## CHAPTER XXV.

## VITAL STATISTICS.

## § 1. Births.

1. Births, 1921 to 1925.-The number of male and female births and the total births registered in Australia during the years 1921 to 1925 are shown in the tables hereunder. The numerical relation which these births bear to the population, and various other associated features, are given in later tables.

MALE BIRTHS, 1921 TO 1925.

|  | Year. | N.S.W. | Vie. | Q'land. | S. Aust. | W. Aust | Tas. | North. Ter. | Fed. <br> Cap. <br> Ter. | Aus- tralia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | . - | 28,005 | 18,288 | 10,638 | 6,122 | 3,988 | 2,944 | 39 | 15 | 70,039 |
| 1922 |  | 28,2]8 | 18,733 | 10,263 | 6,150 | 4,163 | 2,995 | 38 | 17 | 70,582 |
| 1923 |  | 27,713 | 18,565 | 10,163 | 5,976 | 4,014 | 2,888 | 40 | 6 | 69,365 |
| 1924 |  | 27,350 | 18,500 | 10,650 | 5,941 | 4,215 | 2,700 | 29 | 15 | 68,800 |
|  | Single births | 27,308 | 18,166 | 10,072 | 5,712 | 4,120 | 2,617 | 36 | 22 | 68,053 |
| 1925 | Twins . . | 563 | 419 | 241 | 112 | . 90 | 47 |  |  | 1,472 |
|  | Triplets .. | 7 | 7 | 3 |  | $\cdots$ | $\cdots$ |  |  | 17 |
|  | Total births | 27,878 | 18,592 | 10,316 | 5,824 | 4,210 | 2,664 | 36 | 22 | 69,542 |

FEMALE BIRTHS, 1921 TO 1925.

|  | Year. | N.S.W. | Vic. | Qland. | S. Aust. | W. Aust | таs. | North. Ter. | Fed. <br> Cap. <br> Ter. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | . | 26,631 | 17.303 | 9,681 | 5,852 | 3,819 | 2,811 | 40 | 12 | 66,159 |
| 1922 |  | 26,952 | 17,550 | 9,724 | 5,851 | 3,968 | 2,822 | 32 | 15 | 66,914 |
| 1923 |  | 26,356 | 17.312 | 9,819 | 5,716 | 3,840 | 2,769 | 32 | 13 | 65,857 |
| 1924 |  | 26,355 | 17,640 | 9,658 | 5,651 | 4,086 | 2,683 | 28 | 26 | 66,127 |
|  | Single births | 26,181 | 16,961 | 9,761 | 5,477 | 3,874 | 2,513 | 29 | 25 | 64,821 |
| 1925 | Twins . | 550 | 367 | 203 | 156 | 98 | 41 | . | . | 1,415 |
| 1925 | Triplets .. | 6 | 2 | ${ }^{3}$ |  | 3 | $\cdots$ |  | $\cdots$ | 14 |
|  | Total births | 26,737 | 17,330 | 9,967 | 5,633 | 3,975 | 2,554 | 29 | 25 | 66,250 |

TOTAL BIRTHS, 1921 TO 1925.

|  | Year. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust | Tas. | North. Ter. | Fed. <br> Cap. <br> Ter. | Aus- tralia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 |  | 54,638 | 35,591 | 20,329 | 11,974 | 7,807 | 5,755 | 79 | 27 | 136,198 |
| 1922 |  | 55,170 | 36,288 | 19,987 | 12,001 | 8,131 | 5,817 | 70 | 32 | 137,496 |
| 1923 |  | 54,069 | 35,877 | 19,982 | 11,692 | 7,854 | 5,657 | 72 | 19 | 135,222 |
| 1924 |  | 53,705 | 36,140 | 19,708 | 11,592 | 8,301 | 5,383 | 57 | 41 | 134,927 |
|  | Single births | 53,489 | 35,127 | 19,833 | 11,189 | 7,994 | 5,130 | 65 | 47 | 132,874 |
|  | Twins .. | (a) 1,113 | (c) 786 | (d) 444 | 268 | (b) 188 | 88 | . | . | 2,887 |
| 1925 | Triplets . Total births | $(e) 13$ 54 | [ 9 |  |  | 3 8,185 | 5,218 | 65 | 47 | 31 5 |
|  |  | -6.,015 | 35,322 | 2 |  | 8,185 | 6,218 | 65 | 47 | 3.,792 |

[^0](e) Two stillborn triplets not included.
2. Birth Rates.-The next table gives the crude birth rates for the years 1921 to 1925.

CRUDE BIRTH RATE( $a$ ), 1921 TO 1925.

| Year. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | Northern Territory. | Federal Capital Territory. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | 25.93 | 23.16 | 26.64 | 24.08 | 23.39 | 26.98 | 20.23 | 10.87 | 24.95 |
| 1922 | 25.67 | 23.10 | 25.59 | 23.71 | 23.94 | 27.08 | 19.16 | 11.37 | 24.69 |
| 1923 | 24.63 | 22.31 | 24.89 | 22.60 | 22.55 | 26.27 | 19.94 | 5.73 | 23.77 |
| 1924 | 24.11 | 22.01 | 23.87 | 21.88 | 23.09 | 25.07 | 15.82 | 10.65 | 23.24 |
| 1925 | 24.01 | 21.49 | 23.82 | 21.06 | 22.23 | 24.44 | 17.69 | 9.96 | 22.89 |

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

Generally speaking the crude birth rate of Australia has shown a constant decline for many years, and the rate for 1925 is the lowest yet recorded.

The principal factor in determining the crude birth rate is the proportion of married women of child-bearing age in the community, but as the fecundity of women varies with age, the birth rate per 1,000 married women will vary according to the age composition of the group, and, other things being equal, the rate generally should be highest where the average age of married women is lowest. For the purposes of the following table the child-bearing age has been taken as from 15-44 years inclusive, and all births of which the mothers were stated to be over 45 years have been counted in the group 40-44.

The following table shows some of the more important factors which affect the birth rates, and also the birth rates computed on various bases as follows :-Births per 1,000 of the population (crude); births per 1,000 women of child-bearing age; nuptial births per 1,000 married women of child-bearing age; births per 1,000 married women of child-bearing age corrected for inequalities in the age composition by taking the female population of Australia as a ${ }^{\circ}$ whole for a standard; and ex-nuptial births per 1,000 unmarried women aged $15-44$ inclusive. The results are obtained from the births during the years 1920, 1921, and 1922 in relation to the age and conjugal .condition of the population at the time of the Census of the 4th April, 1921.

The rates obtained from these computations place Tasmania first, and Queensland second, although the proportions of married women of child-bearing age in their populations were lower than the average for Australia. This result was due to the relatively low average age of the married women in these States, and the large proportion of ex-nuptial births. The relatively low proportion of married women of child-bearing age in Queensland was due to the large number of adult males employed in localities unsuited to women, a circumstance which accounts for the high masculinity of the population.

In Tasmania the relatively small proportion of married women arises from conditions directly opposite to those in Queensland. In the island State the numbers of the sexes were almost equal, while large numbers of the young adults emigrate to the mainland, leaving a population with abnormally high proportions of very young and very old. Although the proportion of married women of child-bearing age was lower in Tasmania than in Queensland, and the average age was the same in both States, Tasmania had the greater weight in the more productive age-groups-from 15 to 24 years.

Western Australia, though fifth in order of the crude birth rates, takes third place -when the rates are computed in relation to women only, the change in position being
due to the high masculinity. Although the average age of married women of reproductive ages was higher than in any other State, the uncorrected birthrate for nuptial births per 1,000 married women was higher than in New South Wales, Victoria, or South Australia. The adjustment for age improves the status of Western Australia very considerably, though not sufficiently to alter the sequence of its position.

The crude birth rate placed New South Wales third, but on the adjusted rate per 1,000 married women takes fifth place. The high position of New South Wales in regard to crude birth rates was due rather to the large proportion in the population of married women of child-bearing age than to their productiveness.

Victoria was the only State with an excess of females in its population, and the proportion to the total population of women aged 15-44 was the largest among the States, but as the proportion of these who were married was the lowest, the primary factor in the crude birth rate, viz., the proportion to the total population of married women of reproductive ages was the smallest.

The difference between the adjusted birth rates per 100 married women of childbearing ages for New South Wales and Victoria was very small, and the proportions of ex-nuptial to all births in these States were almost identical.

Although 12.53 per cent. of its total population consisted of married women of childbearing age-against an average of 12.20 for Australia-South Australia occupies fourth place in the order of crude birth rates. The advantage from its high proportion of potentially productive women was to some extent counteracted by their average age being somewhat above the average for Australia, while its position was also affected by the very small proportion of ex-nuptial births. The number of nuptial births per 100 women of child-bearing age in South Australia represented 18.71, as against 19.65 for Australia, but the difference was somewhat reduced by the adjusting process which makes the rate for South Australia 18.99 as against the Australian rate of 19.65.

BIRTH RATES, AND FACTORS AFFECTING THEM.-AVERAGE OF YEARS 1920, $1921,1922$.

| Particulars. | N.S.W. | Vic. | Q'land. | S.A. | W.A. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Crude birth rate per 1,000 persons. | 25.99 | 23.54 | 26.72 | 24.23 | 24.14 | 26.99 | 25.15 |
| Birth rate per 100 women 15-44 incl. | 11.04 | 9.79 | 11.83 | 10.25 | 11.05 | 11.91 | 10.74 |
| Birth rate per 100 married women 15-44 incl.(a) | 19.39 | 19.29 | 21.26 | 18.71 | 19.62 | 21.83 | 19.65 |
| Birth rate per 100 married women 15-44 incl. (corrected for age variation) | 19.14 | 19.44 | 20.77 | 18.99 | 20.44 | 21.24 | 19.65 |
| Ex-nuptial births-per cent. on all births .. | 4.82 | 4.84 | 5.00 | 3.28 | 4.02 | 5.11 | 4.69 |
| Ex-nuptial births per 100 unmarried women 15-44 incl. | 1.16 | 0.92 | 1.26 | 0.72 | 0.92 | 1.26 | 1.05 |
| Women 15-44 incl.-per cent. all persons | 23.54 | 24.02 | 22.57 | 23.65 | 21.83 | 22.67 | 23.41 |
| Average age of all women $15-44 \mathrm{incl}$. $\quad$ a | 28.67 | 28.61 | 28.09 | 28.73 | 28.45 | 28.10 | 28.54 |
| Married women 15-44 incl-per cent. on all persons | 12.75 | 11.61 | 11.93 | 12.53 | 11.81 | 11.73 | 12.20 |
| Average age of married women $15-44 \mathrm{incl}$. | 32.24 | 32.74 | 32.16 | 32.67 | 33.02 | 32.16 | 32.48 |

(a) Nuptial births only.

The following figures gives a comparison for Australia, at Census periods from 1880 , of the total births per 1,000 women (married and unmarried) and of the nuptial births per 1,000 married women of ages 15 to 44 inclusive :-

| Particulars. | 1880-82. | 1890-92. | 1900-02. | 1910-12. | 1920-22. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Births per 1,000 women aged 15-44 | 169.7 | 158.8 | 117.3 | 117.2 | 107.4 |
| Nuptial births per 1,000 married women 15-44. | 321.0 | 332.0 | 235.8 | 236.0 | 1965 |

3. Birth Rates of Various Countries.-(i) Crude Rates. A comparison with other countries shows that the Australian States occupy a midway position, which is, however, counterbalanced by a still lower position in regard to their death rates, as evidenced in the table hereinafter in the section dealing with "Deaths."

CRUDE BIRTH RATES $(a)$.-VARIOUS COUNTRIES.

| Country. | Year. | Rate. | Country. | Year. | Rate. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Canada (excluding |  |  |
| Egypt | 1925 | 48.8 | Quebec) .. | 1925 | 22.6 |
| Soviet Republics | 1923 | 42.5 | Finland . | 1925 | 22.4 |
| Chile .. | 1925 | 40.5 | Western Australia | 1925 | 22.2 |
| Ceylon | 1925 | 39.2 | Northern Ireland | 1925 | 22.0 |
| Jamaica | 1924 | 36.8 | Victoria . . | 1925 | 21.5 |
| Rumania | 1923 | 36.6 | Austria | 1924 | 21.4 |
| Japan | 1924 | 33.8 | Scotland . . | 1925 | 21.3 |
| Quebec (Canada) | 1923 | 32.3 | United States (b) | 1925 | 21.2 |
| Bulgariz | 1925 | 31.3 | New Zealand | 1925 | 21.2 |
| Spain | 1925 | 29.3 | Denmark . | 1925 | 21.1 |
| Hungary | 1925 | 29.1 | South Australia | 1925 | 21.1 |
| Italy | 1924 | 28.2 | Prussia | 1924 | 20.8 |
| Union of South Africa (whites) | 1925 | 26.5 | New York State | 1925 | 20.6 20.6 |
| Uruguay | 1924 | 25.8 | Norway | 1925 | 20.0 |
| Czecho-Slovakia | 1925 | 25.7 | Belgium | 1925 | 19.8 |
| Tasmania | 1925 | 24.4 | Irish Free State | 1925 | 19.6 |
| Netherlands . | 1925 | 24.3 | France . . | 1925 | 19.6 |
| New South Wales | 1925 | 24.0 | Great Britain | 1924. | 19.3 |
| Queensland .. | 1925 | 23.8 | Switzerland | 1924 | 18.7 |
| Australia | 1925 | 22.9 | England and Wales | 1925 | 18.3 |
| Ontario (Canada) ? | 1925 | 22.6 | Sweden .. | 1925 | 17.5 |

(a) Number of birth3 per 1,000 of the mean population. (b) Figures for "provisional birth-registration area " which includes about 76 per cent. of the population.
(ii) Nuptial Birth Rates at Child-bearing Ages. The wide discrepancies between 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 gives more reliable results. The comparative results given in the following table have been taken from the Annuaire International de Statistique, and are based on ages 15 to 49 years, Australia with a rate of 198 being, again, midway between maximum and minimum :-

NUPTIAL BIRTH RATES PER 1,000 MARRIED WOMEN AGED 15 T0 49 YEARS.VARIOUS COUNTRIES.

| Country. |  | Period. | Rate. | Country. | Period. | Rate. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Bulgaria | . | 1910-11 | 280 | Australia .. | 1906-15 | 198 |
| Ireland | . | 1909-12 | 250 | Hungary .. | 1906-15 | 198 |
| Netherlands |  | 1905-14 | 233 | Germany .. | 1907-14 | 196 |
| Finland ${ }^{\text {d }}$ | . | 1906-15 | 230 | Sweden | 1908-13 | 196 |
| Italy | . | 1907-14 | 226 | Denmark | 1906-15 | 191 |
| Norway $\%$ | $\cdots$ | 1907-14 | 224 | New Zealand | 1906-15 | 183 |
| Austria |  | 1908-13 | 219 | Switzerland | 1906-15 | 184 |
| Spain | . . | 1906-15 | 218 | England and Wales | 1906-15 | 171 |
| Prussia |  | 1907-14 | 204 | Belgium | 1908-13 | 161 |
| Scotland ${ }^{\text {g }}$ |  | 1906-15 | 202 | France | 1910-11 | 114 |

4. Masculinity of Births.-(i) General. The masculinity of births, i.e., the excess of males over females per 100 births registered, during the last five years varied from 0.32 in Tasmenia in 1924 to 4.66 in Queensland in 1921. On account of the smallness of the numbers, the returns from the Northern Territory and the Federal Capital Territory have not been taken into consideration. The following table gives particulars for the years 1921 to 1925.

MASCULINITY(a) OF BIRTHS REGISTERED, 1921 T0 1925.

| Year. | N.S.W. | Vic. | Q'iand. | S. Aust. | W. Aust. | Tas. | Northern \| Territory. | Federal Capital Territory. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | 2.51 | 2.77 | 4.66 | 2.25 | 2.16 | 2.31 | $-1.27$ | 11.11 | 2.85 |
| 1922 | 2.29 | 3.27 | 2.70 | 2.49 | 2.40 | 2.97 | 8.77 | 6.25 | 2.67 |
| 1923 | 2.51 | 3.49 | 1.72 | 2.22 | 2.22 | 2.10 | 11.11 | $-36.84$ | 2.59 |
| 1924 | 1.85 | 2.38 | 1.99 | 2.50 | 1.55 | 0.32 | 1.75 | $-26.83$ | 1.98 |
| 1925 | 2.09 | 3.51 | 1.72 | 1.67 | 2.87 | 2.11 | 10.77 | -6.38 | 2.42 |

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

Note.-The minus sign ( - ) denotes an excess of females over males per 100 total births.
(ii) Masculinity of Ex-nuptial-Birthe. The masculinity of ex-nuptial births was as follows :-

MASCULINITY(a) OF EX-NUPTIAL BIRTHS, 1921 TO 1925.

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

Note.-The minus sign ( - ) denotes an excess of females over males per 100 total ex-nuptial births.

Although the general tendency of the change in the sex composition of the ex-nuptial births has been the same as in the total births, the results in the smaller States do not show the same consistency in the former as in the latter on account of the relatively small numbers involved.
(iii) Masculinity of Nuptial and Ex-nuptial Births, Various Countries. There is ordinarily a very small difference between the masculinity of nuptial and ex-nuptial births. Thus, according to the following table, for the period about 1906 to 1913 , the masculinity in various countries ranged from $\overline{4} .63$ to 1.91 , and from 5.90 to 0.06 for nuptial and ex-nuptial births respectively.

## MASCULINITY OF BIRTHS.-VARIOUS COUNTRIES.

| Country. | Period. | Masculinity of Births.(a) |  | Country. | Period. | Mascullnity of - Births.(a) |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Nuntial <br> Live <br> Births | $\left\lvert\, \begin{gathered} \text { Ex-nuptial } \\ \text { Live } \\ \text { Births. } \end{gathered}\right.$ |  |  | Nuptial Live Births. | $\begin{array}{\|c} \text { Ex-nuptial } \\ \text { Live } \\ \text { Birthg. } \end{array}$ |
| Spain | 1906-13 | 4.63 | 5.90 | Ireland | 1906-12 | 2.61 | 1.63 |
| Portugal | 1906-10 | 3.93 | 0.06 | New Zealand | 1906-13 | 2.59 | 2.57 |
| Finland | 1906-13 | 3.03 | 2.09 | Australia . . | 1906-13 | 2.52 | 2.27 |
| Sweden | 1906-13 | 2.95 | 3.27 | Netherlands | 1906-13 | 2.49 | 1.53 |
| Hungary | 1906-13 | 2.86 | 2.02 | Denmark . | 1906-13 | 2.43 | 2.22 |
| Norway | 1906-13 | 2.79 | 2.98 | Switzerland | 1906-13 | 2.38 | 1.21 |
| Prussia . | 1906-13 | 2.79 | 2.12 | Japan . | 1906-13 | 2.32 | 0.87 |
| Russia, Euro- |  |  |  | France | 1906-11 | 2.21 | 1.59 |
| pean | 1906-09 | 2.77 | 2.00 | Chile | 1906-13 | 2.20 | 2.81 |
| Austria | 1906-13 | 2.76 | 2.73 | Belgium | 1906-13 | 2.08 | 1.31 |
| Germany | 1906-13 | 2.71 | 2.29 | Scotland . | 1906-13 | 2.05 | 2.14 |
| Italy | 1906-13 | 2.64 | 2.29 | England and |  |  |  |
| Serbia | 1906-10 | 2.62 | 2.86 | W ales | 1906-13 | 1.91 | 2.07 |

(a) Excess of males over females per 100 total births.
5. Ex-nuptial Births.-(i) General. The number of ex-nuptial births reached its maximum, 7,438 , in 1913, but it has since fallen considerably. On the average of the five years 1910-14, the number of ex-nuptial births in Australia was 7,171, while for the period $1921-25$ it was only 6,291 , a decline of 12.3 per cent., whereas the annual average total births for the same period increased by 5.2 per cent.

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.

EX-NUPTIAL BIRTHS, 1921 T0 1925.

| Year. | N.s.W. | Vic. | Qland. | S. Aust. | W. Aust. | Tas. | Northern <br> Territory. | Federal <br> Capital <br> Territory. | Aus- <br> tralia. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | $\ldots$ | 2,640 | 1,725 | 1,062 | 377 | 315 | 318 | 26 |  |  |
| 1922 | $\cdots$ | 2,667 | 1,602 | 932 | 356 | 337 | 265 | 17 | $\cdots$ | 6,463 |
| 1923 | $\cdots$ | 2,676 | 1,595 | 1,079 | 360 | 285 | 251 | 29 | $\cdots$ | 6,176 |
| 1924 | $\ldots$ | 2,589 | 1,668 | 1,052 | 355 | 327 | 228 | 13 | 1 | 6,276 |
| 1925 | $\cdots$ | 2,764 | 1,543 | 1,035 | 359 | 335 | 247 | 24 | $\ldots$ | 6,233 |

(ii) Rate of Ex-nuptiality, 1921 to 1925 . The rate of ex-nuptiality, i.e., the percentage of ex-nuptial on total births fell from 4.75 in 1921 to 4.64 in 1925 . On the basis of the figures given in the preceding sub-section the ex-nuptial rate fell from 5.55 per cent. of all births during the years 1910-14 to 4.63 per cent. for the years 1921-25.

PERCENTAGE OF EX-NUPTIAL ON TOTAL BIRTHS, 1921 TO 1925.


A better comparison 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 Australia for the last five 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 ; years $1920-22,10.50$. The comparative results given in the following table have been taken from the Annuaire International de Statistique, Vols. II. and V., and are based on ages 15 to 49 years :-

## EX-NUPTIAL BIRTHS PER 1,000 UNMARRIED WOMEN AGED 15 T0 49 YEARS.VARIOUS COUNTRIES.


(iii) Comparison of Rates. The following table shows the relative proportions of ex-nuptial and nuptial births to the total population during the last five years :-

CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH RATES (a).-AUSTRALIA, 1921 T0 1925.

|  | Rates. |  |  | 1921. | 1922. | 1923. | 1924. | $1 \mathrm{v25}$. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Ex-nuptial | $\ldots$ | $\ldots$ | $\ldots$ | 1.18 | 1.11 | 1.10 | 1.07 | 1.06 |
| Nuptial | $\ldots$ | $\ldots$ | $\cdots$ | 23.77 | 23.58 | 22.67 | 22.17 | 21.83 |
| Total | $\ldots$ | $\ldots$ | $\ldots$ | 24.95 | 24.69 | 23.77 | 23.24 | 22.89 |

(a) Number of births per 1,000 of mean population.
6. Multiple Births.-Among the total number of 135,792 births registered in Australia in 1925, there were 132,874 single births, 2,887 twins, and 31 triplets. The number of cases of twins was 1,458 , there being 29 stillbirths, and there were 11 cases of triplets, two children being stillborn. The total number of mothers was, therefore, 134,343, the proportion of mothers of twins being one in every 92 , and of mothers of triplets one in every 12,213 of total mothers. The proportion of multiple births is fairly constant over an extended period.

MULTIPLE BIRTHS.-AUSTRALIA, 1921 T0 1925.

7. Ages of Parents.-(i) Single Births. The relative ages of the parents of children registered in 1925 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 the Bulletin of "Australian Demography," No. 43, published by this Bureau. In the present work the exigencies of space allow only the insertion of corresponding tables showing the relative ages of parents in groups of five years. The largest number of fathers in the case of single births is found at ages 30 to 34 , and of mothers at ages 25 to 29 . When, however, the ages of both parents are considered together, the largest number of single births occurred when both father and mother were between the ages of 25 and 29 .
ages of parents in cases of single births.-aUStralia, 1925.

| Ages of Fathers and Sexes of Children. | Total Children. | Ages of Mothers. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\left\lvert\, \begin{gathered} \text { Under } \\ 15 . \end{gathered}\right.$ | 15 to 19. | 20 to 24. | 25 to 29. | 30 to 34. | $\begin{gathered} 35 \text { to } \\ 39 . \end{gathered}$ | $\begin{aligned} & 40 \text { to } \\ & 44 . \end{aligned}$ | 45 and upwards | Unspect fled. |
| Males. | 360 | $\cdots$ | 274 | 80 | 4 | 2 | $\cdots$ |  | $\cdots$ | $\cdots$ |
| Under $\{$ Females | 338 | . . | 250 | 79 | 7 | 2 | . |  | . . | . |
| 20 Total.. | 698 | . . | 524 | 159 | 11 | 4 | . |  | . | . |
| (Males.. | 7,258 | 4 | 1,692 | 4,532 | 903 | 114 | 12 | 1 | . | . |
| 20 to $24\{$ Females | 6,938 | 2 | 1,574 | 4,435 | 828 | 85 | 13 | 1 |  |  |
| (Thotal .. | 14,196 | 6 | 3,266 | 8,967 | 1,731 | 199 | 25 | 2 | , | $\cdots$ |
| PMales.. | 15,904 | 2 | 687 | 6,226 | 7,469 | 1,310 | 187 | 23 |  |  |
| 25 to $29\{$ Females | 15,093 |  | 663 | 5,962 | 6,985 | 1,308 | 159 | 15 | 1 |  |
| Total.. | 30,997 | 2 | 1,350 | 12,188 | 14,454 | 2,618 | 346 | 38 | 1 | $\cdots$ |
| 20 Males.. | 16,669 | $\ldots$ | 168 | 2,466 | 6,657 | 6,242 | 1,039 | 94 | 3 | $\cdots$ |
| 30 to 34 Females | 15,681 | $\cdots$ | 179 347 | 2,317 | 6,221 | 5,844 | 1,027 | 92 | 1 |  |
| (Total.. | 32,350 | $\cdots$ | 347 | 4,783 | 12,878 | 12,086 | 2,066 | 186 | 4 | .- |
| 55 ¢ Males.. | 12,785 | . | 65 | 741 | 2,716 | 4,854 | 3,966 | 430 | 12 | 1 |
| 35 to $39\{$ Females | 12,231 | . | 50 | 707 | 2,603 | 4,654 | 3,806 | 400 | 8 | 3 |
| LTotal.. | 25,016 | . | 115 | 1,448 | 5,319 | 9,508 | 7,772 | 830 | 20 | 4 |
| . Males. | 7,008 | $\ldots$ | 15 | 208 | 795 | 1,865 | 2,728 | 1,347 | 49 | 1 |
| 40 to $44\left\{\begin{array}{l}\text { Females }\end{array}\right.$ | 6,733 |  | 15 | 203 | 715 | 1,845 | 2,653 | 1,256 | 46 |  |
| (Total.. | 13,741 | . | 30 | 411 | 1,510 | 3,710 | 5,381 | 2,603 | 95 | 1 |
| ¢ Males.. | 3,207 |  | 3 | 60 | 250 | 581 | 1,211 | 973 | 128 | 1 |
| 45 to 49 Females | 3,091 | 1 | 5 | 67 127 | 228 | 541 | 1,186 | 934 | 128 | 1 |
| Total.. | 6,298 | 1 | 8 | 127 | 478 | 1,122 | 2,397 | 1,907 | 256 | 2 |
| ( Males.. | 1,129 | $\ldots$ | 1 | 29 | 65 | 201 | 378 | 384 | 70 | 1 |
| 50 to 54 Females | 1,116 | . | 1 | 17 | 67 | 188 | 372 | 399 | 72 |  |
| (Total.. | 2.245 | . | 2 | 46 | 132 | 389 | 750 | 783 | 142 | 1 |
| , Males.. | 376 | $\ldots$ |  | 13 | 20 | 61 | 126 | 121 | 35 | $\cdots$ |
| 55 to $59\{$ Females | 383 | $\cdots$ | 2 | \% | 24 | 46 | 153 | 121 | 30 | $\cdots$ |
| . Total.. | 759 | * | 2 | 20 | 44 | 107 | 279 | 242 | 65 | $\cdots$ |
| ( Males.. | 121 | $\cdots$ | $\cdots$ | 3 | 4 | 25 | 44 | 37 | 8 |  |
| 60 to 64 Fermales | 114 | $\cdots$ | . | 3 | 8 | 25 | 29 | 40 | 9 |  |
| (Total . . | 235 | . |  | 6 | 12 | 50 | 73 | 77 | 17 |  |
| 65 and Males.. | 53 | $\ldots$ | 1 | 1 | 6 | 6 | 23 | 13 | 3 |  |
| up- Females | 63 | $\ldots$ | . | 2 | 6 | 7 | 23 | 16 | 9 |  |
| wards (Total.. | 116 | . | 1 | 3 | 12 | 13 | 46 | 29 | 12 |  |
| ¢ Males. | 5 | . | 1 | $\cdots$ | 2 | 1 | 1 | $\ldots$ |  |  |
| Not $\left\{\begin{array}{l}\text { Females }\end{array}\right.$ | 2 | $\cdots$ |  | $\ldots$ | 1 | , |  | . |  | $i$ |
| stated (Total.. | 7 | . | 1 | . | 3 | 1 | 1 | . |  | 1 |
| Nuptial Males.. | 64,875 | 6 | 2,907 | 14,359 | 18,891 |  | 9,715 | 3,423 | 308 | 4 |
| chil- $\{$ Females | 61,783 | 3 | 2,739 | 13,799 | 17,693 | 14,545 | 9,421 | 3,274 | 304 | 5 |
| dren LTotal.. | 126,658 | 9 | 5,646 | 28,158 | 36,584 | 29.807 | 19,136 | 6,697 | 612 | 9 |
| Ex- Males.. | 3,178 | 8 | 873 | 1,077 | 541 | 348 | 233 | 85 | 6 |  |
| nuptial $\left\{\begin{array}{l}\text { Females }\end{array}\right.$ | 3.038 | 13 | 878 | 1,059 | 483 | 298 | 207 | 91 | 7 | 2 |
| chidren LTotal.. | 6,216 | 21 | 1,751 | 2,136 | 1,024 | 646 | 440 | 176 | 13 | 9 |
| Total $\{$ Males.. | 68,053 | 14 | 3,780 | 15,436 | 19.432 | 15,610 | 9,948 | 3,508 | 314 | 11 |
| children $\{$ Females | 64,821 | 16 | 3,617 | 14,858 | 18,176 | 14,843 | 9,628 | 3,365 | 311 | 7 |
| children Total.. | 132,874 | 30 | 7,397 | 30,294 | 37,608 | 30,453 | 19,576 | 6,873 | 625 | 18 |

(ii) Twins. The ages of parents of twins in 1925 are given hereunder :AGES OF PARENTS OF TWINS.-AUSTRALIA, 1925.

