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FIFTY-FIRST  
ANNUAL REPORT

OF THE

REGISTRAR-GENERAL

OF

BIRTHS, DEATHS, AND MARRIAGES

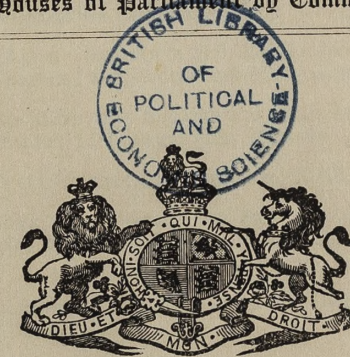
IN ENGLAND.

(1888.)

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Presented to both Houses of Parliament by Command of Her Majesty.

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## REPORT

TO

The Right Honourable CHARLES T. RITCHIE, M.P.,  
President of the Local Government Board, &c. &c.

(1888.)

SIR,  
I HAVE the honour to submit to you the following report on the births, deaths, and marriages, registered in England and Wales in the year 1888.

### POPULATION.

The population of England and Wales, as enumerated in April 1881, consisted of 25,974,439 persons. The excess of births over deaths from that date to the middle of 1888 was 2,687,242; so that the population at the later date, if its growth were determined simply by the balance between births and deaths, would have been 28,661,681. This, however, takes no account of emigration and immigration, and, in the absence of sufficiently full information on these points, the best method of estimating the population is to assume that the rate of growth that existed in the last intercensal period has been maintained in the years that have since elapsed. It was shown in the last Annual Report that this assumption is not likely to lead us far astray, and according to it the population of England and Wales in the middle of 1888 consisted of 28,628,804 persons, of whom 13,931,592 were males and 14,697,212 were females (Table 1). It is on this estimated population that the rates in this report have been calculated.

### MARRIAGES.

The marriages registered in 1888 numbered 203,821, giving a rate of 14·2 persons married to 1000 living. The rate in the preceding year, 1887, had also been 14·2, and in 1886 had been 14·1; and these three rates are the lowest as yet recorded. (Tables 2 and 3). As a rule in recent years the marriage-rate has gone up or down with the value of British exports, and with the average price of wheat. But in 1888 the value of the exports rose, while the price of wheat fell, and the marriage-rate remained stationary. (Table A.)

TABLE A.—MARRIAGE-RATE, BRITISH EXPORTS AND IMPORTS, PRICE OF WHEAT, and amount cleared at the London Bankers' Clearing House, 1860-88.\*

YEARS.	Marriage-rate.	Value per Head of Population of United Kingdom.			Average Price of Wheat per Quarter.	Amount cleared at the Bankers' Clearing House per Head of Population.
		Exports of British Produce.	Imports.	Total Exports and Imports.		
Cols.	1.	2.	3.	4.	5.	6.
		£ s. d.	£ s. d.	£ s. d.	s. d.	£
1860	17.1	4 14 5	7 6 4	13 0 8	53 3	—
1861	16.3	4 6 4	7 10 1	13 0 3	55 4	—
1862	16.1	4 4 10	7 14 4	13 8 0	55 5	—
1863	16.8	4 19 6	8 8 11	15 2 7	44 8	—
1864	17.2	5 8 1	9 5 3	16 8 7	40 2	—
1865	17.5	5 10 10	9 1 2	16 7 5	41 9	—
1866	17.5	6 5 4	9 15 11	17 14 5	49 11	—
1867	16.5	5 19 0	9 1 0	16 9 6	64 5	—
1868	16.1	5 17 1	9 12 1	17 0 6	63 9	158
1869	15.9	6 2 8	9 10 9	17 3 9	48 2	162
1870	16.1	6 7 8	9 14 1	17 10 3	46 10	174
1871	16.7	7 1 5	10 9 10	19 9 6	56 10	210
1872	17.4	8 0 10	11 2 7	21 0 0	57 1	255
1873	17.6	7 18 7	11 10 10	21 4 2	58 8	264
1874	17.0	7 7 5	11 7 9	20 11 0	55 9	249
1875	16.7	6 16 2	11 7 10	19 19 4	45 2	235
1876	16.5	6 0 11	11 6 1	19 0 10	46 2	203
1877	15.7	5 18 6	11 15 0	19 5 5	56 9	203
1878	15.2	5 13 8	10 17 5	18 2 1	46 5	200
1879	14.4	5 11 9	10 11 9	17 16 10	43 10	195
1880	14.9	6 8 11	11 17 8	20 3 3	44 4	222
1881	15.1	6 14 0	11 7 4	19 17 5	45 4	243
1882	15.5	6 16 10	11 14 0	20 7 8	45 0	236
1883	15.4	6 14 8	11 19 9	20 11 3	41 7	221
1884	15.0	6 9 7	10 16 11	19 1 6	35 8	214
1885	14.4	5 17 3	10 4 3	17 13 7	32 10	200
1886	14.1	5 15 9	9 10 7	16 17 0	31 1	212
1887	14.2	5 19 5	9 15 4	17 6 8	32 6	215
1888	14.2	6 4 11	10 7 1	18 6 2	31 10	242

\* The figures in the marriage-rate column are not strictly comparable with those in the value columns, inasmuch as the former relate only to England and Wales, while the latter relate to the whole of the United Kingdom. The figures relating to exports and imports are derived from the Board of Trade Statistical Abstracts; and those showing the amount cleared at the London Bankers' Clearing House are calculated upon the population of England and Wales, and are derived from the same source.

*Forms of Marriage.*—Of the 203,821 marriages contracted in the year, 142,863, or 701 per 1000, were solemnised according to the rites of the Established Church, and 60,958, or 299 per 1000, otherwise. These proportions were precisely the same as in the preceding year 1887; but with that exception the proportion of Church to total marriages was lower than in any previous year. The proportion of Roman Catholic marriages declined, while the proportion of civil marriages advanced slightly, and that of Jewish marriages very considerably, each of these last two proportions being at the highest point as yet reached. (Table 5.) It is to be noted, as pointing to some very great increase in the proportion of Jews in the population, that, while the total marriages in England and Wales increased between 1881 and 1888 by less than 4 per cent., the marriages of Jews, or rather the marriages by Jewish rites, increased no less than 65 per cent.

The increasing preference manifested in recent years among those who are married by the rites of the Established Church to be married after the publication of banns rather than by special or other licence is visible also in the returns for 1888; for of 1000 Church marriages 902 were solemnised after banns, while the average proportion in the ten preceding years had been 880.

*First marriages; Re-marriages.*—The returns of the civil condition of those who are married show that the decline in the marriage-rate, which began some fifteen years back and has since continued, has been due to a falling off both in the re-marriages and in the marriages between bachelors and spinsters, but that the proportionate decline has been much greater among the former than among the latter; for it will be seen in Table 7, that whereas in 1876 of 1000 men who married 141 were widowers, and of 1000 women 103 were widows, the proportions have gradually fallen until in 1888 they were respectively 119 and 83. Or, to put it in other terms, the marriage-rate, as calculated simply from first marriages, fell between 1876 and 1888 some 12 per cent. both for bachelors and spinsters; while the marriage-rate, as calculated simply from the widowers who re-married, fell 27 per cent., and, as calculated from re-marriages of widows, fell 31 per cent.

*Re-marriages of Divorced Persons.*—The number of persons married in 1888 who were described in the register as having been previously divorced was 178, of whom 82 were men and 96 were women; the numbers of divorced persons married in the three preceding years having been 170, 163, and 173 respectively. Of the 82 divorced men 65 married spinsters, 12 married widows, and 5 married divorced women. Of the 96 divorced women, 70 married bachelors, 21 married widowers, and 5 married divorced men.

*Ages at Marriage.*—In 10,213, or 5.0 per cent. of the marriages, the ages of both contracting parties were not inserted in the register. It was shown in the 41st Report that the proportion per cent. of marriages in which the ages of both parties were not recorded in the Marriage Register had steadily declined from 40.6 in 1858 to 21.1 in 1878; and since 1878 the decline has continued, the proportion having further fallen to 5.0 per cent. in 1888. The mean age of the 193,608 couples whose ages were stated, was 28.3 years for the men, and 26.0 years for the women. The widowers who re-married averaged 43.8, the widows 40.2, the bachelors 26.3, and the spinsters 24.7 years. These figures showed a very slight increase upon the mean ages of persons married in 1887. The marriages of minors, whether lads or girls, showed a further satisfactory decline, the proportion of such immature unions having been 63 per 1000 for men, and 199 per 1000 for women. We must go back as far as 1860 to find so low a proportion for the men, and to 1863 for so low a proportion among the women. (Table 7.)

*Signature in Marriage Register.*—In 5991 cases, that is to say in 29 per 1000 marriages, neither bridegroom nor bride could sign the register. This was a marked improvement even upon recent figures; and, if we go back to the earlier years of registration in the table (Table 7), we find that forty years ago in not far short of a quarter of the marriages neither the man nor the woman was able to write.

*Buildings registered for the Solemnisation of Marriages.*—There were, at the end of 1888, 14,923 Churches or Chapels belonging to the Established Church in which marriages could be solemnised, showing an increase of 56 upon the number at the end of the preceding year. The number of buildings registered for marriages by other rites than those of the Established Church standing on the register at the end of 1888 was 10,116 (Table 9), showing an increase in the course of the year of 182, or 1.8 per cent. upon the number on the register at the end of 1887.

*Certified Places of Worship.*—At the end of 1887 there were on the register 25,330 places of worship not belonging to the Established Church, certified for religious worship under Acts 15 & 16 Vict. c. 36, and 18 & 19

Vict. c. 81. During the year 1888 748 new buildings were registered, while 117 were removed from the register by cancellation; thus the net increase during the year was 631, and the number on the register on the 31st of December 1888 was 25,961. There are grounds, however, for believing that some of the buildings standing on the register are no longer used, although no steps have been taken to remove them from the register by cancellation.

#### BIRTHS.

The births registered in 1888 numbered 879,868, and were in the proportion of 30·6 to 1000 persons living. This is the lowest birth-rate recorded in this country since civil registration began, with the exception of the first year of registration, 1838, when the system was not yet in thorough working order, and the births that remained unregistered were doubtlessly very numerous. The birth-rate has fallen continuously since 1876, when it was 36·3 and at its maximum.

The rate varied in the registration counties from 24·2 in the little county of Rutland, 25·2 in Sussex, and 25·5 in North Wales, to 34·1 in Durham, and 35·4 both in Essex and in Monmouthshire. In every county, with the single exception of Essex, the rate was below the average of the preceding decennium; but the estimates of the populations of single counties so many years after the last enumeration are of course somewhat doubtful, and very possibly the apparent exceptional increase in the birth-rate, in the case of Essex, may be due to an under-estimate of the growth in that county since 1881. (Table 10.)

*Sex.*—The male births numbered 447,172, and the female births 432,696, the former being to the latter in the proportion of 1033 to 1000, the proportion in the preceding decennium having been 1038. In no previous year was the proportion of male to female births so low as in 1888.

*Illegitimate Births.*—The infants registered as born out of wedlock numbered 40,730, and were 4·6 per cent. of the total births, the proportion being lower than in any preceding year (Table 2). It is satisfactory to note that, though the marriage-rate has declined persistently for many years, and with it of course the legitimate birth-rate, the illegitimate birth-rate has also persistently declined, and in 1888 was only 1·4 per 1000 living persons. The registration counties in which the proportion of illegitimate to total births was highest were Norfolk, Herefordshire, Shropshire, Cumberland, and North Wales, all of these habitually showing similarly high proportions. (Table 10.)

#### DEATHS.

The deaths registered in the year numbered 510,971, and were in the proportion of 17·8 to 1000 persons living. This is far the lowest death-rate as yet recorded, the next lowest being 18·8, the rate recorded in the immediately preceding year 1887. In each of the eight years of the current decennium the death-rate has been under 20·0, whereas in no single previous year had it ever fallen so low. The average in the eight years has been only 19·05, having in the next preceding decennium, 1871–80, been 21·38.

It will be shown in the following paragraphs, in what counties, in which sex, at what ages, and under what diseases the great fall in 1888 occurred.

*County death-rates.*—The rate in 1888 was only 14·3 in Surrey (extra-metropolitan) and 14·6 in Sussex, and was under 16·0 in Kent, Berkshire, Huntingdonshire, Worcestershire, Rutlandshire, and Westmorland; while

in only one county did it rise as high as 20·0, namely in Lancashire, where the rate was 20·2. In every county, with one exception, the rate was below the previous decennial average; the exception was Dorsetshire, where the rate was the same as the previous average; that average, however, being one of the very lowest. (Table 10.)

*Sex.*—The 510,971 deaths included 263,294 of males and 247,677 of females. The death-rate of males was 18·8, and that of females 16·8 per 1000 living of each sex respectively, showing a decline for each sex of 10 per cent. from the average rate of the immediately preceding ten years 1878–87.

Out of equal numbers living there were 1121 deaths of males to 1000 deaths of females, a difference somewhat greater than in any of the three next preceding years (Table 2), and slightly exceeding the decennial average.

*Ages at Death.*—In Tables 11–14 are given the death-rates at different ages for each sex; and, if the figures for 1888 be compared with those for previous years, it will be seen that, though the mortality declined at almost every age, yet the main diminution was in the periods of infancy and childhood. The rate in the first age-period, 0–5 years, was for boys 15, and for girls 16 per cent. below the average in the preceding ten years; and among children in the second age-period, 5–10 years, the decline was 22 per cent. for boys, and 20 per cent. for girls; all these declines being greater than the falling off in the general death-rate at all ages, which, as stated in the last paragraph, was only 10 per cent. for each sex. The year 1888 was thus clearly especially favourable to infants and children, and, as will be seen later on, the favourable condition consisted in the coolness of the summer months which checked infantile diarrhoea, and the mildness of the winter months which checked infantile bronchitis.

The proportion of deaths of infants in the first year of life to the registered births, or the infantile mortality, which is largely influenced by the amount of summer diarrhoea, was 136 deaths to 1000 births, and, as may be seen in Table 18, the proportion has only twice been lower than this, namely in 1879 and in 1881, each of which years was also distinguished by exceptionally low diarrhoea mortality.

In almost every county (Table 10) the infantile mortality was considerably below the decennial average; but the rate varied from 87 in Westmorland, 95 in Herefordshire, and 100 in Dorsetshire, to 154 in the West Riding, 159 in Lancashire, 162 in Staffordshire, and 163 in Leicestershire, all these latter being counties in which the infantile mortality is invariably in excess.

It will be noticed that in this Report the deaths of infants in the first year of life have for the first time been sub-divided and shown for shorter sub-periods (pp. 106–133).

Among the deaths were 69 of reputed centenarians, 19 being men and 50 being women. A large share of these aged persons was as usual contributed by Wales.

*Urban and Rural mortality.*—The urban death-rate is invariably in excess of the rural death-rate; but the effect of sanitary measures has been to reduce the difference between the two very considerably. Both have fallen, but the urban rate more than the rural. In the three successive decennial periods, 1851–60, 1861–70, 1871–80, for every hundred deaths in the rural districts there were, out of equal numbers living, 124, 126, and 122 deaths in the urban population. But since 1880 only on one occasion, namely in 1882, has the proportion been so high as 120, and in 1888 it fell to 110, the minimum yet reached. (Table 24.) This is in great part attributable to the cool summer and consequent comparative absence

of infantile diarrhoea, which is a disease of towns rather than of rural districts, and which causes the excess of urban over rural mortality to be much greater in the third than in any other quarter of the year.

## REGISTERED CAUSES OF DEATH.

The assigned causes of death were distributed as follows in the several classes :—

TABLE B.—MORTALITY FROM THE SEVERAL CLASSES OF DISEASES.

Causes of Death.	Total Deaths 1888.	Rate per Million living.								
		1883.	1887.	1886.	1885.	1884.	1883.	1882.	1881.	Mean 1871-80.
Zymotic diseases - -	60,166	2,097	2,660	2,648	2,507	3,094	2,639	3,088	2,660	3,724
Parasitic diseases - -	709	25	29	35	30	38	39	37	39	57
Dietetic diseases - -	1,779	62	63	59	59	58	66	68	66	63
Constitutional diseases - -	89,332	3,111	3,166	3,330	3,276	3,404	3,407	3,395	3,328	3,594
Developmental diseases - -	44,293	1,543	1,555	1,618	1,598	1,574	1,632	1,558	1,582	1,674
Local diseases - -	27,202	9,479	9,720	9,915	9,908	9,543	9,890	9,591	9,348	9,920
Violence - -	17,534	611	642	626	625	651	675	669	697	736
Ill-defined and not specified causes - -	25,132	871	955	1,047	1,007	1,149	1,188	1,154	1,160	1,610
All causes - -	510,971	17,739	18,790	19,278	19,010	19,511	19,536	19,560	18,880	21,378

*Zymotic or Specific Febrile Diseases.*—The deaths ascribed to this class of specially preventable diseases numbered 60,166, and were in the proportion of 2097 to a million persons living. This rate was far lower than that recorded in any previous year in the current decennium, and no less than 44 per cent. below the mean rate in the preceding decennium, 1871-80.

It will be seen on reference to Table 16, that the decline in mortality was shared by all the diseases in this class, with the single exception of diphtheria; the rate under each other heading in the group having been considerably below the previous decennial average, and, in the majority of cases, if not actually at the minimum point yet attained, not far above it.

The deaths from *small-pox* were 1026, and in the ratio of 36 per million living, a ratio somewhat higher than that in either of the two next preceding years, but lower than the decennial average, which had been 54. To the 1026 deaths ascribed to *small-pox* may be added 116 ascribed to *chicken-pox*, and not improbably cases of mistaken *small-pox*; with this addition the rate instead of being 36 would still have only been 40.

Of the 1026 deaths ascribed to *small-pox* 91 were certified to have been of vaccinated and 269 to have been of unvaccinated persons, while concerning the remaining 666 there was no information.

Of the 1026 deaths no less than 409, or two-fifths of the whole, occurred in Sheffield with Ecclesall Bierlow. There were also minor outbreaks in Preston (52 deaths), Bristol and Clifton (47 deaths), Caistor (48 deaths), Ashton-under-Lyne (34 deaths), and Chesterfield (30 deaths).

The deaths from *measles* were 9784 and in the proportion of 341 per million living. This is the lowest rate recorded in any year since 1881, when the rate was only 280, and contrasts strongly with the rate in the immediately preceding year 1887, which was 594 and the highest, with the exception of 1839, on record. The exceptionally low rate in 1888 was probably to a considerable extent due to the excessive pre-

valence of the disease in 1887, which had left comparatively few children unprotected by previous attack. There were, however, some registration counties in which the measles mortality in 1888 was anything but low. Thus in Staffordshire the deaths per million living were 825, in Monmouthshire 747, in Dorsetshire 649, in London 565, in Gloucestershire 513, in Bedfordshire 455, and in Lancashire 427; and it is to be noted that in some of them, namely, the industrial counties of Stafford, Monmouth, London, and Lancaster the measles death-rate is almost always in excess. (Table 23.)

The deaths from *scarlet-fever* numbered 6378, and were in the proportion of 222 to a million living. For four successive years, 1885-88, the rate has been below 300, a level to which it had never fallen in any single preceding year. In 1874 the rate was 1051, and from that date has fallen almost uninterruptedly year after year. So persistent a decline can scarcely be explained by referring it to the casual fluctuation to which all the zymotic diseases are subject, and seems to point to some persistent improvement in the conditions on which the prevalence of this disease depends; and not improbably one such improvement consists in the extended facilities for isolation provided by sanitary authorities; and the greater care taken by school managers to exclude children coming from infected houses. The highest rates in the registration counties were 350 in Derbyshire, 362 in the West Riding, 387 in Lancashire, and 513 in South Wales, all of these being mining or industrial counties. (Table 23.)

