

SECTION IV.

POPULATION.

[In order to permit of the incorporation of the latest available details in regard to the Census of 1921, this Section has been transferred to the end of the present issue of the Official Year Book, and appears after Section XXXI. It will, however, be placed in its usual order in succeeding issues.]

SECTION V.

VITAL STATISTICS.

NOTE.—The rates quoted throughout this Section for the years 1915 to 1921 have been calculated in accordance with the corrected populations as determined by the results of the Census of 1921.

§ 1. Births.

1. Male and Female Births, 1915 to 1921.—The total number of male and female births registered in the Commonwealth during the years 1915 to 1921 is shewn in the two tables hereunder :—

TOTAL MALE BIRTHS, COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Territory.	Common- wealth.
1915 ..	27,085	17,820	10,444	6,076	4,578	2,991	33	22	69,049
1916 ..	26,615	17,623	9,673	6,200	4,439	2,873	44	38	67,505
1917 ..	27,002	17,220	10,058	5,762	4,058	2,720	42	21	66,883
1918 ..	26,002	16,172	10,080	5,787	3,615	2,717	59	26	64,458
1919 ..	24,924	16,225	9,746	5,776	3,477	2,718	55	10	62,931
1920 ..	27,691	18,647	10,537	6,178	4,256	2,908	31	8	70,256
1921 ..	28,005	18,288	10,638	6,122	3,988	2,944	39	15	70,039

TOTAL FEMALE BIRTHS, COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Territory.	Common- wealth.
1915 ..	25,846	17,189	9,719	5,722	4,439	2,854	28	25	65,822
1916 ..	25,465	16,612	9,239	5,657	4,124	2,769	30	25	63,921
1917 ..	25,446	15,813	9,729	5,564	3,824	2,656	27	23	63,082
1918 ..	24,707	15,425	9,456	5,570	3,491	2,563	46	23	61,281
1919 ..	23,608	15,394	8,953	5,284	3,460	2,592	51	17	59,359
1920 ..	26,251	17,566	9,719	5,850	3,893	2,832	32	7	66,150
1921 ..	26,631	17,303	9,691	5,852	3,819	2,811	40	12	66,159

2. Total Births, 1915 to 1921.—The greatest number of births ever recorded in the Commonwealth, viz., 137,983, was reached in 1914. A continuous decrease was experienced each year till 1919. A substantial recovery took place in 1920, and although this was not maintained in 1921, the total of 136,198 births was only 1,785 less than 1914.

TOTAL BIRTHS, COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Terr.	C'wealth.
1915 ..	52,931	35,009	20,163	11,798	9,017	5,845	61	47	134,871
1916 ..	52,080	34,235	18,912	11,857	8,563	5,642	74	63	131,426
1917 ..	52,448	33,033	19,787	11,326	7,882	5,376	69	44	129,965
1918 ..	50,709	31,597	19,536	11,357	7,106	5,280	105	49	125,739
1919 ..	48,532	31,619	18,699	11,060	6,937	5,310	106	27	122,290
1920 ..	53,942	36,213	20,256	12,028	8,149	5,740	63	15	136,406
1921 ..	54,636	35,591	20,329	11,974	7,807	5,755	79	27	136,198

3. Birth Rates, 1915 to 1921.—(i) *Crude Birth Rate.* The most notable feature of the table shewing the crude birth rate is the continual fall from 1915 to 1919. This feature, which is doubtless due to the war, is exhibited in all the States. An increase took place in 1920, but this was followed in 1921 by a fall in the rate in every State. The birth rate is still very much below that of pre-war years. The rates in the Territories shew considerable fluctuation, but the numbers concerned are too small to allow of any satisfactory deductions therefrom.

CRUDE BIRTH RATE (a), COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Territory.	C'with.
1915 ..	28.02	24.45	29.08	26.42	28.09	29.78	14.11	19.05	27.05
1916 ..	27.53	24.20	27.59	26.84	27.38	29.03	15.55	24.11	26.56
1917 ..	27.56	23.40	28.96	25.62	25.76	27.68	14.22	17.65	26.27
1918 ..	26.12	22.19	27.95	25.15	23.08	26.63	21.56	20.19	25.00
1919 ..	24.28	21.46	25.80	23.61	21.71	25.90	22.77	11.68	23.53
1920 ..	26.10	23.95	27.10	24.71	24.73	27.28	14.95	6.90	25.45
1921 ..	25.94	23.15	26.59	24.07	23.43	26.97	20.21	10.87	24.95
Density (b) (No. per square mile) ..	6.87	17.65	1.15	1.32	0.34	8.33	0.007	2.20	1.85

(a) Number of births per 1,000 of the mean annual population. (b) On 31st December, 1921.

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, furnishes, however, a more significant rate. This calculation has been made for the four last Census periods for which the information is available, 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 1,000 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 1,000 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 shews that the Australian States occupy a rather 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." It will be noticed that, owing to the difficulty of procuring statistics in regard to the belligerent countries in the late war, many of the rates quoted for continental countries are for rather remote years. Consequently it is not suggested that the comparison instituted in the attached table is exact. This does not however affect the general proposition that Australia takes a low position amongst the countries of the world, both as regards crude birth rate and crude death rate.

CRUDE BIRTH RATE (a) OF VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Russia, European ..	1909	44.0	Australia ..	1921	25.0
Rumania ..	1914	42.5	Norway ..	1918	24.4
Bulgaria ..	1911	40.2	Netherlands ..	1919	24.2
Serbia ..	1912	38.0	South Australia ..	1921	24.1
Chile ..	1914	37.0	Western Australia ..	1921	23.4
Ceylon ..	1920	36.5	New Zealand ..	1921	23.3
Hungary ..	1912	36.3	Victoria ..	1921	23.2
Jamaica ..	1919	34.1	Denmark ..	1919	22.7
Quebec (Canada) ..	1919	33.0	Belgium ..	1912	22.6
Japan ..	1918	32.2	United Kingdom ..	1921	22.5
Austria ..	1912	31.3	England and Wales ..	1921	22.4
Union of South Africa			United States (b) ..	1919	22.3
(whites) ..	1920	28.9	Ontario (Canada) ..	1919	22.1
Spain ..	1919	28.3	Sweden ..	1918	20.3
Prussia ..	1913	28.2	Ireland ..	1921	20.2
Germany ..	1913	27.5	Finland ..	1919	19.2
Tasmania ..	1921	27.0	Italy ..	1917	19.0
Queensland ..	1921	26.6	France ..	1913	19.0
New South Wales ..	1921	25.9	Switzerland ..	1919	18.7
Scotland ..	1921	25.2			

(a) Number of births per 1,000 of the mean population. (b) Figures for "provisional birth-registration area," which includes about 59 per cent. of the population.

The wide discrepancies among the crude birth rates of the various countries are, to some extent, due to differences in sex and age constitution and in conjugal condition. If the birth rates be calculated per 1,000 women of child-bearing ages, the comparison shews very different results. The report for 1908 of the Registrar-General for England and Wales contains a table shewing the nuptial births per 1,000 married women of ages 15 to 45 in a number of countries, and the information here given in regard to the period 1900-1902 is taken therefrom.

NUPTIAL BIRTHS PER 1,000 MARRIED WOMEN, AGED 15-45 YEARS, 1900-1902.

Country.	Rate.	Country.	Rate.
Netherlands ..	314.6	Switzerland ..	265.9
Norway ..	302.8	Denmark ..	259.1
Prussia ..	290.4	Spain ..	258.7
Ireland ..	289.4	Belgium ..	250.7
Germany ..	284.2	New Zealand ..	243.2
Austria ..	283.7	Australia ..	235.8
Scotland ..	271.8	England and Wales ..	235.5
Italy ..	269.4	France ..	157.5
Sweden ..	269.0		

5. **Masculinity at Birth.**—The masculinity of births, *i.e.*, the excess of males over females per 100 births, registered during the last seven years in the several States of the Commonwealth has, apart from the Northern Territory and the Federal 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 0.25 in Western Australia in 1919 to 4.66 in Queensland in 1921. The following table, which gives the values for the States and Commonwealth for 1915 to 1921, shews that for the Commonwealth there was a steady increase of masculinity from 1915 to 1920, with the exception of 1918. During 1921, however, the figures fell from 3.01 to 2.85.

MASCULINITY (a) OF BIRTHS REGISTERED, COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Vict.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Territory.	C'wealth.
1915 ..	2.34	1.80	3.60	3.00	1.54	2.34	8.20	-6.38	2.39
1916 ..	2.21	2.95	2.29	4.58	3.68	1.84	18.92	20.63	2.73
1917 ..	2.97	4.26	1.66	1.75	2.97	1.19	21.74	-4.55	2.92
1918 ..	2.55	2.36	3.19	1.91	1.75	2.92	12.38	6.12	2.53
1919 ..	2.71	2.63	4.24	4.45	0.25	2.37	3.77	-25.93	2.92
1920 ..	2.67	2.99	4.04	2.73	4.45	1.32	-1.59	6.67	3.01
1921 ..	2.51	2.77	4.66	2.25	2.16	2.31	-1.27	11.11	2.85

(a) Excess of males over females per 100 total births.

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 in various countries ranged from 3.98 to 1.77, and from 3.80 to 0.79 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	3.98	3.80	Germany	2.53	2.29
Rumania	3.71	1.67	Finland	2.44	2.53
Portugal	3.61	3.10	Hungary	2.44	1.43
Austria	2.82	2.68	Sweden	2.44	2.10
Italy	2.82	2.15	Denmark	2.34	2.44
Norway	2.82	2.87	Serbia	2.30	1.72
Ireland	2.68	2.34	France	2.25	1.43
Netherlands ..	2.68	2.29	Belgium	2.20	1.08
Scotland	2.68	2.87	Switzerland ..	2.20	0.79
Russia, European ..	2.63	2.20	England	1.77	2.15

(a) Excess of males over females per 100 total births.

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

MASCULINITY (a) OF EX-NUPTIAL BIRTHS REGISTERED, COMMONWEALTH, 1915 TO 1921.

Year	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Territory.	C'with.
1915 ..	-0.72	1.09	-0.37	0.85	0.26	0.32	-17.65	..	0.00
1916 ..	1.67	4.71	6.83	5.68	0.31	-5.26	-6.67	33.33	3.22
1917 ..	2.21	3.61	3.43	0.00	-7.65	5.63	25.00	-100.00	2.34
1918 ..	1.33	-1.68	5.07	-6.14	-5.59	-0.36	14.29	..	0.24
1919 ..	4.93	0.22	8.91	4.84	-2.74	7.98	0.00	-100.00	4.03
1920 ..	3.87	8.20	11.52	-2.22	5.36	-3.63	-6.67	..	5.60
1921 ..	3.94	2.72	-0.94	6.10	6.03	1.26	15.38	..	2.96

(a) Excess of males over females per 100 total births.

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 in the period under review, this has not been the case in regard to ex-nuptial births, since in every State a negative masculinity has been experienced. 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 and Federal Territory are not taken into consideration.

6. *Ex-nuptiality of Births.*—The number of ex-nuptial births reached its maximum, 7,438, in 1913. Since 1915 the numbers recorded have been considerably less than those of the pre-war years.

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, 1915 TO 1921.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Territory.	C'wealth.
1915 ..	2,633	2,012	1,082	472	383	311	17	..	6,910
1916 ..	2,461	1,763	966	458	321	285	15	3	6,272
1917 ..	2,485	1,826	992	448	327	284	16	1	6,379
1918 ..	2,625	1,849	1,066	456	286	279	21	..	6,582
1919 ..	2,495	1,826	1,078	433	292	326	26	1	6,477
1920 ..	2,582	1,902	1,033	450	317	303	15	..	6,602
1921 ..	2,640	1,725	1,062	377	315	318	26	..	6,463

(i) *Rate of Ex-nuptiality, 1915 to 1921.* The rate of ex-nuptiality, i.e., the percentage of ex-nuptial to total births has, on the whole, been fairly stationary during the last seven years. The highest rate for the period occurred in 1919, and the lowest, 4.75 per cent., in 1921.

**PERCENTAGE OF EX-NUPTIAL ON TOTAL BIRTHS, COMMONWEALTH,
1915 TO 1921.**

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Territory.	C'wealth
	%	%	%	%	%	%	%	%	%
1915 ..	4.97	5.74	5.36	4.00	4.24	5.32	27.87	..	5.12
1916 ..	4.73	5.15	5.11	3.80	3.75	5.05	20.27	4.76	4.77
1917 ..	4.74	5.53	5.01	3.96	4.15	5.28	23.19	2.27	4.91
1918 ..	5.18	5.85	5.46	4.02	4.02	5.28	20.00	..	5.23
1919 ..	5.14	5.77	5.76	3.92	4.21	6.14	24.53	3.70	5.30
1920 ..	4.79	5.25	5.10	3.74	3.89	5.28	23.81	..	4.84
1921 ..	4.83	4.85	5.22	3.15	4.03	5.53	32.91	..	4.75

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 for which the information is available, 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 1,000 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. Corresponding figures for those countries for which the nuptial birth rates were shewn in a preceding paragraph are here given for the sake of comparison :—

**EX-NUPTIAL BIRTHS PER 1,000 UNMARRIED WOMEN AGED 15-45 YEARS,
1900 TO 1902.**

Country.	Rate.	Country.	Rate.
Austria	40.1	Spain	15.5
Germany	27.4	Scotland	13.4
Sweden	24.3	Australia	13.3
Denmark	24.2	Switzerland	9.8
Prussia	23.7	New Zealand	8.9
Italy	19.4	England and Wales	8.5
France	19.1	Netherlands	6.8
Belgium	17.8	Ireland	3.8
Norway	17.2		

(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, which shews that this is not the case :—

**CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH RATES (a),
COMMONWEALTH, 1915 TO 1921.**

Rates.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
Ex-nuptial ..	1.40	1.28	1.30	1.32	1.26	1.24	1.18
Nuptial ..	25.85	25.50	25.21	23.93	22.52	24.50	23.77
Total ..	27.25	26.78	26.51	25.25	23.78	25.74	24.95

(a) Number of births per 1,000 of mean population.

7. *Multiple Births.*—Among the total number of 136,198 births registered in the Commonwealth in 1921 there were 133,262 single births, 2,900 twins, and 36 triplets. The number of cases of twins was 1,453, there being 6 stillbirths, and the number of cases of triplets 12. The total number of mothers was, therefore, 134,727, the proportion of mothers of twins being one in every 92, and of mothers of triplets one in every 11,227 of total mothers. The proportion of multiple births is a very constant one.

**PERCENTAGE OF MOTHERS OF MULTIPLE BIRTHS TO TOTAL MOTHERS.
1915 TO 1921.**

Year.	Cases of Twins.	Cases of Triplets.	Cases of Quadruplets.	Percentage of Cases of Multiple Births to total Mothers.	Number of Mothers to each Multiple Birth.
				%	
1915	1,417	10	..	1.06	94
1916	1,383	12	..	1.06	93
1917	1,477	17	1	1.16	86
1918	1,370	8	..	1.10	90
1919	1,327	15	1	1.10	90
1920	1,521	16	..	1.13	88
1921	1,453	12	..	1.09	92

8. **Ages of Parents.**—The relative ages of the parents of children registered in 1921 have been tabulated separately for male and female births, twins and triplets being distinguished from single births, and are shown for single ages and for every State in "Bulletin of Population and Vital Statistics, No. 39; Commonwealth Demography, 1921 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. The largest number of mothers was also found at ages 25 to 29.

AGES OF PARENTS IN CASES OF SINGLE BIRTHS, COMMONWEALTH, 1921.

Ages of Fathers and Sexes of Children.		Total Children.	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 upwards.	Un- speci- fied.
Under 20	Males..	265	1	174	85	5	..	..	..	..	..
	Females	215	..	149	61	5	..	..	..	..	..
	Total ..	480	1	323	146	10	..	..	..	..	..
20 to 24	Males..	6,762	2	1,278	4,438	945	77	17	4	..	1
	Females	6,259	1	1,126	4,109	908	101	13	..	..	..
	Total ..	13,021	3	2,404	8,547	1,853	178	30	4	1	1
25 to 29	Males..	16,640	..	618	6,490	7,807	1,532	173	19	..	1
	Females	15,614	1	606	6,102	7,372	1,336	179	17	1	..
	Total ..	32,254	1	1,224	12,592	15,179	2,868	352	36	1	..
30 to 34	Males..	17,320	1	189	2,647	6,963	6,336	1,093	84	4	3
	Females	16,170	..	201	2,516	6,658	5,957	1,029	108	..	1
	Total ..	33,790	1	390	5,163	13,621	12,293	2,122	192	4	4
35 to 39	Males..	12,177	..	56	761	2,684	4,588	3,671	407	9	1
	Females	11,593	..	53	706	2,481	4,467	3,474	404	7	1
	Total ..	23,770	..	109	1,467	5,165	9,055	7,145	811	16	2
40 to 44	Males..	6,979	..	19	210	819	1,960	2,666	1,272	32	1
	Females	6,560	..	15	194	749	1,753	2,565	1,246	38	..
	Total ..	13,539	..	34	404	1,568	3,713	5,231	2,518	70	1
45 to 49	Males..	3,219	..	8	74	267	596	1,264	891	119	..
	Females	3,154	..	13	75	263	603	1,136	958	105	1
	Total ..	6,373	..	21	149	530	1,199	2,400	1,849	224	1
50 to 54	Males..	1,301	..	3	17	67	223	409	498	83	1
	Females	1,246	..	5	18	86	215	394	448	80	..
	Total ..	2,547	..	8	35	153	438	803	946	163	1
55 to 59	Males..	438	..	..	8	39	73	136	144	38	..
	Females	400	..	2	6	36	66	144	114	32	..
	Total ..	838	..	2	14	75	139	280	258	70	..
60 to 64	Males..	118	..	..	6	9	22	34	39	8	..
	Females	96	..	..	..	2	26	32	28	7	1
	Total ..	214	..	..	6	11	48	66	67	15	1
65 and up- wards	Males..	39	..	..	1	4	7	9	16	2	..
	Females	45	..	..	2	6	8	12	15	2	..
	Total ..	84	..	..	3	10	15	21	31	4	..
Not stated	Males..	7	..	..	2	1	1	2	1	..	..
	Females	4	..	..	1	..	2	1	..	..	..
	Total ..	11	..	..	3	1	3	3	1	..	..
Nuptial chil- dren	Males..	65,265	4	2,345	14,739	19,610	15,415	9,474	3,375	295	8
	Females	61,656	2	2,170	13,790	18,566	14,534	8,979	3,338	273	4
	Total ..	126,921	6	4,515	28,529	38,176	29,949	18,453	6,713	568	12
Ex- nuptial children	Males..	3,275	16	821	1,204	592	341	213	80	5	3
	Females	3,066	10	758	1,118	577	325	204	61	11	2
	Total ..	6,341	26	1,579	2,322	1,169	666	417	141	16	5
Total chil- dren	Males..	68,540	20	3,166	15,943	20,202	15,756	9,687	3,455	300	11
	Females	64,722	12	2,928	14,908	19,143	14,859	9,183	3,399	284	6
	Total ..	133,262	32	6,094	30,851	39,345	30,615	18,870	6,854	584	17

AGES OF PARENTS OF TWINS, COMMONWEALTH, 1921.

Ages of Fathers and Sexes of Children.			Total Children.	Ages of Mothers.						
				Under 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and upwards.
Under 20	Females	..	2	..	2	..	..	..	..	..
	Total	..	2	..	2	..	..	..	..	..
20 to 24	Males	..	96	14	55	24	3	..	..	..
	Females	..	84	8	61	12	3	..	..	..
	Total	..	180	22	116	36	6	..	..	..
25 to 29	Males	..	237	3	78	123	28	4	1	..
	Females	..	247	11	69	133	27	6	1	..
	Total	..	484	14	147	256	55	10	2	..
30 to 34	Males	..	412	4	39	132	195	40	2	..
	Females	..	382	..	37	128	176	39	4	..
	Total	..	794	4	76	258	371	79	6	..
35 to 39	Males	..	332	..	12	44	148	116	12	..
	Females	..	317	..	10	62	112	123	10	..
	Total	..	649	..	22	106	260	239	22	..
40 to 44	Males	..	192	..	..	19	42	87	44	..
	Females	..	187	..	..	19	49	79	38	2
	Total	..	379	..	..	38	91	166	82	2
45 to 49	Males	..	90	..	..	11	21	37	18	2
	Females	..	96	..	..	5	23	41	25	2
	Total	..	186	..	..	16	44	78	44	4
50 to 54	Males	..	52	..	..	3	13	18	18	..
	Females	..	30	..	..	5	7	6	12	..
	Total	..	82	..	..	8	20	24	30	..
55 to 59	Males	..	12	..	..	..	1	5	6	..
	Females	..	10	..	..	..	1	3	6	..
	Total	..	22	..	..	..	2	8	12	..
60 and over	Males	..	4	..	..	..	2	..	2	..
	Females	..	2	..	..	..	..	2	..	..
	Total	..	6	..	..	..	2	2	2	..
Nuptial children	Males	..	1,427	21	184	356	453	307	104	2
	Females	..	1,357	19	179	362	398	299	96	4
	Total	..	2,784	40	363	718	851	606	200	6
Ex-nuptial children	Males	..	47	7	17	12	5	5	1	..
	Females	..	69	13	19	16	9	5	7	..
	Total	..	116	20	36	28	14	10	8	..
Total children	Males	..	1,474	28	201	368	458	312	105	2
	Females	..	1,426	32	198	378	407	304	103	4
	Total	..	2,900	60	399	746	865	616	208	6

AGES OF PARENTS OF TRIPLETS, COMMONWEALTH, 1921.

Ages of Fathers and Sexes of Children.			Total Children.	Ages of Mothers.				
				Under 20.	20 to 24.	25 to 29.	30 to 34.	35 to 39.
20 to 24	Males	..	3	..	3	..	..	..
	Females	..	..	..	..	..	..	..
	Total	..	3	..	3	..	..	..
25 to 29	Males	..	11	..	6	5	..	..
	Females	..	4	..	..	1	3	..
	Total	..	15	..	6	6	3	..
30 to 34	Males	..	4	..	..	..	4	..
	Females	..	5	..	..	..	5	..
	Total	..	9	..	..	..	9	..
35 to 39	Males	..	2	..	..	..	2	..
	Females	..	1	..	..	..	1	..
	Total	..	3	..	..	..	3	..
Nuptial children	Males	..	20	..	9	5	6	..
	Females	..	10	..	..	1	9	..
	Total	..	30	..	9	6	15	..
Ex-nuptial children	Males	..	5	3	..	2	..	..
	Females	..	1	..	..	1	..	..
	Total	..	6	3	..	3	..	..
Total children	Males	..	25	3	9	7	6	..
	Females	..	11	..	..	2	9	..
	Total	..	36	3	9	9	15	..

No deductions can, of course, be drawn from one year's figures as to variations in the masculinity of the births at different ages of the parents, but so far as the figures go they indicate a few conclusions which may be mentioned, viz. :—In cases where the father is older than the mother the masculinity has a tendency to be above the average, while in cases where both parents belong to the same age group, or where the father is younger than the mother, the masculinity is rather below the average. It is also below the average in cases where the father, or both father and mother, are under 25; and it is above the average where the mother alone is under 25.

9. Birthplaces of Parents.—The relative birthplaces of the parents of children whose births were registered during the year 1921 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, 1921.

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—									
New South Wales	41,040	405	4	43,038	447	4	2,359.	19	2
Victoria ..	33,203	390	3	32,205	356	3	1,619	12	..
Queensland ..	13,467	139	..	15,348	156	..	897	12	..
South Australia	11,664	134	1	11,353	135	1	370	4	..
Western Australia	2,018	19	..	2,658	23	..	219	2	..
Tasmania ..	5,683	53	2	5,787	53	2	405	3	..
North. Territory	18	..	..	29	..	..	26	..	..
Federal Territory	2	..	..	..	..	..	..	..	..
New Zealand ..	1,093	7	..	737	6	..	45	..	..
EUROPE—									
England ..	11,496	157	..	10,716	145	..	257	5	..
Wales ..	332	5	..	249	4	..	4	..	..
Scotland ..	2,614	34	..	2,371	29	..	60	..	..
Ireland ..	1,344	21	..	932	14	..	25	1	..
Isle of Man ..	17	..	..	6	..	..	..	..	..
Other European British Possessions..	60	1	..	36	1	..	1	..	..
Austria-Hungary ..	53	1	..	32	..	..	1	..	..
Belgium ..	15	..	..	31	..	..	..	..	..
Denmark ..	156	2	..	41	..	..	..	..	..
France ..	64	..	..	77	1	..	2	..	..
Germany ..	454	4	..	172	6	..	6	..	..
Greece ..	148	5	..	76	2	..	..	..	..
Italy ..	297	2	..	169	2	..	2	..	..
Netherlands ..	61	1	..	25	..	..	1	..	..
Norway ..	85	..	..	18	..	..	..	..	..
Portugal..	2	1	..	3	..	..	..	..	..
Russia ..	262	3	..	127	1	..	1	..	..
Spain ..	33	..	..	21	..	..	..	..	..
Sweden ..	132	4	..	6	..	..	1	..	..
Switzerland ..	41	..	..	19	..	..	1	..	..
Other European Countries ..	39	..	..	11	1	..	..	..	..
ASIA—									
British India ..	132	..	..	78	1	..	..	..	..
Ceylon ..	12	..	..	11	..	..	..	..	..
Hong Kong ..	2	..	..	..	..	..	..	..	..
Straits Settlements	10	..	..	6	..	..	..	..	..
Other Asiatic British Possessions ..	3	..	..	..	..	..	..	..	..