(iii) Triplets. Particulars regarding the ages of parents in cases of triplets are given in the next table:-

AGES OF PARENTS OF TRIPLETS.-AUSTRALIA, 1925.

(a) Excluding 1 triplet stillborn.
(iv) Influence on Masculinity. Valid deductions cannot, 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 the following conclusions are indicated:-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.
8. Birthplaces of Parents.-The relative birthplaces of the parents of children whose births were registered during the year 1925 will be found in the Bulletin of "Australian Demography," published by this Bureau. A summary of the results of the tabulation is given hereunder.

BIRTHPLACES OF PARENTS.-AUSTRALIA, 1925.


BIRTHPLACES OF PARENTS.-AUSTRALIA, 1925-continued.

| Birthplaces. | Fathers. |  |  | Mothers of Nuptial Children. |  |  | Mothers of Exnuptial Children. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Single Births. | Twins. | $\begin{array}{\|l} \text { Trip } \\ \text { lets. } \end{array}$ | Single Births. | Twins. | $\begin{array}{\|l\|} \text { Trip- } \\ \text { lets. } \end{array}$ | Single Births. | Twins. |
| EUROPE- |  |  |  |  |  |  |  |  |
| England and Wales .. | 11,136 | 156 | $\cdots$ | 10,067 | 148 | 2 | 316 | 3 |
| Scotland . | 2,726 | 30 | $\cdots$ | 2,466 | 31 | . | 90 |  |
| Ireland ... . . | 1,273 | 12 | $\cdots$ | 829 | I3 | $\cdots$ | 28 | $\cdots$ |
| Other British Possessions in Europe .. | 139 | 2 |  | 98 | 1 | . | 3 | . |
| Denmark .. .. | 122 | 2 | 1 | 32 | 1 | . | 1 | . |
| France | 43 | 1 | . | 63 |  | $\cdots$ | 2 |  |
| Germany | 365 | 4 | $\cdots$ | 135 | 1 | $\cdots$ | 9 | $\cdots$ |
| Greece | 268 | 4 | . | 188 | 3 | $\cdots$ |  | - |
| Italy . | 523 | 5 | $\cdots$ | 370 | 5 | . | 8 |  |
| Netherlands .. | 57 | 2 | . | 27 | 1 | $\cdots$ | 2 | $\cdots$ |
| Norway .. | 83 | 1 | $\cdots$ | 6 | . | $\cdots$ |  |  |
| Poland | 37 | . | $\cdots$ | 14 | . | $\cdots$ |  | $\cdots$ |
| Russia | 158 | 2 | $\cdots$ | 75 | . | $\ldots$ | 1 |  |
| Sweden | 84 | 2 | . | 10 | . | $\cdots$ |  |  |
| Switzerland .. .. | 45 | . . | . | 24 | . | $\cdots$ | .. |  |
| Other European Countries | 225 | . | . . | 121 | . . | $\cdots$ | 2 | $\cdots$ |
| ASIA- |  |  |  |  |  |  |  |  |
| British India and Ceylon | 124 | , | $\cdots$ | 82 | 2 | .. | 3 | 1 |
| China .. | 111 | 1 | . | 21 | . | $\cdots$ | . . | . . |
| Japan | 24 | $\cdots$ | . | 12 | 1 | $\cdots$ | $\cdots$ | $\cdots$ |
| Syria $\quad \cdots \quad \cdots$ | 105 | $\cdots$ | $\cdots$ | 66 | 1 | $\cdots$ | . | $\cdots$ |
| Other Countries in Asia | 39 | . . | . | 20 | 1 | $\cdots$ | . | - |
| AFRICA- |  |  |  |  |  |  |  |  |
| Union of South Africa.. | 133 | 2 | $\cdots$ | 153 | 1 | $\cdots$ | 8 | - |
| Other African Countries | 35 | $\cdots$ | $\cdots$ | 26 | $\cdots$ | $\cdots$ | $\cdots$ | $\cdots$ |
| AMERICA- |  |  |  |  |  |  |  |  |
| Canada .. | 78 | - 1 | $\cdots$ | 37 | $\cdots$ | $\cdots$ | 2 | - |
| United States of America | I 83 | 2 | . . | 94 | 1 | . . | 4 | . |
| Other American Countries | 34 | 1 | . | 33 | . | . | 3 | - |
| POLYNESIA- |  |  |  |  |  |  |  |  |
| Fiji .. ... . | 25 | 1 | $\cdots$ | 15 | $\cdots$ | $\cdots$ | 1 | $\cdots$ |
| New Caledonia - . | 12 | . | . | 14 | 1 | . | . | . |
| New Hebrides . . | 9 | . | $\cdots$ | 2 | . | $\cdots$ | $\cdots$ | . |
| Other Polynesian Islands | 25 | . | . | 8 | $\because$ | $\ldots$ | 1 | $\cdots$ |
| At Sea | 40 | -• | . | 23 | $\cdots$ | $\cdots$ | 2 | . |
| Unspecified .. .. | 12 | . | $\ldots$ | 14 | . | $\cdots$ | 12 | $\ldots$ |
| Total .. .. | 126,658 | 1,412 | 11 | 126,658 | 1,412 | 11 | 6,216 | 46 |

9. Occupations of Fathers.-(i) Year 1925. A summary of the classes of occupations of the fathers of all nuptial children whose births were registered in 1925 is given in the following table:-

OCCUPATIONS OF FATHERS OF NUPTIAL CHILDREN.-AUSTRALIA, 1925.

(ii) Summary, 1921 to 1925. The next table gives a summary in classes of the occupations of fathers of nuptial children in each of the last five years, with the percentage of each class on the total number of fathers. In $1925,42.33$ per cent. of fathers were of the industrial class, and 24.27 per cent. Were of the agricultural pastoral, mining, etc., class.

OCCUPATIONS OF FATHERS OF NUPTIAL CHILDREN.-AUSTRALIA, 1921 T0 1925.

| Class. | 1921. | 1922. | 1923. | 1924. | 1925. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Professional No. | 6,204 | 6,369 | 6,010 | 5,946 | 6,077 |
| I. Professional $\cdots\left\{\begin{array}{l}\text { \% }\end{array}\right.$ | 4.83 | 4.90 | 4.71 | 4.67 | 4.74 |
| II Domestic .. No. | 2,319 | 2,045 | 2,242 | 2,098 | 2,180 |
| II. Domestic $\quad \cdots\left\{\begin{array}{l}\text { \% }\end{array}\right.$ | 1.81 | 1.57 | 1.76 | 1.64 | 1.70 |
| III Commercial .. \{No. | 18,298 | 18,731 | 18,210 | 18,519 | 17,978 |
| Commercial ${ }^{\text {a }}$ \% | 14.26 | 14.41 | 14.27 | 14.54 | 14.04 |
| IV. Transport and Com- \{ No. | 15,351 | 15,809 | 15,244 | 15,670 | 16,306 |
| munication .. $\%$ | 11.96 | 12:17 | 11.95 | 12.30 | 12.73 |
| V. Industrial .. $\{$ No. | 53,567 | 54,104 | 53,737 | 53,899 | 54,214 |
| V. Industrial $\cdots$ \% | 41.75 | 41.64 | 42.11 | 42.31 | 42.33 |
| VI. Agricultural, pastoral, No. | 32,405 | 32,665 | 31,974 | 31,046 | 31,082 |
| mining, etc. .. \% | 25.25 | 25.14 | 25.06 | 24.37 | 24.27 |
| VII. Indefinite .. \{ No. | 169 | 204 | 186 | 213 | 244 |
| VII. Indefinite $\quad \cdots\left\{\begin{array}{l}\text { \% }\end{array}\right.$ | 0.13 | 0.16 | 0.14 | 0.17 | 0.19 |
| VIII. Dependents $\quad . \quad\left\{\begin{array}{c}\text { No. } \\ \%\end{array}\right.$ | 13 | ${ }^{7}$ | . . | . . | . |
| VIIH. Dependents $\quad \cdots$ \% | 0.01 | 0.01 | . | $\ldots$ |  |
| Total .. .. \| No. | 128,326 | 129,934 | 127,603 | 127.391 | 128,081 |
| 1 \% | 100.00 | 100.00 | 100.00 | 100.00 | 100.00 |

10. Mother's Age, Duration of Marriage, and Issue.-(i) General. The total number of nuptial confinements in 1925 was 128,081, viz., 126,658 single births, 1,412 cases of twins, and 11 cases of triplets, but in 77 cases the necessary information was lacking, and the following series of tables refers, therefore, to 128,004 nuptial confinements. Ex-nuptial children-previous issue by the same father-are included as previous issue, but children by former marriages, and stillborn children are excluded. The tables cannot be given in extenso, but the following are their most salient features. The complete tabulations are shown in "Australian Demography," No. 43.
(ii) Duration of Marriage and Issue of Mothers. The following table shows that the duration of marriage of mothers of nuptial children ranged from less than one year up to between 34 and 35 years, and that the average family increased fairly regularly with the duration of marriage. The average number of children of all marriages was 3.10, the corresponding figures for 1924 being 3.08 ; for $1923,3.08$; for $1922,3.10$; and for $1921,3.08$.

DURATION OF MARRIAGE AND ISSUE OF MOTHERS.-AUSTRALIA, 1925.

| $\begin{gathered} \text { Duration } \\ \text { of } \\ \text { Marriage. } \end{gathered}$ | Total Mothers. | Total Issue. | Average Number of Children. |  | Total Mothers. | Total Issue. | Average Number of Children. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Years. |  |  |  | Years. |  |  |  |
| 0-1 | 19,552 | 19,741 | 1.01 | 19-20 | 1,100 | 8,746 | 7.95 |
| 1-2 | 12,197 | 14,536 | 1.19 | 20-21 | 886 | 7,224 | 8.15 |
| 2-3 | 11,351 | 20,286 | 1.79 | 21-22 | 649 | 5,693 | 8.77 |
| 3-4 | 11,193 | 23,383 | 2.09 | 22-23 | 523 | 4,712 | 9.01 |
| 4-5 | 10,667 | 26,313 | 2.47 | 23-24 | 369 | 3,329 | 9.02 |
| 5-6 | 9,813 | 27,627 | 2.82 | 24-25 | 232 | 2,253 | 9.71 |
| 6-7 | 7,492 | 23,602 | 3.15 | 25-26 | 186 | 1,872 | 10.06 |
| 7-8 | 5,542 | 19,413 | 3.50 | 26-27 | 91 | 945 | 10.38 |
| 8-9 | 4,812 | 18,243 | 3.79 | 27-28 | 59 | 676 | 11.46 |
| 9-10 | 4,760 | 19,468 | 4.09 | 28-29 | 23 | 284 | 12.35 |
| 10-11 | 4,809 | 21,150 | 4.40 | 29-30 | 15 | 155 | 10.33 |
| 11-12 | 4,155 | 20,170 | 4.85 | 30-31 | 6 | 61 | 10.17 |
| 12-13 | 3,781 | 19,423 | 5.14 | 31-32 | 1 | 13 | 13.00 |
| 13-14 | 3,328 | 18,559 | 5.58 | 32-33 | 1 | 13 | 13.00 |
| 14-15 | 2,840 | 16,787 | 5.91 | 33-34 | 1 | 16 | 16.00 |
| 15-16 | 2,467 | 15,811 | 6.41 | 34-35 | 1 | 14 | 14.00 |
| 16-17 | 2,007 | 13,277 | 6.62 |  |  |  |  |
| 17-18 | 1,699 | 11,962 | 7.04 | Total | 128,004 | 396,356 | 3.10 |
| 18-19 | 1,396 | 10,599 | 7.59 |  |  |  |  |

(iii) Ages of Mothers and Issue. The ages of mothers, issue, and average family are given in the attached table, which shows that the average family increased fairly regularly to a maximum of 8.07 children in the age-group 45 years and over, and that the greatest number of mothers occurs in the group 25 to 29 years.

AGES AND ISSUE OF MOTHERS. -AUSTRALIA, 1925.

| Ages of Mothers. | Total Mothers. | Total | Average Number of Children | Ages of Mothers. | Total Mothers. | Total Issue. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 20 years | 5,689 | 6,880 | 1.21 | 40-44 years .. | 6,803 | 43,033 | 6.33 |
| 20-24 years | 28,322 | 49,046 | 1.73 | 45 yrs . and over | 617 | 4,980 | 8.07 |
| 25-29 | 36,954 | 91,821 | 2.48 |  |  |  |  |
| 30-34 | 30,198 | 106,490 | 3.53 |  |  |  |  |
| 35-39 ,, | 19,421 | 94,106 | 4.85 | All ages .. | 128,004 | 396,356 | 3.10 |

(iv) Previous Issue of Mothers, Various Ages. The previous issue, according to the age of the mother, is given in the following table.

PREVIOUS ISSUE OF MOTHERS OF VARIOUS AGES.-AUSTRALIA, 1925.

| Previous Issue. | Mothers' Ages. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Under 20 Years. | 20-24 | $\begin{aligned} & 25-29 \\ & \text { Years. } \end{aligned}$ | $\begin{aligned} & \text { Years. } 34 \\ & \hline \end{aligned}$ | $\begin{aligned} & 35-39 \\ & \text { Years. } \end{aligned}$ | $\begin{aligned} & \text { Years } \\ & \text { Year. } \end{aligned}$ | 45 Years and Over | Total. |
| 0 | 4,619 | 14,595 | 10,879 | 4,823 | 1,735 | 393 | 15 | 37,059 |
| 1 | 991 | 8,554 | 10,620 | 6,169 | 2,329 | 481 | 21 | 29,165 |
| 2 | 71 | 3,850 | 7,680 | 5,997 | 2,837 | 578 | 30 | 21,043 |
| 3 | 8 | 1,076 | 4,384 | 4,718 | 2,745 | 728 | 33 | 13,692 |
| 4 | . . | 209 | 2,152 | 3,428 | 2,516 | 746 | 52 | 9,103 |
| 5 | $\cdots$ | 30 | 836 | 2,411 | 2,208 | 747 | 48 | 6,280 |
| 6 | . | 8 | 281 | 1,466 | 1,831 | 726 | 74 | 4,386 |
| 7 | - | . | 93 | 715 | 1,363 | 622 | 61 | 2,854 |
| 8 | $\cdots$ | . | 19 | 296 | 872 | 592 | 57 | 1,836 |
| 9 | . | . | 8 | 121 | 578 | 510 | : 73 | 1,290 |
| 10 | - | $\cdots$ | 1 | 40 | 238 | 303 | 62 | 644 |
| 11 |  | . | 1 | 11 | 99 | 179 | 30 | 320 |
| 12 | . | . | . . | 3 | 43 | 106 | 25 | 177 |
| 13 | . . | $\cdots$ | . | . . | 17 | 43 | 24 | 84 |
| 14 | $\cdots$ | $\cdots$ | $\cdots$ | - | 9 | 30 | 3 | 42 |
| 15 | $\therefore$ | . | - | . | 1 | 12 | 6 | 19 |
| 16 | . | $\cdots$ | . | $\cdots$ |  | 5 | 1. | - 6 |
| 17 | . | - | . | $\cdots$ | . | 1 | 1 | 2 |
| 19 | . | . | . | - |  | 1 | 1 | 2 |
| Total Mothers | 5,689 | 28,322 | 36,954 | 30,198 | 19,421 | 6,803 | 617 | 128,004 |

(v) Previous Issue of Mothers of Twins and Triplets. Figures regarding the previous issue of mothers of twins and triplets show that 304 mothers had twins at their first confinement; 297 at their second; 231 at their third; 173 at their fourth;

137 at their fifth; 93 at their sixth; 55 at their seventh; 41 at their eighth; 35 at their ninth; 31 at their tenth; 6 at their eleventh; 5 at their twelfth; 1 at her thirteenth; 1 at her fourteenth; and 2 at their fifteenth.

Of the 11 cases of triplets registered during 1925, 4 were second confinements, 2 third, 1 fourth, 2 seventh, and 2 the eighth.
11. Interval between Marriage and First Birth.-(i) Interval and Sex of Children. The following table shows the interval between marriage and first birth, distinguishing the sexes of the children. Twins and triplets are included, the eldest born only being enumerated :-

INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH.-AUSTRALIA, 1925.

| Interval. |  |  | Number of First Children. |  |  | Interva |  |  | Number of First Children. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Males. | Females. | Total. |  |  |  | Males. | Females. | Total. |
| Under 1 month |  |  | 162 | 128 | 290 |  | vears | . | 1,578 | 1,455 | 3,033 |
|  | month |  | 242 | 232 | 474 | 3 | , | $\cdots$ | 876 | 906 | 1,782 |
| 2 | months |  | 355 | 340 | 695 | 4 | , | $\cdots$ | 522 | 500 | 1,022 |
| 3 | " |  | 516 | 513 | 1,029 | 5 | ,' |  | 331 | 293 | 624 |
| 4 |  |  | 644 | 648 | 1,292 | 6 | , | $\cdots$ | 175 | 156 | 331 |
| 5 |  |  | 831 | 760 | 1,591 | 7 | , | $\cdots$ | 96 | 109 | 205 |
| 6 |  |  | 1,125 | 1,018 | 2,143 | 8 | ", | . | 67 | 65 | 132 |
| 7 |  |  | 1,180 | 1,129 | 2,309 | 9 | " | $\cdots$ | 48 | 54 | 102 |
| 8 |  |  | 729 | 703 | 1,432 | 10 | " |  | 58 | 42 | 100 |
| 9 |  |  | 1,565 | 1,483 | 3,048 | 11 | " | $\cdots$ | 28 | 26 | 54 |
| 10 | " |  | 1,491 | 1,518 | 3,009 | 12 | " | $\cdots$ | 27 | 23 | 50 |
| 11 | ;, |  | 1,114 | 1,088 | 2,202 | 13 | " | $\cdots$ | 14 | 9 | 23 |
| 12 | ," |  | 942 | 866 | 1,808 | 14 | " | $\cdots$ | 13 | 9 | 22 |
| 13 | ", |  | 644 | 646 | 1,290 | 15 | ", | $\cdots$ | 11 | 4 | 15 |
| 14 | ", |  | 585 | 528 | 1,113 | 16 |  | $\cdots$ | 4 | 6 | 10 |
| 15 | " | $\cdot$ | 526 | 479 | 1,005 | 17 |  | . | 2 | 2 | 4 |
| 16 | " |  | 444 | 414 | 858 | 18 | " | . | 3 | 1 | 4 |
| 17 | " | . | 417 | 378 | 795 |  | ," | . | 5 | 2 | 7 |
| 18 | , |  | 375 | 315 | 690 |  | , | $\cdots$ | 1 | 1 | 2 |
| 19 | " | $\cdot$ | 317 | 306 | 623 |  | , | . | 1 | . . | 1 |
| 20 | , | - | 303 | 266 | 569 |  | " | . | 1 | $\cdots$ | 1 |
| 21 |  |  | 258 | 241 | 499 |  | , |  | 2 |  | 2 |
| 22 | ," |  | 218 | 192 | 410 |  |  |  |  |  |  |
| 23 | , |  | 187 | 172 | 350 |  | Total | . | 19,033 | 18,026 | 37,059 |

The masculinity of first births was 2.72 as compared with 2.42 for total births.
(ii) Ages of Mothers and Interval. 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 shows the ages of mothers in the cases of ex-nuptial first births, of nuptial first births occurring less than nine months after marriage, and of nuptial first 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 shows that for all ages the ratio was about 2 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 information in connexion therewith is not available.

AGES OF MOTHERS AND INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH, ETC.-AUSTRALIA, 1925.

12. Interval between Birth and Registration of Birth.-Information was obtained for the years 1911 to 1921 regarding the period which elapsed between birth and registration. A detailed table giving the results for 1921 is contained in Demography Bulletin No. 39, issued by this Bureau. 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.

Since the granting of the maternity allowance 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.

## § 2. Marriages.

1. Marriages, 1921 to 1925.-The number of marriages registered in Australia during 1925 was 46,899 , giving a rate of 7.91 per 1,000 of the mean population for the year. Totals for the years 1921 to 1925 are given hereunder :-

MARRIAGES, 1921 TO 1925.

| Year. | N.S.W. | Victoria. | Qland. | S. Aust. | W. Aust. | Tas. | North. <br> Terr. | Fed. Cap. <br> Terr. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1921 \ldots$ | 18,506 | 13,676 | 5,963 | 4,383 | 2,656 | 1,668 | 15 | 2 | 46,869 |
| 1922 | $\ldots$ | 17,580 | 12,996 | 5,878 | 4,144 | 2,446 | 1,674 | 13 | $\ldots$ |
| 1923 | 17,523 | 13,126 | 5,814 | 4,099 | 2,376 | 1,592 | 7 | 4 | 44,731 |
| 1924 | $\ldots$ | 18,072 | 13,296 | 6,234 | 4,121 | 2,596 | 1,529 | 17 | 4 |
| 1925 | 18,522 | 13,370 | 6,471 | 4,255 | 2,746 | 1,504 | 20 | 11 | 46,899 |

2. Marriage Rates, 1921 to 1925.-The number of marriages registered per 1,000 of mean population is given in the following table for the same period:

CRUDE MARRIAGE RATES ( $a$ ), 1921 TO 1925.

| Year. | N.S.W. | Victoria. | Qland. | S. Aust. | W. Aust. | Tas. | North. Terr. | Fed. Cap. Terr. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921. | 8.78 | 8.90 | 7.82 | 8.82 | 7.96 | 7.82 | 3.84 | 0.81 | 8.59 |
| 1922 | 8.18 | 8.27 | 7.52 | 8.19 | 7.20 | 7.79 | 3.56 |  | 8.03 |
| 1923 | 8.00 | 8.16 | 7.24 | 7.29 | 6.82 | 7.39 | 1.94 | 1.21 | 7.83 |
| 1924 | 8.11 | 8.10 | 7.55 | 7.78 | 7.22 | 7.12 | 4.72 | 1.04 | 7.90 |
| 1925 .. | 8.14 | 8.00 | 7.60 | 7.82 | 7.46 | 7.05 | 5.43 | 2.33 | 7.91 |

(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 Australia for the last four Census periods for which the particulars are available. 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 $1910-12,50.44$; years 1920-22, 56.02. 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.-The following table shows the marriage rate for Australia in comparison with various other countries :-

CRUDE MARRIAGE RATES (a).-VARIOUS COUNTRIES.

| Country. | Year. | $\begin{gathered} \text { Crude } \\ \text { Marriage } \\ \text { Rate. } \end{gathered}$ | Country. | Year. | Crude Marriage Rate. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Soviet Republics | 1523 | 12.8 | Western Australia | 1925 | 7.5 |
| United States ( $b$ ) | 1924 | 10.1 | Netherlands | 1925 | 7.4 |
| Rumania | 1923 | 9.9 | Ontario (Canada) | 1925 | 74 |
| Belgium | 1925 | 9.6 | Chile .. | 1925 | 7.4 |
| Czecho-Slovakia | 1925 | 9.2 | Switzerland | 1924 | 7.3 |
| France | 1925 | 9.0 | Prussia | 1924 | 7.2 |
| Hungary | 1925 | 8.9 | Spain | 1925 | 7.2 |
| Japan | 1924 | 8.7 | Tasmania . | 1925 | 7.1 |
| South African Union (c) | 1925 | 8.6 | Canada (excluding |  |  |
| New Zealand | 1925 | 8.3 | Quebec) . | 1925 | 6.9 |
| New South Wales | 1925 | 8.1 | Ceylon .. | 1925 | 6.8 |
| Victoria | 1925 | 8.0 | Quebec (Canada) | 1923 | 6.7 |
| Austria | 1924 | 8.0 | Scotland . | 1925 | 6.6 |
| Australia | 1925 | 7.9 | Finland | 1925 | 6.3 |
| South Australia | 1925 | 7.8 | Sweden | 1925 | 6.2 |
| Italy | 1924 | 7.7 | Northern Ireland | 1925 | 6.1 |
| Germany | 1925 | 7.7 | Norway .. | 1925 | 5.9 |
| Denmark | 1925 | 7.6 | Uruguay | 1924 | 5.7 |
| England and Wales | 1925 | 7.6 | Irish Free State | 1924 | 4.7 |
| Queensland .. | 1925 | 7.6 | Jamaica | 1924 | 3.5 |
| Great Britain | 1924 | 7.5 |  |  |  |

(a) Number of marriages per 1,000 of mean population.
(b) $\mathbf{R}$ gistration area includes about 87 per cent of total population.
(c) White population only.
4. Age and Conjugal Condition at Marriage.-(i) General. The ages at marriage of bridegrooms and brides will be found in "Australian Demography," Bulletin No. 43. A summary in age groups is given in the table hereunder, which also shows the previous conjugal condition of the contracting parties. There were 2,514 males who were less than twenty-one years of age married during 1925, while the corresponding number of females was 10,163 . At the other extreme there were 48 men of sixty-five years and upwards, who described themselves as bachelors, and 10 spinsters of corresponding age.

