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THIRTY-THIRD 42(R7)
ANNUAL REPORT

OF THE

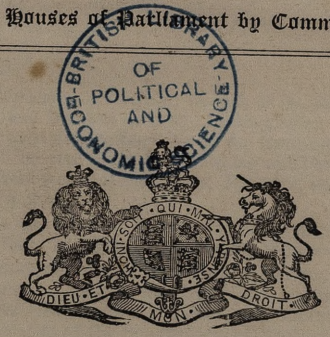
REGISTRAR-GENERAL

OF

BIRTHS, DEATHS, AND MARRIAGES
IN ENGLAND.

ABSTRACTS FOR 1870,
WITH
SUMMARY OF MARRIAGES, BIRTHS, AND DEATHS
REGISTERED IN TEN YEARS 1861-70.

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



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REPORT

TO

The Right Honourable JAMES STANSFELD, M.P., President of the Local Government Board, &c. &c.

*General Register Office, Somerset House,
26th June 1872.*

SIR,

I HAVE the honour to lay before you my annual report for the year 1870.

The births, deaths, and marriages, and some of their principal circumstances of place, time, causes, and relation, recorded day by day, are classified and analysed to a greater extent in the following Tables than could be attempted in the returns which I have published quarterly. In addition to the numbers married, the conjugal condition, and the age at the date of marriage, are here distinguished; the births are arranged to show the numbers of each sex, as well as the proportions born in and out of wedlock: then, of the persons dying in the year, the sexes, ages, and causes of death are analysed elaborately, so as to set forth the facts in detail under a great variety of aspects, having especial reference not only to their bearing on the public health and on the doctrine of population, but to a great variety of social problems. Among them I may venture to mention the question of the education of the people which has been very much advanced by the remarkable revelations of the marriage registers, which showed that in the 41st year of the nineteenth century, 41 per cent. of the future fathers and mothers of the English nation had been left by the country so imperfectly educated that they could not write their names legibly. This deplorable fact was brought under the notice of Parliament in my reports year after year, and strengthened the hands of those who had been long labouring in vain, or with little effect, to place the keys of elementary knowledge within the whole people's possession. The subsequent reports show, as on a scale, the progressive improvement that took place, and now give, as the starting point of the new laws which the wisdom of Parliament has sanctioned, the fact that still in the year 1870, of the persons marrying 24 in 100 or 20 in 100 men, 27 in 100 women, made their marks, and did not write their names on the registers.

The recent reports have been issued under a disadvantage, in as much as the rates of birth, death, and marriage were based on an estimated, and not on an enumerated, population; and this is to some extent the case now, for although the population has been enumerated, the numbers have not yet been finally revised. But the numbers, as given in the preliminary Census Report, have been employed, as they are not likely to be erroneous to any considerable extent.

The population of England and Wales by that report was about 22,457,366 in the middle of the year 1870.

The average English rates for the 33 years 1838-70 have been 16.48 persons married, 33.8 children born alive, and 22.4 deaths, to every 1000 of the population.

The *marriage-rate* in 1870 was *below*, the *birth-rate* and the *death-rate* both *above*, the average in ten previous years. The excess was proportionally greatest in the death-rate. The death-rate was enhanced by the

severe winter weather, by a fatal epidemic of scarlet fever, and by the prevalence of diarrhoea, which was much promoted by the dry season causing the imperfect supply and storage of water to be felt all over the country.

Increase of Population.—The natural increase of population is expressed by the excess of births over deaths; but the actual increase of the population of this country depends also further on the difference between the forces of emigration and immigration. The births registered in the year were 792,787, the deaths 515,329, giving an ascertained increase of 277,458. The registration of births is not quite complete, and to get the actual excess of births, some addition to this number has to be made. We have accounts neither of the numbers of the natives of Scotland and of Ireland entering England, nor of the numbers of Englishmen entering the two other parts of the United Kingdom; but it is quite certain that the excess is largely on the side of immigration into England, which tends to swell the population here. Upon the other hand, there is an ascertained efflux of English emigrants to the colonies and to other parts; in fact the number of emigrants of English origin returned at the ports having emigration officers was 105,293. Deducting this number, the natural increase is reduced to 172,165; but as the estimated population for the middle of 1870 showed an increase of 292,519 upon that for 1869, it would appear that emigration was more than balanced by the immigration from Scotland, Ireland, and foreign countries.

Some circumstances have evident influence on marriage, birth, or death-rates; among them are the temperature and the rain-fall, the abundance or scarcity of food, and the state of trade.

The results of the meteorological observations for the year, conducted under the superintendence of Mr. Glaisher, will be found recorded in his remarks and tables on pp. xxxiv-v, and lxxxii-v. From these it appears that the mean temperature of the air at the Royal Observatory, Greenwich, was 48°·7, or 0°·7 below the average, and that 18·5 inches of rain fell, or 5·5 inches below the average.

The average prices of the principal articles of food (see Table 46) did not vary much from those in the previous year. In the first quarter of the year 1870 the price of wheat showed a decline when compared with the corresponding quarter of 1869, the respective averages being 42s. 3d. and 50s. 2d. per quarter; in the second and third quarters the difference between the two years was very slight, and in the fourth quarter of 1870 the average price per quarter was 50s. 1d. against 46s. 0d. in the fourth quarter of 1869.

The price of beef, though rather lower in the first three quarters than in the same period of 1869, rose considerably in the last quarter, while the price of mutton maintained a steady and continued rise throughout the year. Taking the mean price for the whole year, potatoes were 5s. a ton dearer than in 1869. The returns of pauperism were again heavy, the average number of in-door paupers relieved on the last day of each week showing a slight increase, and of out-door paupers a considerable increase upon the returns for the previous year.

MARRIAGES.

During the year 363,310 persons married, a number exceeding by 9370 the married in the previous year. The persons married were at the rate of 16·2 per 1000 living, which is somewhat below the average. This rate, low in 1862, began rising in 1863, and reached the highest point (17·6) in 1865-6; in 1867 it began to fall, and in 1868 it descended to 16·2, from which it has varied little for three years. The rate fell in the year 1869 to 16·0. The lowest annual marriage-rate for the last 33 years was 14·74 in 1842; the highest was 17·88 in 1853. The increased marriage-rate in the year 1870 was chiefly shown in the coal-mining and

iron-producing districts, thus reflecting the early indications of the prosperity which has been recently manifested in those branches of industry. In most of the purely agricultural counties the numbers of marriages were stationary, or exhibited a decrease.

Of the 181,655 marriages, 137,986, or 76 per cent., were solemnized according to the rites of the Established Church, and 43,669, or 24 per cent., were performed not according to the rites of the Establishment. These proportions corresponded with those in the previous year. Of 100 marriages in the Established Church, 101 were by special license, 12 by license, 83 after banns, 3 by Superintendent Registrar's certificate, and in rather more than 1 per cent. it was not stated in which of the foregoing modes the requisite formalities antecedent to the actual ceremony had been observed.

Of 100 couples who were married not according to the rites of the Church of England, 17 were Roman Catholics, 1 were Quakers, 41 were members of other Christian denominations, 8 were Jews, and 41 were married without any religious ceremony at the Superintendent Registrars' offices. These civil marriages before Superintendent Registrars have shown a steady increase in recent years.

Of the marriages during the year 148,848 were between bachelors and spinsters, 8134 between bachelors and widows, 15,366 between widowers and spinsters, and 9307 between widowers and widows.

In each of 34 marriages one of the parties was stated to have been previously divorced. In 19 instances divorced men married spinsters, one divorced man married a widow, and 10 bachelors and 4 widowers married divorced women.

Ages of persons married.—The precise ages of both parties were specified in 127,040 instances, or in 70 per cent. of the total number of marriages, showing a further slight improvement upon former years in the proportion of cases in which an exact statement of age was given.

The mean age of persons who married in 1870 was, of men 27·9, of women 25·7. The mean age of the widowers was 42·6, and of the widows 38·8. Excluding re-marriages, the mean age of bachelors was 25·8, and of spinsters 24·4.

There were 11 cases in which the husbands were aged 80 and under 85. One of these octogenarian bridegrooms was united to a bride who had also reached the age of fourscore years; 2 secured wives whose ages were returned as 30 and under 35. As further examples of disparity in age may be noticed 2 husbands aged 60 and 75 married to girls of the respective ages of 15 and 21.

Marriages of Minors.—The number of men married under 21 years of age was 13,598, and of women 39,205, the respective proportions to the total numbers married being 7·5 and 21·6 per cent. A slight increase in the proportional number of minors married is again to be noted. These early marriages continue to prevail to the greatest extent in the same parts of the country as in former years; the counties of Bedfordshire, Leicestershire, Northamptonshire, Buckinghamshire, Nottinghamshire, and Staffordshire showing the largest proportion of men, and Durham, Staffordshire, the West Riding of Yorkshire, Huntingdonshire, Leicestershire, Northamptonshire, Nottinghamshire, Buckinghamshire, and Bedfordshire the largest proportion of women who married under 21 years of age.

Signature of Marriage Registers.—Of the men who were married in the year 1870, 35,999, or 19·8 per cent., and of the women 49,532, or 27·3 per cent., signed the register by mark. The improvement in the state of elementary education, of which an increase in the proportion of those able to write their names is an indication, continues at a very slow rate, and some years must yet elapse before the effects of recent legislation on the subject are seen in the registers. The comparative extent to which

an acquaintance with the rudiments of learning was diffused in each county, as evidenced by the proportion of those who were unable to write their names in the register of their marriages, is shown in Table 4. Judged by this test of signatures, the state of both male and female education continued to be most backward in Monmouthshire, Wales, Staffordshire, and Bedfordshire; from 30 to 37 per cent. of the men, and from 36 to 47 per cent. of the women in these counties displaying an ignorance of the art of writing. In Suffolk also the per-centage of men who signed by mark was so high as 31; and in Lancashire 39 per cent., and in Durham and the West Riding of Yorkshire 36 per cent. of the women had recourse to the same illiterate mode of signature.

A great national effort should be made to teach the adult population of marrying ages the arts of reading and writing; otherwise irreparable time will be lost. A generation of illiterate fathers or mothers will grow up. Dr. Pick and others have proved that there are short and effectual methods of teaching adults to read and write; why should these not be brought at once into use, at least experimentally?

Buildings registered for Marriages.—The number of these buildings on the register at the end of 1870 was 6425. Table 7 shows the number in England and Wales, and in each registration division and county, belonging to each of the principal denominations. The number of places of meeting certified to the Registrar General for religious worship, and on the register on 31st December 1870 was 18,071, distributed amongst nearly 100 different religious bodies.

BIRTHS.

The children born alive and registered in 1870 numbered 792,787, showing a recovery from the falling off which occurred in the previous year; the increase being 19,406 upon the number recorded in 1869, and 5929 upon that in 1868. The birth-rate, 35·3 per 1000, was nearly identical with the average rate for the 10 previous years. The highest rates were as usual in the counties of Staffordshire, Lancashire, the West Riding of Yorkshire, and Durham; though the rates in Staffordshire and Durham were slightly below their ordinarily very high average. The greatest increase when compared with the mean rate for the 10 years 1860–69, was shown in the extra-metropolitan part of Middlesex, in Hampshire, Nottinghamshire, and Derbyshire.

Sex.—Of these 792,787 children, 404,305 were boys and 388,482 were girls. Thus 104·1 boys were born to every 100 girls.

This proportion does not vary much from year to year in the whole of England and Wales, as may be seen from Table 9, the number of boys born to every 100 girls during the 20 years 1851–70 having been least, namely, 103·6 in 1868, and greatest, namely, 105·2 in 1857. But when the comparison is made on a smaller scale, the ratio of males to females born varies more considerably. Thus in the year 1870 the ratio in Huntingdonshire was only 95·6, while in the neighbouring county of Rutlandshire it was 123·5. This inequality, however, is lessened if the calculation is spread over a sufficient number of years. Thus taking the mean proportion in the 10 years 1860–69, the variation amongst the different counties of England and Wales was only 3·2, ranging from 102·9 in Hertfordshire to 106·1 in Cornwall.

Children born out of wedlock.—The births of 44,737 children born out of wedlock were registered during the year, of whom 22,009 were males, and 21,828 females, or in the proportion of 105 boys to 100 girls.

Of every 100 children whose births were registered 5·6 were illegitimate. The actual proportion of births of illegitimate children to total births may be rather higher, since from the natural desire on the part of the mothers in some cases to avoid publicity, a larger proportion of illegitimate than of legitimate children probably escape registration. But it is

worthy of remark that the proportion of illegitimate births has steadily decreased during the last 20 years from 6·8 to 5·6, or 1·2 per cent., while there is no reason to suppose that a larger proportion than formerly of the total births remain unregistered. The greater difficulty of concealment in rural districts renders the returns of illegitimacy more complete in some counties than in others; and allowance should therefore be made for this circumstance in comparing the proportions in different parts of the country. Cumberland again showed the largest proportion of illegitimate to total births, namely 11·0 per cent.; Norfolk was next with 9·7; then Shropshire 9·4, the North Riding of Yorkshire 8·9, and Westmorland 8·5. The lowest rates were 4·0 in London, Surrey (extra-metropolitan), and Middlesex (extra-metropolitan); 4·5 in Essex and Warwickshire; and 4·7 in Kent (extra-metropolitan), Durham, and Monmouthshire. It might be supposed that the prevalence of early marriages would tend to diminish the number of illegitimate births. From a comparison, however, of Tables 4 and 10, it does not appear to have such an influence. Taking for example the above-mentioned counties, although Cumberland and Shropshire show a high rate of illegitimacy combined with a low proportion of persons married under 21 years of age, yet in Norfolk, where the proportion of illegitimate children is also high, the proportion of minors married is above the average, and in the North Riding of Yorkshire and in Westmorland the latter proportion is not remarkably low. On the other hand, the connection between a low rate of illegitimacy and a large proportion of early marriages only holds good in Warwickshire, Durham, and Monmouthshire, while London, and the extra-metropolitan parts of Surrey, Kent, and Middlesex show a combination of low proportions both of illegitimate children, and of persons married under age. The comparison is not materially affected when extended over a series of years.