BIRTHPLACES OF PARENTS OF CHILDREN—*continued.*

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.
ASIA—<i>continued.</i>									
Arabia .. ..	..	..	..	..	..	..	..	..	..
China	119	..	..	35	..	..	1	..	..
Japan	21	..	..	15	..	..	..	..	..
Java	4	..	..	1	..	..	..	..	..
Philippine Islands..	3	..	..	..	..	..	..	..	..
Syria	78	2	..	51	2	..	1	..	..
Other Asiatic Countries	11	1	..	7	..	..	..	..	..
AFRICA—									
Mauritius	11	..	..	3	..	..	..	..	..
S. Africa, Union of	100	1	..	101	5	..	6	..	..
Egypt	12	..	..	22	1	..	1	..	..
Other African British Possessions ..	4	..	..	..	..	..	..	..	..
Other African Countries	3	..	..	1	..	..	..	..	..
AMERICA—									
Barbadoes	1	..	..	..	..	..	..	..	..
Canada	88	..	..	47	..	..	..	..	..
Jamaica	1	..	..	3	..	..	..	..	..
Newfoundland	4	..	..	2	..	..	..	..	..
Other American British Possessions ..	7	1	..	6	..	..	..	..	..
Argentine Republic	4	..	..	3	..	..	..	..	..
Brazil	2	..	..	1	..	..	..	..	..
Chile .. ..	..	..	..	3	..	..	..	..	..
Mexico	1	..	..	..	..	..	..	..	..
United States of America	199	2	..	89	3	..	11	..	..
Other American Countries	36	..	..	17	..	..	1	..	..
POLYNESIA—									
Fiji	36	..	..	27	..	..	1	..	..
Friendly Islands	2	..	..	..	..	..	..	..	..
Papua .. ..	..	..	..	1	..	..	..	..	..
Other Polynesian British Possessions	7	..	..	3	..	..	..	..	..
New Caledonia	20	..	..	26	..	..	4	..	..
New Hebrides	3	..	..	2	1	..	..	..	..
Samoa	1	..	..	2	..	..	..	..	..
South Sea Islands (so described) ..	12	..	..	1	..	..	..	..	..
At Sea	59	..	..	38	..	..	1	..	..
Unspecified	15	..	..	26	..	..	12	..	..
Total	126,921	1,395	10	126,921	1,395	10	6,341	58	2

10. Occupations of Fathers.—A summary of the occupations of the fathers of all nuptial children, whose births were registered in 1921, 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, 1921.

Occupations.	Number of Fathers.	Occupations.	Number of Fathers.
CLASS I.—PROFESSIONAL.		CLASS III.—COMMERCIAL—<i>contd.</i>	
General Government	739	Gold, Silver, and Precious Stones ..	1
Local Government	118	Ironmongery	145
Defence	458	Merchants, Importers	428
Law and Order	1,166	Shopkeepers and Assistants	1,271
Religion	412	Dealers and Hawkers	329
Charities	2	Agents and Brokers	607
Health	1,113	Clerks, Bookkeepers, etc.	4,794
Literature	116	Commercial Travellers, Salesmen ..	1,732
Science	80	Others engaged in Commercial Pursuits	1,491
Civil Engineering, Architecture, and Surveying	475	Speculators on Chance Events	56
Education	778	Storage	1
Fine Arts	136	Total Commercial	18,298
Music	148		
Amusements	463		
Total Professional	6,204	CLASS IV.—TRANSPORT AND COMMUNICATION.	
CLASS II.—DOMESTIC.		Aviation	14
Hotelkeepers and Assistants	1,050	Railway Traffic	5,309
Others engaged in providing board and lodging	179	Tramway Traffic	1,311
House Servants	2	Road Traffic	5,785
Coachmen and Grooms	80	Sea and River Traffic	1,613
Hairdressers	582	Postal Service	712
Laundrymen	36	Telegraph and Telephone Service ..	587
Others engaged in domestic occupations	390	Messengers, etc.	20
Total Domestic	2,319	Total Transport & Communication ..	15,351
CLASS III.—COMMERCIAL.		CLASS V.—INDUSTRIAL.	
Banking and Finance	585	Books and Publications	806
Insurance and Valuation	541	Musical Instruments	80
Landed and House Property	189	Prints, Pictures and Art Materials ..	67
Property Rights n.e.i.	3	Ornaments and Small Wares	137
Books, Publications, Advertising ..	166	Equipment for Sports and Games ..	2
Musical Instruments	10	Medals, Type, and Dies	39
Prints, Pictures and Art Materials ..	5	Watches, Clocks, and Scientific Instruments	118
Ornaments and Small Wares	2	Surgical Instruments	16
Watches, Clocks, Jewellery	8	Arms and Ammunition	30
Machinery	32	Engines, Machines, Tools, and Implements	1,718
Carriages and Vehicles	44	Carriages and Vehicles	1,449
Harness, Saddlery & Leatherware ..	3	Harness, Saddlery & Leatherware ..	380
Ships and Boats	14	Ships, Boats, etc.	150
Building Materials	9	Furniture	833
Furniture	38	Building Materials	1,089
Chemicals and By-products	15	Chemicals and By-products	54
Paper and Stationery	62	Textile Fabrics	208
Textile Fabrics	437	Dress	1,885
Dress	180	Fibrous Materials	36
Fibrous Materials	7	Animal Food	332
Animal Food	2,351	Vegetable Food	1,438
Vegetable Food	746	Groceries, Drinks, Narcotics, and Stimulants	314
Groceries, Drinks, Narcotics, and Stimulants	1,326	Animal Matter n.e.i.	351
Living Animals	156	Workers in Wood n.e.i.	181
Leather, Raw Materials	36	Vegetable Produce for Fodder	12
Wool and Tallow	67	Paper	16
Hay, Corn, etc.	166	Stone, Clay, Glass, etc.	589
Other Vegetable Matter, n.e.i.	77	Jewellery and Precious Stones	227
Wood and Coal	143	Metals, other than Gold & Silver ..	3,083
Stone, Clay and Glass	25	Gas, Electric Lighting, etc.	1,119

OCCUPATIONS OF FATHERS OF ALL NUPTIAL CHILDREN—*continued.*

Occupations.	Number of Fathers.	Occupations.	Number of Fathers.
CLASS V.—INDUSTRIAL—<i>contd.</i>		CLASS VI.—AGRICULTURAL, PASTORAL, MINING, ETC.	
Building—		Agricultural	21,919
Builders	607	Pastoral	3,894
Stonemasons	191	Dairy Farming	1,316
Bricklayers	640	Bees, Fisheries, and Wild Animals	461
Carpenters	3,167	Forestry	995
Slaters	54	Water Conservation and Supply	113
Plasterers	367	Mines and Quarries	3,707
Painters	1,109	Total Primary Producers	32,405
Plumbers	832		
Signwriters	65	CLASS VII.—INDEFINITE.	
Others	36	Independent Means, having no specific occupation ..	115
Roads, Railways, Earthworks ..	211	Occupation not stated ..	54
Disposal of the Dead	40	Total Indefinite ..	169
Disposal of Refuse	93		
Other Industrial Workers—		CLASS VIII.—DEPENDENTS.	
Manufacturers, etc.	663	Dependent Relatives	7
Engineers, Firemen	3,357	Dependent on State	6
Contractors	1,138	Total Dependents ..	13
Labourers, undefined	23,826	Total all Occupations ..	128,326
Others	412		
Total Industrial	53,567		

11. *Mother's 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 1921 was 128,326, viz., 126,921 single births, 1,395 cases of twins, and 10 cases of triplets. Account has been taken in the number of births of only 2,784 twins and 30 triplets, 6 cases of stillbirths having been excluded. From this number 55 mothers must be deducted, in whose cases 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 128,271 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. 39; Commonwealth Demography, 1921, and previous years."

DURATION OF MARRIAGE AND ISSUE OF MOTHERS OF ALL AGES,
COMMONWEALTH, 1921.

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 ..	22,997	23,294	1.01	18-19 ..	1,363	10,198	7.48
1-2 ..	12,475	13,950	1.12	19-20 ..	1,186	9,197	7.75
2-3 ..	10,374	18,353	1.77	20-21 ..	945	7,725	8.17
3-4 ..	9,423	19,138	2.03	21-22 ..	848	7,156	8.44
4-5 ..	8,005	19,073	2.38	22-23 ..	530	4,652	8.78
5-6 ..	7,940	21,553	2.71	23-24 ..	382	3,532	9.25
6-7 ..	7,837	24,016	3.06	24-25 ..	280	2,617	9.35
7-8 ..	7,149	24,980	3.49	25-26 ..	151	1,506	9.97
8-9 ..	6,204	23,636	3.82	26-27 ..	104	1,087	10.45
9-10 ..	5,535	22,977	4.15	27-28 ..	57	588	10.32
10-11 ..	4,750	21,286	4.48	28-29 ..	30	315	10.50
11-12 ..	4,383	21,476	4.90	29-30 ..	30	328	10.93
12-13 ..	3,486	18,637	5.35	30-31 ..	10	115	11.50
13-14 ..	2,973	16,564	5.57	31-32 ..	6	55	9.17
14-15 ..	2,747	16,534	6.02	32-33 ..	3	39	13.00
15-16 ..	2,433	15,423	6.34				
16-17 ..	2,055	13,807	6.72	Total ..	128,271	394,901	3.08
17-18 ..	1,580	11,044	6.99				

AGES AND ISSUE OF MOTHERS, COMMONWEALTH, 1921.

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	4,537	5,279	1.16	40-44 years ..	6,808	42,673	6.27
20-24 years ..	28,703	47,209	1.64	45 yrs. and over	571	4,589	8.04
25-29 ..	38,529	93,968	2.44				
30-34 ..	30,371	108,333	3.57				
35-39 ..	18,752	92,850	4.95	All ages ..	128,271	394,901	3.08

PREVIOUS ISSUE OF MOTHERS OF VARIOUS AGES, COMMONWEALTH, 1921.

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	3,883	16,247	13,232	5,410	1,787	444	15	41,018
1	591	8,186	9,859	5,514	1,973	403	13	26,539
2	58	3,045	7,070	5,557	2,492	588	31	18,811
3	5	989	4,556	4,941	2,667	707	46	13,911
4	..	211	2,351	3,511	2,512	790	42	9,420
5	..	45	963	2,608	2,230	796	52	6,694
6	..	3	356	1,539	1,765	739	59	4,461
7	..	7	95	819	1,373	661	42	2,997
8	..	..	36	293	936	562	63	1,890
9	..	..	9	123	559	468	60	1,219
10	..	..	2	33	263	297	61	661
11	..	..	..	11	106	194	39	350
12	..	..	..	5	42	88	17	152
13	..	..	..	4	27	36	12	79
14	..	..	..	..	7	18	9	34
15	..	..	..	..	7	6	6	19
16	..	..	..	..	1	5	3	9
17	..	..	..	..	..	5	..	5
19	..	..	..	..	..	..	1	1
21	..	..	..	..	..	1	..	1
Total Mothers	4,537	28,703	38,529	30,371	18,752	6,808	571	128,271

The tables shew 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 years and eight months. The average number of children of all marriages was 3.08, the corresponding figures for 1920 having been 3.11; for 1919, 3.33; for 1918, 3.34; for 1917, 3.29; for 1916, 3.29; and for 1915, 3.26.

A similar table has been prepared shewing the previous issue of mothers of twins and triplets, from which it appears that 329 mothers had twins at their first confinement; 272 at their second; 200 at their third; 151 at their fourth; 140 at their fifth; 112 at

their sixth; 74 at their seventh; 45 at their eighth; 37 at their ninth; 19 at their tenth; 10 at their eleventh; 4 at their twelfth; and 2 at their thirteenth.

Of the 10 cases of triplets, 4 occurred at the first confinement; 3 at the second; 2 at the third; and 1 at the sixth.

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, 1921.

Interval.	Number of First Children.			Interval.	Number of First Children.		
	Males.	Females.	Total.		Males.	Females.	Total.
Under 1 month	239	198	437	2 years ..	1,511	1,412	2,923
1 month ..	271	267	538	3 „ ..	711	702	1,413
2 months ..	402	333	735	4 „ ..	443	394	837
3 „ ..	551	466	1,017	5 „ ..	352	302	654
4 „ ..	704	632	1,336	6 „ ..	186	163	349
5 „ ..	945	836	1,781	7 „ ..	114	111	225
6 „ ..	1,239	1,181	2,420	8 „ ..	72	75	147
7 „ ..	1,167	1,064	2,231	9 „ ..	49	49	98
8 „ ..	1,015	935	1,950	10 „ ..	36	44	80
9 „ ..	2,103	2,119	4,222	11 „ ..	23	27	50
10 „ ..	1,899	1,731	3,630	12 „ ..	21	20	41
11 „ ..	1,357	1,288	2,645	13 „ ..	17	13	30
12 „ ..	1,007	943	1,950	14 „ ..	14	8	22
13 „ ..	808	792	1,600	15 „ ..	7	12	19
14 „ ..	678	572	1,250	16 „ ..	9	11	20
15 „ ..	586	543	1,129	17 „ ..	5	6	11
16 „ ..	461	476	937	18 „ ..	2	1	3
17 „ ..	404	383	787	19 „ ..	..	1	1
18 „ ..	407	400	807	20 „ ..	1	1	2
19 „ ..	384	321	705	23 „ ..	1	..	1
20 „ ..	340	306	646	29 „ ..	1	..	1
21 „ ..	234	263	497				
22 „ ..	245	225	470				
23 „ ..	181	190	371	Total ..	21,202	19,816	41,018

The masculinity of first births was 3.38 as compared with 2.85 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 about as 2 is to 3. 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 is 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, 1921.

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.
12 years ..	1	..	1	..	..	1
13 " ..	4	..	4	..	..	4
14 " ..	23	5	28	1	6	29
15 " ..	63	18	81	2	20	83
16 " ..	172	126	298	24	150	322
17 " ..	307	419	726	73	492	799
18 " ..	487	876	1,363	297	1,173	1,660
19 " ..	559	1,297	1,856	745	2,042	2,601
20 " ..	562	1,379	1,941	1,156	2,535	3,097
21 " ..	556	1,574	2,130	1,651	3,225	3,781
22 " ..	448	1,293	1,741	2,190	3,483	3,931
23 " ..	418	1,081	1,499	2,490	3,571	3,989
24 " ..	356	849	1,205	2,584	3,433	3,789
25 " ..	324	741	1,065	2,596	3,337	3,661
26 " ..	248	611	859	2,392	3,003	3,251
27 " ..	241	475	716	2,128	2,603	2,844
28 " ..	200	371	571	1,917	2,288	2,488
29 " ..	171	309	480	1,692	2,001	2,172
30 " ..	192	243	435	1,421	1,664	1,856
31 " ..	129	168	297	1,084	1,252	1,381
32 " ..	126	126	252	919	1,045	1,171
33 " ..	127	110	237	694	804	931
34 " ..	99	82	181	563	645	744
35 " ..	110	80	190	478	558	668
36 " ..	81	49	130	359	408	489
37 " ..	83	43	126	302	345	428
38 " ..	88	28	116	245	273	361
39 " ..	60	28	88	175	203	263
40 " ..	46	25	71	141	166	212
41 " ..	33	18	51	90	108	141
42 " ..	36	6	42	86	92	128
43 " ..	19	9	28	40	49	68
44 " ..	11	5	16	24	29	40
45 " ..	9	1	10	7	8	17
46 " ..	3	..	3	..	..	3
47 " ..	1	..	1	3	3	4
48 " ..	2	..	2	3	3	5
49 " ..	1	..	1	1	1	2
Not stated ..	5	..	5	..	..	5
Total ..	6,401	12,445	18,846	28,573	41,018	47,419

13. Interval between Birth and Registration of Birth.—Information was obtained during 1921 as to the period elapsing between birth and registration. The law relating to maternity allowances has tended to accelerate the registration of births; and during the year under review it was found that approximately 35 per cent. were registered in the first week.

INTERVAL BETWEEN BIRTH AND REGISTRATION, COMMONWEALTH, 1921.

Interval.	Nuptial Births.	Ex-nuptial Births.	Total Births.	Interval.	Nuptial Births.	Ex-nuptial Births.	Total Births.
Under 1 day	1,403	90	1,493	38 days ..	586	20	606
1 day ..	5,659	472	6,131	39 " ..	574	19	593
2 days ..	7,512	591	8,103	40 " ..	585	13	598
3 " ..	8,140	511	8,651	41 " ..	531	25	556
4 " ..	7,836	359	8,195	42 " ..	482	22	504
5 " ..	7,834	281	8,115	43 " ..	408	18	426
6 " ..	7,059	262	7,321	44 " ..	379	13	392
7 " ..	6,428	258	6,686	45 " ..	322	15	337
8 " ..	5,911	228	6,139	46 " ..	312	15	327
9 " ..	5,252	148	5,400	47 " ..	303	18	321
10 " ..	5,051	218	5,269	48 " ..	285	8	293
11 " ..	4,870	238	5,108	49 " ..	263	21	284
12 " ..	4,763	239	5,002	50 " ..	233	9	242
13 " ..	4,603	247	4,850	51 " ..	228	10	238
14 " ..	4,001	216	4,217	52 " ..	227	10	237
15 " ..	3,426	221	3,647	53 " ..	211	13	224
16 " ..	3,071	142	3,213	54 " ..	200	10	210
17 " ..	2,710	138	2,848	55 " ..	206	11	217
18 " ..	2,476	155	2,631	56 " ..	213	12	225
19 " ..	2,337	109	2,446	57 " ..	181	7	188
20 " ..	2,062	105	2,167	58 " ..	197	12	209
21 " ..	1,944	71	2,015	59 " ..	197	20	217
22 " ..	1,740	74	1,814	60 " ..	128	6	134
23 " ..	1,677	79	1,756	61 to 69 days	301	28	329
24 " ..	1,460	62	1,522	70 " 79 "	177	14	191
25 " ..	1,402	40	1,442	80 " 89 "	109	16	125
26 " ..	1,362	57	1,419	90 " 99 "	60	9	69
27 " ..	1,189	63	1,252	100 " 109 "	27	2	29
28 " ..	1,101	45	1,146	110 " 119 "	14	6	20
29 " ..	1,067	41	1,108	120 " 129 "	13	1	14
30 " ..	980	51	1,031	130 " 139 "	11	1	12
31 " ..	1,009	35	1,044	140 " 149 "	9	1	10
32 " ..	862	49	911	150 " 159 "	13	4	17
33 " ..	794	48	842	160 " 169 "	5	4	9
34 " ..	732	32	764	170 " 179 "	6	1	7
35 " ..	716	29	745	180 " 365 "	22	2	24
36 " ..	639	26	665				
37 " ..	639	17	656	Total Births	129,735	6,463	136,198

The weighted average interval between the dates of birth and registration has been found to be about 13 days both for nuptial and ex-nuptial children since the granting of the maternity allowance.

2. Marriages.

1. Marriages, 1915 to 1921.—The number of marriages registered in the Commonwealth in 1920 was 51,552, the highest number ever recorded. During 1921 46,869 marriages were celebrated, and although this number did not reach the record

of 1920, it was considerably in excess of the figures for the years prior to 1920. The number of marriages in each State since 1915 is shewn below :—

TOTAL MARRIAGES, COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Terr.	Common- wealth
1915 ..	18,095	12,832	6,135	3,965	2,581	1,600	12	4	45,224
1916 ..	16,316	11,342	5,208	3,602	2,365	1,433	19	4	40,289
1917 ..	13,246	9,505	4,868	3,252	1,621	1,138	34	2	33,666
1918 ..	13,194	9,156	4,815	3,190	1,612	1,131	39	4	33,141
1919 ..	15,809	11,706	5,429	3,855	2,194	1,513	25	9	40,540
1920 ..	20,154	14,898	6,667	4,881	2,932	1,949	17	4	51,552
1921 ..	18,506	13,676	5,963	4,383	2,656	1,668	15	2	46,869

2. **Marriage Rates, 1915 to 1921.**—The number of marriages registered per thousand of mean population is shewn in the following table for the same period :—

CRUDE MARRIAGE RATE (a), COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Terr.	Common- wealth.
1915 ..	9.58	8.96	8.85	8.88	8.04	8.15	2.78	1.62	9.07
1916 ..	8.63	8.02	7.60	8.15	7.56	7.37	3.99	1.53	8.14
1917 ..	6.96	6.73	7.13	7.36	5.27	5.86	7.01	0.80	6.80
1918 ..	6.79	6.43	6.89	7.07	5.24	5.70	8.01	1.65	6.59
1919 ..	7.91	7.95	7.49	8.23	6.87	7.38	5.37	3.89	7.80
1920 ..	9.75	9.85	8.92	10.03	8.90	9.50	4.04	1.84	9.62
1921 ..	8.79	8.90	7.80	8.81	7.97	7.82	3.84	0.81	8.59

(a) Number of marriages (not persons married) per 1,000 of mean annual population.

As in some international tabulations the marriage rates are calculated per 1,000 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 is the case in the preceding table.

3. **Marriage Rates in Various Countries.**—A comparison of the Australian marriage rate with that of European countries shews that until 1915 it was once or twice surpassed by the rate for Ontario, and equalled by the rate of some of the countries of the East of Europe, and that it was higher than the rate of the countries of Central and Western Europe, and especially than the rate of countries of the North of Europe. The following table shews that the Commonwealth, with a rate of 8.6, occupies a very favourable position in the list of countries for which recent information is available.

CRUDE MARRIAGE RATES, VARIOUS COUNTRIES.

Country.	Year.	Crude Marriage Rate.	Country.	Year.	Crude Marriage Rate.
Serbia	1911	10.3	Prussia	1912	8.0
United Kingdom ..	1919	9.9	Switzerland ..	1919	8.0
South Africa, Union of	1920	9.9	Scotland	1921	8.0
Bulgaria	1911	9.4	Western Australia ..	1921	8.0
Ontario (Canada) ..	1919	9.3	Russia (European) ..	1909	7.9
Japan	1918	9.0	Tasmania	1921	7.8
Victoria	1921	8.9	Queensland	1921	7.8
South Australia ..	1921	8.8	Germany	1913	7.7
Quebec (Canada) ..	1919	8.8	Norway	1918	7.5
New South Wales ..	1921	8.8	France	1913	7.5
New Zealand	1921	8.7	Austria	1912	7.4
Australia	1921	8.6	Sweden	1918	6.7
Hungary	1912	8.6	Ireland	1919	6.1
Rumania	1914	8.5	Finland	1919	5.7
Netherlands	1919	8.5	Chile	1914	5.2
England and Wales ..	1921	8.4	Ceylon	1920	5.2
Denmark	1919	8.3	Jamaica	1919	3.7
Spain	1919	8.1	Italy	1917	2.7
Belgium	1912	8.0			

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 1,714 males who were less than twenty-one years of age were married during 1921. The corresponding number of females was 8,635. At the other extreme there were 36 men of sixty-five years and upwards, who described themselves as bachelors, and 7 spinsters of corresponding age.

AGES AND CONJUGAL CONDITION OF PERSONS MARRIED,
COMMONWEALTH, 1921.

Age at Marriage.	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
12 years ..	..	..	..	..	1	..	..	1
13 .. ..	..	..	..	..	1	..	..	1
14 .. ..	..	..	..	..	10	..	..	10
15	1	..	..	1	61	..	..	61
16	7	..	..	7	321	..	..	321
17	65	..	..	65	939	..	..	939
18	197	..	..	197	1,849	1	..	1,850
19	499	..	..	499	2,538	1	..	2,539
20	945	..	..	945	2,909	4	..	2,913
21	2,555	1	1	2,557	4,947	22	3	4,972
22	2,802	3	1	2,806	4,064	24	8	4,096
23	3,350	9	2	3,361	3,764	38	12	3,814
24	3,362	14	4	3,380	3,625	50	17	3,692
25	3,643	10	5	3,658	3,209	75	25	3,309
26	3,572	30	15	3,617	2,782	80	25	2,887
27	3,202	37	15	3,254	2,309	106	33	2,448
28	3,085	50	20	3,155	1,964	97	28	2,089

AGES AND CONJUGAL CONDITION OF PERSONS MARRIED,
COMMONWEALTH, 1921—*continued*.

Age at Marriage.	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
29 years ..	2,545	55	31	2,631	1,516	112	38	1,666
30 " ..	2,214	71	22	2,307	1,238	121	34	1,393
31 " ..	1,800	87	17	1,904	940	102	44	1,086
32 " ..	1,531	88	19	1,638	807	125	39	971
33 " ..	1,281	112	31	1,424	658	105	30	793
34 " ..	1,039	87	28	1,154	485	101	32	618
35 " ..	899	90	16	1,005	430	105	28	563
36 " ..	738	97	29	864	328	100	26	454
37 " ..	591	86	26	703	271	102	17	390
38 " ..	553	109	31	693	232	97	24	353
39 " ..	447	97	28	572	227	102	14	343
40 " ..	337	110	21	468	192	96	17	305
41 " ..	269	86	23	378	111	67	15	193
42 " ..	266	92	18	376	124	79	10	213
43 " ..	217	85	19	321	108	64	8	180
44 " ..	167	70	11	248	94	62	7	163
45 " ..	176	69	15	260	85	63	9	157
46 " ..	141	80	17	238	63	58	5	126
47 " ..	118	66	9	193	66	50	6	122
48 " ..	110	79	9	198	39	64	7	110
49 " ..	92	80	10	182	25	50	4	79
50 " ..	80	79	6	165	28	45	4	77
51 " ..	66	50	7	123	22	26	1	49
52 " ..	67	75	5	147	25	36	2	63
53 " ..	34	67	13	114	23	35	1	59
54 " ..	38	55	9	102	14	26	3	43
55 " ..	22	73	1	96	7	26	2	35
56 " ..	32	61	4	97	11	24	1	36
57 " ..	27	52	3	82	8	22	3	33
58 " ..	33	61	5	99	8	25	..	33
59 " ..	20	34	4	58	6	28	..	34
60 " ..	11	66	2	79	6	29	..	35
61 " ..	10	33	2	45	4	9	..	13
62 " ..	14	35	1	50	3	12	..	15
63 " ..	7	29	1	37	3	16	..	19
64 " ..	2	26	2	30	3	17	..	20
65 " ..	9	49	2	60	3	9	..	12
66 " ..	5	32	1	38	1	14	..	15
67 " ..	3	23	..	26	..	9	1	10
68 " ..	5	17	1	23	1	8	..	9
69 " ..	3	18	..	21	1	6	..	7
70 " ..	3	20	..	23	..	4	..	4
71 " ..	3	11	..	14	..	2	..	2
72 " ..	..	10	..	10	1	5	..	6
73 " ..	..	8	..	8	..	1	..	1
74 " ..	1	8	..	9	..	3	..	3
75 " ..	1	15	..	16	..	1	..	1
76 " ..	1	7	..	8	..	3	..	3
77 " ..	..	3	..	3	..	1	..	1
78 " ..	..	5	..	5	..	..	..	..
79 " ..	..	6	..	6	..	2	..	2
80 " ..	..	1	..	1	..	1	..	1
81 " ..	2	1	..	3	..	..	..	..
84 " ..	..	1	..	1	..	1	..	1
85 " ..	..	3	..	3	..	..	..	..
86 " ..	..	1	..	1	..	..	..	..
89 " ..	..	1	..	1	..	..	..	..
93 " ..	..	1	..	1	..	..	..	..
Not stated	4	1	..	5	6	1	..	7
Total	43,319	2,988	562	46,869	43,516	2,770	583	46,869

(b) The relative ages of bridegrooms and brides are shewn for single years in "Bulletin of Population and Vital Statistics, No. 39"; a condensation into age-groups of five years is here given :—

RELATIVE AGES OF PERSONS MARRIED, COMMONWEALTH, 1921.