AGES AND CONJUGAL CONDITION OF PERSONS MARRIED.—AUSTRALIA, 1925.

(ii) Relative Ages, Bridegrooms and Brides. The relative ages of bridegrooms and brides are shown for single years in "Australian Demography," Bulletin No. 43: a condensation into age-groups of five years is given below :-

RELATIVE AGES OF PERSONS MARRIED.-AUSTRALIA, 1925.

(iii) Average Ages, Bridegrooms and Brides. The age at marriage of brides has remained fairly stationary during recent years at an average of about 26 years. The figures for the five years are:-1921, 26.16 years; $1922,26.14$ years; $1923,25.61$ years; 1924, 25.46 years; and 1925, 25.45 years. For the five years 1907-11 the average age was 25.70 years, compared with 25.92 years for the five years 1912-16, 26.07 years for the five years 1917-21, and 25.76 years for the five years 1921-1925. The average age of bridegrooms in 1921 was 29.74 years; in $1922,29.65$ years; in 1923, 29.12 years; in 1924, 28.99 years; and in 1925, 28.94 years. It follows, therefore, that brides are generally speaking rather less than three and one-half years younger than bridegrooms.
5. Previous Conjugal Condition.-The number of bachelors and spinsters, widowed and divorced persons, who were married during the year 1925 has already been given. The following table shows the conjugal condition of the contracting parties :-

PREVIOUS CONJUGAL CONDITION OF PERSONS MARRIED.-AUSTRALIA, 1925.

| Conjugal Condition. | Total Bridegrooms. | Brides. |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | Spinsters. | Widows. | Divorced. |
| ¢ Bachelors | 43,138 | 41,063 | 1,434 | 641 |
| Bridegrooms $\{$ Widowers | 2,962 | 1,939 | 887 | 136 |
| Brich Divorced | 2,799 | 1,591 | 126 | 82 |
| Total Brides | 46,899 | 43,593 | 2,447 | 859 |

6. Birthplaces of Persons Married.-The following table shows the birthplaces of persons who were married in 1925. In "Australian Demography," Bulletin No. 43 the relative birthplaces of bridegrooms and brides will be found tabulated in full detail.

BIRTHPLACES OF PERSONS MARRIED.-AUSTRALIA, 1925.

| Birthplaees. | Bridegrooms. | Brides. | Birthplaces. | Bridegrooms. | Brides. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| AUSTRALASIA- |  |  | ASIA- |  |  |
| New South Wales | 14,777 | 15,744 | British India and |  |  |
| Victoria | 11,950 | 12,391 | Ceylon .. | 45 | 25 |
| Queensland | 5,027 | 5,503 | China .- | 12 | 2 |
| South Australia | 3,923 | 3,978 | Syria .. .. | 17 | 19 |
| Western Australia | 1,602 | 1,867 | Other Countries in |  |  |
| Tasmania.. | 1,850 | 1,900 | Asia .. .. | 25 | 14 |
| Northern Territory .. | 17 | 18 |  |  |  |
| Federal Capital Territory | 3 | 2 | AFRICA- |  |  |
| New Zealand | 444 | 357 | Union of South Africa Other African Countries | 89 14 | 80 6 |
| EUROPE- |  |  |  |  |  |
| England and Wales.. | 4,453 | 3,284 | AMERICA- |  |  |
| Scotland . . | 1,172 | 891 |  |  |  |
| Ireland .. . | 448 | 309 | Canada .. | 40 | 22 |
| Other British Possessions in Europe .. | 54 | 29 | United States ... | 141 | 38 |
| Belgium. . . . | 5 | 5 | Countries | 18 | 18 |
| Denmark | 49 | 7 |  |  |  |
| Finland | 18 | 3 |  |  |  |
| France | 27 | 20 | POLYNESIA |  |  |
| Germany . | 125 | 61 |  |  |  |
| Greece | 79 | 40 | Fiji . . | 7 | 11 |
| Italy .. | 193 | 123 | Other Polynesian Is- |  |  |
| Netherlands | 24 | 3 | lands .. | 24 | 19 |
| Norway . . | 20 | 11 |  |  |  |
| Russia | 51 | 27 |  |  |  |
| Spain | 14 | 10 | At Sea .. .. | 10 | 11 |
| Sweden | 46 | 5 | Unspecified. . . | 9 | 14 |
| Switzerland .. | 33 | 5 |  |  |  |
| Other Countries in Europe .. | 44 | 27 | Total .. | 46,899 | 46,899 |

7. Occupations and Ages of Bridegrooms.-A tabulation has been made of the occupations and ages of all males married in Australia, and the results for 1925 are published in detail in "Australian Demography," Bulletin No. 43. An abridgment of this tabulation is given below. The average ages of the persons falling under the 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 income from investments, and who may be expected to have reached a comparatively high age before attaining a position of financial independence, the average age ranges from 26.97 years for those employed on roads and trams, to 31.95 years in the class engaged in pastoral pursuits. On the experience of 1925 the average age at marriage of bridegrooms in the larger classes of occupations was as follows :Professional, 29.8 years; Domestic, 30.4 years; Commercial, 29.2 years; Transport, 27.9 years; Industrial, 28.2 years; and Primary Producers, 30.5 years.

OCCUPATIONS AND AGES OF BRIDEGROOMS.-AUSTRALIA, 1925.

8. Fertility of Marriages.-The quotient obtained by division of the nuptial births registered, e.g., during the five years 1921 to 1925, by the number of marriages registered during the five years 1916 to 1920 , i.e., the period antecedent by five years to the period of the births, has been called the "fertility of marriages." The quotient for this period is 3.25 -in other words, the number of children to be expected from every marriage in Australia is about three. This method, while not absolutely accurate, generally furnishes results which agree fairly well with those found by more elaborate and careful investigation. For the following five-yearly periods the results were:-1916-20, 2.90; 1917-21, 2.91 ; 1918-22, 3.07; 1919-23, 3.25 ; 1920-24, 3.36 ; and 1921-25, 3.25.
9. Registration of Marriages.-(i) Marriages in each Denomination. In all the States 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. Most of the marriages are celebrated by ministers of religion. The proportions so celebrated in 1925 were :-New South Wales, 93.90 per cent.; Victoria, 95.15 per cent.; Queensland, 95.97 per cent.; South Australia, 95.07 per cent.; Western Australia, 81.10 per cent.; and Tasmania, 96.08 per cent., the percentage for Australia being 94.26 . The registered ministers in 1925 belong 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 1925 are shown in the following table :-

MARRIAGES IN EACH DENOMINATION.-AUSTRALIA, 1925.

| Denomination. | N.S.W. | Vic. | Qld. | S.A. | W.A. | Tas. | Nor. Ter. | Fed. <br> Cap. <br> Ter. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Church of England | 7,849 | 3,793 | 1,981 | 1,129 | 998 | 600 | 1 | 10 | 16,361 |
| Roman Catholic | 3,782 | 2,461 | 1,485 | 509 | 451 | 218 | 5 |  | 8,911 |
| Methodist | 2,169 | 1,883 | 1,063 | 1,317 | 376 | 281 | 14 | 1 | 7,104 |
| Presbyterian | 2,528 | 2,548 | 974 | 228 | 203 | 131 | . | $\cdots$ | 6,612 |
| Congregational | 384 | 901 | 135 | 199 | 77 | 45 | . |  | 1,741 |
| Baptist | 267 | 629 | 160 | 216 | 39 | 72 | $\cdots$ | $\cdots$ | 1,383 |
| Church of Christ | 155 | 318 | 31 | 184 | 37 | 45 | . | $\cdots$ | 770 |
| Lutheran .. | 30 | 58 | 141 | 182 | 4 | . | $\cdots$ | $\cdots$ | 415 |
| Greek Catholic | 23 | 5 | 9 | 3 | 4 | . | . | . | 44 |
| Unitarian .. | 10 | 83 | . | 2 | - | $\cdots$ |  |  | 95 |
| Salvation Army | 75 | 68 | 37 | 58 | 18 | 15 | $\cdots$ |  | 271 |
| Seventh-Day Adventist | 49 | 25 | 14 | 9 | 7 | 4 | $\cdots$ | $\cdots$ | 108 |
| Other Christians | 30 | 44 | 177 | 8 | 1 | 34 | . | . | 294 |
| Hebrew .. | 42 | 39 | 3 | 1 | 12 |  |  | . | 97 |
| Registrar's Office | 1,129 | 515 | 261 | 210 | 519 | 59 |  |  | 2,693 |
| Total | 18,522 | 13,370 | 6,471 | 4,255 | 2,746 | 1,504 | 20 | 11 | 46,899 |

(ii) Number and Percentage in each Denomination, 1921 to 1925. The number of marriages according to denomination, and the percentages on total marriages, are shown in the next table :-

MARRIAGES IN EACH DENOMINATION.-AUSTRALIA, 1921 TO 1925.

| Denomination. | 1921. | 1922. | 1923. | 1924. | 1925. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Church of England .. | 16,499 | 15,877 | 15,783 | 16,229 | 16,361 |
|  | 35.20 | 35.49 | 35.43 | 35.38 | 34.89 |
| Roman Catholic .. | 8,458 | 8,304 | 8,240 | 8,714 | 8,911 |
| Roman Catholic $\quad \cdots\left\{\begin{array}{l}\text { \% }\end{array}\right.$ | 18.05 | 18.57 | 18.50 | 19.00 | $19 \cdot 00$ |
| Methodist | 7,320 | 6,904 | 6,965 | 6,919 | 7,104 |
|  | 15.62 | 15.43 | 15.64 | 15.09 | 15.15 |
| Presbyterian .. | 6,808 | 6,345 | 6,268 | 6,391 | 6,612 |
|  | 14.52 | 14.18 | 14.07 | 13.93 | 14.10 |
|  | 2,001 | 1,773 | 1,694 | 1,697 | 1,741 |
| Congregational $\quad .\left\{\begin{array}{l}\text { \% }\end{array}\right.$ | 4.27 | 3.96 | 3.80 | 3.70 | 3.71 |
| Baptist | 1,461 | 1,356 | 1,342 | 1,327 | 1,383 |
|  | 3.12 | 3.03 | 3.01 | 2.89 | 2.95 |
| Church of Christ | 870 | 768 | 720 | 740 | 770 |
| Church of Christ $\quad . \quad\{\%$ | 1.86 | 1.72 | 1.62 | 1.61 | 1.64 |
| Lutheran | 401 | 422 | 390 | 405 | 415 |
|  | 0.86 | 0.94 | 0.88 | 0.88 | 0.88 |
| Greek Catholic | 23 | 34 | 47 | 59 | 44 |
|  | 0.05 | 0.08 | 0.11 | 0.13 | 0.09 |
| Unitarian | 21 | 18 | 17 | 19 | 95 |
|  | 0.04 | 0.04 | 0.04 | 0.04 | 0.20 |
| Salvation Army | 227 | 214 | 225 | 237 | 271 |
|  | 0.48 | 0.48 | 0.51 | 0.52 | 0.58 |
| Seventh-Day Adventist | 57 | 56 | 60 | 67 | 108 |
|  | 0.12 | C. 13 | 0.13 | 0.15 | 0.23 |
| Other Christians | 527 | 483 | 424 | 321 | 294 |
| Oner Christians $\cdots$, | 1.12 | 1.08 | 0.95 | 0.70 | 0.63 |
| Hebrew | 113 | 90 | 100 | 130 | 97 |
|  | 0.24 | 0.20 | 0.22 | 0.28 | 0.21 |
| Registrar's Office | 2,074 | 2,075 | 2,263 | 2,614 | 2,693 |
|  | 4.43 | 4.64 | 5.08 | 5.70 | 5.74 |
| Unspecified | 9 | 12 | 3 | . . | . . |
|  | 0.02 | 0.03 | 0.01 |  |  |
|  | 46,869 | 44,731 | 44,541 | 45,869 | 46,899 |

## § 3. Deaths.

1. Male and Female Deaths, 1921 to 1925.-The two following tables show the number of deaths registered in each year from 1921 to 1925 inclusive. The annual average of male deaths during the period was 30,751 , and of female deaths 22,483 , the details being as follow :-

MALE DEATHS, 1921 TO 1925.

| Year. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | North. Terr. | Fed. <br> Cap. <br> Terr. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | 11,490 | 8,662 | 4,397 | 2,655 | 2,209 | 1,166 | 70 | 3 | 30,652 |
| 1922 | 11,014 | 8,187 | 4,372 | 2,537 | 1,994 | 1,084 | 52 | 5 | 29,245 |
| 1923 | 11,969 | 9,135 | 4,699 | 2,727 | 1,907 | 1,140 | 35 | 10 | 31,622 |
| 1924 | 11,887 | 8,863 | 4,440 | 2,644 | 2,039 | 1,177 | 42 | 11 | 31,103 |
| 1925 | 11,944 | 8,582 | 4,581 | 2,729 | 2,157 | 1,081 | 51 | 9 | 31,134 |
| Rate (a), 1925 | 10.30 | 10.32 | 10.19 | 9.83 | 10.92 | 10.17 | 19.71 | 2.96 | 10.28 |

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

FEMALE DEATHS, 1921 T0 1925.

(a) Number of deaths per 1,000 of mean female population.
2. Male and Female Death Rates, 1925.-The crude male and female death rates for 1925 only are given in the last line of the preceding tables. Western Australia had the highest and South Australia the lowest rate for males, and for the females Victoria had the highest and Western Australia the lowest 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 age constitution in the six States, the crude rates are not, however, strictly comparable. A more satisfactory rate is furnished by the " Index of Mortality" (see sub-para. 5). The death rates for males and females in each State in five-year age groups for the three years 1920 to 1922, that is, for the Census year and for the year immediately preceding and following, are shown in sub-section 9 hereafter,

The rates for the five years 1921-1925 averaged about 10.6 per 1,000 for males, and 8.4 per 1,000 for females.

MALE AND FEMALE DEATH RATES (a).-AUSTRALIA, 1921 T0 1925.

| Year. |  | 1921. | 1922. | 1923. | 1924. | 1925. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Male rate | $\cdots$ | 11.05 | 10.33 | 10.91 | 10.50 | 10.28 |
| Female rate | . | 8.73 | 8.06 | 8.82 | 8.39 | 8.07 |
| Crude total rate | .. | 9.91 | 9.22 | 9.89 | 9.47 | 9.20 |

(a) Number of deaths per 1,000 of mean population.
3. Total Deaths, 1921 to 1925.-The total number of deaths during each of the five years 1921 to 1925 is given below :-

TOTAL DEATHS, 1921 TO 1925.

4. Crude Death Rates, 1921 to 1925 .-The crude death rates for the five years 1921 to $\mathbf{1 9 2 5}$ are given in the next table.

CRUDE DEATH RATES (a), 1921 TO 1925.

| Year. | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | North. Terr. | Fed. Cap. Terr. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | 9.50 | 10.52 | 9.36 | 10.02 | 10.43 | 10.30 | 20.48 | 1.61 | 9.91 |
| 1922 | 8.92 | 9.65 | 9.16 | 9.11 | 9.32 | 9.30 | 16.42 | 2.13 | 9.22 |
| 1923 | 9.61 | 10.71 | 9.83 | 9.59 | 8.41 | 9.92 | 10.53 | 3.02 | 9.89 |
| 1924 | 9.35 | 10.05 | 8.88 | 9.19 | 9.08 | 9.89 | 12.21 | 3.90 | 9.47 |
| 1925 | 9.16 | 9.47 | 8.86 | 9.15 | 9.00 | 9.35 | 16.84 | 2.54 | 9.20 |

(a) Number of deaths per 1,000 of annual mean population.
5. Index of Mortality.-(i) General.-The death rates so far quoted are crade rates, i.e., they simply show the number of deaths per thousand of mean population, without taking the age constitution into consideration. Other conditions being equal, however, the death rate of a country will be lower if it contains a large percentage of young people (not infants). In order to obtain a comparison of the mortality of various countries on a uniform basis so far as age and age constitution is concerned, the standard population compiled by the International Institute of Statistics, according to age distribution (eleven age-groups) of the population of nineteen European countries at their censuses nearest to the year 1900 is used in the computation of the " Index of Mortality" as distinguished from the crude death rate.
(ii) Sex and Age-Groups. The distribution per 10,000 according to sex and ago in the eleven age-groups used in computation of the "Index of Mortality" is given in the following table :-

|  | Age Group. |  |  |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  |  |  |  |  |

In computing an index the death rate is ascertained for each age-group for each sex and multiplied by the corresponding number in the above table, and the sum of the products so obtained is divided by 10,000 . The result represents the "Index of Mortality."
(iii) Comparison of Rates. For the year 1925 on the basis of the crude rates there is a range of 0.59 per 1,000 persons between the lowest rate in Queensland (8.86) and the highest rate in Victoria (9.47), whereas the standardized rates increase the range to
1.24 per 1,000 , i.e. between 9.43 in South Australia and 10.67 in Western Australia. In its application to the figures for 1925 the process of adjustment completely altered the relative positions of the various States from those determined by the crude rates. The principal changes were that South Australia from third position took the premier place from Queensland. Western Australia from second place fell to the lowest position, to the advantage of Victoria which was thus promoted from the lowest position on the basis of crude rates to the second position on the standardized basis.
(iv) Years 1921 to 1925. For purposes of comparison with previous years the index of mortality, based on the method alluded to in (ii) ante, is shown in the following table for each of the five years 1921 to 1925 :-

INDEX OF MORTALITY, 1921 TO 1925.

6. Death Rates of Various Countries-The following table gives particulars of the crude death rates of various countries for the latest available years:-

DEATH RATES (a).-VARIOUS COUNTRIES.

| Country. | Year. | Crude Death Rate. | Country. | Year. | Crude <br> Death <br> Rate. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| New Zealand | 1925 | 7.8 | Switzerland | 1924 | 12.4 |
| Queensland | 1925 | 8.9 | Great Britain | 1924 | 12.6 |
| Western Australia | 1925 | 9.0 | Now York State | 1925 | 12.7 |
| South Australia | 1925 | 9.2 | Belgium | 1925 | .13.1 |
| New South Wales | 1925 | 9.2 | Scotland . . | 1925 | 13.4 |
| Australia | 1925 | 9.2 | Quebec (Canada) | 1923 | 13.6 |
| Tasmania | 1925 | 9.4 | Irish Free State | 1925 | 13.8 |
| Union of South Africa (Whites) | 1925 | 9.4 | Austria Finland | 1924 | 14.9 15.3 |
| Victoria | 1925 | 9.5 | Northern Ireland | 1925 | 15.7 |
| Canada (excluding Quebec) | 1925 | 9.7 | Czecho-Slovakia | 1925 | 15.9 16.6 |
| Netherlands ${ }^{\text {- }}$ | 1925 | 9.8 | Italy | 1924 | 16.6 |
| Norway | 1925 | 10.9 | France | 1925 | 18.1 |
| Denmark | 1925 | 10.9 | Spain | 1925 | 19.4 |
| Ontario (Canada) | 1925 | 10.9 | Bulgaria | 1925 | 19.9 |
| Sweden | 1925 | 11.7 | Japan | 1924 | 21.2 |
| United States (b) (Registration Area) | 1925 | 11.7 | Jamaica Rumania | 1924 | 21.8 22.4 |
| Uruguay .. | 1924 | 11.8 | Russia (European) | 1923 | 22.7 |
| Germany | 1925 | 11.9 | Ceylon | 1925 | 23.9 |
| Prussia | 1924 | 12.2 | Chile | 1925 | 29.8 |
| England and Wales | 1925 | 12.2 | Egypt | 1925 | 35.8 |

(a) Number of deaths per 1,000 of mean population. (b) Registration Area includes
about 89 per cent. of the population.
7. Infantile Deaths and Death Rate.-(i) Australia 1921 to 1925. In the following table, which shows both the total number of deaths of children under one year and the rate per thousand live births since 1921, males and females are distinguished. The universal experience that during the first few years of life the higher death rate of male infants tends to counteract the excess of male births is confirmed by the fact that out of 348,328 male infants born from 1921 to $1925,22,372$ ( 64.23 per 1,000 ) died during their first year of life, while of 331,307 female infants only 16,967 ( 51.21 per 1,000 ) died during the first year.

INFANTILE DEATHS AND DEATH RATES.-AUSTRALIA, 1921 T0 1925.

| Year. | Registered deaths under one year. |  |  | Rate of Infantile Mortality (a). |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females. | Australia. |
| 1921 | 5,111 | 3,841 | 8,952 | 72.97 | 58.06 | 65.73 |
| 1922 | 4,279 | 2,972 | 7,251 | 60.62 | 44.42 | 52.74 |
| 1923 | 4,617 | 3,567 | 8,184 | 66.56 | 54.16 | 60.52 |
| 1924 | 4,276 | 3,425 | 7,701 | 62.15 | 51.79 | 57.08 |
| 1925 | 4,089 | 3,162 | 7,251 | 58.80 | 47.73 | 53.40 |

(a) Number of deaths under 1 year per 1,000 live births registered.
(ii) States, 1921 to 1925 . For the States and Territories the rates of infantile mortality during the last five years were as follows :-

INFANTILE MORTALITY RATES (a), 1921 TO 1925.

| Year. | N.S.W. | Vic. | Q'land. | S. Aust. | W. Aust. | Tas. | North. Terr. | Fed. Cap. Terr. | Aus- |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1921 | 62.56 | 72.55 | 54.16 | 65.48 | 78.26 | 78.02 | 63.29 | 74.07 | 65.73 |
| 1922 | 53.60 | 53.35 | 50.38 | 47.50 | 55.59 | 55.70 | 57.14 | 31.25 | 52.74 |
| 1923 | 60.68 | 65.70 | 53.95 | 60.30 | 56.02 | 57.45 | 13.89 |  | 60.52 |
| 1924 | 58.93 | 61.32 | 51.30 | 51.33 | 49.87 | 54.99 | - 35.09 | 48.78 | 57.08 |
| 1925 | 54.95 | 56.98 | 45.21 | 46:09 | 56.57 | 55.19 | 30.77 | 106.38 | 53.40 |

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

The infantile mortality rate for Australia in 1922 was the lowest yet recorded, and was exceptionally low in all the states, South Australia occupying the most satisfactory position with a mortality of 47.50 per 1,000 births. Moreover, the death rate from almost every cause was light, though the greatest effect was from the comparatively low mortality from diarrhœa and enteritis, and from pneumonia and whooping cough. Although the rate for 1925 was not so satisfactory as for 1922 , it was much below the average for the preceding four years. In 1925, Queensland had the lowest and Victoria the highest rate among the States.
(iii) Districts. The total number of births, of deaths of children under one year of age, and the average rate of infantile mortality for the five years 1921 to 1925 are shown in the following table for each of the fifty-nine districts for which the vital statistics have been tabulated. To afford a better indication 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 Territories and for Lord Howe Island are included for the sake of completeness, but are too small to be used in comparison with others. Remarkable variations
are shown in the mortality rate for the various districts. The lowest rate was experienced in the Wide Bay District of Queensland ( 41.48 per 1,000 births), and the highest in the Trans-Darling Plains (Broken Hill) of New South Wales ( 107.30 per 1,000 births).