DEATHS.

In the year 1870 the deaths registered in England were 515,329, showing a further increase of 20,501 upon those returned in the three preceding years. After making due allowance for increase of population, the death-rate in the four years 1867–8–9–70 was successively 21·8, 22·0, 22·3, and 22·9 per 1000 persons living; in the 33 years 1838–70 the annual rate averaged 22·4, and ranged between 20·5 the lowest in 1856 and 25·1 in 1849, when cholera was severely epidemic.

The causes of death in 1870 are considered in detail in Dr. Farr's letter, see Appendix A., pp. 403–14.

The Seasons.—The principal meteorological features of the year (see Mr. Glaisher's remarks, pp. xxxiv–v) were a warm and dry spring, a cold and early winter, and a general and marked deficiency in the rain-fall. In the March quarter of the year the death-rate was 26 per 1000, and 1 per 1000 in excess of the average rate in the corresponding period of 33 years; in the second quarter it was, however, only 21·6 per 1000 against an average of 22·1; in the three months ending September the rate was 22·0, showing an excess of 1·3, and in the last three months of the year 22·3 against 21·9. Of 4000 deaths in 1870, there were 1130 registered in the first, 943 in the second, 957 in the third, and 970 in the fourth quarters of the year.

Sex.—The 515,329 deaths in England in 1870 included 265,586 or 51·5 per cent. of males, and 249,743 or 48·5 per cent. of females; these proportions were identical with those which prevailed in the previous year. The deaths of males in 1870 were to the deaths of females as 106 to 100. The rate of mortality among males was equal to 24·3 per 1000, while among females it did not exceed 21·6; therefore of equal numbers living the number of male deaths in the year to each 100 deaths of females were 112. In the 33 years 1838–70 this proportion averaged 109, and

since 1849 has steadily increased from 105 to the 112 shown in each of the four years 1867-70. As the calculations showing the mortality of the sexes at different groups of ages in recent years have been postponed until the results of the recent Census (1871) are available, it is impossible to pursue an inquiry as to the several ages at which the mortality of males shows the largest excess upon that of females. Judging, however, by the experience of the 30 years 1838-67, it may be stated that except at the principal child-bearing ages 15-35 the mortality among males exceeds that among females at each period of life; especially is this excess remarkable among male children under five years of age, the death-rate among whom in the above-mentioned 30 years was equal to 72.4 per 1000 living, while among female children at these ages the rate did not exceed 62.5 per 1000. The occupations of adult males naturally expose them to greater risks from physical and mechanical injuries than are sustained by females; this in some measure explains the excess of mortality among males at most of the ages past childhood.

Locality.—As before stated the average rate of mortality in the whole of England and Wales in 1870 was 22.9 per 1000, but the rate ranged in different parts of the country from less than 17 per 1000 in the healthier rural districts, to close upon 40 per 1000 in the most unhealthy town districts. By using the unrevised numbers of the population enumerated at the Census in 1871, estimates of the population in different parts of the country have been framed for the middle of 1870 sufficiently reliable for the calculation of marriage, birth, and death rates in some detail. In the 11 Registration Divisions into which the country is divided the death-rate ranged from 20.6 in the second, comprising the South-eastern counties, to 26.1 in the eighth, including Lancashire and Cheshire. The lowest county death-rates in the year were 18.7 in Huntingdonshire and Westmorland, and 19.5 in Suffolk; the highest rates were 24.6 in Gloucestershire, including Bristol, 25.7 in the West Riding of Yorkshire, and 26.8 in Lancashire. The difference between these county death-rates is in great measure explained by the fact that the rate of mortality from the seven principal zymotic diseases was equal to but 2.0, 2.3, and 2.8 per 1000 respectively in Westmorland, Suffolk, and Huntingdonshire; while it was 5.6 in Gloucestershire, 5.8 in Lancashire, and 5.9 in the West Riding of Yorkshire. The excess in the death-rate of the two last-mentioned counties was principally confined to the manufacturing districts which include so large a proportion of their population. The death-rate in all the principal town districts of England and Wales in 1870 averaged 24.7 per 1000, scarcely exceeding the mean rate in the ten previous years; in the remaining or rural population the rate did not exceed 20.6 per 1000, which, however, was one per 1000 above the average in the ten preceding years. In the ten years 1860-69 there was an average difference of 5 per 1000 in the English urban and rural death-rates: it follows therefore that the death-rate in a county depends in great measure upon the proportion of each of these classes of population which it contains. At pages 158-69 will be found a variety of information as to the causes of death not only in registration Divisions and Counties, but also in each of the Districts of England and Wales; a study of these figures will enable the fatality from each of the principal zymotic diseases to be localised in considerable detail. The Quarterly Returns for 1870 first gave similar information to this in sub-districts, but on account of the great additional labour that would thus be involved, the causes of death are not yet abstracted at the Central Office in sub-districts, registration districts being at present the smallest areas for which this information is available in the Annual Reports.

Towns.—The approximately correct population figures in the Preliminary Census Report, showing the numbers enumerated in April 1871, from which estimates have been framed for the middle of 1870, give addi-

tional value to the new birth, death, and marriage rates. It was found that in many of the large towns the population had in recent years been over-estimated by assuming that the rate of increase which prevailed from 1851-61 had been maintained during the more recent decade 1861-71. The average rate of increase of population for the whole of England and Wales had been estimated with a successful approach to accuracy, but ten years is too long a period wherein to assume that the rate of increase in the several counties and towns shall remain uniformly the same as that which prevailed in a previous decade; and yet it would be still more incorrect to take such populations as stationary. In 20 of the largest towns of the United Kingdom the death-rate in 1870 averaged 25.8 per 1000; the average rate in the entire Kingdom was 22.9. In the several towns the lowest rates were 20.9 in Sunderland, 22.1 in Portsmouth, and 23.0 in Birmingham; while the most excessive rates were 29.8 in Manchester, and 32.9 in Liverpool. Compared with the rates in the three preceding years a considerable increase was shown during 1870 in Norwich, Bristol, and Liverpool; while the rates in Wolverhampton, Manchester, Salford, Hull, Sunderland, and Newcastle-upon-Tyne had declined.

Mortality at different Ages.—As the ages of the population enumerated in 1871 have not yet been tabled at the Census Office, it is again necessary to postpone any detailed consideration of the mortality at the different groups of ages. It will, therefore, only be desirable to take a brief glance at the proportions of the deaths registered during 1870 at the several ages. Of the 515,329 deaths in England and Wales 211,694, or 41.1 per cent., were of children under five years of age, against 40.0, 42.3, and 41.1 per cent. respectively in the three preceding years. Among male children the proportion of the total deaths occurring among children under five years of age was 43.0 per cent., while among female children it did not exceed 39.1 per cent. Real *infant* mortality may be satisfactorily measured by its proportion to births registered; to each 100 births in 1870, 16 deaths of infants under one year of age occurred (the percentage was 17.4 among male and 14.5 among female infants) against 15.6 per cent. in 1869. The proportional infant mortality, measured in this way, was 18.3 per cent. during the year in 17 of the largest English towns furnishing weekly returns, and ranged from 15.0 and 16.0 respectively in Sunderland and Portsmouth to 22.1 in Norwich, 23.5 in Leicester, and 25.9 per cent. in Liverpool.

Among children aged between 5 and 15 years of age 33,890 deaths were registered in 1870, or 6.6 per cent. of the deaths at all ages, against 6.3 per cent. in 1869; among male children the proportion was 6.5, and among female children 6.6 per cent. Between 15 and 55 years of age the deaths of males also exceeded those of females, but the per centage to total deaths, which among persons of both sexes averaged 25.0, was 24.6 only among males, while it was 25.4 among females; between 15 and 35, the principal child-bearing ages, the deaths of females exceeded those of males, and the proportion to total deaths among females was 12.6 per cent., while among males it did not exceed 11.3 per cent.

Not only is the mortality among male infants larger than among females, but of the persons surviving the years of infancy the mean age at death is greater among females than among males. The deaths of persons aged 55 years and upwards showed in 1870 a proportion of 27.3 per cent. of the total deaths; the deaths of males at these ages did not exceed 25.9 per cent., while those of females were 28.9 per cent. The greater longevity among females is more remarkable at the extreme ages; in 1870 the deaths of only 4,601 males at the ages 85 years and upwards were registered, while those of females at the same ages were 6,660; the proportion of deaths of males aged 85 and upwards was 1.7 per cent. of the total deaths, while of females it was 2.7 per cent. During 1870 the

deaths of 18 males and of 63 females, whose ages were stated to be upwards of 100 years were registered; in all 81 persons, against 63 and 79 respectively in 1868 and 1869. The highest ages said to have been attained in 1870 were 108 by a male and 107 by a female. Further particulars regarding these centenarians will be found in the notes to the Table "Deaths at different Ages" on pp. 96-117.

Deaths in Public Institutions.—During 1870 there were registered 43,017 deaths in 1034 of the largest public institutions of England and Wales. Of these institutions 690 were workhouses, 266 were hospitals or infirmaries, and 78 were lunatic asylums. Of each hundred deaths registered in England and Wales during 1870, 5·6 were recorded in workhouses, 2·0 in hospitals, and ·7 per cent. in lunatic asylums; these percentages exactly correspond with those which prevailed in 1869. The proportion of deaths in public institutions as usual varied very considerably in the different registration divisions; in the Metropolitan Divisions 16·1 per cent. of the total deaths were returned in the large public institutions; in the South-eastern Division, including Surrey (extra-metropolitan), Kent (extra-metropolitan), Sussex, Hampshire, and Berkshire, the proportion was 9·6 per cent., owing in great measure to several large metropolitan institutions being situated therein; and in the North-western counties, Lancashire and Cheshire, it was 8·8 per cent. The smallest proportions were 3·8 per cent. in the Welsh, 5·2 each in the North Midland and Yorkshire, and 5·3 in the Northern registration divisions. The proportion of deaths recorded in workhouses may to some extent be taken as an indication of the amount of pauperism prevailing in different parts of England and Wales during 1870; as above stated, an average, 5·6 per cent., of the total deaths occurred in workhouses during the year. The percentage of workhouse deaths in London was 9·0, in the South-eastern counties 6·9, in Lancashire and Cheshire 6·8, and in the Eastern Counties 5·9; the smallest proportions were 3·6 per cent. each in Yorkshire and the Northern Counties, and 2·8 in Wales. In Wales many of the registration districts are without workhouses, only out-door relief being given, and this in great measure accounts for the small proportion of deaths in workhouses in that part of the kingdom.

Other facts relating to the marriages, births, and deaths in 1870, with more detailed information as to the sanitary condition of districts and other kindred matters, will be found in the "Summary of the Quarterly Reports, 1870" (see pp. xviii-xxxi); these reports were published within a month after the expiration of each of the quarters of the year.

UNITED KINGDOM.

The population of the United Kingdom at the middle of the year 1870, estimated from the numbers enumerated in April 1871 was 31,205,444 persons, of which 22,457,366 or 72 per cent. were living in England and Wales, 3,335,418 or 11 per cent. in Scotland, and 5,412,660 or 17 per cent. in Ireland. After a correction for defective registration in Ireland, by authority of the Registrar-General of that portion of the kingdom, the persons married during the year in the United Kingdom were 498,450, the births were 1,099,287, and the deaths 713,600. The natural increase to the population of the kingdom during the year, by excess of births over deaths, was 385,687. The number of emigrants of home origin, who left our shores during 1870, as reported by the Emigration Commissioners, was 202,511; the net increase to the population of the kingdom in the year was therefore but 183,176 against 288,221 in 1868, and 195,919 in 1869.

The marriage-rate for the United Kingdom in 1870 was 16·0, the birth-rate 35·2, and the death-rate 22·9 per 1000 of the estimated population.

The marriage-rate in Scotland was but 14·3 per 1000 against 16·2 in England and Wales; the Scotch birth and death rates were each also slightly below (see Table 26) those which prevailed in England and Wales.

The numbers of marriages, births, and deaths in Ireland have been estimated by assuming that the respective rates were the same as those which prevailed in England and Wales, see Tables 25 and 26, p. lix.

FOREIGN STATES.