Ages.		Total Bride- grooms.	Ages of Brides.								Not stated.
			Under 15.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and upwards.	
Ages of Bridegrooms.	Under 20 ..	769	2	538	212	17	..	..	..	..	..
	20 to 24 ..	13,049	5	3,120	8,116	1,600	171	28	7	1	1
	25 to 29 ..	16,315	2	1,473	7,685	5,857	1,076	170	40	12	..
	30 to 34 ..	8,427	1	406	2,513	3,132	1,825	438	93	19	..
	35 to 39 ..	3,837	1	124	683	1,198	984	616	171	60	..
	40 to 44 ..	1,791	1	26	178	354	460	419	255	97	1
	45 to 49 ..	1,071	..	15	57	153	201	232	199	213	1
	50 to 54 ..	651	..	5	25	55	81	112	144	228	1
	55 to 59 ..	432	..	2	12	18	40	54	82	224	..
	60 to 64 ..	241	..	..	..	10	14	19	41	157	..
	65 and upwards ..	281	..	1	4	5	9	15	22	225	..
	Not stated ..	5	..	..	2	..	..	..	..	..	3
Total Brides ..		46,869	12	5,710	19,487	12,399	4,861	2,103	1,054	1,236	7

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 1921, was shewn. In the following table the relative conjugal condition of the contracting parties is given :—

RELATIVE CONJUGAL CONDITION OF PERSONS MARRIED, COMMONWEALTH, 1921.

Conjugal Condition.		Total Bridegrooms.	Brides.		
			Spinsters.	Widows.	Divorced.
Bridegrooms	Bachelors ..	43,319	41,086	1,795	438
	Widowers ..	2,988	1,988	892	108
	Divorced ..	562	442	83	37
Total Brides ..		46,869	43,516	2,770	583

6. Birthplaces of Persons Married.—Information as to the birthplaces of persons who were married in 1921 was not obtained in the State of Western Australia; the following figures refer, therefore, only to New South Wales, Victoria, Queensland, South Australia, Tasmania, the Northern Territory and Federal Territory. As might

be expected, there were more brides than bridegrooms who were natives of the Commonwealth. In "Bulletin No. 39, Commonwealth Demography," the relative birth-places of bridegrooms and brides will be found tabulated.

BIRTHPLACES OF PERSONS MARRIED, COMMONWEALTH (a), 1921.

Birthplaces.	Bridegrooms.	Brides.	Birthplaces.	Bridegrooms.	Brides.
AUSTRALASIA—			ASIA—continued.		
New South Wales ..	14,545	15,873	Java ..	..	2
Victoria ..	12,720	12,888	Philippine Islands ..	2	..
Queensland ..	4,596	5,180	Syria ..	16	5
South Australia ..	4,033	4,047			
Western Australia ..	155	205	AFRICA—		
Tasmania ..	1,862	1,935	Mauritius ..	4	1
Northern Territory ..	11	9	Union of South Africa	52	38
Federal Territory ..	3	..	Other African British Possessions ..	2	..
New Zealand ..	405	280	Egypt ..	2	5
			Other African Countries ..	1	..
EUROPE—			AMERICA—		
England ..	3,495	2,425	Canada ..	45	11
Wales ..	95	63	Jamaica ..	1	1
Scotland ..	867	656	Newfoundland ..	2	..
Ireland ..	470	281	Other American British Possessions ..	5	4
Isle of Man ..	5	3	Argentine Republic ..	3	3
Other European British Possessions	25	11	Brazil ..	1	1
Austria-Hungary ..	14	5	Chile ..	1	1
Belgium ..	4	6	Mexico ..	..	1
Denmark ..	48	8	United States ..	90	25
France ..	25	19	Other American Countries ..	6	4
Germany ..	114	48			
Greece ..	48	16	POLYNESIA —		
Italy ..	76	36	Fiji ..	8	10
Netherlands ..	21	4	Papua ..	1	1
Norway ..	26	4	New Caledonia ..	6	11
Russia ..	81	19	New Hebrides ..	4	1
Spain ..	13	3	Samoa ..	1	..
Sweden ..	50	3	Other Polynesian Islands ..	2	..
Switzerland ..	20	7	South Sea Islands (so described) ..	5	1
Other European Countries ..	6	5	At sea ..	18	7
ASIA—			Not stated ..	4	12
British India ..	46	20			
Ceylon ..	8	1	Total ..	44,213	44,213
Straits Settlements	1	2			
Other Asiatic British Possessions ..	4	1			
China ..	35	5			
Japan ..	4	..			

(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 "Bulletin No. 39" the 1921 tabulation is shewn for orders of occupations; here it is repeated in an abridged form. The average ages of the persons falling under those twenty-eight 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 27.54 among those engaged in the manufacture of gas, electricity and other forms of energy to 32.66 years in the Pastoral class. The results obtained are shewn in the following table :—

OCCUPATIONS AND AGES OF BRIDEGROOMS, COMMONWEALTH, 1921.

Ages at Marriage.	Pro-fessional.		Domestic.		Commercial.							Transport and Communication.			
	Government, Defence, and Law.	Others.	Board and Lodging.	Others.	Property and Finance.	Art, Mechanic, and Textile Products.	Food and Drinks.	Animal and Vegetable Substances.	Fuel, Light, and Metals.	Merchants and Dealers.	Others.	Railways.	Roads and Trams.	Seas and Rivers.	Others.
15 years..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
16 " ..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..
17 " ..	2	1	..	..	..	..	..	1	..	..	..	..	1	..	1
18 " ..	..	2	..	..	..	..	10	1	..	..	..	..	19	3	..
19 " ..	5	9	3	..	..	1	31	..	..	..	..	..	62	10	..
20 " ..	15	22	5	17	4	4	..	..	..	..	..	..	172	49	27
21 " ..	48	64	18	29	14	10	87	..	..	39	177	101	172	49	38
22 " ..	47	65	20	35	25	22	110	3	..	32	240	121	161	38	38
23 " ..	69	121	20	33	35	29	140	9	9	61	322	119	200	48	47
24 " ..	72	110	24	29	42	25	133	9	..	45	345	122	171	31	50
25 " ..	100	117	24	31	57	25	139	6	7	87	400	126	165	43	54
26 " ..	105	132	25	20	65	35	159	10	6	66	348	144	177	52	47
27 " ..	92	125	24	27	41	28	105	10	8	67	347	100	142	46	47
28 " ..	69	135	29	23	47	33	99	13	..	70	309	131	131	49	31
29 " ..	71	98	16	27	38	20	96	9	6	56	255	96	132	46	36
30 " ..	66	118	21	16	36	19	69	12	3	58	230	87	90	36	22
31 " ..	38	81	18	13	27	21	58	10	8	44	188	53	71	38	27
32 " ..	39	72	26	14	27	19	47	8	3	52	140	55	48	30	9
33 " ..	31	72	15	13	20	10	38	9	6	36	132	45	64	30	10
34 " ..	28	57	16	9	19	13	43	8	8	28	96	36	34	25	9
35 to 39..	90	170	60	33	51	45	117	22	9	124	325	100	152	107	31
40 " 44..	39	81	16	28	24	16	48	8	5	62	152	49	60	46	13
45 " 49..	26	42	23	15	17	14	34	5	5	43	95	24	38	22	12
50 and over	33	83	27	18	30	19	38	9	7	63	108	53	41	33	9
Not stated	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..
Total ..	1,085	1,778	430	443	621	408	1,626	169	115	1,055	4,323	1,607	2,181	792	531
Average age— year 1921	29.93	31.02	32.48	30.14	30.94	31.21	28.84	32.25	32.00	32.19	29.45	29.12	28.19	31.27	28.47

Ages at Marriage.	Manufacturing.								Primary Producers.					Indefinite.
	Art and Mechanic Productions.	Textiles and Fibrous Materials.	Food and Drinks.	Animal and Vegetable Substances.	Metals and Minerals.	Fuel, Light, and Energy.	Building and Construction.	Others.	Agri-cultural.	Pastoral.	Mining and Quarrying.	Others.		
15 years..	..	..	..	1	..	..	..	..	..	..	..	..	..
16 " ..	1	..	1	..	1	..	..	2	..	..	..	..	..
17 " ..	6	3	2	..	8	1	3	15	4	..	..	..	..
18 " ..	8	4	7	2	9	3	10	67	12	5	1	3	..	
19 " ..	28	17	12	10	27	3	21	155	39	5	15	5	..	
20 " ..	73	23	20	7	53	6	43	282	95	24	27	15	1	
21 " ..	180	51	57	14	112	43	143	682	283	42	75	29	4	
22 " ..	204	61	58	26	139	39	170	640	340	70	61	28	4	
23 " ..	276	68	45	16	134	42	202	685	461	64	72	29	9	
24 " ..	262	73	39	18	119	51	226	670	551	73	57	19	4	
25 " ..	259	73	49	23	143	45	249	685	573	94	49	29	4	
26 " ..	263	74	63	15	112	48	216	641	608	114	46	22	4	
27 " ..	220	59	51	1	111	37	178	601	600	98	46	23	6	
28 " ..	194	52	37	13	120	28	173	575	603	106	50	24	3	
29 " ..	160	45	26	14	77	34	133	481	506	87	37	25	4	
30 " ..	132	41	21	8	75	22	108	418	459	73	46	20	1	
31 " ..	112	27	20	6	53	23	112	330	395	85	29	15	2	
32 " ..	107	37	20	2	41	17	79	312	305	80	29	16	4	
33 " ..	75	16	14	11	38	19	79	248	285	83	15	9	1	
34 " ..	60	21	14	4	32	7	60	194	261	44	21	7	1	
35 to 39..	177	48	39	12	84	32	199	699	800	203	62	30	11	
40 " 44..	72	22	13	4	38	9	98	356	351	110	44	20	7	
45 " 49..	53	15	16	5	21	3	41	221	170	70	29	8	4	
50 and over	74	30	23	8	32	1	113	288	249	99	56	12	49	
Not stated	..	..	..	..	..	..	..	2	1	..	..	..	..
Total ..	2,996	860	647	234	1,579	513	2,656	9,249	7,951	1,631	875	391	123	
Average age— year 1921	28.58	28.81	28.56	28.19	27.96	27.54	29.63	29.20	30.49	32.66	30.42	29.35	41.63	

The age at marriage of brides has remained fairly stationary during the period at an average of about 26 years. The figures for the seven years are:—1915, 25.75 years; 1916, 26.07 years; 1917, 26.22 years; 1918, 26.11 years; 1919, 25.77 years; 26.11 years in 1920; and 26.16 in 1921. For the five years 1907–11 the average age was 25.70 years, compared with 25.92 years for the five years 1912–16, and 26.07 for the five years 1917–21. As the average age of all bridegrooms during 1921 was 29.74 years, it follows that brides are generally speaking rather less than three years and one-half younger than bridegrooms.

8. Fertility of Marriages.—The quotient obtained by division of the nuptial births registered, say during the five years 1917 to 1921, by the number of marriages registered during the five years 1912 to 1916, 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 3.06, or in other words, the number of children to be expected from every marriage in the Commonwealth is about three. 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. For the period 1907–11 the result was 3.43; for the year 1914, 3.87; for the year 1915, 3.50; for the year 1916, 3.17; for the year 1917, 2.93; for the year 1918, 3.02; for the year 1919, 2.86; and for the year 1920, 3.05.

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 great majority of marriages in every State are celebrated by ministers of religion. The proportions so celebrated in 1921 were: New South Wales, 95.13 per cent.; Victoria, 97.16 per cent.; Queensland, 97.20 per cent.; South Australia, 96.46 per cent.; Western Australia, 84.15 per cent.; and Tasmania, 97.60 per cent., the percentage for the Commonwealth being 95.57. The registered ministers in 1921 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 1921 are shewn in the following table:—

MARRIAGES IN EACH DENOMINATION, COMMONWEALTH, 1921.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N. Ter.	Fed. Ter.	Com'. wealth.
Church of England ..	7,951	3,980	1,796	1,149	981	635	5	2	16,499
Roman Catholic Church..	3,700	2,359	1,243	530	382	241	3	..	8,458
Presbyterian Church of Australia ..	2,552	2,717	898	232	217	190	2	..	6,808
Methodist Church ..	2,318	1,919	987	1,370	435	288	3	..	7,320
Congregational Church ..	425	992	222	196	108	58	..	..	2,001
Baptist Church ..	265	599	174	246	56	121	..	..	1,461
Church of Christ ..	154	358	45	246	21	46	..	..	870
Lutheran Church ..	33	50	131	187	..	..	..	..	401
Greek Orthodox Church..	12	5	..	..	6	..	..	..	23
Unitarian Church ..	14	3	..	4	..	..	..	..	21
Salvation Army ..	72	48	43	41	14	9	..	..	227
Seventh-Day Adventists..	16	15	12	5	3	6	..	..	57
Other Christians ..	35	198	238	18	4	33	1	..	527
Hebrew ..	51	44	5	4	8	1	..	..	113
Registrar's Office ..	901	389	167	155	421	40	1	..	2,074
Unspecified ..	7	..	2	..	..	..	..	..	9
Total ..	18,506	13,676	5,963	4,383	2,656	1,668	15	2	46,869

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, 1915 to 1921.* The percentage of mark signatures by males and females during the last seven years have been very even, with a slight preponderance in the case of males :—

**PERCENTAGE OF MARK SIGNATURES AT MARRIAGE, COMMONWEALTH,
1915 TO 1921.**

Year.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
Male	0.27	0.37	0.37	0.33	0.27	0.18	0.16
Female	0.27	0.32	0.31	0.29	0.27	0.14	0.18

(ii) *Mark Signatures in Commonwealth States, 1915 to 1921.* The following table shows that there has been a marked decrease in every State over the whole period :—

**PERCENTAGE OF MARK SIGNATURES AT MARRIAGE, COMMONWEALTH,
1915 TO 1921.**

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Terr.	C'wealth.
1915 ..	0.25	0.11	0.26	0.32	0.43	1.47	..	..	0.27
1916 ..	0.41	0.18	0.32	0.35	0.32	0.98	10.53	..	0.35
1917 ..	0.41	0.16	0.32	0.25	0.49	1.14	7.35	..	0.34
1918 ..	0.37	0.13	0.12	0.34	0.43	1.41	5.13	..	0.31
1919 ..	0.29	0.18	0.17	0.25	0.32	0.89	16.00	..	0.27
1920 ..	0.17	0.09	0.04	0.11	0.31	0.90	5.88	..	0.16
1921 ..	0.21	0.09	0.11	0.13	0.24	0.51	6.67	..	0.17

A complete disappearance of mark signatures is hardly to be expected, for the available information tends to shew that about 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, 1915 to 1921.*—The total number of deaths registered in the Commonwealth from 1915 to 1921 inclusive, gives an annual average of 30,652 males and 23,424 females, the details being as follow :—

MALE DEATHS, COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Terr.	C'wealth.
1915 ..	11,439	8,860	4,695	2,587	1,887	1,083	89	14	30,654
1916 ..	11,500	8,901	4,653	2,721	1,981	1,148	108	6	31,018
1917 ..	10,445	7,952	4,027	2,398	1,802	926	52	7	27,609
1918 ..	10,914	8,079	4,359	2,430	1,774	959	66	4	28,585
1919 ..	15,256	10,508	5,337	2,927	2,340	1,175	82	7	37,632
1920 ..	12,088	9,059	4,824	2,814	2,161	1,055	48	4	32,053
1921 ..	11,490	8,662	4,397	2,655	2,209	1,166	70	3	30,652
Rate (a), 1921	10.70	11.43	10.90	10.64	12.45	10.83	24.67	2.04	11.05

(a) Number of deaths per 1,000 of mean population.

FEMALE DEATHS, COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Terr.	C'wealth.
1915 ..	8,146	6,963	2,864	2,107	1,105	932	8	3	22,128
1916 ..	8,346	7,588	2,861	2,356	1,104	908	14	2	23,179
1917 ..	7,496	6,603	2,528	1,967	967	842	11	6	20,420
1918 ..	7,902	7,098	2,792	1,960	1,059	843	8	2	21,664
1919 ..	11,088	8,862	3,519	2,548	1,250	1,017	3	11	28,298
1920 ..	8,846	7,773	3,123	2,269	1,227	981	15	2	24,236
1921 ..	8,536	7,503	2,745	2,327	1,271	1,031	10	1	23,424
Rate (a), 1921	8.26	9.62	7.60	9.38	8.15	9.75	9.33	0.98	8.72

(a) Number of deaths per 1,000 of mean population.

2. Male and Female Death Rates, 1921.—The crude male and female death rates for 1921 only are given in the last line of the preceding tables. Western Australia has the highest rate for males, and Tasmania for females, while South Australia has the lowest male, and Queensland the lowest female death rate. The rates for the two Territories are based on very small numbers, and comparisons with the States would be misleading.

Owing to differences in the age constitution of the six States, the crude rates are not, however, strictly comparable. A more satisfactory rate is furnished by the "Index of Mortality" (see para. 14). The death rates for males and females in each State in five-year age groups for the three years 1910–1912, that is, for the census year and for the year immediately preceding and following, are shewn on page 105.

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 crude 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 ..	1921	8.7	Ireland ..	1921	14.2
Queensland ..	1921	9.3	Belgium ..	1912	14.8
New South Wales ..	1921	9.5	Prussia ..	1913	14.9
Australia ..	1921	9.9	Germany ..	1913	15.0
South Australia ..	1921	10.0	Norway ..	1918	16.4
Tasmania ..	1921	10.3	France ..	1913	17.7
Western Australia ..	1921	10.4	Sweden ..	1918	17.9
Victoria ..	1921	10.5	Italy ..	1917	18.7
South Africa, Union of			Finland ..	1919	18.9
(Whites) ..	1920	11.1	Austria ..	1912	20.5
Ontario (Canada) ..	1919	11.9	Serbia ..	1912	21.1
England and Wales ..	1921	12.1	Bulgaria ..	1911	21.5
United Kingdom ..	1921	12.5	Jamaica ..	1919	22.2
United States (Regis-			Spain ..	1919	23.3
tration area) ..	1919	12.9	Hungary ..	1912	23.3
Denmark ..	1919	13.1	Rumania ..	1914	23.8
Netherlands ..	1919	13.2	Japan ..	1918	26.8
Scotland ..	1921	13.6	Chile ..	1914	27.8
Quebec (Canada) ..	1919	13.7	Russia, European ..	1909	28.9
Switzerland ..	1919	14.2	Ceylon ..	1920	29.6

(a) Number of deaths per 1,000 of mean population.

4. **Total Deaths, 1915 to 1921.**—The total number of deaths in each of the Commonwealth States during the seven years 1915 to 1921 is shewn below :—

TOTAL DEATHS, COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Terr.	C'wealth.
1915	19,585	15,823	7,559	4,694	2,992	2,015	97	17	52,782
1916	19,846	16,489	7,514	5,077	3,085	2,056	122	8	54,197
1917	17,941	14,555	6,555	4,365	2,769	1,768	63	13	48,029
1918	18,816	15,177	7,151	4,390	2,833	1,802	74	6	50,249
1919	26,344	19,370	8,856	5,475	3,590	2,192	85	18	65,930
1920	20,934	16,832	7,947	5,083	3,388	2,036	63	6	56,289
1921	20,026	16,165	7,142	4,982	3,480	2,197	80	4	54,076

5. **Crude Death Rates, 1915 to 1921.**—The death rate for the Commonwealth during the period under review reached its maximum in 1919 owing to the outbreak of influenza.

CRUDE DEATH RATE (a), COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Terr.	C'wealth.
1915 ..	10.37	11.05	10.90	10.51	9.32	10.27	22.43	6.89	10.59
1916 ..	10.49	11.66	10.96	11.49	9.86	10.58	25.64	3.06	10.95
1917 ..	9.43	10.31	9.60	9.87	9.05	9.10	12.97	5.21	9.71
1918 ..	9.69	10.66	10.23	9.72	9.20	9.09	15.19	2.47	9.99
1919 ..	13.18	13.15	12.22	11.69	11.24	10.69	18.26	7.79	12.69
1920 ..	10.13	11.13	10.63	10.44	10.28	9.67	14.95	2.76	10.50
1921 ..	9.51	10.52	9.34	10.02	10.44	10.30	20.47	1.61	9.91

(a) Number of deaths per 1,000 of mean population for year.

6. **Male and Female Death Rates, 1915 to 1921.**—The large death rate in 1919 was due, as already stated, to an exceptional cause. The rates in the period 1915–21, excluding 1919, were remarkably steady, averaging about 11.5 per 1,000 for males, and 9 per 1,000 for females.

MALE AND FEMALE DEATH RATES (a), COMMONWEALTH, 1915 TO 1921.

Year.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
Male rate ..	11.95	12.48	11.29	11.50	14.40	11.75	11.05
Female rate ..	9.14	9.41	8.16	8.51	10.5	9.20	8.72
Crude total rate ..	10.59	10.95	9.71	9.99	12.69	10.50	9.91

(a) Number of deaths per 1,000 of mean population.

7. Infantile Death Rate.—(i) *Deaths and Death Rates of Male and Female Infants, 1915 to 1921.* While the infantile mortality rate for 1921 shows an improvement over that for 1920, it is still much higher than the rate for 1917. In the following table, which shows both the total number of deaths of children under one year and the rate per thousand births since 1915, males and females are distinguished. The universal experience that during the first few years of life the excess of male births tends to disappear as a consequence of the higher death rate of male infants, is confirmed by the fact that out of 471,121 male infants born from 1915 to 1921, 34,022 died during their first year of life, while of 445,774 female infants the number who died was only 25,805 :—

**NUMBER OF INFANTILE DEATHS AND RATES OF INFANTILE MORTALITY,
COMMONWEALTH, 1915 TO 1921.**

Year.	Registered Deaths under one year.			Rate of Infantile Mortality (a).		
	Males.	Females.	Total.	Males.	Females.	Total.
1915	5,127	3,980	9,107	74.25	60.47	67.52
1916	5,186	4,057	9,243	76.82	63.47	70.33
1917	4,232	3,034	7,266	63.27	48.10	55.91
1918	4,178	3,186	7,364	64.82	51.99	58.57
1919	4,802	3,662	8,464	76.31	61.69	69.21
1920	5,386	4,045	9,431	76.66	61.15	69.14
1921	5,111	3,841	8,952	72.97	58.06	65.73

(a) Number of deaths under 1 year per 1,000 births registered.

(ii) *Infantile Mortality, 1915 to 1921.* Divided among the States and Territories the rates of infantile mortality during the last seven years were as follows :—

RATES (a) OF INFANTILE MORTALITY, COMMONWEALTH, 1915 TO 1921.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	North. Terr.	Federal Territory.	Com'- wealth.
1915 ..	67.67	68.78	64.33	67.04	66.54	72.37	65.57	42.55	67.52
1916 ..	67.15	74.63	70.27	73.21	66.22	74.97	40.54	15.87	70.33
1917 ..	56.93	56.82	53.87	53.06	57.09	52.27	43.48	45.45	55.91
1918 ..	59.02	61.75	56.66	51.25	57.13	60.80	28.57	20.41	58.57
1919 ..	71.83	67.90	71.88	64.01	61.12	64.97	66.04	111.11	69.21
1920 ..	69.41	73.70	63.24	67.34	66.02	65.51	190.48	66.67	69.14
1921 ..	62.56	72.55	54.16	65.48	78.26	78.02	63.29	74.07	65.73

(a) Number of deaths under 1 year per 1,000 births registered.

The movement has been irregular. In 1917 a rate of 55.91 was recorded, but since that year it has not been so favourable. The rate for 1921 is only slightly less than that for 1915.

A considerable decrease is shown by every State during 1917, and the rates for that year are the lowest on record in every State and in the Commonwealth as a whole, whilst only a very slight increase was registered in 1918.

The total number of births, and of deaths of children under one year of age, and the average rate of infantile mortality for the seven years 1915 to 1921 are shown in the following table for each of the fifty-nine districts for which the vital statistics of the Commonwealth have been tabulated during that period. To afford a better idea of the geographical position of the districts, the name of a town situated in a fairly central part of each district has been added. The figures for the Federal Territory and for Lord Howe Island are included for the sake of completeness, but are too small to be used in comparison with others.

INFANTILE MORTALITY FOR THE SEVEN YEARS 1915 TO 1921.