INFANTILE MORTALITY.-STATE DISTRICTS, 1921 T0 1925.

| States and Territories. | Districts. |  | Towns. | $\begin{gathered} \text { Total } \\ \text { Births, } \\ 1921-25 . \end{gathered}$ | Total <br> Deaths of Children under one year, 1921-25. | Average Infantile Mortality per 1,000 Births, 1921-25. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New South Wales.. | Metropolitan |  | Sydney .. | 113,367 | 6,741 | 59.46 |
| \% | North Coast |  | Grafton | 22,568 | 1,061 | 47.01 |
| " | Lower Hunter |  | Newcastle | 30,284 | 1,897 | 62.64 |
| ", .. | Cumberland |  | Parramatta | 15,756 | 697 | 44.24 |
| " | South Coast | . | Nowra | 9,963 | 560 | 56.21 |
| " | Northern Tableland | . | Armidale | 12,711 | 624 | 49.09 |
| " | Central Tableland | . . | Bathurst | 16,163 | 1,045 | 34.65 |
| " | Southern Tableland | . . | Goulburn | 18,672 | 854 | 62.46 |
| ", | North-Western Slope | . | Moree | 5,326 | 316 | 59.33 |
| " | Central-Western Slope | . . | Dubbo | 9,438 | 523 | 55.41 |
| , ${ }^{\text {, }}$ | South-Western Slope | $\cdots$ | Temora | 11,136 | . 588 | 52.80 |
| " | Riverina | . | Hay | 6,524 | 382 | 58.55 |
| ", | Plains East of Darling | $\cdots$ | Cobar | 1,461 | 119 | 81.45 |
| " | Trans-Darling Plains | . | Broken Hill | 3,821 | 410 | 107.30 |
| Yictori". | Lord Howe Island | . |  | -8,5 | 1 | 200.00 |
| Victoria | Metropolitan . . | . | Melbourne | 95,254 | 6,271 | 65.82 |
| " .. . | Central | . | Geelong | 17,359 | 1,110 | 63.94 |
| " . . . | North-Central | $\cdots$ | Kyneton | 5,901 | 333 | 56.43 |
| " | Western | . | Hamilton | 17,583 | 1,018 | 57.90 |
| ,, .. .. | Wimmera | . | Horsham | 7,160 | 413 | 57.68 |
| " .. .. | Mallee | . | Ultima | 7,423 | 480 | 65.47 |
| " | Northern | . | Rochester | 16,078 | 908 | 56.47 |
| \% . . . | North-Eastern |  | Beechworth | 4,541 | 212 | 46.69 |
| $\cdots$ | Gippsland |  | Sale | 8,519 | 386 | 45.31 |
| Queensland | Metropolitan |  | Brisbane | 31,261 | 1,776 | 50.81 |
| " | Moreton | . | Ipswich | 10,565 | 451 | 42.69 |
| " | Wide Bay |  | Maryborough | 12,296 | 510 | 41.48 |
| " | Port Curtis |  | Rockhampton | 7,699 | 424 | 55.07 |
| " | Edgecumbe |  | Townsville . | 9,640 | 488 | 50.62 |
| " | Rockingham |  | Cairns | 6,294 | 268 | 42.58 |
| $\cdots$ | York Peninsula |  | Cooktown | 1,050 | 69 | 65.71 |
| " | Carpentaria . |  | Croydon | 1,479 | 88 | 59.50 |
| " | Central-Western |  | Winton | 524 | 28 | 53.44 |
| " | South-Western | . | Charleville | 1,362 | 101 | 74.16 |
| " | Central | . | Blackall | 3,169 | 169 | 53.33 |
| " . | Maranoa |  | Roma | 1,682 | 79 | 46.97 |
|  | Downs |  | Toowoomba | 13,268 | 663 | 49.97 |
| South Australia | Metropolitan |  | Adelaide | 29,747 | 1,811 | 60.88 |
| " | Central |  | Gawler | 11,816 | 515 | 43.59 |
| ", | Lower North |  | Redruth | 8,939 | 480 | 53.70 |
| " . . | Upper North |  | Port Augusta | 2,893 | 144 | 49.78 |
| ", . | South-Eastern |  | Mount Gambier | 2,847 | 114 | 40.04 |
|  | Westera |  | Port lincoln . . | 2,474 | 118 | 47.70 |
| Western Australia. | Metropolitan |  | Perth | 21,028 | 1,335 | 63.49 |
| " . | Northern Agricultural |  | Geraldton | 5,402 | 269 | 49.80 |
| " | South-Western .. |  | Katanning | 10,393 | 532 | 51.16 |
| ", . | Eastern Goldfields |  | Kalgoorlie | 2,657 | 186 | 70.00 |
| ", | Northern Goldfields |  | Pilbara | 419 | 34 | 81.15 |
| , . | North-Western .. |  | Roebourne | 206 | 10 | 48.54 |
|  | Northern | . | Broome | - 168 | 16 | 95.24 |
| Tasmania | Metr politan |  | Hobart | 7,864 | 539 | 68.54 |
| " | jaunceston |  | Launceston | 4,292 | 287 | 66.87 |
| " | North-Eastern |  | Scottsdale | 2,456 | 140 | 57.06 |
| " | North-Western |  | Stanley | 7,270 | 411 | 56.53 |
| " . | Midland |  | Zeehan | 2,493 | 123 | 49.34 |
| " | South-Eastern |  | Sorell | 2,847 | 147 | 51.63 |
|  | South-Western |  | Franklin | 608 | 35 | 57.57 |
| Northern Territory | .. |  | Darwin | 343 | 14 | 40.82 |
| $\underset{\text { Territory Capital }}{\text { Federal }}$ | . |  | Canberra | 168 | 10 | 60.24 |

(iv) Various Countries and Cities. Compared with other countries, the States of Australia occupy a very favourable position, being surpassed by New Zealand and Norway only. There are, however, several continental cities which show better results than the record for any Australian city. A study of the respective rates shows that a high birth rate is often, though not invariably, accompanied by a high infantile death rate.

INFANTILE MORTALITY RATES (a).-VARIOUS COUNTRIES.

| Country. | Year. | Rate of Infantile Mortality. (a) | Crude Birth Rate. <br> (b) | Country. | Year. | Rate of Infantile Mortality. (a) | Grude Birth Rate. <br> (b) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| New Zealand | 1925 | 40 | 21.2 | Denmark | 1925 | 81 | 21.1 |
| Queensland | 1925 | 45 | 23.8 | Northern Ireland | 1925 | 86 | 22.0 |
| South Australia | 1925 | 46 | 21.1 | France | 1925 | 89 | 19.6 |
| Norway | 1923 | 49 | 23.0 | Belgium | 1924 | 90 | 19.9 |
| Australia | 1825 | 53 | 22.9 | Scotland | 1925 | 91 | 21.3 |
| New South Wales | 1925 | 55 | 24.0 | Uruguay | 1923 | 104 | 25.4 |
| Tasmania | 1925 | 55 | 24.4 | Germany | 1925 | 105 | 20.6 |
| Sweden . | 1925 | 55 | 17.5 | Prussia | 1924 | 106 | 20.8 |
| Victoria. | 1925 | 57 | 21.5 | Finland | 1925 | 107 | 22.4 |
| Western Australia | 1925 | 57 | 22.2 | Italy .. | 1923 | 128 | 29.3 |
| Netherlands | 1924 | 61 | 25.1 | Austria | 1924 | 128 | 21.4 |
| Switzerland | 1923 | 61 | 19.4 | Quebec (Canada) | 1923 | 131 | 32.3 |
| New York State | 1925 | 68 | 20.6 | Spain .. | 1924 | 143 | 29.7 |
| Union of South |  |  |  | Czecho-Slovakia | 1925 | 146 | 25.7 |
| Africa (Whites) | 1925 | 68 | 26.5 | Japan | 1924 | 156 | 33.8 |
| Irish Free State. | 1924 | 71 | 20.1 | Bulgaria | 1925 | 156 | 31.3 |
|  |  |  |  | Hungary | 1925 | 168 | 29.1 |
| gistration Area) | 1925 | 72 | 21.2 | Ceylon | 1925 | 172 | 39.2 |
| England and Wales | 1925 | 75 | 18.3 | Jamaica | 1922 | 177 | 37.3 |
| Great Britain | 1924 | 78 | 19.3 | Rumania | 1923 | 207 | 36.6 |
| Ontario (Canada) | 1925 | 79 | 22.6 | Egypt | 1925 | 237 | 48.8 |
| Canada (excluding |  |  |  | Russia, European | 1909 | 248 | 44.0 |
| Quebec) .. | 1925 | 79 | 22.6 | Chile . | 1924 | 266 | 39.9 |

(a) Number of deaths under 1 year per 1,000 births registered. (b) Number of births per 1,000 of mean population.
infantile mortality rates (a).-VARIOUS cities.

| City. | Year. | Rate of Infantile Mortality. <br> (a) | City. |  | Year. | Rate of Infantile (a) (a) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Wellington | 1925 | 35 | Washington | . | 1925 | 88 |
| Amsterdam | 1925 | 36 | Paris |  | 1925 | 89 |
| Oslo | 1925 | 43 | Manchester |  | 1925 | 92 |
| Stockholm | 1925 | 43 | Edinburgh |  | 1925 | 96 |
| Christchurch | 1925 | 48 | Liverpool | $\cdots$ | 1925 | 98 |
| Adelaide | 1925 | 49 | Vienna |  | 1924 | 99 |
| Brisbane | 1925 | 50 | Cologne |  | 1925 | 100 |
| Auckland | 1925 | 51 | Berlin |  | 1925 | 102 |
| Newcastle, N.S.W. | 1925 | 53 | Glasgow | . | 1925 | 102 |
| San Francisco | 1925 | 56 | Belfast |  | 1925 | 104 |
| Sydney | 1925 | 57 | Leipzig | . | 1925 | 104 |
| Melbourno | 1925 | 60 | Munich |  | 1925 | 105 |
| New York | 1925 | 65 | Breslau |  | 1925 | 106 |
| Perth | 1925 | 66 | Brussels |  | 1924 | 108 |
| London | 1925 | 67 | Aberdeen |  | 1925 | 109 |
| Hobart | 1925 | 68 | Prague |  | 1924 | 110 |
| Copenhagen | 1925 | - 68 | Dublin |  | 1925 | 111 |
| Chicago | 1925 | 75 | Buda Pest |  | 1925 | 121 |
| Birmingham | 1925 | 75 | Lodz |  | 1922 | 156 |
| Toronto | 1923 | 77 | Warsaw |  | 1925 | 158 |
| Detroit | 1925 | 77 | Montreal |  | 1922 | 163 |
| Philadelphia | 1925 | 77 | São Paulo |  | 1925 | 176 |
| Antwerp | 1925 | 79 | Colombo |  | 1924 | 240 |
| Hamburg | 1925 | 81 | Madras |  | 1925 | 274 |
| Dresden | 1925 | 81 | Bombay | . | 1925 | 356 |

(a) Number of deaths under 1 year per 1,000 births registered.
(v) Causes of Deaths of Children under one Year. The following table gives for twenty-six causes the ages of all children who died under one year of age. Particulars for males and females may be found in Bulletin No. 43 of "Australian Demography."

CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR.-AUSTRALIA, 1925.

(a) Rate per 1,000 total births.
(b) Rate per 1,000 ex-nuptial births.

Pre-natal influences, such as malformations, congenital debility, and premature birth, together with injuries at birth, accounted for 3,644 , or 50 per cent., of all deaths under one year ; and of these 3,644 deaths, 2,377 , or 65 per cent., occurred within a week of birth. Among the survivors of the first week, diarrhœes and enteritis had the most fatal effects. These diseases were responsible for 1,092 deaths, representing 15
per cent. of all deaths under one year, or 8.04 per 1,000 births. Excluding deaths from pre-natal causes already referred to, over 42 per cent. of the deaths between three months and one year of age were due to diarrhœa and enteritis.
(vi) Deaths of Ex-nuptial Children under one Year. The deaths of ex-nuptial children were tabulated by this Bureau for the first time in 1925. The causes of death of these children are shown as an addendum to the preceding table.

Pre-natal influences such as malformations, congenital debility, premature birth, and injuries from birth accounted for 227 , or 42 per cent., and diarrhœea and enteritis for 121 , or 22 per cent., of the total deaths.
8. Deaths in Age-Groups, 1921 to 1925.-A distribution into age-groups has been made of the 271,171 deaths which occurred in Australia from 1921 to 1925, and the results have been tabulated for each State. It is, however, sufficient to show here the results for Australia as a whole, which are as follows :-

DEATHS IN AGE GROUPS.-AUSTRALIA, 1921 TO 1925.

| Age-Group. | Males. | Females. | Total. | Percentage on Total Males. | Percentage on Total Females. | $\begin{array}{\|c} \text { Percentage } \\ \text { on } \\ \text { Total. } \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 1 year | 22,372 | 16,967 | 39,339 | 14.55 | 14.45 | 14.51 |
| 1 year and under 5 | 7,161 | 5,931 | 13,092 | 4.66 | 5.05 | 4.83 |
| 5 years and under 20 | 7,649 | 6,042 | 13,691 | 4.97 | 5.15 | 5.05 |
| 20 years and under 40 | 17,399 | 16,623 | 34,022 | 11.32 | 14.16 | 12.55 |
| 40 years and under 60 | 33,610 | 22,009 | 55,619 | 21.86 | 18.75 | 20.51 |
| 60 years and under 65 | 14,000 | 8,328 | 22,328 | 9.10 | 7.09 | 8.23 |
| 65 years and over | . 51,323 | 41,474 | 92,797 | 33.38 | 35.32 | 34.22 |
| Age unspecified | 242 | 41 | 283 | 0.16 | 0.03 | 0.10 |
| Total | 153,756 | 117,415 | 271,171 | 100.00 | 100.00 | 100.00 |

9. Deaths at Single Ages and in Age-Groups, 1925.-(i) General. The 54,568 deaths registered in Australia in the year 1925 will be found tabulated under single years, and in groups of five years for each State and Territory, in Bulletin No. 43 " Australian Demography, 1925." The deaths during the first two years of life have been tabulated in shorter periods. A summary for Australia is given in the following table :-

DEATHS AT SINGLE AGES AND IN AGE-GROUPS.-AUSTRALIA, 1925.

(ii) Rates. The following tables give the death rate per 1,000 living at each age for the three years 1920,1921 , and 1922 , i.e., the Census year 1921, and the years immediately preceding and following. The Northern Territory is included with South Australia, and the Federal Capital Territory with New South Wales :-

AVERAGE ANNUAL DEATH RATES.-AGE-GROUPS, 1920 TO 1922.

| Age-Group. |  | N.S.W. | Victoria. | Q'land. | S. Aust. | W. Aust. | Tas. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Males. |  |  |  |  |  |  |  |  |
| 0 to 4 years |  | 21.49 | 22.61 | 20.73 | 20.01 | 23.88 | 20.72 | 21.64 |
| 5 , 9 |  | 1.85 | 2.15 | 1.96 | 2.25 | 2.24 | 2.04 | 2.02 |
| 10 ," 14 |  | 1.59 | 1.61 | . 1.58 | 1.56 | 1.42 | 1.83 | 1.59 |
| 15 ," 19 |  | 2.16 | 2.07 | 2.90 | 2.42 | 2.37 | 2.66 | 2.30 |
| 20 ," 24 |  | 2.74 | 3.06 | 3.54 | 3.33 | 3.96 | 3.23 | 3.10 |
| 25 ,, 29 |  | 3.36 | 3.60 | 4.37 | 3.64 | 4.08 | 5.05 | 3.70 |
| 30 „, 34 |  | 4.13 | 3.70 | 4.58 | 4.00 | 5.40 | 4.59 | 4.16 |
| 35 ,, 39 |  | 5.36 | 5.32 | 5.95 | 5.18 | 6.42 | 4.79 | 5.48 |
| 40 ," 44 |  | 7.85 | 6.60 | 7.86 | 6.20 | 7.90 | 5.98 | 6.89 |
| 45 ,, 49 |  | 9.61 | 9.80 | 10.60 | 8.81 | 12.09 | 8.71 | 9.91 |
| 50 ,, 54 |  | 12.38 | 12.24 | 14.23 | 11.76 | 17.18 | 11.51 | 12.90 |
| 55 ," 59 |  | 18.72 | 18.24 | 20.34 | 19.70 | 23.76 | 13.44 | 19.04 |
| 60 " 64 |  | 28.35 | 28.48 | 30.36 | 25.63 | 34.19 | 23.95 | 28.71 |
| 65 ,, 69 |  | 43.00 | 44.38 | 44.93 | 42.31 | 49.51 | 38.53 | 43.74 |
| 70 , 74 |  | 65.81 | 65.16 | 64.56 | 62.01 | 72.15 | 53.55 | 64.88 |
| 75 " 79 |  | 105.54 | 107.84 | 103.32 | 106.23 | 115.56 | 109.46 | 106.53 |
| 80 ," 84 |  | 159.12 | 163.74 | 159.06 | 161.73 | 184.49 | 132.47 | 160.73 |
| 85 ,, 89 | $\cdots$ | 271.79 | 266.12 | 227.79 | 226.87 | 283.46 | 232.39 | 259.17 |
| 90 and over | . | 368.58 | 387.01 | 314.96 | 387.09 | 566.67 | 350.00 | 376.08 |

Females.


Persons.

| 0 to 4 years |  | 19.24 | 20.30 | 18.45 | 18.17 | 21.39 | 18.75 | 19.40 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 5 , 9 |  | 1.76 | 2.05 | 1.93 | 2.26 | 1.76 | 2.07 | 1.92 |
| 10 ," 14 |  | 1.40 | 1.40 | 1.51 | 1.45 | 1.33 | 1.73 | 1.43 |
| 15 ," 19 |  | 1:90 | 2.03 | 2.45 | 2.57 | 1.86 | 2.62 | 2.10 |
| 20 ", 24 |  | 2.58 | 2.99 | 3.17 | 3.09 | 3.52 | 3.49 | 2.92 |
| 25 , 29 |  | 3.42 | 3.57 | 4.00 | 3.75 | 4.03 | 4.43 | 3.64 |
| 30 " 34 |  | 3.99 | 3.92 | 4.37 | 4.10 | 5.03 | 4.50 | 4.11 |
| 35 , 39 |  | 5.03 | 5.14 | 5.88 | 5.18 | 5.72 | 5.39 | 5.24 |
| 40 ", 44 |  | 5.99 | 6.16 | 7.04 | 5.60 | 7.23 | 5.73 | 6.22 |
| 45 ," 49 |  | 8.21 | 8.30 | 8.89 | 7.62 | 10.41 | 8.04 | 8.44 |
| 50 , 54 |  | 10.97 | 10.67 | 12.04 | 10.46 | 14.58 | 10.16 | 11.20 |
| 55 ," 59 |  | 16.19 | 15.60 | 17.57 | 15.32 | 19.61 | 13.80 | 16.22 |
| $60,{ }^{64}$ |  | 24.11 | 23.93 | 25.99 | 22.13 | 27.90 | 22.13 | 24.22 |
| 65 ," 69 |  | 37.81 | 37.90 | 39.23 | 37.80 | 41.71 | 36.73 | 38.17 |
| 70 ,, 74 |  | 58.34 | 58.09 | 58.64 | 53.85 | 64.31 | 51.54 | 57.82 |
| 75 , 79 |  | 97.02 | 97.07 | 96.41 | 94.82 | 106.68 | 93.60 | 96.98 |
| 80 ," 84 |  | 149.75 | 152.49 | 144.74 | 145.42 | 162.58 | 128.81 | . 149.09 |
| 85 , 89 " |  | 248.05 | 246.87 | 219.48 | 206.49 | 252.00 | 219.14 | 238.91 |
| 90 and over | . | 374.81 | 349.09 | 304.15 | 355.73 | 528.30 | 351.64 | 357.36 |

The high death rate for children under five years of age rapidly diminishes until, at ages 10 to 14 , it stands at 1.43 per 1,000 , which is the lowest at any age. The rate thereafter gradually rises with increasing age until, at the ages 90 and over, more than one-third die every year.
10. Deaths of Centenarians, 1925.-.Particulars concerning the twenty-one persons -eleven males and ten females-who died in 1925 aged 100 years and upwards, are given in the following table. While the Registrars-General of the various States verify the figures as far as possible, absolute reliance cannot be placed on their accuracy, owing to the well-known tendency of very old people to overstate their ages. In connexion with this question it may be noted that while parish registers in the United Kingdom often date very far back, compulsory registration of births dates practically from 1874 only, the Act of 1836 having left many loop-holes open for those unwilling to register the births of their children.

DEATHS OF CENTENARIANS.-AUSTRALIA, 1925.


Males.

| 109 | Granville | N.S.W. | Senility | Labourer. . | At sea | Not stated | Married |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 106 |  |  | Hemiplegia |  | Not stated | 43 years .. | Single |
| 105 | Launceston | Tasmania | Senility . | Pensioner | England .. | Not stated | Not stated |
| 104 | Eden | N.S.W. . | , .. | Storekeeper |  | 75 years . | Married |
| 101 | Balwy | Victoria .. | - | Not stated | Scotland | 85 years |  |
| 100 | Boorowa . . | N.S.W: . | Myocarditis | Wheelwright | England | 73 years .. |  |
| 100 | Gunnedah |  | Senility . . | Not stated | Notstated | Not stated | Not stated |
| 100 | Bowraville |  | Rronchitis.. | Farmer . . | Ireland | 73 years | Married |
| 100 | Dromana .. | Victoria . | Senility | Fisherman | Greece | 50 years . |  |
| 100 | NGrwood | Sth. Aust. |  | Chemist .. | England | 69 years . | Not stated |
| 100 | Sorell | Tasmania |  | Farmer | Tasmania | Native | Married |

Females.

| 107 | Moama | N.S.W. | Senility | $\ldots$ | Tasmania | Native | Married |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 104 | Bundaberg | Queensland | ," | . | England . . | 51 years .. |  |
| 103 | Hunter's Hill | N.S.W. . | " | . | Scotland | 100 years | Single |
| 103 | Kapunda . . | Sth. Aust. | ', | . | Jreland | 72 years .. | Married |
| 102 | Woollahra.. | N.S.W. .. |  | . | N.S.W. | Native | " |
| 102 | Northam | W.Australia | Fracture hip | . . | Scotland | 30 years .. | O |
| 102 | Hobart . | Tasmania | Diabetes Mellitus | . | England . . | 99 years .. | Single |
| 101 | Box Hill . . | Victoria . | Senilty | $\cdots$ | Scotland | 75 years | Married |
| 100 | Randwick.. | N.S.W. . | " | $\cdots$ | Ireland | 83 years | " |
| 100 | Garfield | Victoria |  | $\cdots$ | Scotland | 52 years .. | " |

11. Length of Residence in Australia of Persons who died in 1925.-The length of residence in Australia of all persons whose deaths were registered in the year 1925 is shown in the following table :-

## LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED IN 1925.

| Length of Residence. | Male Deaths. | Female Deaths. | Total Deaths. | Length of Residence. | Male Deaths. | Female Deaths. | Total Deaths. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Born in Australia | 19,833 | 16,185 | 36,018 | Resident 25 to 29 years | 317 | 161 | 478 |
| Resident under 1 year | 140 | 39 | 179 | ", 30 to 34 , .. | 569 | 249 | 818 |
| ,, 1 year | 94 | 47 | 141 | ," 35 to 39 , | 740 | 483 | 1,223 |
| ., 2 years | 102 | 59 | 161 | , 40 to 44 " | 1,499 | 756 | 2,255 |
| " 3 , | 97 | 40 | 137 | ", 45 to 49 ", | 812 | 467 | 1,279 |
| ", 4 ", | 56 | 48 | 104 | " 50 to 54 ", | 794 | 551 | 1,345 |
| $\because 5$ | 65 | 63 | 128 | ", 55 to 59 " | 469 | 387 | 858 |
| $\therefore \quad 6$ | 26 | 28 | 54 | " 60 to 64 "'.. | 844 | 727 | 1,571 |
| ,, 7 | 18 | 10 | 28 | $\because 65$ yrs. and over | 1,554 | 1,851 | 3,405 |
| .. 8 | 22 | 13 | 35 | Length of residence |  |  |  |
| , 9 | 19 | 19 | 38 | not stated .. | 1,706 | 492 | 2,198 |
| ,' 10 to 14 years | 665 | 422 | 1,087 |  |  |  |  |
| ", 20 to 24 " | 379 314 | 142 | 574 456 | Total | 31,134 | 23,434 | 54,568 |

12. Birthplaces of Persons who Died in 1925.-The following table gives the birthplaces of persons whose deaths were registered in 1925. More detailed information will be found in "Australian Demography," Bulletin No. 43.

BIRTHPLACES OF PERSONS WHO DIED IN 1925.-AUSTRALIA.

13. Occupations of Males who Died in 1925.-(i) Australia, 1925. Information as to the main groups of the occupations of the 31,134 males who died in Australia in 1925 is contained in the following table :-

OCCUPATIONS OF MALES WHO DIED IN 1925.-AUSTRALIA.

(ii) Australia, 1921 to 1925. The male deaths in Australia grouped according to the main classes of occupations, and the percentage of each class on the total male deaths for the five years 1921 to 1925, are shown in the table hereunder :-

OCCUPATIONS OF MALES WHO DIED IN AUSTRALIA, 1921 TO 1925.

| Occupation. |  |  | 1921. | 1922. | 1923. | 1924. | 1925. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Class |  |  |  |  |  |  |  |
| I. Professional |  | 1 Total | 1,307 | 1,317 | 1,339 | 1,327 | 1,378 |
|  |  | ( Per cent. | 4.26 | 4.50 | 4.23 | 4.27 | 4.43 |
| II. Domestic |  | ¢ Total | 830 | 745 | 803 | 802 | 840 |
|  |  | - Per cent. | 2.71 | 2.55 | 2.54 | 2.58 | 2.70 |
| III. Commercial |  | 1 Total | 2,739 | 2,871 | 2,914 | 3,063 | 3,067 |
|  |  | 1 Per cent. | 8.94 | 9.82 | 9.22 | 9.85 | 9.85 |
| IV. Transport and communication |  | \{ Total | 1,841 | 1,842 | 1,931 | 2,041 | 2,102 |
|  |  | Y Per cent. | 6.01 | 6.30 | 6.11 | 6.56 | 6.75 |
| V. Industrial .. |  | \{ Total | 8,613 | 8,592 | 9,509 | 9,510 | 9,555 |
|  |  | YPer cent. | 28.10 | 29.38 | 30.07 | 30.57 | 30.69 |
| VI. Agricultural, Pastoral, Mining, etc. |  | Total | 5,711 | 5,664 | 5,902 | 5,959 | 6,101 |
|  |  | Y Per cent. | 18.63 | 19.37 | 18.66 | 19.16 | 19.60 |
| VII. Indefinite . . |  | 1 Total | 1,436 | 1,378 | 1,866 | 1,431 | 1,539 |
|  |  | 1 Per cent. | 4.68 | 4.71 | 5.90 | 4.60 | 4.94 |
| VIII. | Dependents | \{ Total | 8,175 | 6,836 | 7,358 | 6,970 | 6,552 |
|  |  | \{ Per cent. | 26.67 | 23.37 | 23.27 | 22.41 | 21.04 |
|  | Total |  | 30,652 | 29,245 | 31,622 | 31,103 | 31,134 |

14. Causes of Death.-(i) General: The classification adopted by the Commonwealth Burcau of Census and Statistics is that of the International Institute of Statistics, as amended by the Committees of Revision which met in 1909 and 1920. The detailed classification groups causes of death under 205 different headings, in fifteen categories, as follows :-
i. Epidemic, Endemic, and Infectious Diseases.
ii. General Diseases not included in (i).
iii. Diseases of the Nervous System and Organs of Sense.
iv. Diseases of the Circulatory System.
v. Diseases of the Respiratory System.
vi. Diseases of the Digestive System.
vii. Diseases of the, Genito-urinary System and Adnexa.
viii. Puerperal Condition.
ix. Diseases of the Skin and Cellular. Tissue
x. Diseases of the Organs of Locomotion.
xi. Malformations.
xii. Early Infancy.
xiii. Old Age.
xiv. External Causes.
xv. Ill-defined Diseases.
(ii) Mortality Statistics for 1907 and Subsequent Years. The statistics relating to causes of death in Australia from the year 1907 onward have been tabulated in the Commonwealth Bureau of Census and Statistics in accordance with the above-mentioned classification, and the system is being employed also in the various State statistical offices.
(iii) Classification of Causes of Death, 1921 to 1925, 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 countries and American States, and a table has been prepared 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 1921 to 1925 will be found in full in Bulletins Nos. 39 to 43 of "Australian Demography." In the following tables showing deaths of males; females, and persons for the year 1925, the abridged classification has been omployed.