France.—Returns giving French vital statistics for 1869 have not yet been received, provisional figures have, however, been furnished by the French Government for 1870, which approximately show the movement of the population during that year. The population, inclusive of that of the provinces since ceded to Germany, is estimated at 38,365,965, and the deaths in the year are supposed to have exceeded the births by 105,887 and the deaths recorded in 1868 (which were unusually high) by 187,689. This remarkable excess of deaths in 1870 was doubtless directly or indirectly due to the war with Germany. The French marriage-rate in 1870 was but 12·4 per 1000 of the population against an average rate of 15·8 per 1000 in the five years 1864-8; the birth-rate was 26·1 per 1000, and differed but slightly from the average rate in recent years; the death-rate was 28·8 per 1000, against 23·3 in the ten years 1859-68. The depression of the marriage-rate, we may hope, will only be temporary; and the mortality has already declined.

Austria.—The population of the Austrian Empire, exclusive of Hungary, estimated to the middle of 1870 was 20,385,498, among whom the marriage-rate was 19·4 per 1000, which, although 1·3 per 1000 lower than the exceptionally high rate in 1869, exceeded that in England and Wales by no less than 3·2 per 1000. The birth-rate was 40·5 per 1000, against 39·3 and 40·2 in the two preceding years, and exceeded the English rate by 5·2 per 1000. The Austrian death-rate in 1870 was fully as excessive as the rates of persons married and of births; the death-rate was 29·2 per 1000, against 29·3 and 28·9 in the two preceding years, and exceeded by 6·2 per 1000 the English rate in 1870.

Italy.—No returns of population, marriages, births, or deaths, have yet been received from this country relating to the year 1870.

Spain.—Returns from the Statistical Bureau at Madrid have furnished the figures showing the vital statistics for the Kingdom, not only for 1870 but for the two preceding years which had previously been wanting. In 1870 the Spanish marriage-rate was 12·5 per 1000, against 13·3 and 16·2 in the two preceding years: civil registration for marriages was introduced during 1870, and the decline in the marriage-rate for that year is said to be due to a priestly opposition to the measure, while the high rate in the previous year may have been caused by a wish to evade the new law which was about to come into operation. The birth-rate in 1870 was equal to 35·4 per 1000, and was almost identical with the English rate. The death-rate for the year was so high as 30·1 per 1000, which, although showing a considerable decline upon 32·6, the rate which prevailed in each of the two previous years, was so much as 7·2 per 1000 in excess of the English death-rate.

THE ARMY.

During the year 1870 the average strength of the British Army at home and abroad, as shown by returns with which I have been favoured by His Royal Highness the General Commanding-in-Chief, was 180,444 officers and men, against 186,668 in 1869.

The average strength of the army at home during the year was 89,670 officers and men. The deaths occurring from all causes among this strength were 1029, of which 66 were of officers, and 963 of non-commissioned officers and men. These deaths showed a proportion to the mean strength of 13.7 per 1000 among the officers, against 5.9 in 1869; while the death-rate among the non-commissioned officers and men was equal to 11.4 per 1000 against 10.7 in 1869.

In Great Britain the death-rate of officers was 16.6 per 1000, and among the small number in Ireland only 5.5; the rate among non-commissioned officers and men was 12.2 in Great Britain and 9.1 per 1000 in Ireland.

The average strength of the army abroad in 1870 was 90,774 of all ranks, against 100,390 in 1869; among this force 1609 deaths occurred, including 64 of officers and 1545 of non-commissioned officers and men; the death-rate was equal to 13.3 per 1000 of the mean strength among officers, and to 18.0 among the men. Compared with the results for 1869 the mortality of officers showed a considerable increase, while that of non-commissioned officers and men had declined.

According to returns received from Austria the mean strength of the army of that empire in 1870 was 610,662, and the death-rate therein did not exceed 6.4 per 1000.

BIRTHS AND DEATHS OF BRITISH SUBJECTS AT SEA.

The strength of the mercantile marine, as returned by the Registrar General of Seamen, was 195,962 in 1870, against 197,502 and 195,492 in the two preceding years. The number of reported deaths in the year was 4523, or equal to 23.1 per 1000 of the strength, against 26.9, 26.6, and 24.7 respectively in the three years 1867-8-9. It will thus be seen that in spite of a decline in this death-rate among merchant seamen in 1870, it exceeded by 5 per 1000 the rate among the British army serving abroad during that year. A reference to Table 55 (p. lxxviii) will show that the 4523 deaths among the seamen of the British merchant service in 1870, included 2644 from drowning (including 1655 by wreck) 302 from other forms of accidental death, 254 from fever, 210 from yellow fever, and 200 from phthisis. Only six deaths were directly referred to purpura and scurvy, while in the three preceding years the numbers were 52, 26, and 9 respectively. By murder and manslaughter 13 deaths were caused, and 21 cases of suicide were reported. Of the 4523 deaths, 901 occurred under 21 years of age, 2545 between 21 and 41 years, 425 at 41 years of age and upwards, and 652 at unknown ages.

The numbers of births and deaths among British subjects at sea reported to the Registrar General of Seamen in 1870, exclusive of seamen, soldiers, and marines, were 315 and 773 respectively.

MARINE REGISTER BOOK.

By the Registration and Passengers Acts captains or commanding officers of British vessels are required to transmit to me the particulars of all births and deaths that occur among British subjects at sea. The entries for 1870 in the Marine Register Book which is kept by me are 89 births and 205 deaths; these returns, however, as appears from the numbers reported to the Registrar General of Seamen, are very far from complete. The entries of births in 1868 and 1869 were 115 and 89 respectively; of deaths, 251 and 240. It may be remarked that the information from which these entries are made in the Marine Register is almost exclusively received through the Admiralty from Her Majesty's ships, very few being furnished from the Mercantile Navy.

NAMES ON THE REGISTERS, AND SEARCHES.

During the 33½ years, from the middle of 1837 to the end of 1870, the marriages, births, or deaths of 45,346,461 persons have been entered upon the registers, of which 1,671,426 were inscribed in 1870.

The number of searches of the registers at the CENTRAL OFFICE (exclusive of the non-parochial registers) has shown a rapid increase in recent years. The Registration Act provides for the preparation of indexes of all names entered on the marriage, birth, and death registers; the number of searches in these indexes during 1870 was 15,303, showing an increase of 1977 or 14.8 per cent. upon those in the previous year, while the increase between 1868 and 1869 did not exceed 11.2 per cent. The searches in 1860 were but 5636; in the ten years 1860-70 the increase in the number of searches in the indexes to the registers was no less than 171.5 per cent.; in 1870 there were nearly three searches to each one in 1860. The total amount received in fees for searches, and certified copies of marriage, birth, or death entries during 1870, and paid into the Exchequer was 2,456*l.* 19*s.* 6*d.*, against 2,247*l.* 7*s.* 6*d.* in 1869; see Table 43. Many certificates of births furnished for purposes in connexion with the Factory Acts are given free of charge, and are not counted as searches, as no fees are receivable in respect of them.

WILLS.

The return of the Chief Registrar of the Court of Probate shows that the number of probates and letters of administration granted at the principal registry in the year 1870 was 15,208, against 14,099 and 14,674 in the two preceding years. The value of the effects was sworn under 59,508,585*l.* The returns furnished by the district registrars show that in the 40 district registries the number of probates and letters of administration granted in the same year was 23,932, against 21,905 and 23,393. The value of the property under which these probates and administrations were sworn was 46,029,670*l.* At the principal and district registries, therefore, the number of probates and administrations granted in 1870 was 39,140, and the total value of the effects was sworn under 105,538,255*l.*; in 1869 the number of probates was 38,067, and the value of the property 100,269,554*l.* The average value of property under each of the probates and administrations granted in 1870 at the principal and district registries was 2,696*l.*, against 2,634*l.* in 1869. In 1870 the average property under each probate granted at the 40 district registries was 2,366*l.*, and under each administration 645*l.*

On pages 213-367 will be found, in supplementary tables, a complete summary of the marriages, births, and deaths registered in England and Wales during the ten years 1861-70, and in each of the registration divisions, counties, districts, and sub-districts for the same period; with the excess of births over deaths, and the increase or decrease of population between the Census enumerations of 1861 and 1871, in similar detail. These figures will be fully considered in a subsequent Report, when the tables now in progress, showing the ages at death and the causes of death in this decenniad, are ready for publication. Another supplementary table (pp. 369-399) gives a complete list of all the registration districts and sub-districts in which changes of constitution or boundary came into effect during the ten years 1861-70, showing the date of the alteration, and in each case the names and populations of the places annexed or removed. The preparation of these laborious tables has delayed the publication of this report somewhat beyond the usual date.

A Report on the Causes of Death in England, addressed to me by Dr. Farr, F.R.S., will be found in Appendix A. (pp. 403-414), and accom-

panying the usual Abstracts are detailed tables of considerable interest relating to the ages at death, the causes of death, and the deaths registered in the large public institutions during the year 1870.

Appendix B. contains some Healthy District Life Tables prepared under Dr. Farr's superintendence, which will be of interest to those concerned in life insurance. These are also standard tables showing the effect of favourable sanitary conditions on the lifetime and pecuniary circumstances of mankind. By these tables the mean duration of life is half a century; by the English Life Table embracing the whole population it is 41 years, and in some of the unhealthiest cities the mean lifetime is only 25 years.

I rejoice that Her Majesty's Government have resolved to introduce in the House of Lords this year a Bill amending the statutes relating to Civil Registration of Births and Deaths, which in my opinion may in some instances be considerably improved.

Amongst other changes I should recommend —

That Boards of Guardians should have power to alter limits of sub-districts, and to create new ones, subject to the approval of the Local Government Board.

That all registration officers should appoint deputies.

That the Registrar General, with the approval of the Local Government Board, should have power to alter the schedules in the Registration Acts.

That legally qualified medical practitioners should give written certificates of cause of death to be recorded in the register book.

That a better mode of correcting errors in a register be introduced.

That new regulations be made respecting the burial of still-born children, with a view to preventing infanticide.

But, above all things, I think that there should be new enactments making it compulsory, under a penalty, to give "notice" and "information" respecting every birth and death that occurs, and introducing alterations as to the qualifications of "informants."

Under the present system, however zealously registrars of births and deaths may strive to comply with the words of the existing statute, that they should "inform themselves carefully of every birth and every death," it is impossible for them in densely populous urban districts to become aware of and record every birth and death promptly after its occurrence unless they are aided by the public.

In one sub-district in Lancashire there are upon an average recorded by one registrar every day 25 births and deaths, and therefore many more on particular days. He cannot register these events at the houses in which they occur; time would not admit of it; and, unless the entries were in many instances made at his office by informants voluntarily attending there, delay would arise in obtaining certificates to be presented to officiating ministers at burials, and great inconvenience would be caused to the clergy.

In like manner, in thinly populated sub-districts with very extensive area, registrars living at a distance cannot learn and record all these events promptly after their occurrence, unless the public assist them by giving "notice," and in frequent instances repairing to the residence of the registrar.

In Devonshire there is a sub-district with an area of 86,000 acres. In these places, and in others with similarly extended boundaries, no registrar can in a complete and satisfactory manner perform his duties unless some of those who are interested as to an accurate record being made of the event in their families on these occasions, which do not often happen, take the trouble of personally repairing to the registrar's office.

I have often derived essential help from the clergy in carrying out the enactments of the Registration Acts; but in some parishes the difficulty

which registrars under the present system, as above stated, unavoidably encounter is rendered greater by the clergy, who are opposed to civil registration, urging their parishioners not to assist the registration officers by repairing to their residences. Handbills have been in some instances industriously circulated, in which advice is given tending to prevent that complete registration being effected which is desired by the Legislature.

A handbill* has been lately published by a clergyman in Warwickshire, which I should not think worthy of being alluded to here, had it not been widely circulated by him in all parts of the country, preventing births and deaths from being recorded as hitherto.

In it the public are deliberately advised to offer passive resistance, and to cease taking the slight trouble of transmitting a "notice," and to abstain from going to the residence of the registrar.

I beg to assure the Local Government Board that I have done my best to counteract these mischievous efforts; and, as several months must elapse before a new statute can come into force, I have in the meantime widely circulated an explanatory notice stating some of the benefits to be derived by all classes of persons from a complete civil registration of births and deaths.

I strongly advise that an Act of Parliament be passed this Session making it imperative, under a penalty, that in England as in Scotland "notice" should be given, and that under certain circumstances "informants" be compelled to attend at the office of the registrar.

In Scotland no birth or death is recorded except at the registrar's office; and in no instance whatever is he allowed to take his register books to any private house for the purpose of there making the entry, to the greater convenience of the occupier, however high in rank.

Thus it will be rendered impossible for evil-disposed persons to mislead the public and to defeat the object of the Legislature when it has decided to confer on the whole population, without religious distinction, the advantages of civil registration.

I have the honour to be,

Sir,

Your faithful servant,

GEORGE GRAHAM,

Registrar-General.

* "REGISTRATION OF BIRTHS AND DEATHS.

"When a birth or a death occurs, no one is obliged either to go or send notice to the registrar. It is the duty of that officer to bring his books to the houses where these events have lately happened, and there to ask the questions prescribed by law.

"An un-baptized child has only a surname. In this case therefore no name purporting to be a Christian name should be required by or given to the registrar.

"The friends of a deceased person have nothing to do with obtaining a burial certificate. If one has not been brought to them by the registrar the clergyman will bury the corpse without objection.