The deaths ascribed to *typhus* numbered 160, being in the proportion of only 6 to a million living. This is the lowest typhus rate on record; the rate having fallen uninterruptedly, with the exception of a slight recrudescence in 1874, and again in 1882-83, from 193 per million in 1869, when the distinction of typhus from other fevers was first made in these annual reports, to the present insignificant figure. Doubtless much of this decline is due to the stricter use of the term typhus, which in earlier years was used frequently for any form of severe febrile attack; but the experience of our hospitals shows that this is not the whole explanation, and that there has been, for some reason or other, an extraordinary diminution, amounting almost to complete disappearance, of this species of continued fever. As has been several times pointed out in former reports it is in the northern counties that this disease still maintains a position; for out of the 160 deaths in all England and Wales, 10 occurred in Cheshire, 12 in the West Riding, 21 in Durham, and 67 in Lancashire; of these last, 35 occurred in Liverpool and the immediately surrounding districts, 15 in Manchester, Salford, and Prestwich, while the remaining 17 were scattered among the other registration districts of the county.

The deaths from *enteric fever* numbered 4848, being in the ratio of 169 per million living; while the deaths ascribed to simple or to ill-defined forms of continued fever were 436, or 15 per million living. These two rates, as that from typhus, were the lowest on record. Taking the 8 years of the current decennium, the mean annual rates have been 201 per million living for enteric and 28 for simple or ill-defined fever, while the average rates in the next preceding decennium had been 326 and 105 respectively. As the conditions under which outbreaks of enteric fever occur are more thoroughly known than those which bring about typhus, there seems no reason why we should not hope that this disease also may, like typhus, before many years practically disappear from the death account. The enteric fever rate in 1888 was less than 100 per million living in the counties of Surrey (extra-metropolitan), Sussex, Herts, Oxon, Bedford, Cambridge, Wilts, Dorset, Cornwall, Hereford, Rutland, and Cumberland; while it exceeded 200 in the counties of Northampton, Leicester, Lincoln, Nottingham, Derby, Chester, and Lancaster, the former being all rural and the latter, with one exception, industrial counties. (Table 20.)



Under *whooping-cough* 12,287 deaths were registered in the year, being 428 per million of the estimated population. This rate was somewhat, but not much, below the average, the mean rate in the ten preceding years, 1878-87, having been 490. This disease of children is much less amenable to sanitary interference than are most other zymotics, and the mortality from it has consequently been comparatively little reduced. The mortality was higher among girls than among boys, the rate under five years of age having been 3314 per million for the former and only 2780 per million for the latter; and it will be seen later on, when the age and sex incidence of zymotic diseases comes under consideration, that this higher mortality of girls is in accordance with the habitual incidence of this disease.

In the registration counties the rate varied from 17 per million in Herefordshire, 29 in Monmouthshire, and 85 in Cornwall, to 516 in Norfolk, 545 in Leicestershire, 576 in Staffordshire, 697 in London, 740 in Essex, 746 in Cumberland, and 934 in Middlesex (extra-metropolitan). (See Tables 20 and 23.)

The deaths registered under the heading *diphtheria* numbered 4815, being in the proportion of 168 per million living. With the single exception of 1884, the mortality from this disease had not been so high as this for more than 20 years. The differences of opinion as to what forms of throat affections should be termed diphtheritic doubtlessly make the mortality figures under this heading somewhat untrustworthy; still an examination of the figures for successive years, as given in Table 16, leaves but little room for doubt that this affection is on the increase, the registered rate having averaged 156 per million in the eight years of the current decennium, against an average of 121 in the next preceding decennial period.

It was pointed out in the 47th Annual Report (p. xiii), that an examination of the death-rates in the separate counties for a succession of years led to the conclusion that there are in this country two tolerably definite areas in which diphtheria apparently finds its most suitable home, and these areas were for convenience styled respectively the South-eastern and the Welsh diphtheritic regions. If the rates for 1888, as given in Table 20, be examined, it will be seen that of the sixteen registration counties in which the diphtheria mortality in that year exceeded the rate for the whole country no less than twelve form a compact area in the South-eastern district, while of the counties in or about the western district only one, namely, Monmouthshire, showed a similar excess. The remaining three counties, which form no part of either diphtheritic region, but nevertheless had in 1888 rates above the general average, were Lancashire, Devonshire, and Dorsetshire.

The deaths from *diarrhœa*, including *dysentery*, numbered 12,839, being in the proportion of 447 to a million living. This was not only far below the average, the mean annual rate in the immediately preceding ten years having been 749 per million, but was lower than the rate recorded in any one of the preceding forty years.

Of these 12,839 deaths, 8212 were of infants in the first year of life; and, comparing this figure with the births registered in the year, it will be found that the infantile diarrhœa deaths were in the proportion of 9333 to a million births, the proportion having been 16,355 in 1871-80, and 13,949 in 1881-87.

The diarrhœa mortality is mainly determined by the summer temperature, and the exceptionally low death-rate of 1888 is ascribable to the exceptionally low temperature of July and August, the mean temperature at Greenwich in these two months having been 57°·9 and 59°·1 respectively, against an average in 100 years of 61°·6 and 60°·8.

It is more striking, however, to compare 1888 with the immediately preceding year 1887, because the general sanitary conditions can hardly have changed much in these two contiguous years, and therefore any great difference in the diarrhœa mortalities can safely be attributed to other than sanitary causes. In 1887 the proportion of infantile deaths from diarrhœa to registered births was 15,909 per million, while in 1888 it was only 9333. But in 1887 the mean temperatures in June, July, and August were respectively 60°·9, 66°·5, and 62°·5; while in 1888 they were 58°·3, 57°·9, and 59°·1; a difference, taking the whole period of these months, of almost five degrees of Fahrenheit, so that those five degrees of extra heat in the summer of 1887 cost between six and seven thousand deaths of infants from bowel complaints per million registered births.

*Puerperal Fever.*—The deaths thus described were 2386, and, adding to these 1774 deaths from the other accidents of childbirth, we have a total of 4160 directly ascribed to parturition. This was in the proportion of 4·73 deaths to 1000 registered births, a rate somewhat higher than the previous decennial average, which had been only 4·51. The childbirth mortality was, as usual, much higher in Wales, and especially in North Wales, than in the English counties. (Table 23.)

*Hydrophobia.*—There were but 14 deaths ascribed to this disease in the year, being a smaller number than in any year since 1868. (Table 15.) Of these 14 deaths, 5 occurred in Lancashire, and 6 either in London or the immediately adjoining counties, while there was one apiece in Wiltshire, Cumberland, and Glamorganshire.

The great interest attaching to this disease makes it worth while to supplement the somewhat minute examination to which its statistics were subjected in the 48th Annual Report by a Table showing the geographical distribution of the deaths caused by it in the 20 years 1869-88. The number of deaths is too small to give a sufficient basis for calculation of trustworthy rates for each separate county. But by grouping these as is done in Table C., a somewhat better basis can be obtained.

TABLE C.—DEATHS AND AVERAGE ANNUAL DEATH-RATE FROM HYDROPHOBIA IN GROUPS OF COUNTIES, 1869-88.

COUNTIES.	Enumerated Population, 1881.	Deaths 1869-88.	Annual Deaths per Million living.
London - - - -	3,816,483	121	1·59
Middlesex (ex.met.) - - -	1,550,395	45	1·45
Surrey (ex.-met.) - - -			
Kent (ex.-met.) - - -			
Sussex - - - -	1,317,495	24	0·91
Hampshire - - - -			
Berkshire - - - -			
Hertfordshire - - - -	1,215,445	23	0·95
Buckinghamshire - - -			
Oxfordshire - - - -			
Northamptonshire - - -			
Huntingdonshire - - -			
Bedfordshire - - - -			
Cambridgeshire - - - -	552,268	9	0·81
Essex - - - -			

TABLE C.—Continued.

COUNTIES.	Enumerated Population, 1881.	Deaths 1869-88.	Annual Deaths per Million living.
Suffolk - - - - }	791,256	5	0·32
Norfolk - - - - }			
Wiltshire - - - - }	1,859,013	25	0·67
Dorsetshire - - - - }			
Devonshire - - - - }			
Cornwall - - - - }			
Somersetshire - - - - }			
Gloucestershire - - - - }	1,292,215	12	0·46
Herefordshire - - - - }			
Shropshire - - - - }			
Worcestershire - - - - }			
Warwickshire - - - - -	730,531	6	0·41
Leicestershire - - - - }	812,709	8	0·49
Rutlandshire - - - - }			
Lincolnshire - - - - }			
Staffordshire - - - - -	1,006,758	26	1·29
Nottinghamshire - - - - }	825,156	32	1·94
Derbyshire - - - - }			
Lancashire - - - - -	3,485,819	236	3·39
Cheshire - - - - -	622,365	30	2·41
West Riding - - - - -	2,197,999	107	2·43
North Riding - - - - }	696,760	17	1·22
East Riding - - - - }			
Durham - - - - -	1,309,252	35	1·34
Northumberland - - - - }			
Cumberland - - - - }	314,961	2	0·32
Westmorland - - - - }			
Monmouthshire - - - - }	1,577,559	17	0·54
Wales - - - - -			

It appears from the Table that hydrophobia has in this country two centres, from which it radiates into the surrounding districts.

The more important of these two centres consists of the county of Lancashire, where the annual mortality is 3·39 per million, and far higher than in any other part of the country whatsoever. From Lancashire the disease radiates into the contiguous counties of Chester and the West Riding, in which the rate is 2·43, and higher than anywhere else, excepting of course Lancashire itself. Then come the next adjoining counties on the south and east of these, namely, Derbyshire and Nottinghamshire, with a rate of 1·94; and then a further ring, consisting of Northumberland, Durham, North and East Riding, and Staffordshire, with rates varying from 1·22 to 1·34. The arrangement, which is of course best seen by duly shading an outline map, is so definite, that no reasonable doubt can exist that Lancashire is the central point from which the disease starts, and that the other counties in the North are affected in proportions determined by their

respective proximities to that centre. It is, however, to be noted that there is no radiation apparently into Westmorland and Cumberland, notwithstanding their proximity to Lancashire. Possibly their exceptional exemption may be explicable on geographical grounds, such as the presence of physical barriers and the comparative absence of great open lines of communication between the main part of Lancashire and these small mountainous counties.

The second centre consists of London, where the rate is 1·59 and higher than in any of the southern counties. From London the disease spreads into the extra-metropolitan portions of the three metropolitan counties of Middlesex, Surrey, and Kent, in which the rate is 1·45; and then into the wider belt of counties round these, Sussex, Hampshire, Berkshire, Oxfordshire, Buckinghamshire, Hertfordshire, Bedfordshire, Cambridge-shire, and Essex.

This geographical distribution of hydrophobia in man tallies very closely, as might be expected, with the distribution of rabies in animals. For it appears from the last report of the Agricultural Department of the Privy Council (page 151) that "there are two groups of counties or districts in which this malady is chiefly localised and where it may be said to be enzootic. The first comprises the counties of Chester, Lancashire, York (West Riding), Stafford, and Derby;—the second includes the Metropolitan and the adjoining counties of Middlesex, Essex, Kent, Surrey, and Sussex." It would be of much interest to know whether these two centres of rabies and hydrophobia are distinguished from the rest of the country in the number or character of the dogs that inhabit them.

*Parasitic diseases.*—Of the total 709 deaths in this class, 54 were ascribed to Hydatids, the average annual number in the seven earlier years of the current decennium having been 53; to worms and other animal parasites were ascribed 109 deaths, the average in the preceding seven years having been 131; vegetable parasites were credited with seven deaths, while the remaining 539 were ascribed to the very unsatisfactory heading thrush. It is, however, a sign of improving statement of causes by medical men that the deaths thus inadequately described are year by year falling off in number. In 1888 they were fewer than ever before, and the rate for the whole class fell in consequence to its minimum, being no more than 18 to a million living.

*Dietetic Diseases.*—The deaths in this class, in which intemperance is the chief heading, were 1779, and in the proportion of 62 per million living, a rate scarcely differing from the average of recent years.

*Constitutional Diseases.*—The deaths in this class numbered 89,332, being 3111 per million living, and fewer in proportion to the population than in any previous year of the current decennium, or than in the preceding decennial period. The decline was due to the further falling off in the mortality from phthisis and other tubercular diseases, which was at its minimum; while there was, as usual, a slight increase under cancer, and diabetes remained at the same point as had been reached in the previous year, that point being its maximum. The mortality from rheumatic fever and from rheumatism remained very nearly at the level of recent years. (Table 16.)

*Developmental Diseases.*—The deaths thus classed numbered 44,293, being 1543 per million living, a rate slightly, but not materially, lower than that recorded in any other year in the Table (Table B.). The main heading in the class is Old Age, and under this there was a slight further decline, attributable probably to the more precise designation of the causes of death of aged persons. The deaths from premature birth, which is the only other considerable heading in the class, were in the proportion of 15·98 deaths to 1000 registered births.

It has been pointed out in former reports, and the fact is of sufficient importance to deserve being again noticed, that the proportion of premature births, or rather of deaths so described, to total births, is constantly increasing, and though the deaths ascribed to congenital malformations have not increased to an equal extent, yet here also there appears to be a tendency to rise; and in 1888 the mortality under each of these headings reached its maximum, as the following table shows.

TABLE D.—PREMATURE BIRTHS AND CONGENITAL MAL-FORMATIONS.  
DEATHS TO 1000 BIRTHS, 1861-1888.

YEAR.	Premature Births.	Congenital Mal-formations.
1861-65	11.19	1.76
1866-70	11.50	1.84
1871-75	12.60	1.85
1876-80	13.38	2.39
1881	13.63	3.20
1882	13.99	3.31
1883	14.45	3.08
1884	14.42	3.15
1885	14.43	3.41
1886	15.09	3.33
1887	15.89	3.29
1888	15.98	3.45

*Local Diseases.*—The deaths in this class numbered 272,026, and were in the proportion of 9479 to a million living, a rate which though not actually the lowest shown in Table B., for it exceeded the rate in 1881, was nevertheless below the average of recent years. The decline was under diseases of the nervous system, of the liver and digestive organs, and of the respiratory system, these latter having probably fallen off in consequence of the mildness of the winter months; for the year 1888 had not only a remarkably cool summer, which diminished the diarrhoea mortality, but also a remarkably mild winter period. On the other hand there was a further slight increase in the mortality from the diseases of the circulatory system, and the deaths from urinary diseases remained practically at the level of recent years.

*Violence.*—The deaths ascribed to some or other form of violence numbered 17,534, and were in the proportion of 611 to a million living. Both the deaths from accident or negligence and the deaths from homicide were fewer in proportion to the population than in any previous year (Table 16), the rate for the former being 519 and for the latter 10 per million living. On the other hand the deaths from suicide, 2308 in number, were relatively more numerous than they had ever been before, being 81 to a million living.

The deaths from homicide include all those in which a jury has returned a verdict either of murder or manslaughter. Doubtlessly the line between the two is very vague; and consequently in the 49th Annual Report (p. xxi), when the age and sex liabilities to these forms of violent death were considered, the two were taken together. Still, as the deaths ascribed to manslaughter purport to be due to unintentional killing, while in those ascribed to murder the intention was held to be the destruction of life, it may be of interest to examine what ages and which sex are most liable to murder. The following table gives the experience of 25 years, namely, 1863-1887.

TABLE E.—DEATHS AND DEATH-RATES OF MALES AND FEMALES FROM MURDER AT DIFFERENT AGE PERIODS, PER MILLION LIVING, 1863-1887.

AGES.	Murders.		Annual Rates per Million living, 1863-87.	
	Males.	Females.	Males.	Females.
<b>All Ages</b>	<b>2,656</b>	<b>2,658</b>	<b>9</b>	<b>9</b>
0—	1,626	1,629	178	180
1—	51	55	6	7
2—	32	38	4	5
3—	24	30	3	4
4—	15	25	2	3
Total under 5	1,748	1,777	43	43
5—	59	70	2	2
10—	27	25	0.8	0.8
15—	65	52	2	2
20—	122	105	5	4
25—	208	219	5	5
35—	179	187	5	5
45—	113	115	5	4
55—	71	58	4	3
65—	39	35	4	3
75 and upwards	25	15	7	3

It will be seen from the Table that more than 60 per cent. of the deaths from murder are cases of infanticide, murders of infants in the first year of life. The first year passed, the chances of murder decrease year by year through infancy and childhood, till a minimum is reached about the close of the fifteenth year. Then the rate again rises, and having after a few years reached some 5 per million remains pretty much the same throughout the rest of life. There is very slight difference in the respective liabilities of the two sexes; but, so far as conclusions can be drawn from such scanty data, there appears to be a slightly greater tendency to destroy female infants and very old men, rather than male infants or aged women.

*Ill-defined and Not-specified Causes.*—The deaths in this unsatisfactory class numbered 25,132, being 4.9 per cent. of all the deaths registered. This shows a further improvement in the certification of causes of death, the average percentage in the preceding years of the current decennium having been 5.7. It was, however, found necessary to send no less than 3370 letters of inquiry to medical practitioners, asking for further particulars as to causes of death that had been indefinitely stated. The result of this laborious work was to add 367 deaths to the heading cancer, 301 to puerperal fever and accidents of childbirth, and varying numbers to other definite headings.

*Certification of the Causes of Death.*—During the year 1888 the causes of 466,646, or 91.3 per cent. of the 510,971 deaths, were certified by registered medical practitioners; and the causes of 28,578, or 5.6 per cent., were certified by coroners after inquest. The causes of 15,747, or 3.1 per cent. of the total deaths, were not certified, the proportion of uncertified deaths having steadily declined from 4.7 per cent. in 1879 to 3.3 per cent. in 1887. The proportion of uncertified deaths as usual varied very considerably in different parts of England and Wales. In the county of London the proportion in 1888 did not exceed 1.0 per cent. The lowest percentages of uncertified deaths in the other counties were 0.9 in

Middlesex, 1.1 in Surrey, 1.2 in Wiltshire, 1.3 in Monmouthshire, and 1.4 in Sussex; while the highest percentages were 4.4 in the West Riding, 4.5 in Derbyshire, 4.6 in Cornwall, 4.7 in Herefordshire, 4.8 in Kent, 5.0 in Durham, and 6.4 in Huntingdonshire. In Wales the percentage of uncertified deaths was 6.9, being 8.7 in North Wales, and 6.1 in South Wales.

PROGRESS OF REGISTRATION.

The number of names added in 1888 to the alphabetical indexes of births, deaths, and marriages recorded in the national register of England and Wales was 1,798,481. At the close of the year the aggregate number of names in these indexes, which embraced a period of 51½ years, was 77,554,236. The total number of searches in 1888 in the various registers was 40,477, showing an increase of 2727 upon the number in the previous year. The number of certificates issued was 30,053, and 2565 more than in 1887. The amount received as fees for searches and certificates in the year 1888 and paid into Her Majesty's Exchequer was 5,808*l.* *os.* *6d.* an increase of 460*l.* *15s.* *6d.* upon the amount in the previous year. (Table 26.)

A list of the various public registers and records lodged in the General Register Office, Somerset House, was published in the 34th Annual Report, pp. xxi-xxii and xxv-xxvi.

MORTALITY IN THE ARMY.\*

The average strength of the Army, at home and abroad, in 1888, was 211,105, and the deaths were 2041, so that the rate of mortality was 9.7 per 1000; in the two preceding years the rates had been 13.8 and 9.6. The mortality in the army abroad was 12.6 per 1000, whereas it had averaged 15.3 in the five preceding years; the rate at home was 6.8, corresponding with the rate in the preceding quinquennium. (Table 29.)

