	1.60	269.6	0.43
40 " " 60	379	...	...	192.3	0.00
60 " and upwards	150	5	33.33	114.6	3.82
Total	2,037	10	4.91	1,000.0	6.36

INDEX OF MORTALITY, 1912.—(STATES AND COMMONWEALTH)—Continued.

Age-Group.	Mean Population, 1912, distributed according to Results of Census of 1911.	Number of Deaths, 1912.	No. of Deaths per 1000 of Mean Population, 1912, in each Age-Group.	Age Distribution per 1000 of Standard Population.	Index of Mortality
COMMONWEALTH.					
Under 1 year	121,307	9,570	78.89	25.5	2.01
1 year and under 20	1,823,305	6,371	3.49	398.0	1.39
20 years " 40	1,527,916	7,365	4.82	269.6	1.30
40 " " 60	872,956	10,232	11.72	192.3	2.25
60 " and upwards	299,368	18,639	62.26	114.6	7.13
Total	4,644,852	52,177	11.23	1,000.0	14.08

NOTE.—The small number of persons whose ages were not ascertained at the 1911 Census have been proportionately distributed among the various age-groups, and the same plan has been followed in regard to the 112 persons who died in 1912, and whose ages were not stated in the certificates of death.

It will be seen that Victoria has the highest index and crude rates, while South Australia has the lowest index and lowest crude rate. The range of the indexes is slightly larger than that of the crude death rates, thus, while the latter in 1912 rose from 10.28 per thousand in South Australia to 12.23 per thousand in Victoria, a range of 1.95 per thousand, the indexes varied from 12.76 per thousand in South Australia to 14.94 per thousand in Victoria, a range of 2.18 per thousand.

For purposes of comparison with previous years the index of mortality is shewn in the following table for each of the eleven years 1902-1912 :—

INDEX OF MORTALITY, 1902-1912 (STATES AND TERRITORIES).

Year.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Northern Territory.	Federal Territory.	Commonwealth.
1902	15.32	15.90	15.68	15.50	17.55	14.25	...	...	15.70
1903	14.89	15.38	15.72	13.99	16.11	14.73	...	...	15.21
1904	13.90	14.46	12.89	13.45	15.49	14.13	...	...	14.11
1905	13.23	14.80	13.72	13.49	14.17	12.95	...	...	13.94
1906	12.91	15.26	12.44	13.78	15.84	14.10	...	...	13.94
1907	13.66	14.55	13.52	13.12	14.94	14.10	...	...	13.97
1908	13.13	15.58	13.37	12.89	14.81	14.46	...	...	14.10
1909	12.61	14.11	12.57	12.27	13.91	12.82	...	...	13.15
1910	12.48	14.15	12.60	12.50	13.48	13.62	...	...	13.17
1911	13.23	14.23	13.57	12.18	13.47	12.97	(a) 17.91	(b) 6.53	13.55
1912	13.63	14.94	13.91	12.76	14.55	13.69	17.23	6.36	14.08

(a) Included in South Australia prior to 1911. (b) Part of New South Wales prior to 1911.

A comparison of the above figures with the crude death rates given on a previous page shews that while the crude rate was highest in Victoria nine times in 11 years and twice in Western Australia, the index was highest in Victoria six times and in Western Australia five times in the same period. South Australia had the lowest index six times, Queensland and Tasmania each twice, and New South Wales once. The high index in Victoria is due to the large proportion of persons over 60 years of age, and in Western Australia to the heavy mortality in the early period of life.

15. Monthly Variations in Death Rates.—(i.) *General Death Rates.* The annual death rates, corresponding to the number of deaths registered in each equalised month, have been calculated for the six years 1907-1912, and a series of diagrams shewing the results for each State and the Commonwealth as a whole appears on page 209 of this issue, distinguishing the rates for males, females, and persons. The curves shewing the male and female rate exhibit in each State a fairly parallel course, irregularities being, however, more strongly marked in the case of the male curve.

The minimum rates in New South Wales and Queensland fall within the autumn months, from March to May, while in Victoria, South Australia, Western Australia, and Tasmania they fall in the spring months, October and November. In no case is there, however, a very great difference between the rates in spring and in autumn, the figures for the Commonwealth being 10.19 per thousand in March, and 10.34 per thousand in October. The maximum rates in New South Wales, Victoria, and Tasmania are experienced in August, and in Queensland in September, with the rates for December and January as secondary maxima. In South Australia the maximum rate rate of 11.33 per thousand falls in January, the rate for August standing next with 10.80 per thousand. In Western Australia the maximum rate is found in May.

(ii.) *Infantile Death Rates.* A similar series of diagrams, shewing the monthly variations in the infantile death rates, appears on page 210. With the exception of Western Australia, where the maximum occurs in May, the minima are found in the summer months in every State. The rates gradually decrease from January to March, shewing in several States a slight increase in April, with a further diminution until July. In July and August the rates rise to some extent, to fall again until October or November. From that time a rapid rise takes place, until the maximum is reached in December or January. Tasmania, where the seasons are rather later than in the continental States, shews two distinct minima in May and November, with a summer maximum in February, and a fairly high rate in September. In Western Australia the rates are moderately high in December and January, and drop until March, to rise rapidly in April and May when the maximum is reached. From May to September there is a gradual decrease, with a quick rise from the latter month until December.

16. **Causes of Death.**—(i.) Information regarding the changes in the classification of causes of death will be found in previous editions of this Year Book (*e.g.*, Year Book No. 5, pages 222 and 223). The statement will suffice, therefore, that the classification adopted by the Commonwealth Bureau of Census and Statistics is that of the International Institute of Statistics, as amended by the Committee of Revision which met in 1909. The detailed classification groups causes of death under 189 different headings in fourteen categories, as follows:—

- | | |
|--|---|
| <ul style="list-style-type: none"> i. General Diseases. ii. Diseases of the Nervous System and Organs of Special Sense. iii. Diseases of the Circulatory System. iv. Diseases of the Respiratory System. v. Diseases of the Digestive System. vi. Diseases of the Genito-urinary System and Adnexa. vii. Puerperal Condition. | <ul style="list-style-type: none"> viii. Diseases of the Skin and Cellular Tissue. ix. Diseases of the Organs of Locomotion. x. Malformations. xi. Infancy. xii. Old Age. xiii. Violence. xiv. Ill-defined Diseases. |
|--|---|

(ii.) *Compilation of Vital Statistics for 1907 and Subsequent Years in Commonwealth Bureau.* The vital statistics of the Commonwealth from the year 1907 onward have been tabulated according to this classification in the Commonwealth Bureau, and the system is being employed in the majority of the State offices in the preparation of their monthly and quarterly bulletins of vital statistics.

(iii.) *Classification of Causes of Death, 1907 to 1912, according to Abridged International Classification.* An abridged classification, which enumerates thirty-eight diseases and groups of diseases according to the revised classification, is in use in many European and American States, while the Commonwealth Statistics have been compiled on the detailed classification of 189 headings. A table has been compiled shewing the causes of death according to the abridged classification, so that the results may be compared with those of countries which use the abridged index.

The compilations for the years 1907 to 1912 will be found in full in "Bulletins Nos. 8, 14, 20, 25, 29, and 30 of Population and Vital Statistics"; here it will suffice to give the abridged classification under thirty-eight headings for the year 1912:—

CAUSES OF DEATH—COMMONWEALTH, 1912.

(a) MALES.

Cause.	N.S.W.	Vic.	Q'land.	S.Aust.	W.Aus.	Tas.	Nor. Ter.	Fed. Ter.	C'with.
1 Typhoid Fever ...	144	54	92	32	67	10	...	...	399
2 Typhus ...	...	...	...	...	...	...	...	...	...
3 Malaria ...	4	2	6	...	1	...	...	...	13
4 Small-pox ...	...	...	...	...	...	...	...	...	...
5 Measles ...	191	52	26	8	...	5	...	...	282
6 Scarlet Fever ...	5	2	3	4	3	2	...	...	19
7 Whooping Cough ...	51	64	14	1	2	...	...	...	132
8 Diphtheria and Croup ...	192	118	46	24	16	20	...	...	356
9 Influenza ...	70	76	20	14	10	15	...	...	205
10 Asiatic Cholera ...	...	...	...	...	...	...	...	...	...
11 Cholera Nostras ...	1	...	...	...	...	...	...	...	1
12 Other Epidemic Diseases ...	27	20	46	6	14	4	1	...	118
13 Tuberculosis of the Lungs ...	636	548	232	165	159	46	8	...	1,794
14 Tuberculosis of the Meninges ...	26	35	7	16	4	7	...	...	95
15 Other forms of Tuberculosis ...	65	60	28	18	20	4	...	...	195
16 Cancer and other Malignant Tumours ...	709	572	221	173	105	62	2	1	1,845
17 Simple Meningitis ...	164	108	60	37	36	17	...	...	422
18 Congestion, Hæmorrhage and Softening of Brain ...	431	367	144	113	59	32	...	...	1,146
19 Organic Diseases of the Heart ...	1,119	957	459	249	133	125	...	...	3,042
20 Acute Bronchitis ...	105	72	25	21	10	9	...	...	242
21 Chronic Bronchitis ...	206	250	55	43	23	22	...	...	599
22 Pneumonia ...	511	485	133	71	97	88	...	...	1,385
23 Other Diseases of the Respiratory System (Tuberculosis excepted) ...	345	489	131	58	80	44	3	...	1,150
24 Diseases of the Stomach (Cancer excepted) ...	78	89	37	16	11	6	1	...	238
25 Diarrhœa & Enteritis (children under 2 years only) ...	753	422	273	118	184	44	...	...	1,794
26 Appendicitis and Typhlitis ...	77	69	32	13	12	12	...	...	215
27 Hernia, Intestinal Obstructions ...	92	77	33	17	21	8	...	...	248
28 Cirrhosis of the Liver ...	113	80	48	11	23	7	1	1	284
29 Nephritis and Bright's Disease ...	446	517	185	113	55	31	4	1	1,352
30 Non-cancerous Tumours and other Diseases of Female Genital Organs ...	...	...	...	...	...	...	...	...	...
31 Puerperal Septicæmia (Puerperal Fever, Puerperal Peritonitis, Puerperal Phlebitis) ...	...	...	...	...	...	...	...	...	...
32 Other Puerperal Accidents of Pregnancy and Confinement ...	...	...	...	...	...	...	...	...	...
33 Congenital Debility and Malformations ...	786	595	264	195	160	112	1	1	2,114
34 Senile Debility ...	886	769	255	224	105	118	5	...	2,362
35 Violence ...	860	543	463	198	412	7	6	...	2,559
36 Suicide ...	195	118	96	43	43	18	1	...	514
37 Other Diseases ...	1,740	1,398	830	359	276	161	13	...	4,777
38 Unspecified or Ill-defined Diseases ...	126	64	41	49	69	24	15	...	388
Total—Males ...	11,094	9,072	4,305	2,409	2,210	1,130	61	4	30,285

CAUSES OF DEATH—COMMONWEALTH, 1912.

(b) FEMALES.

Cause.	N.S.W.	Vic.	Q'land.	S. A.	W.A.	Tas.	N. T.	Fed. Ter.	C'wth.
1 Typhoid Fever	85	41	49	7	32	6	...	...	220
2 Typhus ... ..	...	...	...	...	...	...	...	...	...
3 Malaria ... ..	...	...	3	...	...	1	...	...	4
4 Small-pox ... ..	...	...	...	...	...	...	...	...	...
5 Measles	161	36	26	6	1	7	...	...	237
6 Scarlet Fever	6	3	...	9	2	2	...	...	22
7 Whooping Cough... ..	50	86	23	...	8	2	...	...	169
8 Diphtheria and Croup	135	134	52	33	19	25	...	...	398
9 Influenza	51	76	27	7	8	12	...	...	181
10 Asiatic Cholera ... ..	...	...	...	...	...	...	...	...	...
11 Cholera Nostras ... ..	...	4	...	...	...	...	...	...	4
12 Other Epidemic Diseases	38	23	19	7	17	2	...	...	106
13 Tuberculosis of the Lungs... ..	434	522	103	155	63	73	2	...	1,352
14 Tuberculosis of the Meninges... ..	32	48	6	16	3	15	...	...	120
15 Other forms of Tuberculosis	42	50	18	8	6	8	...	...	132
16 Cancer and other Malignant Tumours	578	644	173	152	75	70	...	...	1,692
17 Simple Meningitis	117	99	36	27	26	22	...	...	327
18 Congestion, Hæmorrhage, & Softening of the Brain	324	386	124	110	34	51	...	1	1,030
19 Organic Diseases of the Heart	727	873	248	220	74	82	...	1	2,225
20 Acute Bronchitis	95	68	24	14	8	9	...	...	218
21 Chronic Bronchitis	138	197	48	41	10	20	...	...	454
22 Pneumonia	223	283	83	53	49	31	...	...	722
23 Other Diseases of the Res- piratory System (Tuber- culosis excepted)	253	302	59	45	26	27	1	...	713
24 Diseases of the Stomach (Cancer excepted)	86	72	26	11	12	12	...	...	219
25 Diarrhœa and Enteritis children under 2 yrs only	641	326	217	84	144	41	...	1	1,454
26 Appendicitis and Typhlitis... ..	51	38	12	14	8	9	...	...	132
27 Hernia, Intestinal Obstruc- tions... ..	72	72	26	22	16	7	...	...	215
28 Cirrhosis of the Liver	34	72	17	12	4	3	...	...	142
29 Nephritis & Bright's Disease	270	330	121	67	30	18	...	...	836
30 Non-cancerous Tumours and other Diseases of the Female Genital Organs	61	41	14	11	16	2	...	...	145
31 Puerperal Septicæmia (Puer- peral Fever, Puerperal Peritonitis, Puerperal Phlebitis)	106	66	27	18	9	5	...	...	231
32 Other Puerperal Accidents of Pregnancy & Confinement	173	95	72	30	28	15	...	...	413
33 Congenital Debility and Mal- formations	579	420	189	144	95	69	...	1	1,497
34 Senile Debility	574	676	134	219	45	112	1	1	1,762
35 Violence... ..	242	190	121	51	54	20	...	...	678
36 Suicide	66	27	10	6	6	2	...	...	117
37 Other Diseases	1,241	1,169	496	306	178	131	1	1	3,523
38 Unspecified or Ill-defined Diseases	83	48	13	22	19	16	1	...	202
Total—Females	7,768	7,517	2,616	1,927	1,125	927	6	6	21,892

CAUSES OF DEATH—COMMONWEALTH, 1912.

(c) TOTAL, MALES AND FEMALES.

Cause.	N.S. W.	Vic.	Qld.	S. A.	W.A.	Tas.	N. Ter.	Fed. Ter.	Com'-wealth
1 Typhoid Fever ...	229	95	141	39	99	16	...	...	619
2 Typhus ...	...	...	...	...	...	...	...	...	...
3 Malaria ...	4	2	9	...	1	1	...	...	17
4 Small-pox ...	...	...	...	...	...	...	...	...	...
5 Measles ...	352	88	52	14	1	12	...	...	519
6 Scarlet Fever ...	11	5	3	13	5	4	...	...	41
7 Whooping Cough ...	101	150	37	1	10	2	...	...	301
8 Diphtheria and Croup ...	267	252	98	57	35	45	...	...	754
9 Influenza ...	121	152	47	21	18	27	...	...	386
10 Asiatic Cholera ...	...	...	...	...	...	...	...	...	...
11 Cholera Nostras ...	1	4	...	...	...	...	...	...	5
12 Other Epidemic Diseases ...	65	43	65	13	31	6	1	...	224
13 Tuberculosis of the Lungs ...	1,070	1,070	335	320	222	119	10	...	3,146
14 Tuberculosis of the Meninges ...	58	83	13	32	7	22	...	...	215
15 Other forms of Tuberculosis ...	107	110	46	26	26	12	...	...	327
16 Cancer and other Malignant Tumours ...	1,287	1,216	394	325	180	132	2	1	3,537
17 Simple Meningitis ...	281	207	96	64	62	39	...	...	749
18 Congestion, Hæmorrhage, & Softening of the Brain ...	755	753	268	223	93	83	...	1	2,176
19 Organic Diseases of Heart ...	1,846	1,830	707	469	207	207	...	1	5,267
20 Acute Bronchitis ...	200	140	49	35	18	18	...	...	460
21 Chronic Bronchitis ...	344	447	103	84	33	42	...	...	1,053
22 Pneumonia ...	734	768	216	124	146	119	...	...	2,107
23 Other Diseases of the Respiratory System (Phthisis excepted) ...	598	791	190	103	106	71	4	...	1,863
24 Diseases of the Stomach (Cancer excepted) ...	164	161	63	27	23	18	1	...	457
25 Diarrhœa and Enteritis (children under 2yrs. only) ...	1,394	748	490	202	328	85	...	1	3,248
26 Appendicitis and Typhlitis ...	128	107	44	27	20	21	...	...	347
27 Hernia, Intestinal Obstructions ...	164	149	59	39	37	15	...	...	463
28 Cirrhosis of the Liver ...	147	152	65	23	27	10	1	1	426
29 Nephritis & Bright's Disease ...	716	847	306	180	85	49	4	1	2,188
30 Non-cancerous Tumours & other Diseases of the Female Genital Organs ...	61	41	14	11	16	2	...	...	145
31 Puerperal Septicæmia (Puerperal Fever, Puerperal Peritonitis, Puerperal Phlebitis) ...	106	66	27	18	9	5	...	...	231
32 Other Puerperal Accidents of Pregnancy and Confinement ...	173	95	72	30	28	15	...	...	413
33 Congenital Debility and Malformations ...	1,365	1,015	453	339	255	181	1	2	3,611
34 Senile Debility ...	1,460	1,445	389	443	150	230	6	1	4,124
35 Violence ...	1,102	733	584	249	466	97	6	...	3,237
36 Suicide ...	261	145	106	49	49	20	1	...	631
37 Other Diseases ...	2,981	2,567	1,326	665	454	292	14	1	8,300
38 Unspecified or Ill-defined Diseases ...	209	112	54	71	88	40	16	...	590
Total—Males and Females	18,862	16,589	6,921	4,336	3,335	2,057	67	10	52,177

(d) The classification for the years 1907 to 1911 is shown for the Commonwealth in the following table, and for purposes of comparison the figures for the year 1912 have

been repeated from the preceding table. Male and female deaths for 1905, 1906, and 1907 are shewn separately on page 237 of the second issue, those for 1908 on pages 211 and 212 of the third issue, for 1909 on pages 200 and 201 of the fourth issue, for 1910 on pages 202 and 203 of the fifth issue, and for 1911 on pages 224 and 225 of the sixth issue of this Year Book; while the figures for 1912 are given on pages 182 and 183.