"The only duty therefore imposed on parents and friends is to answer the registrar's questions put to them at their own houses. They may, if they please, send him information of a birth or death. If he is a good officer he will encourage them to do so, and if they are good subjects they will not be unwilling to further, without compulsion, the objects of the law. They may do so by an ordinary message or an halfpenny postal card, on receiving which the registrar should attend at their houses.

"This information is given because some registrars, especially when they are also relieving officers, impose upon ignorant persons duties which belong to themselves, and which they are paid to perform.

"To sum up all in a few words:—Persons interested about births or deaths need take no steps whatever about registration until the registrar comes to their own doors, when they must answer his legal questions.

"M. B."

Summary of the Quarterly Reports, 1870.

NOTE.—The various marriage, birth, and death-rates given below have been recalculated upon estimated populations derived from the unrevised numbers enumerated at the Census in April 1871.

First Quarter.—January, February, March.

In the UNITED KINGDOM the births of 274,772 children, and the deaths of 194,137 persons of both sexes, were registered in the three months ending on March 31st, 1870. The natural increase of population was thus 80,635.

The number of persons married in the quarter ending March 31st, 1870, was 108,100.

The marriage, birth, and death-rates of the Kingdom differ little from those prevailing in England and Wales.

ENGLAND.—The marriage-rate, which had revived at the end of the year 1869, fell off again in the first three inclement months of the year 1870. Births were above the average. Provisions were cheaper than usual. But the winter was cold. Bleak, dry, harsh east and north-east winds blew in February and March; and while vegetation was arrested, human life was destroyed. The death-toll was unusually heavy.

Marriages.—72,910 persons married in the winter quarter; fewer by 2594 than married in the previous winter. Marriages occurred only at the annual rate of 13·2 to 1000 persons living; whereas in the previous ten winter quarters the average rate was 14·0; and the winter rate ranged from 13·5 in 1861 to 14·6 in 1864. Marriage at the highest point in the Christmas quarter, always ebbs to the lowest in the following first three winter months of the year.

Births.—The births of 206,366 children born alive were registered in the quarter that ended on March 31, and the birth-rate was 37·3 to 1000; it was ·7 over the average rate of the winter season. The births exceeded those in the previous corresponding quarter by 2591. The increase was very generally diffused over the kingdom.

Increase of Population.—The births exceeded the deaths by 62,593; and the natural recorded increase was at the rate of 695 daily. To this should be added a small number of births that escaped registration.

Emigration carried off 32,627 people of all ages from the ports of the United Kingdom, at which there were emigration officers, in the 90 days; and of them about 14,296 were of English origin. On an average a ship load of about 159 English emigrants sailed daily to the Australian Colonies, British North America, the United States, and other places; 11,754 of the emigrants sailed to the United States, 1933 to the Australian Colonies. Of the Irish 11,757, of the Scotch 2846 emigrated; about 3728 of the emigrants from the ports were foreigners.

Prices, Pauperism, and the Weather.—The average price of wheat which was 72s. 2d. in the winter of 1868, and 50s. 2d. in the same period of 1869, fell to 42s. 3d. per quarter in the winter of 1870. This marked reduction represents a fall of 41 per cent. in the eight seasons, and of 16 per cent. in the last four seasons. Potatoes were cheaper; the best quality at the Waterside Market, Southwark, sold on an average at 102s. 6d. a ton (5s. 1½d. per cwt.); this was lower by 45s. a ton or 2s. 3d. per cwt. than in the winter of 1868, and somewhat lower than the price in the same season of 1869.

The wholesale price of meat at Smithfield market had varied little since the winter of the previous year. The average price of beef in the two winters of 1869 and 1870 was 6d. per lb. and 5¼d. per lb. respectively; of mutton 6½d. per lb. and 6¼d. per lb.

The returns of pauperism were heavy. The average number of persons relieved on the last day of each week in each of the quarters ending 31st March 1868, 1869, and 1870 respectively, was as follows:—

Quarter ending 31st March	Year	In-door.	Out-door.
1868	-	159,720	861,044
"	"	162,308	850,883
"	"	164,387	892,822

During the first seventeen days of January the weather was very mild; during the remainder of the month the air was mostly dry and frequently very cold, while the deficiency of daily temperature averaged 5°. At the beginning of February there was a remarkable change; frosts disappeared, and mild weather prevailed. This was followed by another period of low temperature, which lasted from the 9th to the 25th. During these seventeen days the deficiency of temperature averaged as much as 7¼° daily, and for five or six days the cold was excessively severe. Six warm days succeeded, with an average daily excess of temperature of 8¼°. With the exception of three days, viz. the 16th, 17th, and 18th March, the weather from the 4th to the end of the month was very cold.

The mean temperature of the three months was 38·0°, or half a degree below the average of 99 years. The combined effects of frequent alternations of temperature, lengthened periods of cold, and bleak east and north-east winds, were unfavourable to the progress of agricultural work, and vegetation was very backward. The rain-fall of the quarter at Greenwich was 4·1 in., or 1 in. below the average; in March the fall was half an inch above the average.

Deaths; and the State of Public Health.—The 143,773 deaths in the quarter exceeded by more than 10,000 the deaths in the previous winter, and by more than 24,000 the deaths in the milder winter of 1868; such is the effect of cold. The weather of February 1868 was more like spring than winter, and at the end of the month trees and shrubs were budding. A difference of 3° in lowness of temperature for 90 days was the chief cause of a difference of 4 per 1000 in the death-toll. Man is indeed to some extent "an atmospherical creature."

The mortality was at the rate of 26·0 per 1000; the average in the ten preceding winters being 25·2.

The mortality in town districts was higher than in the country districts; it was 27·7 in town, and 24·0 in country.

It is notable that the excess of mortality occurred almost entirely in the small town and country districts, where the mortality rose from the average of 22·6 to 24·0, or what may be called 1·4 degrees. In the town districts the rise was only 0·4 on the average of 27·3; it was 27·7.

In the following towns and cities the mortality much exceeded the quarterly town average; it was 30·2 in Bristol, 34·6 in Manchester, 36·5 in Glasgow. Abroad the mortality of Paris was 32·1, while that of Berlin and Vienna was 28·2 and 28·8 per 1000 respectively.

This the first Quarterly Return of the year 1870 was much extended. England is divided for registration purposes into 2196 sub-districts, in each of which resides a registrar of births and deaths. The sub-districts differ in size and population; but a sub-district on an average at the Census of 1861 embraced an area of 26½ square miles—a square of 5¼ miles to the side—having in seven parishes or places 1698 houses, and 9113 inhabitants. For every sub-district, great and small, the births and deaths, as they are registered down to the termination of the quarter, are returned.

The Return from each sub-district showed for the first time the number of deaths of infants under one year of age, and of persons aged 60 years and upwards; of deaths from small-pox, measles, scarlet fever, diphtheria, whooping-cough, fever, diarrhoea, and violence; the number of inquest cases, and of deaths in large public institutions. Similar detailed information, derived from an analysis of the certified copies, is given for Registration Divisions, Counties, and Districts only, at pp. 158-69 of the Annual Abstracts.

Small-pox was only fatal to 405 persons; of whom 99 died in London (15 in Mile End Old Town, and 22 in the Islington sub-district, containing the Small-pox Hospital); 44 in the South Midland Division (of which 17 were in Middlesex, out of London, 23 in Wycombe), 122 in Lancashire, and 106 in Yorkshire. Bury, Oldham, and the districts around Manchester were the chief offenders in Lancashire; Dewsbury, Barnsley and Guisbrough in Yorkshire.

Small-pox was only fatal to *one* life in the NORTH MIDLAND COUNTIES, *two* in the EASTERN, *four* in the WEST MIDLAND, *five* in the NORTHERN, *six* in the SOUTH EASTERN, *eight* in the SOUTH WESTERN, and *eight* in the WELSH COUNTIES. In this vast tract of country it was practically a nullity. But it is not extinct so long as any of the matter—the propagating corpuscles—the *variolads* exist.

Measles, scarlet fever, diphtheria, whooping-cough, fever in its various forms, and the vague diarrhoea still subsist; still wave their dark standards over the nation; they slew nearly twice 10,000 victims in 90 days; measles 1922, scarlet fever 6693, diphtheria 710, whooping-cough 4451, fever 4177, diarrhoea 1733.

Measles had its favourite haunts; no deaths by the disease occurred in Rutland or Westmorland, while in some sub-districts of London, in Bexley and Gillingham in Kent; Portsea Island, Warminster, Sherborne, Northam in Devon; Bath, Bedminster, Bristol, and Clifton; Burslem, Nuneaton, Leicester, Derby; Wigan, Warrington, Oldham, Blackburn, Preston, Dewsbury; Auckland in Durham; Blaenavon, Cardiff, and Pembroke, the number of deaths was considerable, either absolutely or as compared with population. In hundreds of sub-districts no death by measles was registered, but none of the 17 large towns except Sunderland escaped without a death. The outbreaks of measles are often quite local and limited.

Scarlet fever let none of the 17 large English towns escape; it was more fatal and more diffused than measles. Of the 6693 deaths, 2472, or more than *one third* part occurred in these places peopled by 6,247,626 souls, including 1296 in London. Many deaths, absolutely or comparatively, occurred in sub-districts of Croydon, Eastbourne, Edmonton, West Ham, Swaffham, Weymouth, Looe in Cornwall, Bedminster, St. George Clifton, Stroud; Leominster, Shrewsbury, West Bromwich; Great Grimsby, Greasley in Nottinghamshire, Belper, Toxteth Park, Everton and Walton, Yeading, Sheffield and the neighbouring districts, Whitby, Yarm (Stockton), Llangibby, Upper Merthyr Tydfil, and Swansea. In many sub-districts no death by scarlet fever was registered.

Fever in the enteric, typhus, or relapsing form prevailed very widely; of the 4177 deaths by fever, 1097 occurred in the large towns, including 460 in London. There were deaths by fever in every county, and in every one of the 17 large towns. In Liverpool 107, in Manchester 132 persons died by fever. Liverpool had in this quarter the advantage over Manchester.

The deaths were absolutely or relatively numerous in Milton and Minster (Sheppey), and Portsea Island; in Weymouth, evidently in an unhealthy state, there were in a population of 12,858 no less than 114 deaths by all causes, including 18 by scarlet fever, 9 by diphtheria, 3 by whooping-cough, 12 by fever, and 5 by diarrhoea. Several fatal cases of fever

occurred in Wolverhampton, Walsall, Warwick, Basford, Chester, Didsbury, Chorlton, Darlington, Durham. In the Whitehaven sub-district 35 deaths by fever occurred in the 90 days, out of a population of 14,064 at the 1861 Census. Tredegar is evidently in an unhealthy condition; 21 persons died of fever, 32 of scarlet fever. In Llangibby and in Merthyr Tydfil fever, as well as scarlet fever, was prevalent and fatal. Llanelli is in a bad way; 18 persons died there of fever.

Whooping-cough prevailed to an unusual extent; the deaths were 4451, of which 1686, more than one third part, took place in the 17 large English towns, including 824 in London.

It is true that the returns of deaths can never furnish such immediate notice of the origins of epidemic diseases as returns of cases of disease; but it is not true that the information of the death register is necessarily too late; it is too late as regards the individual, but it is not too late as regards the community, which can immediately adopt measures to quench the sparks before they involve it all in flames.

The seas which divide this island from the rest of the world no longer ward off diseases, which are landed every day on her shores, and can no more be shut out than the east winds. The nation is associated with all races and nations by its maritime population, and with many by empire. And however much men may indulge the natural pride of nationality, in one respect their solidarity admits of no dispute; they are all subject to the same diseases; and are all interested equally in the mitigation of the sufferings and losses those diseases occasion.

How can those evils be mitigated, unless their origin is known, and unless science determine the laws by which they are governed? And recorded observation on a European scale is as necessary for the determinations in this field of life as observation of the skies in astronomy, without which Copernicus, Newton, and Laplace could never have built up the system of the universe, or have given the navigator the means of avoiding shipwreck, and finding his destination over the ocean.

England is the only country in the world at the present time which publishes weekly and quarterly observations on an extensive scale in time to be available for immediate administrative use. But the Registrar General hopes soon to get the co-operation of other countries, and in a few years to see in operation among several of the principal nations of the world one well concerted series of reports of their marriages, births, deaths, and most controllable diseases.

Second Quarter.—April, May, June.

In the UNITED KINGDOM the births of 275,403 children, and the deaths of 162,624 persons of both sexes, were registered in the three months ending on June 30th, 1870. The natural increase of population was thus 112,779.

The number of persons married in the quarter ending June 30th, 1870, was 115,594.

The marriage, birth, and death-rates of the Kingdom differ little from those prevailing in England and Wales.

ENGLAND.—The returns of marriages and of births were satisfactory. The marriages, depressed in the previous spring, in this spring quarter approached the average number. The birth-rate exceeded the average, while the mortality which had been so high in the previous severe winter, fell to the average rate for the season.

In this hot, dry, and to an unexampled extent almost rainless spring, scarlet fever was the prevailing epidemic.