MORTALITY IN THE NAVY.†

The average force afloat in 1888 was 50,060. The deaths were 286, being in the ratio of 5.71 per 1000 of the strength. Of the 286 deaths, 198 were due to disease, and 88 (including 8 from heat-stroke) to violence; so that the death-rate from disease was 3.95 and from violence 1.76 per 1000.

Of the 88 deaths from violence 35 resulted from accidental drowning, 44 from other accidental causes, and 9 from suicide.

BIRTHS AND DEATHS OF BRITISH SUBJECTS AT SEA.

*Marine Register Book.*—In accordance with the Births and Deaths Registration Act of 1874, commanding officers of British ships not in Her Majesty's service, are required, under a penalty, to transmit returns of all births and deaths occurring on board their ships to the Registrar-General of Shipping and Seamen, who furnishes certified copies of such returns to the Registrars-General of England, Scotland, and Ireland. Returns of a similar character are also received from the commanding officers of Her Majesty's ships. These certified copies of entries of births and deaths at sea constitute the "Marine Register Book." During the year 1888 the

\* Based upon returns furnished by His Royal Highness the Commander-in-Chief.

† From data supplied by the Director-General of the Medical Department of the Navy.

entries added to this Register related to 232 births and to 3374 deaths. Of these 3374 deaths, 1486 were of persons returned as of English origin, while 499 were indefinitely returned as of persons of "British" origin.

Among *passengers* on board merchant vessels at sea (Table 32), 129 births and 447 deaths were reported in 1888, showing a decline of 15 births and of 423 deaths, as compared with the numbers in 1887.

*Mercantile Marine.*—The Registrar-General of Shipping and Seamen reports that the number of masters and of merchant seamen afloat in registered vessels belonging to the United Kingdom, including the islands in the British Seas, during 1888 was 223,673, showing an increase of 3407 upon the number in the preceding year. The reported deaths among these masters and merchant seamen during 1888 were 3114, and were equal to an annual rate of 13.9 per 1000 of the strength; this was 1.5 below the rate in 1887, and was lower than the recorded rate in any recent year.

INTERNATIONAL VITAL STATISTICS.

In Tables 39-56 will be found international vital statistics relating to most of the principal European States, including the United Kingdom. Table 39 affords the means for comparing the marriage, birth, and death-rates in each State in a series of years with the mean rate during the period 1861-80. Tables 40-56 give detailed statistics for the United Kingdom and its several parts, and for the other European States.

The *marriage-rates* in 1888, with the exception of a further increase in Belgium, scarcely differed from those recorded in 1886 and 1887. The mean rate in the nine European States furnishing returns was 15.2 per 1000, and exceeded the rate in the United Kingdom by 1.9. The rates in the various States ranged from 12.3 in Norway and 13.8 in the Netherlands, to 15.8 in Austria and 16.1 in Prussia.

The *birth-rates* showed a further general decline in the European States, the mean rate being 32.8, which exceeded the rate in the United Kingdom by 3.2. The rates in the various States ranged from 23.1 in France and 27.7 in Switzerland, to 36.6 in Italy, 36.7 in the German Empire, and 37.9 in Austria.

The *death-rates*, compared with those in 1887, showed an increase in Denmark, Norway, Austria, the Netherlands, and Belgium, whereas they declined in the other States. The mean rate of mortality in the nine European States furnishing returns was 24.3 per 1000, and exceeded the rate in the United Kingdom by no less than 6.5. The rates in the various States ranged from 16.9 in Norway and 19.7 in Denmark, to 23.8 in the German Empire, 26.8 in Italy, and 29.2 in Austria. It should be remembered, however, that, in order to make these crude death-rates strictly comparable, due correction should be made for the variations in the proportional age-distribution of the several populations.

ZYMOTIC MORTALITY IN RELATION TO SEX AND AGE.

In the last Annual Report (pp. xxi-xxxiv) statistics, based upon the enormous mass of data that have accumulated in the General Register Office since its establishment half a century ago, were given as to the age and sex incidence of a considerable number of fatal diseases. How wide was the basis upon which these statistics were founded may be judged from the fact that the rates of mortality at the several age-periods and in the two sexes for phthisis were calculated from not far short of two million recorded deaths from that disease. In the diseases examined in that report the main zymotic affections were not included, partly for want of space, and partly

because those zymotic affections require a somewhat different mode of investigation; for as several of them are mainly, though not exclusively, destructive in the earlier years of life, it becomes necessary in their case to split up the first age-period, 0-5 years, into single-year periods, and further, if possible, to divide the first year itself into shorter sub-divisions of time.

It will, however, be convenient first of all to give a Table (Table F) for these zymotics drawn up on the same plan as was used for the other diseases, and to show in a separate Table (Table G) the further sub-divisions of the first age-period. As in the corresponding Table in the former Report, the second column in Table F gives the period over which the observations have extended, while the third gives the total number of observations that have accumulated in that period. Columns 5-15 give the annual death-rates at eleven successive age-periods per million living at each such period; while in column 4 are given the annual rates per standard million, that is for a million males and females having identically the same age-distribution, this distribution being that given at p. xxi of the last Report.

It will be noted that with the single exception of enteric fever, all the diseases in the Table are diseases that are pre-eminently, though not exclusively, fatal in the first five years of life, and that the only diseases of which the very high rate of mortality extends beyond that first age-period are scarlet-fever, diphtheria, and, as already mentioned, enteric fever. It is this, as before explained, that makes it advisable to split up the first age-period into single years. But it must be remembered that death-rates calculated for single years of life are far less trustworthy than those calculated for quinquennial or decennial periods, inasmuch as neither the living population nor the number of deaths can be ascertained with anything like so great accuracy as is possible for the longer periods. For, when a child is stated by its parents to be three years old, we may feel assured that it comes well within the 0-5 age-period, but can by no means feel equally certain that the parent may not have meant "in its third year of life" and not "three at its last birth-day." At the same time the effect of this uncertainty must not be exaggerated; and the rates may, in spite of it, be accepted as approximately correct.

*Small-pox.*—The mortality from small-pox was considered at length in the 43rd Annual Report, and it was there shown how enormously, not only the aggregate death-rate from this disease, but the relative mortality at different age-periods, had been altered concurrently with the increasing use of vaccination. The average rates therefore for 1854-87 given in Table F differ very widely from the rates if calculated for a shorter and more recent period. But as there is no reason to suppose that vaccination is neglected more commonly in one sex than the other, the rates in the Table may be safely used for comparison between males and females in regard to their liability to death from small-pox. The Tables show that throughout life, with the exception of the 2nd and 3rd years and of one later quinquennium, the mortality of males exceeds that of females, and this in a very high degree, and that, taking all ages together, the average annual male rate has been 183 and the average annual female rate 148 per standard million. The exceptional quinquennial period is the 10-15 years period, when the female slightly exceeds the male mortality, being also very little behind it in the next quinquennial age-period. This, however, is simply an instance of what is observable in many other diseases, namely that, at a stage of life when important organic changes are going on in the female body, the mortality of females rises to a much higher level as compared with that of males than at the other periods of life. The excess on the female side in the 2nd and 3rd years is but very slight, and, did it stand as an isolated fact, might be attributed to the comparative untrustworthiness of rates calculated for single-year periods. But, on looking at the figures for other diseases it will be seen that several of them present somewhat analogous features.

TABLE F.—AVERAGE ANNUAL DEATH-RATES FROM THE CHIEF ZYMOTIC DISEASES PER MILLION LIVING AT SUCCESSIVE AGE-PERIODS, AND PER STANDARD MILLION AT ALL AGES (in continuation of Table C. in 50th Annual Report, pp. xxii-iv).

DISEASE.	Period taken for Calculation.	Number of Deaths in Period.	Annual Mortality per Million living.												
			ALL AGES. (Standard Million.)	Under 5 Years.	5—	10—	15—	20—	25—	35—	45—	55—	65—	75 and upwards.	
Column 1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	
Small-pox - - - -	1854-87	M.	70,136	183	511	187	76	120	218	175	123	87	55	43	37
		F.	57,889	148	493	167	80	108	128	102	69	45	32	20	18
Measles - - - -	1848-87	M.	187,338	426	2,888	236	25	8	6	4	3	2	1	0·7	1
		F.	180,264	408	2,738	259	32	11	8	8	5	2	1	1	1
Scarlet-fever - - -	1859-85	M.	238,262	763	3,681	1,667	346	111	59	36	20	12	6	4	5
		F.	231,299	738	3,482	1,613	381	113	77	58	28	9	7	5	3
Diphtheria - - - -	1859-87	M.	53,086	157	655	337	100	46	27	19	18	19	24	25	23
		F.	59,988	176	664	434	147	53	30	24	21	16	19	19	20
Croup - - - -	1848-87	M.	97,376	221	1,393	254	13	0·7	0·2	0·2	0·2	0·14	0·08	0·3	0·6
		F.	84,694	192	1,204	231	12	0·9	0·4	0·3	0·2	0·1	0·2	0·06	0·3
Whooping-cough - -	1848-87	M.	198,785	451	3,217	118	5	0·9	0·4	0·3	0·3	0·3	0·4	0·9	0·8
		F.	243,752	554	3,916	179	10	2	0·6	0·5	0·4	0·4	0·6	0·4	2
Diarrhoea and Dysentery -	1848-87	M.	406,941	932	5,526	83	32	33	49	69	102	191	478	1,404	3,941
		F.	375,909	835	4,805	87	32	35	57	91	124	185	464	1,357	3,733
Enteric Fever - - -	1869-87	M.	67,064	288	303	264	250	353	395	301	240	244	256	287	210
		F.	67,751	277	312	304	310	389	302	253	217	203	210	221	154

Zymotic Mortality in relation to Sex and Age.

TABLE G.—ANNUAL DEATH-RATES PER MILLION LIVING AT EACH OF THE FIRST FIVE YEARS OF AGE.

DISEASE.	Period taken for Calculation.	Number of Deaths in Period under 5 Years of Age.	Annual Mortality per Million living.					
			Under 5 Years.	Under 1 Year.	1—	2—	3—	4—5.
Columns 1.	2.	3.	4.	5.	6.	7.	8.	9.
Small-pox - - -	1854-87	M. 26,906	511	1,035	432	367	341	305
		F. 25,937	493	946	448	381	333	296
Measles - - -	1848-87	M. 172,567	2,888	3,011	5,812	2,883	1,599	926
		F. 163,307	2,738	2,515	5,462	2,935	1,680	956
Scarlet fever - - -	1859-85	M. 156,456	3,681	1,664	4,170	4,676	4,484	3,642
		F. 147,885	3,482	1,384	3,874	4,491	4,332	3,556
Diphtheria - - -	1859-87	M. 30,358	655	464	720	675	757	690
		F. 30,765	664	356	665	731	835	782
Croup - - -	1848-87	M. 83,260	1,393	1,043	1,871	1,633	1,422	1,013
		F. 71,825	1,204	752	1,574	1,519	1,294	912
Whooping-cough - - -	1848-87	M. 192,190	3,217	6,769	4,930	2,071	1,086	584
		F. 233,599	3,916	7,306	6,223	2,954	1,629	859
Diarrhoea and Dysentery - - -	1848-87	M. 330,187	5,526	18,972	5,024	1,042	393	231
		F. 286,631	4,805	15,899	4,950	1,057	381	221
Enteric fever - - -	1869-87	M. 9,769	303	183	306	364	343	336
		F. 10,084	312	171	299	365	374	373

Thus, under diarrhœa, measles, diphtheria, and enteric fever, though the male mortality in the first two years is in excess, a change sets in in the third year, and the female rate becomes the higher. The general explanation appears to be that the first year of life, and in a smaller degree also the second, is pre-eminently dangerous to male children, who from a pathological point of view are weaker than girls of corresponding age, and, if not more liable to be attacked by most illnesses, are at any rate more likely to succumb to them. These first years of life over, the two sexes for the rest of early childhood stand more on an equality; and, more of the weakly males having already succumbed, there may perhaps now be even some slight inferiority on the side of the girls.

The much greater mortality from small-pox of males than of females seems to have escaped the notice of most writers on this disease, who speak of the two sexes as equally susceptible to attack, and do not state such attacks to be more fatal in the one than in the other sex. But the basis (128,025 deaths) on which the rates in Tables F. and G. are based is so large, and the difference in the rates is so great, that it is impossible to question the reality of the fact, that for some reason or other the male mortality from small-pox far exceeds that of females. There are two possible explanations, namely, greater susceptibility to attack on the part of males, or greater chance of an attack in their case proving fatal. Not improbably both explanations are concurrently admissible; for, judging from such imperfect data as are furnished by the reports of our public small-pox hospitals, not only do the male cases admitted far outnumber the female cases, but a much larger proportion of them terminate in death.

*Measles.*—There is reason to believe that all ages and both sexes are equally liable to be attacked by this disease, for, when after an absolute immunity of many years, a case of measles was introduced into the Faroe Islands, the infection spread to all persons without exception, saving some few aged persons who had had an attack in their early childhood and were consequently protected. But in this country, where the virus is always present, so very large a proportion of the population is attacked in infancy or childhood that the number remaining unprotected at more advanced ages is comparatively small. Thus the disease appears to be almost limited to childhood, and the mortality of course follows the same limitation. Whether any part, and, if so, how great a part, in the low mortality of the more advanced ages is due to diminished case-mortality at such ages, there are unfortunately no means of deciding, in the absence of sufficiently ample records of cases.

Limiting ourselves, therefore, to the mortality figures, we find that the death-rate from measles is at its maximum for each sex in the second year of life, and then falls rapidly, year by year, until, after childhood is past, it becomes insignificant. Taking the whole of life the aggregate mortality is somewhat higher for males than for females, the mean annual deaths per standard million having been 426 for the former and 408 for the latter in the forty years 1848-87. But it is curious that this excess on the side of males is entirely due to their higher mortality in the first two years of life, and that at each later year in the first quinquennium and in each later age-period, the female mortality is the higher. These excesses on the female side are not very large, but are sufficiently so to be unmistakable; and their being maintained regularly, age-period after age-period, leaves no doubt that they are not casual but the outcome of some persistent law.

*Scarlet Fever.*—The statistics of scarlet fever were examined in great detail in the 49th Annual Report (pp. xiii-xviii), and it will, therefore, be unnecessary to do more on the present occasion than quote the conclusions to which that elaborate inquiry led. They were as follow:—



1. The mortality from this disease is at its maximum in the third year of life, and after this diminishes with age, at first slowly, afterwards rapidly.
2. This diminution is due to three contributory causes; (a) the increased proportion in the population at each successive age-period of persons protected by a previous attack; (b) the diminution of liability to infection in successive age-periods of those who are as yet unprotected; (c) the diminishing risk in successive age-periods of an attack, should it occur, proving fatal.
3. The liability of the unprotected to infection is small in the first year of life, increases to a maximum in the fifth year or soon after, and then becomes rapidly smaller and smaller with advance of years.
4. The chance that an attack will terminate fatally is highest in infancy, and diminishes rapidly to the end of the twenty-fifth year, after which an attack is again somewhat more dangerous.
5. The female sex throughout life, the first year possibly excepted, is more liable to scarlet fever than is the male sex.
6. But the attacks in males, though fewer, are more likely to terminate fatally.

*Diphtheria.*—It is scarcely to be doubted that the returns of deaths under this heading are untrustworthy, there being apparently no thorough consensus among medical practitioners as to the precise use of the term, and especially there being a difference in opinion as regards its relation to croup. Not infrequently it has been found that, there being an outbreak of sore-throats in some district, the deaths in one medical man's practice are returned as due to diphtheria, in another's as due to sore-throat, and in another's perhaps to croup. On this account the figures for croup have been put in the two previous Tables side by side with those for diphtheria, although croup, in accordance with the classification of the College of Physicians, does not find its place in these Reports among the zymotic affections, but among diseases of the respiratory system. A comparison of the figures under the two headings in Tables F. and G. will, however, sufficiently show, that, though there may be considerable confusion and an absence of any very clear line of demarcation between the deaths ascribed to croup and those ascribed to diphtheria, the two names can scarcely be regarded as mere aliases for one and the same affection. For while the mortality under croup is throughout considerably higher among boys than among girls, the mortality under diphtheria after the first two years of infancy is much higher in the female sex, diphtheria being the only zymotic disease, with the exception of whooping-cough, to which females furnish, out of equal numbers living, more victims than do males.

The mortality from diphtheria rises to its maximum about the fourth year of life, and then falls in each successive age-period with the exception of an insignificant rise in old age.

Sufficient data are unfortunately not to be found for determining whether the higher death-rates of females and of the young are explicable by higher case-mortality; that is to say, whether, and to what extent, an attack of diphtheria is more likely to terminate fatally in a female than in a male, and in a child than in an adult; but it appears from such data as are procurable\* that the susceptibility to attack among those living in cottages where the disease is present is very much greater for females than for males, and for those under than for those over 20 years of age; and further that in the first two years of life the susceptibility is not so great as somewhat later on; so that the mortality figures in Tables F. and G. show at any rate a general correspondence with the observed facts as to susceptibility.

\* Cf. St. George's Hosp. Reports, 1877-78., ix. 717-8.

*Whooping-cough.*—The mortality from this affection is at its maximum in the first year of life, in which respect whooping-cough resembles diarrhoea and small-pox, but differs from measles, scarlatina, diphtheria, and enteric fever, all of which reach their maxima in a later year. The first year passed, the mortality from whooping-cough falls gradually year by year, and after the tenth year becomes quite insignificant. Whooping-cough presents this peculiarity, which, however, is shared in a smaller degree by diphtheria, that it is more destructive to females than to males, the mean annual mortality per standard million being 554 for the former, and only 451 for the latter sex. Moreover, if we put aside those advanced age-periods when the deaths are too few to give a safe basis for calculation, the excess on the female side shows itself at each successive age-period; and this is the only zymotic disease in which such a condition of things presents itself.

There are unfortunately no adequate data available for determining whether the greater mortality of the female sex is due to greater liability to attack, or to higher case-mortality. It appears, however, to be the opinion of medical authorities, that girls are much more liable than boys to contract this ailment.\*

*Diarrhoea.*—Of all the affections included in the above Tables the most destructive is diarrhoea, with which is comprised dysentery. These bowel affections are most fatal at the two extremes of life, and especially in infancy, the mean annual mortality in the first year of life having been in the forty years, 1848-87, no less than 18,972 per million living among male infants and 15,899 per million among girls. After the first year of life the mortality falls very greatly and diminishes continuously until a minimum is reached in the 10-15 years period, after which it again rises slowly but uninterruptedly, age-period after age-period, to the end. In the first year of life, and also in old age, the male exceeds the female mortality, but in the intervening age-periods there is no such very marked difference between the sexes, and in the child-bearing periods, from 15 to 45 years, the mortality is distinctly higher among females. But as the first year and old age are the periods when diarrhoea is by far the most fatal, the total mortality of males at all ages is considerably in excess of the female mortality, the annual deaths averaging 932 for the former and only 835 for the latter, per standard million.

*Enteric Fever.*—It is highly probable that a large proportion of the deaths ascribed to enteric fever among infants and very young children are in reality not due to that disease, but to some undetected cause manifesting itself in feverish symptoms; for there appears to be a very general consensus among the best authorities, that true enteric fever is very rare among children in the first two years, and uncommon even in the third and fourth years of life. Taking, however, the figures as they stand, the registered mortality from this disease is at its minimum, for each sex, in the first year of life, after which it rises and remains high for the remaining years of the first quinquennial period, so that the annual rate in the aggregate quinquennium is high, 303 for males and 312 for females per million.

After this first period is over, the rate falls not inconsiderably for males, but quite insignificantly for females, until the 15th year of life has been completed, when the rate again rises, reaches a maximum in the 20-25 years period, and then falls to remain comparatively low through the remaining age-periods.