The figures for 1907, 1908, and 1909, which were compiled under thirty-five headings, have here been distributed among the corresponding headings of the revised classification.

CAUSES OF DEATH—COMMONWEALTH, 1907 to 1912.

MALES AND FEMALES.

Cause.	1907.	1908.	1909.	1910.	1911.	1912.
1 Typhoid Fever	564	736	661	648	488	619
2 Typhus ... ..	...	...	...	...	...	...
3 Malaria	42	52	59	55	19	17
4 Small-pox ... ..	...	...	1	4	1	...
5 Measles	147	125	31	124	206	519
6 Scarlet Fever	37	63	74	58	24	41
7 Whooping Cough	1,070	249	257	476	291	301
8 Diphtheria and Croup	403	421	435	555	696	754
9 Influenza... ..	902	588	326	324	447	386
10 Asiatic Cholera ... ..	...	...	...	...	...	...
11 Cholera Nostras	5	4	1	1	6	5
12 Other Epidemic Diseases	276	268	221	184	295	224
13 Tuberculosis of the Lungs	3,206	3,409	3,169	3,059	3,164	3,146
14 Tuberculosis of the Meninges	237	205	220	215	269	215
15 Other forms of Tuberculosis	415	352	332	343	303	327
16 Cancer and other Malignant Tumours	2,940	2,921	3,112	3,205	3,321	3,537
17 Simple Meningitis	648	676	616	567	636	749
18 Congestion, Hæmorrhage, and Softening of the Brain	1,901	1,867	1,665	1,704	2,178	2,176
19 Organic Diseases of the Heart	3,801	4,066	3,940	4,378	4,896	5,267
20 Acute Bronchitis	514	412	422	420	515	460
21 Chronic Bronchitis	844	818	897	859	1,046	1,053
22 Pneumonia	1,788	1,871	1,752	1,612	1,869	2,107
23 Other Diseases of the Respiratory System (Tuberculosis excepted)	1,689	1,569	1,565	1,544	1,872	1,863
24 Diseases of the Stomach (Cancer excepted)	334	308	272	297	370	457
25 Diarrhœa and Enteritis (Children under two years only)	2,733	3,236	2,803	3,145	2,462	3,248
26 Appendicitis and Typhlitis	305	293	344	315	320	347
27 Hernia, Intestinal Obstructions	411	389	396	398	439	463
28 Cirrhosis of the Liver	325	362	331	368	385	426
29 Nephritis and Bright's Disease	1,760	1,864	1,799	1,771	1,951	2,188
30 Non-cancerous Tumours and other Diseases of the Female Genital Organs	128	159	130	149	120	145
31 Puerperal Septicæmia (Puerperal Fever, Puerperal Peritonitis, Puerperal Phlebitis)	179	202	201	218	209	231
32 Other Puerperal Accidents of Pregnancy and Confinement	435	404	376	373	406	413
33 Congenital Debility and Malformations	3,038	2,973	2,905	3,221	3,142	3,611
34 Senile Debility	3,136	3,466	3,194	3,353	3,849	4,124
35 Violence	2,679	2,922	2,664	2,738	3,018	3,237
36 Suicide	461	497	495	516	544	631
37 Other Diseases	6,677	7,417	7,419	7,795	7,652	8,300
38 Unspecified or Ill-defined Diseases	1,275	1,262	1,087	598	460	590
Total	45,305	46,426	44,172	45,590	47,869	52,177

17. **Certification of Deaths.**—Information was obtained in 1912 as to the persons by whom the 52,177 deaths which occurred in the Commonwealth were certified. The result of the enquiry shows that approximately 88.1 per cent. (in 1910, 88.1 per cent., and in 1911, 88.2 per cent.) were certified by medical practitioners, and 10.9 per cent. (in 1910, 11.1 per cent., and in 1911, 10.9 per cent.) by coroners after inquests, or magisterial enquiries, while in 1.0 per cent. (in 1910, 0.8 per cent., and in 1911, 0.9 per cent.) of the cases there was either no certificate given, or particulars were not forthcoming. The results are shewn in detail in Bulletin No. 30; a short summary will therefore suffice here:—

CERTIFICATION OF DEATHS, COMMONWEALTH, 1912.

Death Certified by—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Fed. Ter.	C'wlth.
Medical practitioner	16,600	14,620	6,261	3,896	2,727	1,849	29	9	45,991
Coroner	2,229	1,965	428	431	390	195	38	1	5,677
Not certified or not stated	33	4	232	9	218	13	...	...	509
Total Deaths ...	18,862	16,589	6,921	4,336	3,335	2,057	67	10	52,177

Of the cases certified by coroners, violent deaths numbered 2836, ill-defined cause^s 289, organic heart disease 508, senile decay 456, congenital debility 189, diarrhœa and enteritis 91, Bright's disease 98, congestion and hæmorrhage of brain 120, tuberculosis of lungs 84, pneumonia 102, infantile convulsions 87, broncho-pneumonia 38, diseases of arteries, aneurisms, etc. 45, and acute and chronic alcoholism 47; a total of 4990 out of 5677.

Of uncertified causes of death, violent deaths numbered 249, senile debility 55, ill-defined causes 32, infantile convulsions 25, congenital debility 34, diarrhœa and enteritis 6, tuberculosis of the lungs 7, organic heart disease 20, and pneumonia 2; a total of 430 out of 509.

18. **Deaths from Special Causes.**—The table on p. 185 furnishes comparisons for the last six years only, and comparisons will, therefore, be restricted to that period.

(i.) *Typhoid Fever.* Deaths from typhoid fever were more numerous in 1908 than in 1907, numbering 736, against 564 in 1907. In 1909 the number fell to 661, in 1910, to 648, and to 488 in 1911. In 1912, 619 were due to typhoid fever, of which 229 occurred in New South Wales, 95 in Victoria, 141 in Queensland, 39 in South Australia, 99 in Western Australia, and 16 in Tasmania.

(ii.) *Typhus.* The death of one woman was registered in 1906 in Victoria as being due to typhus, but this registration may have been due to an error in the death certificate, and the death may possibly have been one of typhoid (enteric) fever. No deaths from typhus have been registered from 1907 to 1912.

(iii.) *Malaria.* Deaths from malarial diseases are practically confined to the tropical districts of Northern Queensland and Western Australia, and to the Northern Territory, 9 out of 17 deaths registered in 1912 having occurred in Queensland, and 1 in Western Australia.

(iv.) *Small-pox.* No deaths from small-pox occurred during the two years 1907 and 1908, but in 1909 one death was registered in Western Australia. In 1910 one death was registered in New South Wales, and three in Victoria, and in 1911, only one death occurred in New South Wales. No deaths were registered in 1912.

(v.) *Measles.* No serious epidemic of measles has occurred for several years; the deaths in 1908 were less numerous than in 1907, numbering 125, against 147. In 1909 the deaths numbered 31, while 124 were registered in 1910, and 206 in 1911. In 1912

New South Wales experienced a slight epidemic, and was responsible for 352 deaths out of 519 registered, Victoria contributing 88, Queensland 52, South Australia 14, Western Australia 1, and Tasmania 12.

(iv.) *Scarlet Fever*. 41 deaths were registered in 1912, distributed over all six States.

(vii.) *Whooping Cough*. A rather severe epidemic of whooping cough visited New South Wales in the early part of 1907, causing 592 deaths out of a total of 1070 registered in the Commonwealth. The deaths in 1908 fell to 249, with a slight increase to 257 in 1909, and a much greater increase to 476 in 1910. During 1911, however, only 291 deaths, and in 1912, 301 deaths were registered.

(viii.) *Diphtheria and Croup*. Deaths in 1907, 403; in 1908, 421; in 1909, 435; in 1910, 555; in 1911, 696, and in 1912, 754, of which 267 occurred in New South Wales, 252 in Victoria, 98 in Queensland, 57 in South Australia, 35 in Western Australia, and 45 in Tasmania.

(ix.) *Influenza*. This disease was rather more prevalent in 1907 than in the two previous years, the deaths numbering 902, against 428 and 539. The deaths in 1908 were 588; in 1909, 326; 324 in 1910; in 1911, 447; and in 1912, 386, of which 121 occurred in New South Wales, 152 in Victoria, 47 in Queensland, 21 in South Australia, 18 in Western Australia, and 27 in Tasmania.

(x.) *Asiatic Cholera*. No cases of Asiatic cholera have ever occurred in the Commonwealth.

(xi.) *Cholera Nostras*. Isolated cases only of choleric form diarrhoea occurred in each of the six years. Five deaths from this cause occurred during 1912.

(xii.) *Other Epidemic Diseases*. The number of deaths registered under this heading was 276 in 1907, 268 in 1908, 221 in 1909, 184 in 1910, 295 in 1911, and 224 in 1912. The list in 1912 includes the following diseases:—Dysentery 103, erysipelas 93, leprosy 11, of which 10 occurred in Queensland, plague 1, other epidemic diseases, 16. Prior to 1910 beri-beri was included in other epidemic diseases, but is now included in No. 37 of the revised classification. Of the 65 deaths from leprosy in the years 1907 to 1912, 50 occurred in Queensland. There were no deaths from plague in the Commonwealth during 1910 and 1911. In 1907, 48 deaths were registered; in 1908, 14 deaths; and in 1909, 13 deaths. The only death registered in 1912 occurred in the Northern Territory.

(xiii.) *Tuberculosis of the Lungs and Acute Miliary Tuberculosis*. The deaths in 1912 numbered 3146, viz., 1794 males and 1352 females. The figures for the years 1907 to 1911 were 3206, 3409, 3169, 3059, and 3164 respectively. Of the deaths in 1912, 1070 occurred in New South Wales, 1070 in Victoria, 335 in Queensland, 320 in South Australia, 222 in Western Australia, 119 in Tasmania, and 10 in Northern Territory. In accordance with the revised classification, deaths from tuberculosis of the larynx are now included with tuberculosis of the lungs, instead of in class 15 as in years prior to 1910. In the table on page 185, deaths from tuberculosis of the larynx have been included with tuberculosis of the lungs, so that the figures allow of correct comparison.

(xiii.a.) *Tuberculosis of the Respiratory System*. Of the various forms of tuberculosis prevalent in the Commonwealth, that which has probably attracted the most attention and has been the subject of the widest comment is phthisis, or tuberculosis of the lungs. The intimate relation, however, between tuberculosis of the lungs and that of other parts of the respiratory system renders it desirable that all forms of tuberculosis of the respiratory system should be brought under one head for various investigations concerning the age incidence and duration of this disease.

In the matter of the age incidence of death from tuberculosis of the respiratory system, diagrams were given in Year Books 2, 3, and 4, pp. 239, 217, and 206 respectively, shewing the frequency of deaths at successive ages in England and Wales during 1906 (Fig. 1), and in the Commonwealth during 1907 (Fig. 2). These were superseded by a fuller reference based on later results in Year Book No. 5, pp. 230, etc. The results given depended upon intercensal estimates of population, and these having now been

adjusted to agree with the Census of 3rd April, 1911, some slight amendments of the figures in previous issues were made in Year Book No. 5. The figures are not now repeated.

(xiv.) *Tuberculosis of the Meninges.* The number of deaths registered in 1907 was 237; in 1908, 205; in 1909, 220; in 1910, 215; in 1911, 269; and in 1912, 215.

(xv.) *Other Forms of Tuberculosis.* Deaths numbered in 1907, 415; in 1908, 352; in 1909, 332; in 1910, 343; in 1911, 303; and in 1912, 327. The deaths in 1912 include the following forms of tuberculosis:—Abdominal tuberculosis, 146; Pott's disease, 49; white swellings, 24; tuberculosis of other organs, 45; and disseminated tuberculosis, 63. Tuberculosis of the larynx (see paragraph xiii.)

(xvi.) *All Forms of Tuberculosis.* A complete tabulation of all the different tubercular diseases from which deaths occurred in 1912, will be found in Bulletin No. 30 of Population and Vital Statistics. Here it will suffice to show a few of the features of the tabulation mentioned. The total number of deaths due to tubercular diseases was 3688, viz., 2084 males and 1604 females. The following table shews the ages of these 3688 persons:—

AGES OF PERSONS WHO DIED FROM TUBERCULAR DISEASES, 1912.

COMMONWEALTH.

Ages.	Male.	Female	Total.	Ages.	Male.	Female	Total.
Under 5 years ...	122	111	233	55 years and under 60	131	42	173
5 years and under 10	30	36	66	60 " " 65	90	35	125
10 " " 15	18	48	66	65 " " 70	55	33	88
15 " " 20	85	141	226	70 " " 75	42	23	65
20 " " 25	174	271	445	75 " " 80	13	6	19
25 " " 30	244	227	471	80 " over ...	6	5	11
30 " " 35	223	178	401				
35 " " 40	229	156	385				
40 " " 45	196	116	312	Total Deaths ...	2,084	1,604	3,688
45 " " 50	235	108	343				
50 " " 55	191	68	259				

A tabulation has been made of the occupations of males dying from tubercular diseases during 1912. A summary is here given:—

OCCUPATION OF MALES WHO DIED FROM TUBERCULAR DISEASES, 1912.

COMMONWEALTH.

Occupation.	No. of Deaths	Occupation.	No. of Deaths
Professional class ...	106	Agricultural class ...	156
Domestic class ...	79	Pastoral class ...	50
Mercantile class ...	266	Working in mines and quarries ...	205
Engaged in transport and communication ...	138	Other primary producers ...	12
Manufacturing class ...	276	Independent means ...	21
Engaged in building and construction ...	99	Dependents ...	247
Other industrial workers ...	383	Occupation not stated ...	46
		Total male deaths ...	2,084

The length of residence in the Commonwealth of persons who died from tubercular diseases has been tabulated for the year 1912 for all the Commonwealth States, with the following results:—

LENGTH OF RESIDENCE IN COMMONWEALTH
OF PERSONS WHO DIED FROM TUBERCULAR DISEASES, 1912.

Length of Residence in Commonwealth.	Male.	Fem.	Total.	Length of Residence in Commonwealth.			
				Male.	Fem.	Total.	
Born in Commonwealth ...	1,329	1,333	2,662	Resident 10 yrs. & under 15	36	7	43
Resident under 1 year ...	44	24	68	" 15 " " 20	61	12	73
" 1 year ...	39	14	53	" 20 " over ...	383	144	527
" 2 years ...	23	9	32	Length of resid'ce not stated	110	34	144
" 3 " ...	9	8	17				
" 4 " ...	10	4	14				
" 5 " & under 10	40	15	55	Total Deaths ...	2,084	1,604	3,688

There would not appear, therefore, to be much ground for the statement sometimes heard that many persons arrive in Australia in the last stages of consumption.

In order to shew the prevalence of tuberculosis in the several States, the death rates from tubercular diseases are shewn in the following table, together with the percentage which deaths from tuberculosis bear on the total number of deaths registered:—

DEATH RATES (a) FROM TUBERCULOSIS AND PERCENTAGE ON TOTAL DEATHS.
COMMONWEALTH, 1912.

State.	Death Rates (a) from Tuberculosis.			Percentage on Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	0.80	0.62	0.71	6.55	6.54	6.55
Victoria ...	0.95	0.91	0.93	7.09	8.25	7.61
Queensland ...	0.78	0.44	0.62	6.20	4.86	5.69
South Australia ...	0.97	0.86	0.92	8.68	9.29	8.95
Western Australia	1.06	0.56	0.85	8.28	6.40	7.65
Tasmania ...	0.58	1.03	0.80	5.04	10.36	7.44
North. Territory	2.90	3.39	2.98	13.12	33.33	14.93
Federal Territory	...	...	...	...	...	...
Commonwealth	0.86	0.72	0.79	6.88	7.33	7.07

(a) Number of deaths from tuberculosis per 1000 of mean population.