Marriages.—In April, May, and June marriages are always more numerous than in the previous three winter months; and the increase in these three spring months was nearly ten thousand. 93,440 persons

married in 91 days, or on an average a thousand persons married daily. The marriage-rate of the quarter was 16.7, the average rate being 17.0 annually, per 1000 of population.

The revival of the marriage-rate was most notable in London, in Cornwall, and in the counties of Gloucester, Stafford, Lancaster, York, Durham, and Northumberland. The population engaged in the production of coal and iron were recovering from depression, and were again marrying and giving in marriage at their usual pace.

Births.—The births of 203,615 children were registered in the spring months that ended on June 30th. The number is greater by 14,997 than the births in the corresponding season of the previous year. The annual birth-rate was somewhat above the average; it was 36.4 in 1000. The lowest proportion in ten previous springs was 34.1 in 1869, the highest proportion was 37.2 in the spring of 1868.

Increase of Population.—The excess of births over deaths was 82,487; it gave a daily addition of 906 to the English population. 41,373 English emigrants sailed from our shores in 91 days, or 455 daily. Of the 111,842 emigrants that sailed from our ports, 23,162 were foreigners. Of the 88,680 natives of the kingdom, 37,878 were Irish, 9429 were Scotch; 4690 emigrants sailed to the Australian colonies, 15,676 to British North America, 67,458 to the United States, and only 856 to other places.

Prices, Pauperism, and the Weather.—The average price of wheat was 44s. 8d. a quarter, slightly lower than it was in the same three months of the previous year, 27s. 2d. less than it was in the spring of 1868. The fall was equal to 38 per cent. Since the harvest of 1868, the prices of wheat had been steady, but declining. The average price of beef by the carcase ranged from 4½d. to 6¾d. a lb. The price was somewhat lower than the prices of the previous year. The prices of mutton ranged from 5¼d. to 7½d. a lb. The price of the higher qualities was less, the price of the lower qualities higher than in the spring of 1869. Best potatoes were 6s. 3d. per cwt. at the Waterside Market, Southwark; dearer than in the spring of 1869 and cheaper than in the spring of 1868.

The returns of pauperism still continued heavy. The average number of persons relieved on the last day of each week in each of the quarters ending 30th June 1868, 1869, and 1870 respectively, was as follows:—

	In-door.	Out-door.
Quarter ending 30th June 1868	142,782	801,500
“ “ 1869	145,094	816,260
“ “ 1870	144,226	825,337

Mr. Glaisher showed that *April* came in cold; that the temperature then rose, and was high until near the end of the month. Anon cold came, and rain fell in small quantities in different parts of the country, until May had fully set in: then the weather became warm and dry, and full of sunshine until nearly the end of June, when the cold, changeable fit returned, and brought a little rain.

The months were almost rainless at Greenwich; only 1.2 in. of rain fell on 15 days out of 91 against an average of 5.8 in. Over the country, especially in the north, the rain-fall was not so inconsiderable. Mr. Glaisher estimated the mean rain-fall at 3.37 in.

The mean temperature at Greenwich was 54.4 Fahrenheit or 12.4 centigrade. The air was unusually dry; taking saturation at 100, the degree of humidity was 70, whereas it was 76 on an average of 29 years. The air travelled horizontally at the average rate of ten miles an hour.

Deaths; and the State of Public Health.—The mortality, 21.6 in 1000, was below the average for the season, which lies between the extremes of winter when it is highest, and summer when it is lowest, unless some great epidemic prevails. 121,128 persons died in the 91 days; more by 7357 than the average of the preceding three spring quarters.

The annual mortality per 1000 was 22.7 in the chief town districts, less than the average of ten preceding years by 0.8; while in the other districts of small towns and villages the mortality was 20.1, or about the average. It is necessary to cover the whole area of the kingdom with an effective sanitary administration.

The mortality in the 50 towns of second magnitude was at the rate of 23 in 1000: among these towns those of lowest mortality were Dover, Southampton, Coventry, Birkenhead, and South Shields. Among the towns with the highest mortality were Exeter, Stoke-upon-Trent, Macclesfield, Wigan, Bolton, Huddersfield, Halifax, and Swansea. These high rates of mortality should be inquired into specially by the local authorities. Measles, scarlet fever, and fever were epidemic in Halifax; but the diseases that proved so fatal in Exeter were not so apparent.

In 17 large English towns the rate of mortality from the seven principal zymotic diseases, namely, small-pox, measles, scarlet fever, diphtheria, whooping-cough, fever, and diarrhoea, was lowest in Sunderland and Leicester, highest in Sheffield, Bradford, and Bristol.

At the present time it is important to watch closely the mortality of infants. In the healthier districts of England it appears by the Life Table that out of 100 born alive 10 die in the 12 months following. Now the births in a quarter have been compared with the deaths in the same time under one year of age in 17 large English towns, and the deaths are 15 to 100 births; five are killed by various causes in these towns in addition to the ten that die in healthy country districts. In this quarter the infants fared worst in Bradford, Liverpool, Manchester, Leeds, Bristol, where from 17 to 18 out of 100 born alive died; best in Portsmouth, Sunderland, and Sheffield, where from 11 to 13 infants under 12 months of age died to 100 born alive.

In the 17 towns, including London, inquests were held by coroners in 6 out of 100 deaths: the proportions were lowest in Wolverhampton, Bradford, and Hull, highest in London (6.0), Liverpool (6.3), Manchester (6.6), and Birmingham (11.1). The proportion of deaths by violence in Birmingham is high, in Bradford and Norwich low. Of 100 deaths in these towns, 15 were in large public institutions; the proportions ranged from 8 in Bradford and Norwich, to 16 in Liverpool, and 17 each in London and Manchester.

The SOUTH EASTERN COUNTIES suffered in the second, as they did in the first quarter of the year from scarlet fever. Dartford, Ashford, and New Romney, sub-districts of Kent, suffered severely, so did Winchester, Odham, Wokingham, and Bracknell. Measles was much less fatal than scarlet fever.

In the SOUTH MIDLAND COUNTIES the deaths from scarlet fever were most numerous in the sub-districts of Harrow, Tring, and Henley.

The EASTERN COUNTIES, except in West Ham, which is really a part of London, and in Ilford, suffered little from scarlet fever. Whooping-cough killed 14 children in Witham, measles 15 in Halstead.

The SOUTH WESTERN COUNTIES presented a few striking cases of mortality from scarlet fever; thus in Penzance 52 deaths from scarlet fever occurred in St. Just-in-Penwith, 11 in the Penzance sub-district. Cranborne and Dorchester were visited less severely. 12 children died of measles in Devizes, 39 in Trowbridge.

The WEST MIDLAND COUNTIES suffered considerably from scarlet fever, and from fever. From scarlet fever 15 persons died in the sub-district of St. Augustine (Bristol), 19 in St. George, and 55 in St. Philip and St. Jacob (Clifton), 49 in Gloucester District, 56 in Stroud District, 17 in Cirencester, 12 in Cleeve, 16 in Ludlow sub-district, 43 in Walsall District, 46 in West Bromwich. Measles in a few sub-districts was fatal. Among them may be mentioned Darlaston, Longton, and Whitchurch (Salop).

In the NORTH MIDLAND COUNTIES scarlet fever was only exceedingly fatal at Great Grimsby and at Greasley.

In the NORTH-WESTERN COUNTIES the mortality was lower than usual, and scarlet fever was less fatal than in London: Liverpool and West Derby were almost the only districts that suffered severely.

In YORKSHIRE the mortality was high; and this was to a considerable extent due to the 974 deaths from scarlet fever. Among the sub-districts that suffered most severely were Holmfirth and Newmill in Huddersfield; Bowling and Pudsey in Bradford; Batley in Dewsbury; Sandal in Wakefield; Ecclesfield, Ecclesall Bierlow, Brightside, Attercliffe, Rotherham, Kimberworth, Epworth, Sutton, and Scarborough.

The mortality was below the average in the NORTHERN Counties. The total deaths from scarlet fever were 248, from fever 256. Stockton and Auckland suffered severely.

In WALES, including Monmouthshire, the mortality was above the average. The deaths from scarlet fever were 441, from fever 254. 64 persons died of measles in the Blaenavon sub-district. Scarlet fever was most fatal in Llangibby, St. Woollos, Upper Merthyr Tydfil, Margam, Neath, Llansamlet, Llangafelach, Swansea, Llanelly, and Haverfordwest.

Scarlet fever appeared to have taken the place of small-pox, and had latterly been excessively fatal. It is an infectious disease, and there are great difficulties in hedging it in. Undoubtedly it is found under all conditions, but it is most fatal where the sanitary state of a place is unfavourable.

If the health of the people of England does not improve more rapidly, it is on account of the delay in adopting measures for removing the dirt from human habitations to its natural place in the earth, delay in supplying towns with pure water throughout the year, delay in investigating and combating all the elements of ill-health in communities.

Third Quarter.—July, August, September.

In the UNITED KINGDOM the births of 255,479 children, and the deaths of 159,141 persons of both sexes, were registered in the three months ending on September 30th, 1870. The natural increase of population was thus 96,338.

The number of persons married in the quarter ending September 30th, 1870, was 109,328.

The marriage, birth, and death-rates of the Kingdom differ little from those prevailing in England and Wales.

ENGLAND.—The marriage-rate of the summer quarter remained, as in the two previous summers, below the average of the season. The births exceeded the average. The health of the people was bad; the mortality largely exceeded the average during the summer months. The country districts suffered unusually. Diarrhœa with simple cholera, the prevailing epidemic, is in more direct connexion with unhealthy conditions than other diseases, and thousands of the deaths to which it gives rise call loudly for effectual measures of relief.

Marriages.—The marriages of 87,800 persons were recorded in the summer of 1870, being in the ratio of 15.5 annually to every 1000 of the population: the average annual marriage-rate for the season is 16.3 per 1000, or .7 above the rate of the last summer quarter. The highest summer marriage-rate during the previous ten years was 17.3 in 1865, and 17.2 in 1866; the rates in the following summers successively declined to 16.2, 15.8, 15.7, and 15.5. In London and the extra-metropolitan parts of Middlesex, Kent, and Surrey, in Sussex, Hants, Oxfordshire, Wilts, Devonshire, Cornwall, Gloucestershire, Rutlandshire, Lincolnshire, and North Wales, marriages were less numerous than in three

preceding summers: there was an increase in the counties of Bedford, Cambridge, Suffolk, Norfolk, Somerset, Salop, Stafford, Worcester, Warwick, Leicester, Nottingham, Derby, Chester, Lancaster, in the East and West Ridings of Yorkshire, in the four Northern Counties, and in Monmouthshire.

Births.—192,521 children were born alive in the 92 days that ended on September 30th. The annual birth-rate during the summer season was 34.0 per 1000, which is identical with the average of ten previous summers. The number of births in nearly every division was about the same as it had been on an average in the three previous summer quarters.

Increase of Population.—The registered births exceeded the registered deaths by 68,224; and this is the natural increase of the population. English emigrants, to the number of 30,548, sailed from the ports of the United Kingdom at which there are Government emigration officers. Allowing for emigrants on one hand, and for births unregistered on the other, the probable increase of population was about 40,000 souls in three months. The emigrants of Scotch birth numbered 7311, and of Irish 16,563. The destination of 52,399 emigrants was the United States; 9656 went to British North America, 5126 to the Australian Colonies, and 1198 to various other places. In comparison with corresponding summer quarters the tide of emigration in the two summers of 1869 and 1870 was higher than in any previous summer since 1854.

Prices, Pauperism, and the Weather.—Wheat was on an average 50s. 4d. a quarter; nearly the same (50s. 11d.) as in the corresponding months of the previous year; but 8s. 9d. less than in the same season of 1868. Beef by the carcase was 6d. a lb. at the Metropolitan Market; 4 $\frac{3}{4}$ d. for inferior, 7 $\frac{1}{4}$ d. for superior meat. Mutton was dearer; it was on an average 6 $\frac{3}{4}$ d. a lb.; 5 $\frac{1}{4}$ d. for inferior, 8d. for superior meat. The price of mutton had risen during the last three summers 1d. a lb.; beef slightly rose and fell. It was in this quarter cheaper than mutton. Best potatoes were 120s. a ton., 6s. a hundred-weight at Waterside Market, Southwark; the prices in the two previous summers having been 7s. 4d. and 5s. 6d. a cwt. Consols were lower, the Bank rate of discount higher than in the two previous summer seasons.

The returns of pauperism still continued heavy. The average number of persons relieved on the last day of each week in each of the quarters ending 30th September 1868, 1869, and 1870 respectively, was as follows:—

	In-door.	Out-door.
Quarter ending 30th September 1868	- 138,794	- 779,039
" " 1869	- 137,406	- 781,382
" " 1870	- 138,444	- 787,976

The weather of the summer was exceptional. At Greenwich the mean temperature was 60°.7 (= 16° centigrade*), or 1°.2 above the average of 99 previous summers. The peculiarity consisted in the hot weather,—with the exception of 11 changeable, cold days interposed,—extending from June to August 18th, and the low temperature extending from August 19th to the end of the quarter. The rain-fall was 5.6 inches (= 14 centimetres †) or 1.8 in. below the average of 55 years. A fourth part of the customary rain failed. The high temperature forced on the grain crops. Harvest began in the south of England in the third week of July, and the fine, mild weather towards the end of September enabled the farmers in the north to secure in good condition all the outstanding crops.