CAUSES OF DEATH.-MALES, 1925.

| Cause. | N.S.W. | Vic. | Q'land. | S. Aus. | W. Aus. | Tas. | Nor. Ter. | Fed. Cap. Ter. | Australia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Typhoid Fever | 58 | 15 | 25 | 7 | 7 | 1 | . | $\cdots$ | 113 |
| 2 Typhus Fever | . | $\cdots$ | 1 | 1 |  |  | $\cdots$ | . | 2 |
| 3 Malaria . | $\cdots$ | 1 | 18 | . | 3 | 1 | 2 | . | 25 |
| 4 Small-pox | $\cdots$ | . | . | $\cdots$ |  |  |  |  |  |
| 5 Measles | 13 | 23 | 2 | 28 |  |  |  |  | 66 |
| 6 Scarlet Fever | 9 | 6 | 2 |  |  | 1 |  | $\cdots$ | 18 |
| 7 Whooping Cough | 135 | 20 | 30 | 3 | 7 | 17 |  | 1 | 213 |
| 8 Diphtheria .. | 61 | 36 | 24 | 10 | 2 | 6 | 1 | . | 140 |
| 9 Influenza-Pneumonic | 43 | 27 | 22 | 1 | 12 | 1 |  |  | 106 |
| $9 a$ Influenza-other | 30 | 10 | 25 | 2 | 9 | 1 |  | 1 | 78 |
| 10 Asiatic Cholera | . . | . . | . . |  | . |  |  |  |  |
| 11 Cholera Nostras |  |  |  |  |  |  |  |  |  |
| 12 Other Epidemic Diseases | 79 | 73 | 37 | 16 | 16 | 7 |  |  | 228 |
| 13 Tuberculosis of the Respiratory System | 615 | 529 | 205 | 174 | 179 | 57 | 10 | $\cdots$ | 1,769 |
| 14 Tuberculosis of the Men. inges .. .. | 26 | 33 | 1 | 7 | 6 | 4 |  | $\cdots$ | 77 |
| 15 Other forms of Tuberculosis | 38 | 45 | 9 | 20 | 10 | 9 | . | . | 131 |
| 16 Cancer and other Malignant Tumours | 1,162 | 802 | 408 | 269 | 176 | 109 | 6 | . | 2,932 |
| 17 Meningitis .. . | 57 | 38 | 19 | 18 | 6 | 4 | 1 | $\ldots$ | 143 |
| 18 Haemorrhage, Embolism, and Softening of Brain | 590 | 405 | 207 | 162 | 82 | 55 | 1 | - | 1,502 |
| 19 Diseases of the Heart | 1,747 | 1,139 | 621 | 303 | 244 | 165 | 6 | 1 | 4,226 |
| 20 Acute Bronchitis | 78 | 26 | 25 | 9 | 5 | 2 |  | . | 145 |
| 21 Chronic Bronchitis | 145 | 123 | 71 | 34 | 36 | 10 |  |  | 419 |
| 22 Pneumonia .. .. | 547 | 334 | 166 | 114 | 126 | 58 |  | $\cdots$ | 1,345 |
| 23 Other Diseases of the Respiratory System (Tuberculosis excptd.) | 497 | 456 | 225 | 111 | 139 | 45 | 1 | 1 | 1,475 |
| 24 Diseases of the Stomach <br> (Cancer excepted) | 112 | 89 | 51 | 21 | 23 | 10 | $\ldots$ | $\cdots$ | 306 |
| $25 a$ Diarrhoea and Enteritis (children under 2 years of age) | 308 | 272 | 74 | 38 | 87 | 15 | $\cdots$ | . | 794 |
| $25 b$ Diarrhoea and Enteritis <br> ( 2 years and over) .. | 67 | 57 | 49 | 21 | 17 | 10 | $\ldots$ | $\cdots$ | 221 |
| 26 Appendicitis \& Typhlitis | 104 | 76 | 47 | 36 | 11 | 7 | $\cdots$ | $\cdots$ | 281 |
| 27 Hernia, Intestinal Obstruction .. | 120 | 97 | 41 | 16 | 18 | 10 |  | . | 302 |
| 28 Cirrhosis of the Liver | 69 | 54 | 41 | 17 | 12 | 7 | . | . . | 200 |
| 29 Acute and Chronic | 689 | 460 | 298 | 163 | 87 | 49 | 1 | 2 | 1,749 |
| 30 Non-cancerous Tumours and other Diseases of Female Genital Organs | . | $\cdots$ | $\cdots$ | $\cdots$ | . . | .. | . | . |  |
| 31 Puerperal Septicaemia (Puerperal Fever) | .. | $\cdots$ | $\cdots$ | $\ldots$ | $\ldots$ | . | $\ldots$ | . | . |
| 32 Other Puerperal Accidents of Pregnancy and Confinement | . | . | . |  |  |  | $\ldots$ |  |  |
| 33 Congenital Debility and |  |  |  |  |  |  |  |  |  |
| Malformations .. | 805 | 607 | 274 | 176 | 136 | 85 |  | 1 | 2,084 |
| 34 Senility | 643 | 568 | 315 | 201 | 105 | 63 | 8 |  | 1,903 |
| $35 a$ Homicides | 18 | 6 | 6 | 12 | 3 | 3 |  |  | 48 |
| 356 Other Accidental Deaths | 929 | 629 | 390 | 202 | 210 | 77 | 4 | 1 | 2,442 |
| 36 Suicides . . | 212 | 161 | 81 | 48 | 47 | 17 | 3 |  | 569 |
| 37 Other Diseases | 1,784 | 1,251 | 729 | 411 | 294 | 164 | 6 | 1 | 4,640 |
| 38 Unspecified or Ill-defined Diseases .. | 154 | 114 | 42 | 78 | 42 | 11 | 1 |  | 442 |
| Total-Males . . | 11,944 | 8,582 | 4,581 | 2,729 | 2,157 | 1,081 | 51 | 9 | 31,134 |

CAUSES OF DEATH.-FEMALES, 1925.

| Cause. | N.S.W. | Vic. | O'land. | S. Aus. | W. Aus. | Tas. | Nor. Ter. | Fed. <br> Can. <br> Ter | Austraiia. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Typhoid Fever | 22 | 4 | 13 | 8 | 5 | 5 | $\cdots$ | $\cdots$ | 57 |
| 2 Typhus Fever | . |  | 1 | . . |  |  | $\cdots$ |  | 1 |
| 3 Malaria | 2 | 1 | 6 |  |  |  | 1 |  | 10 |
| 4 Small-pox |  |  |  |  |  |  |  |  |  |
| 5 Measles | 17 | 23 | 7 | 17 |  |  |  |  | 64 |
| 6 Scarlet Fever | 18 | 11 | 4 | 2 |  | 2 | . |  | 37 |
| 7 Whooping Cough | 183 | 22 | 25 | 3 | 7 | 10 |  |  | 250 |
| 8 Diphtheria .. | 58 | 33 | 22 | 9 | 4 | 7 | . |  | 133 |
| 9 Influenza-Pneumonic | 31 | 17 | 22 | 5 | 6 | 3 |  |  | 84 |
| $9 a$ Influenza-other | 33 | 14 | 23 | 2 | 8 | 3 | $\cdots$ |  | 83 |
| 10 Asiatic Cholera |  |  |  |  |  |  |  |  |  |
| 11 Cholera Nostras |  |  |  |  |  |  |  |  |  |
| 12 Other Epidemic Diseases | . 60 | 69 | 32 | 15 | 9 | 6 |  |  | 191 |
| 13 Tuberculosis of the Respiratory System | 409 | 401 | 136 | 148 | 77 | 53 | 1 |  | 1,225 |
| 14 Tuberculosis of the Meninges | 22 | 36 | 1 | 13 | 6 | 1 |  |  | 79 |
| 15 Other forms of Tuberculosis | 42 | 52 | 8 | 19 | 10 | 12 | . |  | 143 |
| 16 Cancer and other Malignant Tumours | 971 | 841 | 284 | 237 | 124 | 88 |  |  | 2,545 |
| 17 Meningitis .. | 29 | 24 | 20 | 15 | 4 | 1 | 1 |  | 94 |
| 18 Haemorrhage, Embolism, and Softening of Brain | 577 | 483 | 166 | 181 | 64 | 65 |  |  | 1,536 |
| 19 Diseases of the Heart | 1,304 | 1,050 | 381 | 277 | 129 | 118 | 1 |  | 3,260 |
| 20 Acute Bronchitis | 68 | 17 | 12 | 13 | 3 | 2 |  |  | 115 |
| 21 Chronic Bronchitis | 134 | 102 | 37 | 25 | 12 | 12 |  |  | 322 |
| 22 Pneumonia .. | 358 | 217 | 112 | 95 | 51 | 40 | $\cdots$ |  | 873 |
| 23 Other Diseases of the Respiratory System (Tuberculosis excptd.) | 443 | 322 | 109 | 91 | 48 | 32 | $\cdots$ | 2 | 1,047 |
| 24 Diseases of the Stomach (Cancer excepted) .. | 47 | 61 | 34 | 13 | 9 | 5 | . | . | 169 |
| $25 a$ Diarrhoea and Enteritis (children under 2 years of age) | 228 | 210 | 56 | 34 | 49 | 15 |  |  | 592 |
| 250 Diarrhoea and Enteritis <br> (2 years and over) .. | 72 | 68 | 44 | 16 | 11 | 10 |  |  | 221 |
| 26 Appendicitis \& Typhlitis | 74 | 38 | 23 | 10 | 5 | 7 |  |  | 157 |
| 27 Hernia, Intestinal Ob. struction .. | 99 | 92 | 27 | 19 | 17 | 8 | $\cdots$ |  | 262 |
| 28 Cirrhosis of the Liver | 30 | 36 | 22 | 14 | 8 | 2 |  |  | 112 |
| 29 Acute and Chronic | 423 | 417 | 209 | 102 | 49 | 29 | $\cdots$ | $\cdots$ | 1,229 |
| 30 Non-cancerous Tumours and other Diseases of Female Genital Organs | 56 | 56 | 21 | 17 | 12 | 3 |  |  | 165 |
| 31 Puerperal Septicaemia (Puerperal Fever) | 107 | 46 | 32 | 27 | 14 | 10 |  |  | 236 |
| 32 Other Puerperal Accidents of Pregnancy and Confinement | 220 | 111 | 89 | 51 | 39 | 20 |  | $\cdots$ | 530 |
| 33 Congenital Debility and |  |  |  |  |  |  |  |  |  |
| Malformations | 648 | 449 | 224 | 132 | 84 | 67 |  |  | 1,604 |
| 34 Senility | 435 | 647 | 216 | 191 | 68 | 102 | 1 |  | 1,660 |
| $35 a$ Homicides | 13 | 12 | 2 | 3 |  | 3 | . |  | - 35 |
| $35 b$ Other Accidental Deaths | 264 | 207 | 110 | 55 | 32 | 21 | 2 | 1 | 692 |
| 36 Suicídes | 55 | 36 | 15 | 14 | 5 | 6 | . | . | 131 |
| 37 Other Diseases | 1,267 | 963 | 400 | 337 | 174 | 139 | 4 | . | 3,284 |
| 38 Unspecified or Ill-defined Diseases .. | 59 | 67 | 19 | 40 | 13 | 8 |  |  | 206 |
| Total-Females . | 8,878 | 7,255 | 2,964 | 2,250 | 1,158 | 915 | 11 | 3 | 23,434 |

## CAUSES OF DEATH.-PERSONS, 1925.

| Cause. | N.S.W. | Vic. | Q land. | S. Aus. | W. Aus. | Tas. | Nor. Ter. | Fed <br> Cap. <br> Ter. | $\begin{aligned} & \text { Aus- } \\ & \text { tralia. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 Typhoid Fever | 80 | 19 | 38 | 15 | 12 | 6 | $\cdots$ | $\cdots$ | 170 |
| 2 Typhus Fever |  | . | 2 | , | . |  |  |  |  |
| 3 Malaria | 2 | 2 | 24 |  | 3 | 1 | 3 |  | 35 |
| 4 Small-pox |  | . |  |  | . |  | . | $\cdots$ |  |
| 5 Measles | 30 | 46 | 9 | 45 | . |  |  | . | 130 |
| 6 Scarlet Fever | 27 | 17 | 6 | 2 | $\cdots$ | 3 |  | - | 55 |
| 7 Whooping Cough | 318 | 42 | 55 | 6 | 14 | 27 | - | 1 | 463 |
| 8 Diphtheria ... .. | 119 | 69 | 46 | 19 | 8 | 13 | 1 | . | 273 |
| 9 Influenza-Pneumonic | 74 | 44 | 44 | 6 | 18 | 4 |  |  | 190 |
| $9 a$ Influenza-other | 63 | 24 | 48 | 4 | 17 | 4 | $\cdots$ | 1 | 161 |
| 10 Asiatic Cholera | . . | . . | . |  | . |  |  |  |  |
| 11 Cholera Nostras |  |  |  |  |  |  |  |  |  |
| 12 Other Epidemic Diseases | 139 | 142 | 69 | 31 | 25 | 13 | $\cdots$ |  | 419 |
| 13 Tuberculosis of the Respiratory System | 1,024 | 930 | 341 | 322 | 256 | 110 | 11 | - | 2,994 |
| 14 Tuberculosis of the Meninges | 48 | 69 | 2 | 20 | 12 | 5 | . | $\cdots$ | 156 |
| 15 Other forms of Tuberculosis | 80 | 97 | 17 | 39 | 20 | 21 |  | $\cdots$ | 274 |
| 16 Cancer and other Malignant Tumours | 2,133 | 1,643 | 692 | 506 | 300 | 197 | 6 |  | 5,477 |
| 17 Meningitis .. | 86 | 62 | 39 | 33 | 10 | 5 | 2 | $\cdots$ | 237 |
| 18 Haemorrhage, Embolism, and Softening of Brain | 1,167 | 888 | 373 | 343 | 146 | 120 | 1 |  | 3,038 |
| 19 Diseases of the Heart | 3,051 | 2,189 | 1,002 | 580 | 373 | 283 | 7 | 1 | 7,486 |
| 20 Acute Bronchitis | 146 | 43 | 37 | 22 | 8 | 4 | . |  | 260 |
| 21 Chronic Bronchitis | 279 | 225 | 108 | 59 | 48 | 22 | $\cdots$ |  | 741 |
| 22 Pneumonia .. | 905 | 551 | 278 | 209 | 177 | 98 | $\cdots$ | $\cdots$ | 2,218 |
| 23 Other Diseases of the Respiratory System (Tuberculosis excptd.) | 940 | 778 | 334 | 202 | 187 | 77 | 1 | 3 | 2,522 |
| 24 Diseases of the Stomach (Cancer excepted) | 159 | 150 | 85 | 34 | 32 | 15 | $\cdots$ | . | 475 |
| 25a Diarrhoea and Enteritis (children under 2 years of age) | 536 | 482 | 130 | 72 | 136 | 30 | . |  | 1,386 |
| $25 b$ Diarrhoea and Enteritis (2 years and over) .. | 139 | 125 | 93 | 37 | 28 | 20 |  |  | 442 |
| 26 Appendicitis \& Typhlitis | 178 | 114 | 70 | 46 | 16 | 14 |  | $\ldots$ | 438 |
| 27 Hernia, Intestinal Obstruction .. | 219 | 189 | 68 | 35 | 35 | 18 | $\cdots$ |  | 564 |
| 28 Cirrhosis of the Liver | 99 | 90 | 63 | 31 | 20 | 9 |  |  | 312 |
| 29 Acute and Chronic Nephritis . . .. | 1,112 | 877 | 507 | 265 | 136 | 78 | 1 | 2 | 2,978 |
| 30 Non-cancerous Tumours and other Diseases of Female Genital Organs | 56 | 56 | 21 | 17 | 12 | 3 |  |  | 165 |
| 31 Puerperal Septicaemia (Puerperal Fever) .. | 107 | 46 | 32 | 27 | 14 | 10 | $\cdots$ | $\cdots$ | 236 |
| 32 Other Puerperal Accidents of Pregnancy and Confinement .. | 220 | 111 | 89 | 51 | 39 | 20 |  |  | 530 |
| 33 Congenital Debility and Malformations | 1,453 | 1,056 | 498 | 308 | 220 | 152 |  |  |  |
| 34 Senility .. | 1,078 | 1,215 | 531 | 392 | 173 | 165 | 9 |  | 3,563 |
| $35 a$ Homicides | 31 | 18 | 8 | 15 | 5 | 6 |  |  | 83 |
| $35 b$ Other Accidental Deaths | 1,193 | 836 | 500 | 257 | 242 | 98 | 6 | 2 | 3,134 |
| 36 Suicides . | 267 | 197 | 96 | 62 | 52 | 23 | 3 | $\therefore$ | 700 |
| 37 Other Diseases | 3,051 | 2,214 | 1,129 | 748 | 468 | 303 | 10 | 1 | 7,924 |
| 38 Unspecified or Ill-defined Diseases .. | 213 | 181 | 61 | 118 | 55 | 19 | 1 |  | 648 |
| Total-Persons | 20,822 | 15,837 | 7,545 | 4,979 | 3,315 | 1,996 | 62 | 12 | 54,568 |

The next table shows the total deaths in Australia during the last five years in aceordance. with the abridged classification alluded to previously.

CAUSES OF DEATH.--AUSTRALIA, 1921 TO 1925.
Persons.

(a) Includes acute disseminated tuberculosis.

NOTE.-In consequence of changes made in the classification of the causes of death the figures given in the table above are not on identical lines throughout the period covered.
15. Deaths from Special Causes.-The above table furnishes particulars for the last five years only, and comparisons will, therefore, generally be restricted to that period:
(i) Typhoid Fever. The number of deaths from typhoid fever declined from 352 in 1921 to 170 in 1925 , the rate for the latter year being 3 per 100,000 living, and much lower than the average for the last five years. Of the 170 who died, 113 were males and 57 females.
(ii) Typhus. Deaths from typhus have been rare in Australia. During 1925, 3 deaths were recorded from this cause, of which 2 occurred in Queensland and 1 in South Australia. In 19231 death occurred in South Australia. These represent the only deaths recorded from typhus in Australia.
(iii) Malaria.-Deaths from malarial diseases are mainly confined to the tropical districts of Northern Queensland and Western Australia, and to the Northern Territory; 24 out of the 35 deaths registered in 1925 occurred in Queensland, 2 in New South Wales, 2 in Victoria, 3 in Western Australia, 3 in the Northern Territory, and 1 in Tasmania.
(iv) Small-pox. The number of deaths from small-pox in Australia is very small, and during the five years under review only 4 deaths occurred from this cause.
(v) Measles. Of the deaths from measles the greatest number took place in 1923, when 222 were registered, while the minimum was in 1922 with a total of 28 deaths. During 1925 there were 130 deaths, of which 66 were males and 64 females ; of these, 46 were registered in Victoria, 45 in South Australia, 30 in New South Wales, and 9 in Queensland.
(vi) Scarlet Fever. The mortality from this source is very low, the average number of deaths from 1921 to 1925 being 47 per annum.
(vii) Whooping Cough. In 1925 there were 463 deaths, which was the highest number during the period 1921 to 1925 . Of the 463 deaths, 213 were males and 250 females. Of the total for 1925, 318 deaths occurred in New South Wales, 42 in Victoria, 55 in Queensland, 6 in South Australia, 14 in Western Australia, and 27 in Tasmania. The death rate in 1925 was 8 per 100,000 persons.
(viii) Diphtheria. The number of deaths due to diphtheria declined from 917 in 1921 to 273 in 1925. Of the 273 deaths in 1925 (representing a death rate of 5 per 100,000 persons) 140 were males and 133 females. The numbers in each State were as follows :-New South Wales 80, Victoria 19, Queensland 38, South Australia 15, Western Australia 12, and Tasmania 6.
(ix) Influenza. The deaths from influenza during 1925 were less than in 1923, when they were more numerous than in any year since the extraordinary epidemic of 1919. In 1925, there were 351 deaths from this disease, representing a rate of 6 per $\mathbf{1 0 0 , 0 0 0}$ persons. Of these deaths, 190 were ascribed to pneumonic influenza and $\mathbf{1 6 1}$ to ordinary influenza.
(x) Asiatic Cholera. No deaths from Asiatic cholera have been recorded in Australia.
(xi) Cholera Nostras. For the five years under review only 8 deaths have been due to this cause.
(xii) Other Epidemic Diseases. The deaths registered under this heading numbered 419 in 1925. The list includes :-Dysentery 102, lethargic encephalitis 88 , meningococcal meningitis 83 , erysipelas 70 , acute poliomyelitis 58 , mumps 9 , leprosy 2 , and other epidemic diseases 7. There were no deaths from plague in the years 1924 and 1925. Outbreaks oceurred in 1921 and 1922, causing 61 deaths in Queensland and 10 in New South Wales, and 1 death occurred in 1923 in New South Wales.
(xiii) Tuberculosis of the Respiratory System. Of the various forms of tuberculcsis prevalent in Australia, phthisis, or tuberculosis of the lungs, has attracted the most attention. The intimate relation, however, between tuberculosis of the lungs and 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 investigations concerning the age incidence and duration of this disease.

During 1925 there were 2,994 deaths from tuberculosis of the respiratory system, which compares favourably with the average of 3,082 for the preceding four years. The 2,994 deaths in 1925 represented a rate of 50 per 100,000 persons. Of these deaths, 1,769 were males and 1,225 females.
(xiv) Tuberculosis of the Meninges. The number of deaths ascribed to this cause in 1925 was 156 , which is the smallest number for the last five years. The largest number, viz. : 218, occurred in 1921.
(xv) Other Forms of Tuberculosis. The deaths in 1925 include the following:Tuberculosis of the intestines and peritoneum 75 ; tuberculosis of the spinal column, 39 ; tuberculosis of the joints, 19 ; tuberculosis of other organs 35 ; acute disseminated tuberculosis, 8 I ; and chronic disseminated tuberculosis, 25.
(xva) All Forms of Tuberculosis.-(a) General. A tabulation of all the tubercular, diseases from which deaths occurred in 1925 will be found in Bulletin No. 43 of "Aus: tralian Demography." The total number of deaths therefrom in 1925 was 3.424, viz,, 1,977 males and 1,447 females.
(b) Ages at Death. The following table shows the ages of these $\mathbf{3 , 4 2 4}$ persons :TUBERCULAR DISEASES.—DEATHS IN AGE-GROUPS, AUSTRALIA, 1925.

(c) Occupations at Death, Males. A tabulation of occupations of the males who died from tubercular diseases in 1925 is given hereunder :-

OCCUPATIONS OF MALES WHO DIED FROM TUBERCULAR DISEASESAUSTRALIA, 1925.

| Occupations. | No. of Male Deaths | Occupations. | No. of Male Deaths |
| :---: | :---: | :---: | :---: |
| Professional Class |  | Industrial Class- |  |
| Government, Defence, Law | 52 | Art and Mechanic Productions | 91 |
| Others. . | 62 | Textiles and Fibrous Materials | 55 |
|  |  | Food and Drinks | 19 |
| Domestic Cliass- |  | Animal and Vegetable Sub- |  |
| Board and Lodging | 33 | stances .. $\quad .$. | 8 |
| Others | 29 | Metals and Minerals | 46 |
|  |  | Fuel, Light and Energy | 17 |
| Commercial Class- |  | Building and Construction | 83 |
| Property and Finance | 23 | Others .. . | 430 |
| Art, Mechanic and Textile Products | 19 | -Agricultural, Pastoral, |  |
| Foods' and Drinks | 51 | Mining, etc., Class- |  |
| Animal and Vegetable Sub- |  | Agricultural | 150 |
| stances . . $\quad \cdots$ | 5 | Pastoral .. | 39 |
| Fuel, Light and Metal | 5 | Mining and Quarrying | 161 |
| Merchants and Dealers | 34 | Others | 12 |
| Others | 150 |  |  |
|  |  | Independent Means | 37 |
| Transport and Communication Class- |  | Dependents | 137 |
| Railway Traffic | 42 |  |  |
| Road and Tramway Traffic | 65 | Occupation Not Stated | 47 |
| Sea and River Traffic | 57 18 |  |  |
| Others ... .. | 18 | - Total Male Deaths | 1,977 |

(d) Length of Residence in Australia. The length of residence in Australia of persons who died from tubercular diseases in 1925 is given in the next table.

| LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED FROM TUBERCULAR DISEASES, 1925. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Length of Residence in Australia. | Male. | Fem. | Total. | Length of Residence in Australia. | Male. | Fem. | Total. |
| Born in Australia | 1,413 | 1,251 | 2,664 | Resident 10 years \& under. 15 | 94 | 43 | 137 |
| Resident under 1 year | 1, 15 | 1,29 | 2, 17 | " 15 ", ${ }^{\text {b }}$ | -50 | 15 | 65 |
| , 1 year | 7 | 7 | 14 | " 20 ', over | 257 | 79 | 336 |
| ", 2 years | 14 | 8 | 29 | Iength of residence not stated | 79 | 16 | 95 |
| ", 30 | 15 | 8 6 | 23 16 | Tength of |  |  |  |
|  | 22 | 13 | 16- | Total Deaths | 1,977 | 1,447 | 3,424 |

(e) Death Rates. The preceding table and the table on page 937 show that, among persons who have lived less than five years in Australia, 722 deaths occurred, and of these 92, or 12.7 per cent., were due to tubercular diseases.

In order to show 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 :-

TUBERCULOSIS (ALL FORMS).-DEATH RATES (a) AND PROPORTION OF TOTAL DEATHS, 1925.

| State. |  | Death Rates (a) from Tuberculosis. |  |  | Proportion per 10,000 Deaths from all Causes. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Males. | Females. | Total. | Males. | Females. | Total. |
| New South Wales | . | 59 | 42 | 51 | 569 | 533 | 553 |
| Victoria . |  | 73 | 58 | 66 | 707 | 674 | 692 |
| Queensland | . | 48 | 36 | 42 | 469 | 489 | 477 |
| South Australia | . | 72 | 68 | 70 | 737 | 800 | 765 |
| Western Australia | . | 99 | 55 | 78 | 904 | 803 | 869 |
| Tasmania.. | $\cdots$ | 66 | 62 | 64 | 648 | 721 | 681 |
| Northern Territory | $\therefore$ | 387 | 91 | 299 | 1,961 | 909 | 1,774 |
| Australia | . | 65 | 50 | 58 | 635 | 618 | 628 |

(a) Number of deaths from tuberculosis per 100,000 of mean population.
(f) Death Rates, Various Countries. The following comparative table for various countries shows that Australia occupies a very favourable position as regards the death rate from this disease.