It may be of interest to state that while deaths from pulmonary tuberculosis in the Commonwealth were 0.68 per thousand in 1912, they were 0.93 per thousand in Ontario in 1911; 1.08 per thousand in England and Wales in 1911; 1.51 per thousand in Prussia in 1911; 2.94 per thousand in Austria in 1911; and 3.67 per thousand in Hungary in 1911. The Commonwealth occupies, therefore, a very enviable position in regard to tubercular diseases, when compared with European countries.

(xvi.) *Cancer and other Malignant Tumours.* Deaths from cancer shew a tendency to increase, the figures for 1907 being 2940 deaths; for 1908, 2921 deaths; for 1909, 3112 deaths; 1910, 3205 deaths; 1911, 3321 deaths; and 1912, 3537 deaths. Of the deaths registered in 1912, 1845 were those of males, viz., 709 in New South Wales, 572 in Victoria, 221 in Queensland, 173 in South Australia, 105 in Western Australia; 62 in Tasmania; 2 in the Northern Territory, and 1 in the Federal Territory; while 1692 were those of females; viz., 578 in New South Wales, 644 in Victoria, 173 in Queensland, 152 in South Australia, 75 in Western Australia, and 70 in Tasmania. Bulletin No. 30 contains a complete tabulation of the various types of cancer and of the seat of the disease, of which the following is a summary:—

DEATHS FROM CANCER, COMMONWEALTH, 1912.

Seat of Disease.	Male.	Female	Total.
Cancer, etc., of the buccal cavity	260	31	291
„ „ the stomach and liver	779	501	1,280
„ „ the peritoneum, the intestines, and the rectum ...	220	219	439
„ „ the female genital organs ... ..	...	362	362
„ „ the breast ... ..	...	276	276
„ „ the skin	81	41	122
„ „ other organs	505	262	767
Total Deaths	1,845	1,692	3,537

Of these deaths 1012 were described as cancer, 1551 as carcinoma, 145 as epithelioma, 452 as "malignant disease," 37 as "malignant tumour," 10 as neoplasm, 37 as "rodent ulcer," 275 as sarcoma, and 18 as scirrhus.

The ages of the 3537 persons who died from cancer in 1912, are shewn in the following table, from which it will be seen that while the ages below 35 are not by any means immune from the disease, the great majority of deaths occurred at ages from 35 upwards, the maximum being found in the age group 65 to 70.

AGES OF PERSONS WHO DIED FROM CANCER, 1912.
COMMONWEALTH.

Ages.	Males.	Female	Total.	Ages.	Males.	Female	Total.
Under 15 years ...	18	15	33	65 years and under 70	281	183	464
15 years and under 20	6	5	11	70 „ „ 75	223	196	419
20 „ „ 25	14	9	23	75 „ „ 80	174	157	331
25 „ „ 30	15	20	35	80 „ „ 85	92	60	152
30 „ „ 35	25	39	64	85 years and over ...	27	34	61
35 „ „ 40	39	70	109	Age not stated ...	3	1	4
40 „ „ 45	74	138	212				
45 „ „ 50	166	173	339				
50 „ „ 55	199	187	386	Total Deaths ...	1,845	1,692	3,537
55 „ „ 60	246	213	459				
60 „ „ 65	243	192	435				

A tabulation has been made of the occupations of the males who died from cancer, of which the following is a summary:—

OCCUPATION OF MALES WHO DIED FROM CANCER, 1912.
COMMONWEALTH.

Occupation.	No. of Deaths.	Occupation.	No. of Deaths.
Professional class	77	Pastoral class	72
Domestic class	63	Working in mines and quarries... ..	136
Mercantile class	206	Other primary producers	13
Engaged in transport and communication	124	Independent means	67
Manufacturing class	201	Dependents	61
Engaged in building and construction	113	Occupation not stated... ..	53
Other industrial workers	373		
Agricultural class	286	Total Male Deaths	1,845

As the following tables shew, the total death rates from cancer are below those for tubercular diseases in all the States with the exception of New South Wales, while both rates were equal in Queensland. The male death rate from cancer was, in 1912, in excess of that from tuberculosis in Tasmania, and the female death rates in New South Wales, Victoria, Queensland, and Western Australia. While the death rates from tuberculosis have a general tendency to decrease, the death rates from cancer have, on the contrary, shewn an increase in nearly every recent year. Thus for the whole Commonwealth in 1907 the death rate from tuberculosis was 0.22 per thousand greater than that from cancer, and in 1908 the excess amounted to 0.25 per thousand. In 1909 this decreased to 0.14; in 1910 to 0.10; in 1911 to 0.09; and in 1912 to 0.03 per thousand.

DEATH RATES (a) FROM CANCER AND PERCENTAGE ON TOTAL DEATHS, 1912.

COMMONWEALTH.

State.	Death Rates (a) from Cancer.			Percentage on Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	0.78	0.70	0.74	6.39	7.44	6.82
Victoria ...	0.84	0.95	0.90	6.31	8.57	7.33
Queensland ...	0.64	0.60	0.62	5.13	6.61	5.69
South Australia ...	0.91	0.73	0.77	7.18	7.89	7.50
Western Australia	0.61	0.58	0.60	4.75	6.67	5.40
Tasmania ...	0.63	0.75	0.69	5.49	7.55	6.42
Northern Territory	0.72	...	0.60	3.28	...	2.99
Federal Territory	0.90	...	0.49	25.00	...	10.00
Commonwealth	0.76	0.76	0.76	6.09	7.73	6.78

(a) Number of deaths from Cancer per 1000 of mean population.

The following table shows the death rate of the Commonwealth in comparison with other countries:—

CANCER—DEATH RATE IN VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Hungary ...	1911	0.46	New Zealand ...	1912	0.78
Spain ...	1911	0.51	France ...	1910	0.79
Denmark ...	1911	0.57	Prussia ...	1911	0.81
Western Australia ...	1912	0.60	Austria ...	1911	0.82
Queensland ...	1912	0.62	Ireland ...	1911	0.82
Belgium ...	1910	0.63	German Empire	1911	0.88
Canada (Ontario) ...	1911	0.63	Victoria ...	1912	0.90
Italy ...	1911	0.65	Norway ...	1910	0.93
Tasmania ...	1912	0.69	United Kingdom	1910	0.96
New South Wales ...	1912	0.74	England and Wales	1911	0.99
United States (Registra- tion Area ...)	1911	0.74	Scotland ...	1910	1.03
Commonwealth ...	1912	0.76	Netherlands ...	1911	1.07
South Australia ...	1912	0.77	Switzerland ...	1910	1.23

The fifth issue of this Year Book contains, on pages 230, etc., a paper dealing, *inter alia*, with the incidence of cancer in the Commonwealth. The paper is not reprinted in the present issue.

(xvii.) *Simple Meningitis*. The table shews 648 deaths in 1907, 676 deaths in 1908, 616 deaths in 1909, 567 in 1910, 636 in 1911, and 749 in 1912.

(xviii.) *Apoplexy, Hæmorrhage, and Softening of the Brain*. The deaths registered under this heading in 1907 were 1901, viz., 1038 males and 863 females; in 1908, 1867, viz., 991 males and 876 females; in 1909, 1665, viz., 869 males and 796 females; in 1910, 1704, viz., 864 males and 840 females; in 1911, 2178, viz., 1122 males and 1056 females, and in 1912, 2176, viz., 1146 males and 1030 females. The 1912 figures are made up of hæmorrhage of the brain and apoplexy—1086 males, 968 females, total 2054; and softening of the brain—60 males, 62 females, total 122.

(xix.) *Organic Diseases of the Heart*. The number of deaths registered in 1912 was 5267, viz., 3042 males and 2225 females. Of these deaths, New South Wales was responsible for 1119 males and 727 females; Victoria for 957 males and 873 females; Queensland for 459 males and 248 females; South Australia for 249 males and 220 females; Western Australia for 133 males and 74 females; Tasmania for 125 males and 82 females; and the Federal Territory 1 female. To the figures for 1912 correspond the following death rates and percentages to total deaths:—

DEATH RATES (a) FROM ORGANIC HEART DISEASE AND PERCENTAGE ON TOTAL DEATHS, COMMONWEALTH, 1912.

State.	Death Rates (a) from Organic Heart Disease.			Percentage on Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	1.23	0.88	1.06	10.09	9.36	9.79
Victoria ...	1.41	1.29	1.35	10.55	11.61	11.03
Queensland ...	1.34	0.86	1.12	10.66	9.48	10.21
South Australia ...	1.16	1.06	1.11	10.34	11.42	10.82
Western Australia	0.77	0.57	0.69	6.02	6.58	6.21
Tasmania ...	1.27	0.88	1.08	11.06	8.95	10.06
Northern Territory	...	...	...	...	...	...
Federal Territory	...	1.08	0.49	...	16.67	10.00
Commonwealth ...	1.26	1.00	1.13	10.05	10.16	10.10

(a) Number of deaths from Organic Heart Disease per 1000 of mean population.

(xx.) *Acute Bronchitis*. The classification of causes of deaths requires deaths of persons under five years of age, which are merely ascribed to "bronchitis," to be classified under "acute bronchitis," and similarly certified deaths of older persons under "chronic bronchitis." This rule has been followed throughout in compiling the tables for 1907-1912, with the result that acute bronchitis is credited with 514 deaths in 1907, 412 deaths in 1908, 422 deaths in 1909, 420 deaths in 1910, 515 deaths in 1911, and 460 deaths in 1912, viz., 242 males and 218 females.

(xxi.) *Chronic Bronchitis*. The adjustment mentioned in the preceding paragraph gives a total of 844 deaths in 1907, 818 deaths in 1908, 897 deaths in 1909, 859 in 1910, 1046 in 1911, and 1053 in 1912, viz., 599 males and 454 females.

(xxii.) *Pneumonia*. The 1912 figures were 1385 males and 722 females, a total of 2107 deaths.

(xxiii.) *Other Diseases of the Respiratory System.* This head was established in 1910, the figures previously being included in "Other Diseases" (paragraph xxxvii.). Deaths in 1907 numbered 1689; in 1908, 1569; in 1909, 1565; in 1910, 1544; in 1911, 1872; and in 1912, 1863. The total for 1912 is made up as follows, viz.:—Diseases of the nasal fossæ, 2 deaths; diseases of the larynx, 81 deaths; diseases of the thyroid body, 14 deaths; broncho-pneumonia, 989 deaths; pleurisy, 164 deaths; pulmonary congestion and apoplexy, 211 deaths; gangrene of the lung, 28 deaths; asthma, 146 deaths; pulmonary emphysema, 9 deaths; fibroid phthisis, miners' complaint, 135 deaths; other diseases of the respiratory system (tuberculosis excepted), 84 deaths.

(xxiv.) *Diseases of the Stomach (Cancer excepted).* In 1912 this heading includes: Ulcer of the stomach, 71 males, 54 females; and other diseases of the stomach (cancer excepted), 167 males, 165 females; a total of 457 deaths. The corresponding figures for the years 1907 to 1911 were 334, 308, 272, 297, and 370 respectively.

(xxv.) *Diarrhœa and Enteritis (Children under two years only).* In 1907, deaths numbered 2733, viz., 1513 boys and 1220 girls; in 1908, 3236, viz., 1814 boys and 1422 girls; in 1909, 2803, viz., 1544 boys and 1259 girls; in 1910, 3145, viz., 1713 boys and 1432 girls; in 1911, 2462, viz., 1388 boys and 1074 girls, and in 1912, 3248, viz., 1794 boys and 1454 girls. The 1912 deaths were distributed amongst the six States as follows:—New South Wales, 753 males, 641 females, total 1394; Victoria, 422 males, 326 females, total 748; Queensland, 273 males, 217 females, total 490; South Australia, 118 males, 84 females, total 202; Western Australia, 184 males, 144 females, total 328; Tasmania, 44 males, 41 females, total 85; and Federal Territory, 1 female.

The following are the death rates and percentages on total deaths due to infantile diarrhœa and enteritis in the States and Territories for the year 1912:—

DEATH RATES (a) FROM INFANTILE DIARRHŒA AND ENTERITIS, AND PERCENTAGE ON TOTAL DEATHS, COMMONWEALTH, 1912.

State.	Death Rate (a) from Infantile Diarrhœa and Enteritis.			Percentage on Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	0.83	0.78	0.80	6.79	8.25	7.39
Victoria ...	0.62	0.48	0.55	4.65	4.34	4.51
Queensland ...	0.80	0.75	0.78	6.34	8.29	7.08
South Australia ...	0.55	0.41	0.48	4.90	4.36	4.66
Western Australia	1.06	1.11	1.09	8.33	12.80	9.83
Tasmania ...	0.45	0.44	0.44	3.89	4.42	4.13
Northern Territory	...	...	...	...	...	...
Federal Territory	...	1.08	0.49	...	16.67	10.00
Commonwealth	0.74	0.65	0.70	5.92	6.64	6.23

(a) Number of deaths from these diseases per 1000 of mean population.

As a large number of these deaths is directly due to improper feeding, it would be interesting to know the percentage of infants who were bottle-fed, but, unfortunately, no provision exists for the registration of this information. The number of deaths was larger than usual in 1908, particularly in Victoria, and to a lesser degree in South Australia and in Tasmania, owing to the phenomenal heat experienced in the early part of that year. The death rates for the three States named were 0.83, 0.61, and 0.71 per 1000 respectively in 1908, compared with 0.55, 0.45 and 0.48 in 1907, and with 0.50, 0.36 and 0.51 in 1911. The rate in 1912 was higher in every State, Tasmania excepted, than that for 1911, the increase being particularly noticeable in New South Wales, Queensland, and Western Australia, where the 1911 rate had been 0.57, 0.58, and 0.87 respectively, compared with 0.80, 0.78, and 1.09 for 1912, as shewn in the preceding table.

(xxvi.) *Appendicitis and Typhlitis.* Prior to 1910 deaths from these causes were included in Other Diseases, paragraph xxxvii. Deaths numbered 305 in 1907, 293 in 1908, 344 in 1909, 315 in 1910, 320 in 1911, and in 1912, 347, viz., 215 males and 132 females.

(xxvii.) *Hernia, Intestinal Obstructions.* The number of deaths has not varied much from year to year, the number registered in 1907 being 411; in 1908, 339; in 1909, 396; in 1910, 398; in 1911, 439; and in 1912, 463, viz., 248 males and 215 females.

(xxviii.) *Cirrhosis of the Liver.* The deaths in 1907 numbered 325; in 1908, 362; in 1909, 331; in 1910, 368; in 1911, 385; and in 1912, 426, viz., 284 males and 142 females.

(xxix.) *Nephritis and Bright's Disease.* The number of deaths attributable to these diseases from year to year is a very large one. In 1907 there were registered the deaths of 1065 males and 695 females; in 1908, those of 1140 males and 724 females; in 1909 those of 1076 males and 723 females; in 1910, 1771, 1077 males and 694 females; in 1911, 1951, 1197 males and 754 females; and in 1912, 2188, 1352 males and 836 females. Of the deaths registered in 1912, those of 66 males and 69 females were ascribed to acute nephritis, and those of 1286 males and 767 females to Bright's disease. New South Wales was responsible for 716 deaths; Victoria for 847; Queensland for 306; South Australia for 180; Western Australia for 85; Tasmania for 49; the Northern Territory for 4, and the Federal Territory for 1; making a total of 2188.

(xxx.) *Non-cancerous Tumours and other Diseases of the Female Genital Organs.* Deaths in 1907 numbered 128; in 1908, 159; in 1909, 130; in 1910, 149; in 1911, 120; and in 1912, 145. Included in the 145 deaths registered in 1912 were the following:—Non-*puerperal* uterine hæmorrhage, 4; non-cancerous uterine tumours, 32; other diseases of the uterus, 32; cysts and other ovarian tumours, 29; other diseases of the female genital organs, 48.

(xxx.) *Puerperal Septicæmia (Puerperal Fever, Puerperal Peritonitis, Puerperal Phlebitis).* Deaths in 1907 were 179; in 1908, 202; in 1909, 201; in 1910, 218; in 1911, 209, and in 1912, 231.

(xxxii.) *Other Puerperal Accidents of Pregnancy and Confinement.* The deaths in 1907 numbered 435; in 1908, 404; in 1909, 376; in 1910, 373; in 1911, 406; and in 1912, 413. Included in the 413 deaths registered in 1912 were the following:—Accidents of pregnancy, 92; *puerperal* hæmorrhage, 75; other accidents of childbirth, 83; *puerperal* albuminuria and convulsions, 120; *puerperal* phlegmasia alba dolens, embolus, sudden death, 35; death following childbirth, 8.

(xxxiii.) *All Puerperal Diseases.* The 644 deaths registered in 1912 under the two preceding headings will be found tabulated in "Bulletin No. 30: Commonwealth Demography" under various aspects. It will suffice to repeat here the following facts:—

Of the 644 mothers who died in childbirth during the year 1912, 579 were married and 65 were single. As the total number of nuptial confinements was 124,427, and of ex-nuptial confinements 7299, it follows that one in 215 of married mothers, and one in 112 of single mothers, died of *puerperal* disease, the general proportion being one in 205, as against one in 197 in 1911, one in 196 in 1910, one in 195 in 1909, one in 181 in 1908, and one in 178 in 1907.