* To obtain the temperature by Fahrenheit's scale, multiply the centigrade degrees by 9, divide by 5, and add 32°. The zero of the centigrade scale is the freezing point of water; 100° indicates the boiling point of water.

† The centimetre is about 4 tenths of an inch.

Mr. Glaisher showed that between latitudes 50° — 55° the rain-fall in the three last summers was 7.4, 6.8, and 4.9 inches = 19, 17, and 12 centimetres. The deficiency of rain in the last summer was, therefore, very considerable.

Deaths; and State of the Public Health.—Health was unfavourably affected during the summer. 124,297 people of all ages died. The annual rate of mortality was 22.0 a thousand, or 1.5 over the average of the summer season.

The mortality of the districts containing the chief towns was at the annual rate of 23.9 to 1000 living, their average rate for the summer season being 23.0; so the excess was .9. The mortality of the village and small town districts was at the rate of 19.1 against an average of 17.3; giving an excess over their average of 1.8, or double that of the towns. May this not be ascribed to the more rapid deterioration of the sanitary condition in the villages and small towns, than in the large towns, where partial improvements have been effected?

The mortality in the 20 great towns of the United Kingdom, including London, was at the rate of 26; it exceeded 30 in Leicester, Liverpool, Bradford, and Leeds; it was below 22 in Portsmouth and Sunderland.

In the 50 towns of considerable, but of less magnitude, the mortality was at the rate of 24. In some of these towns the mortality was low, in others excessively high. It exceeded 30 in the following towns: Oxford, Northampton, Macclesfield, Wigan, and Preston.

There were two grand causes of the excess in the mortality; scarlet fever was fatal to 7498 lives, simple diarrhoea to 17,647. The diarrhoea ran into cholera in 611 cases, and gave a character to the epidemic constitution of the season. Diarrhoea was fatal in all England at the annual rate of 3.1 in 1000 living; in the 17 great towns at the rate of 4.9; in the 50 towns at the rate of 4.4; in the rest of the country at the rate of 2.2. The diarrhoea-rate was or exceeded 6.0 in Norwich, Wolverhampton, Birmingham, Bradford, Hull, Oxford, Ashton-under-Lyne; 7.0 in Leicester, Liverpool, Manchester, Salford, Sheffield, Northampton, Coventry; 8.0 in Leeds and Bolton; 9.0 in Colchester; 11.0 in Preston; 12.0 in Wigan. In all these places something is radically wrong.

It is to be regretted that Bristol, where precautions have been taken to a certain extent by an able health officer, on plans thoughtfully suggested, experienced a considerable mortality, both from scarlet fever and from diarrhoea. The 293 deaths from scarlet fever, the 52 deaths from fever, and 156 from diarrhoea in three months, imply some essential defects in the dwellings, sewage, water supply, or other hygienic conditions, which mere quarantine arrangements do not meet. This important and ancient city will no doubt, under its intelligent guidance, discover, and apply with energy appropriate remedies. In Birmingham, otherwise lightly visited, no less than 510 deaths from diarrhoea were registered. In Northampton by some culpable negligence the deaths were allowed to exceed the births, and by measles, scarlet fever, fever, and diarrhoea, among other diseases, to raise the mortality to the annual rate of 43 in 1000. Dr. Hunter, in a report on alleged injury from the sewage works at Northampton, describes with his graphic pen one evil then prevalent in that town:—

“In this spongy sandstone cesspools once made are made and closed for ever; they are hardly ever cleaned out and are always nearly empty. The meaning of this is that the ordures infiltrate all around, far and near, and their gases exhale from the surface.” * * * There are wells. * * * “None of the cesspools were cemented, and, indeed, it is a principle with the Northampton builders that a cesspool needs no drain, so absorbent is the sandy stratum. This is a fatal convenience which may to some extent account for the great development of fever in the sandstone counties. One of the evils attending the absence of an overflow drain to a cesspool is that the gaseous [volatile] contents are always under pressure as they are generated; in consequence of this there is a strong and murderous whiff of foul air the moment the valve of the watercloset is drawn!” *

* Seventh Report of Medical Officer of Privy Council, pp. 526-528.

Such cesspools as Dr. Hunter describes are nuisances, and should be at once suppressed by police regulation; and so should all heaps of excreta in “the wrong place.” The soil is their proper receptacle.

As usual, under their imperfect water supply and unreformed midden system, which still holds its ground, many of the districts of Lancashire, Yorkshire, and Durham suffered severely from epidemic diarrhoeas. The deaths even in Newcastle-upon-Tyne from diarrhoea numbered 125; and the mortality from all causes was at the rate of 27.0 per 1000.

The scarcity of water throughout the country was unfavourable to health. The sewage in the rivers and wells became more concentrated, and in the country unclean ponds instead of wells and streams were sometimes resorted to. The means of cleanliness were diminished. The importance of storing up flood waters in the high grounds becomes every year more apparent.

The sewage question has made such progress that towns are no longer excusable for neglecting to deal with it. It is agreed that the excreta should no longer be thrown into rivers, but be rapidly restored to the earth; and this can be done by the dry or wet method, according to the circumstances of each case. What is wanted in human habitations is sweetness and cleanliness.

Then follow, as the next great social work of the age, improved dwellings for the industrious classes, and the demolition of all the fever dens of the land. This is a European question; and it will well become England to employ the powers science and wealth have placed in her hands for healing men and for developing the physical and the diviner faculties of the English race. Should her example excite emulation in other countries, we shall see, besides the great struggles for the supremacy of races, common efforts to improve the conditions of life, to diffuse knowledge, to mitigate human suffering, to increase virtue, to elevate intelligence, and thus to conquer the standing armies of disease and death; works of vaster amplitude and greater difficulty than the capture of cities, the subjugation of nations, or the destruction of armies.

How difficult it is to quench the pestilences that afflict mankind is evident from a retrospect of the English returns now extending over 33 years. Disease is no sooner extinguished in one form than it breaks out in another; and the increase of industry, by which the means of living are created, itself develops new dangers in the mine, in the machine, on the rail, in the close workshop, and in the crowded city. Still there is progress: but health, like land won from the sea, is perpetually assailed by the waves of disease, so every new acquisition by nations widens the frontier to be defended; and the ruin of one by pestilence may become by extension the ruin of all.

Fourth Quarter.—October, November, December.

In the UNITED KINGDOM the births of 252,626 children, and the deaths of 164,203 persons of both sexes, were registered in the three months ending on December 31st, 1870. The natural increase of population was thus 88,423.

The number of persons married in the quarter ending December 31st, 1870, was 135,536.

The marriage, birth, and death-rates of the Kingdom differ little from those prevailing in England and Wales.

ENGLAND.—The marriages at the end of the year 1870 increased, and, as it has often been shown, this is a sure sign of improvement in the circumstances of the working classes. The autumn births exceeded the average slightly; and so unhappily did the deaths. Scarlet fever was the prevailing epidemic.

Marriages.—The marriages of 109,160 persons were recorded in the Christmas quarter of the year 1870. The annual marriage-rate in the three months was 19·2 per 1000, against 18·6 in the corresponding quarter of 1869. In the metropolitan part of Kent, the extra-metropolitan part of Surrey, in the counties of Sussex, Herts, Bucks, Oxford, Northampton, Huntingdon, Bedford, Cambridge, Suffolk, Norfolk, Dorset, Somerset, Leicester, Rutland, and Lincoln, the marriages were less than in the three preceding winter quarters.

Births.—The births of 190,285 children born alive were registered in the last quarter of 1870, and the equivalent annual birth-rate was 33·6 per 1000 persons living: this ratio is lower by ·5 per 1000 than it was in the autumn of 1869, by 1·4 per 1000 than in the same quarter of 1868, and by ·3 per 1000 than the average of the ten December quarters 1860–69. There were fewer births than usual in London, in all the counties of the South-eastern Division, and in the Welsh Division; also in the counties of Huntingdon, Cambridge, Essex, Norfolk, Dorset, Devon, Cornwall, Somerset, Gloucester, Hereford, Worcester, Leicester, and Rutland. The increase was considerable in Yorkshire, and the Northern Counties.

Increase of Population.—The natural increase of the population, that is the excess of births over deaths, was 64,154 in the three months, or at the rate of 697 per day; and if it were not for the disturbing element of migration, the natural increment would suffice for determining the increase of the population up to any given period. Of immigrants no record is kept, but the number during the quarter was probably much larger than usual, owing to the special circumstances of the time. Emigration is a fluctuating quantity, not only in successive quarters of the same year, but also in corresponding seasons of different years; and it is therefore noteworthy that the emigrants from the United Kingdom during the autumn quarters of the last two years were almost identical in point of number. Of the 38,460 emigrants who sailed from British ports in the quarter now under review, 18,599 were of English, 3754 of Scotch, and 8641 of Irish origin; 7466 were foreigners. The destination of 13,210 of the English emigrants was the United States, 1063 went to British North America, 2662 to Australia, and 1664 to various other places. The bulk of the Scotch, Irish, and Foreign emigrants also went to the United States.

Prices, Pauperism, and the Weather.—The average price of wheat was 50s. 1d. per quarter, being 4s. higher than in the autumn of 1869, but 1s. 10d. lower than in the autumn of 1868: comparing the last six months of 1870 with the first half of the year there was a rise in price of nearly 7s. per quarter; but taking the whole year, wheat was cheaper than it had been in any year since 1865. Beef by the carcase averaged 6½d. per lb., and mutton 6¾d. per lb. at the Metropolitan Meat Market; the prices of beef for quality ranged from 5d. to 7¾d., and of mutton from 5¼d. to 8d. In the autumn quarter of 1869 the average price of beef was 6½d., and of mutton 6¾d. per lb.; while in the same quarter of 1868 it was 5¾d. and 5¾d. per lb. respectively. It thus appears that since the autumn of 1868 beef had risen 11 per cent. in price, and mutton 18 per cent. This rise in the price of animal food does not tell much in favour of restrictions on the cattle trade. Potatoes (Regents) averaged 70s. per ton at the Waterside Market, Southwark, being cheaper by 17s. 6d. and 35s. per ton than in the corresponding quarters of 1869 and 1868.

The average number of paupers relieved on the last day of each week in each of the three autumn quarters of 1868, 1869, and 1870 was as follows:

		In-door.	Out-door.	
Quarter ending 31st December	1868	- 152,747	- 795,761	
"	"	1869	- 152,021	- 813,753
"	"	1870	- 150,729	- 802,291

The autumnal pauperism is thus shown to have diminished steadily as regards in-door recipients of relief, while out-door paupers, though somewhat more numerous in the autumn of 1870 than in that of 1868, were less so than in the autumn of 1869.

Mr. Glaisher's remarks on the meteorological characteristics of the quarter showed that the mean temperature at Greenwich was 41°·6, or 2°·1 below the average of the same quarter in 99 years; that the average daily range of temperature was 12°·3, the mean reading of the barometer 29·647 in., and the rain-fall 7·6 inches. In October the mean air temperature was 0°·1 above, and in November 0°·9 below the average, with a daily range somewhat in excess of the average; the barometric readings being ·136 and ·129 below the average in those months. The air temperature was in a state of constant alternation throughout October; the first 19 days of November were cold, then followed 10 warm days; from November 30th to December 11th there was an average daily deficiency of 7¾°; this was succeeded by nine days exhibiting a daily excess of 4¼°; a great change took place on December 21st, when the mean temperature was 27°·7, or 24°·8 below what it had been a few days previously, and snowfalls were everywhere frequent and heavy; on Christmas Day it was "painfully cold," the mean value being so low as 20°·6, and thenceforward to the end of the month the mean daily value was 6° below freezing point. Mr. Glaisher cited 41 instances of daily temperature below 22° occurring since 1814, from which it appeared that the lowest (10°·7) was on 20th January 1838, and that only eleven of these coldest days had occurred within the last 30 years, namely, six in January (1841, 1848, and 1867), two in February (1841 and 1845), and three in December, two of which latter occurred on the Christmas Days of 1860 and 1870. From December 20th to the end of the year the country was covered with snow, a strong northerly or easterly wind mostly prevailed, and there was an average daily deficiency in temperature of 12½°. Mr. Glaisher gives a table showing that the cold in the 11 days ending 31st December 1870 was more rigorous than in any period of similar length since February 1855.

Deaths; and the State of the Public Health.—The public health had not recovered from the depression during summer. 126,131 deaths were registered in the 92 days that ended on the last day of the year 1870; and the mortality was at the annual rate of 22·3 to 1000 living; it was 0·4 above the average of the ten previous autumn quarters.

The mortality was still higher in the dense town districts than it was in the country; it was at the rate of 24 in the town districts, 19 (in 1000) in the country in the autumn of 1870; but while the town mortality is kept down within its old limits, the mortality in the small towns, suburbs of large towns, and villages is rapidly increasing; it was ten years ago at a rate below 18, it was in the quarter under review 19 in 1000. This must be so, while effective sanitary organization is denied to rural districts; as diseases, like the dangerous population, when driven from a well ordered community, take refuge in lawless border lands.