The aggregate rate for all ages is somewhat, but very slightly, higher for males than for females, being 288 for the former and 277 for the latter

\* Cf. Barthez et Rilliet., ii., 644. Steffen in Ziemssen's Cyclop., vi., 717.

per standard million; and this excess on the side of males is the more noticeable inasmuch as an attack of this fever is on the whole somewhat more likely to prove fatal in the case of females than in the case of males.\*

But though the male death-rate from enteric fever at all ages in the aggregate exceeds that of females, this is by no means the case at each separate age-period. On the contrary the female mortality is very considerably the higher from the third year of life until the end of the twentieth.

Is this higher death-rate of females at these ages due to greater liability on their part to contract the disease, or to its being in their case more often fatal? The latter appears to be the case, as is shown in the following Table (Table H.), in which the number of deaths per million in each sex at each age-period is multiplied by the number of cases to one death, as deduced from the records of the London Fever and Metropolitan Asylum Hospitals. The Table shows that so far from females between 5 and 20 years of age being more liable than males to attacks of enteric fever, their liability is considerably less; and that it is the more dangerous nature of the attack, or in other words the higher case-mortality, and not a greater number of attacks, to which the excessive female death-rate at these age-periods is due. The Table, though the case-mortality is only based on 5716 recorded attacks, which doubtlessly is scarcely a sufficiently wide foundation, shows clearly enough how dangerous it is to draw inferences as to the liability of different ages and sexes to any given disease merely from the mortality figures.

TABLE H.—ENTERIC FEVER.—AVERAGE ATTACKS TO ONE DEATH; AND ESTIMATED ANNUAL ATTACKS AT SUCCESSIVE AGE-PERIODS PER MILLION LIVING AT EACH SUCH PERIOD.

AGES.	MALES.			FEMALES.		
	Annual Deaths per Million living.	Average Cases to one Death. (London Hospitals.)	Estimated Annual Cases per Million living.	Annual Deaths per Million living.	Average Cases to one Death. (London Hospitals.)	Estimated Annual Cases per Million living.
0 —	303	6.08	1,842	312	8.33	2,599
5 —	264	13.79	3,641	304	9.58	2,912
10 —	250	11.19	2,798	310	5.54	1,717
15 —	353	6.27	2,213	389	4.49	1,747
20 —	395	4.49	1,774	302	5.69	1,718
25 —	301	3.64	1,096	253	4.77	1,207
35 —	240	3.57	857	217	4.47	970
45 & upwds.	253	2.19	554	205	4.79	982

In dealing with the zymotic diseases in Table G., the first quinquennium has been broken up into single-year periods. The first year of life, however, with its excessively high death-rate, is of such importance that it will be worth while attempting to sub-divide it into still shorter periods. But before so doing, it is necessary to repeat, and even with greater emphasis, the caution already given as to single-year periods, namely that the shorter the age-period for which rates are calculated the less trustworthy are the results. The differences, however, in the rates in the several

\* This statement is based on the results of 5716 cases collected from successive reports of Metropolitan Hospitals. It was found that the case-mortality for males was 171 per 1000 and for females 188 per 1000; and this result tallies pretty closely with that of medical writers. Thus the cases collected by Murchison gave him a mortality for males of 177, and for females of 189 per 1000 cases.

sub-divisions of the first year, as shown in the following Table, are as a rule so very great, that, when every allowance has been made for possible and probable inaccuracies, some most certain inferences may be drawn without risk of error. It has not been thought worth while to calculate the rates separately for males and females. The figures, therefore, are for all infants irrespective of sex.

TABLE I.—DEATH-RATES FROM VARIOUS CAUSES OF INFANTS IN SUB-PERIODS OF THE FIRST YEAR OF LIFE, 1852-70 AND 1881-7.

CAUSES OF DEATH.	Annual Rates per Million.		
	Under Three Months.	Three Months and under Six Months.	Six Months and under One Year.
All Causes - - -	313,429	129,234	105,428
Small-pox - - -	1,573	890	790
Measles - - -	384	885	4,881
Scarlet Fever - - -	303	688	2,349
Diphtheria - - -	320	304	632
Whooping-cough - - -	4,560	6,144	8,123
Fever - - -	384	581	784
Diarrhœa - - -	20,996	20,138	11,860
Erysipelas - - -	1,905	774	268

The most noticeable feature in this table is that though the annual mortality of infants from all causes is far higher in the first three months of life than in the next quarter, and in this again than in the remaining six months of the first year, the contrary is the case as regards most of the zymotic diseases, the annual mortality increasing with the advance of age, and being especially low in the first three months. This is the case with Measles, Scarlet Fever, Diphtheria, Whooping-cough, and Fever, from all of which diseases very early infancy appears to enjoy a marked degree of immunity. But the figures for Small-pox, for Diarrhœa, and for Erysipelas contrast in the most striking way with these: for under each of those headings the mortality is highest in the first three months, and declines very greatly after that age.

As regards Small-pox the probable explanation of this is to be found in the fact that the proportion of infants who are protected by vaccination is comparatively small in the first three months, and increases with the advance of age. As regards Erysipelas, under which somewhat vague name are probably included a variety of skin affections, the fact that the mortality is enormously greater in the first three months than later on is scarcely compatible with the opinion, sometimes put forth, that the mortality of infants from this affection is in large measure due to vaccination; for the excess is at the period when vaccination is least common, and the mortality largely decreases when the usual time for vaccination has arrived. There remains Diarrhœa; here there is no very great difference of rates between the first and the second three months, in each of which short periods the mortality is enormously high; but these two sub-divisions of the first year contrast in a remarkable degree with the third and latest sub-division, in which the mortality falls off by not far short of 50 per cent. And this is the more noteworthy, inasmuch as it appears to be the belief of those who have given attention to the subject, that diarrhœa is more common among infants who have been weaned than among those who are still at the breast. If this be so, the necessary inference appears to be, that diarrhœa, though less frequent among infants in the first six months of life than among those somewhat older, is never-

theless so much more likely to prove fatal to them, that the comparative paucity of attacks is much more than counterbalanced.

The age and sex incidence of the chief diseases in our Tables has now been pretty fully considered, and from the accounts given in the present and the last Reports it will be sufficiently clear that before any satisfactory answer can be returned to the question, whether any given disease is more fatal in the one than in the other sex, it is absolutely necessary to take age into account. There are, it is true, some diseases among those to which both sexes are liable, that are at every age-period more destructive to one sex than the other. Such, for instance, are gout, carbuncle, alcoholism, diabetes, fistula, pleurisy, aneurism, calculus, cystitis, and generally diseases of the urinary organs, which at each age-period carry off more males than females; such also are cancer, chorea, and gallstones, which are practically at all ages more destructive to women. But in the majority of cases, one and the same disease is more fatal at some ages in one sex, and at other ages in the other. As instances may be cited phthisis, apoplexy, syphilis, erysipelas, and hernia; to which may further be added several others, which, though at most age-periods they carry off annually more males than females, yet in the exceptional period of puberty reverse the order of fatality, and are more destructive to the female sex; such are pneumonia, bronchitis, and generally diseases of the respiratory organs, and such also are pericarditis and rheumatic fever.

If a simpler answer as to the respective mortalities of the two sexes be required, the only way to obtain it is, as has been previously explained, to apply the death-rates for each sex at the successive age-periods to a male and female population in which the age distribution is identical; and, when this is done, it is found that the annual mortality in almost all cases is higher in the male than in the female sex, the only, or almost the only, exceptions to this rule being cancer, chorea, gallstones, peritonitis, diphtheria, and whooping-cough, under each of which headings the female mortality is the higher. Among the other diseases the excess on the male side is sometimes comparatively slight, as in enteric fever, measles, scarlet fever, diseases of the digestive organs, syphilis, and rheumatic fever, under none of which headings is the excess as much as ten per cent.; but there are other headings under which the male rate is from two to five times, or in one instance as much as nine times, as high as the female rate. Such are alcoholism, gout, carbuncle, aneurism, fistula, calculus, cystitis, and generally diseases of the urinary organs, and such also are accident and suicide.

I have the honour to be,

Sir,

Your faithful Servant,

BRYDGES P. HENNIKER,

General Register Office, Somerset House,

Registrar-General.

30th November 1889.

REMARKS ON THE METEOROLOGY OF THE YEAR 1888.\*

By JAMES GLAISHER, Esq. F.R.S., &c.

The following remarks, both with regard to atmospheric pressure and temperature, are based on the observations made near London, but they may be taken as having a general application.

*Atmospheric Pressure.*—The readings of the barometer were generally above their averages till the 9th of February, being particularly so from the 9th to the 13th of January, when they were about three-quarters of an inch above their averages, the mean daily excess for the 40 days being 0.28 in.; from February 10th to the 22nd they were below, the mean daily deficiency being 0.22 in.; from February 23rd to March 2nd they were above, the mean daily excess being 0.16 in.; from March 3rd to the 31st they were below, particularly so on the 11th, 28th, and 29th days, when they were over an inch below their averages, the mean daily deficiency for the 29 days being 0.43 in.; from April 1st to June 4th they were generally for a few days together above or below their averages and nearly to the same value; from June 5th to July 31st they were generally below, the mean daily deficiency being 0.14 in.; from August 1st to October 30th they were generally above, the mean daily excess for these 91 days being 0.12 in.; from October 31st to November 14th they were below, the mean daily deficiency being 0.27 in.; from November 15th to the 25th they were above, the mean daily excess being 0.16 in.; and from November 26th to the end of the year they were generally below, the mean daily deficiency for these 36 days being 0.08 in.

The highest reading of the barometer in the year at the height of 150 feet above the sea was 30.54 ins. on January 11th, and the lowest was 28.54 ins. on March 28th; the yearly range was therefore 2.00 ins.

*Temperature.*—The temperature of the air was generally below its average till the 12th of April, being particularly so on the 1st and 30th of January; on the 2nd, and from the 22nd to the 29th of February; on the 1st, 2nd, 17th, 18th, 19th and 20th of March; and from the 4th to the 10th days of April, the deficiency below the average of each of these days being nearly 10° or more than 10°, the mean daily deficiency for the 103 days ending April 12th being 4°.1; from April 13th to the 18th it was above, the mean daily excess being 2°.7; from April 19th to May 16th it was below, the mean daily deficiency being 2°.5; from May 17th to the 21st it was above, being particularly so on the 19th day, when it was 12½° above its average, the mean daily excess being 4°.8; from May 22nd to the 31st it was below, the mean daily deficiency being 3°.6; from June 1st to the 4th it was above, particularly so on the 3rd day, when it was 10½° above its average, the mean daily excess being 5°.8; from June 5th to August 6th it was generally below, particularly so from the 17th to the 20th of June, and on the 11th and 12th of July, when it was 16°.5 and 15°.1 respectively below the average, the mean daily deficiency for the 63 days ending August 6th being 4°.7; from August 7th to 12th it was above, the mean daily excess being 4°.8; from August 13th to October 24th it was generally below, particularly so from the 1st to the 9th of October, the mean daily deficiency for these 9 days being 13°.4; and the mean daily deficiency for the 73 days ending October 24th being 3°.6; from October 25th to December 8th it was generally above, being particularly so on the 27th and 28th of October, on the 16th and 25th of November, and on the 5th and 6th days of December, and on all these days it was over 10° above the average, the mean daily excess for the 45 days ending December 8th being 3°.6; from December 9th to 18th it was below, being as much as 12°.8 below on the 10th, and 11°.2 on the 18th; the mean

\* For Meteorological Tables, see pp. lxiv-lxix.

daily deficiency being  $8^{\circ}6$ ; and from December 19th to the end of the year it was above, the mean daily excess being  $2^{\circ}5$ .

The highest temperatures of the air were  $87^{\circ}7$  at the Royal Observatory,  $87^{\circ}$  at Cambridge, and  $86^{\circ}5$  at Royston; and the lowest were  $11^{\circ}5$  at Somerleyton,  $12^{\circ}5$  at Carlisle, and  $12^{\circ}6$  at Bath.

*Rainfall.*—The falls of rain were below their average in January and February, and above in March. The total fall in the three months at Greenwich was  $4.56$  ins., being  $0.42$  in. below the average. The falls of rain were below their average in April and May, and above in June. The total fall for the three months at Greenwich was  $5.50$  ins., being  $0.28$  in. below the average. The falls of rain for July and August were above their average, and below in September. At Greenwich the total fall in these three months was  $11.21$  ins., being  $3.93$  ins. above the average. The fall of rain for October was below the average, above for November, and below for December. At Greenwich the total fall for these three months was  $6.22$  ins., being  $0.89$  in. below the average. The fall of rain for the year was  $27.49$  ins., being  $2.34$  ins. above the average; and the number of days on which it fell was 167.

The heaviest falls of rain at our stations in the year were at Bath  $41.34$  ins., at Truro  $40.94$  ins., and at Plymouth  $37.00$  ins.

The least falls were at Cambridge  $18.94$  ins., at Nottingham  $20.00$  ins., and at Royston  $21.62$  ins.

The greatest numbers of days of rain were 229 at Guernsey, 223 at Salisbury, and 213 at Stonyhurst; and the smallest numbers of rainy days were 153 at Cambridge, 159 at Royston, and 160 at Rugby.

*Thunderstorms* occurred on 60 days at the different stations during the year; of these, 16 took place in July, 12 in June, 10 in August, 5 in both March and November, 4 in May, 4 in September, 3 in April, and 1 in October, and none were reported in January, February, or December.

*Thunder was heard but lightning was not seen* on 63 days during the year; of these, 14 were in July, 12 in August, 11 in June, 7 both in May and September, 3 in November, and 2 both in March and October.

*Lightning was seen but thunder was not heard* on 42 days during the year; of these, 11 were in August, 8 in June, 5 in both July and September, 4 in November, 3 in May, 3 in October, and 1 in each of the months of March, April, and December.

*Solar halos were seen* on 92 days during the year; of these, 13 were in June, 11 in both April and August, 9 in July, 8 in each of the months of March, May, and November, 7 in both October and December, 4 in September, 3 in January, and 2 in February.

*Lunar halos were seen* on 32 days during the year; of these, 7 were in November, 5 in December, 4 in both January and March, 3 in both August and October, 2 in July, and 1 in each of the months of February, April, June, and September.

*Snow fell* on 86 days during the year; of these, 25 were in March, 23 in February, 14 in April, 13 in January, 5 in October, 4 in November, and 1 in both May and July; the last fall in the spring was May 2nd, at Halifax, none fell in June, August, September, or December; and the first fall in the autumn was on the 1st of October.

*Hail fell* on 92 days during the year; of these, 15 were in February, 14 in March, 12 in April, 9 in both January and November, 7 in both May and July, 5 in both August and October, 4 in June, 3 in September, and 2 in December.

*Fog prevailed* on 174 days during the year; of these, 22 were in October 20 in each of the months of January, September, and December, 17 in June, 15 in November, 12 in March, 11 in both February and July, 10 in April 9 in May, and 7 in August.

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## PRELIMINARY TABLES.

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TABLE 5.—ENGLAND.—Marriages.—Manner of Solemnisation, 1841-88

Table with columns: YEAR, ACCORDING TO THE RITES OF THE ESTABLISHED CHURCH (Special Licence, Licence, Banns, Superintendent Registrar's Certificate, Not stated, TOTAL IN ESTABLISHED CHURCH), NOT ACCORDING TO THE RITES OF THE ESTABLISHED CHURCH (TOTAL NOT IN ESTABLISHED CHURCH, Roman Catholics, Other Christian Denominations, Quakers, Jews, Civil Marriages in Superintendent Registrar's Office).

TABLE 6.—ENGLAND. Marriages.—Manner of Solemnisation, in Counties, 1888.

Table with columns: REGISTRATION COUNTY, ACCORDING TO THE RITES OF THE ESTABLISHED CHURCH (Special Licence, Licence, Banns, Superintendent Registrar's Certificate, Not stated, TOTAL IN ESTABLISHED CHURCH), NOT ACCORDING TO THE RITES OF THE ESTABLISHED CHURCH (TOTAL NOT IN ESTABLISHED CHURCH, Roman Catholics, Other Christian Denominations, Quakers, Jews, Civil Marriages in Superintendent Registrar's Office). Rows include ENGLAND and various counties (I-LONDON, II-SOUTH EASTERN, III-SOUTH MIDLAND, IV-EASTERN, V-SOUTH WESTERN, VI-WEST MIDLAND, VII-NORTH MIDLAND, VIII-NORTH WESTERN, IX-YORK, X-NORTHERN, XI-WELSH).

NOTE.—A cipher indicates that the number of marriages was too small to show a rate of one per 1000. When no marriages occurred, — is inserted.





TABLE 9.—ENGLAND.—Churches and Chapels of the Established Church; and Registered Buildings for Solemnisation of Marriage, 31st December, 1888.

Table with 24 columns: REGISTRATION DIVISIONS AND COUNTIES, ALL RELIGIOUS DENOMINATIONS, ESTABLISHED CHURCH, ALL OTHER RELIGIOUS DENOMINATIONS (Presbyterians, Independents, Baptists, etc.), and All others. Rows include ENGLAND, I.—LONDON, II.—SOUTH EASTERN, III.—SOUTH MIDLAND, IV.—EASTERN, V.—SOUTH WESTERN, VI.—WEST MIDLAND, VII.—NORTH MIDLAND, VIII.—NORTH WESTERN, IX.—YORK, X.—NORTHERN, XI.—WELSH.

TABLE 10.—ENGLAND.—Birth- and Death-rates in Counties, 1878-87, and 1888.

Table with 12 columns: REGISTRATION COUNTY, Births to 1000 Living (Ten Years 1878-87, 1888), Illegitimate Births to 1000 Births (Ten Years 1878-87, 1888), Males Born to 1000 Females Born (Ten Years 1878-87, 1888), Deaths to 1000 Living (Ten Years 1878-87, 1888), Deaths of Children under one year to 1000 Births (Ten Years 1878-87, 1888). Rows include ENGLAND, I.—LONDON, II.—SOUTH EASTERN, III.—SOUTH MIDLAND, IV.—EASTERN, V.—SOUTH WESTERN, VI.—WEST MIDLAND, VII.—NORTH MIDLAND, VIII.—NORTH WESTERN, IX.—YORK, X.—NORTHERN, XI.—WELSH.

TABLE 11.—ENGLAND.—Annual Death-rates at Twelve Groups of Ages, 1839-88.\*—Males.

Table with columns for Year and Ages (0-85 and up), showing death rates per 1000 living males. Includes a sub-header 'DEATHS TO 1000 LIVING MALES'.

\*The populations used are deduced from the rates of increase observed in the 40 years 1841-81 (see Table 1), and are distributed in the several groups of ages according to the proportions found to prevail at the last five Censuses.

TABLE 12.—ENGLAND.—Annual Death-rates at Twelve Groups of Ages, 1839-88.\*—Females.

Table with columns for Year and Ages (0-85 and up), showing death rates per 1000 living females. Includes a sub-header 'DEATHS TO 1000 LIVING FEMALES'.

\*See Note to Table 11.

TABLE 13.—ENGLAND.—Annual Death-rates at Twelve Age-periods in Groups of Years, 1838-88.\*—Males and Females.

Table with 13 columns for age groups (0- to 85 and up) and rows for years (1838 to 1888) and sex (Males and Females).

\* See Note to Table 11.

TABLE 14.—ENGLAND.—Death-rates, at Twelve Groups of Ages, in Registration Counties, 1888.

Table with 13 columns for age groups (0- to 85 & up) and rows for registration counties (e.g., ENGLAND, I.-LONDON, II.-SOUTH EASTERN, etc.).





TABLE 17.—ENGLAND.—Annual Death-rates, from various Causes, to a Million Persons living, in Groups of Years, 1858-88.