The ages of the mothers who died varied from 15 to 47 years, and are shewn in the following table:—

AGES OF MOTHERS WHO DIED IN CHILDBIRTH, COMMONWEALTH, 1912.

Age at Death.	Married Women.	Single Women.	Total.	Age at Death.	Married Women.	Single Women.	Total.
15 years ...	...	3	3	32 years ...	30	1	31
16 " ...	1	2	3	33 " ...	22	...	22
17 " ...	3	3	6	34 " ...	18	1	19
18 " ...	6	4	10	35 " ...	20	...	20
19 " ...	8	9	17	36 " ...	35	...	35
20 " ...	12	4	16	37 " ...	32	1	33
21 " ...	12	5	17	38 " ...	25	1	26
22 " ...	14	3	17	39 " ...	17	1	18
23 " ...	31	6	37	40 " ...	14	1	15
24 " ...	21	3	24	41 " ...	11	1	12
25 " ...	24	4	28	42 " ...	7	2	9
26 " ...	35	1	36	43 " ...	10	...	10
27 " ...	22	1	23	44 " ...	9	...	9
28 " ...	37	2	39	45 " ...	6	...	6
29 " ...	25	3	28	47 " ...	1	...	1
30 " ...	36	1	37				
31 " ...	35	2	37	Total deaths	579	65	644

Of the 579 married women shewn in the above table, 17 died in Tasmania; in regard to these no information is available as to previous issue and as to duration of marriage. Of the remaining 562 women, 197 died at their first confinement, 84 at their second, 73 at their third, 59 at their fourth, 52 at their fifth, 32 at their sixth, 27 at their seventh, 15 at their eighth, 8 at their ninth, 6 at their tenth, 6 at their eleventh, 2 at their twelfth, and 1 at her thirteenth. The total number of children of the 562 mothers was 1578.

Forty-three of the mothers who died had been married less than one year, 85 between one and two years, 52 between two and three years, the duration of marriage ranging up to 26 years. This tabulation will be found in detail, and distinguishing the ages at marriage, in "Bulletin No. 30; Commonwealth Demography," as will a further tabulation shewing the duration of marriage and previous issue in combination. These tables shew, for instance, that one mother, who had been married at the age of 24 years, died at the age of 43, in the 19th year of her marriage, at her thirteenth confinement.

(xxxiii.) *Congenital Debility and Malformations.* The total deaths registered under these heads in 1912 were 3611, of whom 3577 were children under 1 year of age, inclusive of 3135 under three months. The figures include:—Malformations, 279 males, 175 females, total 454; and congenital debility, icterus, and sclerema of children under one year of age, 1835 males and 1322 females, total 3157; or a grand total of 3611. Of these deaths, 1365 were registered in New South Wales, viz., 786 males and 579 females; 1015 in Victoria, viz., 595, males and 420 females; 453 in Queensland, viz., 264 males and 189 females; 339 in South Australia, viz., 195 males and 144 females; 255 in Western Australia, viz., 160 males and 95 females; 181 in Tasmania, viz., 112 males and 69 females; 1 male in the Northern Territory, and 1 male and 1 female in the Federal Territory.

(xxxiv.) *Senile Debility.* The deaths ascribed to "old age" form a large group, and are slightly in excess of those due to infantile debility. In 1907 they numbered 3136, viz., 1721 males and 1415 females; in 1908, 3466, viz., 2027 males and 1439 females; in 1909, 3194, viz., 1829 males and 1365 females; in 1910, 3353, viz., 1905 males and 1448 females; in 1911, 3849, viz., 2225 males and 1624 females, and in 1912, 4124, viz., 2362 males and 1762 females. Of the deaths registered in 1912, 1460 occurred in New South Wales, viz., 886 males and 574 females; 1445 in Victoria, viz., 769 males and 676 females; 389 in Queensland, viz., 255 males and 134 females; 443 in South Australia, viz., 224 males and 219 females; 150 in Western Australia, viz., 105 males and 45 females; 230 in Tasmania, viz., 118 males and 112 females; 5 males and 1 female in the Northern Territory and 1 female in the Federal Territory.

Of the males whose death was described as due to senility, 6 were aged between 55 and 59; 59 between 60 and 64; 169 between 65 and 69; 348 between 70 and 74; 609 between 75 and 79; 625 between 80 and 84; 359 between 85 and 89; 136 between 90 and 94; 45 between 95 and 99; while 4 were 100 years old and upwards; and of two the age was not stated.

Of the females, 1 was between 55 and 59; 35 were between 60 and 64; 107 between 65 and 69; 237 between 70 and 74; 404 between 75 and 79; 494 between 80 and 84; 308 between 85 and 89; 131 between 90 and 94; 36 between 95 and 99; while 7 were 100 years old and upwards; and of two the age was not stated.

(xxxv.) *Violence.* A very large number of deaths is every year due to external violence, and, as might be expected from the fact that their occupations expose them much more to accidents, males largely predominate. The figures quoted are exclusive of suicides, which have been treated as a separate group. Deaths ascribed to violence numbered in 1907, 2679, viz., 2038 males and 641 females; in 1908, 2922, viz., 2187 males and 735 females; in 1909, 2664, viz., 2050 males and 614 females; in 1910, 2738, viz., 2128 males and 610 females; in 1911, 3018, viz., 2323 males and 695 females; and in 1912, 3237, viz., 2559 males and 678 females. Of the deaths registered in 1912, those of 860 males and 242 females occurred in New South Wales; those of 543 males and 190 females in Victoria; those of 463 males and 121 females in Queensland; those of 198 males and 51 females in South Australia; those of 412 males and 54 females in Western Australia; those of 77 males and 20 females in Tasmania; and those of 6 males in the Northern Territory.

The following table shows the various kinds of accidental deaths which occurred in 1912, distinguishing males and females:—

DEATHS FROM VIOLENCE, COMMONWEALTH, 1912.

Cause of Death.	Males.	Females.	Total.
Poisoning by food	24	7	31
Venomous bites and stings	10	6	16
Other acute poisonings	36	20	56
Conflagration	8	1	9
Burns (conflagration excepted)	114	207	321
Absorption of deleterious gases	53	41	94
Accidental drowning	643	89	732
Traumatism by firearms	112	9	121
Traumatism by cutting or piercing instruments	3	2	5
Traumatism by fall	325	58	383
Traumatism in mines or quarries	155	...	155
Traumatism by machines	24	...	24
Traumatism by other crushing (vehicles, rail-ways, etc.)	509	58	567
Injuries by animals	74	6	80
Starvation, thirst, fatigue	46	5	51
Excessive cold	5	...	5
Effects of heat	81	46	127
Lightning	8	2	10
Electricity (lightning excepted)	8	...	8
Homicide by firearms	14	3	17
Homicide by cutting or piercing instruments...	11	8	19
Homicide by other means	35	30	65
Fractures (cause not specified)	116	57	173
Other external violence	145	23	168
Total Deaths	2,559	678	3,237

In every kind of violent death there was, therefore, an excess of males, with the exception of burning accidents, in which female deaths largely predominated.

The excessive heat of January, 1908, was responsible for an increase in the number of deaths caused by insolation, i.e., sunstroke and heat apoplexy, from 64 in 1907 to 246 in 1908, distributed as follows:—New South Wales, 46; Victoria, 130; Queensland, 14; South Australia, 39; Western Australia, 15; Tasmania, 2. In 1911 the deaths fell to 78, while in 1912 they numbered 127.

(xxxvi.) *Suicide*. It may be said that suicides have shown a tendency to decrease during recent years, the number in 1905 having been 520, viz., 431 males and 89 females; while in 1906 it was 499, viz., 403 males and 96 females; in 1907, 461, viz., 385 males and 76 females; in 1908, 497, viz., 413 males and 84 females; in 1909, 495, viz., 398 males and 97 females; in 1910, 516, viz., 432 males and 84 females; in 1911, 544, viz., 446 males and 98 females, and in 1912, 631, viz., 514 males and 117 females. Of the suicides in 1912, a number considerably in excess of the number in previous years, those of 195 males and 66 females, happened in New South Wales; those of 118 males and 27 females in Victoria; those of 96 males and 10 females in Queensland; those of 43 males and 6 females in South Australia; those of 43 males and 6 females in Western Australia; those of 18 males and 2 females in Tasmania, and that of 1 male in Northern Territory.

The modes adopted by persons who committed suicide in the years 1907 to 1912 were as follows:—

NUMBER OF MALE AND FEMALE SUICIDES, COMMONWEALTH, 1907 to 1912.

Mode of Death.	Males.		Females.		Total.	
	Total of 5 years 1907-11.	1912.	Total of 5 years 1907-11.	1912.	Total of 5 years 1907-11.	1912.
Poisoning	387	128	207	70	594	198
Asphyxia	7	4	1	...	8	4
Hanging or Strangulation	347	79	56	12	403	91
Drowning	177	34	84	11	261	45
Firearms	680	168	31	10	711	178
Cutting instruments	333	76	38	8	371	84
Precipitation from a height	22	...	5	...	27	...
Crushing... ..	28	8	5	1	33	9
Other modes	93	17	12	5	105	22
Total	2,074	514	439	117	2,513	631

The death rates from suicides and the percentage on total deaths borne by suicides are shown in the following table:—

DEATH RATES (a) FROM SUICIDE AND PERCENTAGE ON TOTAL DEATHS, 1912. COMMONWEALTH.

State.	Death Rates (a) from Suicide.			Percentage on Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	0.21	0.08	0.15	1.76	0.85	1.38
Victoria	0.17	0.04	0.11	1.31	0.36	0.87
Queensland	0.28	0.03	0.17	2.23	0.38	1.53
South Australia	0.20	0.03	0.12	1.79	0.31	1.13
Western Australia	0.25	0.05	0.16	1.95	0.53	1.47
Tasmania	0.18	0.03	0.11	1.59	0.32	1.02
Northern Territory	0.36	...	0.30	1.64	...	1.49
Federal Territory	...	...	...	...	...	...
Commonwealth	0.21	0.05	0.14	1.70	0.54	1.21

(a) Number of deaths from suicide per 1000 of mean population.

From the following table, which shows the ages of the persons who committed suicide in 1912, it will be seen that both extreme youth and extreme old age are represented:—

AGES OF PERSONS WHO COMMITTED SUICIDE, COMMONWEALTH, 1912.

Ages.	M.	F.	Total.	Ages.	M.	F.	Total.
10 years and under 15	4	3	7	60 years and under 65	20	4	24
15 " " 20	12	14	26	65 " " 70	23	3	26
20 " " 25	37	17	54	70 " " 75	10	...	10
25 " " 30	44	12	56	75 " " 80	7	...	7
30 " " 35	56	11	67	80 " " 85	1	...	1
35 " " 40	61	15	76	85 " " 90	1	...	1
40 " " 45	65	11	76	Age not stated	3	1	4
45 " " 50	61	10	71				
50 " " 55	62	12	74				
55 " " 60	47	4	51	Total Deaths ...	514	117	631

The following table shows the occupations of the 514 males who committed suicide:—

OCCUPATIONS OF MALE PERSONS WHO COMMITTED SUICIDE, 1912.

COMMONWEALTH.

Occupations.	Deaths.	Occupations.	Deaths.
Professional class ...	29	Pastoral class ...	25
Domestic class ...	30	Working in mines and quarries ...	27
Mercantile class ...	89	Other primary producers ...	5
Engaged in transport and communication ...	24	Independent means ...	9
Manufacturing class ...	55	Dependents ...	8
Engaged in building and construction ...	29	Occupation not stated ...	15
Indefinite industrial workers ...	110		
Agricultural class ...	59	Total Deaths ...	514

The assertion has been made that suicide has become more frequent during recent years, but an examination of the figures from the year 1871 onwards hardly bears this out. The absolute figures have certainly increased, but proportionately to the population the figures for 1906-10 were practically the same as those for 1886-90 and 1891-95. The figures for the two years 1911-12, which have been added to the table, shew, however, a regrettable increase, not only absolutely, but also in proportion to the population. No particulars are available for Western Australia prior to 1886, and from 1886 to 1895 the sexes are not distinguished. All figures for the first five periods are, therefore, exclusive of Western Australia:—

SUICIDES, COMMONWEALTH, 1871-75 to 1911-12.

Period.	Number of Suicides.			Suicides per One Million.			Suicides of Females to 100 Suicides of Males. Based on	
	Males.	Females.	Total.	Males.	Females.	Total.	Absolute Figures.	Rates.
1871-75	715	150	865	150.94	37.56	99.07	20.98	24.88
1876-80	878	145	1,023	159.69	31.06	100.62	16.51	19.45
1881-85	999	183	1,182	152.58	32.90	97.61	18.32	21.56
1886-90	1,394	292	a1,686	179.20	43.97	c116.92	20.95	24.54
1891-95	1,574	337	b1,911	181.34	44.09	d117.07	21.41	24.31
1896-1900	1,838	410	2,248	191.11	47.88	123.65	22.31	25.05
1901-05	2,054	380	2,434	201.78	40.88	124.98	18.50	20.26
1906-10	2,031	437	2,468	186.11	43.22	117.39	21.51	23.22
1911-12	960	215	1,175	201.94	49.07	128.62	22.40	24.30

a. 1705 inclusive of Western Australian figures. b. 1984 inclusive of Western Australian figures. c. 116.49 inclusive of Western Australian figures. d. 119.11 inclusive of Western Australian figures.

In the fifth issue of this Year Book (pp. 240, etc.), the result of a series of investigations into periodicity of suicide was published. The paper was partly reprinted in the sixth issue (pp. 241, etc.), but is not repeated in the present issue.

(xxxvii.) *Other Diseases.* The number of causes included under this heading is a very large one, amounting to no less than 79 of the items shewn in the detailed classification, and deaths were recorded under every one of these with the exception of the following six:—Glanders, anthrax, rabies, pellagra, intestinal parasites, and amputation. The total number of deaths under "other diseases" in 1907 was 6677, viz., 3933 males and 2744 females; in 1908, 7417, viz., 4351 males and 3066 females; in 1909, 7419, viz., 4344 males and 3075 females; in 1910, 7794, viz., 4590 males and 3204 females; in 1911, 7652, viz., 4508 males, 3144 females, and in 1912, 8300, viz., 4777 males and 3523 females. Following the revised edition of the classification the following changes have been made in this heading during 1910: beri-beri is now included under this heading instead of under xii., "Other Epidemic Diseases." Other diseases of the respiratory system (1863 deaths) are now shewn under a new head (xxiii.), and appendicitis and typhlitis (347 deaths) under head xxvi. Some of the diseases included here account for very considerable numbers of deaths. Thus there were 804 deaths ascribed to diarrhoea and enteritis of children over two years of age and of adults, 473 to convulsions of children under five years of age; 437 to diabetes; 370 to paralysis without indicated cause; and 470 to diseases of the arteries, atheroma, and aneurism. Particulars of the deaths included in 1912 are shewn in the following table:—

CAUSES OF DEATH INCLUDED UNDER "OTHER DISEASES," COMMONWEALTH, 1912

Causes.	M.	F.	Total.	Causes.	M.	F.	Total.
Purulent Infection and Septicæmia	81	77	158	Diseases of the Lymphatic System	13	7	20
Tetanus	86	34	120	Hæmorrhages, Other Diseases of Circulatory System ...	15	15	30
Mycoses	2	1	3	Diseases of the Mouth and its Associated Organs	4	9	13
Beri-beri	66	2	68	Diseases of the Pharynx	30	19	49
Ricketts	7	5	12	Diseases of the Oesophagus ...	13	6	19
Syphilis	111	73	184	Diarrhoea and Enteritis of Children over two years of age and Adults	407	397	804
Gonococcus Infection	4	...	4	Ankylostomiasis	2	1	3
Other Tumours (Tumours of the female genital organs excepted)	13	24	37	Other Diseases of the Intestine	35	40	75
Acute Articular Rheumatism	96	121	217	Acute Yellow Atrophy of the Liver	2	9	11
Chronic Rheumatism and Gout	38	52	90	Hydatid Tumours of the Liver	23	25	48
Scurvy	3	2	5	Biliary Calculi	25	51	76
Diabetes	180	257	437	Other Diseases of the Liver ...	93	104	197
Exophthalmic Goitre	9	55	64	Diseases of the Spleen	6	7	13
Addison's Disease	15	14	29	Simple Peritonitis (non-puerperal)	75	87	162
Leucæmia	46	24	70	Other Diseases of the Digestive System	22	13	35
Anæmia, Chlorosis	136	134	270	Chyluria	1	...	1
Other General Diseases	63	55	118	Other Diseases of the Kidneys and their Adnexa	75	37	112
Acute and Chronic Alcoholism	150	36	186	Calculi of Urinary Passages ...	16	9	25
Chronic Lead Poisoning	6	...	6	Diseases of the Bladder	155	30	185
Other Chronic Poisonings due to occupations	2	...	2	Other Diseases of the Urethra, Urinary Abscess, etc.	18	2	20
Other Chronic Poisonings	4	1	5	Diseases of the Prostate	179	...	179
Encephalitis	32	29	61	Non-venereal Diseases of the Male Genital Organs	1	...	1
Progressive Locomotor Ataxia	71	14	85	Non-puerperal Diseases of the Breast (Cancer excepted) ...	...	3	3
Other Diseases of the Spinal Cord	132	77	209	Gangrene	80	60	140
Paralysis without indicated cause	214	156	370	Furuncle	11	6	17
General Paralysis	115	23	138	Acute Abscess	44	30	74
Other Forms of Mental Alienation	31	39	70	Other Diseases of the Skin and Adnexa	19	23	42
Epilepsy	101	66	167	Non-tuberculous Diseases of the Bones	29	12	41
Convulsions (non-puerperal) ...	10	18	28	Other Diseases of the Joints (Tuberculosis & Rheumatism excepted)	5	1	6
Convulsions of Children under five years of age	258	215	473	Other Diseases of the Organs of Locomotion ... ..	...	1	1
Chorea	2	4	6	Other Diseases peculiar to Infancy	339	237	576
Neuralgia and Neuritis	21	28	49	Want of Care (Infants)	3	5	8
Other Diseases of the Nervous System	117	74	191				
Diseases of the Eye	1	...	1				
Diseases of the Ear	18	13	31				
Pericarditis	54	48	102				
Acute Endocarditis	148	134	282				
Angina Pectoris	76	36	112				
Diseases of the Arteries, Atheromas, Aneurism	348	122	470				
Embolism and Thrombosis	162	198	360				
Diseases of the Veins (Varices, Varicose Ulcers, Hæmorrhoids)	8	16	24				
				Total Deaths	4,777	3,523	8,300

