happening, so that all conscientious workers for sanitary reform will be able to discover at once the direction in which it is most desirable to concentrate attention.

Year by year they will be able to trace the extent to which the rates of mortality due to various causes are falling, and not content with partial success, they will strive towards that ideal which we should ever bear in mind, viz., the complete elimination of all preventable disease.

APPENDIX

A METHOD OF CONSTRUCTING A MORTALITY TABLE

THE PREPARATION OF ANALYSED TABLES.

THE estimated population of England and Wales, and of each of the principal areas, as at the middle of the year 1911, is published in five-yearly age groups up to age 25, then in ten-yearly groups up to age 85, with a final group for ages 85 and upwards.

The deaths are published in five-yearly age-groups up to age 85, with a final group for ages 85 and upwards.

In order to construct a mortality table, the numbers living and dying are required at each age, instead of in groups of ages, and it is necessary, therefore, to make use of some form of mathematical interpolation by means of which the numbers for each age can be estimated from the grouped numbers, which are given by the Registrar-General.

The object of this Appendix is not to explain the theory of interpolation or graduation, but merely to enable anyone to form a mortality table on the lines suggested in the foregoing Chapter.

The method adopted is that known as "Osculatory Interpolation." It has been most clearly explained by Dr. T. B. Sprague (see *Journal of the Institute of Actuaries*, Vol. 22, p. 282), Herr Karup (see Second International Actuarial Congress Transactions, p. 82), and Mr. G. King

v.s.

(see Journal of the Institute of Actuaries, Vol. 41, p. 530).

For those who are interested in higher mathematics, I strongly recommend a perusal of Mr. Geo. King's most interesting paper, but I do not consider it within the scope of this Appendix to attempt any full demonstration. I think, however, that it may be advisable to give the formulæ employed, and to make some few comments thereon, but for those who merely wish to undertake the work of constructing a mortality table in the manner here suggested, it is not absolutely necessary that they should understand these preliminary explanations. In other words, I have given the details of the work at such length that I believe it will be possible for anyone to do the whole of the work without any mathematical appreciation of the reason for the steps employed.

The symbol T_x is used to denote the whole of the population living at a particular age x and all higher ages. Thus, T_{20} represents the numbers living at ages 20, 21, 22, and so on to the oldest age attained.

It will be seen that the Registrar-General's report supplies the data for obtaining T_5 , T_{10} , T_{15} , T_{20} , T_{25} , T_{35} , T_{45} , T_{55} , T_{65} , T_{75} , and T_{85} by merely summing the numbers given in the report, but as the values of T_{30} , T_{40} , T_{50} , T_{60} , and T_{70} are also required, these must be obtained by interpolation. It is possible that in future reports the numbers will be given in five-yearly age-groups throughout and in such circumstances this preliminary interpolation will be obviated. Although this may sacrifice some of the regularity of the rates obtained, it will save a certain amount of work and simplify the method.

It will be noticed that the interpolated value has been obtained for T_{20} , although this can be obtained direct. The reason for this is to obtain a smoother progression.

The value of T_{10} used, however, is the original value, as it is impossible to obtain an interpolated value by the application of the formula.

The method used for obtaining the values of T_{20} , T_{30} , T_{40} , T_{50} , T_{60} and T_{70} is a well-known third difference equation, which may be represented as follows:—

$$\begin{split} T_{20} &= \tfrac{1}{16} \{10 \ (T_{15} + T_{25}) - (T_5 \ + T_{15} + T_{25} + T_{35})\} \\ T_{30} &= \tfrac{1}{16} \{10 \ (T_{25} + T_{35}) - (T_{15} + T_{25} + T_{35} + T_{45})\} \\ T_{40} &= \tfrac{1}{16} \{10 \ (T_{35} + T_{45}) - (T_{25} + T_{35} + T_{45} + T_{55})\} \\ \text{and so on.} \end{split}$$

The rationale of this formula can be readily seen by examining a particular case. Thus, for obtaining T_{20} , we have taken ten times T_{15} and ten times T_{25} , and deducted T_5 , T_{15} , T_{25} , and T_{35} . In other words, we have taken nine times T_{15} and nine times T_{25} , and deducted T_5 and T_{35} . This gives us sixteen values of T_5 , and we have, therefore, divided the result by 16. As would naturally be expected, the greatest weight has been given to the two terms nearest to the interpolated values required.

Having performed the necessary arithmetical work, as explained in the method of construction which follows, we then have a complete series of the values of T_x for each quinquennial age from 0-75. To these values the formula of osculatory interpolation has been applied to obtain the values of T_x for the intermediate ages. For this purpose we require four formulæ, *i.e.*, one for each age between the two quinquennial known values. These formulæ, which apply to each set of four intermediate ages throughout the table, are as follows:—

$$T_{x+1} = (.912 \, T_x + .168 \, T_{x+5}) - (.064 \, T_{x-5} + .016 \, T_{x+10})$$

$$T_{x+2} = (.696 \, T_x + .424 \, T_{x+5}) - (.072 \, T_{x-5} + .048 \, T_{x+10})$$

$$T_{x+3} = (.424 \, T_x + .696 \, T_{x+5}) - (.048 \, T_{x-5} + .072 \, T_{x+10})$$

$$T_{x+4} = (.168 \, T_x + .912 \, T_{x+5}) - (.016 \, T_{x-5} + .064 \, T_{x+10})$$

Applying these formulæ to particular ages we have :—

$$T_{11} = (.912 T_{10} + .168 T_{15}) - (.064 T_5 + .016 T_{20})$$

$$T_{11} = (.696 T_{10} + .424 T_{15}) - (.072 T_5 + .048 T_{20})$$

$$T_{12} = (.696 T_{10} + .424 T_{15}) - (.072 T_5 + .048 T_{20})$$

$$T_{13} = (.424 T_{10} + .696 T_{15}) - (.048 T_5 + .072 T_2)$$

$$T_{14} = (.168 T_{10} + .912 T_{15}) - (.016 T_5 + .064 T_{20})$$

For the next four ages, we have :-

$$T_{16} = (.912 T_{15} + .168 T_{20}) - (.064 T_{10} + .016 T_{25})$$

$$T_{17} = (.696 \, T_{15} + .424 \, T_{20}) - (.072 \, T_{10} + .048 \, T_{25})$$

$$T_{18} = (\cdot 424 \, T_{15} + \cdot 696 \, T_{20}) - (\cdot 048 \, T_{10} + \cdot 072 \, T_{25})$$

$$T_{19} = (\cdot 168 \, T_{15} + \cdot 912 \, T_{20}) - (\cdot 016 \, T_{10} + \cdot 064 \, T_{25})$$

and so on.

It will be seen that T_{11} is built up by taking varying proportions of T_5 , T_{10} , T_{15} and T_{20} ; the greatest weight is given to T_{10} , which is nearest to T_{11} , a smaller weight being given to T_{15} , a still smaller weight to T_5 , while the smallest weight is given to T_{20} , which is the most remote from T_{11} .

It will also be noticed that the sum of the coefficients in each case equals unity, thus for T_{11} we have $(\cdot 912 + \cdot 168) - (\cdot 064 + \cdot 016) = 1$, and for $T_{12} (\cdot 696 + \cdot 424) - (\cdot 072 + \cdot 048) = 1$.

The formulæ given above were obtained by translating Mr. King's third difference formulæ (to which I have already referred) into terms of the original functions. This translation is somewhat similar to the conversion of the ordinary finite difference interpolation formula into the well-known formula of La Grange.

METHOD OF CONSTRUCTION.

In order to explain the modus operandi, it will be convenient to take as an example the male population of England and Wales as given by the Registrar-General in his seventy-fourth annual report.

The first operation is to extract the figures from the Registrar-General's return for the various age-groups 5—10, 10—15, 15—20, 20—25, 25—35, 35—45, 85 and upwards, as set out in column (1) of Schedule A, given on p. 114.

The second operation is to combine the first and second groups and the third and fourth groups respectively, so as to have regular groups each embracing ten ages, and then set these figures out for all the groups in column (2) of Schedule A.

The third operation is to obtain the total population living at any particular age and upwards, and place the results against the corresponding ages in column (3). It is convenient to have a symbol, T_x , to represent these results.

As already explained, the figures given by the Registrar-General in his final age-group are for ages 85 and upwards, viz., 22,775; and, therefore, we have merely to copy these into column (3). In symbols, $T_{85}=22,775$. The male population living between ages 75 and 85 is 184,307, and if this number is added to T_{85} , we obtain T_{75} , that is, 207,082.

Again, the male population living between ages 65 and 75 is 604,220, and, if this number is added to T_{75} , we obtain T_{65} , that is, 811,302.

In exactly the same manner we obtain T_{55} , that is, 1,899,115, and then T_{45} , T_{35} , T_{25} , T_{15} , and, finally, T_{5} , viz., 15,549,567.

The fourth operation is to obtain the figures in column (4), which are denoted by the symbols at the head of the column. This operation merely consists of adding successive groups in column (3) and placing the results in column (4). Thus we add T_{15} and T_{25} , that is, 11,945,199 and 8,779,456, and place the result, viz., 20,724,655, against age 20 in column (4).

The fifth operation is to obtain the figures for column (5) in accordance with the symbols set out at the head of the column. Thus we sum the first four groups of figures in column (3), viz., 15,549,567 + 11,945,199 + 8,779,456 + 5,940,302, and place the result, viz., 42,214,524, opposite age 20 in column (5).

The sixth operation is to obtain the figures for column (6), which we do by multiplying the number against each age in column (4) by 10, and deducting from the result the number against the corresponding age in column (5). Thus at age 20 we have:—

Ten times the number in column (4) = 207,246,550The number in column (5) = 42,214,524

The seventh operation, by means of which we obtain the figures in column (7), merely consists of dividing the number against each age in column (6) by 16, and placing the result in column (7).

It will be noticed that in column (3) are given values of T_5 , T_{15} , T_{25} , T_{35} , etc., and in column (7) values of T_{20} , T_{30} , T_{40} , etc., so that we now have values of T_{15} , T_{20} , T_{25} , T_{30} , and so on at quinquennial intervals up to age 75. We also have the values of T_5 and T_{85} .

The succeeding operations are shown in full in Schedule B. It is only necessary to state that in column (2), T_{10} , which has not previously been used, must now be obtained by adding the numbers for age groups 10 to 15 in Schedule A, column (1), to T_{15} , given in column (3), Schedule A.

In column (9) of Schedule B are given the final results obtained, which represent the graduated numbers of the male population at each age from 10 to 69 inclusive.

I am quite aware that this method for constructing a

mortality table involves a somewhat considerable amount of arithmetical work, but it has the advantage of being confined to work of the very simplest kind. The factors for multiplication in columns (2), (3), (5), and (6) will remain unchanged whatever table of mortality is being constructed, and moreover the figures in columns (3) and (6) have been obtained in columns (2) and (5). Thus, taking column (2), for ages 11, 12, 13, and 14, the factors, viz., $\cdot 912$, $\cdot 696$, $\cdot 424$, and $\cdot 168$, would still be used if we were constructing a table of female mortality, but in that case the values of T_x would, of course, be different.

The next operation is to obtain the graduated numbers of death at each age. The deaths are given in the Registrar General's report for quinquennial age-groups from 5 to 85, and it is not absolutely necessary in this case to prepare a preliminary schedule similar to Schedule A. If this is not done, however, it will be found that the resulting rates of mortality will exhibit some irregularity. It is advisable, therefore, that the deaths should be first combined in the ten-yearly age-groups 5—14, 15—24, 25—34, 35—44, 45—54, 55—64, 65—74, 75—84, and 85 and upwards. Schedule A for the deaths, therefore, will be in precisely the same form as that for the living. In the first column will be the deaths in five-yearly age-groups as given in the Registrar-General's report, starting with group 5—9.

In the second column these numbers will be combined to form ten-yearly age-groups. The other columns will be completed in precisely the same manner as that already explained at length for the living.

Schedule B for the deaths will be in exactly the same form as Schedule B for the living. The interpolated values of T_x for the deaths as obtained in Schedule A are entered in column (1) of Schedule B, and the other columns

are completed in exactly the same way as the corresponding columns for the living, the multiplier shown against each age in Schedule B of the living being used in precisely the same manner.

We have now obtained the numbers living at each age from 10 to 69 inclusive, and also the deaths at the corresponding ages.

The numbers living, however, do not refer to the exact ages, but to mean ages, and in order to obtain the rates of mortality it is, therefore, necessary to make use of the following relationship:—

Rate of mortality per unit at age $x = q_x = \frac{2 d_x}{2 L_x + d_x}$,

where L_x represents the number living at the mean age x as given in the last column of Schedule B of the living, and d_x represents the numbers dying as shown in the last column of the corresponding schedule for deaths.

The actual work of obtaining the values of q_x is given in Schedule C, and it will be noticed that in the last column are given the values of p_x , that is, the probability of living for one year at age x.