TUBERCULOSIS.-DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

| Country. | Year. | Respiratory System. | $\begin{gathered} \text { All } \\ \text { Forms. } \end{gathered}$ | Country. | Year. | Respiratory System. | $\begin{gathered} \text { All } \\ \text { Forms. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Rumania | 1914 | 40 | (a) | Netherlands | 1923 | 79 | 105 |
| Queensland | 1925 | 40 | 42 | Great Britain | 1923 | 84 | 109 |
| Union of South |  |  |  | Scotland | 1925 | 76 | 110 |
| Africa (Whites) | 1925 | 38 | 45 | Egypt | 1925 | 92 | 115 |
| New South Wales | 1925 | 45 | 51 | Quebec (Canada) | 1923 | 97 | 118 |
| New Zealand | 1925 | 43 | 51 | Germany | 1924 | 101 | 120 |
| Australia | 1925 | 50 | 58 | Prussia | 1924 | (a) | 122 |
| Ontario (Canada) | 1925 | 49 | 59 | Sweden | 1925 | (a) | 142 |
| Tasmania . | 1925 | 52 | 64 | Italy . | 1923 | 110 | 143 |
| Canada (exclusive |  |  |  | Irish Free State | 1924 | 117 | 145 |
| of Quebec) .. | 1925 | 55 | 66 | Spain | 1923 | 126 | 155 |
| Victoria .. | 1925 | 56 | 66 | Switzerland | 1922 | 119 | 157 |
| South Australia | 1925 | 59 | 70 | Northern Ireland | 1925 | 125 | 167 |
| Ceylon | 1925 | 66 | 72 | France | 1920 | 151 | 185 |
| Western Australia | 1925 | 70 | 78 | Japan | 1924 | 135 | 194 |
| United States (Reg- |  |  |  | Czecho-Slovakia | 1925 | 173 | 195 |
| istration Area) | 1924 | 79 | 90 | Norway | 1921 | 157 | 198 |
| New York State | 1925 | 82 | 91 | Austria | 1922 | (a) | 218 |
| Denmark | 1925 | 85 | 100 | Chile | 1923 | 223 | 232 |
| Belgium | 1924 | 71 | 103 | Finland | 1925 | 221 | 254 |
| England and Wales | 1925 | 83 | 104 | Hungary $\begin{aligned} & \text { Bulgaria }\end{aligned}$ | 1925 1925 | 224 | 255 346 |

(a) Not available.
(xvi) Cancer and other Malignant Tumours.-(a) General. The number of deaths from cancer has increased continuously to 5,477 in 1925 . Of the deaths registered in 1925, 2,932 were of males, viz., 1,162 in New South Wales, 802 in Victoria, 408 in Queensland, 269 in South Australia, 176 in Western Australia, 109 in Tasmania, and 6 in the Northern Territory; while 2,545 were of females, viz., 971 in New South Wales, 841 in Victoria, 284 in Queensland, 237 in South Australia, 124 in Western Australia, and 88 in Tasmania.
(b) Type and Seat of Disease. Tables showing the type and seat of disease, in conjunction with age, and also with conjugal condition, of the persons dying from cancer in 1925 will be found in Bulletin No. 43 of "Australian Demography." A summary regarding type and seat of disease for the year 1925 is given hereunder :-
deaths from cancer.-TYPE and seat of disease, australia, 1925.

| Type of Disease. | Males. | Females | Persons. | Seat of Diseasc. | Males. | Females | Persons. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Carcinoma | 1,716 | 1,562 | 3,278 | Stomach and liver. | 1,252 | 714 | 1,966 |
| Cancer | 519 | 456 | 975 | Peritoneum, intes. |  |  |  |
| Malignant disease | 264 | 243 | 507 | tines and rectum | 442 | 403 | 845 |
| Sarcoma $\therefore$ | 192 | 133 | 325 | Female genital |  |  |  |
| Epithelioma | 138 | 59 | 197 | organs |  | 520 | 520 |
| Malignant tumour | 57 | 51 | 108 | Breast .. |  | 444 | 444 |
| Rodent ulcer | 34 | 23 | 57 | Buccal cavity | 303 | 23 | 326 |
| Neoplasm | 7 | 5 | 12 | Skin | 146 | 72 | 218 |
| Scirrhus... | 1 | 11 | 12 | Other organs | 789 | 369 | 1,158 |
| Hypernephroma | 4 | 2 | 6 |  |  |  |  |
| Total Deaths | 2,932 | 2,545 | 5,477 | Total Deaths | 2,932 | 2,545 | 5,477 |

(c) Ages at Death. The ages of the 5,477 persons who died from cancer in 1925 are given in the following table, which shows that while the ages below 35 are not 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 :-

DEATHS FROM CANCER.-AGES, AUSTRALIA, 1925.

| Ages. |  |  |  | Males. | Females | Total. |  |  |  |  | Males. | Females | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Under 15 years |  |  |  | 26 | 22 | 48 |  | ears | unde |  | 540 | 373 | 913 |
| 15 years and under 20 |  |  |  | 10 | 4 | 14 | 65 |  |  | 70 | 513 | 341 | 854 |
| 2025 |  |  | 25 | 15 | 3 | 18 | 70 | " | " | 75 | 427 | 279 | 706 |
|  | " |  | 30 | 15 | 22 | 37 | 75 | " | " | 80 | 260 | 219 | 479 |
| 30 | " |  | 35 | 20 | 32 | 52 | 80 | " | " |  | 137 | 139 | 276 |
| 35 | " |  | 40 | 53 | 104 | 157 |  | years | over |  | 70 | 61 | 131 |
| 40 | " |  | 45 | 81 | 142 | 223 |  | pecif |  |  |  | .. |  |
| 45 | " |  | 50 | 152 | 198 | 350 |  |  |  |  |  |  |  |
| $50$ |  |  | 55 | 246 | 274 | 520 |  |  |  |  |  |  |  |
|  | " |  | -60 | _367 | . 332 | .. 699 |  | Tota | aths |  | 2,932 | 2,545 | 5,477 |

(d) Occupations. A tabulation in summarized form of occupations of the males who died from cancer in 1925 is given hereunder:-

OCCUPATION OF MALES WHO DIED FROM CANCER.-AUSTRALIA, 1925.

| Occupation. |  |  |
| :---: | :---: | :---: | :---: | ---: |

(e) Death Rates. The following table shows that the death rate for males is higher than that for females in every State with the exception of Victoria.

DEATHS FROM CANCER.-RATES(a) AND PROPORTIONS, 1925.

(a) Number of deaths from cancer per $\mathbf{1 0 0 , 0 0 0}$ of mean population.
(f) Comparison with Tuberculosis. In recent years the death rate from tuberculosis has shown a tendency to decrease, while that from cancer has displayed an almost continuous increase. The table hereunder shows that for each of the years under review, the death rate for cancer has been greater than that from tuberculosis, the excess varying from 19 per 100,000 persons in 1921 to 34 in 1925. During the whole period the mortality of both sexes from cancer was always greater than that from tuberculosis.

TUBERCULOSIS AND CANCER.-DEATH RATES(a) AUSTRALIA, 1921 TO 1925.

| Year. |  | Death Rate (a) from Tuberculosis. |  |  | Death Rate (a) from Cancer. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Males. | Females. | Total. | Males. | Female ${ }^{\text {a }}$ | Total. |
| 1921 | . | 78 | 56 | 68 | 88 | 87 | 87 |
| 1922 | - | 71 | 51 | 61 | 93 | 88 | 91 |
| 1923 | . | 71 | 53 | 62 | 91 | 88 | 89 |
| 1924 |  | 71 | 51 | 61 | 96 | 91 | 93 |
| 1925 | . | 65 | 50 | 58 | 97 | 88 | 92 |

(a) Number of deaths per 100,000 of mean population.
(g) Deaths, Various Countries. The following table shows the Australian death rate from cancer in comparison with that for other countries :-

CANCER.-DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

| Country. | Year. | Rate. | Country. | Year. | Rate. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Ceylon | 1925 | 8 | Australia . | 1925 | 92 |
| Rumania | 1914 | 13 | United States (Regis- |  |  |
| Greece | 1921 | 18 | tration Area) | 1924 | 92 |
| Egypt | 1925 | 25 | Irish Free State | 1924 | 92 |
| Chile | 1923 | 40 | Prussia | 1924 | 94 |
| Quebec (Canada) | 1923 | 57 | Ontario (Canada) ... | 1925 | 95 |
| Spain | 1923 | 63 | Czecho-Slovakia | 1925 | 99 |
| Bulgaria | 1925 | 64 | Norway | 1921 | 105 |
| Japan | 1924 | 68 | Germany . . | 1924 | 108 |
| Italy $\quad .$. | 1923 | 71 | Netherlands | 1923 . | 113 |
| Union of South Africa |  |  | Northern Ireland | 1925 | 115 |
| (Whites) | 1925 | 73 | New York State | 1925 | 117 |
| Uruguay | 1923 | 74 | Sweden . . | 1922 | 123 |
| France | 1920 | 78 | Great Britain | 1923 | 127 |
| Belgium | 1924 | 81 | Austria | 1922 | 127 |
| Canada (exclusive of |  |  | Switzerland | 1922 | 130 |
| Quebec) . | 1925 | 81 | England and Wales.. | 1925 | 134 |
| Hungary | 1925 | 83 | Scotland .. . | 1925 | 136 |
| New Zealand | 1925 | 91 | Denmark | 1925 | 140 |

The fifth issue of this Year Book contains on pages 230, et seq., a paper dealing, inter alia, with the incidence of cancer in Australia.
(xvii) Meningitis. The deaths during 1925 from meningitis numbered 237, of which 86 occurred in New South Wales, 62 in Victoria, 39 in Queensland, 33 in South Australia, 10 in Western Australia, 5 in Tasmania, and 2 in the Northern Territory.
(xviii) Cerebral Hcemorrhage, Embolism and Softening of the Brain. The deaths under this heading have increased in number during the period under review. The figures for 1925 are made up as follows:-Cerebral hæmorrhage and apoplexy, 1,278 males and 1,291 females; cerebral embolism, 191 males, 211 females; softening of the brain, 33 males and 34 females.
(xix) Diseases of the Heart. The number of deaths in 1925 was 7,486, viz., 4,226 males and 3,260 females ; of the 7,486 deaths 33 were attributed to pericarditis, 395 to endocarditis and acute myocarditis, 306 to angina pectoris, and 6,752 to other diseases of the heart. Of these deaths, New South Wales contributed 1,747 males and 1,304 females ; Victoria, 1,139 males and 1,050 females ; Queensland, 621 males and 381 females; South Australia, 303 males and 277 females; Western Australia, 244 males and 129 females; Tasmania, 165 males and 118 females; Northern Territory, 6 males and 1 female; and Federal Capital Territory, 1 male. The death rates and proportions per 10,000 deaths in 1925 were as follows:-
death rates (a) from diseases of the heart and proportion of 10,000 TOTAL DEATHS, AUSTRALIA, 1925.

| State or Territory. | Death Rates (a) from Diseases of the Heart. |  |  | Proportion of 10,000 Deaths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females. | Total. |
| New South Wales | 151 | 117 | 134 | 1,463 | 1,469 | 1,465 |
| Victoria .. | 137 | 113 | 131 | 1,327 | 1,447 | 1,382 |
| Queensland | 138 | 95 | 118 | 1,356 | 1,286 | 1,328 |
| South Australia | 109 | 104 | 107 | 1,110 | 1,231 | 1,165 |
| Western Australia | 124 | 76 | 101 | 1,131 | 1,114 | 1,125 |
| Tasmania | 155 | 110 | 133 | 1,526 | 1,290 | 1,418 |
| Northern Territory | 232 | 91 | 190 | 1,176 | 909 | 1,129 |
| Federal Capital Territory | 33 | . . | 21 | 1,111 | . . | 833 |
| Australia | 140 | 112 | 126 | 1,358 | 1,391 | 1,372 |

(a) Number of deaths from Diseases of the Heart per 100,000 of mean population.
(xx) Acute Bronchitis. Deaths from bronchitis are classified under the following headings :-(a) Acute, (b) chronic, (c) unspecified, under five years of age, and (d) unspecified, five years and over. For the purpose of the abridged classification, (a) and (c) are treated as "acute," and (b) and (d) as "chronic" bronchitis. Acute bronchitis caused 386 deaths in 1921, 283 in 1922, 351 in 1923, 300 in 1924, and 260 in 1925, viz., 145 males and 115 females.
(xxi) Chronic Bronchitis. The deaths from this cause in 1925 numbered 741, viz., 419 males and 322 females.
(xxii) Pneumonia. The deaths from pneumonia during 1925 were 2,218-1,345 males and 873 females-which is 5 per cent. below the average for the previous four years.
(xxiii) Other Diseases of the Respiratory System. Deaths under this heading in 1921 numbered 2,304; in 1922, 2,208; in 1923, 2,901; in 1924, 2,742; and in 1925, 2,522. The total for 1925 is made up as follows, viz. :-Diseases of the nasal fossae, 14 ; diseases of the larynx, 39 ; broncho-pneumonia, 1,399; capillary bronchitis, 19 ; pleurisy, 194 ; pulmonary congestion and apoplexy, 279 ; gangrene of the lungs, 15 ; asthma, 165 ; pulmonary emphysema, 17 ; chronic interstitial pneumonia, 311 ; other diseases of the respiratory system (tuberculosis excepted), 70.
(xxiv) Diseases of the Stomach (Cancer excepted). In 1925 this heading includes ulcer of the stomach, 130 males, 62 females; ulcer of the duodenum, 86 males, 18 females; and other diseases of the stomach (cancer excepted), 90 males, 89 females ; a total of 475.
(x×va) Diarrhcea and Enteritis (Children under two years only). The number of deaths due to these causes fell from 2,589 in 1921 to 1,386 in 1925. During 1925, 8,427 children died before reaching their second birthday, and of these, 1,386 , or 16.4 per cent., died from diarrhea and enteritis. The ages of children dying from these diseases during the first year of life will be found on page 933.

The number of deaths (under 2 years of age), the death rates, and proportions of 10,000 deaths due to diarrhœa and enteritis are given below:-

DEATHS, DEATH RATES( $a$ ), ETC., DIARRHEEA AND ENTERITIS (UNDER 2 Years of age).-AUSTRALIA, 1925.

| State. | Number of Deaths from Infantile Diarrhœa and Enteritis. |  |  | Death Rates (a) from Infantile Diarrhoea and Enteritis. |  |  | Proportion of $\mathbf{1 0 , 0 0 0}$ Deaths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females. | Total. | Males. | Females. | Total. |
| New South Wales | 308 | 228 | 536 | 27 | 20 | 24 | 258 | 257 | 257 |
| Victoria.. | 272 | 210 | 482 | 33 | 25 | 29 | 317 | 289 | 304 |
| Queensland | 74 | 56 | 130 | 16 | 14 | 15 | 162 | 189 | 172 |
| South Australia | 38 | 34 | 72 | 14 | 13 | 13 | 139 | 151 | 145 |
| Western Australia | 87 | 49 | 136 | 44 | 29 | 37 | 403 | 423 | 410 |
| Tasmania | 15 | 15 | 30 | 14 | 14 | 14 | 139 | 164 | 150 |
| Australia | 794 | 592 | 1,386. | 26 | 20 | 23 | 255 | 253 | 254 |

(a) Number of deaths from these diseases per 100,000 of mean population.
( xxvb ) Diarrheca and Enteritis ( 2 years and over). As in the case of infants the number of deaths from the same causes in older ages shows a very material decline, having fallen from 985 in 1921 to 442 in 1925.
(xxvi) Appendicitis and Typhlitis. Deaths under this heading numbered 351 in 1921, 402 in 1922, 436 in 1923, 408 in 1924, and 438 in 1925 ; the total for the last year included 281 males and 157 females.
(xxvii) Hernia, Intestinal Obstruction. The deaths under this heading have not varied greatly from year to year, the number registered in 1925 being 564, viz., hernia, 141, and intestinal obstruction, 423.
(xxviii) Cirrhosis of the Liver. The deaths from this cause during 1925 numbered 312, and include 31 deaths from alooholic cirrhosis.
(xxix) Acute and Chronic Nephritis. The number of deaths attributable to these diseases shows a considerable increase. In 1921 there were 2,139; in 1922, 2,333 ; in 1923, 2,460; in 1924, 2,893; and in 1925, 2,978, viz., 1,749 males and 1,229 females. Of the deaths registered in 1925, 213 were ascribed to acute nephritis, and 2,765 to chronic nephritis. New South Wales was responsible for 1,112 deaths; Victoria for 877 ; Queensland for 507; South Australia for 265; Western Australia for 136; Tasmania for 78; Northern Territory, 1; and Federal Capital Territory, 2.
(xxx) Non-Cancerous Tumours and other Diseases of the Female Genital Organs. Deaths in 1921 numbered 166; in 1922, 169; in 1923, 174; in 1924, 199; and in 1925, 165. Included in the 165 deaths in 1925 were the following:-Cysts, etc., of the ovary, 30 ; salpingitis and pelvic abscess, 57 ; benign tumours of the uterus, 48 ; uterine hæmorrhage (non-puerperal), 7; other diseases of the female genital organs, 23.
(xxxi) Puerperal Septiccemia (Puerperal Fever). The number of deaths from puerperal septicæmia during 1925 was less than in 1924 , being 236 , or 1.74 to every 1,000 live births. The corresponding rates during the preceding five years were:-1920, 1.83 ; 1921, 1.53 ; 1922, 1.43 ; 1923, 1.72 ; and $1924,1.96$. A statement is appended which shows the death rate per 1,000 live births from puerperal causes in various countries.

CHILDBIRTH.-DEATHS PER 1,000 LIVE BIRTHS, VARIOUS COUNTRIES.

| Country. |  | Year. | Rates per 1,000 Live Births from- |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Puerperal Sepsis. | Other Puerperal Causes. | All Puerperal Causes. |
| Sweden |  |  | 1922 | 0.97 | 1.31 | 2.28 |
| Netherlands |  | 1923 | 0.62 | 1.71 | 2.33 |
| Italy | . . | 1923 | 1.06 | 1.63 | 2.69 |
| Japan |  | 1924 | 1.26 | 1.88 | 3.14 |
| Czecho-Slovakia | $\cdots \quad .$. | 1925 | 1.40 | 1.86 | 3.26 |
| England and Wale |  | 1925 | 1.56 | 2.52 | 4.08 |
| Great Britain |  | 1923 | 1.44 | 2.89 | 4.33 |
| Victoria |  | 1925 | 1.28 | 3.09 | 4.37 |
| Northern Ireland | .. .- | 1925 | 1.55 | 2.89 | 4.44 |
| Spain .. | . . . | 1923 | 2.77 | 1.78 | 4.55 |
| New Zealand |  | 1925 | 1.49 | 3.16 | 4.65 |
| Irish Free State |  | 1924 | 1.94 | 2.84 | 4.78 |
| Germany | . | 1924 | 2.76 | 2.35 | 5.11 |
| New York State | . . . | 1925 | 1.50 | 3.88 | 5.38 |
| Ontario (Canada) |  | 1925 | 1.50 | 4.10 | 5.60 |
| Union of South Afr | ca (Whites) | 1925 | 1.82 | 3.80 | 5.62 |
| Australia . | . .- | 1925 | 1.74 | 3.90 | 5.64 |
| Canada (excluding | Quebec) | 1925 | 1.70 | 4.00 | 5.70 |
| Bulgaria, . |  | 1925 | 2.60 | 3.10 | 5.70 |
| Tasmania . . |  | 1925 | 1.92 | 3.83 | 5.75 |
| Belgium . . | $\because$ | 1924 | 3.12 | 2.68 | 5.80 |
| Prussia . | . . . | 1924 | 3.18 | 2.65 | 5.83 |
| Queensland | $\cdots$ | 1925 | 1.58 | 4.39 | 5.97 |
| New South Wales |  | 1925 | 1.96 | 4.03 | 5.99 |
| Scotland .. | $\cdots$ | 1925 | 1.64 | 4.52 | 6.16 |
| Western Australia |  | 1925 | 1.71 | 4.76 | 6.47 |
| United States | .. $\quad$. | 1924 | 2.40 | 4.10 | 6.50 |
| Chile |  | 1923 | 1.86 | 4.90 | 6.76 |
| South Australia |  | 1925 | 2.36 | 4.45 | 6.81 |
| Ceylon .. |  | 1925 | 7.10 | 11.40 | 18.50 |

(xxxii) Other Puerperal Accidents of Pregnancy and Confinement. The deaths under this heading in 1921 numbered 435 ; in 1922, 425 ; in 1923, 458 ; in 1924, 473 ; and in 1925, 530. Included in the 530 deaths in 1925 were the following:-Accidents of pregnancy, 98 ; puerperal hæmorrhage, 92 ; other accidents of childbirth, 98 ; puerperal phlegmasia alba dolens, embolus, sudden death, 57 ; puerperal albuminuria and convulsions, 176 ; deaths following childbirth, 9.
(xxxiia) All Puerperal Causes. The 766 deaths in 1925 under the two preceding headings correspond to a death rate of 26 per 100,000 females. It may be expressed in other terms by stating that 1 of every 175 women confined in 1925 died from puerperal causes. The corresponding ratios for married women were 1 of every 181, and for single women 1 of every 110. More detailed information will be found in a series of tablea in Bulletin No. 43 "Australian Demography."

The ages of the mothers who died varied from 14 to 49 years as shown hereunder :DEATHS FROM PUERPERAL CAUSES.-AGES OF MOTHERS, AUSTRALIA, 1925.

| Age at Death. | Married Women. | $\begin{gathered} \text { Single } \\ \text { Women. } \end{gathered}$ | Total. | Age at De | eath. | Married Women. | Single Wnmen. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 14 years ${ }^{\text {- }}$ | - | 1 | 1 | 33 years |  | 25 | 1 | 26 |
| 15 " | $\ldots$ | 2 | 2 | 34 ,, | . | 33 | $\bullet$ | 33 |
| 16 " |  | 2 | 2 | 35 ", |  | 35 |  | 35 |
| 17 , | 2 | 5 | 7 | 36 :, |  | 33 | 2 | 35 |
| 18 ", | 3 | 3 | 6 | 37 " |  | 32 |  | 32 |
| 19 ," | 13 | 5 | 18 | 38 | $\cdots$ | 28 | 1 | 29 |
| 20 ", | 11 | 9 | 20 | 39 ", |  | 34 |  | 34 |
| 21 | 15 | 1 | 16 | 40 ," |  | 16 | $\cdots$ | 16 |
| 22 " | 22 | 2 | 24 | 41. ", |  | 18 | . | 18 |
| 23 | 21 | 2 | 23 | 42 , | $\cdots$ | 26 | $\cdots$ | 26 |
| 24 :, | 34 | 2 | 36 | 43 ,, |  | 10 | $\cdots$ | 10 |
| 25 " | 35 | 3 | 38 | 44 ", |  | 6 | $\cdots$ | 6 |
| 26 " | 30 |  | 30 | 45 ", |  | 7 | . | 7 |
| 27 , | 31 | 2 | 33 | 46 , |  | 1 | . | 1 |
| 28 " | 28 | 5 | 33 | 47 :, |  | 1 |  | 1 |
| 29 ," | 42 | . . | 42 | 48 , |  | 1 | . | 1 |
| 30 | 44 | 4 | 48 | 49 |  | 1 |  | 1 |
| 31 " | 37 | 2 | 39 |  |  |  |  |  |
| 32 , | 34 | 3 | 37 | Total D | eaths | 709 | 57 | 766 |

The total number of children left by the married mothers was 1,969 , an average of 2.8 children per mother.

Thirty-nine of the mothers who died had been married less than one year, 114 between one and two years, and 62 between two and three years. The duration of marriage ranged up to 30 years, apart from 4 cases in which the date of marriage was not stated. A tabulation, distinguishing the ages at marriage, will be found in Bulletin No. 43 "Australian Demography," which also includes a table, showing in combination the duration of marriage and previous issue.
(xxxiii) Congenital Malfnrmations, Debility, and Premature Birth. The deaths under this heading in 1925 numbered 3,688 , of which 3,644 were of children under one year of age. Over 50 per cent. of the deaths of children under one year. of age were due to these causes. The number of deaths for 1925 is given in the following table :-

DEATHS FROM CONGENITAL DEBILITY, ETC., AND MALFORMATIONS, 1925.

| State or Territory. | Congenital Malformations. |  |  | Congenital Debility, Icterus, Sclerema. |  |  | Premature Birth, and Injury at Birth. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females. | Total. | Males. | Females. | Total. |
| New South Wales | 133 | 100 | 233 | 143 | 111 | 254 | 529 | 437 | 966 |
| Victoria | 81 | 81 | 162 | 137 | 97 | 234 | 389 | 271 | 660 |
| Queensland | 49 | 45 | 94 | 52 | 38 | 90 | 173 | 141 | 314 |
| South Australia | 26 | 17 | 43 | 47 | 28 | 75 | 103 | 87 | 190 |
| Western Australia | 14 | 17 | 31 | 35 | 14 | 49 | 87 | 53 | 140 |
| Tasmania | 11 | 12 | 23 | 21 | 17 | 38 | 53 | 38 | 91 |
| Northern Territory | .. | . . | . . | . . | .. | . . | 1 | . |  |
| Fed. Cap. Territory |  |  | . | . |  |  | 1 |  |  |
| Australia | 314 | 272 | 586 | 435 | 305 | 740 | 1,335 | 1,027 | 2,362 |
| Number of deaths under one year per 1,000 births | 4.27 | 3.70 | 3.99 | 6.25 | 4.60 | 5.45 | 19.20 | 15.51 | 17.40 |

[^1]females; 392 in South Australia, viz., 201 males and 191 females; 173 in Western Australia, viz., 105 males and 68 females; 165 in Tasmania, viz., 63 males and 102 females; and 9 in the Northern Territory, viz., 8 males and 1 female.

Of the males whose deaths were described as due to senility, 8 were stated to be over 100 , while 8 females also were aged 100 years or over.
(xxxva) Violent Deaths, Homicides. Deaths from homicide in 1925 pumbered 83, this figure being slightly less than the average for the previous four years.
(xxxvb) Other Accidental Deaths. Deaths from accidents in 1925 numbered 3,134, as compared with an average of 2,685 for the previous four years. Of the deaths in 1925, 1,193 occurred in New South Wales; 836 in Victoria; 500 in Queensland ; 267 in South

- Australia; 242 in Western Australia; 98 in Tasmania; 6 in Northern Territory ; and 2 in the Federal Capital Territory.