The mortality in the 20 great cities of the United Kingdom was less than it had been in the autumn quarters of the two previous years. In London the mortality rate was between 2 and 3 in 1000 less than it was in the previous year. The mortality was low in Portsmouth, Wolverhampton, Birmingham, Hull, Sunderland, and Newcastle-upon-Tyne. It was high in Norwich, Bristol, and Leicester; in Liverpool the mortality rose to 41 in 1000. What diseases were fatal in Liverpool? Scarlet fever, fever in its various forms, small-pox, measles, whooping-cough, and various forms of violence of which 196 persons died: the death-rate by the seven principal zymotic diseases was 13 in 1000 living.

Bristol suffered extremely from scarlet fever, so did Leicester: Leeds and Sheffield had many deaths from fever. Manchester and Salford experienced a somewhat low zymotic death-rate.

The mortality in the 50 large town districts was at the rate of 24 in 1000. Northampton maintained its sad pre-eminence; the rate in that town was 33.

In Halifax the deaths exceeded the births in number, and the mortality rose so high as 39 in 1000. In Lincoln and Chester the mortality did not exceed 18 in 1000; in Carlisle the mortality was at the lowest point, 16, observed in any of the towns.

Taking the ten great Divisions of England, the mortality was at the rate of 19 per 1000 in the South-eastern Division, and at the rate of 20 in the Eastern Division and in Monmouthshire and Wales: in Yorkshire the rate of mortality was 24, and in the North-western Division (Lancashire and Cheshire) 26 in 1000: in all the other five Divisions the mortality was lower than the national average.

Brighton was unhealthy; the deaths exceeded the average deaths of the place by 52. There were 31 deaths from small-pox, 39 from scarlet fever, and 10 from diphtheria. The practice of families attacked by or convalescent from communicable diseases, resorting to the watering places, is scarcely fair, either to the residents or to people who seek invigoration and refreshment after toil from the sea breezes. And where the uninfected children of a family are carried to these distant places, if they escape attack in their new lodgings, they are often attacked on their return, and thus protract the disease. Among strangers too they are more likely to die, as they rarely get the attention to be counted on at home. So that by a natural law the disregard of the safety of the community falls back upon the offenders. When the sanitary condition of a house is irreclaimably bad its inmates should be removed into more favourable conditions, but not in ordinary cases. The dispersion of scholars propagates infectious diseases, unless due precaution is taken; thus the registrar of Wells (Norfolk) stated that the girls affected at a school in that town were dispersed, and were the means of spreading the epidemic, from which three deaths occurred in the parish of Binham.

A most common cause of the mortality of epidemics is overcrowding, as in that case zymotic matter is sometimes generated, and at other times is rendered more fatal. An instructive case of this evil occurred in the sub-district of Swindon, Wilts. The mortality was excessive; 155 deaths were registered in the quarter, as compared with an average of 62 in the corresponding quarter of three previous years. Part of this excess is attributable to the increase of population caused by the extension of the Great Western Railway works at New Swindon, but while in the three preceding quarters of 1870 the excess only averaged 23 per quarter, the returns for the last quarter of that year showed an excess of 93 deaths. Of the 155 deaths, 39 occurred in Old Swindon, 85 in New Swindon, and 31 in the remaining parts of the sub-district. Measles and scarlet fever were the prevailing diseases, and of 80 deaths from these two causes 20 occurred in Old Swindon, and 55 in New Swindon. The mortality among young children was especially great in New Swindon. The facts disclosed by the return pointed to the existence of grave sanitary defects at New Swindon, where the house accommodation was insufficient for the increased population.

Winchester suffered severely from scarlet fever, which is chiefly fatal in towns where sanitary arrangements are defective.

The Districts of the SOUTH MIDLAND DIVISION, especially Acton, Finchley, Tottenham, Edmonton, Eton, Oxford, Northampton, Biggleswade, suffered severely from scarlet fever: while 62 deaths from the epidemic were registered in Oxford, including the sub-district of St. Clement, only 22 deaths from that malady were registered in Cambridge. In the Ely sub-district no death from scarlet fever was recorded.

In the EASTERN DIVISION, West Ham (near London), Norwich, and King's Lynn were the chief districts severely visited by the epidemic of the season.

In the SOUTH-WESTERN DIVISION the epidemic visited severely Exmouth and Torquay, Bideford and Northam, Looe, the Truro and Redruth Districts, and St. Just in Penwith. Glastonbury in that old historical region saw 58 children die from this plague.

The part of Somersetshire on the Bristol side was involved in the epidemic of that city. Outside Bristol, Cirencester, Tewkesbury, and Leominster were the only districts of Gloucester and Hereford in which the epidemic was very fatal: Shropshire was so free from the epidemic that it lost only 22 lives by it; whereas the deaths in Staffordshire were 437, in Warwickshire 213. Worcestershire again suffered little. Speaking generally, the deaths from scarlet fever in the whole Valley of the Severn were inconsiderable.

In the WEST MIDLAND COUNTIES, Derbyshire lost few lives by scarlet fever; Leicestershire many, especially in Leicester itself.

Lancashire lost 1322 lives, the West Riding of Yorkshire 1203 lives by the epidemic. Halifax was the centre of a deadly attack, extending over the thickly peopled regions of Huddersfield, Bradford and Dewsbury. When will Yorkshire care for the lives of her children, who are left to perish by hundreds and thousands in the epidemic ravages of every year? Surely health is there as important as wealth. When will the keen intelligence of the North find out how the web of young life can be woven strong?

In parts of Durham, in the NORTHERN DIVISION, the epidemic, often capricious in attacking single families, yet constant in sweeping away children living in unnatural conditions, was also excessively fatal. In the Stockton sub-district alone 115 lives were sacrificed. The authorities of the town will do well to ask "the reason why." In Newcastle and Tynemouth the epidemic was comparatively mild, and it was still milder in the rest of Northumberland, in Cumberland, and Westmorland. For reasons which should be carefully looked into, Wigton suffered severely.

In several sub-districts of MONMOUTHSHIRE and SOUTH WALES the epidemic was very fatal; and notably in the mining districts: Tredegar, Pontypool, Cardiff, Pontypridd, Aberdare, Neath, and Llanelly saw many of their children die of this scarlet plague.

Health of London and other large Cities in 1870.*

THE population of London is now overflowing its borders, and is thus thrown in increasing proportions on the outer ring of surrounding land.

Including the metropolis the 20 great cities of the Kingdom, with an estimated population of 7,090,847 souls, stand on 333½ square miles. In them, 182,819 persons died, and 259,910 children were born. The birth-rate was 36·7, the death-rate 25·8 per 1000 in the year.

Fifty more cities of England, having populations ranging between 25,000 and 150,000, but averaging 50,000, experienced the lower death-rate of 25 in 1000.

For the year, the mortality was low in Portsmouth and Sunderland; the ratio in these two towns having been respectively 22·1 and 20·9.

The mortality was highest in Bristol 28·4, Leeds 28·7, Glasgow 29·6, Manchester 29·8, and Liverpool 32·9.

The registered birth-rate was 36·7 in the 20 great cities; it was at the rate of 41·0 in Leeds, 41·1 in Glasgow, 41·6 in Sheffield, 33·4 in Norwich, and 32·6 in Nottingham.

The ruling epidemic was Scarlet Fever. London and Liverpool were great sufferers. Diarrhoea was fatal, and so was fever. Then to violence many deaths were referred; in Birmingham 402, Liverpool 700, London 2,576. Liverpool is the first, Birmingham second, London third, in the rank of danger from violent death, of one kind or another.

* Reprinted from the "Annual Summary" for 1870.

The seasons influence the mortality largely. The mortality was at the highest rate of 31 in 1,000 inhabitants of the great cities during the coldest week, when the temperature was $6^{\circ}3$ below the freezing point; it was lowest (21) in the genial weeks of June. The mortality in Liverpool rose to 45, 46, and 52 in the last weeks of the year; in Sunderland the mortality was extraordinarily low.

In the 17 large English cities 14 per cent. of the deaths occurred in public institutions, chiefly hospitals and workhouses. The proportions varied from 16 in London, 15 in Manchester, and 15 in Liverpool, to 4 in Wolverhampton and 3 in Bradford.

London.—The Metropolis is indeed the great mother city of the Empire, and deserves all the attention it obtains in the weekly tables. The following circumstances in its condition demand especial note. The mean rate of mortality for 31 years ending 1870 was $24\cdot3$, and the mortality in 1870 was a little below this; it was $24\cdot1$. The mortality is usually higher than the mean in the East and the Central Districts, lower than the mean in the West and North Districts; but the mortality of both West and North Districts rose above their average in the year 1870. The effects of the drainage of the low South Districts has reduced the annual rate of mortality in the three decennials, since 1840, in the following progression of improvement: $26\cdot6$, $24\cdot4$, $23\cdot2$.

According to Returns furnished by the Engineer to the Metropolitan Board of Works, the average daily quantity of sewage pumped into the River Thames at Crossness was 45,647,171 gallons (207,396 cubic metres,*) and at Barking 39,771,470 gallons, or 180,700 cubic metres, equivalent to about as many tons by weight. The amount of sewage pumped is not dependent upon the rainfall to the extent that might be expected; for instance, at Crossness the daily average during the first quarter of the year, when the rainfall was $4\cdot1$ inches, was 53,592,441 gallons (243,495 cubic metres), while in the last three months of the year, with a rainfall of $7\cdot6$ inches, the daily average was only 47,340,595 gallons, or 215,090 cubic metres. The amount of sewage pumped at Barking during the last half of the year showed a considerable increase upon the first six months, due probably to the progress towards completion made during the year in the low level sewer on the north side of the Thames.

The small-pox still ravages London; it destroyed 25,061 lives in the 31 years, 1840-70. The annual deaths averaged 808. The lowest number of deaths in any one year was 154 in 1857; the highest number was 2,012 in the year 1863. In 11 of the years the deaths exceeded 1,000, in 13 they were below 600; thus they fluctuated to the extent of one fourth every two or three years. The deaths rose above 1,200 six times, and fell below 400 eight times. Taking this standard the disease is on an average very fatal every five years. The disease can be followed week by week, quarter by quarter, and taking the quarter of highest small-pox death return as the keystone of the arch, we have 10 epidemics in 30 years, one every three years.

A new small-pox epidemic of unexampled severity began at the end of the year 1870.

The seasons do not affect the mortality of the epidemic to any great extent; thus the weekly mean number of deaths was 16; the weekly deaths in the winter quarter were 17, in the summer quarter 14. The mortality is highest in winter, lowest in summer; it is at the average in spring and autumn.

The mean temperature of the air at the Royal Observatory, Greenwich, during 1870 was $48\cdot7^{\circ}$, which was almost identical with the average of 100 years, but lower than in any of the 10 preceding years except $47\cdot0^{\circ}$ in 1860, and $48\cdot6^{\circ}$ in 1867. An excess of temperature prevailed in the

* A cubic metre is equal in volume to about 35 cubic feet, or to 220 imperial gallons.

spring and summer of 1870, while in the first and last quarters of the year the mean was below the average, especially in December. The mean degree of humidity of the year was 78, and three degrees below the average in 29 years, complete saturation being represented by 100. The rainfall of the year was $18\cdot5$ inches, and so much as seven inches below the average fall in 55 years. During the three months ending June only $1\cdot2$ inches were measured, or $4\cdot6$ below the average; there was a deficiency of an inch in the first quarter, and of nearly two inches in the third quarter, while in the last three months of the year the fall exceeded the average by less than half an inch. In 1864 the rainfall was less than 17 inches, while in 1860 it was 32 inches; in the other years of the decennial, 1860-9, the amount measured ranged from 20 inches in 1863 to 29 inches in 1865.

The series of Weekly Returns from both Paris and Berlin were broken by the war.

In Vienna 18,518 deaths were registered during the year. According to the Census of 1869 the civil population of that city was then 607,514, living in 10,184 houses, showing the high average proportion of $59\cdot7$ persons to a house. The annual rate of increase of population in the five years 1865-9 averaged $2\cdot21$ per cent. The death-rate during the year was $29\cdot8$ per 1000 of the total estimated population, against $28\cdot6$ in 1869. The deaths in 1870 included 530 from typhus, 233 from small-pox, 108 from scarlet fever, and 86 from measles; the death-rate from typhus and small-pox last year did not much exceed that in London, while the mortality from scarlet fever and measles was very considerably lower.

From the Report of Dr. T. G. Hewlett, Health Officer to Bombay, we learn that during the four quarters of 1870 14,888 deaths (exclusive of still-born) were registered in that city, giving a death-rate equal to $23\cdot0$ per 1,000 of the population since enumerated in 1872, which was 646,636 persons. Registration of births can scarcely be said to have been in force, as only 702 were registered during the last quarter of the year, whereas the vaccinations were 3,225, of which 2,211 were successful, 474 were doubtful, and 540 failed. The deaths from small-pox in the year were 556, of which 331 occurred in the second quarter. To different forms of fever, of which by far the most fatal was the "remittent," 4,745 deaths were referred during the year, or nearly 32 per cent. of the total deaths, and showing an annual death-rate of $5\cdot8$ per 1000. In the December quarter of 1870, of the 4,030 deceased persons, 2,817 bodies were buried, 998 were burned, and 215 were taken to the Towers of Silence.