The next operation is to calculate the rates of mortality for males aged 0—4. We must first obtain from the Registrar-General's returns the male births during the year for which the rates are to be obtained, and also for the five previous years. As in this case we are obtaining the rates for 1911, we must obtain the births for the years 1906—1911. These are set out in column (2) of Schedule D.

The next operation is to take the figures in column (2) and put them in groups of two, as shown in column (3). Thus, against 1911 we put the births for 1911 and 1910, that is, 448,933 + 457,266 = 906,199.

In column (4) are set out the results obtained by

dividing the figures in column (3) by 2, that is to say, we have the mean of two years' births which we may assume for the purposes of our calculations took place on the central date of the two years, that is, on January 1st.

Thus, 453,099 is the mean of the births for 1910 to 1911, and may be considered as representing a number of children all born on January 1st, 1911, and being those amongst whom, on the average, the deaths registered in 1911 between ages 0 and 1, that is, 63,874, as stated in column (11), have occurred. Similarly, the mean of the births in 1909 and 1910, viz., 461,864, in column (4), may be assumed to have occurred on the average on January 1st, 1910, and, therefore, if we deduct from these the deaths at age 0 to 1 in 1910, viz., 53,155, in column (5), we shall have approximately the survivors at exact age 1 on January 1st, 1911, that is, 408,709, in column (10), amongst whom the deaths between ages 1 and 2, viz., 16,326, in column (11), occurred during the year 1911.

Again, 472,436, in column (4), is the number of births which took place on the average on January 1st, 1909, and, deducting from these the deaths between ages 0 and 1 in 1909, viz., 56,026, in column (5), and the deaths between ages 1 and 2 in 1910, viz., 13,251, in column (6), we have 403,159, which is approximately the number of survivors at exact age 2, amongst whom the deaths between ages 2 and 3, viz., 5,822, in column (11), occurred during the year 1911.

The assumed number of births on January 1st, 1908, is 473,066, in column (4), and from this we deduct 63,594 + 14,146 + 5,020, that is, the deaths between ages 0 and 1 in 1908, the deaths between ages 1 and 2 in 1909, and the deaths between ages 2 and 3 in 1910, and thus obtain 473,066 - 82,760 = 390,306, in column (10), which is the assumed number of survivors at age 3 on

January 1st, 1911, amongst whom the deaths between ages 3 and 4 in 1911, viz., 3,449, in column (11), are assumed to have occurred.

The assumed number of births on January 1st, 1907, is 472,333, in column (4), and from this we deduct the deaths between ages 0 and 1 in 1907, viz., 60,926, the deaths between ages 1 and 2 in 1908, viz., 14,895, the deaths between ages 2 and 3 in 1909, viz., 5,941, and the deaths between ages 3 and 4 in 1910, viz., 2,950. That is to say, we deduct 84,712, in column (9), and so obtain 387,621, in column (10), i.e., the number of the assumed survivors at exact age 4 on January 1st, 1911, amongst whom the 2,386 deaths between ages 4 and 5, in column (11), are assumed to have occurred in 1911.

With this explanation, the figures in columns (5), (6), (7), (8), (9), (10), and (11) will, I think, be easily understood.

Column (12) shows the results of dividing the figures in column (11) by those in column (10), and represents the rates of mortality (the symbol for which is q_x) for ages 0 to 4. That is to say, $q_0 = \cdot 14097$, $q_1 = \cdot 03995$, $q_2 = \cdot 01444$, $q_3 = \cdot 00884$, and $q_4 = \cdot 00616$.

The method of obtaining the rates of mortality amongst infants is due to Professor Pell, of the University of Sydney, and is fully described on p. 264, in Vol. 21, of the Journal of the Institute of Actuaries.

There now only remain to be found the rates of mortality for ages 5, 6, 7, 8, and 9. These, I suggest, should be obtained by means of what is known as graphic graduation. A piece of specially cross-ruled paper should be used, and the values of q_x already obtained for ages 0 to 4 and 10 to 69 should be plotted out in the same manner as shown in the various diagrams in the preceding pages. When these values have been plotted out, the

result will be a curved line with a break at the five ages 5 to 9.

The general progression of the curve must be observed, and the break filled in so as to join up the curved line. The values of q_5 , q_6 , q_7 , q_8 and q_9 can then be read off.

In Schedule E, column (4), are given all values of q_x from age 0 to age 69. In column (3) the values of p_x are set out, these having been obtained from the relationship $p_x = 1 - q_x$.

In column (1) of Schedule E there are set out the values usually referred to as the life column. This is obtained by assuming 100,000 births, and ascertaining the number of survivors at each successive age, by multiplying by the corresponding values of p_r . This column of figures is useful for many purposes, but it will at once be noticed that it enables us to see at a glance what is the probability of living from age 0 to any other age up to age 69. Thus, the probability of living from age 0 to age 50 is $\cdot 64554$.

In Schedule F is given the corresponding mortality table for females in England and Wales in 1911.

In Schedules G and H are given male and female mortality tables for the city of Liverpool in the year 1911.

CONSTRUCTION OF ANALYSED TABLES.

Having obtained all the rates of mortality from age 0 to age 69, and having set them out in graphic form in the manner indicated, we now proceed to analyse these rates by dividing them into the five divisions referred to in Chapter VI., viz.:—

- A. Tuberculosis, including pulmonary tuberculosis, tuberculous meningitis, and other tuberculous diseases.
 - B. Cancer.
 - C. Other diseases of known microbic origin.

D. Infantile complaints. This group is confined to ages under 15, after which it is included in Group E.

E. All other causes of death.

In order to explain the method of procedure, it will be convenient to confine the description to the analysis of the rates of mortality amongst males in England and Wales during 1911.

On p. 313 of the Registrar-General's report will be found the numbers of deaths occurring from various diseases in different age-groups.

Our first division, A, consists of the following causes as set out by the Registrar-General:—

Cause 9. Pulmonary tuberculosis.

- 10. Tuberculous meningitis.
- ,, 11. Other tuberculous diseases.

Division B consists of :--

Cause 12. Cancer, malignant disease.

Division C consists of :—

Cause 1. Enteric fever.

- " 2. Small-pox.
- " 7. Influenza.
- " 8. Erysipelas.
- " 13. Rheumatic fever.
- " 16. Bronchitis.
- , 17. Pneumonia (all forms).
- " 18. Other respiratory diseases.
- " 23. Puerperal fever.

Division D consists of :—

Cause 3. Measles.

- , 4. Scarlet fever.
- 5. Whooping cough.
- " 6. Diphtheria and croup.
- " 19. Diarrhœa, etc.
- " 25. Congenital debility, etc.

Division E consists of the diseases mentioned in Division D after age 15 combined with:—

Cause 14. Meningitis.

- " 15. Organic heart disease.
- , 20. Appendicitis and typhlitis.
- 21. Cirrhosis of liver.
- 21A. Alcoholism.
- , 22. Nephritis and Bright's disease.
- " 24. Parturition, apart from puerperal fever.
- , 26. Violence, apart from suicide.
- 27. Suicide.
- ,, 28. Other defined diseases.
- 29. Causes ill-defined or unknown.

The deaths occurring from each of these thirty causes are given for age-groups 0—1, 1—2, 2—5, 5—15, 15—25, 25—45, and 45—65.

Dealing first with age-group 0—1, it will be found that the following figures are given on p. 313 of the Registrar-General's report.

Group A	Cause	9 10 11			216 d 600 1,047	eaths.
·	, ,,	Tot	tal		1,863	,,
Group B	Cause	12	•	•	<u>13</u>	"
	(Cause	1	•	•		eaths.
	i	2	•	•	1	,,
	,,,	7		•	120	23
	"	8			63	,,
Group C) " } ,,	13	•		[5	,,
Group C	ļ	16	•	•	4,083	,,
) >>	17			4,994	,,
	,,	18	•	•	353	,,
	; ;;	23	•	•	nil	**
		\mathbf{T}	otal	•	9,622	,,

!	Cause	3	•	•	1,527	deaths.
ļ	,,	4		•	42	"
Group D	,,	5	•	•	1,676	"
Group D	,,	6	•	•	128	,,
į	,,	19	•	•	17,552	,,
į	,,,	25	•	•	19,691	"
					40.010	
		То	tal	•	40,616	**
-	Cause	14	•		858	deaths.
	,,	15	•	•	8	,,
	"	20	•	•	2	,,
	,,	21	•	•	4	,,
	,,	21A	. •	•	nil	,,
Group E {	"	22	•	•	74	,,
_	"	24	•	•	nil	,,
	,,	2 6	•	•	847	,,
	,,	27	•	•	nil	,,
	,,	28	•	•	9,832	"
	,,	29	•	•	135	33
		-	. 4			
		Tc	tal	•	11,760	**

The totals given above appear in column (1) of Schedule I, and it will be seen that the deaths from all thirty causes amounted to 63,874.

In column (3) of Schedule I, the rates of mortality from all causes is given, viz., ·1410, which is the rate shown against age 0 in Schedule E.

In order to obtain the rate of mortality at age 0 from the causes in Group A, we have the following relationship:—

 $\begin{pmatrix}
\text{Rate of mortality} \\
\text{from all causes}
\end{pmatrix} \times \frac{\text{Group A deaths}}{\text{Total deaths}} = \begin{pmatrix}
\text{Rate of mortality from} \\
\text{Group A causes}
\end{pmatrix}.$

Translating this into figures we have—

 $\cdot 1410 \times \frac{1863}{63874} = \cdot 0041 = \begin{cases} \text{Rate of mortality per unit} \\ \text{from Group A causes.} \end{cases}$

In the same way we have—

$$\cdot 1410 \times \frac{9622}{63874} = \cdot 0212 = \begin{cases} \text{Rate of mortality per unit} \\ \text{from Group C causes.} \end{cases}$$

 $\cdot 1410 \times \frac{40616}{63874} = \cdot 0897 = \begin{cases} \text{Rate of mortality per unit} \\ \text{from Group D causes.} \end{cases}$ $\cdot 1410 \times \frac{11760}{63874} = \cdot 0260 = \begin{cases} \text{Rate of mortality per unit} \\ \text{from Group E causes.} \end{cases}$

It will be noticed that in Schedule I, column (3), the rate of mortality for Group B causes is given as *nil*, the reason for this being that the number of deaths is so insignificant that the rate shown is less than ·5 per 10,000.

Precisely the same method is used for age-group 1—2, the figures for which are given in Schedule K.

The first two age-groups consist of single ages, but the third group, viz., 2—5, consists of three ages, and here it will be found that the rate of mortality from all causes is taken as the central age of the group, viz., age 3.

By reference to Schedule E, it will be seen that $q_3 = .0088$. We now assume that the following relationship holds good:—

$$\begin{pmatrix} \text{Rate of mortality} \\ \text{from all causes} \\ \text{at age 3} \end{pmatrix} \times \frac{\text{Group A deaths at ages 2-5}}{\text{Total deaths at ages 2-5}} = \begin{pmatrix} \text{Rate of mortality} \\ \text{from Group A} \\ \text{causes at age 3} \end{pmatrix}$$

By reference to Schedule L, column (3), it will be seen that:—

Rate of mortality at age 3 for Group A causes = .0011

One example will suffice to show how these rates were obtained, thus:—

$$\cdot 0088 \times \frac{1520}{11657} = \cdot 0011.$$

The next age-group given by the Registrar-General is for ages 5—15, that is, ten ages. The central age of this group is $9\frac{1}{2}$, but for all practical purposes it will be sufficient to deal with the mortality rate as at age 10.

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From Schedule E it will be seen that the rate of mortality from all causes at age 10 is .0024.

The Registrar-General gives the total number of deaths for this age-group from all causes as 9,985. The numbers of deaths for the five separate groups A, B, C, D and E are given in Schedule M, column (1), and the rates of mortality in column (3) have been obtained in precisely the same manner as those in Schedule L.

The rates of mortality, as given in column (3) of Schedules N, O and P, have all been obtained in the manner already explained, the central ages having been taken as 20, 35, and 55, respectively.

In Diagram 18 it will be seen that separate curves have been drawn for each group of causes, A, B, C, D and E. In order to obtain these, the points for ages 0, 1, 3, 10, 20, 35 and 55 were plotted out and a freehand curve drawn passing through these points, so as to indicate the general nature of the mortality rates.

In column (2) of Schedules I to P the deaths amongst males in Liverpool during 1911 for the five groups of causes A, B, C, D and E are set out. These figures were obtained from p. 357 of the Registrar-General's report, and were dealt with in the same manner as above explained in reference to the figures for England and Wales.

In column (4) of Schedules I to P the rates of mortality from the separate causes are set out, and in column (5) are given the ratios of the Liverpool rates to those for England and Wales.

The figures relating to females, which are given on the lower half of each Schedule I to P, as well as the graphs in Diagrams 24 and 25, were obtained in precisely the same manner as in the case of males.

The methods suggested for sub-dividing the total

rates of mortality from all causes into their component parts, as indicated by the five groups A, B, C, D and E, may be open to some theoretical objections. After careful investigation, however, I am convinced that the rates obtained so closely approximate to those which would be obtained by more elaborate methods, that I have no hesitation in recommending their use for the suggested purposes of comparison.