The following table shows the various kinds of violent deaths, including homicides, recorded in Australia for the year 1925 :-

DEATHS FROM EXTERNAL VIOLENCE.—AUSTRALIA, 1925.

| Cause of Death. | Males. | Females. | Persons. |
| :---: | :---: | :---: | :---: |
| Poisoning by food .. .. | 13 | 7 | 20 |
| Venomous bites and stings | 10 | 2 | 12 |
| Other acute poisonings (gas excepted) | 21 | 16 | 37 |
| Conflagration .. .. | 8 | 4 | 12 |
| Burns (conflagration excepted) | 129 | 172 | 301 |
| Accidental mechanical suffocation | 31 | 23 | 54 |
| Absorption of irrespirable or poisonous gas | 26 | 7 | 33 |
| Accidental drowning .. . | 438 | 83 | 521 |
| Traumatism by firearms | 100 | 6 | 106 |
| Traumatism by cutting or piercing instruments | 3 | 1 | 4 |
| Traumatism by fall : . .. | 291 | 107 | 398 |
| Traumatism in mines or quarries | 78 |  | 78 |
| Traumatism by machines .. | 35 | 1 | 36 |
| Traumatism by other crushing- |  |  |  |
| Railway accidents . . . | 167 | 25 | 192 |
| Tramway accidents . | 58 | 15 | 73 |
| Automobile accidents | 419 | 98 | 517 |
| Injuries by other vehicles | 217 | 28 | 245 |
| Other crushings .. | 161 | 13 | 174 |
| Injuries by animals (not poisoning) | 27 | 2 | 29 |
| Wounds of war .. .. | 13 | .. | 13 |
| Starvation, thirst, fatigue | 21 | 2 | 23 |
| Excessive cold -. | 3 |  | 3 |
| Effects of heat | 19 | 14 | 33 |
| Lightning . . | 4 | 1 | 5 |
| Other accidental electric shocks. . | 26 | 3 | 29 |
| Homicide by firearms .. | 11 | 5 | 16 |
| Homicide by cutting or piercing instruments | 7 | 3 | 10 |
| Homicide by other means .. .. | 23 | 19 | 42 |
| Infanticide (murder of children under 1 year) | 7 | 8 | 15 |
| Fractures (cause not specified) .. .. | 32 | 29 | 61 |
| Other external violence (cause specified). | 73 | 24 | 97 |
| Other external violence (cause unspecified) | 19 | 9 | 28 |
| Total Deaths | 2,490 | 727 | 3,217 |
| Death Rate per 100,000 of mean population | 82 | 25 | 54 |

(xxxvi) Suicide. (a) General. Deaths by suicide in 1925 showed an increase on the figures for each of the previous four years, the number in 1921 being 621 , viz., 510 males, and 111 females; in 1922, 533, viz., 441 males and 92 females; in 1923, 599, viz., 492 males and 107 females; in 1924, 653, viz., 534 males and 119 females; and in 1925, 700, viz., 569 males and 131 females.
(b) Modes Adopted. The modes adopted by persons who committed suicide in the years 1921 to 1925 were as follows :-

SUICIDES, MODES ADOPTED.-AUSTRALIA, 1921 T0 1925.

| Mode of Death. | Males. |  | Females. |  | Persons. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Total of 4 years, 1921-24. | 1925. | $\begin{aligned} & \text { Total } \\ & \text { of } 4 \text { years, } \\ & \text { 1921-24. } \end{aligned}$ | 1825. | Total of 4 years, 1921-24. | 1925. |
| Poisoning . . | 405 | 114 | 185 | 57 | 590 | 171 |
| Poisonous gas .. | 19 | 10 | 14 | 4 | 33 | 14 |
| Hanging or Strangulation | 293 | 86 | 53 | 19 | 346 | 105 |
| Drowning . . | 200 | 54 | 88 | 23 | 288 | 77 |
| Firearms . . | 595 | 169 | 30 | 5 | 625 | 174 |
| Cutting or piercing instruments | 367 | 107 | 33 | 14 | 400 | 121 |
| Jumping from a high place . . | 28 | 9 | 10 | 2 | 38 | 11 |
| Crushing ${ }^{\text {a }}$ | 41 | 12 | 11 | 4 | 52 | 16 |
| Other Modes | 29 | 8 | 5 | 3 | 34 | 11 |
| Total | 1,977 | 569 | 429 | 131 | 2,406 | 700 |

(c) Death Rates. The death rates from suicide and the proportion per 10,000 of total deaths are given in the following table :-

SUICIDE_-DEATHS, DEATH RATES( $a$ ), AND PROPORTION OF TOTAL DEATHS, 1925.

| State or Territory. | Number of Deaths. |  |  | Death Rates (a) from Suicide. |  |  | Proportion of 10,000 Total Deaths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Total. | Males. | Females. | Total. | Males. | Females. | Total. |
| New South Wales | 212 | 55 | 267 | 18 | 5 | 12 | 178 | 62 | 128 |
| Victoria. | 161 | 36 | 197 | 19 | 4 | 12 | 188 | 50 | 124 |
| Queensland | 81 | 15 | 96 | 18 | 4 | 11 | 177 | 51 | 127 |
| South Australia | 48 | 14 | 62 | 17 | 5 | 11 | 176 | 62 | 125 |
| Western Australia | 47 | 5 | 52 | 24 | 3 | 14 | 218 | 43 | 157 |
| Tasmania .. | 17 | 6 | 23 | 16 | 6 | 11 | 157 | 66 | 115 |
| Northern Territory | 3 | . . | 3 | 116 | . . | 81 | 588 | . . | 484 |
| Fed. Cap. Territory |  |  | . | . $\cdot$ |  | . | $\ldots$ | . | . |
| Australia .. | 569 | 131 | 700 | 19 | 5 | 12 | 183 | 56 | 128 |

(a) Number of deaths from suicide per 100,000 of mean population.
(d) Ages. From the following table, which shows the ages of the persons who committed suicide in 1925, it will be seen that both extreme youth and extreme old age are represented :-

AGES OF PERSONS WHO COMMITTED SUICIDE.-AUSTRALIA, 1925.

| Ages. |  |  |  | M. | F. | Total. | Ag |  |  | M. | F. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 10 years and under 15 |  |  |  | 2 |  | 2 | 60 years an | nd | 65 | 47 | 5 | 52 |
| 15 | , | " | 20 | 13 | 6 | 19 | 65 " | " | 70 | 39 | 2 | 41 |
| 20 | , | , | 25 | 38 | 9 | 47 | 70 , | , | 75 | 30 | 3 | 33 |
| 25 | ", | ," | 30 | 54 | 13 | 67 | 75 ," | ", | 80 | 10 |  | 10 |
| 30 | ," | , | 35 | 58 | 22 | 80 | 80 ", | ", | 85 | 4 | 2 | . 6 |
| 35 | ", | ", | 40 | 53 | 21 | 74 | 85 ", | " | 90 | 3 |  | 3 |
| 40 | ," | ," | 45 | 57 | 15 | 72 | 90 " | ", | 95 | 2 | $\cdots$ | 2 |
| 45 |  |  | 50 | 54 | 12 | 66 | Not stated |  |  | 3 | 1 | 4 |
| 50 | " |  | 55 | 50 | 9 | 59 |  |  |  |  |  |  |
| 55 | " | , | 60 | 52 | 11 | 63 | Total De |  | $\cdots$ | 569 | 131 | 700 |

(e) Occupations of Males. The next table gives the occupations of the males who committed suicide in 1925 :-

OCCUPATIONS OF MALES WHO COMMITTED SUICIDE.-AUSTRALIA, 1925.

| Occupation. | Deaths. | Occupation. | Deaths. |
| :---: | :---: | :---: | :---: |
| Professional Class- |  | Industrial Class- |  |
| Government, Defence, Law . . | 8. | Art and Mechanic Productions | 27 |
| Others .. | 16 | Textiles and Fibrous Materials | 6 |
| Domestic Class- |  | Food and Drinks | 6 |
| Board and Lodging | 12 | Animal and Vegetable Sub- |  |
| Others .. | 5 | stances . . | 2 |
| Commercial Class- |  | Metals and Minerals | 9 |
| Property and Finance | 5 | Fuel, Light and Energy | 2 |
| Art, Mechanic and Textile |  | Building and Construction | 23 |
| Products | 5 | Others | 154 |
| Food and Drinks | 22 | Agricultural, Pastoral |  |
| Animal and Vegetable Substances | 3 | Mining, etc., ClassAgricultural | 90 |
| Merchants and Dealers | 15 | Pastoral . . | 34 |
| Others .. .. .. | 34 | Mining and Quarrying | 16 |
| Transport and Communication Class- |  | Others . $\quad$ Mndependent Means ${ }^{\text {a }}$ | 6 5 |
| Railways | 10 | Dependents | 3 |
| Roads and Trams | 14 | Occupation not stated | 27 |
| Sea and Rivers | 6 |  |  |
| Others | 4 | Total | 569 |

(f) Frequency. The rates show a fairly general increase from 99.07 per million during the years 1871-75 to a maximum of 131.17 per million for the period 1911-15, after which there was a decline, the rate in 1925 standing at 118.02.

SUICIDES.--AUSTRALIA, 1871-75 TO 1925.

| Period. | Number of Suicides. |  |  | Suicides per One Million of Persons Living. Average Annual Rate. |  |  | Suicides of Females to 100 Suicides of Males. Based on- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Persons. | Males. | Females. | Persons. | A bsolute 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 |
| 1922 | 441 | 92 | 533 | 155.78 | 33.61 | 95.72 | 20.86 | 21.58 |
| 1923 | 492 | 107 | 599 | 169.81 | 38.33 | 105.29 | 21.75 | 22.57 |
| 1924 | 534 | 119 | 653 | 180.36 | 41.81 | 112.46 | 22.28 | 23.18 |
| 1925 | 569 | 131 | 700 | 187.89 | 45.13 | 118.02 | 23.02 | 24.02 |

[^2](xxxvii) Other Diseases. The number of causes included under this heading is very large, amounting to no less than 81 of the items shown in the detailed classification, and deaths were recorded under each of these with the exception of the following :-Glanders, rabies, soft chancre, pellagra, other diseases of digestive system, and amputation. The total number of deaths under "other diseases" in 1921 was 8,279 , viz., 4,668 males and 3,611 females ; in 1922, 7,856 , viz., 4,488 males and 3,368 females; in $1923,8,203$, viz., 4,712 males and 3,491 females; in 1924, 8,400 , viz., 4,821 males and 3,579 females; and in 1925, 7,924 , viz., 4,640 males and 3,284 females. Some of the diseases included here account for very considerable numbers of deaths. Particulars for 1925 are shown in the following table :-

DEATHS FROM " OTHER DISEASES."——AUSTRALIA, 1925.

| Causes. | M. | F. | Total. | Causes. | M. | $F$. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Anthrax | , |  | 1 | Embolism and Thrombosis |  |  |  |
| Tetanus.. | 70 | 15 | 85 | (not cerebral)... | 51 | 49 | 100 |
| Mycoses | 6 | 1 | 7 | Diseases of the Veins ... | 10 | 18 | 28 |
| Syphilis | 88 | 38 | 126 | Diseases of the Lymphatic |  |  |  |
| Gonococcus Infection .. | 2 |  | 2 | System $\because$ | 4 | 5 | 9 |
| Purulent Infection and Septjcæmia <br> . $\qquad$ | 60 | 67 | 127 | Hemorrhage (without speci- fled cause) | 8 | 1 | 9 |
| Other Infectious Diseases .. | 3 | . | 1 | Other Diseases of the Circu- |  |  |  |
| Other Tumours (Tumours of the female genital organs excepted) | 38 | 45 | 83 | latory System .. <br> Diseases of the Mouth and its Associated Organs | 7 20 | 8 10 | 15 30 |
| Acute Rheumatic Fever | 116 | 120 | 236 | Diseases of the Pharynx .. | 23 | 30 | 53 |
| Chronic Rheumatism and |  |  |  | Diseases of the Esophagus | 9 | 2 | 11 |
| Gout . . | 70 | 79 | 149 | Ankylostomiasis .. | 1 | 1 | 2 |
| Scurvy .. | 2 | 2 | 4 | Intestinal Parasites ... | 9 | 6 | 15 |
| Beri-beri | 8 |  | 8 | Other Diseases of the In- |  |  |  |
| Rickets. | 5 | 6 | 11 |  | 39 | 14 | 53 |
| Diabetes | 273 | 404 | 677 | Acute Yellow Atrophy of the |  |  |  |
| Anmmia, Chlorosis | 208 | 225 | 433 | Inver .. | 4 | 7 | 11 |
| Diseases of the Pituitary Gland | 8 | 6 | 14 | Hydatid Tumours of the I.iver -. | 20 | 15 | 35 |
| Exophthaimic Goitre | 7 | 71 | 78 | Biliary Calculi $\quad$. | 49 | 103 | 152 |
| Other Diseases of the Thyroid |  |  |  | Other Diseases of the Liver | 93 | 109 | 202 |
| Glands $\quad .$. | 9 | 39 | 48 | Diseases of the Pancreas . | 29 | 28 | 57 |
| Diseases of the Parathyroid Glands | 3 | 2 | 5 | Peritonitis (without specifled cause) | 56 | 56 | 112 |
| Diseases of the Thymus |  |  |  | Chyluria $\quad \therefore \quad \therefore$ | 1 | . | , |
| Gland | 10 | 9 | 19 | Other Diseases of the Kid- |  |  |  |
| Addison's Disease | 14 | 8 | 22 | neys and their Adnexa.. | 138 | 98 | 236 |
| Diseases of the Spleen | 5 | 7 | 12 | Calculi of Urinary Passages | 37 | 22 | 68 |
| Lreucæmia $\quad .$. | 55 | 42 | 97 | Diseases of the Bladder .. | 102 | 14 | 116 |
| Hodgkin's Disease | 43 | 16 | 59 | Other Diseases of the Urethra, |  |  |  |
| Acute and Chronic Alcoholism | 136 | 24 | 160 | Urinary Absoesses, etc. . . | 37 |  | 37 |
| Chronic Lead Poisoning .. | 19 | 3 | 22 | Diseases of the Prostate ... | 322 | . | 322 |
| Chronic Organic Poisonings | 7 |  | 7 | Non-venereal Diseases of the |  |  |  |
| Other General Diseases .. | 43 | 50 | 93 | Male Genital Organs | 8 | . | 8 |
| Encephalitis .- | 82 | 55 | 137 | Non-puerperal Diseases of |  |  |  |
| Locomotor Ataxia $\quad$. | 72 | 13 | 85 | the Breast .. .. |  | 4 | 4 |
| Other Diseases of the Spinal Cord . . | 102 | 77 | 179 | $\begin{array}{lll}\text { Gangrene } & \ldots & \ldots \\ \text { Furuncle } & \ldots & \ldots\end{array}$ | 54 24 | 28 | 82 |
| Paralysis without specified | 102 | 7 | 179 | Phlegmon, Acute ${ }^{\text {A }}$ hscess ${ }^{\text {. }}$ | 55 | 42 | 97 |
| cause | 196 | 186 | 382 | Other Diseases of the Skin |  |  |  |
| General Paralysis of the Insane | 134 | 20 | 154 | and Adnexa ${ }_{\text {a }}$ Non-tuberculous Diseases of | 33 | 21 | 54 |
| Other Forms of Mental Alienation | 59 | 74 | 133 | the Bones | 73 | 36 | 109 |
| Epilepsy ${ }^{\circ} \quad \cdots$ | 113 | 81 | 194 | (Tuberculosis and Rheu- |  |  |  |
| Convulsions (non-puerperal) | 3 | 7 | 10 | matism excepted) .. | 9 | 8 | 27 |
| Convulsions of Children under 5 years of age.. | 89 | 57 |  | Other Diseases of the Organs of Locomotion | 1 |  | 1 |
| Chorea .. | 2 | 2 | 14 | Other Diseases pecullar to |  |  |  |
| Neuralgia and Neuritis | 12 | 19 | 31 | Infancy .. .. | 257 | 178 | 435 |
| Other Diseases of the Nervous System | 235 | 172 | 407 | Lack of Care (Infants) .. | 2 | 11 | 18 |
| Diseases of the Eye | 2 | 2 | 4 |  |  |  |  |
| Diseases of the Ear | 55 | 28 | 83 | Total Deaths | 4,640 | 3,284 | 7,024 |
| Diseases of the Arteries, Aneurism, Atheroma | 690 | 275 | 865 |  |  |  |  |

(xxxviii) Unspecified or Ill-defined Diseases. The number of cases included ander this heading was 721 in 1921, 665 in 1922, 691 in 1923, 735 in 1924, and 648 in 1925, of which 442 were males and 206 females. The detailed classification places these illdefined diseases under two headings-sudden death, including syncope; and unspecified or ill-defined causes, of which the following are specimens:-Heart failure, asthenia, anasarca, atrophy, exhaustion, dropsy, ascites, and general cedema, etc. In 1925, the number of deaths which came under the first of these categories was 63 , and under the second, 585 . It is inevitable that cases will occur regarding which the available information is insufficient to permit of a clear definition of the fatal disease in the certificate of death. In the majority of cases, however, there is little doubt that more satisfactory certificates might have been given.
16. Causes of Deaths in Classes.-The figures in the preceding sub-sections relate to specific causes of death, and are of greater value in medical statistics than a mere grouping under general headings. The classification under fifteen general headings adopted by the compilers of the International Nomenclature is, however, shown in the following table, together with the death rates and percentages on total deaths pertaining to those classes :-
dEATHS, dEATH RATES (a), ETC., IN CLASSES.-AUSTRALIA, 1925.

| Class. | Total Deaths. |  |  | Death Rates. (a) |  |  | Proportion of $\mathbf{1 0 , 0 0 0}$ Deaths. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | M. | F. | Total. | M. | F. | Total. | M. | F. | Total. |
| 1. Epidemic, Endemic, and Infectious Diseases | 3,196 | 2,478 | 5,674 | 106 | 85 | 96 | 1,026 | 1,058 | 1,041 |
| 2. General diseases not included | 4,011 | 3,703 | 7,714 | 132 | 128 | 130 | 1,288 | 1,580 | 1,415 |
| 3. Diseases of the Nervous System and of the Organs of Sense | 2,801 |  |  |  |  |  |  |  |  |
| 4. Diseases of the Circulatory System | 2,801 | 2,423 | 8,224 | 162. | 83 | 88 | 899 | 1,034 | 957 |
| 5. Diseases of the Respiratory System | 3,384 | 2,357 | 5,741 | 112 | 81 | 19 | 1,087 | 1,006 | 1,560 |
| 6. Diseases of the Digestive Organs | 2,456 | 1,894 | 4,350 | 81 | 65 | 73 | 1789 | 1,808 | ${ }^{1,089}$ |
| 7. Diseases of the Genito-Urinary System and Adnexa .. |  |  |  |  |  |  |  |  |  |
| 8. Puerperal Condition ${ }^{\text {Systa }}$ and | 2,394 | 1,532 | 3,926 | 79 | 53 | 66 | 769 | 654 | 719 |
| 8. Puerperal Condition ${ }^{\text {9. }}$ Diseases of the Skin and of the |  | 766 | 766 | . | 20 | 13 |  | 327 | 140 |
| 9. Diseases of the Skin and of the Cellular Tissue | 166 | 104 | 270 | 5 | 4 | 4 | 53 | 44 | 49 |
| 10. Diseases of the Bones and Organs of Locomotion |  |  |  |  | 2 | 2 | 27 | 19 | 3 |
| 11. Malformations | 314 | 272 | 586 | 10 | 9 | 10 | 101 | 116 | 107 |
| 12. Early Infancy.. | 2,029 | 1,521 | 3,550 | 67 | 52 | 60 | 652 | 649 | 651 |
| 13. Old Age .. | 1,903 | 1,660 | 3,563 | 63 | 57 | 80 | 611 | 708 | 652 |
| 14. External Causes | 3,059 | 858 | 3,917 | 101 | 30 | 66 | 983 | 366 | 718 |
| 15. Ill-defined Diseases | ${ }^{442}$ | 206 | 648 | 15 | 7 | 11 | 142 | 88 | 119 |
| Total | 31,134 | 23,434 | 54,568 | 1,028 | 807 | 920 | 10,000 | 10,000 | 10,000 |

(a) Number of deaths per 100,000 of mean population.
17. Ages at Death of Married Males and Females, and Issue.-Bulletin No. 43 "Australian Demography" contains a number of tables showing 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 Australia in 1925. A summary of
those tables is given hereunder. Deaths of married males in 1925 numbered 17,118, and of married females, 15,293 . The tabulations which follow deal, however, with only 16,620 males and 14,984 females, the information in the remaining 807 cases being incomplete. The total number of children in the families of the 16,620 males was 79,190 ; and of the 14,984 females, 74,506 . The average number of children is shown for various age-groups in the following table:-

## AGES AT DEATH OF MARRIED MALES AND FEMALES, AND AVERAGE ISSUE.AUSTRALIA, 1925.

| Age at Death. | Average Family of Males. | Average Family of Females. | Age at Death. | Average Family of Males. | A verage Family of Females. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Under 20 years | 0.50 | 0.51 | 70 to 74 years | 5.69 | 5.99 |
| 20 to 24 years | 0.61 | 0.97 | 75 , 79 " | 6.27 | 6.42 |
| 25 , 29 , | 1.32 | 1.64 | 80 " 84 | 6.60 | 6.70 |
| 30 ", 34 | 1.86 | 2.49 | 85 " 89 | 6.88 | 6.65 |
| 35 " 39 , | 2.50 | 3.14 | 90 ," 94 " | 7.01 | 6.91 |
| 40 " 44 " | 2.99 | 3.44 | 95 ", 99 " | 6.98 | 6.74 |
| 45 , 49 | 3.40 | 3.67 | 100 years and up- |  |  |
| 50 " 54 | 3.72 | 3.81 | wards .. .. | 7.12 | 6.00 |
| 55 " 59 ", | 4.05 | 4.26 | Age unspecified | .. | 9.00 |
| 60 , 64 ," | 4.56 | 4.89 |  |  |  |
| 65 " 69 " | 5.21 | 5.73 | All ages | 4.76 | 4.97 |

The figures 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 279 . The totals are shown in the following table :-

ISSUE OF MARRIED MALES AND FEMALES.-AUSTRALIA, 1925.


These figures show a masculinity in the issue of 2.29 , which is in harmony with the experience of the birth statistics.
18. Ages at Marriage of Deceased Males and Females, and Issue.-While the table giving the average families of married males and females naturally shows an increase in the averages with advancing ages at death, the following table, which gives the average families of males and females according to the age at marriage of the deceased parents, shows a corresponding decrease in the averages as the age at marriage advances :-

## AGES AT MARRIAGE OF DECEASED MALES AND FEMALES, AND AVERAGE ISSUE.-AUSTRALIA, 1925.

| Age at Marriage. | Average Family of Males. | A verage Family of Females. | Age at Marriage. | Average Family of Males. | Average <br> Family of <br> Females. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Under 20 years | 6.63 | 6.95 | 50 to 54 years | 1.75 | $\ldots$ |
| 20 to 24 | 5.72 | 5.45 | 55 , 59 | 1.03 |  |
| 25 , 29 | 4.98 | 3.92 | 60 , 64 | 0.73 |  |
| 30 ,, 34 | 4.17 | 2.56 | 65 years and upwards | 1.03 |  |
| 35 ,, 39 | 3.42 | 1.28 | Age unspecified | 4.90 | 5.30 |
| 40 ,, 44 | 2.82 | 0.46 |  |  |  |
| 45 ,. 49 | 1.90 | 0.04 | All ages | 4.76 | 4.97 |

19. Duration of Life after Marriage of Males and Fenales.-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 containing the results do not, however, lend themselves to condensation, and are, therefore, omitted here. They will be found in Bulletin No. 43 of "Australian Demography."
20. Birthplaces of Deceased. Married Males and Females, and Issue.-The following table shows the birthplaces of married males and females who died in 1925, together with their average issue. No generalizations can, of course, be made in those cases in which the number of deaths was small, but where the figures are comparatively large, as in the case of natives of Australia, differences occur between the averages of the individual States, which appear inexplicable on any other ground than that of different age constitution of the locally born population of the various States due to the different dates of the foundation of settlement. Thus, New South Wales and Tasmania, owing to their early settlement, contain a larger number of locally-born inhabitants of advanced ages than Victoria and Queensland, in which colonization was begun almost fifty years after the foundation of New South Wales. It will be noted that the differences occur both in the male and female averages.

## birthplaces of deceased married males and females, and average ISSUE.-AUSTRALIA, 1925.

| Birthplace. | Married Males. |  | Married Females. |  | Birthplace. | Married Males. |  | Married Females. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  | $\begin{aligned} & \dot{g} \\ & \text { 寽 } \\ & \text { E } \end{aligned}$ |  | 器 |  |
| New South Wales | 3,339 | 4.79 | 3,249 | 4.96 | Other European Coun- |  |  |  |  |
| Victoria ${ }^{\text {a }}$ | 3,143 | 4.15 | 2,826 | 4.08 | tries | 84 | 4.17 | 26 | 5.00 |
| Queensland | 618 | 3.98 | 2,896 | 3.98 | British India and |  |  |  |  |
| South Australia | 1,185 | 4.71 | 1,122 | 4.67 | Ceylon | 45 | 5.31 | 18 | 2.66 |
| Western Australia | 138 | 4.41 | 156 | 4.30 | China - | 61 | 3.77 | 2 | 4.00 |
| Tasmanja.. | 656 | 5.16 | 660 | 5.11 | Syria $\quad$ itio Coun | 16 | 4.81 | 5 | 5.20 |
| Northern Territory |  | .. | 1 | 2.00 | Other Asiatic Coun- |  |  |  |  |
| Federal Capital Teriitory | 1 | 4.00 | 2 | 13.00 | $\underset{\text { Union }}{\text { tries }}$ of South | 9 | 3.11 | 2 | 1.50 |
| New Zealand | 135 | 3.36 | 123 | 13.28 | Africa .. .. | 14 | 2.64 | 9 | 5.44 |
| England and Wales | 3,933 | 5.02 | 3,198 | 5.45 | Other African Coun- |  |  |  |  |
| Scotland . . | 1,020 | 5.01 | 784 | 5.60 | tries . - | 6 | 4.83 | 6 | 2.83 |
| Ireland | 1,282 | 5.70 | 1,575 | 5.85 | Canada .. . | 33 | 3.91 | 17 | 5.94 |
| Other British Possessions in Europe .. | - 30 | 4.23 | 1,575 20 | 4.25 | United States ${ }^{\text {Other }}$ American | 52 | 4.88 | 23 | 3.52 |
| Denmark .. | 91 | 5.04 | 38 | 4.76 | Countries . . | 17 | 3.88 | 6 | 4.50 |
| France | 37 | 3.59 | 17 | 4.53 | Polynesian Islands | 19 | 3.32 | 4 | 5.25 |
| Germany | 332 | 5.86 | 254 | 6.81 | At Sea .- | 52 | 5.69 | 46 | 5.96 |
| Italy | 67 | 3.67 | 19 | 4.53 | Unspecified . | 41 | 3.44 | 37 | 4.70 |
| Norway | 35 | 4.31 | 9 | 4.78 |  |  |  |  |  |
| Poland | 39 | 4.41 | 9 | 5.44 |  |  |  |  |  |
| Russia | 29 | 3.69 | 15 | 5.27 |  |  |  |  |  |
| Sweden | 61 | 3.34 | 10 | 7.00 | Total . . | 16,620 | $4 \cdot 76$ | 14,984 | 4*97 |



Fxplavation.-The base of each smail square represents an interval of one year for both australia and States, and the vertical height represents 2,000 persons for Australia and 1,000 for the States.