(xxxviii.) *Unspecified or Ill-defined Diseases.* The number of cases which has to be included here is a considerable one from year to year, having numbered 1275 in 1907, 1262 in 1908, 1087 in 1909, 598 in 1910, 460 in 1911, and 590, viz., 388 males and 202 females in 1912. The detailed classification distinguishes these ill-defined diseases under three headings:—Ill-defined organic diseases, including such definitions as dropsy, anasarca, ascites, general œdema, etc.; sudden death, including syncope; and unspecified or ill-defined causes, of which the following are specimens:—Asthenia, coma, dentition, exhaustion, heart failure, etc. In 1912 the number of cases of death which would have to be classed under the first of these categories was 26; those belonging to the second, 29; and those belonging to the third, 535. It is, of course, true that there must always occur some cases where the disease is not well characterised, or where sufficient information is not procurable to allow of a clear definition being given in the certificate of death, but in the majority of cases included under this heading a more complete diagnosis and consequently a more satisfactory certificate would no doubt have been possible.

In the fifth issue of this Year Book, pp. 234, etc., some observations were published, dealing with the incidence of scarlet fever, measles, whooping cough, diphtheria and croup, typhoid, diarrhoea, enteritis, and dysentery. It has not been judged expedient to reprint the paper in the present issue.

19. **Causes of Death in Classes.**—The figures presented in the preceding paragraphs relate to certain definite causes of death. It is almost generally acknowledged that figures of this kind are of greater value in medical statistics than is a classification under general headings. The classification under fourteen general headings adopted by the compiler of The International Nomenclature is, however, shewn in the following table, together with the death rates and percentages on total deaths pertaining to those classes:

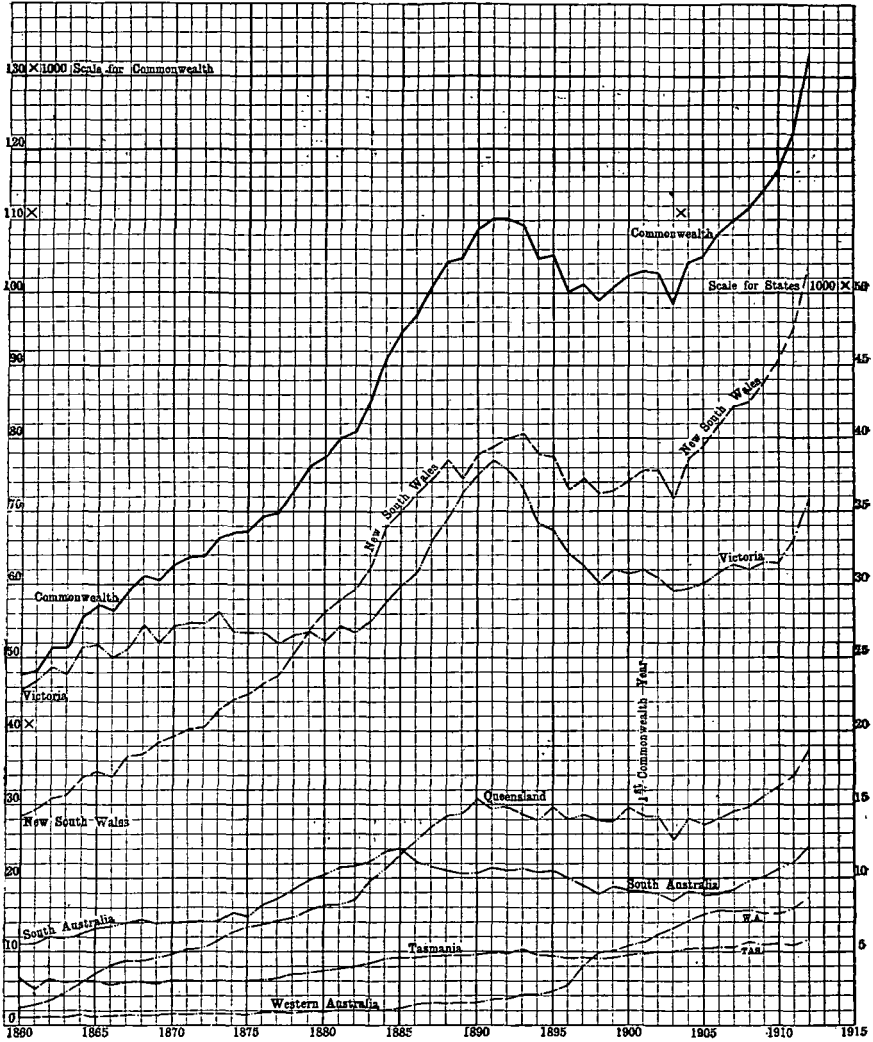
DEATHS, DEATH RATES (a), AND PERCENTAGES ON TOTAL DEATHS IN CLASSES, 1912.—COMMONWEALTH.

Class.	Total Deaths.			Death Rate. (a)			Percentage on Total Deaths.		
	M.	F.	Total.	M.	F.	Total	M.	F.	Total.
1. General diseases	6,572	5,604	12,176	2.72	2.52	2.62	21.70	25.60	23.34
2. Diseases of the Nervous System & of the Organs of Special Sense...	2,691	2,113	4,804	1.11	0.95	1.03	8.89	9.65	9.20
3. Diseases of the Circulatory System	3,866	2,801	6,667	1.60	1.26	1.43	12.76	12.80	12.78
4. Diseases of the Respiratory System	3,376	2,107	5,483	1.39	0.94	1.18	11.15	9.62	10.51
5. Diseases of the Digestive Organs...	3,516	2,930	6,446	1.45	1.32	1.39	11.61	13.38	12.36
6. Diseases of the Genito-Urinary System and Adnexa	1,797	1,062	2,859	0.74	0.48	0.62	5.93	4.85	5.48
7. Puerperal Condition ... ..	...	644	644	...	0.29	0.13	...	2.94	1.23
8. Diseases of the Skin and of the Cellular Tissue	154	119	273	0.06	0.05	0.06	0.51	0.54	0.52
9. Diseases of the Organs of Locomotion	34	14	48	0.01	0.01	0.01	0.11	0.07	0.09
10. Malformations	279	175	454	0.12	0.08	0.10	0.92	0.80	0.87
11. Infancy	2,177	1,564	3,741	0.90	0.70	0.81	7.19	7.15	7.17
12. Old Age	2,362	1,762	4,124	0.98	0.79	0.89	7.80	8.05	7.90
13. Violence	3,073	795	3,868	1.27	0.36	0.83	10.15	3.63	7.42
14. Ill-defined Diseases	388	202	590	0.16	0.09	0.13	1.28	0.92	1.13
Total	30,285	21,892	52,177	12.51	9.84	11.23	100.00	100.00	100.00

(a) Number of deaths per 1000 of mean population.

20. **Deaths of Children under 1 Year.**—“Bulletin No. 30; Commonwealth Demography” contains tables shewing the age at death of children dying during the first year of life from twenty causes. In the Bulletin mentioned the particulars are published for males and females separately for the States, Territories and Commonwealth, but the totals for the Commonwealth only are here shewn for both sexes combined:—

GRAPHS SHEWING TOTAL ANNUAL BIRTHS IN THE COMMONWEALTH AND STATES OF AUSTRALIA, 1860-1912.



(See Table page 146.)

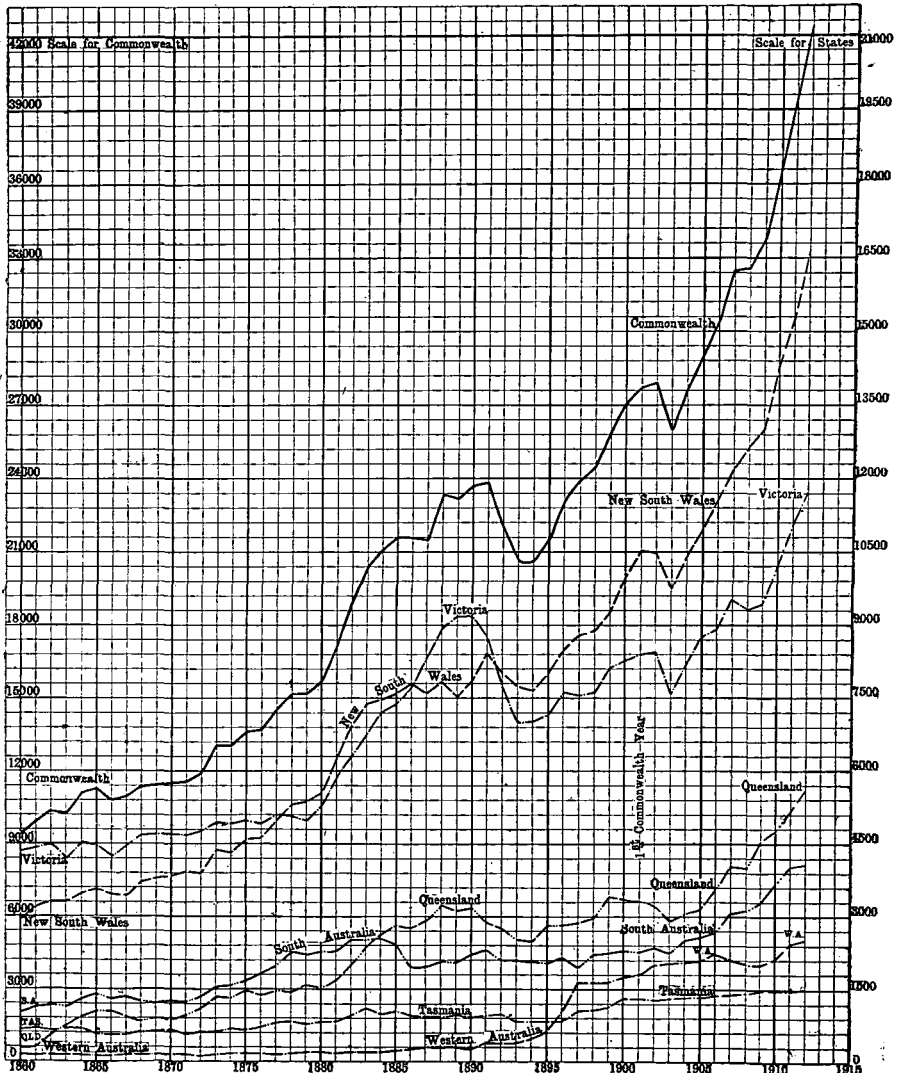
EXPLANATION OF GRAPHS.—The base of each small square represents an interval of one year for both Commonwealth and States, and the vertical height represents 2000 persons for the Commonwealth; and 1000 for the States.

The scale on the left relates to the Commonwealth, and that on the right to the States.

The distances upwards from the common zero lines of the States and Commonwealth, marked 0, denote the total annual number of births in the States and Commonwealth, the scale of the latter being reduced one-half.

The names of the States to which the graphs refer are written thereon, and the characters of the lines used are as follows:—Commonwealth, —————; New South Wales, ————; Victoria, - - - - -; Queensland, ————; South Australia, - - - - -; Western Australia, ————; Tasmania, - - - - -.

GRAPHS SHEWING TOTAL ANNUAL MARRIAGES IN THE COMMONWEALTH AND STATES OF AUSTRALIA, 1860-1912.



(See Table page 159.)

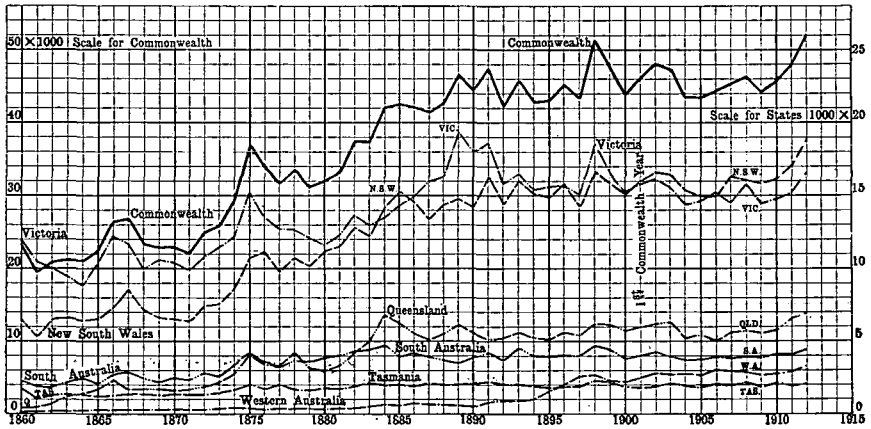
EXPLANATION OF GRAPHS.—The base of each small square represents an interval of one year for both Commonwealth and States, and the vertical height represents 600 marriages for the Commonwealth and 300 for the States.

The scale on the left relates to the Commonwealth, and that on the right relates to the States.

The distances upwards from the zero line, marked 0, denote the total annual number of marriages in the States and Commonwealth, the scale of the latter being reduced one-half.

The names of the States to which the graphs refer are written thereon, and the lines used are similar to those for births on page 201.

GRAPHS SHEWING TOTAL ANNUAL DEATHS IN THE COMMONWEALTH AND STATES OF AUSTRALIA, 1860-1912.



(See Table page 168.)

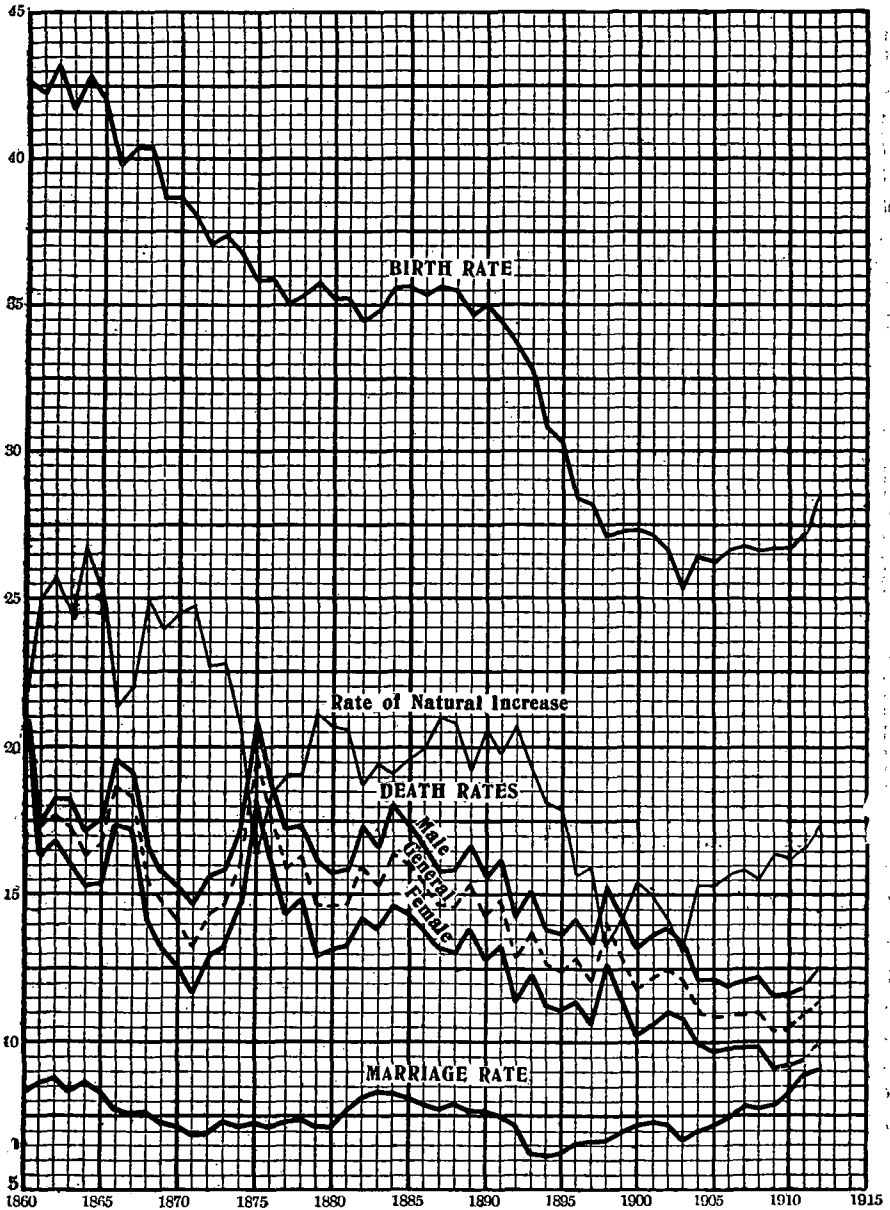
EXPLANATION OF GRAPHS.—The base of each small square represents an interval of one year for both Commonwealth and States, and the vertical height represents 2000 persons for the Commonwealth and 1000 for the States.