SCHEDULE A. England and Wales. Population, Males, 1911

							-
	Population living	Downlotion			$T_{x-15} + T_{x-5} +$		1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
æ	Taken from Page 4	in ten-yearly		1. r 5 + 1. r. + 5.	Te+5 + Te+15.	10 × Col. 4 - Col. 5, Col. 9 × 64 - 45.	31 El x a 100
	General's Report.	(7)	(3)	(+)	(5)	(u)	(7)
ಸ	1,852,192	3,604,368	15,549,567				
10 15	1,752,176	3,165,743	11,945,199			960 660 HOF	10 214 509
20	1,506,574	1	0 11 11 12 13	20,724,655	42,214,524	105,052,020	10,01#,001
22 E	2,839,154	2,839,154	0,119,400	14,719,758	30,262,710	116,934,870	7,308,429
8 8 5	2,342,549	2,342,549	5,940,302	9,538,055	20,216,626	75,163,924	4,697,745
3.4 £	1,698,638	1,698,638	3,597,753	5,496,868	12,248,472	42,720,208	2,670,013
0 0 0 0 0	1,087,813	1,087,813	1,899,115	2.710.417	6,515,252	20,588,918	1,286,807
9.00 t	604,220	604,220	811,302	1 018 384	2.940.274	7,243,566	452,723
52.5	184,307	184,307	207,082	229,857			
လ တို့ လို့	22,775	22,775	22,775))) () ()			
90 95							
100							

39),256	347,191	4,935,123	201,010	აშ
40 41 42 43 44	4,697,745 2,720 3,161 2,241),881	422,899 555,863 477,375 265,926	4,697,745 4,465,867 4,239,215 4,018,505 3,804,446	231,878 226,652 220,710 214,059 206,693	40 41 42 43 44
45 46 47 48 4 9	3,597,753),386 L,158 3,736 L,543	331,042 429,396 362,228 196,707	3,597,753 3,398,671 3,206,726 3,021,548 2,842,768	199,082 191,945 185,178 178,780 172,755	45 46 47 48 49
50 51 52 53 54	2,670,013 1,589 1,767 2,650 2,356	250,845 320,805 265,342 139,920	2,670,013 2,503,258 2,342,749 2,188,528 2,040,635	166,755 160,509 154,221 147,893 141,520	50 51 52 53 54
55 56 57 58 59	1,899,115 2,981 3,942 3,414 1,923	183,862 231,183 186,575 94,643	1,899,115 1,764,315 1,636,207 1,514,268 1,397,976	134,800 128,108 121,939 116,292 111,169	55 56 57 58 59
60 61 62 63 64	1,286,807 7,244 1,731 2,596 8,974	128,787 158,467 123,754 59,360	1,286,807 1,181,080 1,081,143 986,518 896,731	105,727 99,937 94,625 89,787 85,429	60 61 62 63 64
65 66 67 68 69	811,302 3,313 9,940 4,910 3,254	85,669 102,590 76,677 33,843	811,302 730,295 654,031 582,410 515,339	81,007 76,264 71,621 67,071 62,616	65 66 67 68 69
70 71 72 73 74	452,723				
75 76 77 78 79	207,082				
80 81 82 83 84					er er e e e e e e e e e e e e e e e e e

SCHEDULE B.

ENGLAND AND WALES. ESTIMATED MALF POPULATION AT 30TH JUNE, 1911.

VDIX

4,697,745

75,163,924

20,216,626

9,538,055

5,940,302

2,342,549

3,597,753

1,698,638

1,899,115

1,087,813

811,302

604,220

2,342,549 1,698,638 1,087,813 604,220 184,307

2,670,013

42,720,208

452,723

7,243,566

2,940,274

1,018,384

229,857

201,082

184,307

22,775

22,775

2,710,417

1,286,807

20,588,918

12,248,472 6,515,252

5,496,868

Age x.	T _x Population aged x and over.			Col. (2) + Col. (3).			Col. (5) + Col. (6).	T _s Col. (4) — Col. (7).	$L_x = T_x - T_{x+1}$ Population living between ages x and $(x+1)$.	Ag x.
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
5 6 7 8 9	15,549,567									50 77 8
10 11 12 13 14	13,697,375	$T_{10} \times .912 = 12,492,006$ $T_{10} \times .696 = 9,533,373$ $T_{10} \times .424 = 5,807,687$ $T_{10} \times .168 = 2,301,159$	$T_{15} \times \cdot 168 = 2,006,793$ $T_{15} \times \cdot 424 = 5,064,764$ $T_{15} \times \cdot 696 = 8,313,859$ $T_{15} \times \cdot 912 = 10,894,021$	14,498,799 14,598,137 14,121,546 13,195,180	$T_5 \times .064 = 995,172$ $T_5 \times .072 = 1,119,569$ $T_5 \times .048 = 746,379$ $T_5 \times .016 = 248,793$	$T_{20} \times \cdot 016 = 165,032$ $T_{20} \times \cdot 048 = 495,096$ $T_{20} \times \cdot 072 = 742,644$ $T_{20} \times \cdot 064 = 660,128$	1,160,204 1,614,665 1,489,023 908,921	13,697,375 13,338,595 12,983,472 12,632,523 12,286,259	358,780 355,123 350,949 346,264 341,060	10 11 12 13 14
15 16 17 18 19	11,945,199	$T_{15} \times .912 = 10,894,021$ $T_{15} \times .696 = 8,313,859$ $T_{15} \times .424 = 5,064,764$ $T_{15} \times .168 = 2,006,793$	$T_{20} \times \cdot 168 = 1,732,836$ $T_{20} \times \cdot 424 = 4,373,349$ $T_{20} \times \cdot 696 = 7,178,893$ $T_{20} \times \cdot 912 = 9,406,826$	12,626,857 12,687,208 12,243,657 11,413,619	$T_{10} \times .064 = 876,632$ $T_{10} \times .072 = 986,211$ $T_{10} \times .048 = 657,474$ $T_{10} \times .016 = 219,158$	$T_{25} \times \cdot 016 = 140,471$ $T_{25} \times \cdot 048 = 421,414$ $T_{25} \times \cdot 072 = 632,121$ $T_{25} \times \cdot 064 = 561,885$	1,017,103 1,407,625 1,289,595 781,043	11,945,199 11,609,754 11,279,583 10,954,062 10,632,576	335,445 330,171 325,521 321,486 318,074	1; 1(1) 1;
20 21 22 23 24	10,314,502	$T_{20} \times .912 = 9,406,826$ $T_{20} \times .696 = 7,178,893$ $T_{20} \times .424 = 4,373,349$ $T_{30} \times .168 = 1,732,836$	$T_{25} \times \cdot 168 = 1,474,949$ $T_{25} \times \cdot 424 = 3,722,489$ $T_{25} \times \cdot 696 = 6,110,501$ $T_{25} \times \cdot 912 = 8,006,864$	10,881,775 10,901,382 10,483,850 9,739,700	$T_{15} \times .064 = 764,493$ $T_{15} \times .072 = 860,054$ $T_{15} \times .048 = 573,370$ $T_{15} \times .016 = 191,123$	$T_{30} \times .016 = 116,935$ $T_{30} \times .048 = 350,805$ $T_{30} \times .072 = 526,207$ $T_{30} \times .064 = 467,739$	881,428 1,210,859 1,099,577 658,862	10,314,502 10,000,347 9,690,523 9,384,273 9,080,838	314,155 309,824 306,250 303,435 301,382	20 22 22 22 22 22
25 26 27 28 29	8,779,456	$T_{25} \times .912 = 8,006,864$ $T_{25} \times .696 = 6,110,501$ $T_{25} \times .424 = 3,722,489$ $T_{25} \times .168 = 1,474,949$	$T_{30} \times \cdot 168 = 1,227,816$ $T_{30} \times \cdot 424 = 3,098,774$ $T_{30} \times \cdot 696 = 5.086,667$ $T_{30} \times \cdot 912 = 6,665,287$	9,234,680 9,209,275 8,809,156 8,140,236	$T_{20} \times .064 = 660,128$ $T_{20} \times .072 = 742,644$ $T_{20} \times .048 = 495,096$ $T_{20} \times .016 = 165,032$	$T_{35} \times .016 = 95,045$ $T_{35} \times .048 = 285,134$ $T_{35} \times .072 = 427,702$ $T_{35} \times .064 = 380,179$	755,173 1,027,778 922,798 545,211	8,779,456 8,479,507 8,181,497 7,886,358 7,595,025	299,949 298,010 295,139 291,333 286,596	2 2 2 2 2 2
30 31 32 33 34	7,308,429	$T_{30} \times .912 = 6,665,287$ $T_{30} \times .696 = 5,086,667$ $T_{30} \times .424 = 3,098,774$ $T_{30} \times .168 = 1,227,816$	$T_{35} \times \cdot 168 = 997,971$ $T_{35} \times \cdot 424 = 2,518,688$ $T_{35} \times \cdot 696 = 4,134,450$ $T_{35} \times \cdot 912 = 5,417,555$	7,663,258 7,605,355 7,233,224 6,645,371	$T_{25} \times .064 = 561,885$ $T_{25} \times .072 = 632,121$ $T_{25} \times .048 = 421,414$ $T_{25} \times .016 = 140,471$	$T_{40} \times .016 = 75,164$ $T_{40} \times .048 = 225,492$ $T_{40} \times .072 = 338,238$ $T_{40} \times .064 = 300,656$	637,049 857,613 759,652 441,127	7,308,429 7,026,209 6,747,742 6,473,572 6,204,244	282,220 278,467 274,170 269,328 263,942	3 3 3 3
35 36 37 38 39	5,940,302	$T_{55} \times .912 = 5,417,555$ $T_{55} \times .696 = 4,134,450$ $T_{55} \times .424 = 2,518,688$ $T_{55} \times .168 = 997,971$	$T_{40} \times \cdot 168 = 789,221$ $T_{40} \times \cdot 424 = 1,991,844$ $T_{40} \times \cdot 696 = 3,269,631$ $T_{40} \times \cdot 912 = 4,284,343$	6,206,776 6,126,294 5,788,319 5,282,314	$T_{50} \times .064 = 467,739$ $T_{50} \times .072 = 526,207$ $T_{50} \times .048 = 350,805$ $T_{50} \times .016 = 116,935$	$T_{45} \times .016 = 57,564$ $T_{45} \times .048 = 172,692$ $T_{45} \times .072 = 259,038$ $T_{45} \times .064 = 230,256$	525,303 698,899 609,843 347,191	5,940,302 5,681,473 5,427,395 5,178,476 4,935,123	258,829 254,078 248,919 243,353 237,378	3 3 3 3 3
40 41 42 43 41	4,697,745	$T_{40} \times .912 = 4,284,343$ $T_{40} \times .696 = 3,269,631$ $T_{40} \times .424 = 1,991,844$ $T_{40} \times .168 = 789,221$	$T_{45} \times \cdot 168 = 004,423$ $T_{45} \times \cdot 424 = 1,525,447$ $T_{45} \times \cdot 696 = 2,504,036$ $T_{45} \times \cdot 912 = 3,281,151$	4,888,766 4,795,078 4,495,880 4,070,372	$T_{35} \times .064 = 380,179$ $T_{35} \times .072 = 427,702$ $T_{55} \times .048 = 285,134$ $T_{55} \times .016 = 95,045$	$T_{50} \times .016 = 42,720$ $T_{50} \times .048 = 128,161$ $T_{50} \times .072 = 192,241$ $T_{50} \times .064 = 170,881$	422,899 555,863 477,375 265,926	4,697,745 4,465,867 4,239,215 4,018,505 3,804,446	231,878 226,652 220,710 214,059 206,693	4 4 4 4
45 46 47 48 49	3,597,753	$T_{45} \times .912 = 3,281,151$ $T_{45} \times .696 = 2,504,036$ $T_{45} \times .424 = 1,525,447$ $T_{45} \times .168 = 604,423$	$T_{50} \times \cdot 168 = 448,562$ $T_{50} \times \cdot 424 = 1,132,086$ $T_{50} \times \cdot 696 = 1,858,329$ $T_{50} \times \cdot 912 = 2,435,052$	3,729,713 3,636,122 3,383,776 3,039,475	$T_{40} \times .064 = 300,656$ $T_{40} \times .072 = 338,238$ $T_{40} \times .048 = 225,492$ $T_{40} \times .016 = 75,164$	$T_{55} \times .016 = 30,386$ $T_{55} \times .048 = 91,158$ $T_{55} \times .072 = 136,736$ $T_{55} \times .064 = 121,543$	331,042 429,396 362,228 196,707	3,597,753 3,398,671 3,206,726 3,021,548 2,842,768	199,082 191,945 185,178 178,780 172,755	4 4 4
50 51 52 53 54	2,670,013	$T_{50} \times .912 = 2,435,052$ $T_{50} \times .696 = 1,858,329$ $T_{50} \times .424 = 1,132,086$ $T_{50} \times .168 = 448,562$	$T_{55} \times \cdot 168 = 319,051$ $T_{55} \times \cdot 424 = 805,225$ $T_{55} \times \cdot 696 = 1,321,784$ $T_{55} \times \cdot 912 = 1,731,993$	2,754,103 2,663,554 2,453,870 2,180,555	$T_{45} \times .064 = 230,256$ $T_{45} \times .072 = 259,038$ $T_{45} \times .048 = 172,692$ $T_{45} \times .016 = 57,564$	$T_{60} \times .016 = 20,589$ $T_{60} \times .048 = 61,767$ $T_{60} \times .072 = 92,650$ $T_{60} \times .064 = 82,356$	250,845 320,805 265,342 139,920	2,670,013 2,503,258 2,342,749 2,188,528 2,040,635	166,755 160,509 154,221 147,893 141,520	5 5 5 5 5
55 56 57 58 59	1,899,115	$T_{55} \times .912 = 1,731,993$ $T_{55} \times .696 = 1,321,784$ $T_{55} \times .424 = 805,225$ $T_{55} \times .168 = 319,051$	$T_{60} \times \cdot 168 = 216,184$ $T_{60} \times \cdot 424 = 545,606$ $T_{60} \times \cdot 696 = 895,618$ $T_{60} \times \cdot 912 = 1,173,568$	1,948,177 1,867,390 1,700,843 1,492,619	$T_{50} \times .064 = 170,881$ $T_{50} \times .072 = 192,241$ $T_{50} \times .048 = 128,161$ $T_{50} \times .016 = 42,720$	$T_{65} \times .016 = 12,981$ $T_{65} \times .048 = 38,942$ $T_{65} \times .072 = 58,414$ $T_{65} \times .064 = 51,923$	183,862 231,183 186,575 94,643	1,899,115 1,764,315 1,636,207 1,514,268 1,397,976	134,800 128,108 121,939 116,292 111,169	55555
60 61 62 63 64	1,286,807	$T_{60} \times .912 = 1,173,568$ $T_{60} \times .696 = 895,618$ $T_{60} \times .424 = 545,606$ $T_{60} \times .168 = 216,184$	$T_{65} \times \cdot 168 = 136,299$ $T_{65} \times \cdot 424 = 343,992$ $T_{65} \times \cdot 696 = 564,666$ $T_{65} \times \cdot 912 = 739,907$	1,309,867 1,239,610 1,110,272 956,091	$T_{55} \times .064 = 121,543$ $T_{55} \times .072 = 136,736$ $T_{55} \times .048 = 91,158$ $T_{55} \times .016 = 30,386$	$T_{70} \times .016 = 7,244$ $T_{70} \times .048 = 21,731$ $T_{70} \times .072 = 32,596$ $T_{70} \times .064 = 28,974$	128,787 158,467 123,754 59,360	1,286,807 1,181,080 1,081,143 986,518 896,731	105,727 99,937 94,625 89,787 85,429	6 6 6 6
65 66 67 68 69	811,302	$T_{65} \times .912 = 739,907$ $T_{65} \times .696 = 564,666$ $T_{65} \times .424 = 343,992$ $T_{65} \times .168 = 136,299$	$T_{70} \times \cdot 168 = 76,057$ $T_{70} \times \cdot 424 = 191,955$ $T_{70} \times \cdot 696 = 315,095$ $T_{70} \times \cdot 912 = 412,883$	815,964 756,621 659,087 549,182	$T_{60} \times .064 = 82,356$ $T_{60} \times .072 = 92,650$ $T_{60} \times .048 = 61,767$ $T_{60} \times .016 = 20,589$	$T_{75} \times .016 = 3,313$ $T_{75} \times .048 = 9,940$ $T_{75} \times .072 = 14,910$ $T_{75} \times .064 = 13,254$	\$5,669 102,590 76,677 33,843	811,302 730,295 654,031 582,410 515,339	81,007 76,264 71,621 67,071 62,616	6 6 6
70 71 72 73 74	452,723	$T_{70} \times .912 = 412,883$ $T_{70} \times .696 = 315,095$ $T_{70} \times .424 = 191,955$ $T_{70} \times .168 = 76,057$			$T_{65} \times .064 = 51,923$ $T_{65} \times .072 = 58,414$ $T_{65} \times .048 = 38,942$ $T_{65} \times .016 = 12,981$				•	
75 76 77 78 79	207,082			:	$T_{70} \times 064 = 28,974$ $T_{70} \times 072 = 32,596$ $T_{70} \times 048 = 21,731$ $T_{70} \times 016 = 7,244$					
80 81 82 83 84					$T_{75} \times 064 = 13,254$ $T_{75} \times 072 = 14,910$ $T_{75} \times 048 = 9,940$ $T_{75} \times 016 = 3,313$:	