States and Territories.	Districts.	Towns.	Total Births, 1915-21.	Total Deaths of Children under one year, 1915-21.	Average Infantile Mortality per 1,000 Births, 1915-21.
New South Wales ..	Metropolitan ..	Sydney ..	148,313	10,086	68.00
" ..	North Coast ..	Grafton ..	29,737	1,483	49.87
" ..	Lower Hunter ..	Newcastle ..	38,660	2,780	68.03
" ..	Cumberland ..	Parramatta ..	19,515	1,123	57.55
" ..	South Coast ..	Nowra ..	14,666	844	57.55
" ..	Northern Tableland ..	Armidale ..	18,790	1,125	59.87
" ..	Central Tableland ..	Bathurst ..	23,977	1,723	71.86
" ..	Southern Tableland ..	Goulburn ..	18,864	1,203	63.88
" ..	North-Western Slope ..	Moree ..	7,677	464	60.44
" ..	Central-Western Slope ..	Dubbo ..	13,196	824	62.44
" ..	South-Western Slope ..	Temora ..	14,223	683	48.02
" ..	Riverina ..	Hay ..	8,133	471	57.91
" ..	Plains East of Darling ..	Cobar ..	2,600	208	80.00
" ..	Trans-Darling Plains ..	Broken Hill ..	6,921	736	106.34
" ..	Lord Howe Island ..	..	6	1	166.67
Victoria ..	Metropolitan ..	Melbourne ..	123,526	9,526	77.12
" ..	Central ..	Geelong ..	22,255	1,401	62.95
" ..	North-Central ..	Kyneton ..	9,210	531	57.65
" ..	Western ..	Hamilton ..	24,572	1,442	58.68
" ..	Wimmera ..	Horsham ..	9,894	563	56.90
" ..	Mallee ..	Ultima ..	7,366	488	66.25
" ..	Northern ..	Rochester ..	22,279	1,368	61.40
" ..	North-Eastern ..	Beechworth ..	6,971	390	47.34
" ..	Gippsland ..	Sale ..	11,224	540	48.11
Queensland ..	Metropolitan ..	Brisbane ..	40,593	2,945	72.60
" ..	Moreton ..	Ipswich ..	16,726	847	50.64
" ..	Wide Bay ..	Maryborough ..	16,548	884	53.42
" ..	Port Curtis ..	Rockhampton ..	10,950	732	68.68
" ..	Edgcumbe ..	Townsville ..	13,837	773	55.86
" ..	Rockingham ..	Cairns ..	7,175	345	48.03
" ..	York Peninsula ..	Cooktown ..	1,217	82	67.38
" ..	Carpentaria ..	Croydon ..	2,538	211	82.49
" ..	Central-Western ..	Winton ..	761	73	95.93
" ..	South-Western ..	Charleville ..	1,816	145	79.84
" ..	Central ..	Blackall ..	4,265	261	61.20
" ..	Maranoa ..	Roma ..	2,649	192	61.15
" ..	Downs ..	Toowoomba ..	18,617	1,045	56.13
South Australia ..	Metropolitan ..	Adelaide ..	40,405	2,823	69.87
" ..	Central ..	Gawler ..	16,640	812	49.80
" ..	Lower North ..	Redruth ..	12,867	925	71.89
" ..	Upper North ..	Port Augusta ..	3,950	259	65.57
" ..	South-Eastern ..	Mount Gambier ..	4,211	193	45.83
" ..	Western ..	Port Lincoln ..	3,327	132	39.68
Western Australia ..	Metropolitan ..	Perth ..	26,934	1,948	72.32
" ..	Northern Agricultural ..	Geraldton ..	7,979	454	56.90
" ..	South-Western ..	Katanning ..	12,602	592	46.98
" ..	Eastern Goldfields ..	Kalgoorlie ..	6,289	478	76.01
" ..	Northern Goldfields ..	Pilbara ..	1,199	90	75.06
" ..	North-Western ..	Roebourne ..	258	16	62.02
" ..	Northern ..	Broome ..	200	18	90.00
Tasmania ..	Hobart ..	Hobart ..	9,954	765	76.85
" ..	Launceston ..	Launceston ..	6,083	482	79.24
" ..	North-Eastern ..	Scottsdale ..	4,096	231	56.40
" ..	North-Western ..	Stanley ..	9,788	608	62.12
" ..	Midland ..	Zeehan ..	4,170	244	58.51
" ..	South-Eastern ..	Sorell ..	3,837	222	57.86
" ..	South-Western ..	Franklin ..	1,020	66	64.71
Northern Territory ..	..	Darwin ..	557	37	66.43
Federal Territory ..	..	Canberra ..	272	12	44.12

(iii) *Infantile Mortality in Various Countries and Cities.* Compared with European and American countries, the cities and States of the Commonwealth occupy a very favourable position. It may be pointed out also in connexion with the rates hereunder, 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 ..	1921	48	23.3	Scotland ..	1921	90	25.2
Netherlands ..	1919	50	24.2	Denmark ..	1915	95	24.2
Queensland ..	1921	54	26.6	Ontario (Canada) ..	1919	96	22.1
Norway ..	1917	54	24.4	Belgium ..	1912	120	22.6
New South Wales	1921	63	25.9	Finland ..	1919	135	19.2
South Australia	1921	65	24.1	Italy ..	1917	140	19.0
Australia ..	1921	66	25.0	Quebec (Canada)	1918	142	33.0
Victoria ..	1921	73	23.2	Prussia ..	1912	146	28.9
Sweden ..	1915	76	20.3	Serbia ..	1911	146	36.2
Ireland ..	1921	76	20.2	Germany ..	1913	151	27.5
Tasmania ..	1921	78	27.0	Bulgaria ..	1911	156	40.2
Western Australia	1921	78	23.4	Jamaica ..	1919	161	34.1
France ..	1912	78	19.0	Austria ..	1912	180	31.3
South Africa, Union of (Whites)	1919	82	28.9	Ceylon ..	1920	182	36.5
Switzerland ..	1919	82	18.7	Hungary ..	1912	186	36.3
England and Wales	1921	83	22.4	Rumania ..	1914	187	42.5
United Kingdom	1921	83	22.5	Japan ..	1918	189	32.2
United States (Registration area)	1919	87	22.3	Spain ..	1919	192	28.3
				Russia, European	1909	248	44.0
				Chile ..	1914	286	37.0

(a) Number of deaths under 1 year per 1,000 births registered. (b) Number of births per 1,000 of mean population

RATE(a) OF INFANTILE MORTALITY IN VARIOUS CITIES.

City.	Year.	Rate of Infantile Mortality. (a)	City.	Year.	Rate of Infantile Mortality. (a).
Auckland ..	1920	48	Antwerp ..	1921	98
Amsterdam ..	1921	54	Liverpool ..	1921	105
Christiania ..	1921	54	Glasgow ..	1921	106
Zürich ..	1916	55	Aberdeen ..	1921	108
Rome ..	1915	56	Monte Video ..	1916	111
Stockholm ..	1921	61	Dresden ..	1921	115
Brisbane ..	1921	62	Belfast ..	1921	115
Sydney ..	1921	62	Dublin ..	1921	123
Copenhagen ..	1921	67	Munich ..	1921	126
New York ..	1921	71	Genoa ..	1916	126
Geneva ..	1916	73	Berlin ..	1921	135
Wellington ..	1920	74	Leipzig ..	1921	136
Adelaide ..	1921	74	Cologne ..	1921	140
Melbourne ..	1921	74	Chicago ..	1916	145
Hobart ..	1921	75	Vienna ..	1921	146
London ..	1921	80	Prague ..	1921	151
Perth ..	1921	81	Marseilles ..	1916	157
Birmingham ..	1921	82	Breslau ..	1921	170
Washington ..	1919	85	Rio de Janeiro	1912	174
Toronto ..	1917	92	Madrid ..	1915	177
Buenos Aires	1916	94	Florence ..	1916	192
Manchester ..	1921	94	Montreal ..	1911	242
Paris ..	1921	95	Petrograd ..	1912	249
Hamburg ..	1921	95	Madras ..	1921	281
Edinburgh ..	1921	96	Bombay ..	1920	556

(a) Number of deaths under 1 year per 1,000 births registered.

Information relative to the causes of death of children under one year of age will be found in paragraph 20.

8. Deaths in Age-Groups, 1915 to 1921.—A distribution into age-groups has been made of the 381,552 deaths which occurred in the Commonwealth from 1915 to 1921, and the results have been tabulated for each State. It is, however, sufficient here to shew the results for the Commonwealth as a whole, which are as follows:—

DEATHS IN AGE-GROUPS, COMMONWEALTH, 1915 TO 1921.

Ages.	Males.	Females.	Total.	Percentage of Total Males.	Percentage of Total Females.	Percentage of Total.
Under 1 year ..	34,022	25,805	59,827	15.59	15.80	15.68
1 year and under 5 ..	12,361	10,699	23,060	5.66	6.55	6.04
5 years and under 20 ..	11,338	9,487	20,825	5.20	5.80	5.46
20 years and under 40 ..	29,158	26,070	55,228	13.36	15.96	14.47
40 years and under 60 ..	48,625	29,855	78,480	22.28	18.28	20.57
60 years and under 65 ..	16,509	9,482	25,991	7.57	5.80	6.81
65 years and over ..	65,764	51,889	117,653	30.14	31.77	30.84
Age not stated ..	426	62	488	0.20	0.04	0.13
Total ..	218,203	163,349	381,552	100.00	100.00	100.00

9. Deaths at Single Ages and in Age-Groups, 1921.—The 54,076 deaths which were registered in the Commonwealth in the year 1921 will be found tabulated under single years, and in groups of five years for each State and Territory, in "Bulletin No. 39, Commonwealth Demography, 1921." 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 that a great number of children died 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:—

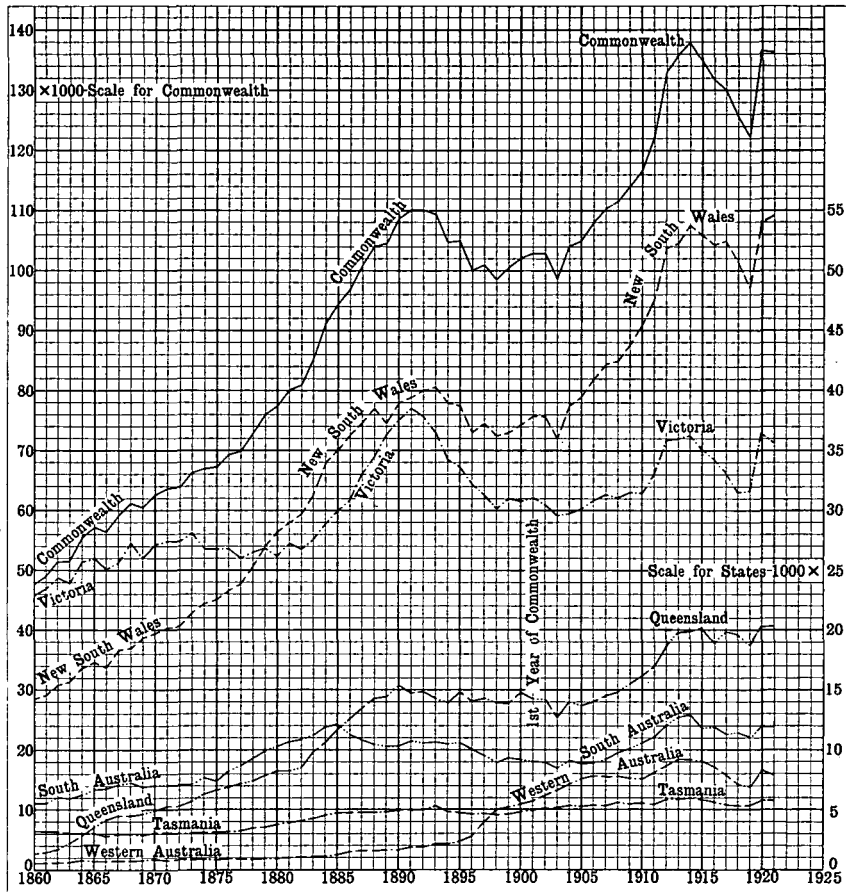
DEATHS AT SINGLE AGES AND IN AGE-GROUPS, COMMONWEALTH, 1921.

Ages.	Males.	Females.	Total.	Ages.	Males.	Females.	Total.
Under 1 week ..	1,823	1,301	3,127	16 months and under 17 ..	65	58	123
1 week and under 2 ..	303	216	519	17 " " " 18 ..	61	43	104
2 weeks " " 3 ..	216	146	362	18 " " " 19 ..	58	46	104
3 " " " 4 ..	129	106	235	19 " " " 20 ..	35	39	74
Total under 1 month ..	2,474	1,769	4,243	20 " " " 21 ..	46	42	88
1 month and under 2 ..	464	342	806	21 " " " 22 ..	43	39	82
2 months " " 3 ..	352	272	624	22 " " " 23 ..	39	27	66
3 " " " 4 ..	318	234	552	23 " " " 24 ..	29	18	47
4 " " " 5 ..	287	189	476	Total under 2 years ..	5,999	4,560	10,559
5 " " " 6 ..	211	190	401	2 years ..	358	330	688
6 " " " 7 ..	202	173	375	3 " " " ..	249	166	415
7 " " " 8 ..	199	141	340	4 " " " ..	196	190	386
8 " " " 9 ..	168	167	335	Total under 5 years ..	6,802	5,246	12,048
9 " " " 10 ..	159	129	288	5 years ..	153	149	302
10 " " " 11 ..	146	121	267	6 " " " ..	137	150	287
11 " " " 12 ..	131	114	245	7 " " " ..	118	109	227
Total under 1 year ..	5,111	3,841	8,952	8 " " " ..	114	81	195
12 months and under 13 ..	262	172	434	9 " " " ..	82	78	160
13 " " " 14 ..	87	70	157	Total 5 years and under 10 ..	604	567	1,171
14 " " " 15 ..	84	94	178				
15 " " " 16 ..	79	71	150				

DEATHS AT SINGLE AGES AND IN AGE-GROUPS, 1921—*continued.*

Ages.	Males.	Females.	Total	Ages.	Males.	Females.	Total
10 years	85	69	154	60 years	639	301	940
11 "	116	62	178	61 "	460	256	716
12 "	88	59	147	62 "	505	301	806
13 "	81	73	154	63 "	529	333	862
14 "	93	72	165	64 "	486	318	804
Total 10 years and under 15	463	335	798	Total 60 years and under 65	2,619	1,509	4,128
15 years	74	78	152	65 years	626	370	996
16 "	99	86	185	66 "	468	290	758
17 "	118	100	218	67 "	459	294	753
18 "	118	113	231	68 "	430	322	752
19 "	111	101	212	69 "	423	280	703
Total 15 years and under 20	520	478	998	Total 65 years and under 70	2,406	1,556	3,962
20 years	115	138	253	70 years	456	343	799
21 "	148	118	266	71 "	360	270	630
22 "	147	116	263	72 "	432	325	757
23 "	139	149	288	73 "	428	340	768
24 "	157	146	303	74 "	407	335	742
Total 20 years and under 25	706	667	1,373	Total 70 years and under 75	2,083	1,613	3,696
25 years	146	166	312	75 years	432	344	776
26 "	165	162	327	76 "	413	373	786
27 "	159	189	348	77 "	394	325	719
28 "	176	183	359	78 "	402	376	778
29 "	192	194	386	79 "	354	299	652
Total 25 years and under 30	838	894	1,732	Total 75 years and under 80	1,995	1,717	3,712
30 years	182	183	365	80 years	394	357	751
31 "	211	142	359	81 "	302	241	543
32 "	204	197	401	82 "	286	256	542
33 "	211	213	424	83 "	229	258	487
34 "	195	201	396	84 "	249	241	490
Total 30 years and under 35	1,003	942	1,945	Total 80 years and under 85	1,460	1,353	2,813
35 years	249	180	429	85 years	269	236	505
36 "	213	199	412	86 "	188	193	381
37 "	214	212	426	87 "	175	174	349
38 "	229	238	467	88 "	153	141	294
39 "	256	195	451	89 "	119	98	217
Total 35 years and under 40	1,161	1,024	2,185	Total 85 years and under 90	904	842	1,746
40 years	278	198	476	90 years	98	104	202
41 "	206	165	371	91 "	53	59	112
42 "	260	190	450	92 "	50	59	109
43 "	266	180	446	93 "	35	53	88
44 "	236	178	414	94 "	25	33	58
Total 40 years and under 45	1,246	911	2,157	Total 90 years and under 95	261	308	569
45 years	315	194	509	95 years	19	25	44
46 "	252	174	426	96 "	16	13	29
47 "	299	188	487	97 "	8	16	24
48 "	314	192	506	98 "	10	9	19
49 "	274	199	473	99 "	1	6	7
Total 45 years and under 50	1,454	947	2,401	Total 95 yrs. and under 100	54	69	123
50 years	376	235	611	100 years	6	2	8
51 "	306	185	491	101 "	4	5	9
52 "	334	238	572	102 "	1	2	3
53 "	365	213	578	103 "	1	..	1
54 "	373	262	635	104 "	1	1	2
Total 50 years and under 55	1,754	1,133	2,887	Total 100 years and over	13	10	23
55 years	376	241	617	Age not stated ..	81	8	89
56 "	469	273	742	Total all ages ..	30,652	23,424	54,076
57 "	421	253	674				
58 "	496	270	766				
59 "	463	258	721				
Total 55 years and under 60	2,225	1,295	3,520				

GRAPHS SHEWING TOTAL ANNUAL BIRTHS IN THE COMMONWEALTH AND STATES OF AUSTRALIA, 1860 TO 1921.



(See Table page 74.)

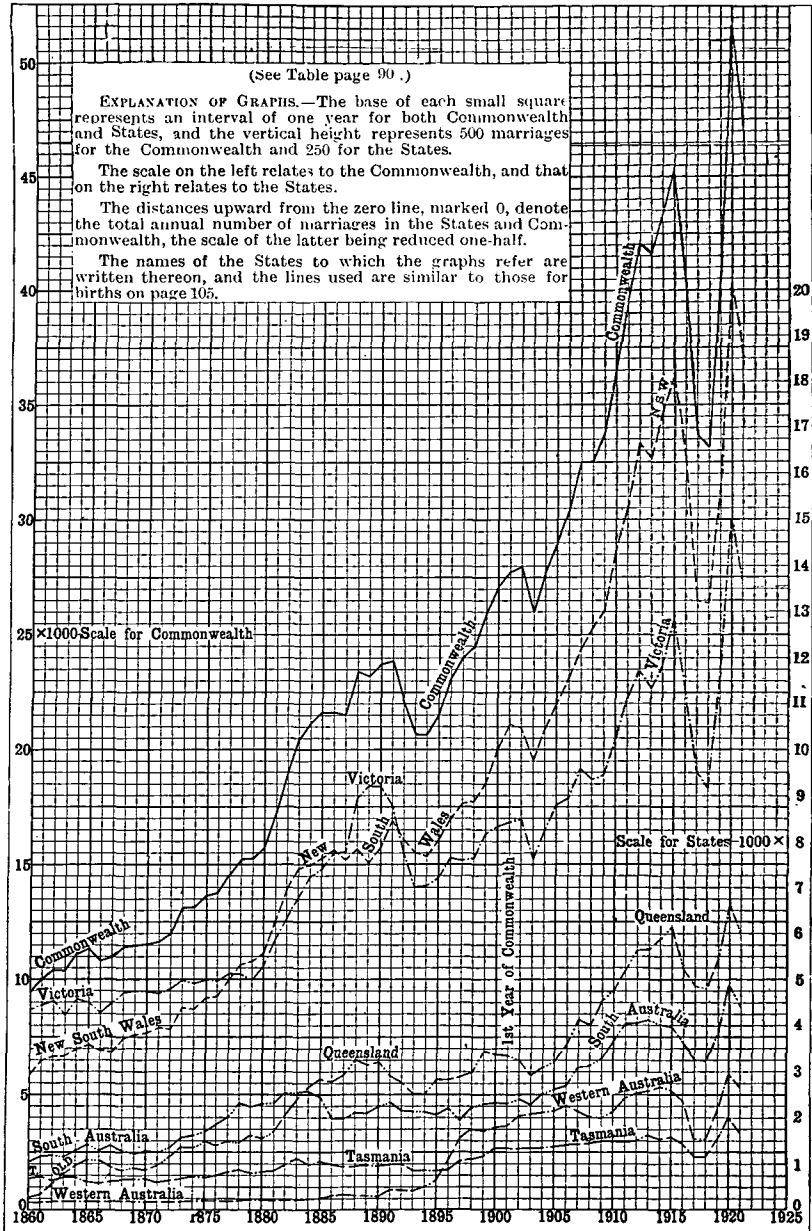
EXPLANATION OF GRAPHS.—The base of each small square represents an interval of one year for both Commonwealth and States, and the vertical height represents 2,000 persons for the Commonwealth and 1,000 for the States.

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

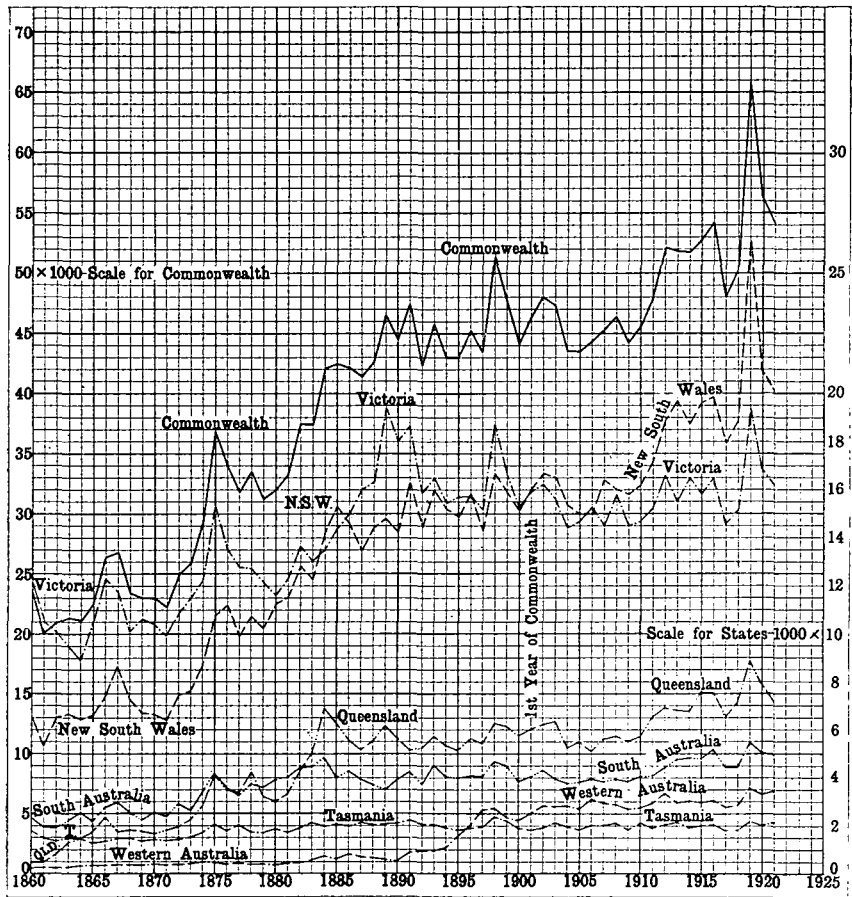
The distances upward from the common zero lines of the States and Commonwealth, marked 0, denote the total annual number of births in the States and Commonwealth, the scale of the latter being reduced one-half.

The names of the States to which the graphs refer are written thereon, and the characters of the line 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 TO 1921.



GRAPHS SHEWING TOTAL ANNUAL DEATHS IN THE COMMONWEALTH AND STATES OF AUSTRALIA, 1860 TO 1921.



(See table on page 99.)

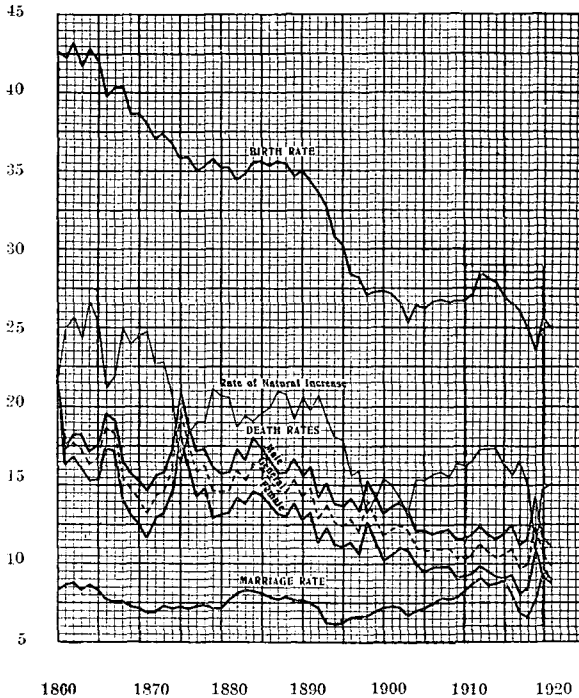
EXPLANATION OF GRAPHS.—The base of each small square represents an interval of one year for both Commonwealth and States, and the vertical height represents 1,000 persons for the Commonwealth and 500 for the States.

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 105.

GRAPHS SHEWING GENERAL BIRTH, NATURAL INCREASE, DEATH (MALE, GENERAL, AND FEMALE) AND MARRIAGE RATES IN THE COMMONWEALTH OF AUSTRALIA, 1860 TO 1921.



(See pages 75, 90, and 99.)

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.

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BIRTH RATE GRAPHS. (See next page.)

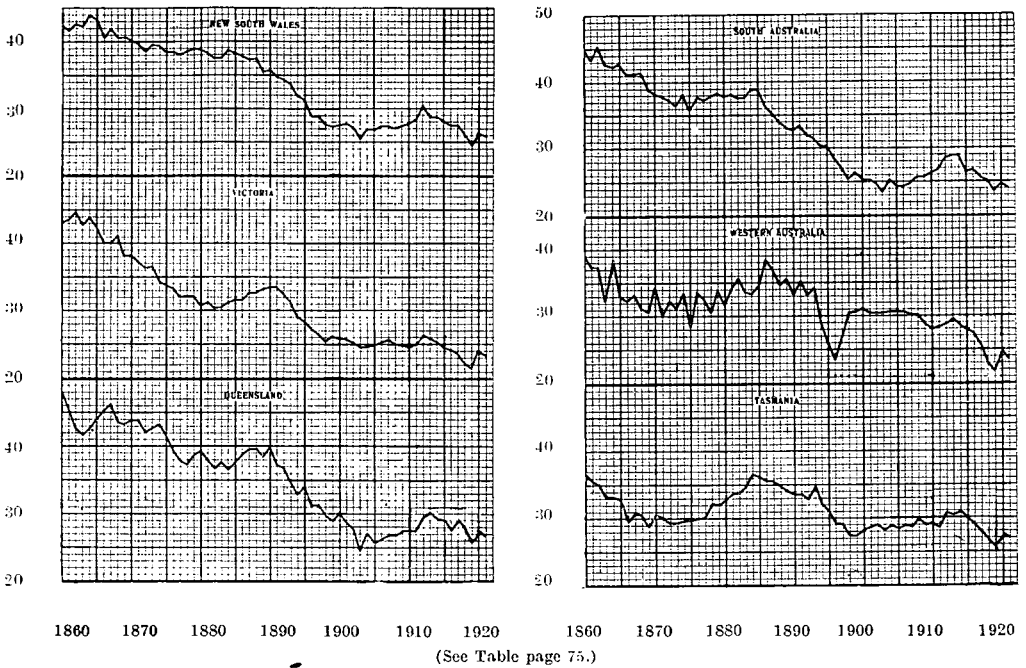
EXPLANATION OF GRAPHS.—The base of each small square represents one year's interval, and the vertical height one birth per thousand of the population—the basic line for each State being twenty per thousand of the population.

DEATH RATE GRAPHS. (See next page.)

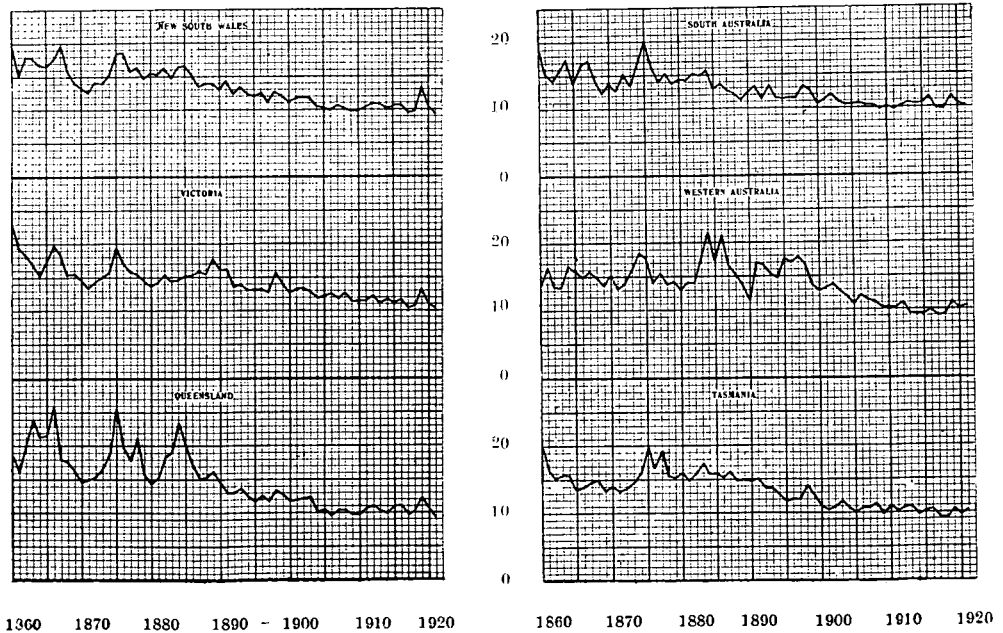
EXPLANATION OF GRAPHS.—The base of each small square represents one year's interval, and the vertical height one death per thousand of the population. The zero for each State is shown by a thickened line.