The scale on the left relates to the Commonwealth, and that on the right relates to the States.

The distances upwards from the common zero line for States and Commonwealth, marked 0, denote the total annual number of deaths in the States and Commonwealth, the scale of the latter being reduced one-half.

The names of the States to which the curves refer are written thereon, and the lines used are similar to those for births on page 201.

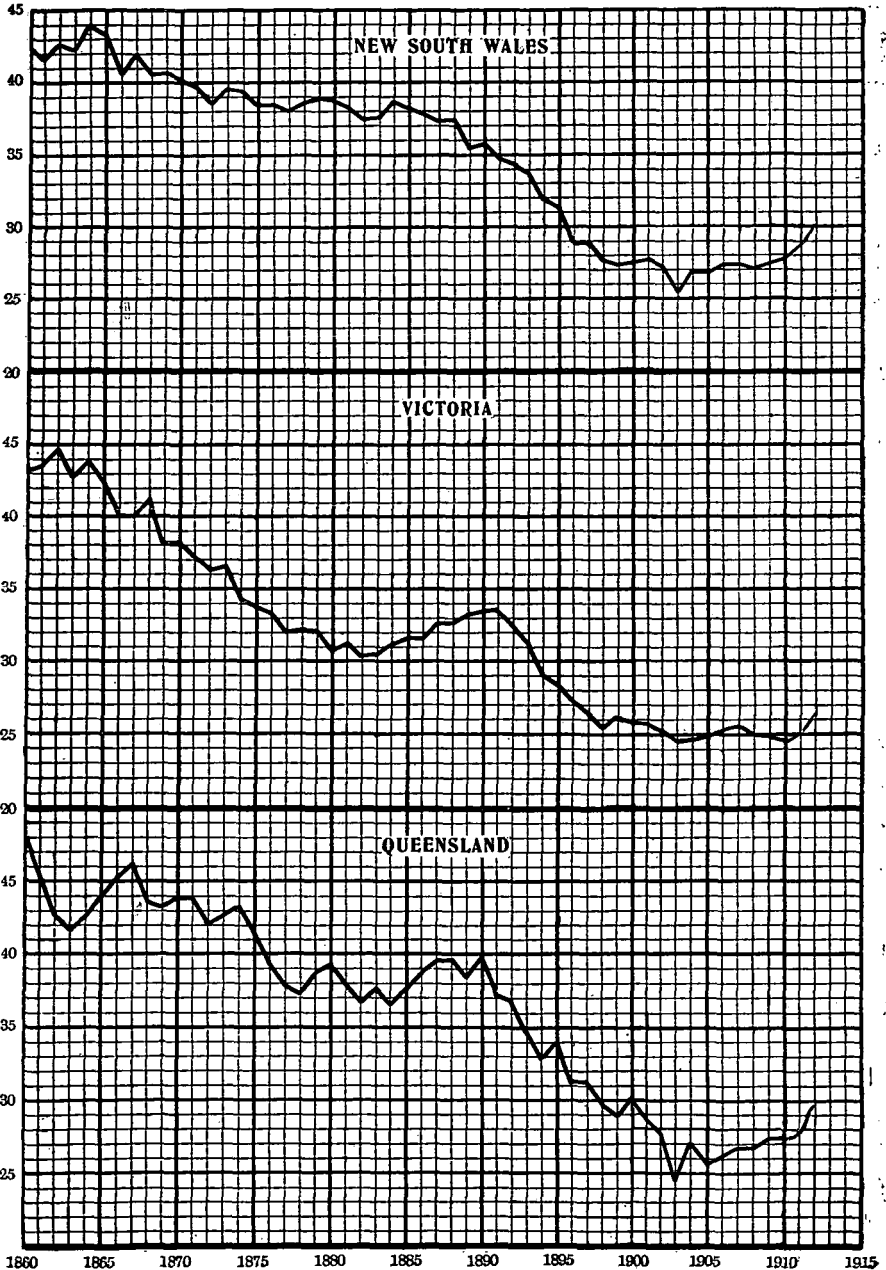
GRAPHS SHEWING GENERAL BIRTH, NATURAL INCREASE, DEATH (MALE, GENERAL AND FEMALE), AND MARRIAGE RATES IN THE COMMONWEALTH OF AUSTRALIA, 1860-1912.



(See pages 146, 159, 168 and 218.)

EXPLANATION OF GRAPHS.—The base of each small square represents one year's interval, and the vertical height, according to the character of the curve, one half per thousand of the population—the basic line being five per thousand of the population.

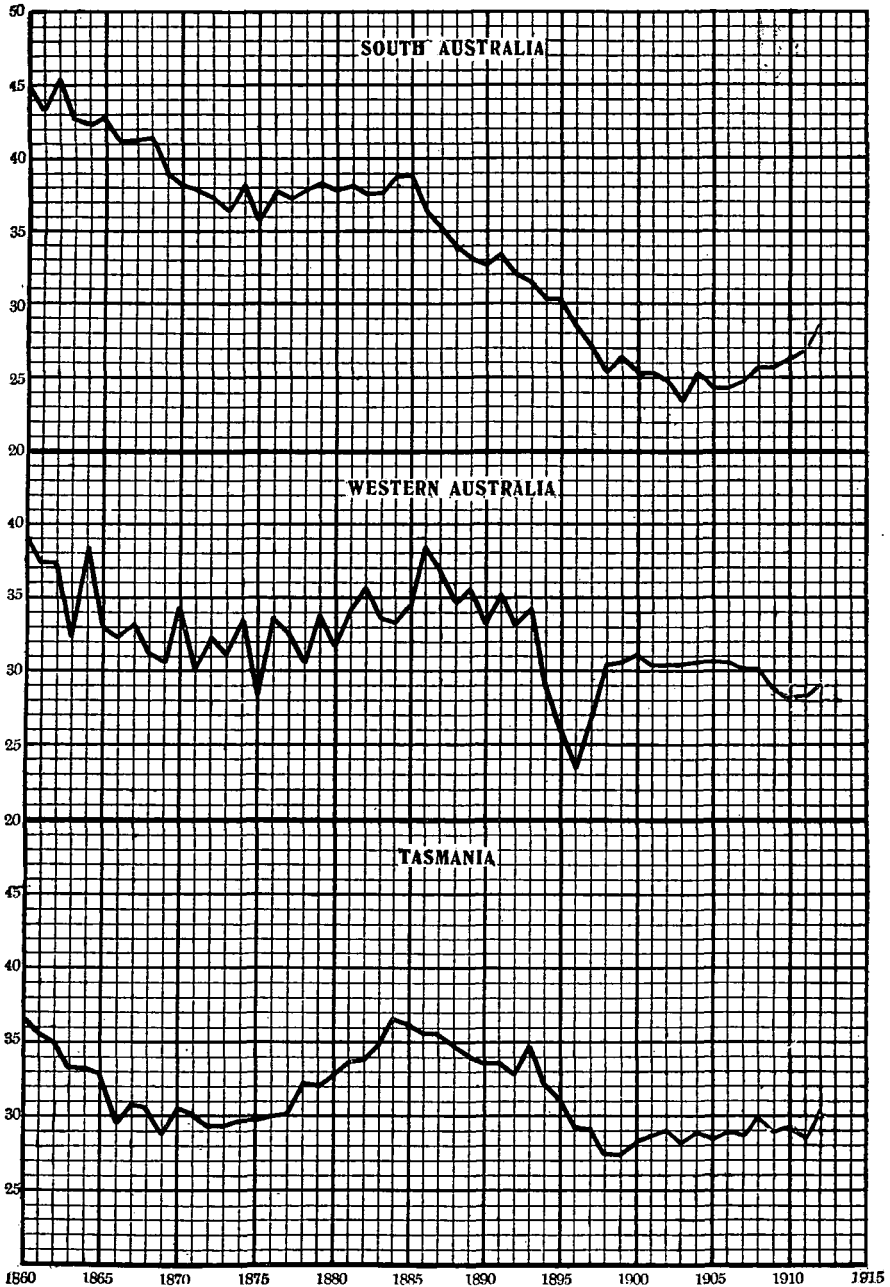
GRAPHS SHEWING BIRTH RATES IN THE STATES OF NEW SOUTH WALES,
VICTORIA, AND QUEENSLAND, 1860-1912.



(See Table page 146.)

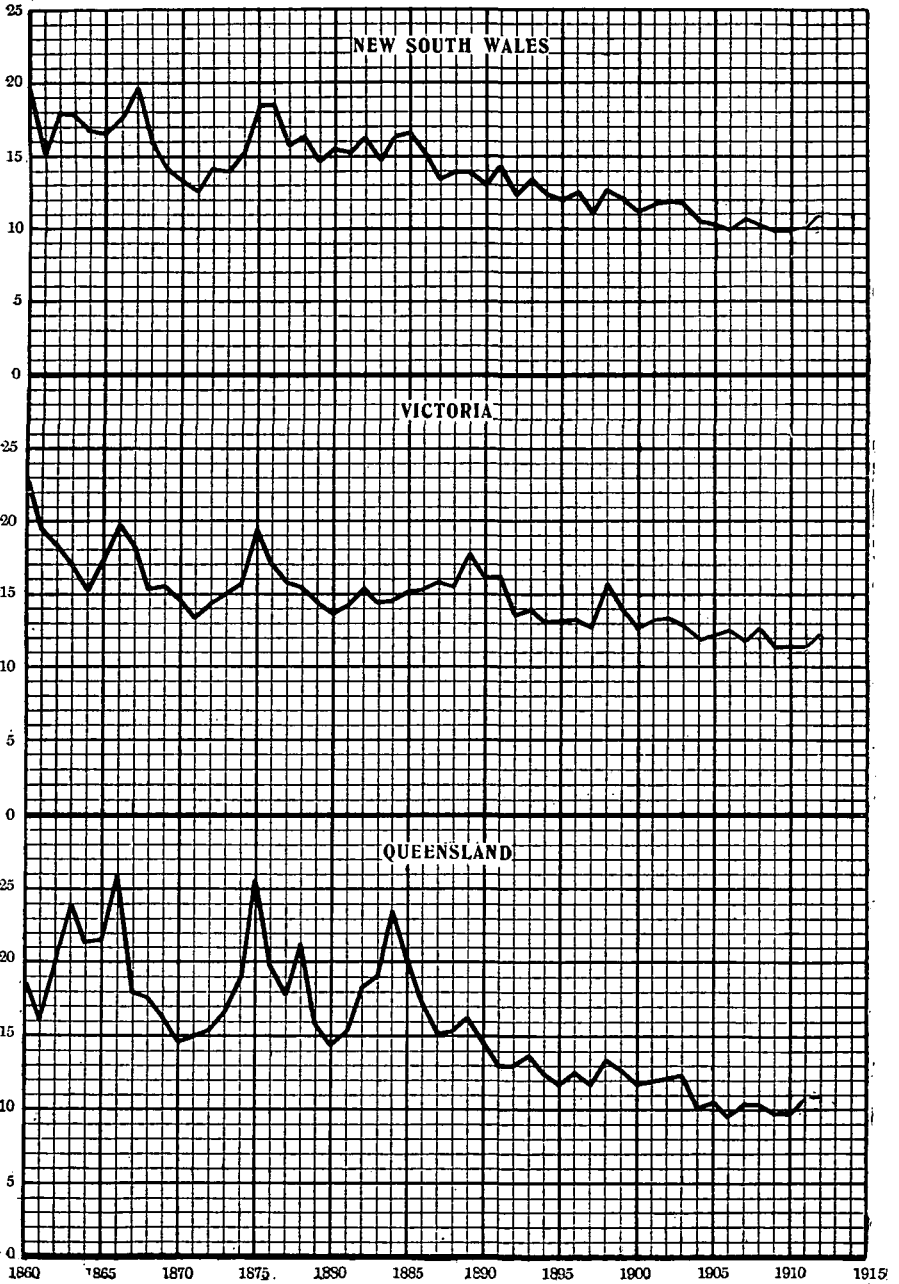
EXPLANATION OF GRAPHS.—The base of each small square represents one year's interval, and the vertical height one birth per thousand of the population—the basic line for each State being twenty per thousand of the population.

GRAPHS SHEWING BIRTH RATES IN THE STATES OF SOUTH AUSTRALIA,
WESTERN AUSTRALIA, AND TASMANIA, 1860-1912.



EXPLANATION OF GRAPHS.—The base of each small square represents one year's interval, and the vertical height one birth per thousand of the population—the basic line for each State being twenty per thousand of the population.

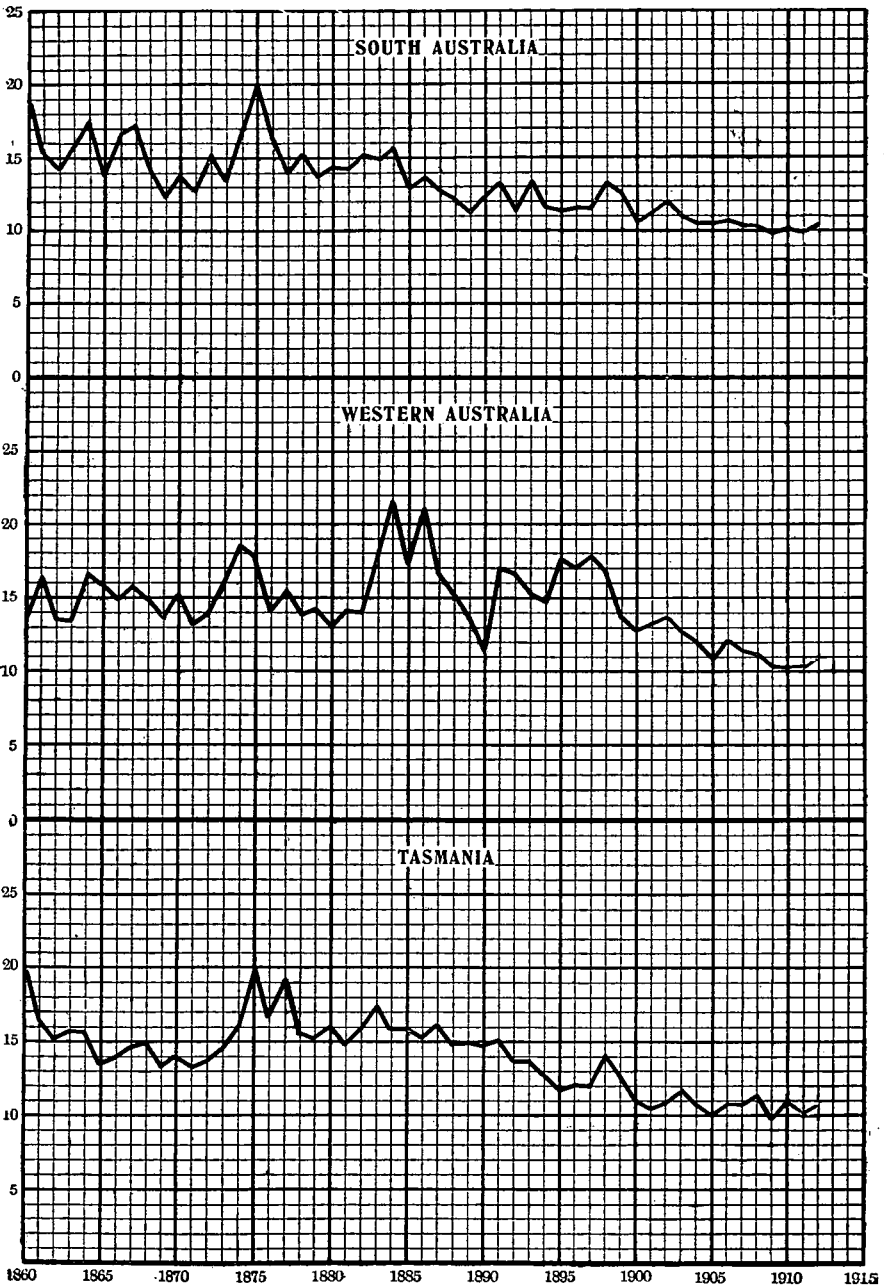
GRAPHS SHEWING DEATH RATES IN THE STATES OF NEW SOUTH WALES, VICTORIA, AND QUEENSLAND, 1860-1912.