Schedule C.

England and Wales. Estimated Male Population at 30th June, 1911.

		:	!		$\begin{bmatrix} \operatorname{Col.} 4 \div \operatorname{Col.} 3 \\ 2 \ d_x \end{bmatrix}$		· ·
r.	2 1.5.	d_{x_i}	$2 \mathbf{L}_{\mathbf{x}}+d_{\mathbf{x}_{r}} $	$2 d_{x_i}$	$= \frac{x}{2 \operatorname{L}_x + d_x} $ $= q_x.$	$p_x = 1 - q_x.$.r.
- ·	(1)	(2)	(3)	(4)	(5)	(6)	
0 1 2 3 4		1	· · · · · · · · · · · · · · · · · · ·			•8590 •9600 •9856 •9912 •9938	0 1 2 3 4
5 6 7 8 9						•9954 •9961 •9966 •9970 •9973	5 6 7 8 9
10	717,560	870	718,430	1,740	·0024	.9976	10
11	710,246	697	710,943	1,394	·0020	.9980	11
12	701,898	610	702,508	1,220	·0017	.9983	12
13	692,528	637	693,165	1,274	·0018	.9982	13
14	682,120	770	682,890	1,540	·0023	.9977	14
15	670,890	922	671,812	1,844	·0027	-9973	15
16	660,342	1,004	661,346	2,008	·0030	-9970	16
17	651,042	1,058	652,100	2,116	·0032	-9968	17
18	642,972	1,086	644,058	2,172	·0034	-9966	18
19	636,148	1 091	637,239	2,182	·0034	-9966	19
20	628,310	1,089	629,399	2,178	·0035	•9965	20
21	619.648	1,103	620,751	2,206	·0036	•9964	21
22	612,500	1,127	613,627	2,254	·0037	•9963	22
23	606,870	1,160	608,030	2,320	·0038	•9962	23
24	602,764	1,200	603,964	2,400	·0040	•9960	24
25	599,898	1,239	601,137	2,478	·0041	-9959	25
26	596,020	1,271	597,291	2,542	·0043	-9957	26
27	590,278	1,308	591,586	2,616	·0044	-9956	27
28	582,666	1,347	584,013	2,694	·0046	-9954	28
29	573,192	1,390	574,582	2,780	·0048	-9952	29
30	564,440	1,429	565,869	2,858	·0051	•9949	30
31	556,934	1,468	558,402	2,936	·0053	•9947	31
32	548,340	1,508	549,848	3,016	·0055	•9945	32
33	538,656	1,557	540,213	3,114	·0058	•9942	33
34	527,884	1,610	529,494	3,220	·0061	•9939	34
35	517,658	1,662	519,320	3,324	.0064	•9936	35
36	508,156	1,709	509,865	3,418	.0067	•9933	36
37	497,838	1,759	499,597	3,518	.0070	•9930	37
38	486,706	1,812	488,518	3,624	.0074	•9926	38
39	474,756	1,870	476,626	3,740	.0078	•9922	39
40	463,756	1,923	465,679	3,846	·0083	•9917	40
41	453,304	1,976	455,280	3,952	·0087	•9913	41
42	441,420	2,030	443,450	4,060	·0092	•9908	42
43	428,118	2,089	430,207	4,178	·0097	•9903	43
44	413,386	2,153	415,539	4,306	·0104	•9896	44

SCHEDULE C—continued.

A	2 L _{x.} (1)	d _{x.} (2)	$2 \cdot 1 \cdot_x + d_{x_*}$ (3)	$\frac{2}{4} \frac{d_{x_i}}{dt}$	Col.4 = Col.3	$p_{\mathcal{F}} = 1 - q_{\mathcal{F}}.$ (6)	э.
45	398,164	2,211	400,375	4,422	•0110	•9890	45
46	383,890	2,270	386,160	4,540	•0118	•9882	46
47	370,356	2,333	372,689	4,666	•0125	•9875	47
48	357,560	2,395	359,955	4,790	•0133	•9867	48
49	345,510	2,465	347,975	4,930	•0142	•9858	49
50	333,510	2,529	336,039	5,058	·0151	•9849	50
51	321,018	2,590	323,608	5,180	·0160	•9840	51
52	308,442	2,658	311,100	5,316	·0171	•9829	52
53	295,786	2,735	298,521	5,470	·0183	•9817	53
54	283,040	2,817	285,857	5,634	·0197	•9803	54
55	269,600	2,905	272,505	5,810	·0213	.9787	55
56	256,216	2,987	259,203	5,974	·0230	.9770	56
57	243,878	3,063	246,941	6,126	·0248	.9752	57
58	232,584	3,132	235,716	6,264	·0266	.9734	58
59	222,338	3,194	225,532	6,388	·0283	.9717	59
60	211,454	3,240	214,694	6,480	-0302	-9698	60
61	199,874	3,291	203,165	6,582	-0324	-9676	61
62	189,250	3,364	192,614	6,728	-0349	-9651	62
63	179,574	3,464	183,038	6,928	-0379	-9621	63
64	170,858	3,586	174,444	7,172	-0411	-9589	64
65	162,014	3,766	165,780	7,532	-0454	-9546	65
66	152,528	3,928	156,456	7,856	-0502	-9498	66
67	143,242	4,008	147,250	8,016	-0544	-9456	67
68	134,142	4,000	138,142	8,000	-0579	-9421	68
69	125,232	3,906	129,138	7,812	-0605	-9395	69

	÷	(13)	0	H	េះ	က	4	
	('ol. 11 ÷	(13)	.14097	03995	.01444	·00884	.00616	
क्षाच्छ, १९	d, = Deaths 1911. Taken from Regis- trar-	Returns.	63,874	16,326	5,835	3,449	2,386	
in terrest in	Sum of Survivors Cols. (5), on 1st Jan (6), (7), nge (x) and (8). (501. (4) (101.	(10)	453,099	408,709	403,159	390,306	387,621	
	Sum of Cols. (5), (6), (7), and (8).	6)		53,155	69,277	82,760	84.712	
NI WITE NIET	Deaths. Ages 34. Year (y + 3).	(8)	1			1	2,950	
, 1 17171	Deaths. Ages $\frac{2-3}{\text{Year}}$. Vear $(y+2)$.	(7)				5,030	5,941	
OF TATOR	Deaths. Ages $1-2$. Year $(y+1)$.	9)			13,251	14,146	14,895	
	Deaths. Ages ()—1. Year (y)	(e) 		53,155	56,026	63,594	926,09	
THE THE TWITES OF MONTANTES, JANUARY AND WALES, MALES, 1911.	Estimated Births 1st Jan. = ½ Col. (3).	(453,099	461,864	472,436	473,066	472,333	
	Births in year (y) + Births in year $(y-1)$	(3)	906,199	923,729	944,873	946,133	944,667	
	Births in year (y). Taken from Registrar-General's Returns.	(%)	448,933	457,266	466,463	478,410	467,728	476,939
	Year (y).	(E)	1911	1910	1909	1908	1907	1906

SCHEDULE E.—ENGLAND AND WALES. 1911. MALES.

	l_{x} .	d_{x_*}	p_x .	q_x .
r.	(1)	(2)	(3)	(4)
0	100,000	14,100	⋅8590	·1410
1	85,900	3,436	•9600	.0400 [
2	82,464	1,187	•9856	•0144
3	81,277	716	•9912	0088
4	80,561	499	•9938	.0062
5	80,062	368	•9954	.0046
6	79,694	311	-9961	.0039
7	79,383	270	9966	•0034
8		238	•9970	.0030
	79,113	·	•9973	.0027
9	78,875	212	6166.	10021
10	78,663	189	•9976	.0024
11	78,474	157	-9980	•0020
$\tilde{12}$	78,317	133	•9983	.0017
13	78,184	141	•9982	.0018
14	78,043	180	•9977	.0023
		100		
15	77,863	210	.9973	•0027
· 16	77,653	233	•9970	•0030
17	77,420	248	.9968	⋅0032
18	77,172	262	·9966	.0034
19	76,910	261	•9966	•0024
20	76,649	269	.9965	.0035
1	1	275	•9964	•0036
21	76,380	281	•9963	·0030
22	76,105	288	9962	.0031
23	75,824	1	1	-0040
24	75,536	303	•9960	.0040
25	75,233	308	-9959	.0041
26	74,925	322	.9957	.0043
27	74,603	328	•9956	.0044
28	74,275	342	•9954	.0046
$\frac{20}{29}$	73,933	355	•9952	.0048
	10,000	335		0010
30	73,578	375	•9949	·0051
31	73,203	388	·9947	.0053
32	72,815	401	•9945	·0055
33	72,414	420	·9942	·0058
34	71,994	439	·9939	•0061
İ	<u> </u>			
	<u> </u>	<u></u>		

SCHEDULE E—continued.