CAUSE OF DEATH.	3 Years 1858-60.	5 Years 1861-65.	5 Years 1866-70.	5 Years 1871-75.	5 Years 1876-80.	5 Years 1881-85.	3 Years 1886-88.
ALL CAUSES - - - -	22221.3	22582.0	22424.6	21963.4	20793.2	19299.4	18622.3
Small-pox - - - - -	219.3	218.6	104.8	410.8	78.4	78.0	21.3
Measles - - - - -	480.0	456.6	428.4	373.2	384.8	410.2	455.3
Scarlet Fever - - - -	891.0	982.4	959.8	758.8	679.6	484.0	238.3
Typhus - - - - -				81.4	34.2	22.8	7.3
Enteric Fever - - - - }	792.0	921.8	849.8	373.8	277.2	215.0	177.7
Simple and Ill-defined Fever - }				140.2	69.2	84.0	18.3
Whooping-cough - - - -	494.3	515.8	545.0	498.6	527.2	456.6	430.0
Diphtheria - - - - -	372.3	247.6	126.8	120.8	121.8	155.6	157.3
Other Miasmatic Diseases* - - -	75.7	46.0	39.6	25.4	18.2	16.8	15.0
Cholera - - - - -	32.0	42.4	172.4	30.6	20.4	16.2	14.3
Diarrhoea, Dysentery - - - -	777.3	874.0	1062.8	1000.6	832.4	652.4	684.0
Malarial Diseases* - - - -	32.7	16.2	10.0	8.4	7.4	11.2	7.0
Hydrophobia - - - - -	0.0	0.4	0.8	2.0	1.8	1.2	0.7
Other Zoogenous Diseases - - -	0.3	0.6	1.0	1.2	1.8	2.6	2.0
Venereal Diseases - - - - -	62.3	77.6	90.8	92.6	95.6	92.6	83.7
Erysipelas - - - - -	95.0	87.4	82.4	105.6	80.8	82.8	59.3
Puerperal Fever - - - - -	55.7	56.0	55.6	86.6	61.6	92.6	81.7
Other Septic Diseases - - - -	?	8.3 (4 years)	14.6	20.8	23.8	23.0	15.0
Thrush - - - - -	57.0	50.0	49.8	49.8	48.0	29.4	23.7
Other Parasitic Diseases - - - -	8.0	8.6	7.6	7.0	9.2	7.2	6.0
Intemperance - - - - -	40.3	41.6	35.4	37.6	42.2	48.0	50.0
Other Dietetic Diseases - - - -	32.0	30.4	26.6	21.2	25.0	15.4	11.3
Rheumatic Fever, Rheumatism of Heart - - - - - }	102.7	108.2	115.0	127.2	139.2	97.0	93.0
Rheumatism - - - - - }						34.8	33.0
Cancer - - - - -	335.3	367.8	403.8	445.6	495.2	544.6	599.7
Phthisis - - - - -	2565.0	2526.6	2447.8	2218.0	2040.0	1820.6	1616.7
Other Tubercular and Scrofulous Diseases - - - - - }	739.0	784.4	752.4	722.6	777.0	706.6	675.3
Diabetes Mellitus - - - - -	25.7	29.2	31.8	35.8	40.4	50.8	61.0
Other Constitutional Diseases -	46.0	51.2	63.8	59.6	86.8	107.6	123.7

\* See notes to Table 15.

TABLE 17 (continued).—ENGLAND.—Annual Death-rates, from various Causes, to a Million Persons living, in Groups of Years, 1858-88.

CAUSE OF DEATH.	3 Years 1858-60.	5 Years 1861-65.	5 Years 1866-70.	5 Years 1871-75.	5 Years 1876-80.	5 Years 1881-85.	3 Years 1886-88.
Premature Birth - - - - -	378.7	392.4	406.0	446.8	472.8	472.8	492.7
Atelectasis* - - - - -	?	?	?	?	?	23.4	26.0
Congenital Malformations - - -	57.7	61.6	64.8	65.6	84.4	84.0	79.3
Old Age - - - - -	1422.0	1352.8	1275.8	1206.8	1072.2	1008.6	974.0
Convulsions - - - - -	1296.7	1258.0	1204.0	1111.2	971.4	843.8	770.3
Diseases of Nervous System - - -	1484.0	1546.0	1605.2	1716.0	1803.6	1797.6	1785.3
Diseases of Organs of Special Sense-	7.0	8.0	8.6	7.6	13.4	19.6	21.3
Diseases of Circulatory System -	900.3	996.6	1095.8	1256.8	1415.2	1459.6	1644.7
Croup - - - - -	274.7	287.6	208.0	184.2	154.2	162.4	133.3
Diseases of Respiratory System -	3265.0	3320.6	3394.2	3685.4	3796.2	3530.8	3535.8
Dentition - - - - -	197.0	201.0	191.4	187.8	179.0	176.2	157.7
Diseases of Liver, Ascites - - -	394.0	416.0	417.6	427.8	423.6	370.0	332.7
Other Diseases of Digestive System	628.0	603.0	566.0	558.6	571.8	565.6	590.3
Diseases of Lymphatic System* -	?	?	?	?	?	7.0	7.7
Diseases of Spleen - - - - -	3.0	3.8	4.0	3.8	5.0	4.6	4.3
Diseases of other Ductless Glands*-	1.0	1.8	3.8	4.4	7.6	8.8	10.3
Diseases of Urinary System - - -	217.7	246.2	286.8	326.4	374.6	420.0	440.7
Diseases of Organs of Generation -	60.7	62.0	62.8	59.6	58.6	60.0	56.3
Diseases of Parturition - - - -	110.3	113.4	106.0	107.6	79.6	72.4	62.7
Diseases of Organs of Locomotion -	89.3	106.4	98.2	101.6	107.8	93.4	88.3
Diseases of Integumentary System -	78.3	74.2	65.8	66.0	74.8	64.2	63.3
Accident and Negligence - - - -	653.0	689.6	677.8	670.6	630.4	576.6	534.0
Homicide - - - - -	18.0	19.4	19.0	16.6	14.0	12.6	11.0
Suicide - - - - -	65.3	65.2	66.4	66.0	73.6	73.8	80.3
Execution - - - - -	0.3	0.8	0.4	0.4	1.0	0.4	1.0
Ill-defined and not specified Causes -	2288.4	2207.6	2117.6	1830.0	1389.2	1131.6	957.4

\* See notes to Table 15.







TABLE 21.—ENGLAND.—Death-rates of Persons, Males, and Females, from various Causes, 1888.

Table with columns: CAUSE OF DEATH, Deaths to 1,000,000 living (Persons, Males, Females). Rows include ALL CAUSES, Small-pox, Measles, Epidemic Rose Rash, Typhus, Relapsing Fever, Influenza, Whooping-cough, Mumps, Diphtheria, Cerebro-spinal Fever, Cholera, Diarrhoea, Dysentery, Remittent Fever, Ague, Hydrophobia, Glanders, Splenic Fever, Syphilis, Gonorrhoea, Phagedæna, Erysipelas, Pyæmia, Puerperal Fever, Thrush, Starvation, Scurvy, Intemperance, Rheumatic Fever, Gout, Rickets, Cancer, Tubercular Meningitis, Phthisis, Purpura, Anæmia, Diabetes Mellitus, Premature Birth, Atelectasis, Cyanosis, Spina Bifida, Imperforate Anus, Cleft Palate, Harelip, Old Age, Inflammation of Brain or its Membranes, Apoplexy, Softening of Brain, Hemiplegia, Brain Paralysis, Paralysis Agitans, Insanity, General Paralysis of Insane, Chorea, Epilepsy, Convulsions, Laryngismus Stridulus, Idiopathic Tetanus, Paraplegia, Diseases of Spinal Cord, Other Diseases of Nervous System, Otitis, Otorrhœa, Epistaxis and Diseases of Nose, Ophthalmia and Diseases of Eye, Endocarditis, Valvular Disease, Pericarditis, Hypertrophy of Heart, Angina Pectoris, Syncope, Aneurism, Senile Gangrene, Embolism, Thrombosis, Pilebitis, Varicose Veins, Other Diseases of Circulatory System, Laryngitis, Croup, Other Diseases of Larynx and Trachea, Emphysema, Asthma, Bronchitis, Pneumonia, Pleurisy, Other Diseases of Respiratory System, Stomatitis, Dentition, Sore Throat, Quinsy, Dyspepsia, Hæmatemesis, Melæna, Diseases of Stomach, Enteritis, Ulceration of Intestine, Ileus, Obstruction of Intestine, Stricture or Strangulation of Intestine, Intussusception of Intestine, Hernia, Fistula, Peritonitis, Ascites, Gallstones, Cirrhosis of Liver, Other Diseases of Liver, Other Diseases of Digestive System, Diseases of Lymphatic System, Diseases of Spleen, Bronchocele, Addison's Disease, Acute Nephritis, Bright's Disease, Uræmia, Suppression of Urine, Calculus, Hæmaturia, Diseases of Bladder and of Prostate, Other Diseases of Urinary System, Ovarian Disease, Diseases of Uterus and Vagina, Disorders of Menstruation, Pelvic Abscess, Perineal Abscess, Diseases of Testes, Penis, Scrotum, &c., Abortion, Miscarriage, Puerperal Mania, Puerperal Convulsions, Placenta Prævia, Flooding, Phlegmasia Dolens, Other Accidents of Childbirth, Caries, Necrosis, Arthritis, Ostitis, Periostitis, Other Diseases of Organs of Locomotion, Carbuncle, Phlegmon, Cellulitis, Lupus, Ulcer, Bedsore, Eczema, Pemphigus, Other Diseases of Integumentary System, Fractures and Contusions, Gunshot Wounds, Cut, Stab, Burn, Scald, Poison, Drowning, Suffocation, Otherwise, Murder, Manslaughter, Suicide, Execution, Dropsy, Debility, Atrophy, Inanition, Mortification, Tumour, Abscess, Sudden (Cause unascertained), Hemorrhage, Sudden (Cause unascertained), Other ill-defined and not specified Causes.

NOTE.—A cipher indicates that the number of deaths was too small to show a rate of one per million. When no deaths occurred, — is inserted.

TABLE 22.—ENGLAND.—Deaths from various Causes, to a Million Deaths from All Causes, 1888.

Table with columns: CAUSE OF DEATH, Proportional Number. Rows include ALL CAUSES, Inflammation of Brain or its Membranes, Apoplexy, Softening of Brain, Hemiplegia, Brain Paralysis, Paralysis Agitans, Insanity, General Paralysis of Insane, Chorea, Epilepsy, Convulsions, Laryngismus Stridulus, Idiopathic Tetanus, Paraplegia, Diseases of Spinal Cord, Other Diseases of Nervous System, Otitis, Otorrhœa, Epistaxis and Diseases of Nose, Ophthalmia and Diseases of Eye, Endocarditis, Valvular Disease, Pericarditis, Hypertrophy of Heart, Angina Pectoris, Syncope, Aneurism, Senile Gangrene, Embolism, Thrombosis, Pilebitis, Varicose Veins, Other Diseases of Circulatory System, Carbuncle, Phlegmon, Cellulitis, Lupus, Ulcer, Bedsore, Eczema, Pemphigus, Other Diseases of Integumentary System, Fractures and Contusions, Gunshot Wounds, Cut, Stab, Burn, Scald, Poison, Drowning, Suffocation, Otherwise, Murder, Manslaughter, Suicide, Execution, Dropsy, Debility, Atrophy, Inanition, Mortification, Tumour, Abscess, Sudden (Cause unascertained), Hemorrhage, Sudden (Cause unascertained), Other ill-defined and not specified Causes, Cholera, Diarrhoea, Dysentery, Remittent Fever, Ague, Hydrophobia, Glanders, Splenic Fever, Cow-pox and other Effects of Vaccination, Syphilis, Gonorrhoea, Stricture of Urethra, Phagedæna, Erysipelas, Pyæmia, Septicæmia, Puerperal Fever, Thrush, Other Diseases from Vegetable parasites, Hydatid Disease, Other Diseases from Animal parasites, Starvation, Want of Breast-milk, Scurvy, Intemperance, Chronic Alcoholism, Delirium Tremens, Rheumatic Fever, Rheumatism of Heart, Rheumatism, Gout, Rickets, Cancer, Tubercular Meningitis (Acute Hydrocephalus), Phthisis, Other Forms of Tuberculosis, Scrofula, Purpura, Hæmorrhagic Diathesis, Anæmia, Chlorosis, Leucocythæmia, Diabetes Mellitus, Other Constitutional Diseases, Premature Birth, Atelectasis, Cyanosis, Spina Bifida, Imperforate Anus, Cleft Palate, Harelip, Other Congenital Defects, Old Age.

NOTE.—A cipher indicates that the number of deaths was too small to show a rate of one per million. When no deaths occurred, — is inserted.

TABLE 23.—ENGLAND.—Death-rates from Measles, Scarlet Fever, Fever, Whooping-cough, and Puerperal Fever and Childbirth, in Registration Counties, in 1878-87, and 1888.

REGISTRATION COUNTY.	To a million persons living,								To 1000 births.	
	Measles.		Scarlet Fever.		Fever (Typhus, Enteric, Simple and Ill-defined).		Whooping-cough.		Puerperal Fever, and Accidents of Childbirth.	
	Ten Years 1878-87.	1888.	Ten Years 1878-87.	1888.	Ten Years 1878-87.	1888.	Ten Years 1878-87.	1888.	Ten Years 1878-87.	1888.
<b>ENGLAND</b> - -	424	341	479	222	285	190	490	428	4.51	4.73
<b>I.—LONDON</b> - -	581	565	463	277	254	172	785	697	3.79	3.74
<b>II.—SOUTH EASTERN.</b>										
Surrey ( <i>extra-metrop.</i> ) -	267	128	175	70	157	92	375	277	4.38	4.69
Kent ( <i>extra-metrop.</i> ) -	248	148	178	80	225	166	385	449	3.89	4.31
Sussex - - - - -	233	45	160	79	185	105	378	368	4.12	3.87
Hampshire - - - -	342	287	130	78	308	152	343	244	4.22	3.96
Berkshire - - - -	299	121	240	162	161	132	373	218	4.19	4.98
<b>III.—SOUTH MIDLAND.</b>										
Middlesex ( <i>extra-metrop.</i> ) -	348	283	276	204	220	170	511	984	4.08	3.93
Hertfordshire - - -	241	269	202	63	187	91	400	438	4.03	5.25
Buckinghamshire - -	300	397	236	102	221	173	442	160	4.29	5.16
Oxfordshire - - - -	260	77	253	33	180	109	283	170	4.52	2.94
Northamptonshire - -	393	217	312	190	247	270	415	290	4.39	5.38
Huntingdonshire - - -	196	20	274	160	241	140	265	180	3.62	1.42
Bedfordshire - - - -	258	455	303	218	184	89	422	224	3.77	3.30
Cambridgeshire - - -	230	110	238	73	209	84	421	309	4.15	4.85
<b>IV.—EASTERN.</b>										
Essex - - - - -	338	220	336	162	239	181	565	740	3.63	3.65
Suffolk - - - - -	199	95	169	53	173	137	408	369	3.55	4.46
Norfolk - - - - -	215	27	297	77	238	167	350	516	4.49	4.07
<b>V.—SOUTH WESTERN.</b>										
Wiltshire - - - - -	246	224	224	64	160	96	264	180	4.57	4.98
Dorsetshire - - - -	234	649	127	11	134	71	266	143	4.62	3.12
Devonshire - - - -	500	264	152	182	250	174	455	143	4.30	3.97
Cornwall - - - - -	314	62	256	62	286	119	573	85	4.31	6.04
Somersetshire - - - -	260	385	219	77	182	113	355	135	3.97	5.05
<b>VI.—WEST MIDLAND.</b>										
Gloucestershire - - -	369	513	350	145	191	168	369	132	4.31	5.63
Herefordshire - - -	202	139	246	35	105	69	247	17	4.99	4.72
Shropshire - - - - -	179	177	319	90	221	144	253	275	5.31	4.72
Staffordshire - - - -	447	825	641	93	283	183	437	576	4.41	4.67
Worcestershire - - - -	335	262	514	59	280	193	322	362	4.56	3.85
Warwickshire - - - -	372	367	604	101	204	141	548	440	4.11	4.31
<b>VII.—NORTH MIDLAND.</b>										
Leicestershire - - -	380	336	525	57	241	224	361	545	4.13	4.78
Rutlandshire - - - -	200	87	205	117	117	87	209	218	3.18	1.80
Lincolnshire - - - -	173	88	341	92	228	278	329	356	4.14	3.35
Nottinghamshire - - -	438	337	563	190	311	300	431	414	4.68	4.85
Derbyshire - - - - -	323	249	548	350	246	235	364	363	4.79	6.06
<b>VIII.—NORTH WESTERN.</b>										
Cheshire - - - - -	434	226	486	254	283	284	400	270	4.95	5.98
Lancashire - - - - -	653	427	692	387	410	287	548	492	5.10	5.80
<b>IX.—YORK.</b>										
West Riding - - - -	373	363	717	362	328	178	486	412	4.99	5.25
East Riding (with York)	281	115	6.0	169	362	191	420	213	3.80	4.34
North Riding - - - -	284	117	489	162	332	205	399	341	4.57	3.74
<b>X.—NORTHERN.</b>										
Durham - - - - -	494	68	939	235	436	218	458	433	4.84	4.20
Northumberland - - -	439	42	719	280	378	168	449	299	5.08	4.45
Cumberland - - - - -	404	397	323	47	233	87	389	746	4.88	4.45
Westmorland - - - - -	136	109	296	78	209	218	201	140	4.11	4.91
<b>XI.—WELSH.</b>										
Monmouthshire - - - -	499	747	631	86	298	143	490	29	5.09	4.84
South Wales - - - - -	426	249	6.7	513	402	211	464	151	5.84	5.97
North Wales - - - - -	239	324	372	104	228	128	315	176	6.13	7.49

TABLE 24.—ENGLAND. Death-rates in Town\* and Country Districts, 1851-88.

YEAR.	Persons to a Square Mile in England and Wales.	ANNUAL DEATHS to 1000 Persons living in			Deaths in Town Districts to 100 Deaths in Country Districts, in equal Numbers living.
		England and Wales.	Town* Districts.	Country Districts.	
1851-60 - - - -	325	22.2	24.7	19.9	124
1861-70 - - - -	365	22.5	24.8	19.7	126
1871-80 - - - -	415	21.4	23.1	19.0	122
1881 - - - - -	447	18.9	20.1	16.9	119
1882 - - - - -	454	19.6	20.9	17.3	121
1883 - - - - -	460	19.5	20.5	17.9	115
1884 - - - - -	466	19.5	20.6	17.7	116
1885 - - - - -	473	19.0	19.7	17.8	111
1886 - - - - -	479	19.3	20.0	18.0	111
1887 - - - - -	485	18.8	19.7	17.2	115
1888 - - - - -	492	17.8	18.4	16.7	110

\* For names of the Districts and Sub-districts taken to represent the Town Districts of England and Wales from 1851 to 1880, see Registrar-General's Forty-third Annual Report, page cv. For description of the Districts taken for 1881-87, see Table 25 below.

TABLE 25.—ENGLAND. Town and Country Districts.—Annual Death-rates in each Quarter of the Eight Years, 1881-88.