(See Table page 16S.)

EXPLANATION OF GRAPHS.—The base of each small square represents one year's interval, and the vertical height one death per thousand of the population: The zero for each State is shewn by a thickened line.

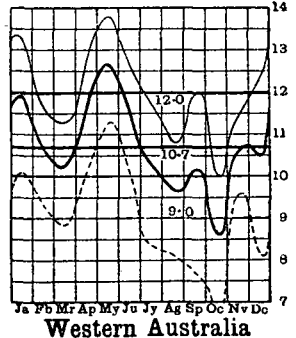
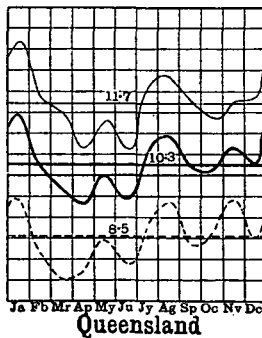
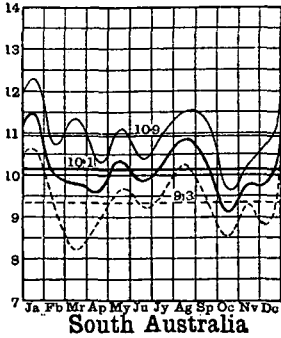
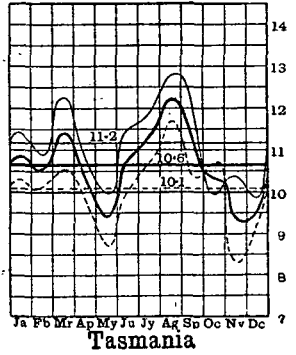
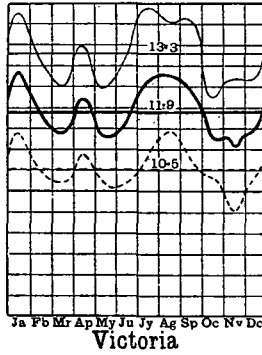
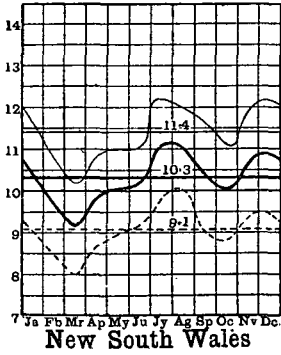
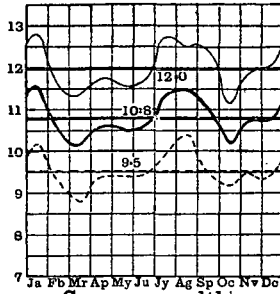
GRAPHS SHEWING DEATH RATES IN THE STATES OF SOUTH AUSTRALIA,
WESTERN AUSTRALIA, AND TASMANIA, 1860-1912.



(See Table page 168.)

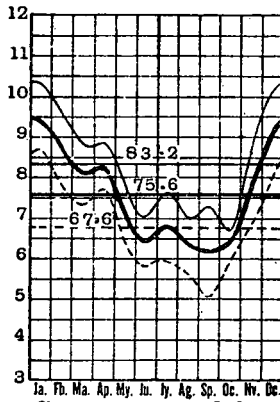
EXPLANATION OF GRAPHS.—The base of each small square represents one year's interval, and the vertical height one death per thousand of the population. The zero for each State is shewn by a thickened line.

GRAPHS SHEWING GENERAL MONTHLY DEATH RATES, 1907-1912

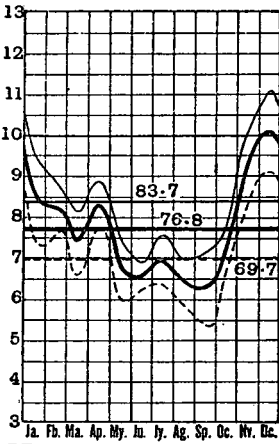


Male Death Rates shewn: ————
 Female ————
 General ————

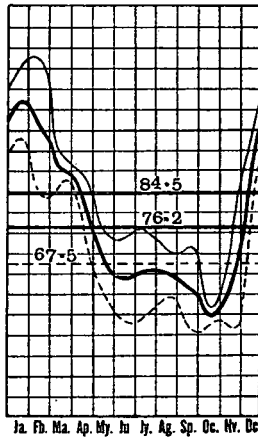
GRAPHS SHEWING INFANTILE MONTHLY DEATH RATES, 1907-1912.



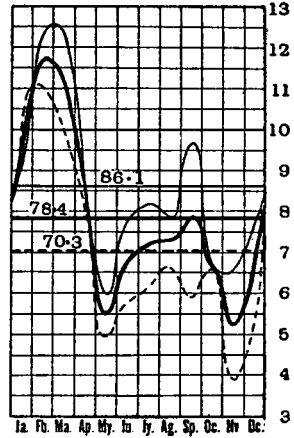
Commonwealth



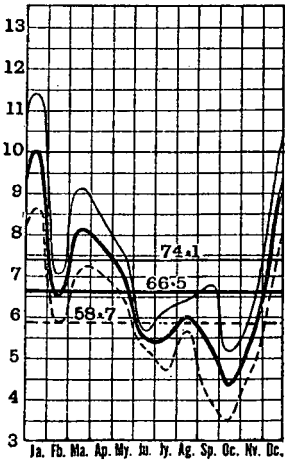
New South Wales



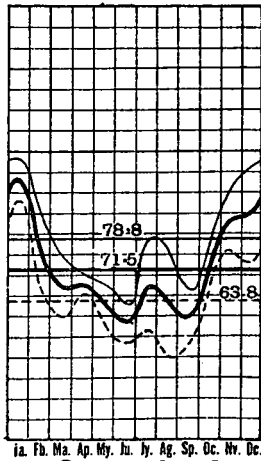
Victoria



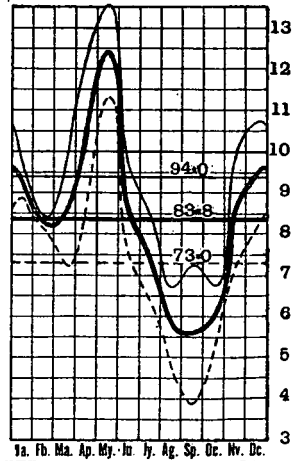
Tasmania



South Australia



Queensland



Western Australia

Male Death Rates shewn: _____
 Female " " _____
 General " " _____

DEATHS OF CHILDREN UNDER 1 YEAR, COMMONWEALTH, 1912.

Age at Death.	Whooping Cough.	Pulmonary Tuberculosis.	Acute Miliary Tuberculosis.	Tubercular Meningitis.	Abdominal Tuberculosis.	Tuberculosis of other Organs.	Disseminated Tuberculosis.	Syphilis.	Meningitis.	Convulsions.	Acute Bronchitis.
Under 1 week ...	...	...	...	...	...	...	...	12	15	102	4
1 week and under 2 ...	1	...	...	...	...	...	...	3	6	40	16
2 weeks "	3	1	...	...	...	...	...	8	7	28	20
3 " "	4	5	...	1	...	1	...	7	6	19	23
1 month "	2	39	...	...	3	...	...	27	16	27	59
2 months "	3	34	1	...	1	...	1	18	23	21	33
3 " "	4	20	...	3	3	...	...	11	20	22	25
4 " "	5	8	1	...	2	...	1	9	19	10	24
5 " "	6	7	...	1	3	...	...	7	17	12	10
6 " "	7	11	1	...	1	1	...	3	20	7	11
7 " "	8	14	1	1	3	1	...	1	29	11	12
8 " "	9	8	2	...	2	1	1	7	17	5	10
9 " "	10	11	2	1	3	1	...	...	25	11	9
10 " "	11	6	...	1	2	...	...	3	19	7	10
11 " "	12	11	1	2	4	...	1	3	11	11	8
Total under 1 year	176	9	4	26	24	3	4	119	250	333	274

Age at Death.	Broncho-Pneumonia.	Pneumonia.	Diarrhea and Enteritis.	Hernia and Intestinal Obstruction.	Malformations.	Congenital Debility, Icterus and Sclerema.	Other Diseases peculiar to Early Infancy.	Lack of Care.	Other External Violence.	Other Causes.	Total.
Under 1 week ...	3	5	12	7	191	1,879	458	6	4	118	2,816
1 week & under 2	14	10	23	6	45	256	48	...	1	66	535
2 weeks "	3	9	6	45	2	26	191	37	...	34	414
3 " "	4	17	8	56	4	25	136	11	1	36	356
1 month "	2	58	26	216	5	31	213	15	...	104	840
2 months "	3	40	24	282	4	16	126	6	1	62	696
3 " "	4	30	15	308	7	18	104	1	...	54	641
4 " "	5	22	16	321	11	10	67	...	...	45	569
5 " "	6	17	16	313	6	11	42	...	...	43	505
6 " "	7	25	14	242	16	9	42	...	...	40	448
7 " "	8	11	15	230	8	14	25	...	1	26	403
8 " "	9	22	11	198	9	4	29	...	...	47	376
9 " "	10	23	16	178	4	8	12	...	...	48	352
10 " "	11	25	13	140	4	8	13	...	...	58	309
11 " "	12	24	4	138	...	4	22	...	...	43	288
Total under 1 year	340	199	2,702	93	420	3,157	576	8	7	824	9,548

It will be seen that the maximum number of deaths from syphilis, convulsions pneumonia, hernia and intestinal obstruction, malformations, congenital debility, icterus and sclerema, other diseases peculiar to early infancy, lack of care, and other external violence occurred during the first month of life, while acute bronchitis

and broncho-pneumonia were most fatal during the second month. Diarrhoea and enteritis carried off more children in the fifth month than in any other, the numbers gradually decreasing toward the end of the year. Whooping cough reached its maximum during the second and third month of life.

21. **Age at Death of Married Males and Females, and Issue.**—"Bulletin No. 30; Commonwealth Demography" contains a number of tables, for the Commonwealth, shewing the age at marriage, age at death, duration of life after marriage, birthplaces, and occupations, in combination with the issue, of married persons who died in 1912. A short summary of the tables mentioned is given hereunder. Deaths of married males in 1912 numbered 12,881, and of married females, 11,881. The ages at death of the males ranged from 18 to 105 years, and those of the females, from 16 to 108 years. The total number of children in the families of the 12,881 males was 69,089, the maximum in one family being 23; and of the 11,881 females, 62,824, with a maximum of 22. The average number of children is shewn for various age-groups in the following table:—

AGE AT DEATH OF MARRIED MALES AND FEMALES, AND AVERAGE ISSUE.

COMMONWEALTH, 1912.

Age at Death.	Average Family of Males.	Average Family of Females.	Age at Death.	Average Family of Males.	Average Family of Females.
Under 20 years ...	...	1.06	70 to 74 years ...	6.31	6.59
20 to 24 years ...	0.92	1.06	75 ,, 79 ,, ...	6.84	6.74
25 ,, 29 ,, ...	1.36	1.91	80 ,, 84 ,, ...	6.74	6.39
30 ,, 34 ,, ...	2.22	2.52	85 ,, 89 ,, ...	6.59	6.11
35 ,, 39 ,, ...	2.78	3.45	90 ,, 94 ,, ...	6.63	5.77
40 ,, 44 ,, ...	3.45	4.04	95 ,, 99 ,, ...	6.86	5.85
45 ,, 49 ,, ...	4.00	4.37	100 years and upwards	3.67	8.29
50 ,, 54 ,, ...	4.60	4.93	Age not stated ...	4.75	5.25
55 ,, 59 ,, ...	5.20	5.77			
60 ,, 64 ,, ...	5.71	5.91			
65 ,, 69 ,, ...	6.30	6.32	All ages ...	5.36	5.29

The figures shewn in the preceding table include the issue both living and dead; the proportion between the two, taking deceased males and females together, was about as 1000 to 311, or, roughly speaking, as ten to three. The totals are shewn in the following table:—

ISSUE OF MARRIED MALES AND FEMALES.

COMMONWEALTH, 1912.

Issue of Married Males.	Males.	Females.	Total.	Issue of Married Females.	Males.	Females.	Total.
Living ...	27,486	26,489	53,975	Living ...	23,707	22,959	46,666
Dead ...	8,095	7,019	15,114	Dead ...	8,559	7,599	16,158
Total ...	35,581	33,508	69,089	Total ...	32,266	30,558	62,824

These figures shew a masculinity in the births of 105.90, which agrees fairly well with the experience of the birth statistics, the masculinity of the births in the Commonwealth from 1902 to 1912 having ranged from 104.54 to 106.38.

22. Age at Marriage of Males and Females, and Issue.—While the table giving the average families of married males and females naturally shows an increase in the averages with advancing ages at death, the following table, which gives the average families of males and females according to the age at marriage of the deceased parents, shews a corresponding decrease in the averages as the age at marriage advances :—

AGE AT MARRIAGE OF MALES AND FEMALES, AND AVERAGE ISSUE.

COMMONWEALTH, 1912.

Age at Marriage.	Average Family of Males.	Average Family of Females.	Age at Marriage.	Average Family of Males.	Average Family of Females.
Under 20 years ...	6.33	7.13	55 to 59 years ...	0.86	...
20 to 24 years ...	6.37	5.70	60 „ 64 „ ...	1.84	...
25 „ 29 „ ...	5.54	4.24	65 years and upwards	1.18	...
30 „ 34 „ ...	4.82	2.83	Age not stated ...	5.35	5.31
35 „ 39 „ ...	4.06	1.55			
40 „ 44 „ ...	3.53	0.43			
45 „ 49 „ ...	2.69	0.15			
50 „ 54 „ ...	1.90	0.08	All ages ...	5.36	5.29

It will be seen that of women who were married at ages from 40 to 44 years, two in every five gave birth to a child, while in the case of women who were married at ages from 45 to 49 years, the proportion fell to about one in every seven.

23. Duration of Life after Marriage of Males and Females.—The duration of life after marriage has been tabulated for males and females both in combination with the age at marriage, and with the total and average issue. The tables shewing the result do not, however, lend themselves to condensation, and are, therefore, omitted here. They will be found in “Bulletin No. 30 of Commonwealth Demography,” pages 173 to 178.

24. Birthplaces of Married Males and Females, and Issue.—The following table shews the birthplaces of married males and females whose deaths were registered in 1912, together with their average issue. No generalisations can, of course, be made in those cases where the number of deaths is small, and where the average family had to be worked out on small figures. But where the figures are comparatively large, as in the case of natives of the Commonwealth, differences occur between the averages of the individual States which appear inexplicable on any other ground than that of inefficient registration in some of the States. It will be noted that the differences occur both in the male and female averages. Although the figures apply to the Commonwealth as a whole, it must be borne in mind that the vast majority of deaths of natives of any one State are registered in that particular State. The average family of all deceased males who were natives of the Commonwealth was 4.77, and that of deceased females who were natives of the Commonwealth, 4.45.

BIRTHPLACES OF MARRIED MALES AND FEMALES, AND AVERAGE ISSUE.
COMMONWEALTH, 1912.

Birthplaces.	Married Males.		Married Females.		Birthplaces.	Married Males.		Married Females.		
	Deaths.	Average Family.	Deaths.	Average Family.		Deaths.	Average Family.	Deaths.	Average Family.	
New South Wales	1,822	5.17	1,915	5.04	Philippine Islands	2	2.50	...	...
Victoria	1,432	4.17	1,593	3.78	Straits Settlements	1	10.00	1	6.00	
Queensland	203	3.50	335	3.29	Syria	5	3.00	2	3.89	
South Australia	541	4.78	549	4.21	Other Asiatic Countries	2	11.00
Western Australia	74	5.07	80	5.83	Cape of Good Hope	2	5.00	...	...
Tasmania	402	5.66	417	5.24	Mauritius	5	5.20	3	4.67	
Northern Territory	...	...	...	2.00	Natal	1	1.00	...	...
New Zealand	66	3.35	63	3.83	Orange River	1	9.00	...	...
England	4,145	5.77	3,148	5.32	South Africa (so descd.)	11	3.35	9	7.22	
Wales	196	5.79	54	6.06	Egypt	1	6.00	...	...
Scotland	1,106	5.64	924	5.97	Barbados	...	...	1	8.00
Ireland	1,804	6.03	2,282	5.86	Canada	30	4.60	2	4.89	
Isle of Man	3	5.67	7	4.14	Jamaica	3	5.00	3	3.00	
Other European British Possessions	16	5.19	9	7.22	Newfoundland	2	5.00	2	4.00	
Austria-Hungary	17	5.53	2	4.50	Other American British Possessions	2	5.50	1	4.00	
Belgium	4	2.75	...	...	Argentina	...	...	1	3.00
Denmark	57	5.04	15	4.80	Brazil	1	9.00	...	...
France	32	3.41	12	4.58	Chile	1	1.00	...	...
Germany	449	5.86	270	6.58	Mexico	1	1.00	1	9.00	
Greece	6	6.67	3	2.67	United States	52	4.98	16	2.94	
Italy	44	5.70	3	2.00	Other American Countries	21	4.19	6	6.83	
Netherlands	10	6.60	2	3.00	Fiji	3	1.33	1	1.00	
Norway	28	4.68	3	5.33	Other Polynesian British Possessions	1	10.00	...	...
Portugal	6	4.83	...	...	New Caledonia	3	6.67	...	...
Russia	39	4.18	8	5.89	New Hebrides	1	1.00	...	...
Spain	9	3.44	2	10.00	Samoa	1	2.00	...	...
Sweden	67	4.82	10	2.10	Other Polynesian Islands	...	...	2	7.00
Switzerland	28	6.11	12	5.25	S. Sea Islands (so descd.)	6	2.67	1	7.00	
Other Europ. Countries	...	...	1	2.00	At Sea	51	2.71	26	6.19
British India	33	4.15	21	5.29	Not stated	44	3.00	40	4.78	
Ceylon	2	1.00	2	2.50						
Hong Kong	...	...	1	...					
China	73	2.37	3	1.67						
Japan	4	0.50	...	...				
Java	1	...	...	...			
Total	12,881	5.36	11,881	5.29						

25.—Occupations of Married Males, and Issue.—A final tabulation shows the average issue in combination with the occupation of deceased males. When these figures are available for a number of years they will afford some clue to the much debated question as to the decrease in the birth rate among various classes of the population.