	I_{x_i}	d_{x_*}	p_x .	qx.
r.	(1)	(2)	(3)	(4)
0-	71 555	450	.0026	.0064
35	71,555	458	•9936	
36	71,097	476	•9933	.0067
37	70,621	494	•9930	·0070
38	70,127	519	•9926	.0074
39	69,608	543	•9922	.0078
	20.00	~= 4	0017	0000
40	69,065	574	•9917	•0083
41	68,491	595	•9913	·0087
42	67,896	625	•9908	$\cdot 0092$
43	67,271	653	•9903	.0097
44	66,618	692	•9896	·0104
	,			
45	65,926	726	9890	·0110
46	65,200	769	$ \cdot9882$	·0118
47	64,431	805	•9875	$\cdot 0125$
48	63,626	847	•9867	·0133
49	62,779	891	•9858	$\cdot 0142$
			:	
50	61,888	935	•9849	·0151
51	60,953	975	•9840	·0160
52	59,978	1,025	•9829	·0171
53	58,953	1,079	•9817	.0183
54	57,874	1,140	•9803	·0197
1	- 1,			
55	56,734	1.209	•9787	.0213
56	55,525	1,277	•9770	.0230
57	54,248	1,345	.9752	-0248
58	52,903	1,407	•9734	·0266
59	51,496	1,458	.9717	∙0283
	, , , , ,			
60	50,038	1,511	•9698	·0302
61	48,527	1,572	.9676	$\cdot 0324$
62	46,955	1,639	•9651	.0349
63	45,316	1,717	•9621	.0379
64	43,599	1,792	•9589	•0411
01	10,000	1,102		
65	41,807	1,898	•9546	.0454
66	39,909	2,004	•9498	.0502
67	37,905	2,062	•9456	.0544
68	35,843	2,075	•9421	.0579
1	33,768	2,013	•9395	.0605
69	00,100	2,010	1000	
i	<u> </u>			<u> </u>

SCHEDULE F.—ENGLAND AND WALES. 1911. FEMALES.

	lr.	d_{i}	p_{e} .	q_x .
æ.	(1)	(2)	(3)	(4)
0	100,000	: 11 <i>6/</i> 0	·8836	·1164
0	100,000	11,640 3,313	•9625	·0375
1	88,360 85,047	1,225	·9856	0144
$rac{2}{3}$	85,047 83,822	729	•9913	•0087
4	83,093	499	9940	•0060
#	00,000	100	:	
5	82,594	372	•9955	∙0045
6	82,222	287	•9965	∙0035
7	81,935	246	·9970	·0030
8	81,689	229	$\cdot 9972$.0028
9	81,460	212	•9974	·0026
10	81,248	195	·9976	·0024
11	81,053	162	•9980	·0020
$\frac{11}{12}$	80,891	145	-9982	∙0018
13	80,746	154	•9981	·0019
14	80,592	177	•9978	$\cdot 0022$
**	00,002	1		
15	80,415	201	•9975	$\cdot 0025$
16	80,214	217	$\cdot 9973$	·0027
17	79,997	232	$\cdot 9971$	·00 2 9
18	79,765	231	•9971	·0029
19	79,534	239	•9970	•0030
20	79,295	238	·9970	.0030
$\frac{20}{21}$	79,057	$\frac{237}{237}$	•9970	·0030
$\frac{21}{22}$	78,820	244	·9969	.0031
$\overline{23}$	78,576	252	•9968	$\cdot 0032$
$\frac{23}{24}$	78,324	258	•9967	•0033
25	78,066	273	•9965	·0035
$\frac{25}{26}$	77,793	280	·9964	-0036
$\frac{20}{27}$	77,513	287	·9963	-0037
28	77,226	301	·9961	-0039
$\frac{20}{29}$	76,925	308	·9960	.0040
ДŲ	10,020	900	0000	3323
30	76,617	322	·9958	·0042
31	76,295	328	•9957	·0043
32	75,967	342	·9955	•0045
33	75,625	355	•9953	.0047
34	75,270	376	•9950	-0050
	•			

SCHEDULE F—continued.

			,	
	Zz.	$d_{x_{i}}$	p_x .	qx.
x.	(1)	(2)	(3)	(4)
0.5	71 901	397	.9947	.0053
35	74,894	410	9945	.0055
36	74,497		•9942	·0058
37	74,087	430	1	
38	73,657	449	•9939	0061
39	73,208	469	•9936	•0064
) AR		40=	0000	0005
40	72,739	487	•9933	.0067
41	72,252	513	•9929	$\cdot 0071$
42	71,739	531	•9926	·0074
43	71,208	555	9922	.0078
44	$70,\!653$	580	•9918	.0082
	. 0,000			
45	70,073	609	•9913	∙0087
$\frac{45}{46}$	69,464	632	•9909	.0091
	i	668	9903	.0097
47	68,832	695	·9898	0102
48	68,164		9890	·0110
49	67,469	742	-9090	-0110
~^	00 505	701	.0003	·0117
50	66,727	781	•9883	
51	65,946	818	9876	0124
52	65,128	860	•9868	0132
53	64,268	906	9859	•0141
54	63,362	963	•9848	•0152
55	62,399	1,017	9837	○0163
56	61,382	1,074	$\cdot 9825$	·0175
57	60,308	1,134	•9812	·0188
58	59,174	1,201	.9797	·0203
59	57,973	1,270	•9781	·0219
	31,010			
60	56,703	1,327	•9766	$\cdot 0234$
	55,376	1,395	•9748	0.0252
61		1,474	9727	0.0273
62	53,981	1,564	9702	.0298
63	52,507		9673	$0230 \ \cdot 0327$
64	50,943	1,666	-9010	0021
0~	40.075	1.790	9637	.0363
65	49,277	1,789		·0400
66	47,488	1,900	9600	
67	45,588	1,974	9567	0433
68	43,614	2,015	9538	0162
69	41,599	2,021	9514	•0486

SCHEDULE G.—LIVERPOOL. 1911. MALES.

	l.r.	d_{x_i}	p_{x_*}	qx.
.r.	(1)	(2)	(3)	(4)
{ 				
0	100,000	16,350	·8365	$\cdot 1635$
1	83,650	6,098	·9271	·0729
2	$77{,}552$	2,024	·9739	.0261
3	75,528	1,133	·9850	.0150
4	74,395	685	•9908	·0092
5	73,710	457	•9938	·0062
6	73,710 $73,253$	388	•9947	·0002
7			1 1 1 1 1	1 . 1
1 0	72,865	350	9952	0048
8 9	72,515	326	•9955	0045
9	72,189	289	•9960	.0040
10	71,900	237	·9967	∙0033
11	71,663	158	•9978	⋅0022
12	71,505	121	•9983	.0017
13	71,384	136	•9981	•0019
14	71,248	192	•9973	.0027
15	71.056	256	•9964	.0026
15	71,056	$\begin{array}{c} 250 \\ 297 \end{array}$	•9958	.0036
16 17	70,800		1	0042
17	70,503	325	9954	.0046
18	70,178	344	•9951	•0049
19	69,834	342	•9951	0049
20	69,492	347	•9950	•0050
21	69,145	353	.9949	.0051
22	68,792	364	•9947	.0053
23	68,428	390	.9943	.0057
24	68,038	415	•9939	.0061
25	67,623	440	•9935	.0065
26	67,183	464	.9931	.0069
$\frac{20}{27}$	66,719	480	.9928	.0072
28	66,239	503	-9924	.0076
29	65,736	526	.9920	•0080
000	07.010	w 1 -	0017	0000
30	65,210	541	•9917	0083
31	64,669	563	•9913	•0087
32	64,106	583	•9909	•0091
33	63,523	604	•9905	.0095
34	62,919	629	•9900	0100
<u> </u>	!	<u> </u>	1	<u> </u>

Schedule G-continued.

				•
	$l_{x_{\bullet}}$	d_{x}	p_x	qx.
æ.	1	(2)	(3)	(4)
	(1)			
		İ	İ	1
35	62,290	654	·9895	$\cdot 0105$
36	61,636	678	•9890	·0110
i i		707	•9884	·0116
37	60,958	· · · · · · · · · · · · · · · · · · ·		.0122
38	60,251	735	•9878	
39	59,516	762	·9872	·0128
				_
40	58,754	787	•9866	·0134
41	57,967	824	•9858	$\cdot 0142$
	·	851	•9851	0149
42	57,143		•9843	.0157
43	56,292	884	1	
44	55,408	925	•9833	·0167
45	54,483	975	•9821	·0179
46	53,508	1,022	•9809	$\cdot 0191$
47	52,486	1,061	9798	$\cdot 0202$
1	1	1,105	•9785	$\cdot 0215$
48	51,425	1		0.0218
49	50,320	1,147	•9772	.0220
			0750	0041
50	49,173	1,186	•9759	$\cdot 0241$
51	47,987	1,228	•9744	$\cdot 0256$
52	46,759	1,281	$\cdot 9726$	$\cdot 0274$
53	45,478	1,337	.9706	$\cdot 0294$
	44,141	1,395	.9684	.0316
54	44,141	1,000	0001	0310
1	10.510	1 400	•9657	0343
55	42,746	1,466	1	i
56	41,280	1,540	.9627	.0373
57	39,740	1,594	•9599	0401
58	38,146	1,625	•9574	•0426
59	36,521	1,636	.9552	.0448
	00,022			
co	24 995	1,650	.9527	$\cdot 0473$
60	34,885	•	•9494	•0506
61	33,235	1,682	i .	•
62	31,553	1,710	9458	•0542
63	29,843	1,716	$\cdot 9425$.0575
64	28,127	1,718	•9389	•0611
65	26,409	1,751	•9337	•0663
66	24,658	1,780	.9278	$\cdot 0722$
1	1	1,771	•9226	.0774
67	22,878	: •	9184	0816
68	21,107	1,723	i i	1
69	19,384	1,628	•9160	·0840
		1		

Schedule H.—Liverpool. 1911. Females.

,,	l.r.	d_{x_*}	pr.	qx.
æ.	(1)	(2)	(3)	(4)
			-	-
0	100,000	14,270	·8573	·1427
1	85,730	5,590	·9348	$\cdot 0652$
2	. 80,140	2,155	·9731	·0269
3	77,985	1,069	.9863	·0137
4	76,916	700	•9909	∙0091
~	70.010	700		
5	76,216	533	•9930	•0070
6	75,683	447	•9941	•0059
7	75,236	391	•9948	.0052
8	74,845	352	•9953	.0047
9	74,493	313	•9958	•0042
10	74,180	281	.9962	•0038
11	73,899	252	•9966	.0034
12	73,647	235	•9968	.0032
13	73,412	228	•9969	.0031
14	73,184	242	-9967	.0033
	,			0000
15	72,942	255	·9965	∙0035
16	72,687	261	·996 1	-0036
17	72,426	261	•9964	·0036
18	72,165	267	•9963	·0037
19	71,898	273	•9962	·0038
20	71,625	273	-0069	0020
21	71,025 $71,352$		•9962	•0038
22	71,082	$\begin{array}{c} 270 \\ 278 \end{array}$	•9962	•0038
$\frac{22}{23}$	70,804	283	•9961	•0039
$\frac{25}{24}$	70,521	303	•9960 •9957	•0040
21	10,021	909	1666.	•0043
25	70,218	302	·9957	.0043
26	69,916	315	•9955	.0045
27	69,601	327	•9953	·0047
28	$69,\!274$	340	•9951	·0049
29	68,934	358	•9948	$\cdot 0052$
30	69 K76	970	.004@	00~4
31	68,576 68 206	370	•9946	·0054
$\frac{31}{32}$	68,206 67,824	382	•9944	.0056
33	67,824 67,417	407	•9940	.0060
34	67,417 66 985	432	•9936	.0064
OT	66,985	469	•9930	·0070

Schedule H—continued.