Area in Acres.	ESTI-MATED POPU-LATION in the middle of 1888.	Quarter ending	ANNUAL RATE of MORTALITY per 1000 in each Quarter of the Years								
			1881	1882	1883	1884	1885	1886	1887	1888	
<b>ENGLAND AND WALES</b> - 37,239,351	23,623,804	YEAR -	18.9	19.6	19.5	19.5	19.0	19.3	18.8	17.8	
		March	21.5	21.5	22.2	19.5	21.8	22.8	20.5	21.0	
		June	18.6	19.0	20.0	18.9	19.3	18.0	18.2	17.5	
		Sept.	16.8	17.8	16.8	19.7	16.5	17.6	17.6	15.0	
		Dec.	18.7	20.0	19.2	19.9	18.5	18.5	18.8	17.8	
<b>TOWN DISTRICTS.</b>	3,688,436	18,372,354	YEAR -	20.1	20.9	20.5	20.6	19.7	20.0	19.7	18.4
			March	22.6	22.9	23.0	20.3	22.1	23.3	21.0	21.3
			June	19.2	20.0	20.6	19.6	20.0	18.2	18.8	17.7
			Sept.	18.3	19.3	18.1	21.5	17.5	19.1	19.0	15.7
			Dec.	20.2	21.4	20.5	21.0	19.4	19.4	19.9	19.0
<b>COUNTRY DISTRICTS.</b>	33,550,915	10,256,450	YEAR -	16.9	17.3	17.9	17.7	17.8	18.0	17.2	16.7
			March	19.7	19.2	21.0	18.3	21.3	22.0	19.7	20.6
			June	17.5	17.4	19.2	17.7	18.2	17.7	17.2	17.2
			Sept.	14.2	15.2	14.6	16.7	14.7	15.6	15.2	13.6
			Dec.	16.1	17.6	16.9	18.0	17.1	16.8	13.9	15.6



TABLE 29.—ARMY. **Strength and Mortality, 1864-88.**

(Regiments on passage out and home are included with the Number Abroad.)

YEAR.	STRENGTH.			DEATHS.			DEATH-RATE PER 1000.		
	TOTAL ARMY.	IN UNITED KINGDOM.	ABROAD.	TOTAL ARMY.	IN UNITED KINGDOM.	ABROAD.	TOTAL ARMY.	IN UNITED KINGDOM.	ABROAD.
1864	214,858	82,721	132,137	3,510	1,017	2,493	16.3	12.3	18.9
1865	208,877	84,502	124,375	3,537	959	2,578	16.9	11.3	20.7
1866	201,641	84,124	117,517	2,858	1,056	1,802	14.2	12.6	15.3
1867	200,335	87,607	112,728	3,234	950	2,284	16.1	10.8	20.3
1868	196,900	89,633	107,267	2,804	1,088	1,716	14.2	12.1	16.0
1869	186,668	86,278	100,390	3,250	903	2,347	17.4	10.5	23.4
1870	180,444	89,670	90,774	2,638	1,029	1,609	14.6	11.5	17.7
1871	192,665	105,757	86,908	2,327	1,005	1,322	12.1	9.5	15.2
1872	192,007	104,154	87,853	2,649	940	1,709	13.8	9.0	19.5
1873	188,379	100,533	87,796	2,139	931	1,208	11.4	9.3	13.8
1874	186,389	97,635	88,754	2,136	1,007	1,129	11.5	10.3	12.7
1875	184,669	97,193	87,476	2,269	1,061	1,208	12.3	10.9	13.8
1876	184,433	97,146	87,287	2,102	930	1,172	11.4	9.6	13.4
1877	190,502	101,904	88,598	1,801	856	945	9.5	8.4	10.7
1878	200,758	109,201	91,557	2,249	778	1,471	11.2	7.1	16.1
1879	191,290	88,215	103,075	4,239	796	3,443	22.2	9.0	33.4
1880	188,986	91,887	97,099	3,333	756	2,577	17.6	8.2	26.5
1881	188,798	91,946	96,852	2,650	844	1,806	14.0	9.2	18.6
1882	189,229	94,295	94,934	2,224	806	1,418	11.8	8.5	14.9
1883	181,971	90,071	91,900	1,783	672	1,111	9.8	7.5	12.1
1884	183,004	89,994	93,010	1,611	523	1,088	8.8	5.8	11.7
1885	198,064	91,579	106,485	2,730	735	1,995	13.8	8.0	18.7
1886	203,805	98,057	105,748	2,813	703	2,110	13.8	7.2	20.0
1887	209,574	106,767	102,807	2,006	568	1,438	9.6	5.3	14.0
1888	211,105	106,913	104,192	2,041	731	1,310	9.7	6.8	12.6

TABLE 30.—ROYAL NAVY. **Mortality in the Service Afloat, 1856-88.**

(From Statistical Reports of the Health of the Navy.)

YEAR.	DEATH-RATE PER 1000.		YEAR.	DEATH-RATE PER 1000.	
	From All Causes.	From Disease alone.		From All Causes.	From Disease alone.
1856	15.5	12.1	1873	8.3	6.0
1857	19.4	14.7	1874	9.4	6.7
1858	25.8	22.0	1875	8.8	6.9
1859	16.7	11.8	1876	9.2	6.0
1860	14.7	11.1	1877	7.1	4.9
1861	15.0	11.5	1878	14.4	5.8
1862	15.3	9.6	1879	8.6	6.2
1863	11.3	7.6	1880	12.6	4.6
1864	14.0	9.0	1881	10.9	5.3
1865	11.3	8.1	1882	9.5	6.9
1866	10.2	7.9	1883	5.9	4.1
1867	11.5	8.4	1884	9.0	5.8
1868	8.9	6.5	1885	7.0	4.8
1869	9.9	7.3	1886	6.9	5.0
1870	19.6	6.7	1887	8.3	4.9
1871	8.5	6.3	1888	5.7	4.0
1872	8.2	5.6			

TABLE 31.—MERCHANT SERVICE. **Number and Mortality of Seamen employed in Vessels registered in the United Kingdom, the Isle of Man, and Channel Islands, 1852-88.**

(Furnished to the Registrar-General by the Registrar-General of Shipping and Seamen.)

YEAR.	No. of PERSONS EMPLOYED.	No. of DEATHS REPORTED.	DEATH-RATE per 1000.	YEAR.	No. of PERSONS EMPLOYED.	No. of DEATHS REPORTED.	DEATH-RATE per 1000.
1852	159,563	2,205	13.8	1871	199,738	4,338	21.7
1853	172,525	3,276	19.0	1872	203,720	4,123	20.2
1854	162,416	2,772	17.1	1873	202,239	5,393	26.6
1855	168,537	3,318	19.7	1874	203,606	4,602	22.6
1856	173,918	3,549	20.4	1875	199,667	4,076	20.4
1857	176,887	3,444	19.5	1876	198,638	4,151	20.9
1858	177,832	3,486	19.6	1877	196,562	4,181	21.3
1859	172,506	3,430	19.9	1878	195,585	3,570	18.3
1860	171,592	3,760	21.9	1879	193,548	3,692	19.0
1861	171,957	3,580	20.8	1880	192,972	4,100	21.2
1862	173,863	3,620	20.8	1881	192,903	4,464	23.1
1863	184,727	3,380	18.3	1882	195,937	4,659	23.8
1864	195,756	3,893	19.9	1883	200,727	4,451	22.2
1865	197,643	4,600	23.3	1884	199,654	3,757	18.8
1866	196,371	4,866	25.8	1885	198,781	3,286	16.5
1867	196,340	5,283	26.9	1886	204,470	3,546	17.3
1868	197,502	5,237	26.6	1887	220,266	3,384	15.4
1869	195,490	4,832	24.7	1888	223,673	3,114	13.9
1870	195,962	4,523	23.1				

NOTE.—Up to and including 1886 masters were excluded from the above employment and mortality figures; the latter of which contained some cases of men who died in colonial vessels and fishing vessels not registered under the Merchant Shipping Acts, whose crews are not included in the employment column. Since 1886 masters are included in both columns, and the employment and mortality figures relate only to persons employed in registered vessels belonging to the United Kingdom, the Isle of Man, and Channel Islands.

TABLE 32.—MERCHANT SERVICE. **Births and Deaths at Sea among Passengers\* (British Subjects), 1857-88.**

(Furnished to the Registrar General by the Registrar General of Shipping and Seamen.)

YEAR.	BIRTHS.			DEATHS.		
	Total.	Males.	Females.	Total.	Males.	Females.
1857	310	168	142	437	297	140
1858	249	132	117	591	409	182
1859	267	135	132	1,023	720	303
1860	250	136	114	593	437	156
1861	218	110	108	403	282	121
1862	294	146	148	491	343	148
1863	344	159	185	694	463	231
1864	380	203	177	685	475	210
1865	412	210	202	938	623	315
1866	415	213	202	1,237	874	363
1867	339	162	177	752	538	214
1868	272	147	125	666	470	196
1869	258	134	124	553	369	184
1870	315	169	146	800	536	264
1871	208	106	102	445	299	146
1872	289	142	147	548	372	176
1873	309	145	164	1,207	765	442
1874	510	244	266	1,744	1,015	729
1875	357	184	173	786	510	276
1876	364	181	183	738	464	274
1877	287	139	148	646	428	218
1878	291	150	141	613	408	205
1879	344	184	160	776	526	250
1880	208	104	104	421	267	154
1881	169	84	85	612	415	197
1882	266	131	135	678	492	186
1883	430	228	202	941	607	334
1884	264	132	132	799	528	271
1885	141	62	79	598	439	159
1886	172	88	84	515	351	164
1887	144	73	71	870	544	326
1888	129	64	65	447	300	147

\* Including soldiers, marines, and invalid seamen from the Royal Navy.

TABLE 33.—Meteorological Elements, Greenwich,

Table with columns: YEAR, Mean Weekly Movement of Average of the Air in Miles, Departure from Average of 40 Years, Fall of Rain in Inches, Departure from Average of 40 Years, Mean Degree of Humidity of the Air (Saturation = 100), Departure from Average of 40 Years, Mean TEMPERATURE of the AIR, Departure from Average of 40 Years.

\* Approximated to the results of Robinson's Anemometer by reductions from Whewell's up to 1859.

TABLE 34.—Meteorological Elements for different Parallels

Table with columns: PARALLEL of LATITUDE, &c., Mean Elevation in Feet above the Sea Level, Barometer, Thermometer, Mean Temperature. Includes rows for Guernsey and latitudes from 50° to 54°.

1849-88. By JAMES GLAISHER, Esq., F.R.S.

Table showing MEAN TEMPERATURES of the AIR in the Quarters ending the last day of March, June, Sept, Dec. Includes columns for Departure from Average of 40 Years and YEAR. Includes an 'Average in 40 Years' row at the bottom.

of Latitude, 1888. By JAMES GLAISHER, Esq., F.R.S.

Table with columns: Mean Elastic Force of Vapour, Mean Weight of Vapour in a Cubic Foot of Air, Mean additional Weight of Vapour required for Saturation, Mean Degree of Humidity of the Air, Mean Weight of a Cubic Foot of Air, Wind, Rain, PARALLEL of LATITUDE, &c. Includes rows for Guernsey and latitudes from 50° to 54°.

TABLE 35.—Quarterly Meteorological

Compiled by JAMES GLAISHER, Esq., F.R.S., from Tables

1888. YEAR Winter Quarter Spring do. Summer do. Autumn do.	Temperature of										Elastic Force of Vapour.		Weight of Vapour in a Cubic Foot of Air.	
	Air.		Evaporation.		Dew Point.		Air—Daily Range.		Mean.	Diff. from Average of 47 Years.	Mean.	Diff. from Average of 47 Years.	Mean.	Diff. from Average of 47 Years.
	Mean.	Diff. from Average of 17 Years.	Mean.	Diff. from Average of 47 Years.	Mean.	Diff. from Average of 47 Years.	Mean.	Diff. from Average of 47 Years.						
	o	o	o	o	o	o	o	o	o	in.	in.	grs.	grs.	
1888.	o	o	o	o	o	o	o	o	o	in.	in.	grs.	grs.	
YEAR	- 47.7	- 1.0	- 1.6	45.1	- 1.4	42.3	- 1.3	14.4	- 1.8	.280	-.014	3.2	- 0.2	
Winter Quarter	- 36.9	- 1.9	- 2.9	34.9	- 3.1	32.1	- 3.2	9.3	- 2.5	.182	-.026	2.2	- 0.2	
Spring do.	- 51.6	- 0.7	- 0.9	47.7	- 1.4	43.8	- 1.5	19.2	- 0.7	.291	-.015	3.3	- 0.2	
Summer do.	- 57.6	- 2.1	- 2.7	54.7	- 1.7	52.1	- 0.9	17.1	- 2.6	.390	-.015	4.4	- 0.2	
Autumn do.	- 44.6	+ 0.9	+ 0.2	43.0	+ 0.4	41.1	+ 0.5	12.1	+ 0.4	.258	+ .001	3.0	- 0.2	

In this table + and - respectively signify that the number in the preceding column is

TABLE 36.—Monthly Meteorological

By JAMES

1888. MONTH.	Mean Reading of the Barometer.	Temperature of the Air.							Departure from Average of 17 years (1771-1888).	Mean Temperature of the Dew Point.
		Highest by Day.	Lowest by Night.	Range in Month.	Mean of all Highest.	Mean of all Lowest.	Mean Daily Range.	Mean for the Month.		
January	in. 30.053	o 51.0	o 22.1	o 28.9	o 41.6	o 33.6	o 8.0	o 37.8	o +1.2	o 34.4
February	29.777	50.8	18.4	32.4	39.3	30.8	8.5	35.0	- 3.8	29.3
March	29.432	56.5	25.4	31.1	44.4	33.0	11.4	38.0	- 3.1	32.7
April	29.707	67.7	26.3	41.4	52.6	36.3	16.2	43.4	- 2.7	37.5
May	29.879	76.8	33.8	43.0	67.9	45.8	22.1	53.0	+ 0.5	43.0
June	29.752	87.6	45.5	42.1	69.2	49.9	19.4	58.3	0.0	50.9
July	29.600	74.0	42.8	31.2	67.2	51.5	15.7	57.9	- 3.8	52.8
August	29.832	87.7	45.2	42.5	69.4	50.9	18.5	59.1	- 1.8	52.7
September	29.963	74.0	38.5	35.5	65.3	48.3	17.0	55.7	- 0.8	50.7
October	29.888	68.4	27.9	40.5	55.2	37.7	17.5	46.0	- 3.5	41.6
November	29.624	59.4	33.5	25.9	51.5	42.7	8.8	47.0	+ 4.6	43.3
December	29.809	58.1	24.8	33.3	45.6	35.6	10.0	40.8	+ 1.7	38.3
Means	29.777	67.7	32.0	35.7	55.8	41.3	14.4	47.7	- 1.0	42.3

Elements, Greenwich, 1888.

furnished to the Registrar General by the Astronomer Royal.

1888. YEAR Winter Quarter Spring do. Summer do. Autumn do.	Degree of Humidity.	Reading of Barometer.		Weight of a Cubic Foot of Air.		Rain.		Reading of Thermometer on Grass.			1888. YEAR Winter Quarter Spring do. Summer do. Autumn do.		
		Mean.	Diff. from Average of 47 Years.	Mean.	Diff. from Average of 47 Years.	Amount.	Diff. from Average of 47 Years.	Number of Nights it was					
								At or below 30°.	Between 30° and 40°.	Above 40°.		Lowest Reading at Night.	Highest Reading at Night.
		in.	in.	grs.	grs.	Sums.	Sums.	o	o				
		in.	in.	grs.	grs.	in.	in.						
1888.		in.	in.	grs.	grs.	in.	in.						
YEAR	- 82	- 1	29.777	+ .003	543	+ 2	27.49	+ 2.44	108	125	133	10.8	56.6
Winter Quarter	- 83	- 2	29.764	- .021	555	+ 3	4.56	- 0.42	51	38	2	10.8	42.7
Spring do.	- 75	- 3	29.779	- .003	539	+ 1	5.50	- 0.18	20	84	37	18.6	55.0
Summer do.	- 83	+ 5	29.800	+ .007	533	+ 3	11.21	+ 3.93	0	20	72	30.0	56.6
Autumn do.	- 88	- 2	29.774	+ .023	547	0	6.22	- 0.89	37	33	22	16.7	49.4

above or below the average to the amount of the quantities to which these signs are affixed.

Elements, Greenwich, 1888.

GLAISHER, Esq., F.R.S.

1888. MONTH.	Mean Elastic Force of Vapour.	Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight required for Saturation.	Mean Degree of Humidity. Saturation = 100.	Mean Weight of a Cubic Foot of Air.	Relative Proportion of Wind.				Mean Amount of Cloud.	Rain.		1888. MONTH.
						N.	E.	S.	W.		Number of Days on which measured.	Amount collected.	
January	in. .199	grs. 2.4	grs. 0.3	88	grs. 560	7	7	9	8	7.4	11	0.89	January.
February	.162	2.0	0.4	79	558	12	7	3	7	8.8	15	0.89	February.
March	.186	2.2	0.5	81	548	8	6	7	10	8.4	21	2.78	March.
April	.224	2.6	0.6	79	547	10	5	7	8	7.0	14	1.51	April.
May	.277	3.1	1.4	69	540	7	6	9	9	5.5	5	0.64	May.
June	.373	4.2	1.3	77	530	9	5	8	8	6.8	17	3.35	June.
July	.400	4.5	0.9	83	529	6	3	10	12	8.5	26	6.75	July.
August	.399	4.5	1.1	80	531	6	3	10	12	7.0	12	3.73	August.
September	.370	4.2	0.8	85	538	10	5	7	8	6.1	12	0.73	September.
October	.263	3.1	0.5	85	547	10	5	6	10	4.8	6	1.30	October.
November	.280	3.3	0.4	87	541	2	9	12	7	7.8	18	4.00	November.
December	.231	2.7	0.2	91	552	3	6	15	7	6.7	10	0.92	December.
Means	.280	3.2	0.7	82	543	90	67	103	106	7.1 Mean	167 Sum	27.49 Sum	Means.