8

GRAPHS SHEWING BIRTH RATES IN THE STATES OF NEW SOUTH WALES, VICTORIA, QUEENSLAND, SOUTH AUSTRALIA, WESTERN AUSTRALIA, AND TASMANIA, 1860 TO 1921.

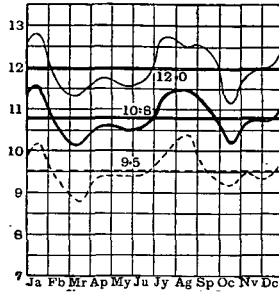


GRAPHS SHEWING DEATH RATES IN THE STATES OF NEW SOUTH WALES, VICTORIA, QUEENSLAND, SOUTH AUSTRALIA, WESTERN AUSTRALIA, AND TASMANIA, 1860-1921.

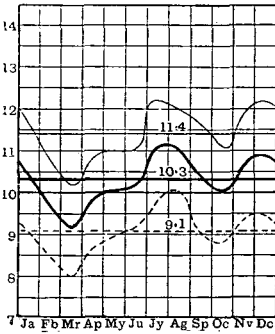


(See Table page 99.) For explanation of above graphs see page 108.

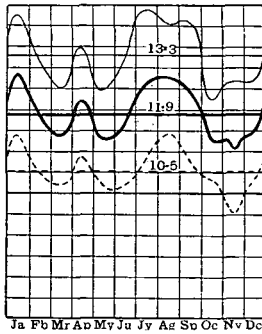
GRAPHS SHEWING GENERAL MONTHLY DEATH RATES 1907 TO 1912.



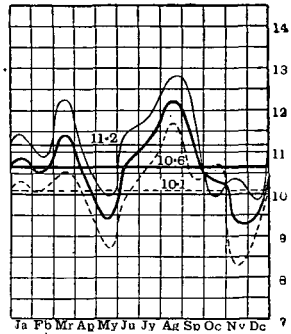
COMMONWEALTH.



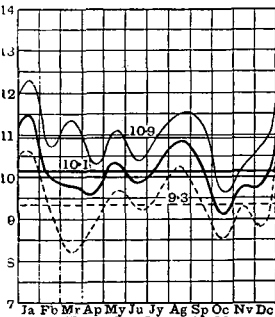
NEW SOUTH WALES.



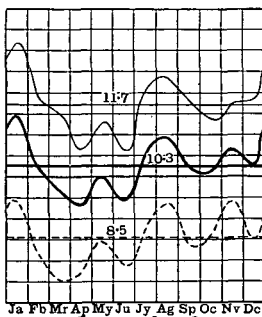
VICTORIA.



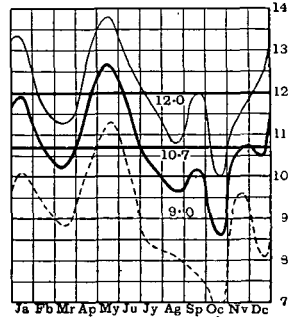
TASMANIA.



SOUTH AUSTRALIA.



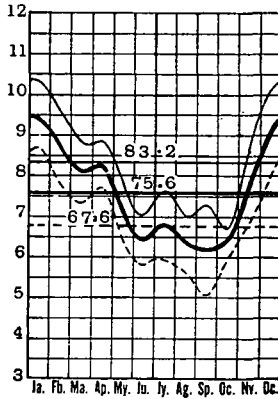
QUEENSLAND.



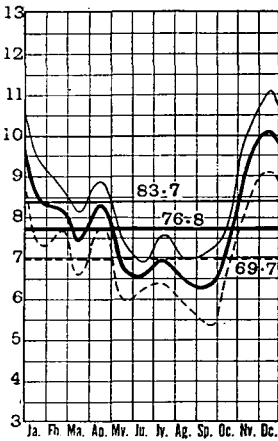
WESTERN AUSTRALIA.

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

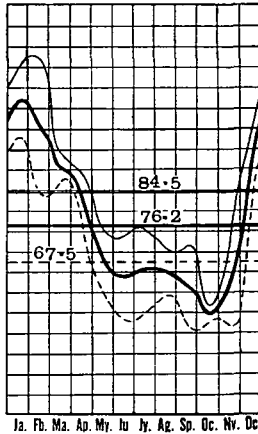
GRAPHUS SHEWING INFANTILE MONTHLY DEATH RATES, 1907 TO 1912.



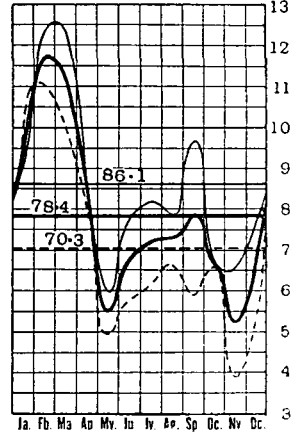
COMMONWEALTH.



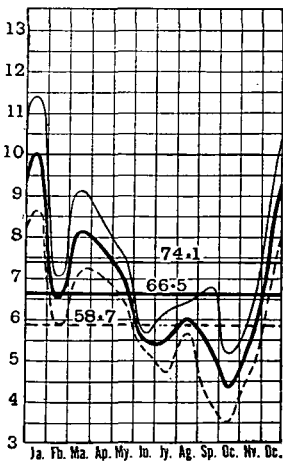
NEW SOUTH WALES.



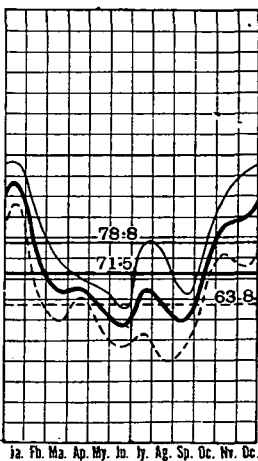
VICTORIA.



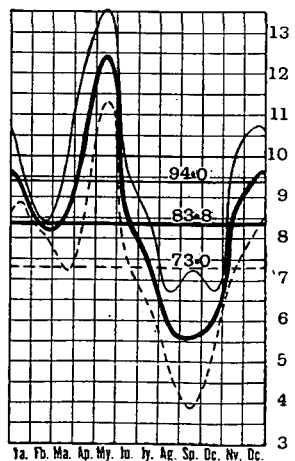
TASMANIA.



SOUTH AUSTRALIA.



QUEENSLAND.



WESTERN AUSTRALIA.

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



The following tables shew the death rate per 1,000 living at each age for the three years 1910, 1911, and 1912, viz., the Census year 1911, and the years immediately preceding and following. The Northern Territory is included with South Australia, and the Federal Territory with New South Wales :—

AVERAGE ANNUAL DEATH RATES PER 1,000 LIVING IN VARIOUS AGE-GROUPS, 1910 TO 1912.

Age Group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.
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MALES.

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	2.36
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	17.66	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	137.87	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

**AVERAGE ANNUAL DEATH RATES PER 1,000 LIVING, IN VARIOUS
AGE-GROUPS, 1910 TO 1912—continued.**

Age-Group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.
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	4.34	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	101.89	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 1,000 is shewn, which is the lowest at any age. The rate then gradually rises with increasing age until, at the ages 90 and over, more than one-third die every year.

10. **Deaths of Centenarians, 1921.**—Particulars as to the twenty-three persons who died in 1921, 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. No attempt has been made by the Commonwealth Bureau of Census and Statistics to verify the truth of the statements made. The fact must not be disregarded in connexion 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, COMMONWEALTH, 1921.

Age.	Locality where Death occurred.	State.	Cause of Death.	Occupation.	Birthplace.	Length of Residence in Commonwealth.	Conjugal Condition.
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MALES.

Yrs.	Locality	State.	Senility	Occupation	Birthplace	Length of Residence	Conjugal Condition
104	Granville ..	N.S.W. ..	..	Teamster	Ireland ..	40 years ..	Single
103	Longwarry ..	Victoria ..	..	Farmer ..	„ ..	69 „ ..	Married
102	Geraldton ..	W. Australia ..	..	Pensioner ..	England ..	102 „ ..	„
101	Lismore ..	N.S.W. ..	..	Farmer ..	Ireland ..	66 „ ..	„
101	Inverell ..	„ ..	..	Labourer..	N.S.W. ..	Native ..	Single
101	Warren ..	„ ..	..	„ ..	„ ..	„ ..	„

DEATHS OF CENTENARIANS, COMMONWEALTH, 1921—*continued.*

Age.	Locality where Death occurred.	State.	Cause of Death.	Occupation.	Birthplace.	Length of Residence in Commonwealth.	Conjugal Condition.
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MALES—*continued.*

Yrs.							
101	Port Wakefield	S. Australia	Senility ..	Labourer..	Ireland ..	63 years ..	Married
100	Glebe ..	N.S.W. ..	Acute Nephritis	Electrician	England ..	69 " ..	"
100	Nundle ..	N.S.W. ..	Myocarditis	Builder ..	Scotland	66 years ..	"
100	Mortlake ..	Victoria ..	Senility ..	Labourer..	Ireland ..	80 " ..	"
100	Rockhampton	Queensland	" ..	Unspecified	" ..	37 " ..	"
100	Toowoomba	"	Jaundice ..	Farmer ..	" ..	65 " ..	"
100	Launceston	Tasmania	Myocarditis	Pensioner	" ..	63 " ..	"

FEMALES.

Yrs.							
104	Port Lincoln	S. Australia	Bronchitis..	..	England ..	64 years ..	Married
102	Sydney ..	N.S.W. ..	Senility ..	..	Ireland ..	86 " ..	"
102	Ross ..	Tasmania	Broncho-Pneumonia	..	Tasmania	Native ..	"
101	Auburn ..	N.S.W. ..	Senility ..	..	England ..	88 years ..	Unspecified
101	Drummoyne	" ..	" ..	..	" ..	81 " ..	Married
101	Newtown ..	" ..	" ..	..	" ..	73 " ..	"
101	Natimuk ..	Victoria ..	" ..	..	Germany..	72 " ..	"
101	York ..	W. Australia	" ..	..	Ireland ..	67 " ..	"
100	Goulburn ..	N.S.W. ..	" ..	..	England ..	80 " ..	"
100	Auburn ..	" ..	Pneumonia	..	India ..	Unspecified	"

11. Length of Residence in the Commonwealth of Persons who Died in 1921.—The length of residence in the Commonwealth of all persons whose deaths were registered in the year 1921 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 1921.

Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.	Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.
Born in the C'wealth	19,331	16,041	35,372	Resident 25 to 29 years	305	145	450
Resident under 1 year ..	103	57	160	" 30 to 34 "	849	472	1,321
" 1 year ..	76	81	157	" 35 to 39 "	1,081	599	1,680
" 2 years ..	25	42	67	" 40 to 44 "	1,129	563	1,692
" 3 " ..	29	12	41	" 45 to 49 "	641	376	1,017
" 4 " ..	34	12	46	" 50 to 54 "	713	509	1,222
" 5 " ..	34	17	51	" 55 to 59 "	753	614	1,367
" 6 " ..	52	33	85	" 60 to 64 "	959	865	1,824
" 7 " ..	92	71	163	" 65 yrs. and over	1,451	1,677	3,128
" 8 " ..	138	95	233	Length of residence not stated ..	1,818	573	2,391
" 9 " ..	152	93	245				
" 10 to 14 years..	453	251	704				
" 15 to 19 " ..	159	83	242				
" 20 to 24 " ..	275	143	418	Total ..	30,652	23,424	54,076

12. Birthplaces of Persons who Died in 1921.—In the following table are shown the birthplaces of persons whose deaths were registered in 1921 :—

BIRTHPLACES OF PERSONS WHO DIED IN 1921, COMMONWEALTH.

Birthplace.	Males.	Females.	Total.	Birthplace.	Males.	Females.	Total.
AUSTRALASIA—				ASIA—continued.			
Commonwealth of Australia—				Philippine Islands	6	..	6
New South Wales	7,141	5,933	13,074	Syria ..	13	8	21
Victoria ..	6,224	5,039	11,263	Other Asiatic Countries ..	15	1	16
Queensland ..	2,000	1,570	3,570				
South Australia ..	2,042	1,829	3,871	AFRICA—			
Western Australia	764	578	1,342	Union of Sth. Africa	29	13	42
Tasmania ..	1,155	1,083	2,238	Mauritius ..	7	4	11
Northern Territory	4	7	11	Other African Brit. Possessions ..	1	..	1
Federal Territory	1	2	3	Other African Countries ..	2	1	3
New Zealand ..	178	117	295				
				AMERICA—			
EUROPE—				Canada ..	49	17	66
England ..	4,949	3,478	8,427	Jamaica ..	5	1	6
Wales ..	172	111	283	Newfoundland ..	4	3	7
Scotland ..	1,309	948	2,257	Other American Brit. Possessions	4	1	5
Ireland ..	2,060	1,983	4,043	Argentine Republic ..	1	2	3
Isle of Man ..	3	1	4	Brazil ..	2	1	3
Other European				Chile ..	2	1	3
Brit. Possessions	32	12	44	United States of America ..	86	32	118
Austria-Hungary	29	7	36	Other American Countries ..	19	14	33
Belgium ..	5	1	6				
Denmark ..	114	33	147	POLYNESIA—			
France ..	60	20	80	Fiji ..	6	1	7
Germany ..	453	236	689	Papua ..	2	1	3
Greece ..	25	..	25	Other Polynesian Brit. Possessions	8	..	8
Italy ..	77	15	92	New Caledonia ..	3	..	3
Netherlands ..	17	2	19	New Hebrides ..	3	1	4
Norway ..	61	4	65	Samoa ..	1	..	1
Portugal ..	7	1	8	Other Polynesian Islands ..	..	3	3
Russia ..	72	28	100	South Sea Islands (so described)	31	1	32
Spain ..	10	3	13	At Sea ..	77	44	121
Sweden ..	102	14	116	Not stated ..	713	183	896
Switzerland ..	35	6	41				
Other European Countries ..	7	1	8	Total Deaths ..	30,652	23,424	54,076
ASIA—							
British India ..	86	21	107				
Ceylon ..	5	2	7				
Straits Settlements	3	..	3				
Other Asiatic Brit. Possessions ..	5	..	5				
Afghanistan ..	4	..	4				
Arabia ..	1	..	1				
China ..	310	3	313				
Japan ..	33	3	36				
Java ..	8	..	8				

13. Occupations of Male Persons who Died in 1921.—Information as to the occupations of the 39,652 males who died in the Commonwealth in 1921 is contained in the following statement:—

OCCUPATIONS OF MALES WHO DIED IN 1921, COMMONWEALTH.

Occupation.	No. of Deaths.	Occupation.	No. of Deaths.
CLASS I.—PROFESSIONAL.		CLASS III.—COMMERCIAL—cont.	
General Government	139	Animal food	288
Local Government	22	Vegetable food	106
Defence	169	Groceries and stimulants	156
Law and order	209	Living animals	40
Religion	115	Leather, raw materials	6
Health	192	Wool and tallow	9
Literature	31	Hay, corn, etc.	18
Science	13	Other vegetable matter	17
Civil and mechanical engineering, architecture and surveying	95	Wood and coal	19
Education	141	Stone, clay, glass	4
Fine arts	45	Gold, silver and precious stones	1
Music	44	Ironmongery	25
Amusements	92	Merchants	109
Total Professional	1,307	Shopkeepers and assistants	196
CLASS II.—DOMESTIC.		Dealers and hawkers	109
Hotelkeepers and assistants	493	Agents and brokers	110
Others engaged in providing board and lodging	28	Clerks, bookkeepers, etc.	669
Coachmen and grooms	62	Commercial travellers and salesmen	237
Hairdressers	72	Others engaged in commercial pursuits	175
Laundrymen	14	Speculators on chance events	18
Others engaged in domestic occupations	156	Total Commercial	2,739
House servants	5	CLASS IV.—TRANSPORT AND COMMUNICATION.	
Total Domestic	830	Railway traffic	491
CLASS III.—COMMERCIAL.		Tramway traffic	74
Banking and finance	102	Road traffic	590
Insurance and valuation	85	Sea and river traffic	544
Land and household property	60	Postal service	86
Property rights, n.e.i.	3	Telegraph and telephone service	41
Books, publications and advertising	36	Messengers, etc.	11
Musical instruments	1	Aviation	4
Prints, Pictures, and Art Materials	1	Total Transport and Communication	1,841
Arms and ammunition	1	CLASS V.—INDUSTRIAL.	
Machines, tools and implements	4	Books and publications	160
Carriages and vehicles	7	Musical instruments	18
Harness and saddlery	1	Prints, pictures and art materials	6
Ships and boats	1	Ornaments and small wares	25
Building materials	13	Sports and games	2
Furniture	7	Designs, medals, type and dies	5
Paper and stationery	9	Watches and clocks	28
Textile fabrics	77	Surgical instruments	1
Dress	18	Arms and ammunition	7
Fibrous materials	1	Engines, machines, tools, etc.	135
		Carriages and vehicles	146
		Harness, saddlery and leatherware	86

OCCUPATIONS OF MALES WHO DIED IN 1921, COMMONWEALTH—*continued.*

Occupation.	No. of Deaths.	Occupation.	No. of Deaths.
CLASS V.—INDUSTRIAL— <i>continued.</i>		CLASS VI.—AGRICULTURAL, PASTORAL, MINING PURSUITS, ETC.	
Ships, boats and equipment ..	54	Agricultural	3,112
Furniture	116	Pastoral	863
Building materials	106	Dairy farming	68
Chemicals and by-products ..	6	Bees, fisheries and wild animals ..	90
Textile fabrics	45	Forestry	104
Dress	386	Water conservation and supply ..	27
Fibrous materials	16	Mines and quarries	1,447
Animal food	24		
Vegetable food	164	Total Primary Producers ..	5,711
Groceries and stimulants ..	50		
Animal matter	35		
Workers in wood not elsewhere classed	16		
Vegetable produce for fodder ..	1		
Paper	6		
Stone, clay, glass	79		
Jewellery and precious stones ..	35		
Metals, other than gold and silver	435	CLASS VII.—INDEFINITE.	
Gas, electric lighting, etc. ..	80	Independent means, having no specific occupation	478
Buildings—		Occupation unspecified	958
Builders	126		
Stonemasons	99	Total Indefinite	1,436
Bricklayers	108		
Slaters	8		
Carpenters	461		
Plasterers	53		
Painters and glaziers	202		
Plumbers	79		
Signwriters	10		
Others	2	CLASS VIII.—DEPENDENTS.	
Roads, railways and earthworks	51	Dependent relatives (including persons under 20 years of age with no specified occupation) ..	8,055
Disposal of the dead	15	Supported by voluntary and State contributions	120
Disposal of refuse	38		
		Total Dependents	8,175
Other industrial workers—			
Manufacturers	66		
Engineers, firemen	441		
Contractors	224		
Labourers, undefined	4,326		
Others	31		
Total Industrial	8,613	Total Male Deaths	30,652

14. *Index of Mortality.*—The death rates, those for age-groups on page 113 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 contains 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 1921 is shewn below for each of the States and Territories and for the Commonwealth, the distribution of the mean population of 1921 into age-groups being in accordance with the distribution as found at the Census of 1911 :—

INDEX OF MORTALITY, STATES AND COMMONWEALTH, 1921.

Age-Group.	Mean Population, 1921, distributed according to Results of Census of 1911.	Number of Deaths, 1921.	No. of Deaths per 1,000 of Mean Population, 1921, in each Age-Group.	Age Distribution per 1,000 of Standard Population.	Index of Mortality.
NEW SOUTH WALES.					
Under 1 year	57,925	3,422	59.08	25.5	1.51
1 year and under 20	829,514	2,320	2.80	398.0	1.11
20 years " 40	705,753	2,691	3.81	269.6	1.03
40 " " 60	381,040	3,912	10.27	192.3	1.97
60 " and upwards	132,266	7,681	58.07	114.6	6.65
Total	2,108,498	20,026	9.51	1,000.0	12.27
VICTORIA.					
Under 1 year	36,370	2,583	71.02	25.5	1.81
1 year and under 20	591,722	1,562	2.64	398.0	1.05
20 years " 40	486,606	1,996	4.10	269.6	1.11
40 " " 60	309,815	3,292	10.63	192.3	2.04
60 " and upwards	112,750	6,732	59.71	114.6	6.84
Total	1,537,263	16,165	10.52	1,000.0	12.85
QUEENSLAND.					
Under 1 year	20,677	1,107	53.54	25.5	1.37
1 year and under 20	313,251	930	2.97	398.0	1.18
20 years " 40	250,534	1,117	4.46	269.6	1.20
40 " " 60	135,837	1,497	11.02	192.3	2.12
60 " and upwards	44,366	2,491	56.15	114.6	6.43
Total	764,665	7,142	9.34	1,000.0	12.30
SOUTH AUSTRALIA.					
Under 1 year	12,809	784	61.21	25.5	1.56
1 year and under 20	194,779	570	2.93	398.0	1.17
20 years " 40	163,895	687	4.19	269.6	1.13
40 " " 60	90,934	884	9.72	192.3	1.87
60 " and upwards	34,996	2,057	58.78	114.6	6.74
Total	497,413	4,982	10.02	1,000.0	12.47
WESTERN AUSTRALIA.					
Under 1 year	8,909	614	68.92	25.5	1.76
1 year and under 20	122,052	427	3.50	398.0	1.39
20 years " 40	122,372	462	3.78	269.6	1.02
40 " " 60	66,557	972	14.60	192.3	2.81
60 " and upwards	13,368	1,005	75.18	114.6	8.62
Total	333,258	3,480	10.44	1,000.0	15.60
TASMANIA.					
Under 1 year	5,998	450	75.03	25.5	1.91
1 year and under 20	90,848	258	2.84	398.0	1.13
20 years " 40	65,262	288	4.41	269.6	1.19
40 " " 60	37,927	396	10.44	192.3	2.01
60 " and upwards	13,335	805	60.37	114.6	6.92
Total	213,370	2,197	10.30	1,000.0	13.16
NORTHERN TERRITORY.					
Under 1 year	35	5	142.86	25.5	3.64
1 year and under 20	719	6	8.34	398.0	3.32
20 years " 40	1,043	7	6.71	269.6	1.81
40 " " 60	1,757	30	17.07	192.3	3.28
60 " and upwards	355	32	90.14	114.6	10.33
Total	3,909	80	20.47	1,000.0	22.38

INDEX OF MORTALITY, STATES AND COMMONWEALTH, 1921—*continued*.

Age-Group.	Mean Population, 1921, distributed according to Results of Census of 1911.	Number of Deaths, 1921.	No. of Deaths per 1,000 of Mean Population, 1921, in each Age-Group.	Age Distribution per 1,000 of Standard Population.	Index of Mortality.
FEDERAL TERRITORY.					
Under 1 year	57	2	35.09	25.5	0.89
1 year and under 20	1,018	..	..	398.0	..
20 years " 40	763	..	..	269.6	..
40 " " 60	463	..	..	192.3	..
60 " and upwards	182	2	10.99	114.6	1.26
Total	2,483	4	1.61	1,000.0	2.15
COMMONWEALTH.					
Under 1 year	142,780	8,967	62.80	25.5	1.60
1 year and under 20	2,113,903	6,073	2.83	398.0	1.13
20 years " 40	1,796,228	7,248	4.04	269.6	1.09
40 " " 60	1,024,330	10,983	10.72	192.3	2.06
60 " and upwards	351,618	20,805	59.17	114.6	6.78
Total	5,458,859	54,076	9.91	1,000.0	12.66

NOTE.—The small number of persons whose ages were not ascertained at the 1911 Census has been proportionately distributed among the various age-groups, and the same plan has been followed in regard to the persons who died in 1921, and whose ages were not stated in the certificate of death.

It will be seen that among the States in 1921 Western Australia had the highest index and Victoria the highest crude rate, while New South Wales had the lowest index and Queensland the lowest crude rate. The range of the indexes was above that of the crude rates, the latter varying from 9.34 per thousand in Queensland to 10.52 per thousand in Victoria, a range of 1.18 per thousand, while the index varied from 12.27 per thousand in New South Wales to 15.60 per thousand in Western Australia, a range of 3.33 per thousand.

For purposes of comparison with previous years the index of mortality is shewn in the following table for each of the seven years 1915–1921 :—

INDEX OF MORTALITY, STATES AND TERRITORIES, 1915–1921.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Northern Territory.	Federal Territory.	C'wealth.
1915 ..	13.24	13.54	14.30	13.09	12.79	13.04	21.62	7.15	13.47
1916 ..	13.48	14.28	14.37	14.45	14.15	13.43	22.63	3.63	13.99
1917 ..	12.45	12.81	12.64	12.65	12.93	11.78	13.42	6.70	12.63
1918 ..	12.86	13.23	13.94	12.53	13.69	11.70	15.40	2.37	13.07
1919 ..	16.48	15.51	15.97	14.59	15.50	13.29	17.42	8.76	15.75
1920 ..	13.32	13.72	14.36	13.49	15.63	12.28	18.27	3.20	13.65
1921 ..	12.27	12.85	12.30	12.47	15.60	13.16	22.38	2.15	12.66

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 110 of this issue, distinguishing the rates for males, females, and persons. The curves shewing the male and female rates 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 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 Rate.* A similar series of diagrams, shewing the monthly variations in the infantile death rates, appears on page 111. With the exception of Western Australia, where the maximum occurs in May, the maxima 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) 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 :—

- | | |
|---|---|
| i. General Diseases. | viii. Diseases of the Skin and Cellular Tissue. |
| ii. Diseases of the Nervous System and Organs of Special Sense. | ix. Diseases of the Organs of Locomotion. |
| iii. Diseases of the Circulatory System. | x. Malformations. |
| iv. Diseases of the Respiratory System. | xi. Infancy. |
| v. Diseases of the Digestive System. | xii. Old Age. |
| vi. Diseases of the Genito-urinary System and Adnexa. | xiii. Violence. |
| vii. Puerperal Condition. | xiv. Ill-defined Diseases. |

The third Decennial Revision was carried out by the International Commission which sat at Paris during October, 1920. The classification as revised will be in use for 1922 and subsequent years.