35 66,516 512 .9923 .0 36 66,004 554 .9916 .0 37 65,450 589 .9910 .0 38 64,861 616 .9905 .0 39 64,245 643 .9900 .0	97. (4) 0077 0084 0090 0095 0100
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0077 0084 0090 0095 0100
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	0077 0084 0090 0095 0100
36 66,004 554 •9916 •0 37 65,450 589 •9910 •0 38 64,861 616 •9905 •0 39 64,245 643 •9900 •0	0084 0090 0095 0100
36 66,004 554 •9916 •0 37 65,450 589 •9910 •0 38 64,861 616 •9905 •0 39 64,245 643 •9900 •0	0084 0090 0095 0100
37 65,450 589 •9910 •0 38 64,861 616 •9905 •0 39 64,245 643 •9900 •0)090)095)100)106
38 64,861 616 ·9905 ·0 39 64,245 643 ·9900 ·0)100)100)106
39 64,245 643 9900 0)100)106
01,210	0106
40 63.602 674 9894 0	
40 63.602 674 9894 0	
10 100,002	
41 62,928 705 9888 0)112
42 62,223 734 9882 0)118
)124
)130
11 00,120	
45 59,937 821 9863 0)137
)143
- / : : : : : : : : : : : : : : : : : :)152
2. 00,2.1)162
0.300	0172
49 56,455 971 9828	/1/4
50 55,484 1,015 9817)183
33 33,232 1 -,322)195
31 31,200	0209
33,10)225
)243
54 $51,114$ $1,242$ $\cdot 9757$	1240
55 49,872 1,332 9733	0267
10,012)291
10,010	0315
1,120	0336
15,015	0356
59 44,110 1,571 9644	1990
60 42,539 1,612 9621	0379
22,000	0408
20,02	0439
2,120	0469
2,100	0498
64 35,774 1,782 9502	J±0O
65 33,992 1,819 9465	0535
20,002	0578
32,210	0614
	0645
20,200	
69 26,617 1,786 9329	0671

SCHEDULE I.

COMPARATIVE TABLE OF ANALYSED RATES OF MORTALITY.

Age-group 0—1.

Males.

	Number of Deaths at age 0—1.		Rate of Mortality per 10,000.		Rate of Mortality Liverpool
Cause of Death.	England and Wales, (1)	l iver- pool. (2)	England and Wales. (3)	Liver- pool.	Rate of Mortality England and Wales (5)
Tuberculosis	1,863	41	41	35	·85
Cancer	13		:	į	
Other microbic diseases	9,622	302	212	259	1.22
Infantile diseases .	40,616	1,136	897	976	1.09
All other causes	11,760	425	260	365	1.40
All causes	63,874	1,904	1,410	1,635	1.16

Females.

			_		
Tuberculosis	1,490	36	34	32	·94
Cancer	9				
Other microbic diseases	7,393	274	170	247	1.45
Infantile diseases .	32,984	928	757	836	1.10
All other causes	8,850	347	203	312	1.54
All causes	50,726	1,585	1,164	1,427	1.23

Schedule K.

Comparative Table of Analysed Rates of Mortality.

Age-group 1—2.

Males.

	Number of Deaths at age 1—2.		Rate of Mortality per 10,000.		Rate of Mortality Liverpool	
Cause of Death.	England and Wales.	Liver- pool,	England and Wales.	Liver- pool.	Rate of Mortality England and Wales. (5)	
Tuberculosis	1,422	45	35	44	1.26	
Cancer	10	######################################				
Other microbic diseases	4,377	173	108	171	1.58	
Infantile diseases .	7,845	376	192	371	1.93	
All other causes	2,672	145	65	143	2.20	
All causes	16,326	739	400	729	1.82	

Females.

Tuberculosis	1,218	38	30	38	1.27
Cancer	12	1	<u> </u>	1	
Other microbic diseases	3,833	157	95	158	1.66
Infantile diseases .	7,635	331	190	334	1.76
All other causes	2,371	120	60	121	2.00
				0.220	
All causes	15,069	647	375	652	1.74

Schedule L.

Comparative Table of Analysed Rates of Mortality.

Age-group 2—5.

Males.

	Number of Deaths at ages 2-5.		Rate of Mortality per 10,000 (at age 3).		Rate of Mortality Liverpool
Cause[of_Death.]	England and Wales. (1)	Liver- pool.	England and Wales. (3)	Liver- pool. (4)	Rate of Mortality England and Wales. (5)
Tuberculosis	1,520	53	11	17	1.55
Cancer	41				
Other microbic diseases	2,717	118	21	37	1.76
Infantile diseases .	4,863	206	37	65	1.76
All other causes	2,516	97	19	31	1.63
All causes	11,657	474	88	150	1.70

Females.

				<u>_</u>	
Tuberculosis	1,364	40	10	12	1.20
Cancer	29				
Other microbic diseases	2,508	113	19	33	1.74
Infantile diseases .	5,234	217	41	64	1.56
All other causes	2,283	96	17	28	1.64
		100	07	137	1.57
All causes	11,418	466	87	137	1.91

Schedule M. Comparative Table of Analysed Rates of Mortality. Age-group 5—15. Males.

	Number of Deaths at ages 5-15.		Rate of Mortality per 10,000 (at age 10).		Rate of Mortality Liverpool
Cause of Death.	England and Wales. (1)	Liver- pool.	England and Wales, (3)	Liver- pool. (4)	÷ Rate of Mortality England and Wales. (5)
Tuberculosis	1,903	64	5	7	1.40
Cancer	90	3			
Other microbic diseases	1,550	64	4	7	1.75
Infantile diseases .	2,133	81	5	8	1.60
All other causes	4,309	114	10	11	1.10
All causes	9,985	326	24	33	1.42

Females.							
Tuberculosis	2,491	89	6	11	1.83		
Cancer	56	1		,			
Other microbic diseases	1,566	71	4	8	2.00		
Infantile diseases .	2,349	60	6	7	1.17		
All other causes	3,431	98	8	12	1.50		
All causes	9,893	319	24	38	1.58		

v.s.

 \mathbf{K}

SCHEDULE N.

COMPARATIVE TABLE OF ANALYSED RATES OF MORTALITY.

Age-group 15—25.

Males.

·	Number of Deaths at ages 15—25.		Rate of Morfality per 10,000 (at age 20).		Rate of Mortality Liverpool	
Cause of Death.	England and Wales, (1)	Liver- pool.	England and Wales. (3)	Liver- pool.	Rate of Mortality England and Wales. (5)	
Tuberculosis	4,053	106	13	17	1.33	
Cancer	155	2	1			
Other microbic diseases	1,709	67	6	11	1.83	
All other causes	4,923	134	15	22	1.47	
All causes	10,840	309	35	50	1.43	

9	Femal	les.			
Tuberculosis	4,437	127	13	18	1.38
Cancer	119	;			
Other microbic diseases	1,492	50	4	7	1.75
All other causes .	3,928	93	13	13	1.00
All causes	9,976	270	30	38	1.27

SCHEDULE O.

COMPARATIVE TABLE OF ANALYSED RATES OF MORTALITY.

Age-group 25—45.

Males.

	Number of Deaths at ages 25—45.		Rate of Mortality per 10,000 (at age 35).		Rate of Mortality Liverpool	
Cause of Death.	England and Wales.	Liver- pool.	England and Wales. (3)	Liver- pool.	Rate of Mortality England and Wales. (5)	
Tuberculosis	10,664	400	21	38	1.81	
Cancer	1,295	37	3	4	1.33	
Other microbic diseases	5,712	236	11	22	2.00	
All other causes	15,439	435	29	41	1.41	
All causes	33,110	1,108	64	105	1.64	

Females.

			· -	··	
Tuberculosis	8,463	278	15	24	1.60
Cancer	2,585	58	5	5	1.00
Other microbic diseases	4,595	194	8	17	2.13
All other causes	13,907	365	25	31	1.24
All causes	29,550	895	53	77	1.45

APPENDIX

SCHEDULE P.

Comparative Table of Analysed Rates of Mortality.

Age-group 45—65.

Males.

	Number of Deaths at ages 45—65.		Rate of Mortality per 10,000 (at age 55).		Rate of Mortality Liverpool	
Cause of Death.	England and Wales. (1)	Liver- pool.	England and Wales. (3)	Liver- pool. (4)	Rate of Mortality England and Wales. (5)	
Tuberculosis	6,714	260	25	52	2.08	
Cancer	7,528	187	28	37	1.32	
Other microbic diseases	10,322	442	38	88	2.32	
All other causes	32,665	830	122	166	1.36	
All causes	57,229	1,719	213	343	1.61	

Females.

Tuberculosis	3,639	138	12	25	2.08
Cancer	9,485	205	32	38	1.19
Other microbic diseases	7,501	380	25	70	2.80
All other causes	28,248	730	94	134	1.43
All causes	48,873	1,453	163	267	1.64

les on back of Sel (For order of entering names see Examples on back of Schedule.) rq odt ,eture pr rticle made or 1 restly indicated. No one else must be included (2) arrived in this dwelling on the morning of Monda, April 3rd, not having been enumerated elsewhere. I 11 "" He branch of Pre the and proposition of the personalists of the (I) passed the night of Sunday, April 2nd, 1911, in this dwelling and was alive at midnight, or of every Person, whether Member of Family, Visitor, Boarder, or Servant, who THE PROPERTY OF THE PARTY OF TH OF PER tatistical Tab suos. 2 I'he contents of the Schedule williand persons. is the paper. ALAW UN fuses to do II 18 TEMITTER III OTROT AG UPOOLAMITE TOT OMOTE TEMITOTAL tinct occupation. Thus, for instance, for breweries it is e required the brewery, as well as the numbers actually engaged in by central or local government authorities, whether in in which entries should be made in Column 11 as well exceeding e is unable r, he may Column 11. put under Column 11. Column 10. ndustry or Service Industry or Service with which worker | Personal Occupation. with which worker is connected. is connected. confidential. rapery Warehouse. Ship Fitter.. .. Harbour Board. eneral Engineer. Solicitor Insurance Company. ove, Grate Maker. -General. Typefounder Type Foundry. ovt. Dockvard. General Printers. Typefounder Wooden Box Maker | Glass Bottle Works. ement Works. altster. Wood Sawyer Joinery Works. Wood Sawyer Pianoforte Works. rewer. rewer. Wood Sawyer Rly. Co.'s Carriage Wks. President.

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ple.	Example.	ample, ample.		<u> </u>		

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1111111 ENDIX

EDULE P.

NALYSED RATES OF MORTALITY.

oup 45—65.

Males.

ber of ages 45	Deaths —65.	Rate of M per 10,000 (a	Rate of Mortality Liverpool	
and d es.	Liver- pool.	England and Wales.	Liver- pool. (4)	Rate of Mortality England and Wales. (5)
714	260	25	52	2.08
528	187	28	37	1.32
322	442	38	88	$2 \cdot 32$
665	830	122	166	1.36
229	1,719	213	343	1.61

Females.

2.08,639 138 1225

AMPLES \mathbf{I} MODE THE SCHEDULE Whether Working at Home.

CENSUS

OF

ENGLAND

1911.



SCHEDULE.

Prepared pursuant to the Census (Great Britain) Act, 1910.

Number of	Registration District	-
Number of	Registration Sub-District	-
Number of	Enumeration District	
Name of Head of Family or Separate Occupier.	}	
	<u> </u>	_
Postal Address_		
•		

NOTICE.

This Schedule must be filled up and signed by, or on behalf of, the Head of the Family or other person in occupation, or in charge, of the dwelling (house, tenement or apartment).

If a house be let or sub-let to two or more occupiers each occupier of a part of the house must fill up a Schedule for his part of the house. Boarders are not to be considered as separate occupiers.

In the case of Hotels, Boarding Houses, Clubs, and other similar establishments, the Keeper, Manager, or other person in charge must fill up a Schedule with respect to all the inmates.

The Schedule will be called for on MONDAY, APRIL 3rd, by the appointed Enumerator; in order that he may not be delayed it must be ready with the answers written in the proper columns early on the morning of that day.

If the answers are incomplete or inaccurate, the Enumerator may ask any questions necessary to enable him to correct the Schedule.

If any person whose duty it is to give information refuses to do so, or wilfully gives false information as to any of the required particulars, he will be liable on conviction to a fine not exceeding FIVE POUNDS.

If the Head of the Family or other person responsible is unable to deliver the Schedule personally to the Enumerator, he may

- 1. DESCRIPTION OF PERSONAL OCCUPATION which living is mainly earned.
- 2. Dealers, Shopkeepers or Shop Ass leave no doubt whether they are Dealers or M "Jewellers," "Chemists," "Bakers," "Seedsi "Shopkeeper," or "Shop Assistant" should t chiefly Maker, or "Dealer," if chiefly Dealer.
 - 3. Out of Work.—If out of work or diser
- 4. The Occupations of Women engage must be fully stated. No entry should be mad
- 5. CHILDREN AT SCHOOL AND STUDENTS. schools, or other instructional classes, or recei Student," "Medical Student."

If attending school or other classes h If also engaged in any employment s Roving Frame Doffer."