The scale on the left relates to Australia, and that on the right to the States.
The names of the States to which the curves refer are written thereon, and the characters of the lines


Australia, - - - - _. - - Tasmania. - - - - - - - - - .



Explanation.-The base of each small square represents an interval of one year for both Australia and States, and the vertical height represents 1,000 yersons for Australia and 500 for the States.

The scale on the left relates to Australia, and that on the right to the States.
The names of the States to which the curves refer are written thereon, and the lincs used are similar to those for birthe on page 961 .


Explanation.-The base of each small square represents one year's interval, and the vertical height one haif per thousand of the population - the basic line being five per thousand of the population.

## STATE BIRTH-RATE GRAPHS. (See page 965.)

Fxplanation.-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.

STATE DEATH-RATE GRAPHS. (See page 966.)
Explanation.-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.

DEATH RATES-STATES; 1860-1925.

21. Occupations of Deceased Married Males, and Issue.-The following tabulation shows the average issue in combination with the occupation of deceased males.

## OCCUPATIONS OF DECEASED MARRIED MALES AND AVERAGE ISSUE.AUSTRALIA, 1925.

| Occupation. | Deatlis of Married Males. | A verage Family. | Occupation. | Deaths of Married Males. | A verage Family. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Professional Class- |  |  | Industmad Class- |  |  |
| Government, Defence, and | 426 | 4.11 | Art and Mechanic Products | 791 | 4.39 |
| Law $\quad$ Others $\quad \cdots$ |  |  | Textiles and librous Materials | 363 | 4.71 |
| Others .- | 609 | 3.80 | Food and Drinks Animal and Vegetable Sü- | 243 | 4.81 |
| Domestic Class- |  |  | stances .. | 55 | 5.60 |
| Board and Lodging | 323 | 3.72 | Metal and Minerals | 464 | 5.03 |
| Others .- . | 256 | 3.76 | Fuel, Light, and Energy | 81 | 3.70 |
|  |  |  | Building and Construction | 1,106 | 4.77 |
| Commercial Class- |  |  | Others .. | 2,937 | 4.83 |
| Property and Finance | 261 | 3.91 |  |  |  |
| Art, Mechanic and Textile Products |  |  | Agricultidal, Pastoral, |  |  |
| Prood and Drinks | 156 458 | 3.80 | Mining, bTe, Class- |  |  |
| Animal and Vegetable Sub- | 45 | 4.32 | $\begin{array}{lll}\text { Agriculural } \\ \text { Pastoral } & \cdots & \cdots\end{array}$ | -,613 | 5.98 5.28 |
| stances $\ldots$ | 93 | 4.25 | Mining and Quarrying | 823 | 5.05 |
| Fuel, Light and Metals | 53 | 4.94 | Others .. | 140 | 4.69 |
| Merchants and Dealers | 467 | 4.23 |  |  |  |
| Others | 777 | 3.40 | Independent Means | 481 | 5.27 |
| Transport and Communica- |  |  | Dependents | 27 | 3.70 |
| tion Class- |  |  |  |  |  |
| Railways | 470 | 4.78 | Occupation not stated | 417 | 4.92 |
| Rosds and 'Trams | 533 | 4.32 |  |  |  |
| Sea and Rivers | 386 | 3.81 |  |  |  |
| Others | 125 | 4.58 | Total | 16,620 | 4.76 |

## § 4. Australian Life Tables.

1. General.-Numerous Australian life tables based on the general populations of States, parts of States or groups of States, have been constructed at various times, as have also certain other tables based on the selected data derived from the experience of Life Assurance Societies, Friendly Societies, and the Public Service. A short account of these tables up to and including those constructed in connexion with the Census of 1911 will be found in Volume I. of the Australian Census of 1911, p. 293. Briefly it may be said that the Australian life tables derived from selected data are somewhat meagre, and out of date, and that of those based on general population, all relating to periods prior to 1911 have been practically superseded by the tables compiled in connexion with the Census of 1911.
2. Life Tables of Census of 1911.-In connexion with the Census of 1911, the mortality of the Australian population for the thirty years 1881 to 1910 inclusive was investigated, separate tables being compiled for each State and for Australia as a whole in respect of each sex for each of the decennial periods 1881-90, 1891-1900, and 1901-10. These compilations represented in all forty-two separate life tables and furnished a comprehensive view of Australian mortality in respect of sex, of time, and of geographical distribution. Full tabulations are given in Volume III. of the Australian Census of 1911,
C.5147.-31
pp. 1209-1278. In addition monetary tables based on the experience for the whole of Australia for the decennium 1901-1910 were published, "Australian Life Tables 1901-10" in 1914, and "Australian Joint Life Tables 1901-10" in 1917.
3. Life Tables of Census of 1921.-In connexion with the Census of 1921 Life Tables have been constructed in respect of each sex for Australia as a whole, and these together with monetary tables on single lives based thereon have been published in Volume II. of the Australian Census of 1921, pp. 1838-1889. Tables in respect of the several States are in course of preparation. For the sake of uniformity with previous tables it would have been desirable to take the decennium 1911-1920 as the basis for deaths recorded, but the exceptional nature of this period owing to the war upheaval of 1914-18 and the influenza epidemic of 1919 rendered the experience of that decennium far from normal. It was consequently decided to base the life tables of the 1921 Census on the population recorded at that Census and the deaths recorded in the three years 1920, 1921 and 1822.
4. Comparisons of Numbers Surviving.-The following table furnishes a comparison of the inumbers of males and females respectively surviving at each age out of 100,000 of each sex born, according to the experience of the different periods specified :-
aUSTRALIAN LIFE TABLES.-COMPARATIVE NUMBER OF SURVIVORS.

| Age. | Male Lives. |  |  |  | Female Iives. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1881-1890. | 1891-1900. | 1901-1910. | 1920-1922. | 1881-1890. | 1891-1900. | 01-1910. | 20-1922 |
| 0 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| 5 | 81,281 | 84,047 | 87,585 | 90,283 | 83,090 | 85,842 | 89,285 | 92,148 |
| 10 | 79,700 | 82,781 | 86,622 | 89,389 | 81,643 | 84,606 | 88,395 | 91,314 |
| 15 | 78,696 | 81,845 | 85,789 | 88,685 | 80,677 | 83,792 | 87,619 | 90,753 |
| 20 | 76,630 | 80, 49 | 84,493 | 87,697 | 79.099 | 82,473 | 86,459 | 89,906 |
| 25 | 73,665 | 78,229 | 82,802 | 86,318 | 76,782 | 80,657 | 84,875 | 88,640 |
| 30 | 70,531 | 75,706 | 80,844 | 84,743 | 73,862 | 78,329 | 82,909 | 87,086 |
| 35 | 67,457 | 72,942 | 78,607 | 82,992 | 70,811 | 75,577 | 80,618 | 85,330 |
| 40 | 64,106 | 69,788 | 75,887 | 80,813 | 67,453 | 72,487 | 78,001 | 83,279 |
| 45 | 60,239 | 66,228 | 72,479 | 78,040 | 63,876 | 69,498 | 75,103 | 81,024 |
| 50 | 55,606 | 62,014 | 68,221 | 74,330 | 59,978 | 66,095 | 71,945 | 78,313 |
| 65 | 50,039 | 56,833 | 63,107 | 69,650 | 55,479 | 61,977 | 68,199 | 74,793 |
| 60 | 43,483 | 50,205 | 56,782 | 63,386 | 50,039 | 56,617 | 63,247 | 70,150 |
| 65 | 36,134 | 41,887 | 48,670 | 54,886 | 43,631 | 49,567 | 56,256 | 63,857 |
| 70 | 27,291 | 32,134 | 38,275 | 44,332 | 34,877 | 40,943 | 46,793 | 54,771 |
| 75 | 18,706 | 22,341 | 25,962 | 31,911 | 25,765 | 30,587 | 34,479 | 42,214 |
| 80 | 10,438 | 12,568 | 14,330 | 18,614 | 15,691 | 18,631 | 21,350 | 27,170 |
| 85 | 4,464 | 5,225 | 5,995 | 7,916 | 6,991 | 8,636 | 10,527 | 13,118 |
| 90 | 1,328 | 1,501 | 1,652 | 2,141 | 2,095 | 2,833 | 3,566 | 4,238 |
| 95 | 243 | 276 | 244 | 306 | 402 | 581 | 687 | 774 |
| 100 | 22 | 25 | 15 | 17 | 42 | 52 | 56 | 62 |

According to the table for $1920-22,54.9$ per cent. of the males born reach age 65 and 18.6 per cent. reach 80 as compared with 36 . 1 per cent. reaching 65 and 10.4 per cent. reaohing 80 according to the table for 1881-1890.

A similar improvement is shown in the case of female lives, as 63.9 per cent. of those born reach age 65 and 27.2 per cent. reach age 80 according to the 1920-22 table, whereas only 43.6 per cent. of those born reached age 65 and 15.7 per cent. reached age 80 , according to the table for 1881-1890.

The greater vitality of female lives is in evidence in all the tables.
5. Comparison of Rates of Mortality.-The next table gives a similar comparison of the rate of mortality per annum experienced at quinquennial ages in each sex for each period. These rates form the bases of the several life tables.

## AUSTRALIAN LIFE TABLES.-COMPARATIVE RATES OF MORTALITY.

| Age. |  | Male | Lives. |  |  | Female | Lives. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1881-1890. | 1891-1900. | 1901-1910. | 1920-1929. | 1881-1890. | 1891-1800. | 1901-1910. | 1920-1922. |
| 0 | 132.48 | 118.40 | 95.10 | 71.32 | 115.72 | 101.39 | 79.53 | 55.68 |
| 5 | 5.37 | 3.98 | 2.81 | 2.52 | 4.98 | 3.88 | 2.58 | 2.40 |
| 10 | 2.53 | 2.25 | 1.79 | 1.56 | 2.39 | 2.00 | 1.59 | 1.27 |
| 15 | 3.72 | 2.90 | 2.55 | 1.84 | 2.99 | 2.48 | 2.19 | 1.44 |
| 20 | 7.14 | 4.73 | 3.70 | 2.84 | 5.28 | 3.88 | 3.29 | 2.52 |
| 25 | 8.62 | 6.17 | 4.48 | 3.55 | 7.02 | 5.33 | 4.30 | 3.27 |
| 30 | 8.67 | 6.98 | 5.19 | 3.90 | 8.28 | 6.52 | 5.19 | 3.87 |
| 35 | 9.51 | 8.21 | 6.33 | 4.75 | 9.01 | 7.98 | 6.17 | 4.50 |
| 40 | 11.29 | 9.69 | 8.16 | 6.17 | 10.40 | 8.37 | 7.18 | 5.24 |
| 45 | 14.24 | 11.83 | 10.83 | 8.44 | 11.67 | 9.17 | 8.07 | 6.06 |
| 50 | 18.61 | 15.22 | 13.95 | 11.58 | 13.99 | 11.42 | 9.56 | 8.08 : |
| 55 | 24.74 | 21.07 | 18.16 | 15.52 | 18.18 | 15.42 | 12.77 | 11.03 . |
| 60 | 32.30 | 30.27 | 25.84 | 24.07 | 23.95 | 22.45 | 19.20 | 15.71 |
| 65 | 45.82 | 44.96 | 38.59 | 35.52 | 35.50 | 32.39 | 29.98 | 24.26 |
| 70 | 64.16 | 60.54 | 61.62 | 52.90 | 52.19 | 46.72 | 47.77 | 40.90 |
| 75 | 92.72 | 90.11 | 96.10 | 83.40 | 76.37 | 76.30 | 77.79 | 68.20 |
| 80 | 136.46 | 138.39 | 137.95 | 133.40 | 124.47 | 122.35 | 113.33 | 112.30 |
| 85 | 188.95 | 196.29 | 197.01 | 195.80 | 187.79 | 174.63 | 164.59 | 172.00 |
| 90 | 256.90 | 258.38 | 277.36 | 283.00 | 253.59 | 239.99 | 242.21 | 251.00 |
| 95 | 337.23 | 334.83 | 381.11 | 384.00 | 324.87 | 325.67 | 341.45 | 347.00 |
| 100 | 473.92 | 481.14 | 525.36 | 530.00 | 452.82 | 501.91 | 500.73 | 501.00 |

Amongst male lives, at most ages under 35 the rate of mortality in 1920-22 was approximately half or was less than half the corresponding rate in 1881-90. Amongst female lives a similar relation held for ages under 40 . From these points onwards the rates of mortality for 1920-22 gradually approach those for 1881-1890, being about 80 per cent. at age 70 and about 90 per cent. at age 75. At age 82 the male rate for 1920-22 becomes greater than that for 1881-1890, and the female rate becomes similarly greater at age 91.
6. Australian Life Tables.-Comparative Expectation of Life $\left({ }^{\circ} e_{x}\right)$.-" The expectation of Life" at any age, or as it might be more correctly expressed, "the average future life time" at such age gives a comprehensive view of the trend and effect of the whole of that portion of the life table beyond the age in question. Thus the expectation of life at date of birth by any life table represents the average number of years of life lived aocording to that table by each person born.

A comparison of such expectations for the several Australian tables is furnished hereunder:-

$$
\text { AUSTRALIAN LIFE TABLES.--EXPECTATION OF LIFE. }\left(\hat{e}_{x}\right)
$$

| Age. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Male Lives. |  |  |  | Female Lives. |  |  |  |
|  | 1881-1890. | 1891-1903 | 1901-1910. | 1920-1922. | 1881-1800. | 1891-1900. | 1901-1910. | 1920-1922 |
| 0 | 47.199 | 51.076 | 55.200 | 59.148 | 50.844 | 54.756 | 58.837 | 63.311 |
| 5 | 52.855 | 55.609 | 57.913 | 60.432 | 55.995 | 58.637 | 60.796 | 63.635 |
| 10 | 48.861 | 51.426 | 53.532 | 56.014 | 51.949 | 54.462 | 56.385 | 59.196 |
| 15 | 44.451 | 46.984 | 49.026 | 51.439 | 47.541 | 49.966 | 51.861 | 54.546 |
| 20 | 40.575 | 42.809 | 44.737 | 46.988 | 43.434 | 45.722 | 47.521 | 50.034 |
| 25 | 37.104 | 38.898 | - 40.599 | 42.697 | 39.667 | 41.692 | 43.360 | 45.712 |
| 30 | 33.642 | 35.110 | 36.520 | 38.444 | 36.133 | 37.855 | 39.327 | 41.482 |
| 35 | 30.061 | 31.344 | 32.486 | 34.201 | 32.582 | 34.140 | 35.371 | 37.283 |
| 40 | 26.499 | 27.645 | 28.557 | 30.053 | 29.077 | 30.488 | 31.473 | 33.138 |
| 45 | 23.035 | 23.994 | 24.778 | 26.028 | 25.564 | 26.691 | 27.589 | 28.990 |
| 50 | 19.740 | 20.450 | 21.163 | 22.196 | 22.060 | 22.933 | 23.688 | 24.903 |
| 55 | 16.649 | 17.077 | 17.670 | 18.514 | 18.640 | 19.285 | 19.847 | 20.952 |
| 60 | 13.774 | 13.988 | 14.348 | 15.082 | 15.387 | 15.863 | 16.195 | 17.166 |
| 65 | 11.056 | 11.252 | 11.306 | 12.014 | 12.268 | 12.749 | 12.879 | 13.597 |
| 70 | 8.815 | 8.900 | 8.670 | 9.261 | 9.698 | 9.892 | 9.955 | 10:412 |
| 75 | 6.715 | 6.698 | 6.580 | 6.870 | 7.237 | 7.367 | 7.586 | 7.733 |
| 80 | 5.106 | 4.997 | 4.960 | 5.001 | 5.272 | 5.486 | 5.731 | 5.611 |
| 85 | 3.864 | 3.785 | 3.654 | 3.622 | 3.897 | 4.121 | 4.188 | 4.058 |
| 90 | 2.306 | 2.908 | 2.639 | 2.598 | 2.975 | 3.068 | 2.990 | 2.911 |
| 95 | 2.157 | 2.159 | 1.883 | 1.864 | 2.252 | 2.177 | 2.095 | 2.072 |
| 100 | 1.315 | 1.293 | 1.180 | 1.170 | 1.373 | 1.233 | 1.240 | 1.240 |

In each table the female expectation of life at date of birth exceeds the male, the excess being 3.645 years in the $1881-1890$ table, 3.680 years in the $1891-1900$ table, 3.637 years in the 1901-1910 table, and 4.163 years in that for 1920-1922. Taking the expectation of life at date of birth as a measure of the life efficiency of those born, it may be said that the experience of 1920-22 indicates a life efficiency about 25 per cent. in excess of that for the period 1881-1890.
7. Comparisons of Rates of Mortality with other Countries.-The next table furnishes a comparison of rates of mortality at decennial ages with certain other countries :-

COMPARISON OF RATES OF MORTALITY ( $1,000 q x$ ).

| Age. | Rate of Mortality per 1,000 per annum at each Age specified. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Australia. | New Zealand. | Union of South Africa. | England and Wales. | U.S.A. | Japan. |
|  | 1920-1922. | 1911-1915. | 1920-1922. | 1910-1912. | 1909-1911. | 1908-1913. |
| Male Lives. |  |  |  |  |  |  |
| 0 | 71.32 | 60.50 | 87.84 | 120.44 | . 124.95 | 160.50 |
| 10 | 1.56 | 1.38 | 2.00 | 1.93 | 2.42 | 3.20 |
| 20 | 2.84 | 2.91 | 3.94 | 3.48 | 5.03 | 8.87 |
| 30 | 3.90 | 3.77 | 4.98 | 4.78 | 6.81 | 7.73 |
| 40 | 6.17 | 6.03 | 8.17 | 8.11 | 10.46 | 9.59 |
| 50 | 11.58 | 10.68 | 13.45 | 14.82 | 15.81 | 16.40 |
| 60 | 24.07 | 21.63 | 25.96 | 30.42 | 31.04 | 32.84 |
| 70 | 52.90 | 49.70 | 56.33 | 64.70 | 62.40 | 69.78 |
| 80 | 133.40 | 135.02 | 119.90 | 142.99 | 135.64 | 145.72 |
| 90 | 283.00 | 292.15 | 235.02 | 273.95 | 253.85 | 305.77 |

COMPARISON OF RATES OF MORTALITY ( $1,000 q_{x}$ )-continued.

| Age. | Rate of Mortallty per 1,000 per annum at each Age specified. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Australia. | New Zealand. | Union of South Africa. | England and | U.S.A. | Japan. |
|  | 1920-1922. | 1911-1915. | 1920-1922. | 1910-1912. | 1909-1911. | 1808-1913. |


| Female Lives. |  |  |  |  |  |  |
| ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 0 | 55.68 | 47.05 | 73.88 | 97.67 | 103.77 | 145.04 |
| 10 | 1.27 | 1.30 | 1.64 | 1.96 | 2.11 | 3.96 |
| 20 | 2.52 | 2.46 | 3.34 | 2.95 | 4.35 | 10.79 |
| 30 | 3.87 | 3.95 | 5.06 | 4.11 | 6.20 | 9.83 |
| 40 | 5.24 | 5.62 | 6.20 | 6.60 | 8.25 | 10.65 |
| 50 | 8.08 | 8.87 | 9.45 | 11.40 | 12.83 | 12.96 |
| 60 | 15.71 | 17.91 | 18.66. | 23.10 | 26.13 | 24.69 |
| 70 | 40.90 | 44.60 | 45.64 | 52.59 | 56.79 | 56.56 |
| 80 | 112.30 | 113.06 | 119.99 | 124.19 | 125.66 | 124.10 |
| 90 | 251.00 | 234.21 | 238.34 | 238.26 | 245.38 | 275.30 |

In view of the marked improvement with time shown in the successive Australian tables, the comparisons here made do not furnish reliable evidence of the relative mortality rates of the countries except in the case of Australia and South Africa on the one hand, and of England, U.S.A. and Japan on the other. New Zealand in point of time occupies a position between these two sets. The close similarity at all ages except the earliest between Australia and New Zealand is striking, and suggests that a New Zealand table for 1920-22 would show much better results than the corresponding table for Australia.
8. Comparisons of Expectation of Life with Other Countries.-Corresponding comparisons of expectation of life are furnished hereunder :-

COMPARISONS OF EXPECTATION OF LIFE ( $\dot{e}_{x}$ ).

| Age. | Expectation of Life at Age specified. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Australia. | New Zealand. | Union of South Africa. | England and Wales. | U.S.A. | Japan. |
|  | 1920-1922. | 1911-1915. | 1920-1922. | 1910-1912. | 1909-1911. | 1908-1913. |
| Male Lives. |  |  |  |  |  |  |
| 0 | 59.1 | 61.0 | 55.6 | 51.5 | 49.9 | 44.3 |
| 10 | 56.0 | 56.5 | 54.0 | 53.1 | 51.1 | 48.8 |
| 20 | 47.0 | 47.6 | 45.3 | 44.2 | 42.5 | 41.1 |
| 30 | 38.4 | 39.0 | 37.1 | 35.8 | 34.7 | 34.3 |
| 40 | 30.1 | 30.7 | 29.2 | 27.7 | 27.3 | 26.8 |
| 50 | 22.2 | 22.8 | 21.9 | 20.3 | 20.3 | 19.6 |
| 60 | 15.1 | 15.5 | 15.1 | 13.8 | 14.0 | 13.3 |
| 70 | 9.3 | 9.3 | 9.5 | 8.5 | 8.8 | 8.3 |
| 80 | 5.0 | 5.0 | 5.6 | 4.9 | 5.1 | 4.7 |
| 90 | 2.6 | 2.5 | 3.1 | 2.9 | 3.0 | 2.4 |
| Female Lives. |  |  |  |  |  |  |
| 0 | 63.3 | 63.5 | 59.2 | 55.4 | 53.2 | 44.7 |
| 10 | 59.2 | 58.3 | 57.0 | 55.9 | 53.3 | 48.5 |
| 20 | 50.0 | 49.1 | 48.2 | 47.1 | 44.7 | 41.7 |
| 30 | 41.5 | 40.5 | 39.9 | 38.5 | 36.8 | 35.7 |
| 40 | 33.1 | 32.3 | 31.9 | 30.3 | 29.2 | 29.0 |
| 50 | 24.9 | 24.2 | 24.0 | 22.5 | 21.7 | 21.8 |
| 60 | 17.2 | 16.7 | 16.6 | 15.5 | 14.9 | 15.0 |
| 70 | 10.4 | 10.1 | 10.4 | 9.6 | 9.4 | 9.3 |
| 80 | 5.6 | 5.9 | 5.8 | 5.5 | 5.4 | 5.3 |
| 90 | 2.9 | 3.0 | 3.2 | 3.2 | 3.1 | 2.6 |

In comparing the expectations given above, the discrepancies between the dates of the several experiences to which attention has been drawn in paragraph 7 should be borne in mind. The Australian and New Zealand expectations are relatively close in both sexes, the New Zealand results being the better in the case of male lives, while the Australian results are the better in the case of females. From age 50 onwards in both sexes there is marked similarity between the Australian, the New Zealand and the South African results. Similarly from age 50 onwards the results for England and Wales, U.S.A. and Japan are in fair accord. The marked predominance of Australia and New Zealand over the other countries is in the first ten years of life, and in this period New Zealand has a predominance over Australia.

## § 5. Graphical Representation of Vital Statistics.

1. General.-The progressive fluctuations of the numbers of births, marriages, and deaths are important indexes of the economic conditions and social ideals of a community. Graphs have accordingly been prepared which show these fluctuations. It should be remembered, however, that, normally, the increase of births and marriages should be proportional to the growth of population.
2. Graphs of Annual Births, Marriages, and Deaths.-The outstanding features of the graph representing births are:-An almost continuous rise in the numbers from 1860 to 1891 ; a decline till 1898, associated with the commercial crisis of 1891-3; a sharp fall in 1903 which accompanied a severe drought; an uninterrupted increase from 1903 to 1914, the total for 1914 being the highest recorded ; a rapid decline until 1920, the result of war conditions. The figures for the last five years show a tendency to return to normal.

The graph for marriages up to 1914 discloses approximately the same features as that for births-financial crises and droughts having a similar effect. The numbers for 1914 and 1915 showed a considerable increase over previous years. From 1916 to 1918 there was a rapid fall, the numbers being much below those of pre-war years. During 1919 and 1920 the recovery was very rapid, the total for the latter year being the highest ever recorded. The totals for 1921 to 1925 were not so favourable.

The characteristic feature of the graph of deaths is its irregular nature. On the whole, however, there is an increase which is due to the growth of population.
3. Graphs of Annual Births, Marriages, and Death Rates, and Rate of Natural Increase.-The graph of the birth rate indicates a well-marked decline throughout the whole period. This reduction of rate has been subject to fluctuations, there being two periods of arrested decline, viz., from 1877 to 1890 , and from 1903 to 1912.

The variations in the marriage rates, though less abrupt than those in the birth and death rates, have ranged from a minimum of 6.08 per 1,000 which marked the culmination of a commercial depression to a maximum of 9.62 per 1,000 in 1920 .

On the whole, the graph for the death rate furnishes clear evidence of a satisfactory decline during the period. The graph brings into prominence six years in which the rates were very high when compared with adjacent years, viz., $1860,1866,1875,1884$, 1898, and 1919. Epidemics of measles were largely responsible for the high rates in the first five years, while influenza caused the increase during 1919.

The graph of natural increase shows roughly the same variations as that for the birth rate, but the influence of the death rate is indicated by the very low rates of natural increase for 1875 , 1898, and 1919 , which resulted from the exceptionally high death rates of those years.


[^0]:    (a) Thirteen stillborn twins not included.
    (c) Six stillborn twins not included.
    (b) Eight stillborn twins not included.
    (d) Two stillborn twins not included.

[^1]:    (xxxiv) Senility. The deaths ascribed to "old age" prior to 1925 were in excess of those due to infantile debility. In $1925,3,563$ deaths were attributed to this cause as follows:-1,078 occurred in New South Wales, viz., 643 males and 435 females; 1,215 in Victoria, viz., 568 males and 647 females; 531 in Queensland, viz., 315 males and 216

[^2]:    (a) 1,705 inclusive of Western Australian figures.
    (b) 1,984 inclusive of Western Australian figures. (c) $116{ }^{\circ} 49$ inclusive of Western Australian figures.
    (d) $119 \cdot 11$ inclusive of Western Australian figures.