(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 all the State offices in the preparation of their monthly and quarterly bulletins of vital statistics.

(iii) *Classification of Causes of Death, 1915 to 1921, 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 showing 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 1915 to 1921 will be found in full in "Bulletins Nos. 33 to 39 of Population and Vital Statistics"; here it will suffice to give the abridged classification under thirty-eight headings for the year 1921.

CAUSES OF DEATH, COMMONWEALTH, 1921.

MALES.

Cause.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	Fed. Ter.	C'with.
1 Typhoid Fever ..	72	30	32	21	24	13	..	..	192
2 Typhus .. ..	..	..	..	..	..	..	..	..	..
3 Malaria	4	..	17	..	3	1	15	..	40
4 Small-pox .. ..	..	1	..	..	..	..	..	..	1
5 Measles	14	2	8	4	14	..	1	..	43
6 Scarlet Fever ..	4	6	2	3	..	1	..	..	16
7 Whooping Cough ..	92	37	34	7	28	7	..	..	205
8 Diphtheria and Croup	160	142	57	55	25	30	..	..	469
9 Influenza	82	25	34	6	13	12	..	1	173
9A Pneumonic Influenza	84	37	16	6	17	8	..	..	168
10 Asiatic Cholera ..	..	..	..	..	..	..	..	..	..
11 Cholera Nostras ..	1	..	..	..	..	..	..	..	1
12 Other Epidemic Diseases	38	27	55	10	12	1	1	..	144
13 Tuberculosis of the Lungs	690	559	221	175	175	74	9	..	1,903
14 Tuberculosis of the Men- inges	41	48	3	15	7	5	..	..	119
15 Other forms of Tuber- culosis	50	48	14	18	12	7	..	..	149
16 Cancer and other Malignant Tumours	916	688	355	239	160	77	5	..	2,440
17 Meningitis	128	106	34	33	29	16	..	..	346
18 Congestion, Hæmorrhage and Softening of Brain	464	361	159	128	86	43	3	..	1,244
19 Organic Diseases of the Heart	1,080	815	424	297	159	118	2	..	2,895
20 Acute Bronchitis ..	95	48	39	12	10	5	..	..	209
21 Chronic Bronchitis ..	170	129	56	38	28	12	..	..	431
22 Pneumonia	505	334	137	94	74	64	1	..	1,209
23 Other Diseases of the Respiratory System (Tuberculosis exceptd.)	454	482	190	85	125	59	1	..	1,396
24 Diseases of the Stomach (Cancer excepted) ..	89	78	32	13	12	11	..	..	235
25 Diarrhoea and Enteritis (children under 2 years only)	543	413	143	136	136	74	..	..	1,445
26 Appendicitis & Typhlitis	77	52	31	9	21	8	..	..	198
27 Hernia, Intestinal Ob- struction	95	80	26	23	14	10	..	..	248
28 Cirrhosis of the Liver..	71	57	56	18	20	5	..	..	227
29 Nephritis and Bright's Disease	475	402	176	102	55	25	..	..	1,235
30 Non-cancerous Tumours and other Diseases of Female Genital Organs	..	..	..	..	..	..	..	..	..
31 Puerperal Septicæmia (Puerperal Fever, Puerperal Peritonitis, Puerperal Phlebitis)	..	..	..	..	..	..	..	..	..
32 Other Puerperal Acci- dents of Pregnancy and Confinement ..	..	..	..	..	..	..	..	..	..
33 Congenital Debility and Malformations ..	860	633	264	205	135	81	..	..	2,178
34 Senile Debility	891	610	286	184	125	68	9	..	2,173
35 Violence	828	535	492	170	186	85	5	..	2,301
36 Suicide	173	133	88	41	63	11	1	..	510
37 Other Diseases	2,058	1,625	865	454	395	220	9	1	5,627
38 Unspecified or Ill-defined Diseases	186	119	51	56	46	15	8	1	482
Total—Males	11,490	8,662	4,397	2,655	2,209	1,166	70	3	30,652

CAUSES OF DEATH, COMMONWEALTH, 1921.

FEMALES.

Cause.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	Fed. Ter.	C'with.
1 Typhoid Fever ..	53	37	27	13	18	12	..	..	160
2 Typhus ..	..	..	..	..	..	..	..	..	..
3 Malaria ..	..	..	3	..	..	..	..	..	3
4 Small-pox ..	..	1	..	..	..	..	..	..	1
5 Measles ..	17	3	3	10	7	..	..	..	40
6 Scarlet Fever ..	5	15	1	1	1	3	..	..	26
7 Whooping Cough ..	100	43	30	12	25	11	1	1	223
8 Diphtheria and Croup ..	142	133	54	69	20	30	..	..	448
9 Influenza ..	58	25	29	5	9	9	..	..	135
9A Pneumonic Influenza ..	88	36	24	11	14	5	..	..	178
10 Asiatic Cholera ..	..	..	..	..	..	..	..	..	..
11 Cholera Nostras ..	..	..	..	..	1	..	..	..	1
12 Other Epidemic Diseases ..	28	24	21	5	6	4	..	..	88
13 Tuberculosis of the Lungs ..	417	469	117	156	85	57	1	..	1,302
14 Tuberculosis of the Men- inges ..	27	46	3	17	1	5	..	..	99
15 Other forms of Tubercu- losis ..	38	49	9	11	3	5	..	..	115
16 Cancer and other Malignant Tumours ..	862	776	249	217	123	101	..	..	2,328
17 Meningitis ..	75	61	23	28	13	11	1	..	212
18 Congestion, Hæmorrhage and Softening of Brain ..	427	395	133	143	60	70	..	..	1,228
19 Organic Diseases of the Heart ..	794	777	256	250	75	119	..	..	2,271
20 Acute Bronchitis ..	85	41	18	16	8	8	1	..	177
21 Chronic Bronchitis ..	150	121	41	37	17	19	..	..	385
22 Pneumonia ..	347	267	89	60	59	35	..	..	857
23 Other Diseases of the Respiratory System (Tuberculosis exceptd.) ..	373	269	103	76	53	34	..	..	908
24 Diseases of the Stomach (Cancer excepted) ..	84	63	21	12	14	9	1	..	204
25 Diarrhœa and Enteritis (children under 2 yrs. only) ..	429	306	127	115	100	66	1	..	1,144
26 Appendicitis & Typhlitis ..	64	32	30	14	5	8	..	..	153
27 Hernia, Intestinal Ob- struction ..	93	68	28	22	10	11	..	..	232
28 Cirrhosis of the Liver ..	37	38	9	7	4	1	..	..	96
29 Nephritis and Bright's Disease ..	310	310	143	74	42	25	..	..	904
30 Non-cancerous Tumours and other Diseases of the Female Genital Organs ..	59	42	21	22	17	4	1	..	166
31 Puerperal Septicæmia (Puerperal Fever, Puer- peral Peritonitis, Puer- peral Phlebitis) ..	84	61	25	23	5	10	..	..	208
32 Other Puerperal Acci- dents of Pregnancy and Confinement ..	148	120	83	50	17	17	..	..	435
33 Congenital Debility and Malformations ..	598	476	186	149	96	74	1	..	1,580
34 Senile Debility ..	620	695	163	185	66	79	..	..	1,808
35 Violence ..	189	197	86	65	35	19	..	..	591
36 Suicide ..	53	25	17	7	6	3	..	..	111
37 Other Diseases ..	1,588	1,415	553	410	241	159	2	..	4,368
38 Unspecified or Ill-defined Diseases ..	94	67	20	35	15	8	..	..	239
Total—Females ..	8,536	7,503	2,745	2,327	1,271	1,031	10	1	23,424

CAUSES OF DEATH, COMMONWEALTH, 1921.

TOTAL—MALES AND FEMALES.

Cause.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	Nor. Ter.	Fed. Ter.	C'with.
1 Typhoid Fever ..	125	67	59	34	42	25	..	..	352
2 Typhus ..	..	..	..	..	..	..	..	..	..
3 Malaria ..	4	..	20	..	3	1	15	..	43
4 Small-pox ..	..	2	..	..	..	..	..	..	2
5 Measles ..	31	5	11	14	21	..	1	..	83
6 Scarlet Fever ..	9	21	3	4	1	4	..	..	42
7 Whooping Cough ..	192	80	64	19	53	18	1	1	428
8 Diphtheria and Croup ..	302	275	111	124	45	60	..	..	917
9 Influenza ..	140	50	63	11	22	21	..	1	308
9A Pneumonic Influenza ..	172	73	40	17	31	13	..	..	346
10 Asiatic Cholera ..	..	..	..	..	..	..	..	..	..
11 Cholera Nostras ..	1	..	..	..	1	..	..	..	2
12 Other Epidemic Diseases ..	66	51	76	15	18	5	1	..	232
13 Tuberculosis of the Lungs ..	1,107	1,028	338	331	260	131	10	..	3,205
14 Tuberculosis of the Men- inges ..	68	94	6	32	8	10	..	..	218
15 Other forms of Tuber- culosis ..	88	97	23	29	15	12	..	..	264
16 Cancer and other Malignant Tumours ..	1,778	1,464	604	456	283	178	5	..	4,768
17 Meningitis ..	203	167	57	61	42	27	1	..	558
18 Congestion, Hæmorrhage and Softening of the Brain ..	891	756	292	271	146	113	3	..	2,472
19 Organic Diseases of Heart ..	1,874	1,592	680	547	234	237	2	..	5,166
20 Acute Bronchitis ..	180	89	57	28	18	13	1	..	386
21 Chronic Bronchitis ..	320	250	97	73	45	31	..	..	816
22 Pneumonia ..	852	601	226	154	133	99	1	..	2,066
23 Other Diseases of the Respiratory System (Tuberculosis excepted) ..	827	751	293	161	178	93	1	..	2,304
24 Diseases of the Stomach (Cancer excepted) ..	173	141	53	25	26	20	1	..	439
25 Diarrhœa and Enteritis (children under 2 years only) ..	972	719	270	251	236	140	1	..	2,589
26 Appendicitis & Typhlitis ..	141	84	61	23	26	16	..	..	351
27 Hernia, Intestinal Ob- struction ..	188	148	54	45	24	21	..	..	480
28 Cirrhosis of the Liver ..	108	95	65	25	24	6	..	..	323
29 Nephritis and Bright's Disease ..	785	712	319	176	97	50	..	..	2,139
30 Non-cancerous Tumours and other Diseases of the Female Genital Organs ..	59	42	21	22	17	4	1	..	166
31 Puerperal Septicæmia (Puerperal Fever, Puer- peral Peritonitis, Puer- peral Phlebitis) ..	84	61	25	23	5	10	..	..	208
32 Other Puerperal Acci- dents of Pregnancy and Confinement ..	148	120	83	50	17	17	..	..	435
33 Congenital Debility and Malformations ..	1,458	1,109	450	354	231	155	1	..	3,758
34 Senile Debility ..	1,511	1,305	449	369	191	147	9	..	3,981
35 Violence ..	1,017	732	578	235	221	104	5	..	2,892
36 Suicide ..	226	158	105	48	69	14	1	..	621
37 Other Diseases ..	3,646	3,040	1,418	864	636	379	11	1	9,995
38 Unspecified or Ill-defined Diseases ..	280	186	71	91	61	23	8	1	721
Total—Males and Females	20,026	16,165	7,142	4,982	3,480	2,197	80	4	54,076

The classification for the years 1915 to 1921 is shewn for the Commonwealth in the following table, and for purposes of comparison the figures for the year 1921 have been repeated from the preceding table. Male and female deaths for 1915 are shewn on pages 198 and 199 of the tenth issue, for 1917 on pages 204 and 205 of the eleventh issue, for 1918 on pages 197 and 198 of the twelfth issue, for 1919 on pages 188 and 189 of the thirteenth issue, and for 1920 on pages 129 and 130 of the fourteenth issue of this book.

CAUSES OF DEATH, COMMONWEALTH, 1915 TO 1921.

MALES AND FEMALES.

Cause.	1915.	1916.	1917.	1918.	1919.	1920.	1921.
1 Typhoid Fever	561	529	284	251	272	312	352
2 Typhus .. .. .	..	..	..	..	..	..	..
3 Malaria	30	50	49	41	34	19	43
4 Small-pox	1	1	..	..	..	..	2
5 Measles	439	211	72	82	51	482	83
6 Scarlet Fever	104	134	64	81	69	90	42
7 Whooping Cough	185	426	282	234	211	561	428
8 Diphtheria and Croup	703	893	646	645	581	829	917
9 Influenza	389	278	168	848	1,289	230	308
9A Pneumonic Influenza .. .. .	..	..	..	..	10,263	218	346
10 Asiatic Cholera .. .. .	..	..	..	..	..	..	..
11 Cholera Nostras	2	4	1	2	1	1	2
12 Other Epidemic Diseases	205	249	144	174	157	124	232
13 Tuberculosis of the Lungs	3,064	3,198	2,883	3,035	3,479	3,098	3,205
14 Tuberculosis of the Meninges	213	215	206	208	188	214	218
15 Other forms of Tuberculosis	278	310	275	292	281	295	264
16 Cancer and other Mal. Tumours	3,702	3,979	4,022	4,246	4,421	4,511	4,768
17 Meningitis	1,209	1,201	690	583	481	596	558
18 Congestion, Hæmorrhage and Softening of the Brain	2,118	2,230	2,214	2,297	2,467	2,495	2,472
19 Organic Diseases of the Heart	4,370	4,509	3,852	3,976	5,864	5,370	5,166
20 Acute Bronchitis	489	512	321	399	420	398	386
21 Chronic Bronchitis	913	1,057	829	1,121	1,047	962	816
22 Pneumonia	2,225	2,220	1,896	2,141	2,656	2,099	2,066
23 Other Diseases of the Respiratory System (Tuberculosis excepted)	2,212	2,243	1,941	2,199	2,413	2,527	2,304
24 Diseases of the Stomach (Cancer excepted)	351	263	394	409	478	443	439
25 Diarrhœa and Enteritis (Children under two years only)	2,815	3,018	1,719	1,732	2,520	3,067	2,589
26 Appendicitis and Typhilitis	356	321	321	371	352	382	351
27 Hernia, Intestinal Obstruction	488	501	449	543	530	541	480
28 Cirrhosis of the Liver	376	309	335	207	315	340	323
29 Nephritis and Bright's Disease	2,274	2,329	2,203	2,144	2,221	2,286	2,139
30 Non-cancerous Tumours and other Diseases of the Female Genital Organs	139	153	148	159	132	154	166
31 Puerperal Septicæmia (Puerperal Fever, Peritonitis, Phlebitis)	182	282	250	183	166	250	208
32 Other Puerperal Accidents of Pregnancy and Confinement	394	411	482	409	404	433	435
33 Congenital Debility, etc.	3,993	3,826	3,423	3,454	3,885	4,046	3,758
34 Senile Debility	4,686	4,980	4,770	4,664	4,840	4,636	3,981
35 Violence	2,851	2,712	2,656	2,641	2,799	2,791	2,892
36 Suicide	658	577	502	498	546	636	621
37 Other Diseases	9,090	9,433	8,871	9,226	9,390	10,048	9,995
38 Unspecified or Ill-defined Diseases	717	633	667	664	707	805	721
Total	52,782	54,197	48,029	50,249	65,930	56,289	54,076

17. **Certification of Deaths.**—Information was obtained in 1921 as to the persons by whom the 54,076 deaths which occurred in the Commonwealth were certified. The result of the enquiry shews that approximately 89.4 were certified by medical practitioners, 10.3 by coroners after inquests or magisterial enquiries, while in 0.3 per cent. of the cases there was either no certificate given or particulars were not forthcoming. The percentages for 1920 were 90.3, 9.4 and 0.3 respectively.

The results are shewn in detail in Bulletin No. 39 ; a short summary will therefore suffice here :—

CERTIFICATION OF DEATHS, COMMONWEALTH, 1921.

Death Certified by—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Ter.	Fed. Ter.	C'with.
Medical practitioner	17,950	14,182	6,594	4,466	3,087	2,031	43	3	48,356
Coroner ..	2,064	1,982	441	510	371	164	32	1	5,565
Not certified or not stated ..	12	1	107	6	22	2	5	..	155
Total Deaths	20,026	16,165	7,142	4,982	3,480	2,197	80	4	54,076

Of the cases certified by coroners, violent deaths numbered 2,776, senile decay 323, organic heart disease 496, ill-defined causes 348, congenital debility 110, cerebral hæmorrhage and apoplexy 153, pneumonia 112, Bright's disease 93, diarrhoea and enteritis 127, pulmonary tuberculosis 76, diseases of arteries, aneurisms, etc., 58, broncho-pneumonia 47, acute and chronic alcoholism 29, puerperal diseases 43, and infantile convulsions 30 ; a total of 4,821 out of 5,565.

Of uncertified causes of death, violent deaths numbered 30, congenital debility 9, senile debility 28, ill-defined causes 38, and heart disease 5 ; a total of 110 out of 155.

18. Deaths from Special Causes.—The table on p. 125 furnishes comparisons for the last seven years only, and comparisons will, therefore, generally be restricted to that period.

(i) *Typhoid Fever.* The number of deaths from typhoid fever in 1921 was 352, which was equivalent to 6 per hundred thousand living. This rate was slightly higher than that for 1920, but was very much below the rates for 1915 and 1916, in each of which years it was 11 per hundred thousand living.

(ii) *Typhus.* No deaths from typhus have been registered from 1914 to 1921.

(iii) *Malaria.* Deaths from malarial diseases are practically confined to the tropical districts of Northern Queensland and Western Australia, and to the Northern Territory, 20 out of 43 deaths registered in 1921 having occurred in Queensland, 3 in Western Australia, and 15 in the Northern Territory.

(iv) *Small-pox.* The number of deaths from small-pox in Australia is very small, four deaths only resulting in the seven years under review.

(v) *Measles.*—Though no serious epidemic of measles has occurred, the numbers vary considerably from year to year. The greatest number occurred during 1920, when 482 were registered, while the minimum was reached in 1919 with a total of 51 deaths. During 1921 there were 43 male and 40 female deaths from measles, of which 31 were registered in New South Wales.

(vi) *Scarlet Fever.* The mortality from this source is very light, the average of deaths from 1915 to 1921 being about 83 per annum.

(vii) *Whooping Cough.* In 1920 the number of deaths was 561, the highest number registered in the period 1915 to 1921. In 1921 there were 428 deaths, of which 192 occurred in New South Wales, 80 in Victoria, 64 in Queensland, 19 in South Australia, 53 in Western Australia, and 18 in Tasmania.

(viii) *Diphtheria and Croup.* The number of deaths due to diphtheria and croup has varied from a minimum of 581 in 1919 to a maximum of 917 in 1921. Of the 917 registered in 1921, 898 were attributed to diphtheria, which gives a death rate of 16 per 100,000 of population. The corresponding rates for the separate States ranged from 13 per 100,000 in Western Australia to 27 in Tasmania.

(ix) *Influenza*. In 1915, 389 deaths were registered from this cause; in 1916, 278; and in 1917, 168. In 1918 there was rather a serious outbreak, the deaths rising to 848. In 1919 Australia experienced the full effect of the world-wide epidemic, the number of deaths reaching the unprecedented figure of 11,552, of which almost exactly one-half occurred in New South Wales. The deaths in States were as follows:—Ordinary influenza—New South Wales, 568; Victoria, 345; Queensland, 247; South Australia, 47; Western Australia, 42; Tasmania, 29; and Northern Territory, 11; total, 1,289. Pneumonic influenza—New South Wales, 5,215; Victoria, 3,110; Queensland, 799; South Australia, 471; Western Australia, 470; Tasmania, 196; Northern Territory, 1; and Federal Territory, 1; total, 10,263.

During 1921, 308 deaths were classed to ordinary influenza and 346 to pneumonic influenza, compared with 230 and 218 respectively for 1920.

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

(xi) *Cholera Nostras*. For the seven years under review only thirteen deaths have been due to this cause.

(xii) *Other Epidemic Diseases*. The number of deaths registered under this heading was 232 in 1921. The list in 1921 includes the following diseases:—Dysentery 83, erysipelas 78, leprosy 6, other epidemic diseases 8. There were no deaths from plague in the Commonwealth from 1912 to 1920. An outbreak occurred in 1921, causing 56 deaths in Queensland and 1 in New South Wales.

(xiii) *Tuberculosis of the Lungs and Acute Miliary Tuberculosis*. The deaths in 1921 numbered 3,205, viz., 1,903 males and 1,302 females. The figures for the years 1915 to 1920 were 3,064, 3,198, 2,883, 3,035, 3,479 and 3,098 respectively. Of the deaths in 1921, 1,107 occurred in New South Wales, 1,028 in Victoria, 338 in Queensland, 331 in South Australia, 260 in Western Australia, 131 in Tasmania, and 10 in the Northern Territory.

(xiiia) *Tuberculosis of the Respiratory System*. Of the various forms of tuberculosis prevalent in the Commonwealth, that which has 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, showing 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 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.

(xiv) *Tuberculosis of the Meninges*. The number of deaths ascribed to this cause has varied very slightly during the last seven years. The greatest number of deaths, viz., 218, occurred in 1921, and the least number, viz., 188, in 1919.

(xv) *Other Forms of Tuberculosis*. The deaths in 1921 include the following forms of tuberculosis:—Abdominal tuberculosis, 90; Pott's disease, 50; white swellings, 17; tuberculosis of other organs, 62; and disseminated tuberculosis, 45.

(xva) *All Forms of Tuberculosis*. A complete tabulation of all the different tubercular diseases from which deaths occurred in 1921 will be found in Bulletin No. 39 of Population and Vital Statistics. Here it will suffice to shew a few of the features of the tabulation mentioned. The total number of deaths due to tubercular diseases was 3,687, viz., 2,171 males and 1,516 females. The following table shews the ages of these 3,687 persons.

AGES OF PERSONS WHO DIED FROM TUBERCULAR DISEASES, COMMONWEALTH, 1921.

Ages.	Male.	Female.	Total.	Ages.	Male.	Female.	Total.
Under 5 years ..	90	76	166	55 years and under 60	172	65	237
5 years and under 10	30	28	58	60 " " 65	118	42	160
10 " " 15	15	23	47	65 " " 70	79	32	111
15 " " 20	72	100	172	70 " " 75	35	10	45
20 " " 25	173	194	367	75 " " 80	18	7	25
25 " " 30	232	246	478	80 " over ..	6	7	13
30 " " 35	237	195	432	Unspecified ..	3	..	3
35 " " 40	247	178	425				
40 " " 45	234	141	375				
45 " " 50	223	102	325				
50 " " 55	179	69	248	Total Deaths ..	2,171	1,516	3,687

A tabulation has been made of the occupations of males dying from tubercular diseases during 1921. A summary is here given :—

OCCUPATIONS OF MALES WHO DIED FROM TUBERCULAR DISEASES, COMMONWEALTH, 1921.

Occupation.	No. of Deaths.	Occupation.	No. of Deaths.
PROFESSIONAL CLASS—		MANUFACTURING CLASS—	
Government, Defence, Law ..	108	Art and Mechanic Productions..	119
Others	59	Textiles and Fibrous Materials..	47
DOMESTIC CLASS—		Food and Drinks	16
Board and Lodging	61	Animal and Vegetable Sub-	
Others	34	stances	6
MERCANTILE CLASS—		Metals and Minerals	46
Property and Finance	23	Fuel, Light and Energy	15
Art, Mechanic and Textile Pro-		Building and Construction ..	105
ducts	12	Others	430
Food and Drinks	41	PRIMARY PRODUCERS—	
Animal and Vegetable Sub-		Agricultural	141
stances	10	Pastoral	39
Fuel, Light and Metals	4	Mining and Quarrying	213
Merchants and Dealers	35	Others	11
Others	167	INDEPENDENT MEANS	18
ENGAGED IN TRANSPORT AND		DEPENDENTS	184
COMMUNICATION—		OCCUPATION NOT STATED ..	62
Railways	33		
Roads and Trams	62	TOTAL MALE DEATHS ..	2,171
Seas and Rivers	46		
Others	24		

The length of residence in the Commonwealth of persons who died from tubercular diseases has been tabulated for the year 1921 for all the Commonwealth States, with the following results :

LENGTH OF RESIDENCE IN COMMONWEALTH OF PERSONS WHO DIED FROM TUBERCULAR DISEASES, 1921.

Length of Residence in Commonwealth.	Male.	Fem.	Total.	Length of Residence in Commonwealth.	Male.	Fem.	Total.
Born in Commonwealth ..	1,553	1,284	2,837	Resident 10 years & under 15	77	34	111
Resident under 1 year ..	7	8	15	" 15 " " 20	19	8	27
" 1 year	8	12	20	" 20 " over ..	295	92	387
" 2 years	6	5	11	Length of residence not stated	111	24	135
" 3 " "	5	2	7				
" 4 " "	9	1	10				
" 5 " and under 10	81	46	127	Total Deaths ..	2,171	1,516	3,687

From the preceding table and the table on page 115, it will be seen that, among persons who had lived less than 5 years in Australia, 471 deaths occurred, and of these 63, or 13.4 per cent., were due to tubercular diseases.

In order to shew the prevalence of tuberculosis in the several States, the death rates from tubercular diseases are given in the following table, together with the proportion which deaths from tuberculosis bear to 10,000 deaths from all causes :—

DEATH RATES(a) FROM TUBERCULOSIS AND PROPORTION OF TOTAL DEATHS, COMMONWEALTH, 1921.

State.	Death Rates (a) from Tuberculosis.			Proportion per 10,000 Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	73	47	59	680	565	631
Victoria	86	72	80	756	752	754
Queensland	59	36	48	541	470	514
South Australia	83	74	79	783	791	787
Western Australia	109	57	85	878	700	813
Tasmania	80	63	72	738	650	696
Northern Territory	317	93	256	1,285	1,000	1,250
Federal Territory .. ..	..	..	..	..	..	..
Commonwealth	78	56	68	708	647	682

(a) Number of deaths from Tuberculosis per 100,000 of mean population.

The following table, which gives for a number of countries the death rates from pulmonary and military tuberculosis per 100,000 persons living, shews that the Commonwealth occupies a very enviable position when compared with most European countries :—

PULMONARY AND MILIARY TUBERCULOSIS—DEATHS PER 100,000 PERSONS LIVING.