- 6. RETIRED OR PENSIONED.—If retired Pensioner," &c. The present occupation, if any
- 7. Private Means.—For persons neither allowances, write "Private Means."
- 8. VAGUE OR INDEFINITE TERMS MUST NOT Labourer, Machinist, Manager, Manufacturer, that no occupational name common to differ "Pottery Enameller," "Watch-dial Enamelle Rivetter, as a "Boiler Rivetter," "Ship Plate
- (a) ARMY, NAVY, CIVIL SERVICE, MUNICIPAL SI rank or grade.
- (b) CLERGYMAN, PRIEST, MINISTER. State whether "Roman Catholic Priest," "Wesleyan Methodist Min Schoolmasters should be returned as Schoolmasters. Preachers, the ordinary occupation only should be giv
- (c) Legal Profession. State whether "Barriste Clerk," "Law Clerk," &c.
- (d) AGENT, BROKER, BUYER, MERCHANT, SALESMO particular kind of business or trade, as "Cycle Agent," 'Commercial Traveller, Millinery."
- (e) CLERK. State whether "Bank Clerk," "Insur! stall Clerk," "Hotel Clerk," "Railway Clerk," "Theat
- (f) Engineering and Metal Trades. State properation, as "Engineer's Pattern Maker," "Ship Pl too indefinite; state whether employed at Blast Furnac-
- (g) Engineman, Engine-Driver, Stoker, Firema Stoker," "Traction Engine Driver," "Stationary Eng. Stoker at Potteries," &c.
- (h) COTTON, WOOL, SILK OR OTHER TEXTILE OPER. the material and the precise occupation, as "Bobbin, "Silk Throwster's Piecer." "Plaiter in Cotton Finishin
- (j) MINER, QUARRYMAN. State kind of mine or qu' Miner, Hewer," "Colliery Horsekeeper (below ground), ground)," "Colliery Labourer (above ground)," "Cager" Stone Quarry," "Rockman in Slate Quarry."
- 9. Industry or Service with which C service how many persons are employed thereir desired to know how many coopers, blacksmitl brewing processes. Further, it is desired to administration or in undertakings such as tramv as in Column 10.

Column 11.

ENGLAND AND

1911.



SCHEDULE

pursuant to the Census (Great Britain) Act, 1910.

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R	egistration Sub-District
E	numeration District
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NOTICE.

must be filled up and signed by, or on behalf of, Family or other person in occupation, or in charge, (house, tenement or apartment).

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Hotels, Boarding Houses, Clubs, and other similar the Keeper, Manager, or other person in charge hedule with respect to all the inmates.

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rs are incomplete or inaccurate, the Enumerator questions necessary to enable him to correct the

whose duty it is to give information refuses to do gives false information as to any of the required will be liable on conviction to a fine not exceeding

of the Family or other person responsible is unable Schedule personally to the Enumerator, he may r person to do so. If desired it may be put under

INSTRUCTIONS

For filling up the Columns headed "Profession or Occupation."

COLUMN 10.

- 1. Description of Personal Occupation.—Describe the Occupation fully in Column 10. If more than one Occupation is followed, state that by which living is mainly earned.
- 2. Dealers, Shopkeepers or Shop Assistants as distinct from Makers, Producers or Repairers.—All such persons should be so described as to leave no doubt whether they are Dealers or Makers. In many cases "Tailors," "Bootmakers," "Watchmakers," "Goldsmiths," "Silversmiths," "Jewellers," "Chemists," "Bakers," "Seedsmen," "Florists," &c., and their Assistants are not Makers or Producers; in such cases the word "Dealer," "Shopkeeper," or "Shop Assistant" should be added to the occupational name. A person who both makes and deals should be described as "Maker," if chiefly Maker, or "Dealer," if chiefly Dealer.
 - 3. Out of Work.—If out of work or disengaged at the time of the Census, the usual occupation must be stated.
- 4. The Occupations of Women engaged in any business or profession, including women regularly engaged in assisting relatives in trade or business, must be fully stated. No entry should be made in the case of wives, daughters, or other female relatives wholly engaged in domestic duties at home.
- 5. CHILDREN AT SCHOOL AND STUDENTS.—For all persons over ten years of age attending school write "School," and for those attending colleges, evening schools, or other instructional classes, or receiving instruction privately, write "Student." If studying for any profession, state the profession, as "Law Student," "Medical Student."

- If attending school or other classes half time or part time only, write "School part time," or "Student part time."

 If also engaged in any employment state the employment, as "School, Newsboy"; "School, Grocer's Errand Boy"; "School part time, Cotton Roving Frame Doffer."
- 6. Retired or Pensioned.—If retired or pensioned state the fact, and add former Occupation, as "Retired Farmer," "Retired Butcher," "Police Pensioner," &c. The present occupation, if any, of pensioners should also be stated in all cases, as "Army Pensioner, Bank Porter," &c.
- 7. Private Means.—For persons neither following nor having followed a profession or occupation, but deriving their income from private sources, or allowances, write "Private Means."
- 8. Vague or Indefinite Terms must not be Used Alone, such for example as Apprentice, Assistant, Canvasser, Collector, Contractor, Foreman, Inspector, Labourer, Machinist, Manager, Manufacturer, Mechanic, Millhand, Overlooker, Superintendent (see also paragraphs a to r below). Care should be taken that no occupational name common to different industries is used without a full and distinctive description; an Enameller should be described as a "Pottery Enameller," "Watch-dial Enameller," "Cycle Enameller," &c.; a Painter as a "Painter (Artist)," "Ship Painter," "House Painter," &c.; a Rivetter, as a "Boiler Rivetter," "Ship Plate Rivetter," "Boot Rivetter," &c.
- (a) ARMY, NAVY, CIVIL SERVICE, MUNICIPAL SERVICE, &c. State the service and
- (b) CLERGYMAN, PRIEST, MINISTER. State whether "Clergyman (Established Church)," "Roman Catholic Priest," "Wesleyan Methodist Minister," &c. Clergymen who are also Schoolmasters should be returned as Schoolmasters. In the case of Local or Occasional Preachers, the ordinary occupation only should be given.
- (c) Legal Profession. State whether "Barrister," "Solicitor," "Solicitor's Articled Clerk," "Law Clerk," &c.
- (d) Agent, Broker, Buyer, Merchant, Salesman, Commercial Traveller. State particular kind of business or trade, as "Cycle Agent," "Sugar Broker," "Coal Merchant, "Commercial Traveller, Millinery."
- (e) CLERK. State whether "Bank Clerk," "Insurance Clerk," "Law Clerk," stall Clerk," "Hotel Clerk," "Railway Clerk," "Theatre Clerk," &c.
- (f) Engineering and Metal Trades. State precise branch of trade and nature of operation, as "Engineer's Pattern Maker," "Ship Plater's Helper." "Iron Worker" is too indefinite; state whether employed at Blast Furnace, Puddling Furnace, Iron Foundry,
- (g) Engineman, Engine-Driver, Stoker, Fireman. State whether "Railway Engine Stoker," "Traction Engine Driver," "Stationary Engineman," "Gas Stoker," "Furnace Stoker at Potteries," &c.
- (h) Cotton, Wool, Silk or other Textile Operative, Dyer, Bleacher, &c. State the material and the precise occupation, as "Bobbin Carrier in Cotton Spinning Room," Silk Throwster's Piecer," "Plaiter in Cotton Finishing Works."
- (j) MINER, QUARRYMAN. State kind of mine or quarry, and nature of work, as "Coal Miner, Hewer," "Colliery Horsekeeper (below ground)," "Colliery Lamp Examiner (above ground)," "Colliery Labourer (above ground)," "Collie Stone Quarry," "Rockman in Slate Quarry."

- (k) FARMER. State whether "Farmer," "Grazier," or "Farm Bailiff." Farmers' sons or other relatives assisting in the work of the farm should be returned as "Farmer's Son working on Farm," "Farmer's Brother working on Farm," "Farmer's Daughter, Dairy work," &c.
- (l) FARM SERVANT. State nature of work, and indicate if mainly in charge of horses, cattle, &c., as "Horseman on Farm," "Waggoner on Farm," "Cowman on Farm," "Shepherd." A Labourer on a Farm whose work is of a general character should be described as "Farm Labourer," not simply as a Labourer.
- (m) LABOURER, PORTER, &c. State nature of employment, as "Bricklayer's Labourer," "Dock Labourer," "Railway Contractor's Labourer," "Farm Labourer," "General Labourer," "Coal Porter," "Railway Porter," &c. The terms "Labourer," "Porter,"
- (n) Domestic Service. State nature of service, as "Cook (Domestic)," "Housemaid (Domestic)," "Gardener (Domestic)," "Coachman (Domestic)," "Nursery Governess."
- (0) SERVANTS, WAITERS, &c., IN HOTELS, CLUBS, RESTAURANTS AND BOARDING HOUSES. State nature of employment and service in which engaged, as "Hotel Cook," "Hall Porter at Club," "Hotel Waiter," "Restaurant Waitress."
 - (p) Nurse. State whether "Nurse (Domestic)," "Monthly Nurse," "Sick Nurse," &c.
- (q) GARDENER. State whether "Gardener (Domestic)," "Market Gardener," "Jobbing Gardener," "Nurseryman," &c.
- Bus Driver," "Tramway Motor Man."

COLUMN 11.

9. Industry or Service with which Connected.—The information asked for in this column is required in order to ascertain for each industry or service how many persons are employed therein, or in connection therewith, although following a distinct occupation. Thus, for instance, for breweries it is desired to know how many coopers, blacksmiths, bricklayers, &c., are in the direct employment of the brewery, as well as the numbers actually engaged in brewing processes. Further, it is desired to ascertain the number of persons directly employed by central or local government authorities, whether in administration or in undertakings such as tramways, gasworks, &c. Following are examples of cases in which entries should be made in Column 11 as well as in Column 10.

> Column 11 Column 11. Column 11

PENDIX

HEDULE P.

NALYSED RATES OF MORTALITY.

roup 45—65.

Males.

ber of ages 4	Deaths 5—65.	Rate of M per 10,000 (a	Rate of Mortality Liverpool	
and d es.	Liver- pool.	England and Wales. (3)	Liver- pool.	Rate of Mortality England and Wales. (5)
14	260	25	52	2.08
28	187	28	37	1.32
22	442	38	88	$2 \cdot 32$
65	830	122	166	1.36
29	1,719	213	343	1.61

'emales.

39	138	12	25	2.08
185	205	32	38	1.19
501	380	25	70	2.80
248	730	94	134	1.43
 873	1,453	163	267	1.64
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	2 2 0 Sewing Machinist, Tailoring Worker At Home London, Whitechapel London, Whitechapel London, Whitechapel London, Whitechapel	None — Boarding House Keeper — Accountent — Manager of Railway Co. — Law Student — Gold Embroiderer — Gold Embroiderer — Housemaid (Boarding House) — Waiter (Boarding House) — Gold Embroiderer — Tailor (Maker) — Worker — Waiter (Boarding House) — Sewing Machinist, Tailoring — School — Schoo	None Golfery Horsekeeper (below ground) Worker Yorks., Hemsworth Yorks., Todmortden Yorks., Todmortden Yorks., Hemsworth Yorks., H	Farmer's Son working on Form. Farmer's Son working on Form. Farmer's Son working on Form. Farmer's Son working on Form. Farmer's Son working on Form. Farmer's Son working on Form. Farmer's Son working on Form. Worker Worker Finisted Basax, Halstead Ba	Bricklayer. Cotton Spinning Onn Acct. Al Home Comberland, Alston Chemical Manut. Conference Chemical Manut. Conference Chemical Manut. Conference Conf	A d A Asisting in the business. Employer Initia Boning (Resident) Huitington, St. Ives. Huitington, Machinat, Huit	1. 12. 13. 13. 14. 15. 15. 15. 15. 16.	Forestern Marriage. Personal Occupation, Survey with variety of present Marriage. Personal Occupation, Survey with variety of very variety Survey with variety Survey
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i	Enumeration District							
Name of Head of Family or Separate Occupier.	<u> </u>							
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NOTICE.

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If any person whose duty it is to give information refuses to do so, or wilfully gives false information as to any of the required particulars, he will be liable on conviction to a fine not exceeding FIVE POUNDS.

If the Head of the Family or other person responsible is unable to deliver the Schedule personally to the Enumerator, he may instruct another person to do so. If desired it may be put under cover.

The contents of the Schedule will be treated as strictly confidential.

BERNARD MALLET,

Registrar-General.

Approved by the Local Government Board,

JOHN BURNS,

President.

If attending school or other classes
If also engaged in any employment
Roving Frame Doffer."

- 6. Retired or Pensioned.—If retire Pensioner," &c. The present occupation, if an
- 7. PRIVATE MEANS.—For persons neithe allowances, write "Private Means."
- 8. Vague or Indefinite Terms must no Labourer, Machinist, Manager, Manufacturer that no occupational name common to diffe "Pottery Enameller," "Watch-dial Enamell' Rivetter, as a "Boiler Rivetter," "Ship Plat
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- (b) CLERGYMAN, PRIEST, MINISTER. State whethe "Roman Catholic Priest," "Wesleyan Methodist Misschoolmasters should be returned as Schoolmasters. Preachers, the ordinary occupation only should be gi
- (c) Legal Profession. State whether "Barrista Clerk," "Law Clerk," &c.
- (d) AGENT, BROKER, BUYER, MERCHANT, SALEST particular kind of business or trade, as "Cycle Agent," Commercial Traveller, Millinery."
- (e) CLERK. State whether "Bank Clerk," "Insurstall Clerk," "Hotel Clerk," "Railway Clerk," "The
- (f) Engineering and Metal Trades. State poperation, as "Engineer's Pattern Maker," "Ship 17 too indefinite; state whether employed at Blast Furnation.
- (g) Engineman, Engine-Driver, Stoker, Firem Stoker," "Traction Engine Driver," "Stationary Electronic Stoker at Potteries," &c.
- (h) COTTON, WOOL, SILK OR OTHER TEXTILE OPER the material and the precise occupation, as "Bobbir" Silk Throwster's Piecer," "Plaiter in Cotton Finishi
- (j) MINER, QUARRYMAN. State kind of mine or (Miner, Hewer," "Colliery Horsekeeper (below ground? ground)," "Colliery Labourer (above ground)," "Cage Stone Quarry," "Rockman in Slate Quarry."
- 9. Industry or Service with which (service how many persons are employed theref desired to know how many coopers, blacksmip brewing processes. Further, it is desired to administration or in undertakings such as transas in Column 10.