TABLE 37.—Mean Annual Values of Meteorological Elements from Observations

NAME OF STATION.	Elevation in feet above the Sea Level.	Latitude.	Barometer.		Thermometer.						Mean Temperature	
			Mean.	Mean Monthly Range.	Highest Reading in the Year.	Lowest Reading in the Year.	Difference or Extreme Range.	Mean of all highest Daily Readings.	Mean of all lowest Daily Readings.	Mean Daily Range.	Of the Air.	Of the Dew-point.
Guernsey	275	49 27 N.	29.679	1.063	76.3	22.0	54.3	54.0	41.8	9.2	48.8	44.8
Truro	43	50 17	29.598	1.051	76.0	18.0	58.0	57.3	43.2	14.1	49.4	43.1
Plymouth	69	50 23	29.669	1.104	76.8	23.0	53.8	55.5	44.1	11.4	49.0	45.2
Torquay	305	50 29	29.673	1.121	75.0	21.6	53.4	54.2	43.4	10.8	48.2	43.6
Ventnor	80	50 36	29.645	1.031	77.5	20.8	56.7	54.2	44.4	9.8	48.3	43.6
Eastbourne	65	50 44	..	..	78.7	17.9	60.8	53.2	42.9	10.3	47.4	42.4
Osborne	172	50 45	29.664	1.015	82.2	20.6	61.6	55.3	41.9	13.5	47.5	44.5
Southbourne	95	50 45	—	—	—	—	—	—	—	—	—	—
Salisbury	186	51 4	29.651	1.085	85.0	14.0	71.0	56.6	37.5	19.1	46.9	43.6
Barnstaple	43	51 5	..	..	78.0	22.0	56.0	56.0	44.2	11.8	49.6	44.7
Bath	596	51 15	29.668	1.041	76.6	12.6	64.0	52.5	40.4	12.1	45.7	42.2
Whitechurch	150	51 29	..	..	..	..	..	..	..	..	..	..
Royal Observatory	159	51 29	29.777	0.946	87.7	18.4	69.3	55.8	41.3	14.4	47.7	42.3
Blackheath	150	51 29	29.655	1.012	86.0	17.0	69.0	54.5	39.9	14.6	46.5	42.5
Camden Square	123	51 32	29.682	1.025	84.7	19.1	65.6	55.6	42.0	13.6	47.8	42.4
Tottenham	47	—	—	—	—	—	—	—	—	—	—	—
Barnet	212	51 38	29.705	1.017	85.0	14.6	70.4	55.2	38.7	16.5	46.3	41.9
Oxford	212	51 46	29.671	1.075	80.4	17.9	62.5	54.1	41.4	12.7	47.3	42.9
Royston	269	52 2	29.700	1.023	86.5	17.2	69.3	55.2	40.4	14.8	46.5	42.4
Cambridge	40	52 13	29.621	1.014	87.0	15.5	71.5	55.9	40.0	15.9	47.1	44.1
Rugby	289	52 19	29.676	1.014	79.7	12.9	66.8	54.7	38.4	16.3	46.1	43.9
Lowestoft	89	52 29	29.642	0.971	74.0	16.0	58.0	52.6	41.7	10.9	46.6	42.4
Somerleyton	50	52 31	29.664	0.977	83.8	11.5	72.3	53.1	40.3	12.8	45.8	42.1
Wolverhampton	500	52 37	29.730	0.986	81.1	18.0	63.1	52.7	38.6	14.1	44.9	40.1
Nottingham	122	52 57	29.577	1.029	82.6	18.0	64.6	53.1	39.8	13.3	45.7	40.1
Llandudno	100	53 20	29.664	1.163	76.9	25.7	51.2	53.2	43.2	10.0	48.0	41.4
Liverpool	197	53 24	29.656	1.111	82.3	25.5	56.8	52.8	42.7	10.1	46.7	41.0
Halifax	530	53 42	29.690	1.086	82.0	15.8	66.2	51.9	40.5	11.4	44.4	40.1
Hull	6	53 45	—	—	—	—	—	—	—	—	—	—
Bradford	364	53 48	29.659	1.097	80.4	19.2	61.2	52.2	41.9	10.2	48.7	40.2
Leeds	137	53 48	29.756	1.115	84.0	21.0	63.0	52.6	42.0	10.6	46.5	40.5
Stonyhurst	363	53 51	29.680	1.182	84.0	14.4	69.6	53.3	39.0	14.3	45.4	39.9
Carlisle	114	53 53	29.619	1.060	83.8	12.5	71.3	55.2	39.0	16.2	46.9	43.7

at several Stations in the Year 1888. By JAMES GLAISHER, Esq., F.R.S.

Mean Monthly Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight of Vapour required for Saturation.	Mean Degree of Humidity (Saturation=100).	Mean Weight of a Cubic Foot of Air.	Mean estimated Strength.	Wind.				Mean Amount of Cloud (0-10).	Number of Days on which measured.	Rain. Amount collected.	NAME OF STATION.
						Relative Proportion of							
						N.	E.	S.	W.				
in.	grs.	gr.		grs.							days.	in.	
.306	3.5	0.6	86	541	1.5	7	7	7	10	6.3	229	36.23	Guernsey.
.285	3.3	0.8	79	543	2.5	8	6	8	9	6.3	181	40.94	Truro.
.308	3.5	0.6	88	544	1.4	7	7	7	9	6.7	191	37.00	Plymouth.
.292	3.3	0.6	86	541	1.4	7	7	7	9	6.8	192	36.87	Torquay.
.271	3.3	0.7	85	544	1.2	7	7	7	9	5.5	188	26.31	Ventnor.
.279	3.2	0.7	83	..	0.4	8	6	7	10	6.6	191	27.31	Eastbourne.
.304	3.5	0.5	89	544	0.8	8	6	8	9	6.6	175	26.97	Osborne.
—	—	—	—	—	—	—	—	—	—	—	—	—	Southbourne.
.295	3.4	0.5	89	544	1.2	8	6	7	9	7.0	223	31.84	Salisbury.
.303	3.4	0.7	83	..	1.2	6	7	8	9	4.4	171	33.98	Barnstaple.
.277	3.2	0.5	87	537	1.4	8	7	8	8	6.8	208	41.34	Bath.
..	..	..	..	..	..	..	..	..	..	..	166	24.51	Whitechurch.
.280	3.2	0.7	82	543	..	..	..	..	..	7.1	167	27.49	Royal Observatory.
.287	3.2	0.6	87	545	1.0	7	6	9	9	7.0	163	27.08	Blackheath.
.280	3.2	0.7	82	544	..	8	7	7	8	6.7	173	27.73	Camden Square.
—	—	—	—	—	—	—	—	—	—	—	—	—	Tottenham.
.276	3.1	0.6	85	545	0.7	7	5	7	12	6.7	162	24.43	Barnet.
.286	3.2	0.6	85	543	2.7	8	6	8	9	7.1	170	28.05	Oxford.
.281	3.2	0.6	86	544	..	8	6	8	9	6.6	159	21.62	Royston.
.300	3.3	0.4	89	546	1.3	8	6	7	9	7.1	151	18.94	Cambridge.
.297	3.4	0.3	91	543	0.6	8	6	8	9	6.8	160	23.90	Rugby.
.281	3.2	0.6	86	545	2.3	8	7	7	9	5.6	184	22.89	Lowestoft.
.277	3.1	0.5	87	545	1.0	7	7	8	9	6.9	175	23.83	Somerleyton.
.276	2.9	0.6	84	540	..	8	7	8	8	8.0	173	21.80	Wolverhampton.
.255	2.9	0.7	81	544	0.4	8	6	7	10	8.0	162	20.00	Nottingham.
.267	3.0	0.8	78	544	1.0	7	6	7	11	6.7	207	25.88	Llandudno.
.233	3.0	0.8	81	543	..	7	7	7	10	6.9	209	23.96	Liverpool.
.254	2.9	0.6	85	540	0.8	7	8	7	9	7.4	195	32.79	Halifax.
—	—	—	—	—	—	—	—	—	—	—	—	—	Hull.
.257	2.9	0.7	80	540	0.4	8	6	7	10	7.7	182	25.64	Bradford.
.259	3.0	0.8	80	545	1.2	8	6	7	9	7.4	163	23.38	Leeds.
.254	2.9	0.7	81	542	0.4	7	7	8	9	7.9	213	32.05	Stonyhurst.
.269	3.4	0.5	89	544	1.0	6	8	7	10	7.2	163	26.97	Carlisle.

TABLE 38.—ENGLAND. Prices and Pauperism, 1839-88.

Table with columns for Year, Average Prices (Wheat, Meat, Best Seaborne Coal), and Pauperism (Average Number, In-door, Out-door). Rows list years from 1839 to 1888.

\* The prices of Consols for the years 1839-52 relate to the 12 months beginning 1st April; from 1853 onwards the prices relate to calendar years.
† The prices of coal in 1849-81 are derived from a Parliamentary Return (No. 25, 1881) furnished by the Registrar of the London Coal Market, by order of the House of Commons: the quotations for 1882-88 are derived from quarterly averages supplied to the Registrar-General by the Mineral Statistics Department, Home Office.
‡ Derived from Returns, published by the Local Government Board, of the number of persons in receipt of Relief on the last day of each week.

INTERNATIONAL VITAL STATISTICS.

TABLE 39.—Persons Married, Births, and Deaths per 1000 of the Population, in the UNITED KINGDOM and in OTHER EUROPEAN STATES.

(Tabulated from returns furnished by the authorities of the various States.)

Large table with columns for Year and various countries (United Kingdom, England and Wales, Scotland, Ireland, Denmark, Norway, Sweden, Austria, Hungary, Switzerland, German Empire, Prussia, The Netherlands, Belgium, France, Italy). Rows are categorized by Persons Married to 1000 Living, Births to 1000 Living, and Deaths to 1000 Living.

NOTE.—Explanations of the causes of excessive rates of mortality in different years will be found in the following Tables relating to the several European States.



TABLE 40.—UNITED KINGDOM. Population, Marriages, Births, and Deaths, 1864-88.

Table with 9 columns: YEAR, ESTIMATED POPULATION, MARRIAGES, PERSONS MARRIED, BIRTHS, DEATHS, PERSONS MARRIED, BIRTHS, DEATHS. Rows from 1864 to 1888.

TABLE 41.—ENGLAND AND WALES. Population, Marriages, Births, and Deaths, 1853-88.

Table with 9 columns: YEAR, ESTIMATED POPULATION, MARRIAGES, PERSONS MARRIED, BIRTHS, DEATHS, PERSONS MARRIED, BIRTHS, DEATHS. Rows from 1853 to 1888.

\* Census year.

TABLE 42.—SCOTLAND. Population, Marriages, Births, and Deaths, 1855-88.

(Compiled from the Reports of the Registrar-General for Scotland.)

Table with 9 columns: YEAR, ESTIMATED POPULATION, MARRIAGES, PERSONS MARRIED, BIRTHS, DEATHS, PERSONS MARRIED, BIRTHS, DEATHS. Rows from 1855 to 1888.

\* Census year.

TABLE 43.—IRELAND. Population, Marriages, Births, and Deaths, 1864-88.

(Compiled from the Reports of the Registrar-General for Ireland.)

Table with 9 columns: YEAR, ESTIMATED POPULATION, MARRIAGES, PERSONS MARRIED, BIRTHS, DEATHS, PERSONS MARRIED, BIRTHS, DEATHS. Rows from 1864 to 1888.

\* Census year.



TABLE 47.—AUSTRIA. Population, Marriages, Births, and Deaths, 1853-88.

Furnished by the President of the Statistical Central Commission of Austria.)

YEAR.	NUMBERS.					PROPORTION PER 1000 OF THE POPULATION.		
	ESTIMATED POPULATION, at the end of each Year.	MAR-RIAGES.	PERSONS MARRIED.	BIRTHS. Exclusive of	DEATHS. Still-born.	PERSONS MARRIED.	BIRTHS.	DEATHS.
1853	17,816,877	137,621	275,242	665,994	570,885	15.4	37.4	32.0
1854	17,911,986	124,258	248,516	654,267	622,695	13.9	36.5	34.8
1855	17,733,086	147,186	294,372	577,177	881,094	16.6	32.5	49.7
1856	17,843,463	147,474	294,948	653,172	541,887	16.5	36.6	30.4
1857*	18,224,500	147,657	295,314	725,334	503,915	16.2	39.8	27.7
1858	18,453,396	155,073	310,146	729,666	532,920	16.8	39.5	28.8
1859	18,671,781	130,656	261,312	753,880	540,475	14.0	40.4	28.9
1860	18,884,698	158,340	316,680	715,606	502,809	16.8	37.9	26.6
1861	19,029,405	151,440	302,380	708,209	563,402	15.9	37.2	29.6
1862	19,193,087	168,684	337,368	726,474	562,792	17.6	37.9	29.3
1863	19,398,051	162,958	325,916	781,455	576,471	16.8	40.3	29.7
1864	19,602,736	160,740	321,480	789,827	585,142	16.4	40.3	29.8
1865	19,750,318	153,492	306,984	746,445	598,863	15.5	37.8	30.3
1866	19,692,437	128,051	256,102	746,507	804,338†	13.0	37.9	40.9†
1867	19,838,970	191,661	383,322	726,538	580,055	19.3	36.6	29.2
1868	20,026,554	182,940	365,880	758,591	571,558	18.3	37.9	28.5
1869*	20,217,531	208,737	417,574	795,360	583,995	20.7	39.3	28.9
1870	20,421,737	199,083	398,166	808,281	598,581	19.5	39.6	29.3
1871	20,601,118	194,591	389,182	801,515	616,729	18.9	38.9	29.9
1872	20,728,929	192,406	384,812	810,147	677,022	18.6	39.1	32.7
1873	20,740,588	194,815	389,630	828,030	811,150‡	18.8	39.9	39.1†
1874	20,902,239	189,017	378,034	829,709	662,929	18.1	39.7	31.7
1875	21,105,317	180,349	360,698	842,303	634,088	17.1	39.9	30.0
1876	21,319,544	176,148	352,296	853,436	634,363	16.5	40.0	29.8
1877	21,467,718	161,337	322,674	830,776	677,748	15.0	38.7	31.6
1878	21,614,206	164,233	328,466	833,251	683,661	15.2	38.6	31.6
1879	21,812,654	169,088	338,176	855,593	652,491	15.5	39.2	29.9
1880*	21,981,321	167,200	334,400	827,980	654,258	15.2	37.7	29.7
1881	22,136,223	176,983	353,966	833,467	676,515	16.0	38.7	30.6
1882	22,320,116	183,378	366,756	873,522	686,951	16.4	38.9	30.8
1883	22,498,862	176,016	352,032	858,832	677,337	15.7	38.2	30.1
1884	22,707,845	179,171	358,342	878,321	666,523	15.7	38.4	29.2
1885	22,876,095	175,233	350,466	860,663	689,493	15.2	37.4	29.9
1886	23,070,688	180,191	360,382	876,063	678,458	15.6	38.0	29.4
1887	23,284,760	182,088	364,176	889,478	672,302	15.6	38.2	28.9
1888	23,484,995	185,991	371,982	889,901	686,573	15.8	37.9	29.2

NOTE.—The figures in this table refer exclusively to the civil population.  
\* Census year.  
† The excessive mortality in 1866 was due to cholera and the war.  
‡ Cholera caused the deaths of 107,007 persons in 1873.

TABLE 48.—HUNGARY. Population, Marriages, Births, and Deaths, 1876-88.

(Furnished by the Director of the Statistical Department of Hungary.)

YEAR.	NUMBERS.					PROPORTION PER 1000 OF THE POPULATION.		
	ESTIMATED POPULATION, in the middle of each Year.	MAR-RIAGES.	PERSONS MARRIED.	BIRTHS. Exclusive of	DEATHS. Still-born	PERSONS MARRIED.	BIRTHS.	DEATHS.
1876	15,510,696	154,305	308,610	704,856	545,570	19.9	45.4	35.2
1877	15,618,027	143,380	286,760	669,816	562,485	18.4	42.9	36.0
1878	15,706,315	147,014	294,028	665,392	577,104	18.7	42.4	36.7
1879	15,863,294	162,188	324,376	713,584	556,605	20.5	45.0	35.1
1880*	15,642,102	144,126	288,252	672,352	583,788	18.4	43.0	37.3
1881	15,776,157	157,733	315,466	676,891	542,836	20.0	42.9	34.4
1882	15,911,191	163,839	327,678	696,682	561,643	20.6	43.8	35.3
1883	16,114,047	167,609	335,218	718,684	515,828	20.8	44.6	32.0
1884	16,351,290	167,404	334,808	740,963	503,720	20.5	45.3	30.8
1885	16,564,571	165,169	330,338	737,110	523,829	19.9	44.5	31.6
1886	16,797,081	160,674	321,348	759,617	527,107	19.1	45.2	31.4
1887	16,973,028	151,511	303,022	744,480	568,533	17.9	43.9	33.5
1888	—	—	—	—	—	—	—	—

\* Census year.

TABLE 49.—SWITZERLAND. Population, Marriages, Births, and Deaths, 1868-88.

(Compiled from the Reports issued by the Federal Statistical Bureau.)

YEAR.	NUMBERS.					PROPORTION PER 1000 OF THE POPULATION.		
	ESTIMATED POPULATION, in the middle of each Year.	MAR-RIAGES.	PERSONS MARRIED.	BIRTHS. Exclusive of	DEATHS. Still-born	PERSONS MARRIED.	BIRTHS.	DEATHS.
1868	2,629,386	17,648	35,296	?	?	13.4	?	?
1869	2,646,115	19,091	38,182	?	?	14.4	?	?
1870*	2,662,344	18,610	37,220	79,208	68,746	14.0	29.8	25.8
1871	2,679,469	19,514	39,028	77,633	74,002	14.6	29.0	27.6
1872	2,697,165	21,212	42,424	80,329	59,758	15.7	29.8	22.2
1873	2,714,860	20,649	41,298	80,569	61,676	15.2	29.7	22.7
1874	2,732,556	22,655	45,310	83,051	60,845	16.6	30.4	22.3
1875	2,750,251	24,629	49,258	87,579	66,113	17.9	31.8	24.0
1876	2,767,947	22,376	44,752	90,786	66,819	16.2	32.8	24.1
1877	2,785,642	21,871	43,742	89,244	65,353	15.7	32.0	23.5
1878	2,803,338	20,590	41,180	87,833	65,311	14.7	31.3	23.3
1879	2,821,033	19,450	38,900	86,180	63,651	13.8	30.5	22.6
1880*	2,838,729	19,413	38,826	84,165	62,223	13.7	29.6	21.9
1881	2,852,462	19,425	38,850	85,142	63,979	13.6	29.8	22.4
1882	2,863,366	19,414	38,823	82,689	62,849	13.6	28.9	21.9
1883	2,874,270	19,696	39,392	81,974	68,733	13.7	28.5	20.4
1884	2,885,174	19,898	39,796	81,571	58,301	13.8	28.3	20.2
1885	2,896,078	20,105	40,210	80,349	61,548	13.9	27.7	21.3
1886	2,906,982	20,080	40,160	80,763	60,061	13.8	27.8	20.7
1887	2,917,886	20,646	41,292	81,287	58,939	14.2	27.9	20.2
1888*	2,932,334	20,701	41,402	81,098	58,227	14.1	27.7	19.9

\* Census year.



TABLE 53.—BELGIUM. Population, Marriages, Births, and Deaths, 1853-88.

(Furnished by the Director of the Statistical Department of Belgium.)

YEAR.	NUMBERS.					PROPORTION PER 1000 OF THE POPULATION.		
	ESTIMATED POPULATION at the end of each Year.	MAR-RIAGES.	PERSONS MARRIED.	BIRTHS. Exclusive of Still-born.	DEATHS.	PERSONS MARRIED.	BIRTHS.	DEATHS.
1853	4,548,507	30,636	61,272	127,728	100,333	13.5	28.1	22.1
1854	4,585,096	29,490	58,980	131,897	103,266	12.9	28.8	22.5
1855	4,607,066	29,818	59,636	125,955	112,716	12.9	27.3	24.5
1856*	4,529,461	32,926	65,852	134,187	97,395	14.5	29.6	21.5
1857	4,577,236	37,292	74,584	143,291	103,458	16.3	31.3	22.6
1858	4,623,197	38,237	76,474	145,074	107,910	16.5	31.4	23.3
1859	4,671,187	36,941	73,882	149,812	111,650	15.8	32.1	23.9
1860	4,731,957	35,112	70,224	144,668	92,871	14.8	30.6	19.6
1861	4,782,255	33,802	67,604	147,253	106,381	14.1	30.8	22.2
1862	4,836,566	34,146	68,292	145,568	100,124	14.1	30.1	20.7
1863	4,893,021	35,813	71,626	155,564	107,959	14.6	31.8	22.1
1864	4,940,570	36,959	73,918	155,872	115,948	15.0	31.5	23.5
1865	4,984,351	37,071	75,342	156,323	122,341	15.1	31.4	24.5
1866*	4,927,933	37,783	75,566	158,010	151,116†	15.7	32.7	31.3†
1867	4,997,794	38,244	76,488	157,149	105,576	15.6	32.1	21.6
1868	4,961,644	36,271	72,542	156,134	107,556	14.6	31.5	21.7
1869	5,021,336	37,134	74,268	158,687	109,607	14.8	31.6	21.8
1870	5,087,826	35,233	70,526	164,572	118,359	13.9	32.3	23.3
1871	5,113,680	37,538	75,076	158,760	145,746†	14.7	31.0	28.5†
1872	5,175,037	40,084	80,168	167,377	120,129	15.5	32.3	23.2
1873	5,253,794	40,598	81,196	170,708	112,873	15.5	32.5	21.5
1874	5,336,634	40,328	80,656	173,978	109,595	15.1	32.6	20.5
1875	5,402,938	39,050	78,100	175,552	122,480	14.5	32.5	22.7
1876*	5,336,185	38,228	76,456	176,915	116,787	14.3	33.2	21.9
1877	5,412,731	36,964	73,928	175,077	114,269	13.7	32.3	21.1
1878	5,476,939	36,669	73,338	172,730	117,721	13.4	31.5	21.5
1879	5,536,654	37,421	74,842	174,641	121,060	13.5	31.5	21.9
1880*	5,520,009	38,926	77,852	171,864	123,323	14.1	31.1	22.3
1881	5,585,846	39,487	78,974	175,411	117,007	14.1	31.4	20.9
1882	5,655,197	39,244	78,488	176,345	114,298	13.9	31.2	20.2
1883	5,720,807	38,666	77,332	174,484	119,196	13.5	30.5	20.8
1884	5,784,958	39,205	78,410	176,721	121,070	13.5	30.5	20.9
1885	5,853,278	39,910	79,820	175,043	117,775	13.6	29.9	20.1
1886	5,909,975	39,642	79,284	175,091	124,904	13.4	29.6	21.1
1887	5,974,743	42,401	84,982	175,466	115,296	14.2	29.4	19.3
1888	6,030,043	42,427	84,854	175,586	121,097	14.7	29.1	20.1

\* Census year.