OCCUPATIONS OF MARRIED MALES, AND AVERAGE ISSUE.

COMMONWEALTH, 1912.

Occupations.	Deaths of Married Males.	Average Family.
Professional class	696	4.73
Domestic class	433	4.04
Mercantile class	1,566	4.66
Engaged in transport and communication	1,014	4.74
Manufacturing class	1,485	5.12
Engaged in building and construction	842	5.43
Indefinite industrial workers	2,107	5.17
Agricultural class	2,131	6.65
Pastoral class	477	6.11
Working in mines and quarries	986	5.46
Other primary producers	83	4.83
Independent means	626	5.85
Dependents	82	3.94
Occupation not stated	353	5.75
Total	12,881	5.36

In the fifth issue of this Year Book (pp. 227 to 229), a series of observations was published dealing with the Commonwealth Rates of Infantile Mortality. These observations are not reprinted in the present issue.

§ 4. Graphical Representation of Vital Statistics.

1. **General.**—The progressive fluctuations of the numbers representing the total births and marriages are important indexes of the economic conditions and social ideals of a community. For this reason graphs have been prepared (see pages 201 and 202), shewing these fluctuations from 1860 to 1912, both for the States and the Commonwealth. The facts are very significant from the national point of view and call for serious consideration. To properly appreciate the situation it should be remembered that, normally, the increase of births and also of marriages will be similar to the increase of population. Although the marriage curve shows a falling off in marriages after 1891 (see page 202), it shews a recovery in 1894, and, with the exception of a small fall for 1903, it has continually advanced. The same characteristic is not seen in the curve of births, which discloses a recovering tendency only in 1904.

The table printed below shews the number of births, marriages and deaths which would have been experienced had the rate for 1890 continued, and reveals the significance of the facts disclosed by the curves. It may be remarked that the death rate has greatly improved, and among other countries Australia stands in a very favourable position in this respect. At the same time the decline in the marriage rate, overtaken once more in 1907, and the still more serious decline in the birth rate, in a country but sparsely populated, have an obvious and most important bearing on the national future, and on questions concerning the extent to which it is desirable to promote immigration.

ACTUAL BIRTHS, DEATHS, AND MARRIAGES.

EXPERIENCED IN THE COMMONWEALTH DURING THE YEARS 1890 TO 1912, COMPARED WITH THE NUMBER THAT WOULD HAVE OCCURRED IF THE RATES OF 1890 HAD REMAINED IN OPERATION.

Year.	BIRTHS.		DEATHS.		MARRIAGES.	
	Actual.	Number of Births that would have been experienced if the 1890 birth rate had been in operation.	Actual.	Number of Deaths that would have been experienced if the 1890 death rate had been in operation.	Actual.	Number of Marriages that would have been experienced if the 1890 marriage rate had been in operation.
1890	108,683		44,449		23,725	
1891	110,187	111,802	47,430	45,737	23,862	24,419
1892	110,158	114,502	42,268	46,842	22,049	25,009
1893	109,322	116,617	45,801	47,707	20,631	25,470
1894	104,660	118,734	42,958	48,573	20,625	25,933
1895	105,084	121,002	43,080	49,501	21,564	26,428
1896	100,134	123,212	45,202	50,405	23,068	26,911
1897	101,137	125,419	43,447	51,308	23,939	27,393
1898	98,845	127,371	51,406	52,106	24,472	27,819
1899	100,638	129,088	47,629	52,809	25,958	28,194
1900	102,221	130,848	44,060	53,529	27,101	28,579
1901	102,945	132,599	46,330	54,245	27,753	29,961
1902	102,776	134,603	48,078	55,065	27,926	29,399
1903	98,443	136,189	47,293	55,714	25,977	29,745
1904	104,113	137,917	43,572	56,420	27,682	30,122
1905	104,941	139,959	43,514	57,256	29,004	30,569
1906	107,890	142,030	44,333	58,103	30,410	31,021
1907	110,347	144,248	45,305	59,011	32,470	31,505
1908	111,545	146,720	46,426	60,022	32,551	32,045
1909	114,071	149,526	44,172	61,170	33,775	32,658
1910	116,801	152,869	45,590	62,537	36,592	33,388
1911	122,193	157,072	47,869	64,257	39,482	34,306
1912	133,088	162,477	52,177	66,468	42,147	35,487

2. **Graphs of Annual Births, Commonwealth and States** (page 201).—A striking feature of the graphs of births is the practically continuous increase in the number of births exhibited in the graph for the Commonwealth from 1860 to 1891, and the marked variations of subsequent years. As the curve clearly shews, a turning point in the number of births occurred in 1891, whilst, as regards the separate States, New South Wales and Tasmania date their decline in number from 1893, Victoria from 1891, and Queensland from 1890. In South Australia the corresponding decline took place as early as 1885, while in Western Australia the increase in number of births has been practically continuous throughout.

It is of special interest to note the decline in births associated with the commercial crisis of 1891-3, and also the decline occurring in 1903, an accompaniment of the severe drought of that period.

In the case of New South Wales the graph crosses that of Victoria in 1879, *i.e.*, the births for that year were sensibly identical in the two States. A fairly continuous increase was experienced in the former State from 1860 to 1893, the only marked fluctuation being a sudden decline in 1889 and an equally rapid recovery in 1890. From 1893 to 1898 a somewhat rapid decline again took place, succeeded by a rise, the continuity of which was broken only by a sharp decline in 1903 and recovery in 1904.

In the case of Victoria the graph shews the increase between 1860 and 1880 to have been comparatively slight, the curve being a gradual rise, with fluctuations more or less marked to 1873, with a subsequent decline. From 1880 to 1891 the increase in the number of births is seen to be very rapid and practically continuous, while from 1891 to 1898 an equally sharp and continuous decline was experienced. A further rise and fall took place between 1898 and 1903, succeeded by a continuous rise from the last-mentioned year to 1907, and a slight fall in 1908, followed by a recovery in 1909.

Starting in 1860 with a lower number of births than any State except Western Australia, the Queensland graph shews that the births increased somewhat rapidly until 1867. The equality in the number of births in Queensland and Tasmania in 1864 is shewn by the Queensland curve crossing the Tasmanian curve at the line for that year. From 1867 to 1882 a continuous though somewhat less rapid increase was experienced, followed by a very rapid rise to 1890, in which year Queensland's maximum number of births was recorded. The South Australian graph is crossed by that of Queensland at the year 1885. From 1890 onwards the number of births has fluctuated somewhat, but has, on the whole, retained a practically stationary position at a height rather less than that of 1890. The most serious variation was a sudden fall in 1903, the drought year, and rapid recovery in 1904, with a further fall in 1905 and a continuous rise since 1906.

The South Australian graph, a slow but practically continuous rise from 1860 to 1885, exhibits the steady increase in the total number of births. This rise is followed by a slow but fluctuating decline to 1903, and a slight recovery to 1912.

The Tasmanian curve may be regarded as made up of five portions, of which the first, from 1860 to 1877, represents a period of very slight variation, with, on the whole, an increase; the second, from 1877 to 1884, a period of continuous and moderately rapid increase; the third, from 1884 to 1893, a period of rapid increase; the fourth, from 1893 to 1898, a period of continuous but slow decrease; and the fifth, from 1898 onwards, a period of steady recovery.

The Western Australian curve indicates that an increase, which was practically continuous but very slow, took place from 1860 to 1884, and that a somewhat quicker rate of increase, experienced from 1884 to 1896, was succeeded by a still more rapid and very satisfactory rate of increase from 1896 onwards.

It will be seen that the years in which the highest points were reached by the several curves are as follows :—

State ...	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.
Year ...	1912	1891	1912	1912	1912	1912	1912

3. Graphs of Annual Marriages, Commonwealth and States (page 202).—The Commonwealth marriage graph from 1860 to 1885 reveals a moderate but somewhat fluctuating increase in the annual number of marriages between 1860 and 1871, a more rapid increase between 1871 and 1879, a still more rapid increase between 1879 and 1885. From 1885 to 1891 the numbers continued to increase, but with marked fluctuations in rate. The financial crisis associated with the period subsequent to the latter year was accompanied by a strongly-marked decline in the number of marriages, which reached its lowest point in 1894. From that year onwards a fairly rapid recovery was effected, the record for 1891 being exceeded by that of 1897. This progress was maintained until 1902, when the severe drought of that and the succeeding year were collateral with a rapid fall in the number of marriages. An equally rapid recovery, however, has since taken place, and the number of marriages in the Commonwealth during 1912 was greater than in any preceding year.

4. Graphs of Annual Deaths, Commonwealth and States (page 203).—The curves shewing the progression of the annual number of deaths indicate clearly that the periods for which exceptionally large numbers of deaths occurred were:—(a) 1866-7, (b) 1875-6, (c) 1884-5, (d) 1889-1891, (e) 1893, (f) 1898, and (g) 1902-3. It is remarkable that in each of the periods specified the phenomenon of a relatively high number of deaths was experienced in the majority of the States. Thus, as regards 1866-7, all the States except Western Australia and Tasmania were so affected; in 1875-6 all except Western Australia; in 1884-5 all were affected; in 1889 all except Western Australia and South Australia; in 1891 all except Queensland; whilst in 1893 and 1898, and 1902-3 all were affected. The fact that the periods of high death rates have been practically identical in the several States furnishes an indication that the excessive mortality has been due to a considerable extent to some common cause operating throughout the Commonwealth.

It may be noted as curious that periods of heavy mortality have occurred at intervals of approximately nine years, viz.:—1866-7, 1875-6, 1884-5, 1893, and 1902-3. There are, however, two marked increases between the third and fourth dates, and one between the fourth and fifth. Thus there is no real indication of the periodicity of the death rate.

Periods in which the number of deaths was exceptionally low are far less clearly defined than those in which the number was high, and the agreement amongst the States is also less complete. The principal periods of low mortality may be said to be 1861, 1869-71, 1879, 1892, 1897, 1900, 1904-5, 1909.

5. Graphs of Annual Birth, Death, and Marriage Rates and of Rate of Natural Increase—Commonwealth (page 204).—(i.) *General*. These graphs represent the number of births, deaths, and marriages, and the excess of births over deaths (natural increase) per 1000 of the population of the Commonwealth, for each of the years 1860 to 1912.

(ii.) *Births*. In the case of births, the graph indicates a well marked decline in rate during the period, and represents a fall from 42.56 per 1000 of population in 1860 to 28.65 per 1000 in 1912. This enormous reduction has been subject to small fluctuations during the period under review, but may, on the whole, be said to have been in evidence throughout. There are, however, two periods of arrested decline noticeable, one from 1877 to 1890, and the other from 1898 to the present time. The course of the graph thus indicates a rapid fall from 42.56 in 1860 to 34.99 in 1877, succeeded by a fluctuating but, on the whole, fairly stationary period to 34.98 in 1890, then a fall even more rapid to 27.15 in 1898, and a further comparatively stationary period to 28.65 in 1912. The lowest point reached, viz., 25.29, was attained in 1903, the year in which the Commonwealth suffered severely from the worst drought it has ever experienced.

Since then a small but well defined advance in the birth rate has been in evidence. A declining birth rate is usually due to complex causes, amongst which the variations in the age constitution of the population, and the adoption of preventative measures, are generally considered the most potent.

(iii.) *Deaths.* The three graphs relating to deaths furnish particulars concerning the rates experienced during the period amongst males and females separately, and in the population as a whole, the latter occupying naturally a position between the other two. Throughout the period the rate for males has largely exceeded that for females, but the fluctuations in the two rates have synchronised remarkably, indicating that the conditions which have been responsible for the marked variations which have occurred from time to time have affected males and females alike. On the whole, the graphs furnish clear evidence of a satisfactory decline in the death rate of the Commonwealth, a fall having taken place from 20.86 in 1860 to 11.23 in 1912. The graphical representation of the death rates brings into prominence five years in which the rates were exceptionally high when compared with those of adjacent years. These years are 1860, 1866, 1875, 1884, and 1898. The principal cause of the excessive rate of 1860 was the prevalence in that year of measles, scarlatina, and diphtheria, while the high rates of 1866, 1875, and 1898 were also largely due to epidemics of measles. Prior to 1892, when a rate of 12.91 was experienced, the lowest general death rate for the Commonwealth was that of 1871, viz., 13.24. The highest male death rate for the period was 20.97 in 1860, and the lowest 11.51 in 1909. For females the highest was 20.71 in 1860, and the lowest 9.06 in 1909. The difference between the male and female rate has, since 1869, been fairly constant, and has ranged between 1.97 and 3.44, with a mean value of about 2.7.

(iv.) *Marriages.* In the case of the graph representing marriage rates, the fluctuations are less abrupt than in the case of the birth rate and death rate graphs, and the rate for 1912, the final year of the period, viz., 9.07, does not differ very considerably from that of 1860, which was 8.42. The lowest marriage rate for the period was that of 1894, viz., 6.08, marking the culmination of the commercial and financial depression indicated by the declining rates from 1888 onwards. From 1894 to the present time a satisfactory increase has been in evidence, disturbed only by the sharp decline which, in 1903, accompanied the severe drought experienced in the Commonwealth in that year.

(v.) *Natural Increase.* This graph, which represents the excess of births over deaths per 1000 of population, exhibits marked fluctuations arising from the combined fluctuations in birth and death rates. Thus, corresponding to the high death rates of 1860, 1866, 1875, and 1898, there are exceptionally low rates of natural increase, accentuated in the last-mentioned year by a comparatively low birth rate. A combination of low birth rate and comparatively high death rate was also responsible for a very low rate of natural increase in 1903. The highest rate of natural increase for the period was 26.58 in 1864, and the lowest 13.03 in 1898.

6. Graphs of Annual Birth Rates—States (pages 205 and 206).—These graphs furnish for the several States information similar to that supplied in the graph on page 204 for the Commonwealth as a whole. It will be seen that in every case the total effect has been an extensive decline in rate, subject to very marked fluctuations. In all the States the period from 1875 to 1885 was one of arrested decline, if not of actual advance, in the birth rate. With the exception of the very low rate accompanying the drought in 1903, the variations in any of the States since 1901 have not been very marked, and in some cases a slight tendency to increase is in evidence.

The highest birth rates during the period were as follows:—New South Wales (1864), 44.00; Victoria (1862), 44.71; Queensland (1860), 47.93; South Australia (1862),

45.44 ; Western Australia (1860), 38.96 ; and Tasmania (1884), 36.63. The following were the lowest rates for the period :—New South Wales (1903), 25.44 ; Victoria (1910), 24.51 ; Queensland (1903), 24.53 ; South Australia (1903), 23.84 ; Western Australia (1896), 23.44 ; Tasmania (1899), 27.43.

7. Graphs of Annual Death Rates—States (pages 207 and 208).—These graphs furnish for the several States similar information to that given for the Commonwealth as a whole in the diagram on page 204, and indicate in each case a satisfactory decline in death rate. It may be noted that an exceptionally high death rate was experienced in all the States in 1875, and that a similar uniformity, though on a smaller scale, is observable for the year 1898, the principal cause in each case having been an epidemic of measles. The highest death rates experienced during the period were as follows :—New South Wales (1867), 19.79 ; Victoria (1860), 22.77 ; Queensland (1866), 25.96 ; South Australia (1875) 19.97 ; Western Australia (1884), 21.54 ; and Tasmania (1875), 19.99. The following were the lowest death rates for the period :—New South Wales (1909 and 1910), 9.89 ; Victoria (1909 and 1911), 11.45 ; Queensland (1906), 9.50 ; South Australia (1909), 9.74 ; Western Australia (1910), 10.11 ; and Tasmania (1909), 9.68.

8. Graphs shewing Variations in Annual Death Rates from Month to Month.—The graphs on pages 209 and 210 shew for the Commonwealth as a whole and for each of the six States the annual death rates for males, females, and persons calculated for equalised months, and the infantile death rate, calculated in the same way, and also distinguishing males, females, and persons. Further particulars in regard to these graphs will be found on page 180.