Column 10. Personal Occupation.	Column 11. Industry of Service with which worker is connected.	Person
Bricklayer Cardboard Box Maker Carter Carter Carter on Sewage Farm Clay Miner	Soap Manufacture. General Carrier. Railway Company. Urban Dist. Council.	Copper Cotton Tente Head T Hotel N House I House I House I

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Registrar-General.

Government Board,

JOHN BURNS,

schools, or other instructional classes, or receiving instruction privately, write "Student." It studying for any profession, state the profession, as "Law Student," "Medical Student."

If attending school or other classes half time or part time only, write "School part time," or "Student part time."

If also engaged in any employment state the employment, as "School, Newsboy"; "School, Grocer's Errand Boy"; "School part time, Cotton Roving Frame Doffer."

- 6. Retired or Pensioned.-If retired or pensioned state the fact, and add former Occupation, as "Retired Farmer," "Retired Butcher," "Police Pensioner," &c. The present occupation, if any, of pensioners should also be stated in all cases, as "Army Pensioner, Bank Porter," &c.
- 7. Private Means.—For persons neither following nor having followed a profession or occupation, but deriving their income from private sources, or allowances, write "Private Means."
- 8. Vague or Indefinite Terms must not be Used Alone, such for example as Apprentice, Assistant, Canvasser, Collector, Contractor, Foreman, Inspector, Labourer, Machinist, Manager, Manufacturer, Mechanic, Millhand, Overlooker, Superintendent (see also paragraphs a to r below). Care should be taken that no occupational name common to different industries is used without a full and distinctive description; an Enameller should be described as a "Pottery Enameller," "Watch-dial Enameller," "Cycle Enameller," &c.; a Painter as a "Painter (Artist)," "Ship Painter," "House Painter," &c.; a Rivetter, as a "Boiler Rivetter," "Ship Plate Rivetter," "Boot Rivetter," &c.
- (a) ARMY, NAVY, CIVIL SERVICE, MUNICIPAL SERVICE, &c. State the service and
- (b) Clergyman, Priest, Minister. State whether "Clergyman (Established Church)," "Roman Catholic Priest," "Wesleyan Methodist Minister," &c. Clergymen who are also Schoolmasters should be returned as Schoolmasters. In the case of Local or Occasional Preachers, the ordinary occupation only should be given.
- (c) LEGAL PROFESSION. State whether "Barrister," "Solicitor," "Solicitor's Articled Clerk," "Law Clerk," &c.
- (d) AGENT, BROKER, BUYER, MERCHANT, SALESMAN, COMMERCIAL TRAVELLER. State particular kind of business or trade, as "Cycle Agent," "Sugar Broker," "Coal Merchant." "Commercial Traveller, Millinery."
- (e) CLERK. State whether "Bank Clerk," "Insurance Clerk," "Law Clerk," "Bookstall Clerk," "Hotel Clerk," "Railway Clerk," "Theatre Clerk," &c.
- (f) Engineering and Metal Trades. State precise branch of trade and nature of operation, as "Engineer's Pattern Maker," "Ship Plater's Helper." "Iron Worker" is too indefinite; state whether employed at Blast Furnace, Puddling Furnace, Iron Foundry,
- (g) Engineman, Engine-Driver, Stoker, Fireman. State whether "Railway Engine Stoker," "Traction Engine Driver," "Stationary Engineman," "Gas Stoker," "Furnace Stoker at Potteries," &c.
- (h) Cotton, Wool, Silk or other Textile Operative, Dyer, Bleacher, &c. State the material and the precise occupation, as "Bobbin Carrier in Cotton Spinning Room," "Silk Throwster's Piecer," "Plaiter in Cotton Finishing Works."
- (j) MINER, QUARRYMAN. State kind of mine or quarry, and nature of work, as "Coal Miner, Hewer," "Colliery Horsekeeper (below ground)," "Colliery Lamp Examiner (above Stone Quarry," "Rockman in Slate Quarry.

- (k) FARMER. State whether "Farmer," "Grazier," or "Farm Bailiff." Farmers' sons or other relatives assisting in the work of the farm should be returned as "Farmer's Son working on Farm," "Farmer's Brother working on Farm," "Farmer's Daughter, Dairy
- (1) FARM SERVANT. State nature of work, and indicate if mainly in charge of horses, cattle, &c., as "Horseman on Farm," "Waggoner on Farm," "Cowman on Farm," "Shepherd." A Labourer on a Farm whose work is of a general character should be described as "Farm Labourer," not simply as a Labourer.
- (m) LABOURER, PORTER, &c. State nature of employment, as "Bricklayer's Labourer," Dock Labourer," "Railway Contractor's Labourer," "Farm Labourer," "General Labourer," "Coal Porter," "Railway Porter," &c. The terms "Labourer," "Porter," should never be used alone.
- (n) Domestic Service. State nature of service, as "Cook (Domestic)," "Housemaid (Domestic)," "Gardener (Domestic)," "Coachman (Domestic)," "Nursery Governess."
- (o) SERVANTS, WAITERS, &c., IN HOTELS, CLUBS, RESTAURANTS AND BOARDING HOUSES. State nature of employment and service in which engaged, as "Hotel Cook," "Hall Porter Club," "Hotel Waiter," "Restaurant Waitress."
 - (p) Nurse. State whether "Nurse (Domestic)," "Monthly Nurse," "Sick Nurse," &c.
- (q) GARDENER. State whether "Gardener (Domestic)," "Market Gardener," "Jobbing Gardener," "Nurseryman," &c.
- (r) COACHMAN, GROOM, MOTOR-CAR DRIVER. State whether employed in Cab, Omnibus, ground)," "Colliery Labourer (above ground)," "Cager-on in Ironstone Mine," "Delver in Domestic, or other service, as "Coachman (Domestic)," "Chauffeur (Domestic)," "Motor-Bus Driver," "Tramway Motor Man."

COLUMN 11.

9. Industry or Service with which Connected.—The information asked for in this column is required in order to ascertain for each industry or service how many persons are employed therein, or in connection therewith, although following a distinct occupation. Thus, for instance, for breweries it is desired to know how many coopers, blacksmiths, bricklayers, &c., are in the direct employment of the brewery, as well as the numbers actually engaged in brewing processes. Further, it is desired to ascertain the number of persons directly employed by central or local government authorities, whether in administration or in undertakings such as tramways, gasworks, &c. Following are examples of cases in which entries should be made in Column 11 as well as in Column 10.

Column 10. Personal Occupation.	Column 11. Industry or Service with which worker is connected.	Column 10. Personal Occupation.	Column 11. Industry or Service with which worker is connected.	Column 10. Personal Occupation.	Column 11. Industry or Service with which worker is connected.	Column 10. Personal Occupation.	is connected.
Blacksmith's Striker Bricklayer Cardboard Box Maker Carter Carter Carter on Sewage Farm Clay Miner Coal Porter, Gasworks	Blast Furnace. Soap Manufacture. General Carrier. Railway Company.	House Painter	Carpet Manufac- ture. County Council. Railway Company. Builder. Chemical Manufac.	Iron Founder Iron Founder Iron Founder Lighterman Maltster's Labourer	Stove, Grate Maker. Govt. Dockyard. Cement Works. Maltster. Brewer.	Solicitor Typefounder Typefounder Wooden Box Maker Wood Sawyer Wood Sawyer	Harbour Board. Insurance Company. Type Foundry. General Printers. Glass Bottle Works. Joinery Works. Pianoforte Works. Rly. Co.'s Carriage Wks.

CENSUS OF ENGLAND AND WALES, 1911.

Before writing on this Schedule please read the Examples and the Instructions given on the other side of the paper, as well as the headings of the Colum

The contents of the Schedule will be treated as confidential. Strict care will be taken that no information is disclosed with regard to individual persons. The returns are not to be used than the preparation of Statistical Tables.

NAME AND SURNAME	RELATIONSHIP TO HEAD OF FAMILY.	AGE (LAST BIR AND S	THDAY)		RTICULARS A	ль то Ма	RRIAGE.	in the second of		PROFE OF PERSONS AG	SSION OR OCCUPATION ED TEN YEARS AND UPWARDS.
of every Person, whether Member of Family, Visitor, Boarder, or Servant, who		For Infants one year st	ate the	Write	1	each Marr Schedule, t	che numbe	r of :	Personal Occupatio	n. // // // // // // // // // // // // //	Industry or Service with which worker is connected. This question should generally
 passed the night of Sunday, April 2nd, 1911, in this dwelling and was alive at midnight, or arrived in this dwelling on the morning of Monday, April 3rd, not having been enumerated elsewhere. 	State whether "Head," or "Wife," "Son," "Daughter," or other Relative, "Visitor," "Boarder," or	age in mor "under one "one mor etc.	nths as month," nth,"	"Single," "Married," "Widower," or "Widow," opposite the names of all persons	Completed years the present Marriage has lasted.	pre (If no	ren born a sent Marri children bo None'' in c	age. orn alive	The reply should show the precise by Trade, Manufacture, &c. If engaged in any Trade or Manufacture, and the Articles	ture, the particular	answered by stating the busicarried on by the employer. this is clearly shown in Colthe question need not be answhere. No entry needed for Domestic
No one else must be included (For order of entering names see Examples on back of Schedule.)	"Servant."	Ages	Ages of Females.	aged 15 years and upwards.	If less than one year write "under one."	Total Children Born Alive.	Children still Living.	Children who have Died.	kind of work done, and the Artic worked or dealt in should be clear (See Instructions 1 to 8 and Examples of	•	vants in private employment. If employed by a public to (Government, Municipal, of state what body. (See Instruction 9 and Example back of Schedule.)
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CENSUS OF ENGLAND AND WALES, 1911.

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chedule please read the Examples and the Instructions given on the other side of the paper, as well as the headings of the Columns. The entries should be written in Ink.

care will be taken that no information is disclosed with regard to individual persons. The returns are not to be used for proof of age, as in connection with Old Age Pensions, or for any other purpose than the preparation of Statistical Tables.

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	State, for each Married Woman entere on this Schedule, the number of :—		entered	Personal Occupation.	Industry or Service with which worker is connected. Whether Employer, Worker, or Working on Own Account.		Whether Working at Home.	(l) If bor the 1 or Pa	n in the United Kingdom, write name of the County, and Town	State whether:— (1) "British subject by parentage."	If any person included in this Schedule is:— (1) "Totally Deaf,"	
Write "Single," "Married," 'Widower," r "Widow," opposite the names of all persons ged 15 years	Completed years the present Marriage has lasted. If less than	Child pre	lren born al esent Marria children bo None'' in co	age. orn alive	The reply should show the precise branch of Profession, Trade, Manufacture, &c. If engaged in any Trade or Manufacture, the particular kind of work done, and the Article made or Material worked or dealt in should be clearly indicated.	This question should generally be answered by stating the business carried on by the employer. If this is clearly shown in Col. 10 the question need not be answered here. No entry needed for Domestic Servants in private employment. If employed by a public body	Write opposite the name of each person engaged in any Trade or Industry, (1) "Employer" (that is employing persons other than domestic servants), or (2) "Worker" (that is working for an employer), or	Write the words "At Home" opposite the name of each person carrying on Trade or Industry at Home.	Emp pend Prov (3) If bor the r (4) If bor Note.—	in any other part of the Britishire, write the name of the Deency, Colony, etc., and of the ince or State. In in a Foreign Country, write name of the Country. In at sea, write "At Sea."	(2) "Naturalised British subject," giving year of naturalisation. Or (3) If of foreign nationality, state whether	Dumb," (2) "Totally Blind."
nd upwards.	one year write "under one."	Total Children Born Alive.	Children still Living.	Children who have Died.	(See Instructions 1 to 8 and Examples on back of Schedule.)	(Government, Municipal, etc.) state what body. (See Instruction 9 and Examples on back of Schedule.)	(3) "Own Account" (that is neither employing others nor working for a trade employer).		where the whether "Country.	n in England or Wales, state Resident" or "Visitor" in this	"French," "German;" "Russian," etc.	the age at which he or she became afflicted.
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