† Cholera prevailed in 1866, and small-pox in 1871.

TABLE 54.—FRANCE. Population, Marriages, Births, and Deaths, 1853-88.

(Supplied by the Director of the Statistical Bureau of France.)

YEAR.	NUMBERS.					PROPORTION PER 1000 OF THE POPULATION.		
	ESTIMATED POPULATION, in the middle of each Year.	MAR-RIAGES.	PERSONS MARRIED.	BIRTHS. Exclusive of Still-born.	DEATHS.	PERSONS MARRIED.	BIRTHS.	DEATHS.
1853	36,108,206	280,609	561,218	936,967	795,607	15.5	25.9	22.0
1854	36,249,566	270,696	541,392	923,461	992,779	14.9	25.5	27.4
1855	36,180,248	283,335	566,670	902,336	937,942	15.7	24.9	25.9
1856*	36,139,364	284,401	568,802	952,116	837,082	15.7	26.3	23.2
1857	36,268,793	295,510	591,020	940,709	858,785	16.3	25.9	23.7
1858	36,350,717	307,056	614,112	969,343	874,186	16.9	26.7	24.0
1859	36,445,874	298,417	596,834	1,017,896	979,333	16.4	27.9	26.9
1860	36,481,437	288,936	577,872	956,875	781,635	15.8	26.2	21.4
1861*	37,386,313	305,203	610,406	1,005,078	866,597	16.3	26.9	23.2
1862	37,517,752	303,514	607,028	995,167	812,978	16.2	26.5	21.7
1863	37,699,941	301,376	602,752	1,012,794	846,917	16.0	26.9	22.5
1864	37,865,818	299,579	599,158	1,005,880	830,330	15.8	26.6	22.7
1865	38,011,368	299,242	598,484	1,005,753	921,887†	15.7	26.5	24.3†
1866*	38,067,064	303,634	607,268	1,006,258	884,573†	16.0	26.4	23.2†
1867	38,188,749	300,333	600,666	1,007,755	866,887	15.7	26.4	22.7
1868	38,329,617	301,225	602,450	984,140	922,038	15.7	25.7	24.1
1869	38,855,178	303,482	606,964	948,526	864,320	16.5	25.7	23.5
1870	38,985,212	223,705	447,410	943,515	1,046,909†	12.1	25.5	28.3†
1871	38,544,067	262,476	524,952	826,121	1,271,010†	14.4	22.6	34.8†
1872*	38,102,921	352,754	705,508	966,000	793,064	19.5	26.8	22.0
1873	38,281,335	321,238	642,476	946,354	844,588	17.7	26.1	23.3
1874	38,459,749	303,113	606,226	954,652	781,709	16.6	26.2	21.4
1875	38,638,163	300,427	600,854	950,975	845,062	16.4	26.0	23.1
1876*	38,905,788	291,366	582,732	966,682	834,074	15.8	26.2	22.6
1877	37,948,410	279,094	558,188	944,576	801,954	15.1	25.5	21.6
1878	37,146,585	279,892	559,784	937,211	839,036	15.1	25.2	22.6
1879	37,365,544	282,776	565,552	936,529	839,882	15.1	25.0	22.5
1880	37,518,796	279,046	558,092	920,177	858,237	14.9	24.5	22.8
1881*	37,672,048	232,079	464,158	937,057	828,828	15.0	24.9	22.0
1882	37,769,000	231,060	462,120	935,566	838,539	14.8	24.8	22.2
1883	37,866,000	234,519	469,038	937,944	841,141	15.0	24.8	22.2
1884	37,949,000	239,555	479,110	937,758	858,784	15.3	24.8	22.2
1885	38,123,000	233,170	466,340	924,558	836,597	14.9	24.2	21.9
1886*	38,218,903	233,208	466,416	912,838	860,222	14.8	23.9	22.5
1887	38,320,000	277,060	554,120	899,333	812,797	14.5	23.5	22.0
1888	38,320,000	276,848	553,696	882,639	837,567	14.4	23.1	21.8

NOTE.—The population in the four years 1862-65 and in the years 1867-69 is estimated by means of the average annual rate of increase observed between the two enumerations of 1861 and 1866. The deaths of Frenchmen abroad, civil or military, are registered in the books of the Commune in which they were last domiciled.

\* Census year.

† Cholera prevailed in 1865-66, and war raged in 1870 and 1871.

TABLE 55.—SPAIN. Population, Marriages, Births, and Deaths, 1861-84.

YEAR.	NUMBERS.					PROPORTION PER 1000 OF THE POPULATION.		
	ESTIMATED POPULATION, beginning of each year.	MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.	PERSONS MARRIED.	BIRTHS.	DEATHS.
1861*	15,673,481	130,731	261,462	624,096	417,764	16·7	39·8	26·7
1862	15,867,326	128,696	257,392	615,919	430,663	16·2	38·8	27·1
1863	16,043,725	124,176	248,352	606,800	461,661	15·5	37·8	28·8
1864	16,180,205	126,303	252,606	629,546	499,486	15·6	38·9	30·9
1865	16,302,170	128,917	257,834	622,050	538,580	15·8	38·2	33·0
1866	16,378,503	131,981	263,962	618,981	463,684	16·1	37·8	28·3
1867*	16,526,516	118,409	236,818	624,212	487,151	14·3	37·8	29·5
1868	16,656,901	111,687	223,374	579,563	548,690	13·4	34·8	32·9
1869	16,682,453	137,120	274,240	602,287	550,560	16·4	36·1	33·0
1870	16,723,589	103,807	207,614	598,347	512,249	12·4	35·8	30·6
1871-77	—	—	—	—	—	—	—	—
1878*	16,684,345	117,693	235,386	608,682	509,598	14·2	36·6	30·6
1879	16,733,429	110,724	221,448	609,222	512,093	13·2	36·4	30·6
1880	16,830,558	104,214	208,428	606,436	504,243	12·4	36·0	30·2
1881	16,928,751	107,841	215,682	638,238	512,701	12·7	37·7	30·3
1882	17,054,289	102,727	205,454	625,601	535,570	12·0	36·7	31·4
1883	17,144,219	107,983	215,966	617,023	567,653	12·6	36·0	33·1
1884	17,193,689	115,470	230,940	637,052	535,256	13·4	37·1	31·1

NOTE.—Statistics for the 7 years 1871-77 were not issued owing to the disturbed state of the country. The decline in registered marriages in 1870 is believed to be due to the introduction of civil registration, which occurred in that year.

\* Censuses were taken on 31st December 1860, 1866, and 1877.

TABLE 56.—ITALY. Population, Marriages, Births, and Deaths, 1864-88.

(Furnished by the Director of the Statistical Department of Italy.)

YEAR.	NUMBERS.					PROPORTION PER 1000 OF THE POPULATION.		
	ESTIMATED POPULATION in each Year. (See Note.)	MARRIAGES.	PERSONS MARRIED.	BIRTHS. Exclusive of Still-born.	DEATHS.	PERSONS MARRIED.	BIRTHS.	DEATHS.
1864	24,749,861	198,759	397,518	938,795	737,136	16·1	37·9	29·8
1865	24,957,965	226,458	452,916	961,234	746,685	18·1	38·5	29·9
1866	25,188,744	142,024	284,048	980,200	733,190	11·3	38·9	29·1
1867	25,342,515	170,456	340,912	927,396	866,865	13·5	36·6	34·2
1868	25,434,376	182,743	365,486	900,416	777,224	14·4	35·4	30·6
1869	25,615,123	205,287	410,574	952,134	713,832	16·0	37·2	27·9
1870	25,823,437	188,986	377,972	951,495	773,169	14·6	36·8	29·9
1871*	25,964,450	192,839	385,678	960,020	778,798	14·9	37·0	30·0
1872	26,897,746	202,361	404,722	1,020,682	827,498	15·0	37·9	30·8
1873	27,079,946	214,906	429,812	985,188	813,973	15·9	36·4	30·1
1874	27,227,756	207,997	415,994	951,658	827,252	15·3	34·9	30·4
1875	27,386,066	230,486	460,972	1,035,377	843,161	16·8	37·8	30·8
1876	27,625,825	225,453	450,906	1,083,721	796,420	16·3	39·2	28·8
1877	27,800,085	214,972	429,944	1,029,037	787,817	15·4	36·9	28·2
1878	28,110,158	199,885	399,770	1,012,475	813,550	14·2	36·0	28·9
1879	28,323,356	213,096	426,192	1,064,153	836,682	15·0	37·6	29·9
1880	28,481,045	196,738	363,476	957,900	869,992	13·8	33·6	30·5
1881*	28,459,628	230,143	460,286	1,081,125	784,181	16·2	38·0	27·6
1882	28,596,512	224,041	448,082	1,061,994	787,324	15·7	37·1	27·5
1883	28,872,024	231,945	463,890	1,071,452	794,196	16·0	37·1	27·5
1884	29,185,842	239,513	479,026	1,130,741	780,361	16·4	38·7	26·7
1885	29,530,408	233,931	467,862	1,125,970	787,217	15·8	38·1	26·6
1886	29,820,963	233,310	466,620	1,086,960	844,603	15·6	36·4	28·3
1887	30,105,212	235,629	471,258	1,152,906	828,992	15·7	38·3	27·5
1888	30,416,767	237,301	474,602	1,113,543	816,572	15·6	36·6	26·8

NOTE.—The numbers for Rome were first included with those for the Kingdom of Italy in 1872. The population figures given for census years show the numbers enumerated on 31st December in each of those years; whereas for each of the other years the population is estimated to the middle of the year. The populations in inter-census years are somewhat over-estimated, no account having been taken of emigration.

\* Census year.

TABLE 57.—ENGLAND. Changes in the Constitution of Registration Districts and Sub-districts during the Year 1888.

N.B.—(1.) The Name of the District is in SMALL CAPITALS, that of the Sub-district in *Italics*.  
(2.) The Populations quoted are the Numbers enumerated at the Census of 1881.

No. of District.	NAME OF REGISTRATION DISTRICT.	Date of Change.	Nature of Change.
		1888.	
69	BATTLE - - -	1 April	The parish of Westfield (population 1,051) was transferred from the sub-district of <i>Bechill</i> to that of <i>Ewhurst</i> .
69	BATTLE - - -	1 July	The sub-district of <i>Battle</i> (aggregate population 5,395) was dissolved, and of the five parishes formerly comprised therein, one, viz., the parish of <i>Battle</i> (population 3,319), was transferred to the sub-district of <i>Ewhurst</i> , which was re-named <i>Battle</i> , and the remaining four parishes, viz., <i>Brightling</i> , <i>Dallington</i> , <i>Ashburnham</i> , and <i>Penhurst</i> (aggregate population 2,076) were transferred to the sub-district of <i>Bechill</i> .
148	THAME - - -	1 April	The parishes comprising this district were re-arranged, and the number of sub-districts reduced from three to two, the sub-district of <i>Brill</i> having been abolished. The two sub-districts are constituted as follows: <i>Lewknor</i> sub-district, in addition to the fourteen parishes formerly constituting the sub-district (aggregate population 3,500), now comprises the five parishes of <i>Tetsworth</i> , <i>Ashton Rowant</i> , <i>Crowell</i> , <i>Sydenham</i> , and <i>Emmington</i> (aggregate population 1,625), which formerly belonged to <i>Thame</i> sub-district, and the three parishes of <i>Albury</i> , <i>Tiddington</i> , and <i>Waterstock</i> (aggregate population 339), which formerly belonged to <i>Brill</i> sub-district. <i>Thame</i> sub-district now comprises four parishes formerly belonging thereto, viz., <i>Attingham</i> , <i>Thame</i> , <i>Towersey</i> , and <i>Kinsey</i> (aggregate population 3,881), and ten parishes which were formerly comprised in <i>Brill</i> sub-district, viz., <i>Long Crendon</i> , <i>Chilton</i> , <i>Dorton</i> , <i>Brill</i> , <i>Oakley</i> , <i>Worminghall</i> , <i>Ickford</i> , <i>Shabbington</i> , <i>Waterperry</i> , and <i>Thomley</i> (aggregate population 4,517).
254	ALDERBURY - - -	1 June	The parishes comprising this district were re-arranged, and the number of sub-districts reduced from four to three, the sub-district of <i>Britford</i> having been abolished. The three sub-districts are now constituted as follows, viz., <i>Alderbury</i> sub-district, in addition to seven parishes formerly belonging thereto, viz., <i>Alderbury</i> , <i>Clarendon Park</i> , <i>East Grimstead</i> , <i>West Grimstead</i> , <i>Farley with Pitton</i> , <i>Winterslow</i> , and <i>West Dean</i> (aggregate population 2,968), also comprises five parishes which were formerly comprised in <i>Britford</i> sub-district, viz., <i>Laverstock</i> , <i>Milford</i> , <i>Fisherton Anger</i> , <i>Old Sarum</i> , and <i>Stratford under the Castle</i> (aggregate population 7,677). <i>Downton</i> sub-district, in addition to the nine parishes formerly constituting the sub-district (aggregate population 4,713), also comprises the three parishes of <i>Earldoms</i> , <i>Landford</i> , and <i>Whiteparish</i> (aggregate population 1,400), which were formerly comprised in <i>Alderbury</i> sub-district; and <i>Salisbury</i> sub-district, in addition to the three parishes formerly constituting the sub-district (aggregate population 8,884), also comprises the three parishes of <i>Britford</i> , <i>West Harnham</i> , and <i>The Close</i> (aggregate population 1,896), which were formerly comprised in <i>Britford</i> sub-district.
261	WIMBORNE - - -	1 August	The sub-districts of <i>Witchampton</i> and <i>Wimborne</i> were united under the name of <i>Wimborne</i> (aggregate population 10,251).

TABLE 57.—ENGLAND. Changes in the Constitution of Registration Districts and Sub-districts during the Year 1888—continued.

No. of District.	NAME OF REGISTRATION DISTRICT.	Date of Change.	Nature of Change.
285	BARNSTAPLE - - -	1888. 1 July	The number of sub-districts forming this district was reduced from six to five, the sub-district of <i>Braunton</i> having been dissolved. The five sub-districts are now constituted as follows:— <i>Barnstaple</i> sub-district comprises the parish of Barnstaple (population 9,518). <i>Parracombe</i> sub-district (aggregate population, 2,710) remains unaltered. <i>Combmartin</i> sub-district, in addition to the six parishes which formerly constituted such sub-district, viz., Arlington, Bratton-Fleming, Combmartin, Kentisbury, Loxhore, and Stoke-Rivers (aggregate population 2,829), also comprises the two parishes of Berrynarbor and East Down (aggregate population 1,043) which were formerly comprised in the <i>Ilfracombe</i> sub-district. <i>Ilfracombe</i> sub-district comprises three parishes which formerly belonged thereto, viz., Bittadon, West Down and Ilfracombe (aggregate population, 6,838), the parish of Goodleigh (population 250), which was formerly in Barnstaple sub-district, and the eight parishes of Ashford, Braunton, Georgeham, Heanton-Punchardon, Marwood, Morthoe, Pilton, and Sherwill (aggregate population 7,103) which were formerly comprised in <i>Braunton</i> sub-district. <i>Bishop's Tawton</i> sub-district, in addition to the eight parishes formerly constituting the sub-district, viz., Atherington, Bishop's Tawton, Fremington, Horwood, Instow, Newton Tracey, Tawstock, and Westleigh (aggregate population 6,100), also comprises the two parishes of Land Key and Swimbridge (aggregate population 1,815), which were formerly comprised in <i>Barnstaple</i> sub-district.
315	AXBRIDGE - - -	1 January	The name of <i>Banwell</i> sub-district was altered to <i>Weston-super-Mare</i> .
336	TWYKESBURY - - -	1 October	The sub-districts of <i>Tewkesbury</i> and <i>Overbury</i> were united under the name of <i>Tewkesbury</i> (aggregate population 12,994).
548	LANCHESTER - - -	1 April	The sub-district of <i>Lanchester</i> was divided into two sub-districts, viz., <i>Consett</i> sub-district, comprising the eight parishes of Medomsley, Billingside, Benfieldside, Healeyfield, Conside-cum-Knitsley, Iveston, Ebchester, and Muggleswick (aggregate population 23,219); and <i>Lanchester</i> sub-district, comprising the seven parishes of Greencroft, Lanchester, Langley, Esh or Ash, Satley, Cornsay, and Hedleyhope (aggregate population 16,439).
557	TYNEMOUTH - - -	1 October	The parishes of East Hartford, West Hartford, and Cramlington (aggregate population 5,939) were transferred from the sub-district of <i>Blyth</i> to the sub-district of <i>Earsdon</i> .
589 and 590	BRIDGEND AND NEATH	1 April	The parish of Llangynwyd Higher (population 2,444) was transferred from the <i>Margam</i> sub-district of NEATH to the <i>Maesteg</i> sub-district of BRIDGEND.
589	BRIDGEND - - -	1 May	The sub-district of <i>Maesteg</i> was divided into two sub-districts, viz., <i>Maesteg</i> sub-district, comprising the four parishes of Llangynwyd Higher, Llangynwyd Middle, Llangynwyd Lower, and Cwmdŷ (aggregate population 9,782); and <i>Ogmore</i> sub-district, comprising the five parishes of Bettws, Llangeinor, Llandyfodog, Ynysawdre, and St. Bride Minor (aggregate population 8,632).

Under the provisions of "The Divided Parishes and Poor Law Amendment Acts, 1876 and 1879," changes were made on the 24th March 1888 in the constitution of the following Districts, viz.:—MALLING (47), MAIDSTONE (50), HOLLINGBOURN (51), EAST ASHFORD (55), ELHAM (65), ROMNEY MARSH (66), ROMSEY, (99), STOCKBRIDGE (100), WINCHESTER (101\*), ANDOVER (110\*), FARINGDON (114\*), WARE (130), HERTFORD (134), BICESTER (151), BANBURY (155\*), BRACKLEY (156), AMPHILL (173), WOBURN (174), ORSETT (190\*), BILLERICAY (191), CHELMSFORD (192), MALDON (194), LEXDEN (197), HALSTEAD (198), BRAINTREE (199), DUNMOW (200), SUDBURY (203), BLANDFORD (260), WIMBORNE (261), POOLE (262), TAUNTON (306), BRIDGWATER (307), CLUTTON (316\*), SPILSBY (422\*), LOUTH (423\*), NANTWICH (449\*), CHESTER (450\*), GREAT OUSEBOURN (488\*), KNARESBOROUGH (489\*), THIRSK (529\*), RICHMOND (541\*), HEXHAM (559), BELLINGHAM (561), MORPETH (562), ALNWICK (563), and ANGLESEY (630A\*).

\* In these cases the limits of the sub-districts only are affected.