Country.	Year.	Death Rate.	Country.	Year.	Death Rate.
Rumania	1914	40	Italy	1917	118
South Africa, Union of (Whites)	1919	41	Germany	1913	124
Denmark	1914	44	Prussia	1913	137
New Zealand	1921	52	Spain	1919	143
Australia	1921	59	Switzerland	1918	146
Ontario (Canada)	1919	69	Jamaica	1915	147
Ceylon	1920	70	Norway	1917	164
Scotland	1921	81	Sweden	1915	166
Belgium	1912	93	Japan	1918	175
England and Wales	1919	97	France	1911	180
United Kingdom	1919	106	Ireland	1919	193
Netherlands	1915	110	Chile	1914	255
Quebec (Canada)	1919	111	Finland	1914	257
United States (Registration Area)	1919	111	Austria	1912	283
			Serbia	1911	324
			Hungary	1912	349

(xvi) *Cancer and other Malignant Tumours.* The number of deaths from cancer has increased continuously to 4,768 in 1921. Of the deaths registered in 1921, 2,440 were those of males, viz., 916 in New South Wales, 688 in Victoria, 355 in Queensland, 239 in South Australia, 160 in Western Australia, 77 in Tasmania, and 5 in the Northern Territory; while 2,328 were those of females, viz., 862 in New South Wales, 776 in Victoria, 249 in Queensland, 217 in South Australia, 123 in Western Australia, and 101 in Tasmania. Bulletin No. 39 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, 1921.

Seat of Disease.	Male.	Female.	Total.
Cancer, etc., of the buccal cavity	306	29	335
" " the stomach and liver	1,038	700	1,738
" " the peritoneum, the intestines, and the rectum ..	318	332	650
" " the female genital organs .. .. .	..	478	478
" " the breast .. .. .	..	369	369
" " the skin	100	61	161
" " other organs	678	359	1,037
Total Deaths	2,440	2,328	4,768

Of these deaths, 982 were described as cancer, 2,628 as carcinoma, 14 as endothelioma, 180 as epithelioma, 14 as hypernephroma, 497 as "malignant disease," 44 as "malignant tumour," 39 as neoplasm, 55 as "rodent ulcer," 297 as sarcoma, and 18 as scirrhus.

The ages of the 4,768 persons who died from cancer in 1921 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 60 to 65 :—

AGES OF PERSONS WHO DIED FROM CANCER, COMMONWEALTH, 1921.

Ages.	Male.	Female.	Total.	Ages.	Male.	Female.	Total.
Under 15 years ..	26	23	49	55 years and under 60	358	308	666
15 years and under 20	8	11	19	60 " " 65	442	349	791
20 " " 25	25	6	13	65 " " 70	380	285	665
25 " " 30	15	19	34	70 " " 75	312	234	546
30 " " 35	26	45	71	75 " " 80	212	215	427
35 " " 40	56	81	137	80 " " 85	83	89	172
40 " " 45	81	140	221	85 years and over..	45	52	97
45 " " 50	147	207	354	Unspecified ..	3	..	3
50 " " 55	240	263	503	Total Deaths ..	2,440	2,328	4,768

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

OCCUPATIONS OF MALES WHO DIED FROM CANCER, COMMONWEALTH, 1921.

Occupation.	No. of Deaths.	Occupation.	No. of Deaths.
PROFESSIONAL CLASS—		MANUFACTURING CLASS—	
Government, Defence and Law	53	Art and Mechanic Products..	102
Others	80	Textiles and Fibrous Materials	51
DOMESTIC CLASS—		Food and Drinks	27
Board and Lodging.. .. .	46	Animal and Vegetable Sub-	
Others	30	stances	9
MERCANTILE CLASS—		Metals and Minerals	56
Property and Finance	28	Fuel, Light and Energy	6
Art, Mechanic and Textile		Building and Construction ..	136
Products	12	Others	553
Food and Drinks	70	PRIMARY PRODUCERS—	
Animal and Vegetable Sub-		Agricultural	397
stances	6	Pastoral	112
Fuel, Light and Metals	2	Mining and Quarrying	108
Merchants and Dealers	48	Others	22
Others	109	INDEPENDENT MEANS	36
ENGAGED IN TRANSPORT AND		DEPENDENTS	36
COMMUNICATION—		OCCUPATION NOT STATED	93
Railways	57		
Roads and Trams	78		
Seas and Rivers	55		
Others	22		
		TOTAL MALE DEATHS	2,440

It will be noticed in the table which follows that the death rate per 100,000 for males is higher than the female rate in every State with the exception of Victoria and Tasmania. For the Commonwealth as a whole the rates for the sexes are almost identical.

**DEATH RATES^(a) FROM CANCER AND PROPORTION OF 10,000 TOTAL DEATHS.
COMMONWEALTH, 1921.**

State.	Death Rates (a) from Cancer.			Proportion of 10,000 Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	85	83	84	797	1,010	889
Victoria	91	99	95	794	1,034	906
Queensland	88	69	79	807	907	846
South Australia	96	88	92	900	933	915
Western Australia	90	79	85	724	968	813
Tasmania	72	96	83	660	980	810
Northern Territory	176	..	128	714	..	625
Federal Territory .. ..	..	..	..	..	..	..
Commonwealth	88	87	87	796	994	882

(a) Number of deaths from Cancer per 100,000 of mean population.

While in recent years the death rate from tuberculosis has shewn a tendency to decrease, that for cancer has displayed an almost continuous increase. From the table given hereunder, it will be seen that for each of the years under review, the death rate for cancer has been greater than that for tuberculosis, the excess varying from 3 per 100,000 persons in 1915 to 19 in 1921. Taking the sexes separately, however, the rate for males for tuberculosis exceeded that for cancer in 1915, 1916, and 1919. During the whole period the mortality of females from cancer was always greater than that from tuberculosis.

DEATH RATES^(a) FROM TUBERCULOSIS AND CANCER, 1915 TO 1921.

Year.	Death Rate (a) from Tuberculosis.			Death Rate (a) from Cancer.		
	Males.	Females.	Total.	Males.	Females.	Total.
1915	79	64	71	75	74	74
1916	86	64	75	82	79	80
1917	81	55	69	84	78	81
1918	82	59	70	91	78	84
1919	90	62	76	88	82	85
1920	79	55	67	86	82	84
1921	78	56	68	88	87	87

(a) Number of deaths per 100,000 of mean population.

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

CANCER—DEATHS PER 100,000 PERSONS LIVING.

Country.	Year.	Rate.	Country.	Year.	Rate.
Ceylon	1920	10	France	1911	80
Rumania	1914	13	Austria	1912	81
Serbia	1911	14	United States (Regis-		
Jamaica	1915	17	tration Area) ..	1919	81
Chile	1914	36	Prussia	1913	83
Hungary	1912	47	New Zealand ..	1921	85
Quebec (Canada) ..	1919	51	Australia	1921	87
South Africa Union			Germany	1913	91
(Whites)	1919	55	Norway	1917	96
Denmark	1914	58	England and Wales	1919	96
Spain	1919	60	Sweden	1915	106
Italy	1917	64	Netherlands ..	1915	109
Japan	1918	70	United Kingdom ..	1919	110
Belgium	1912	71	Scotland	1921	122
Ontario (Canada) ..	1919	77	Switzerland ..	1918	124
Ireland	1919	79			

The fifth issue of this Year Book contains, on pages 230, *et seq.*, a paper dealing, *inter alia*, with the incidence of cancer in the Commonwealth.

(xvii) *Meningitis*. Deaths from this cause increased seriously in 1915 and 1916, since when they have steadily declined, the deaths during 1921 from cerebro-spinal meningitis being 63, and those from all other forms of meningitis 495. Of the former, 28 occurred in New South Wales, 17 in Victoria, 11 in Queensland, 6 in South Australia, and 1 in Tasmania.

(xviii) *Apoplexy, Hæmorrhage and Softening of the Brain*. The deaths registered under this heading have been remarkably steady during the period under review. The figures for 1921 are made up as follows:—Cerebral hæmorrhage and apoplexy, 1,190 males and 1,171 females; softening of the brain, 54 males and 57 females.

(xix) *Organic Diseases of the Heart*. The number of deaths registered in 1921 was 5,166, viz., 2,895 males and 2,271 females. Of these deaths, New South Wales was responsible for 1,080 males and 794 females; Victoria for 815 males and 777 females; Queensland for 424 males and 256 females; South Australia for 297 males and 250 females; Western Australia for 159 males and 75 females; Tasmania for 118 males and 119 females; and the Northern Territory for 2 males. To the figures for 1921 correspond the following death rates and proportions per 10,000 deaths:—

DEATH RATES (a) FROM ORGANIC HEART DISEASE AND PROPORTION OF 10,000 TOTAL DEATHS, COMMONWEALTH, 1921.

State.	Death Rates (a) from Organic Heart Disease.			Proportion of 10,000 Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	101	77	89	940	930	936
Victoria	108	100	104	941	1,036	985
Queensland ..	105	71	89	964	933	952
South Australia	119	101	110	1,119	1,074	1,098
Western Australia	90	48	70	720	590	672
Tasmania	110	113	111	1,012	1,154	1,079
Northern Territory	70	..	51	286	..	250
Federal Territory	..	..	..	..	..	..
Commonwealth	104	85	95	945	969	955

(a) Number of deaths from Organic Heart Disease per 100,000 of mean population.

(xx) *Acute Bronchitis.* The classification of causes of death 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 1915-1921, with the result that acute bronchitis is credited with 489 deaths in 1915, 512 in 1916, 321 in 1917, 399 in 1918, 420 in 1919, 398 in 1920, and 386 deaths in 1921, viz., 209 males and 177 females.

(xxi) *Chronic Bronchitis.* The adjustment mentioned in the preceding paragraph gives a total of 816 deaths in 1921.

(xxii) *Pneumonia.* The 1921 figures were 1,209 males and 857 females, a total of 2,066 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 1915 were 2,212; in 1916, 2,243; in 1917, 1,941; in 1918, 2,199; in 1919, 2,413; in 1920, 2,527; and in 1921, 2,304. The total for 1921 is made up as follows, viz.:—Diseases of the nasal fossae, 4 deaths; diseases of the larynx, 88 deaths; diseases of the thyroid body, 31 deaths; broncho-pneumonia, 1,175 deaths; pleurisy, 203 deaths; pulmonary congestion and apoplexy, 222 deaths; gangrene of the lung, 25 deaths; asthma, 192 deaths; pulmonary emphysema, 14 deaths; fibroid phthisis (miners' complaint), 272 deaths; other diseases of the respiratory system (tuberculosis excepted), 78 deaths.

(xxiv) *Diseases of the Stomach (Cancer excepted).* In 1921 this heading includes ulcer of the stomach, 98 males, 52 females; and other diseases of the stomach (cancer excepted), 137 males, 152 females; a total of 439 deaths for this class.

(xxv) *Diarrhoea and Enteritis (Children under two years only).* The number of deaths due to these causes is always a large one, varying from 1,719 in 1917 to a maximum of 3,067 in 1920. The total for 1921 was 2,589. During 1921, 10,559 children died before reaching their second birthday, and of these, 2,589, or almost 25 per cent., died from diarrhoea and enteritis. The age distribution of children dying from these diseases during the first year of life will be found on page 141.

The following are the number of deaths, the death rates, and proportions of 10,000 deaths due to infantile diarrhoea and enteritis in the States and Territories for the year 1921:—

DEATH RATES (a) FROM INFANTILE DIARRHOEA AND ENTERITIS, AND PROPORTIONS OF TOTAL DEATHS, COMMONWEALTH, 1921.

State.	Number of Deaths from Infantile Diarrhoea and Enteritis.			Death Rates (a) from Infantile Diarrhoea and Enteritis.			Proportions of Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	543	429	972	51	42	46	473	503	485
Victoria ..	413	306	719	55	39	47	477	408	445
Queensland ..	143	127	270	35	35	35	325	463	378
South Australia ..	136	115	251	55	46	50	512	494	504
Western Australia	136	100	236	77	64	71	616	787	678
Tasmania ..	74	66	140	69	62	66	635	640	637
Northern Territory	..	1	1	..	93	26	..	1,000	125
Commonwealth	1,445	1,144	2,589	52	43	47	471	488	479

(a) Number of deaths from these diseases per 100,000 of mean population.

(xxvi) *Appendicitis and Typhlitis.* Deaths numbered 356 in 1915, 321 in 1916, 321 in 1917, 371 in 1918, 352 in 1919, 382 in 1920, and 351 in 1921, viz., 198 males and 153 females.

(xxvii) *Hernia, Intestinal Obstruction.* The number of deaths has not varied greatly from year to year, the number registered in 1921 being 480, viz., 248 males and 232 females.

(xxviii) *Cirrhosis of the Liver.* There is little variation in the number of deaths from 1915 to 1921. 323 deaths were registered in 1921, viz., 227 males and 96 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 1915, there were 2,274, 1,413 males and 861 females; in 1916, 2,329, 1,416 males and 913 females; in 1917, 2,203, 1,343 males and 860 females; in 1918, 2,144; in 1919, 2,221; in 1920, 2,286; and in 1921, 2,139, viz., 1,235 males and 904 females. Of the deaths registered in 1921, those of 78 males and 52 females were ascribed to acute nephritis, and those of 1,157 males and 852 females to Bright's disease. New South Wales was responsible for 785 deaths: Victoria for 712; Queensland for 319; South Australia for 176; Western Australia for 97; and Tasmania for 50.

(xxx) *Non-Cancerous Tumours and other Diseases of the Female Genital Organs.* Deaths in 1915 numbered 139; in 1916, 153; in 1917, 148; in 1918, 159; in 1919, 132; in 1920, 154; and in 1921, 166. Included in the 166 deaths registered in 1921 were the following:—Non-puerperal uterine hæmorrhage, 8; non-cancerous uterine tumours, 40; other diseases of the uterus, 27; cysts and ovarian tumours, 31; salpingitis and other diseases of the female genital organs, 60.

(xxxi) *Puerperal Septicæmia (Puerperal Fever, Puerperal Peritonitis, Puerperal Phlebitis).* The number of deaths is fairly constant, varying from a maximum of 282 in 1916 to a minimum of 166 in 1919. In 1921, there were 208 deaths.

(xxxii) *Other Puerperal Accidents of Pregnancy and Confinement.* The deaths in 1915 numbered 394; in 1916, 411; in 1917, 482; in 1918, 409; in 1919, 404; in 1920, 433; and in 1921, 435. Included in the 435 deaths registered in 1921 were the following:—Accidents of pregnancy, 102; puerperal hæmorrhage, 94; other accidents of childbirth, 60; puerperal albuminuria and convulsions, 141; puerperal phlegmasia alba dolens, embolus, sudden death, 28; death following childbirth, 9; and puerperal diseases of the breast, 1.

(xxxiii) *All Puerperal Causes.* The 643 deaths registered in 1921 under the two preceding headings correspond to a death rate of 23 per 100,000 females. It may be expressed in other terms by stating that 1 out of every 210 women confined in 1921 died from puerperal causes. More detailed information will be found in a series of tables in "Bulletin No. 39, Commonwealth Demography."

The ages of the mothers who died varied from 14 to 47 years, and are shewn in the following table:—

AGES OF MOTHERS WHO DIED FROM PUERPERAL CAUSES, COMMONWEALTH, 1921.

Age at Death	Married Women.	Single Women.	Total.	Age at Death.	Married Women.	Single Women.	Total.
16 years ..	..	2	2	33 years ..	39	..	39
17 " ..	3	7	10	34 " ..	30	..	30
18 " ..	4	7	11	35 " ..	24	..	24
19 " ..	8	5	13	36 " ..	26	..	26
20 " ..	9	5	14	37 " ..	31	..	31
21 " ..	17	6	23	38 " ..	30	..	30
22 " ..	12	..	12	39 " ..	23	..	23
23 " ..	22	5	27	40 " ..	10	..	10
24 " ..	20	6	26	41 " ..	11	..	11
25 " ..	30	3	33	42 " ..	9	..	9
26 " ..	33	3	36	43 " ..	11	..	11
27 " ..	29	1	30	44 " ..	8	..	8
28 " ..	37	3	40	45 " ..	1	..	1
29 " ..	30	..	30	46 " ..	3	..	3
30 " ..	21	2	23				
31 " ..	33	..	33	Total deaths	588	55	643
32 " ..	24	..	24				

The total number of children left by the married mothers shewn in the above table was 1,584, an average of 2.7 children per mother.

Forty-seven of the mothers who died had been married less than one year, 93 between one and two years, 44 between two and three years, the duration of marriage ranging up to 29 years, apart from 4 cases in which the date of marriage could not be stated. This tabulation will be found in detail, distinguishing the ages at marriage, in "Bulletin No. 39; Commonwealth Demography," as will a further tabulation shewing in combination the duration of marriage and previous issue.

(xxxiii) *Congenital Debility and Malformations.* The total deaths registered under these heads in 1921 were 3,758, of whom 3,633 were children under one year of age. Over 40 per cent. of the deaths of children under one year of age are due to these causes. The distribution of these deaths among the various States, and the infantile mortality rate, are as follows :—

DEATHS FROM CONGENITAL DEBILITY AND MALFORMATIONS, 1921.

State.	Congenital Malformations.			Premature Birth.			Congenital Debility, Icterus, Sclerema.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	108	102	210	521	363	884	231	133	364
Victoria ..	111	82	193	320	247	567	202	147	349
Queensland ..	49	40	89	159	102	261	56	44	100
South Australia	47	20	67	86	76	162	72	53	125
Western Australia	27	16	43	78	53	131	30	27	57
Tasmania ..	17	15	32	37	41	78	27	18	45
North'n Territory	..	..	..	..	..	..	..	1	1
Commonwealth	359	275	634	1,201	882	2,083	618	423	1,041
Number of deaths under one year per 1,000 births	4.23	3.22	3.74	17.14	13.33	15.29	8.82	6.39	7.64

(xxxiv) *Senile Debility.* The deaths ascribed to "old age" form a large group, and are in excess of those due to infantile debility. In 1921, 3,981 deaths were attributed to this cause, and were distributed among the States as follows: 1,511 occurred in New South Wales, viz., 891 males and 620 females; 1,305 in Victoria, viz., 610 males and 695 females; 449 in Queensland, viz., 286 males and 163 females; 369 in South Australia, viz., 184 males and 185 females; 191 in Western Australia, viz., 125 males and 66 females; 147 in Tasmania, viz., 68 males and 79 females; and 9 males in the Northern Territory.

Of the males whose deaths were described as due to senility, seven were aged between 55 and 59, and the deaths ranged up to nine over the age of 100. Of the females, seven were aged between 55 and 60, and seven were of the age of 100 or over.

(xxxv) *Violence.* A very large number of deaths is due every year to external violence, and, as may 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 1915, 2,851, viz., 2,251 males and 600 females; in 1916, 2,712, viz., 2,134 males and 578 females; in 1917, 2,656, viz., 2,069 males and 587 females; in 1918, 2,641, viz., 2,039 males and 602 females; in 1919, 2,799, viz., 2,161 males and 638 females; in 1920, 2,791, viz., 2,159 males and 632 females; and in 1921, 2,892, viz., 2,301 males and 591 females. Of the deaths registered in 1921, those of 828 males and 189 females occurred in New South Wales; those of 535 males and 197 females in Victoria; those of 492 males and 86 females in Queensland; those of 170 males and 65 females in South Australia; those of 186 males and 35 females in Western Australia; those of 85 males and 19 females in Tasmania; and those of 5 males in the Northern Territory.

The following table shews the various kinds of violent deaths which occurred in 1921, distinguishing males and females :—

DEATHS FROM EXTERNAL VIOLENCE, COMMONWEALTH, 1921.

Cause of Death.	Males.	Females.	Total.
Poisoning by food	31	10	41
Venomous bites and stings	21	8	29
Other acute poisonings	31	17	48
Conflagration	5	3	8
Burns (conflagration excepted)	124	123	247
Absorption of deleterious gases (conflagration excepted)	51	31	82
Accidental drowning	473	90	563
Traumatism by firearms	74	8	82
Traumatism by cutting or piercing instruments	4	..	4
Traumatism by fall	249	54	303
Traumatism in mines or quarries	149	..	149
Traumatism by machines	29	..	29
Traumatism by other crushing (vehicles, railways, etc.)	594	88	682
Injuries by animals	41	3	44
Starvation, thirst, fatigue	40	6	46
Excessive cold	2	..	2
Effects of heat	49	46	95
Lightning	6	3	9
Electricity (lightning excepted)	15	..	15
Homicide by firearms	14	6	20
Homicide by cutting or piercing instruments	2	2	4
Homicide by other means	29	23	52
Fractures (cause not specified)	114	48	162
Other external violence	154	22	176
Total Deaths	2,301	591	2,892
Death Rate per 100,000 of mean population	84	22	53

In every kind of violent death there was, therefore, an excess of males, with the exception of homicide by cutting or piercing instruments.

(xxxvi) *Suicide.* It may be said that suicides have remained fairly stationary during recent years, the number in 1915 having been 658, viz., 536 males and 122 females; in 1916, 577, viz., 466 males and 111 females; in 1917, 502, viz., 408 males and 94 females; in 1918, 498, viz., 408 males and 90 females; in 1919, 546, viz., 440 males and 106 females; in 1920, 636, viz., 516 males and 120 females; and in 1921, 621, viz., 510 males and 111 females.

The modes adopted by persons who committed suicide in the years 1915 to 1921 were as follows :—

MALE AND FEMALE SUICIDES (MODES ADOPTED), COMMONWEALTH, 1915 TO 1921.

Mode of Death.	Males.		Females.		Total.	
	Total of 6 years. 1915-20.	1921.	Total of 6 years. 1915-20.	1921.	Total of 6 years. 1915-20.	1921.
Poisoning	496	95	294	54	790	149
Asphyxia	11	4	8	1	19	5
Hanging or Strangulation	386	68	98	13	484	81
Drowning	201	60	109	22	310	82
Firearms	1,008	168	45	8	1,053	176
Cutting instruments	536	90	41	5	577	95
Precipitation from a height	27	8	23	4	50	12
Crushing	48	9	11	3	59	12
Other Modes	61	8	14	1	75	9
Total	2,774	510	643	111	3,417	621

The death rates from suicide and the proportion per 10,000 of total deaths borne by suicides are shewn in the following table :—

**DEATH RATES (a) FROM SUICIDE AND PROPORTION OF TOTAL DEATHS,
COMMONWEALTH, 1921.**

State.	Number of Deaths.			Death Rates (a) from Suicide.			Proportion of 10,000 Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	173	53	226	16	5	11	151	62	113
Victoria ..	133	25	158	18	3	11	154	33	98
Queensland ..	88	17	105	22	5	14	200	62	147
South Australia ..	41	7	48	16	3	10	154	30	96
Western Australia	63	6	69	36	4	21	285	47	198
Tasmania ..	11	3	14	10	3	7	94	29	64
Northern Territory	1	..	1	35	..	26	143	..	125
Commonwealth	510	111	621	18	4	11	166	47	115

(a) Number of deaths from suicide per 100,000 of mean population.

From the following table, which shews the ages of the persons who committed suicide in 1921, it will be seen that both extreme youth and extreme old age are represented :—

AGES OF PERSONS WHO COMMITTED SUICIDE, COMMONWEALTH, 1921.

Ages.	M.	F.	Total.	Ages.	M.	F.	Total.
10 years and under 15	1	..	1	60 years and under 65	46	4	50
15 „ „ 20	9	7	16	65 „ „ 70	35	2	37
20 „ „ 25	28	4	32	70 „ „ 75	9	4	13
25 „ „ 30	42	16	58	75 „ „ 80	8	..	8
30 „ „ 35	41	20	61	80 „ „ 85	4	1	5
35 „ „ 40	47	15	62	85 „ „ 90	1	..	1
40 „ „ 45	66	10	76	Not stated ..	5	..	5
45 „ „ 50	58	11	69				
50 „ „ 55	51	8	59				
55 „ „ 60	59	9	68	Total Deaths ..	510	111	621

The following table shews the occupations of the 510 males who committed suicide:—

**OCCUPATIONS OF MALE PERSONS WHO COMMITTED SUICIDE,
COMMONWEALTH, 1921.**

Occupation.	Deaths.	Occupation.	Deaths.
PROFESSIONAL CLASS—		MANUFACTURING CLASS—	
Government, Defence, Law ..	15	Art and Mechanic Productions ..	10
Others	17	Textiles and Fibrous Materials ..	6
DOMESTIC CLASS—		Food and Drinks	5
Board and Lodging	15	Animal and Vegetable Sub-	
Others	5	stances	3
MERCANTILE CLASS—		Metals and Minerals	14
Property and Finance	5	Fuel, Light and Energy	1
Art, Mechanic and Textile Pro-		Building and Construction ..	25
ducts	5	Others	116
Food and Drinks	17	PRIMARY PRODUCERS—	
Animal and Vegetable Sub-		Agricultural	72
stances	2	Pastoral	32
Fuel, Light and Metals	1	Mining and Quarrying	20
Merchants and Dealers	12	Others	7
Others	39	INDEPENDENT MEANS	6
ENGAGED IN TRANSPORT AND		DEPENDENTS	3
COMMUNICATION—		OCCUPATION NOT STATED ..	15
Railways	11		
Roads and Trams	15		
Seas and Rivers	11		
Others	5		
		Total Male Deaths ..	510

It has been said that suicide has become more frequent during recent years, but an examination of the figures from the year 1871 onwards shews that the assertion needs qualification. The absolute figures have certainly increased, but proportionately to the population the figures for 1916–20 and 1921 were less than those for 1886–90 and 1891–95. The figures for the five years 1911–15, shew, however, a regrettable increase, not only absolutely, but also in proportion to the population. The five years 1916–1920 shew lower figures and percentages than the average of the previous thirty years. No particulars are available for Western Australia prior to 1886, and from 1886 to 1895 the sexes are not distinguished. The figures for the first five periods are, therefore, exclusive of Western Australia:—

SUICIDES, COMMONWEALTH, 1871-75 TO 1921.

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	(a) 1,686	179.20	43.97	(c) 116.92	20.95	24.54
1891–95 ..	1,574	337	(b) 1,911	181.34	44.09	(d) 117.07	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
1911–15 ..	2,546	577	3,123	206.15	50.36	131.17	22.66	24.43
1916–20 ..	2,238	521	2,759	175.46	40.93	108.27	23.28	23.33
1921 ..	510	111	621	183.89	41.33	113.76	21.76	22.47

(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, *et seq.*), the result of a series of investigations into the periodicity of suicide was published. The paper was partly reprinted in the following year (pp. 241, *et seq.*), 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 shown in the detailed classification, and deaths were recorded under every one of these with the exception of the following:—Glanders, rabies, pellagra, intestinal parasites, amputations, and other diseases of the organs of locomotion. The total number of deaths under "other diseases" in 1915 was 9,090, viz., 5,259 males and 3,831 females; in 1916, 9,433, viz., 5,489 males and 3,944 females; in 1917, 8,871, viz., 5,147 males and 3,724 females; in 1918, 9,226, viz., 5,290 males and 3,936 females; in 1919, 9,390, viz., 5,316 males and 4,074 females; in 1920, 10,048, viz., 5,740 males and 4,308 females; and in 1921, 9,995, viz., 5,627 males and 4,368 females. In accordance with the revised edition of the classification, the following changes were 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 are now shewn under a new head (xxiii), and appendicitis and typhlitis under head (xxvi). Some of the diseases included here account for very considerable numbers of deaths. Particulars of the deaths included in 1921 are shewn in the following table:—

CAUSES OF DEATHS INCLUDED UNDER "OTHER DISEASES," COMMONWEALTH, 1921.

Causes.	M.	F.	Total.	Causes.	M.	F.	Total.
Purulent Infection and Septicæmia	96	82	178	Diseases of the Veins (Varices, Varicose Ulcers, Hæmorrhoids) ..	5	22	27
Anthrax	5	1	6	Diseases of the Lymphatic System	12	13	25
Tetanus	58	30	88	Hæmorrhages, Other Diseases of Circulatory System ..	45	67	112
Mycoses	1	3	4	Diseases of the Mouth and its Associated Organs ..	10	7	17
Beri-beri	18	1	19	Diseases of the Pharynx ..	39	44	83
Rickets	1	1	2	Diseases of the Oesophagus ..	20	5	25
Syphilis	79	51	130	Diarrhœa and Enteritis of Children over two years of age and Adults ..	544	441	985
Gonococcus Infection ..	8	2	10	Ankylostomiasis	5	1	6
Other Tumours (Tumours of the female genital organs excepted)	13	27	40	Other Diseases of the Intestines	52	38	90
Acute Articular Rheumatism ..	112	89	201	Acute Yellow Atrophy of the Liver	3	10	13
Chronic Rheumatism and Gout	66	83	149	Hydatid Tumours of the Liver	30	17	47
Scurvy	2	2	4	Biliary Calculi	33	106	139
Diabetes	260	369	629	Other Diseases of the Liver ..	102	87	189
Exophthalmic Goitre	5	49	54	Diseases of the Spleen	5	5	10
Addison's Disease	6	17	23	Simple Peritonitis (non-puerperal)	53	98	151
Leucæmia	76	65	141	Other Diseases of the Digestive System	21	13	34
Anæmia, Chlorosis	158	212	370	Other Diseases of the Kidneys and their Adnexa ..	103	61	164
Other General Diseases ..	52	35	87	Calculi of Urinary Passages ..	20	12	32
Acute and Chronic Alcoholism ..	125	17	142	Diseases of the Bladder	151	31	182
Chronic Lead Poisoning	18	2	20	Other Diseases of the Urethra, Urinary Abscesses, etc. ..	29	2	31
Other Chronic Poisonings due to Occupations	1	..	1	Diseases of the Prostate	257	..	257
Other Chronic Poisonings ..	..	2	2	Non-venereal Diseases of the Male Genital Organs ..	3	..	3
Encephalitis	106	60	166	Non-puerperal Diseases of the Breast (Cancer excepted) ..	..	4	4
Progressive Locomotor Ataxia ..	70	6	76	Gangrene	58	41	99
Other Diseases of the Spinal Cord	176	127	303	Furuncle	22	8	30
Paralysis without indicated cause	142	133	275	Acute Abscess	67	72	139
General Paralysis of the Insane	127	24	151	Other Diseases of the Skin and Adnexa	29	27	56
Other Forms of Mental Alienation	38	55	93	Non-tuberculous Diseases of the Bones	54	38	92
Epilepsy	134	87	221	Other Diseases of the Joints (Tuberculosis and Rheumatism excepted)	6	12	18
Convulsions (non-puerperal) ..	3	11	14	Other Diseases peculiar to Infancy	439	314	753
Convulsions of Children under five years of age	136	134	270	Want of Care (Infants)	4	7	11
Chorea	3	1	4				
Neuralgia and Neuritis	18	7	25				
Other Diseases of the Nervous System	149	126	275				
Diseases of the Eye	1	1	2				
Diseases of the Ear	28	25	53				
Pericarditis	60	24	84				
Acute Endocarditis	263	241	504				
Angina Pectoris	92	51	143				
Diseases of the Arteries, Atheroma, Aneurism ..	554	273	827				
Embolism and Thrombosis ..	146	239	385				
				Total Deaths	5,627	4,368	9,995

(xxxviii) *Unspecified or Ill-defined Diseases.* The number of cases which has to be included here is a considerable one from year to year, comprising 717 in 1915, 633 in 1916, 667 in 1917, 664 in 1918, 707 in 1919, 805 in 1920, and 721 in 1921. The detailed classification distinguishes these ill-defined diseases under three headings:—Ill-defined organic diseases, including such definitions as dropsy, anasarca, ascites, general oedema, 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 1921 the number of cases of death which would have to be classed under the first of these categories was 22; those belonging to the second, 44; and those belonging to the third, 655. 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.

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 compilers 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 PROPORTION OF 10,000 DEATHS IN CLASSES, COMMONWEALTH, 1921.

Class.	Total Deaths.			Death Rates. (a)			Proportion of 10,000 Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. General diseases	7,223	6,287	13,510	260	234	247	2,357	2,684	2,498
2. Diseases of the Nervous System and of the Organs of Special Sense	2,721	2,237	4,958	98	83	91	888	955	917
3. Diseases of the Circulatory System	4,072	3,201	7,273	147	119	133	1,328	1,367	1,345
4. Diseases of the Respiratory System	3,245	2,327	5,572	117	87	102	1,059	993	1,031
5. Diseases of the Digestive Organs	3,270	2,701	5,971	118	101	109	1,067	1,153	1,104
6. Diseases of the Genito-Urinary System and Adnexa	1,798	1,180	2,978	65	44	55	587	504	551
7. Puerperal Condition .. .. .	..	643	643	..	23	12	..	275	119
8. Diseases of the Skin and of the Cellular Tissue	176	148	324	6	6	6	57	63	60
9. Diseases of the Organs of Locomotion	60	50	110	2	2	2	20	21	20
10. Malformations	359	275	634	13	10	12	117	117	117
11. Infancy	2,262	1,626	3,888	82	61	72	738	694	719
12. Old Age	2,173	1,808	3,981	78	67	73	709	772	736
13. Violence	2,811	702	3,513	102	26	64	916	300	650
14. Ill-defined Diseases	482	239	721	17	9	13	157	102	133
Total	30,652	23,424	54,076	1,105	872	991	10,000	10,000	10,000

(a) Number of deaths per 100,000 of mean population.

20. Deaths of Children under one Year.—"Bulletin No. 39; Commonwealth Demography," contains tables shewing for twenty-three causes the age at death of children dying during the first year of life. In the Bulletin mentioned, the particulars are

published for males and females separately for the Commonwealth, but the totals for the Commonwealth only are here shewn for both sexes combined :—

DEATHS OF CHILDREN UNDER ONE YEAR, COMMONWEALTH, 1921.

Age at Death.	Measles.	Whooping Cough.	Diphtheria and Croup.	Erysipelas.	Pulmonary Tuberculosis.	Tubercular Meningitis.	Tuberculosis, other forms.	Syphilis.	Simple Meningitis.	Cerebro-Spinal Meningitis.	Convulsions.	Acute Bronchitis.
Under 1 week ..	..	..	1	..	..	..	..	7	5	..	81	7
1 week and under 2 ..	..	..	1	1	..	..	..	2	6	..	25	12
2 weeks ..	2	6	3	2	..	..	..	2	4	..	5	9
3 ..	1	2	3	2	..	..	..	5	2	..	4	21
1 month ..	3	48	12	13	1	1	..	20	9	2	11	52
2 months ..	3	60	6	6	..	..	..	14	6	1	7	22
3 ..	..	22	8	..	1	1	2	7	7	..	8	24
4 ..	1	23	2	1	3	..	..	5	11	..	8	8
5 ..	1	14	4	1	..	4	1	4	11	..	11	5
6 ..	..	16	4	2	..	3	3	1	22	1	4	12
7 ..	1	15	6	1	..	6	1	2	17	..	6	11
8 ..	2	20	2	..	1	1	1	1	18	..	10	8
9 ..	4	15	9	2	..	1	2	3	9	..	7	7
10 ..	3	18	9	1	1	3	..	2	13	..	9	2
11 ..	..	10	10	..	2	5	1	2	10	..	1	4
Total under 1 year ..	21	269	80	32	9	25	11	76	150	4	197	204
Number of deaths from each cause per 1,000 births ..	0.15	1.97	0.59	0.24	0.07	0.18	0.08	0.56	1.10	0.03	1.45	1.50

Age at Death.	Broncho-Pneumonia.	Pneumonia.	Pleurisy.	Other Diseases of Stomach.	Diarrhoea and Enteritis.	Hernia and Intestinal Obstruction.	Malformations.	Premature Birth.	Congenital Debility, Icterus and Sclerema.	Other Diseases peculiar to Early Infancy.	Lack of Care.	Other Causes.	Total.
Under 1 week ..	5	18	1	7	17	10	235	1,622	388	627	10	86	3,127
1 week and under 2 ..	17	9	..	..	23	7	65	152	103	56	..	40	519
2 weeks ..	20	10	..	4	29	2	26	99	60	29	..	49	362
3 ..	13	7	..	3	20	1	16	62	34	16	..	23	235
1 month ..	75	47	..	9	147	5	44	93	132	15	..	68	806
2 months ..	55	17	1	14	209	4	37	25	89	3	1	43	624
3 ..	40	29	..	10	253	7	21	10	69	1	..	32	552
4 ..	33	25	..	6	237	7	11	5	50	5	..	35	476
5 ..	27	22	1	7	192	10	12	7	38	..	..	29	401
6 ..	22	23	..	6	202	6	13	3	14	..	..	18	375
7 ..	20	14	..	7	170	10	12	2	13	..	..	26	340
8 ..	19	15	3	8	164	5	6	3	21	..	..	27	335
9 ..	23	9	4	7	144	3	4	..	14	..	..	21	288
10 ..	23	23	4	3	126	..	4	..	6	..	..	17	267
11 ..	27	16	2	5	112	1	3	..	10	1	..	25	245
Total under 1 year ..	419	284	16	96	2,045	78	509	2,083	1,041	753	11	539	8,952
Number of deaths from each cause per 1,000 births ..	3.08	2.08	0.12	0.71	15.01	0.57	3.74	15.29	7.64	5.53	0.08	3.96	65.73

It will be seen that the maximum number of deaths from convulsions, malformations, premature birth, congenital debility, icterus and sclerema, other diseases peculiar to early infancy, and lack of care, occurred during the first month of life, while acute bronchitis, broncho-pneumonia and pneumonia were most fatal during the second month. Diarrhoea and enteritis carried off more children in the fourth and fifth months than in any other, the numbers gradually decreasing toward the end of the year. Whooping cough reached its maximum during the second and third months of life.

21. Ages at Death of Married Males and Females, and Issue.—“ Bulletin No. 39. 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 1921. A short summary of the tables mentioned is given hereunder. Deaths of married males

in 1921 numbered 14,907, and of married females, 13,973. The tabulations which follow deal, however, with only 14,552 males and 13,760 females, the information in the remaining 568 cases being too incomplete to be utilised. The total number of children in the families of the 14,552 males was 72,352; and of the 13,760 females, 69,544. The average number of children is shewn for various age-groups in the following table:—

AGES AT DEATH OF MARRIED MALES AND FEMALES, AND AVERAGE ISSUE, COMMONWEALTH, 1921.

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 ..	..	0.77	70 to 74 years ..	6.06	6.30
20 to 24 years ..	0.84	1.22	75 „ 79 „ ..	6.66	6.56
25 „ 29 „ ..	1.29	1.86	80 „ 84 „ ..	6.89	6.76
30 „ 34 „ ..	2.06	2.45	85 „ 89 „ ..	7.18	6.93
35 „ 39 „ ..	2.58	3.29	90 „ 94 „ ..	7.21	6.53
40 „ 44 „ ..	3.23	3.66	95 „ 99 „ ..	6.97	6.05
45 „ 49 „ ..	3.48	3.76	100 years and upwards	9.20	5.11
50 „ 54 „ ..	3.76	4.23	Age not stated ..	5.36	5.80
55 „ 59 „ ..	4.41	4.69			
60 „ 64 „ ..	4.98	5.39			
65 „ 69 „ ..	5.50	5.86	All ages ..	4.97	5.05

The figures shewn in the preceding table include the issue both living and dead, the proportion between them, taking the issue of deceased males and females together, being about 1,000 to 293. The totals are shewn in the following table:—

ISSUE OF MARRIED MALES AND FEMALES, COMMONWEALTH, 1921.

Issue of Married Males.	Males.	Females.	Total.	Issue of Married Females.	Males.	Females.	Total.
Living ..	28,359	28,744	57,103	Living ..	26,125	26,502	52,627
Dead ..	8,521	6,728	15,249	Dead ..	9,408	7,509	16,917
Total ..	36,880	35,472	72,352	Total ..	35,533	34,011	69,544

These figures shew a masculinity in the births of 2.07, which agrees fairly well with the experience of the birth statistics.

22. **Ages at Marriage of Males and Females, and Issue.**—While the table giving the average families of married males and females naturally shews 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:—

AGES AT MARRIAGE OF MALES AND FEMALES, AND AVERAGE ISSUE, COMMONWEALTH, 1921.

Age at Marriage.	Average Family of Males.	Average Family of Females.
Under 20 years ..	6.32	6.97
20 to 24 „ ..	6.05	5.50
25 „ 29 „ ..	5.17	4.09
30 „ 34 „ ..	4.45	2.66
35 „ 39 „ ..	3.90	1.61
40 „ 44 „ ..	2.67	0.62
45 „ 49 „ ..	2.20	0.03
50 „ 54 „ ..	1.70	..
55 „ 59 „ ..	1.30	..
60 „ 64 „ ..	0.33	..
65 years and upwards	0.25	..
Age not stated ..	4.93	5.41
All ages ..	4.97	5.05

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 39 of Commonwealth Demography," pages 211 to 216.

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 1921, 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 different age constitution of the local-born population of the various 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.

BIRTHPLACES OF MARRIED MALES AND FEMALES, AND AVERAGE ISSUE, COMMONWEALTH, 1921.

Birthplace.	Married Males.		Married Females.		Birthplace.	Married Males.		Married Females.	
	Deaths.	Average Family.	Deaths.	Average Family.		Deaths.	Average Family.	Deaths.	Average Family.
New South Wales	2,678	5.08	2,868	5.05	Straits Settlements	1	1.00	..	..
Victoria ..	2,497	4.09	2,338	4.04	Other Asiatic British Possessions ..	2	3.00	..	..
Queensland ..	452	3.73	529	3.88	China ..	67	3.13	2	8.00
South Australia ..	952	4.62	986	4.43	Japan ..	3	1.00	1	..
Western Australia ..	93	5.66	112	4.48	Philippine Islands ..	4	3.75	..	..
Tasmania ..	552	4.50	597	5.21	Syria ..	5	6.75	8	4.38
Northern Territory ..	..	..	2	3.00	Other Asiatic C'tries ..	1	..	1	2.00
New Zealand ..	119	3.63	89	3.49	Mauritius ..	5	5.40	3	8.33
England ..	3,723	5.35	3,077	5.43	Union of Sth. Africa ..	16	4.75	9	5.00
Wales ..	133	5.19	103	5.43	Other African C'tries ..	1	..	2	4.00
Scotland ..	901	5.45	850	5.88	Barbadoes ..	..	..	1	12.00
Ireland ..	1,376	5.76	1,671	5.92	Canada ..	34	4.97	13	5.38
Isle of Man ..	3	7.33	1	5.00	Jamaica ..	3	4.67	..	..
Other European British Possessions ..	20	4.65	11	6.73	Newfoundland ..	4	2.00	3	4.33
Austria-Hungary ..	16	4.19	6	4.50	Other American British Possessions ..	4	4.75	3	5.00
Belgium ..	3	3.67	1	..	Argentine Republic ..	1	2.00	1	6.00
Denmark ..	79	5.35	31	5.23	Brazil ..	1	5.00	1	7.00
France ..	40	4.35	15	4.13	Chile ..	..	..	1	1.00
Germany ..	345	6.12	219	7.01	United States ..	53	3.91	29	4.86
Greece ..	19	4.58	..	..	Other American Countries ..	5	7.40	7	4.14
Italy ..	37	4.59	13	3.54	Fiji ..	1	3.00	1	5.00
Netherlands ..	9	5.44	2	3.00	New Hebrides ..	1	1.00	..	..
Norway ..	24	4.54	4	6.00	Samoa ..	1	9.00	..	..
Portugal ..	4	9.50	..	..	Other Polynesian Is. ..	..	..	3	6.00
Russia ..	41	4.90	24	5.17	S.Sea Islds.(so desc'd.) ..	4	2.25	1	2.00
Spain ..	3	5.33	3	1.00	At Sea ..	62	6.34	37	6.65
Sweden ..	48	4.44	13	4.54	Not stated ..	32	3.09	40	4.50
Switzerland ..	26	4.65	7	4.00					
Other Europ. C'tries ..	10	2.90	2	2.50					
British India ..	35	3.40	17	4.41					
Ceylon ..	..	..	2	5.00					
					Total	14,552	4.97	13,760	5.05

25. **Occupations of Married Males, and Issue.**—A final tabulation shews 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, 1921.

Occupation.	Deaths of Married Males.	Average Family.	Occupation.	Deaths of Married Males.	Average Family.
PROFESSIONAL CLASS—			MANUFACTURING CLASS—		
Government, Defence, and Law	373	4.00	Art and Mechanic Products	640	4.69
Others	553	4.06	Textiles and Fibrous Materials	306	4.98
DOMESTIC CLASS—			Food and Drinks ..	183	5.07
Board and Lodging ..	346	3.36	Animal and Vegetable Sub-		
Others	206	3.87	stances	41	5.32
MERCANTILE CLASS—			Metals and Minerals ..	401	5.18
Property and Finance ..	224	3.72	Fuel, Light and Energy ..	59	3.61
Art, Mechanic and Textile			Building and Construction ..	913	4.95
Products	104	4.21	Others	2,543	4.98
Food and Drinks ..	430	4.58			
Animal and Vegetable Sub-			PRIMARY PRODUCERS—		
stances	74	5.57	Agricultural	2,359	6.28
Fuel, Light and Metals ..	33	4.67	Pastoral	594	5.70
Merchants and Dealers ..	395	4.57	Mining and Quarrying ..	914	5.02
Others	717	3.70	Others	116	4.53
ENGAGED IN TRANSPORT AND			INDEPENDENT MEANS ..	352	5.31
COMMUNICATION—			DEPENDENTS	15	4.00
Railways	406	4.99	OCCUPATION NOT STATED ..	407	5.65
Roads and Trams	466	4.49			
Seas and Rivers	277	4.53	Total	14,552	4.97
Others	105	4.13			

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. Legislation relating to Registration of Births, Deaths, and Marriages, and Legitimation of Children.

A review of the legislation relative to the above subject appeared in the thirteenth issue of this Year Book, pages 212–255. There has been no alteration in the laws dealing with this subject since the issue referred to.

§ 5. 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 105 and 106), shewing these fluctuations from 1860 to 1921, both for the States and the Commonwealth. The facts are very significant from the national point of view, and call for serious consideration. To appreciate the situation properly, 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 shews a falling off in marriages after 1891 (see page 106), it shews a recovery in 1894, and, with the exception of a small fall for 1903, it continually advanced until 1915. In 1916, 1917, and 1918 a heavy falling off was recorded, unquestionably owing to the European War. There was a rapid recovery in 1919 and 1920, the figures for the latter year being the highest ever recorded. The total for 1921, while not so great as for 1920, was in excess of the numbers registered before the latter year. The same characteristic is not seen in the curve of births, which, from 1904 onwards, rose continually to 1914, then declined to 1919, and recovered again in 1920 and 1921.

ACTUAL BIRTHS, DEATHS, AND MARRIAGES

EXPERIENCED IN THE COMMONWEALTH DURING THE YEARS 1890 TO 1921, 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	111,002	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	23,993	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	28,961
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	33,387
1911 ..	122,193	157,138	47,869	64,283	39,482	34,320
1912 ..	133,088	162,807	52,177	66,603	42,147	35,559
1913 ..	135,714	168,660	51,789	68,997	41,594	36,837
1914 ..	137,983	173,024	51,720	70,783	43,311	37,790
1915 ..	134,871	174,380	52,782	71,337	45,224	38,080
1916 ..	131,426	173,078	54,197	70,805	40,289	37,802
1917 ..	129,965	173,075	48,029	70,803	33,666	37,801
1918 ..	125,739	175,945	50,249	71,978	33,141	38,428
1919 ..	122,290	181,795	65,930	74,370	40,540	39,706
1920 ..	136,406	187,496	56,289	76,703	51,552	40,951
1921 ..	136,198	190,951	54,076	78,116	46,869	41,706

The foregoing table 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 still more serious decline in the birth rate, in a country but sparsely populated, has an obvious and most important bearing on the national future, and on the extent to which it is desirable to promote immigration.

2. Graphs of Annual Births, Commonwealth and States (page 105).—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 to 1913.

It is of special interest to note the decline in births associated with the commercial crisis of 1891–3, also that 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. From 1904 to 1914 there was a gradual rise, followed by a decline which lasted till 1919. The number of births registered in 1921 in New South Wales was the highest on record.

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, and 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. A slight fall in 1910 was followed by a continuous rise to 1914, since which year a continuous decline till 1919 was experienced. There was a substantial increase in the number of registrations during 1920, which was, however, not maintained in 1921.

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 prior to 1909 was recorded. The South Australian graph is crossed by that of Queensland at the year 1885. From 1890 onwards to 1908 the number of births fluctuated somewhat, but, 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 from 1906 to 1915. In 1916 there was a sudden fall, followed by a rapid rise in 1917, with another fall during 1918 and 1919. The curve rose in 1920 and 1921.

The South Australian graph shews a slow but practically continuous rise from 1860 to 1885. This rise is followed by a slow but fluctuating decline to 1903, and a slight recovery to 1914. In 1915, 1917 and 1919 and 1921 there were declines and in 1916, 1918 and 1920 there were upward movements.

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 to 1906. A slight fall was apparent to 1910, followed by a rapid rise to 1913. From 1913 to 1919 there was a continuous decline, but this was followed by a recovery in 1920. A further decline occurred during 1921.

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 to 1914, a period of steady recovery. The years 1915 to 1918 were years of decline, but 1919 to 1921 were characterised by increase.

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 ..	1921	1891	1921	1914	1913	1914	1914

3. Graphs of Annual Marriages, Commonwealth and States (page 106).—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, and a still more rapid increase between 1879 and 1885. From 1885 to 1891 the numbers continued to increase, but with marked fluctuations in magnitude. 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 was 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 1915 was greater than in any preceding year. In 1916, 1917, and 1918, as already mentioned, there was a heavy falling off. In 1919 and 1920 a rapid recovery took place, with the result that the number recorded during the latter year was the highest on record. During 1921, however, the numbers again decreased.

4. Graphs of Annual Deaths, Commonwealth and States (page 107).—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, (g) 1902-3, (h) 1916, (i) 1919, and (j) 1920. 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, 1898, and 1902-3 all were affected. In 1916 all States except Queensland were affected, and in 1919 each State shewed a large increase owing to the prevalence of influenza. 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.

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, 1914 and 1921. In 1917 there were marked declines in all the States, succeeded in 1918 by less marked increases, and in 1919 by large increases, for the reason already stated.

5. Graphs of Annual Birth, Death, and Marriage Rates and of Rate of Natural Increase—Commonwealth (page 108).—(i) General. These graphs represent the number of births, deaths, and marriages, and the excess of births over deaths (natural increase) per 1,000 of the population of the Commonwealth, for each of the years 1860 to 1921.

(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 1,000 of population in 1860 to 23.53 per 1,000 in 1919. 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 23.53 in 1919. The lowest point reached, until 1919, viz., 23.78, was attained in 1903, the year in which the Commonwealth suffered severely from the worst drought it has ever experienced. From 1903 to 1912 there was an advance in the rate, followed by a decline to 1919. The rate in 1921 was 24.95. 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 preventive measures, are generally considered the most potent. The highest birth rate recorded was 43.27 in 1862; and the lowest, 23.53 in 1919.

(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 general death rate of the Commonwealth, a fall having taken place from 20.86 in 1860 to 10.59 in 1915. In 1916 there was a slight rise to 10.95, followed in 1917 by a fall to 9.71, the lowest rate yet recorded in the Commonwealth as a whole. In 1918 there was a slight rise to 9.99, followed by a rise to 12.69 in 1919. The rate for 1921 fell to 9.91. The graphical representation of the death rates brings into prominence six years in which the rates were exceptionally high when compared with those of adjacent years. These years are 1860, 1866, 1875, 1884, 1898, and 1919. 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 11.05 in 1921. For females the highest was 20.71 in 1860, and the lowest 8.16 in 1917. The difference between the male and female rate has, since 1869, been fairly constant, and has ranged between 1.97 and 3.68, 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 1920, 9.73, the highest ever recorded, 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 1915 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. In 1916, 1917, and 1918 the rate declined to 8.14, 6.80, and 6.59 respectively, but increased to 9.62 in 1920. In 1921 the rate fell to 8.59.

(v) *Natural Increase.* This graph, which represents the excess of births over deaths per 1,000 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, 1898, and 1919 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 the 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 10.84 in 1919. During 1920 and 1921 the rate increased to 15.04.

6. Graphs of Annual Birth Rates—States (page 109).—These graphs furnish for the several States information similar to that supplied in the graph on page 108 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 a very low rate accompanying the drought in 1903, the variations in any of the States since 1901 have not been very marked, and in most cases a slight tendency to increase is in evidence up to 1913. From 1915 to 1921 the rates in every year have been less than that experienced in 1914.

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 (1919), 24.28; Victoria (1919), 21.46; Queensland (1903), 24.53; South Australia (1919), 23.61; Western Australia (1919), 21.71; Tasmania (1919), 25.90.

7. **Graphs of Annual Death Rates—States** (page 109).—These graphs furnish for the several States similar information to that given for the Commonwealth as a whole in the diagram on page 108, 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 (1917), 9.43; Victoria (1917), 10.31; Queensland (1921), 9.34; South Australia (1918), 9.72; Western Australia (1917), 9.05; and Tasmania (1918), 9.09.

8. **Graphs shewing Variations in Annual Death Rates from Month to Month.**—The graphs on pages 110 and 111 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, also distinguishing males, females, and persons. Further particulars in regard to these graphs will be found on pages 120 and 121.