Dr. Chas. P. Russel, Registrar of Records to the Health Department of the City of New York, kindly contributed a summary of the deaths registered in that city during the 52 weeks ending 31st December 1870, from which it appears that 27,175 deaths occurred in the enumerated population of 926,341 persons, showing an annual rate of mortality equal to $29\cdot3$ per 1000. During the year 3,956 deaths were referred to cholera and diarrhoea, 975 to scarlet fever, 518 to different forms of fever, 308 to diphtheria, 298 to measles, 293 to small-pox, and 201 to whooping cough; in all, 6,549 deaths resulted from these eight principal diseases of the zymotic class, equal to an annual rate of $7\cdot1$ per 1,000. The death-rate in London during the year from the same eight diseases was $5\cdot2$ per 1000. In the large Public Institutions of New York 5,002 deaths were recorded during 1870, or $18\cdot4$ per cent. of the total deaths; the proportion so returned in London during the same period was $15\cdot8$ per cent.

REMARKS ON the METEOROLOGY of 1870. By JAMES GLAISHER, Esq.,
F.R.S., &c.

In the year 1869 the several meteorological values differed but slightly from their averages, with the exception perhaps that the mean weekly horizontal movement of the air was nearly 300 miles above the average, and exceeded the values given for 1868 and 1867.

The principal meteorological features of 1870 were, the frequent alternations of warm and cold periods, together with bleak east and north-east winds, and very bad weather generally in the first three months; the extremely cold weather in November and December, especially about the 25th December; and the deficiency of rain during the spring and summer months.

The annual means of the various elements at the several stations between Guernsey and North Shields are shown, in Table 59, on pages lxxxii-lxxxiii.

These results naturally varied considerably at the several stations, but, so far as concerns the excess or deficiency above or below the average, the observations at the Royal Observatory, may be taken as generally applicable to the whole country.

Atmospheric Pressure.—The mean daily readings of the barometer during the first 15 days of January were below the average, but during this period an increase from 29.16 in. on the 1st, to 29.73 in. on the 4th, followed by a decrease to 28.91 in. on the 9th, occurred. Increasing values were then generally recorded till 30.45 in. was reached on the 18th, and from this day till the end of the month nearly, the mean daily values remained in excess of the average. During February, the readings were generally close to the average, sometimes in excess, sometimes in defect, but no movements worthy of note occurred. 30.22 in. was recorded on the 6th March, but a decrease set in shortly after, reaching its minimum 29.51 in. on the 12th; this again was followed by an increase to 30.29 in. on the 19th, and till the end of the month high values were experienced. During the next three months the readings were generally high, and with but few exceptions in excess of the average, the absolute ranges of reading in each month being small. In July and August also, the readings were remarkably steady and the ranges small, but during the early part of September several oscillations were registered, the absolute minimum for the month, 29.16 in., occurring on the 7th. From that day, increasing values were recorded, till on the 15th the readings passed above 30 in., and remained in excess of that value till the end of the month. A steady decrease to 28.78 in., from the 1st to the 9th October was followed by a rapid increase to 29.73 in. on the 11th. From the 12th to the 31st the values generally increased, but the daily means were, however, in defect of their averages throughout. The main features of the barometric variations in November were very similar to those in December, viz., the maximum readings occurring at the beginning and end of the month, and the minimum about the middle.

Temperature.—Mild weather prevailed from the 1st to the 17th January with frequent rain, and at times high winds, principally from the S.W. From the 18th to the 30th the direction of the wind was easterly and northerly, and the air was frequently very cold. The first few days of February were mild, but from the 9th February to the end of March, with the exception of a few warm waves, the weather was very cold. The bleak and cold weather at the end of March continued to the 5th day of April. From the 6th to the 26th the temperature of the air was high, on the 20th and 21st the excess above the average being as large as 16° and 13° respectively. On the 27th the weather became changeable, and continued so till the 12th May. From this date till the 22nd June a very

fine warm period prevailed, with abundance of sunshine and very little rain, followed again by cold and changeable weather till July 3rd. A fine bright period extending up to August 18th then occurred, but it became cold about the 20th, and the temperature was generally low till near the end of the quarter, though the sky was frequently nearly cloudless, particularly during the last ten days of September. During October and November there were constant alternations of temperature. From the 12th to the 20th December the weather was warm, but a very great change took place on the 21st, the mean temperature for that day being 27°.7, or 24°.8 lower for the whole day, than it was a few days previously.

On Christmas day it was colder still, the mean value being as low as 20°.6, the day throughout being painfully cold. From December 20th to the end of the year the country was covered with snow, and the wind was from the north or east, at times blowing strongly. The mean temperature of the year at the Royal Observatory, Greenwich, was 48°.7 and was 0°.7 below the average of 22 years. At the several stations at which observations were reported, the mean temperature of the year ranged from 50°.8 at Barnstaple to 45°.5 at Halifax. The coldest day of the year was December 25th, when the mean temperature was 20°.6, and the warmest day June 22d, when the mean was 72°.9.

Rain-fall.—In January the rain-fall was somewhat below the average, and in February to a greater degree, but in March there was a slight excess. The amounts measured in April, May, and June were 0.3 in., 0.5 in., and 0.4 in., respectively. In April and May there have been but three instances respectively back to 1815, when the falls of rain were less than the amounts given above, and in June but one instance back to the same year. In the three months ending June there is no instance on record of so small a fall of rain as in this year, the nearest approach being in 1844 and 1855, in both of which the fall was 2.6 in. In the three months ending September, the fall of rain was again small, on each occasion being slightly in defect of the average. In October the rain-fall showed a slight excess, in November a considerable deficiency, but in December the amount collected was large, due in a great measure to the snow that fell between the 20th and 31st.

The rain-fall of the year at the Royal Observatory amounted to 18.5 in., which was 5.5 in. below the average of 22 years, and less than any annual fall back to 1864, when 16.7 in. was recorded. At the several observation stations furnishing reports, the rain-fall of the year varied from 15.9 in. at Cardington and 17.2 in. at Royston, to 40.7 in., and 45.6 in. respectively at Halifax and Stonyhurst. Rain fell on 116 days of the year at Cardington, and on 211 days at Stonyhurst; at the Royal Observatory, rain was measured on 128 days.

PRELIMINARY TABLES.

NOTE.—Many of the Marriage, Birth, and Death rates given in the subsequent Tables for the eight years 1862–69 will be found to differ from those published in recent Reports. These differences have been caused by a necessary revision of the estimates of population for those years on the basis of the numbers enumerated at the Census in April 1871. The differences are considerable in some of the county rates, *see* especially Tables 12 and 16.

TABLE 1.—Estimated Population, with the Number of Marriages, Births, and Deaths registered in England in each of the Thirty-three Years 1838–70.

YEARS ended Dec. 31st	Estimated POPULATION in ENGLAND in the Middle of each Year.*	MARRIAGES.	PERSONS MARRIED.	BIRTHS (exclusive of Still-born).	DEATHS	EXCESS OF BIRTHS OVER DEATHS.
1838	15,287,699	118,067	236,134	463,787	342,760	121,027
1839	15,514,255	123,166	246,332	492,574	338,984	153,590
1840	15,730,813	122,665	245,330	502,303	359,687	142,616
1841	15,929,492	122,496	244,992	512,158	343,847	168,311
1842	16,130,326	118,825	237,650	517,739	349,519	168,220
1843	16,332,228	123,818	247,636	527,825	346,445	180,880
1844	16,535,174	132,249	264,498	540,763	356,933	183,830
1845	16,739,136	143,743	287,486	543,521	349,366	194,155
1846	16,944,092	145,664	291,323	572,625	390,315	182,310
1847	17,150,018	135,845	271,690	539,965	423,304	116,661
1848	17,356,882	138,230	276,460	563,059	399,833	163,226
1849	17,564,656	141,883	283,766	578,159	440,839	137,320
1850	17,773,324	152,744	305,488	593,422	368,995	224,427
1851	17,982,349	154,206	308,412	615,865	395,396	220,469
1852	18,193,206	158,782	317,564	624,012	407,135	216,877
1853	18,404,368	164,520	329,040	612,391	421,097	191,294
1854	18,616,310	159,727	319,454	634,405	437,905	196,500
1855	18,829,000	152,118	304,226	635,043	425,703	209,340
1856	19,042,412	159,337	318,674	657,453	390,566	266,947
1857	19,256,516	159,097	318,194	663,071	419,815	243,256
1858	19,471,291	156,070	312,140	655,481	449,656	205,825
1859	19,686,701	167,723	335,446	689,881	440,781	249,100
1860	19,902,713	170,156	340,312	684,048	422,721	261,327
1861	20,119,314	163,703	327,412	696,406	435,114	261,292
1862	20,352,140	164,030	328,060	712,684	436,566	276,118
1863	20,590,356	173,510	347,020	727,417	473,837	253,580
1864	20,834,496	180,387	360,774	740,275	495,531	244,744
1865	21,085,139	185,474	370,948	748,069	490,909	257,160
1866	21,342,864	187,776	375,552	753,870	500,689	253,181
1867	21,608,286	179,154	358,308	768,349	471,073	297,276
1868	21,882,059	176,962	353,924	786,858	480,622	306,236
1869	22,164,847	176,970	353,940	773,381	494,828	278,553
1870	22,457,366	181,655	363,310	792,787	515,329	277,458

* See Table 58, p. lxxx.

TABLE 2.—Proportion of Marriages, Births, and Deaths to the Population of England, in each of the Thirty-three Years 1838–70.

YEARS ended Dec. 31st	TO 1000 PERSONS LIVING.				THE NUMBER OF PERSONS LIVING			
	MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.	TO ONE MARRIAGE.	TO ONE PERSON MARRIED.	TO ONE BIRTH.	TO ONE DEATH.
1838	7.71	15.42	30.3	22.4	130	65	33	45
1839	7.94	15.88	31.8	21.9	126	63	31	46
1840	7.80	15.60	32.0	22.9	128	64	31	44
1841	7.69	15.38	32.2	21.6	130	65	31	46
1842	7.37	14.74	32.1	21.7	136	68	31	46
1843	7.59	15.18	32.3	21.2	132	66	31	47
1844	8.01	16.02	32.7	21.6	125	62	31	46
1845	8.60	17.20	32.5	20.9	116	58	31	48
1846	8.61	17.22	33.8	23.1	116	58	30	43
1847	7.93	15.86	31.5	24.7	126	63	32	40
1848	7.97	15.94	32.5	23.1	125	63	31	43
1849	8.08	16.16	32.9	25.1	124	62	30	40
1850	8.60	17.20	33.4	20.8	116	58	30	48
1851	8.58	17.16	34.3	22.0	117	58	29	45
1852	8.73	17.46	34.3	22.4	115	57	29	45
1853	8.94	17.88	33.3	22.9	112	56	30	44
1854	8.58	17.16	34.1	23.5	117	58	29	43
1855	8.08	16.16	33.7	22.6	124	62	30	44
1856	8.37	16.74	34.5	20.5	119	60	29	49
1857	8.26	16.52	34.4	21.8	121	61	29	46
1858	8.02	16.04	33.7	23.1	125	62	30	43
1859	8.52	17.04	35.0	22.4	117	59	29	45
1860	8.55	17.10	34.4	21.2	117	58	29	47
1861	8.14	16.27	34.6	21.6	123	61	29	46
1862	8.06	16.12	35.0	21.5	124	62	29	46
1863	8.43	16.85	35.3	23.0	119	59	28	43
1864	8.66	17.32	35.5	23.8	115	58	28	42
1865	8.80	17.59	35.5	23.3	114	57	28	43
1866	8.80	17.60	35.3	23.5	114	57	28	43
1867	8.29	16.58	35.6	21.8	121	60	28	47
1868	8.09	16.17	36.0	22.0	124	62	28	46
1869	7.93	15.97	34.9	22.3	125	63	29	45
1870	8.09	16.18	35.3	22.9	124	62	28	44
Mean . .	8.24	16.48	33.8	22.4	122	61	30	45

NOTE.—The Table may be read thus:—In the year 1838 to every 10,000 persons living there were 77 marriages or 154 persons married, 303 births, and 224 deaths; the number of persons living to every marriage, birth or death, was 130, 65, 33, and 45 respectively. The rates in this Table have been calculated upon the estimated populations given in Table 1, but no corrections have been made for the difference between an ordinary year of 365 days and leap year.

TABLE 3.—Marriages registered in England in each of the Thirty Years 1841-70.

YEARS ended 31st December	TOTAL MARRIAGES.*	ACCORDING TO THE RITES OF THE ESTABLISHED CHURCH.					NOT ACCORDING TO THE RITES OF THE ESTABLISHED CHURCH.					
		Special Licence.	Licence.	Banns.	Superintendent Registrar's Certificate.	Not stated.	TOTAL IN ESTABLISHED CHURCH.	TOTAL NOT IN ESTABLISHED CHURCH.	In Registered Places.	Other Christian Denominations.	Superintendent Registrar's Office.	Quakers.
1841	122,496	13	15,792	78,015	972	19,579	114,371	8,125	5882	2064	66	113
1842	118,825	9	14,935	75,744	944	18,415	110,047	8,778	6200	2357	58	163
1843	123,818	8	14,544	79,849	1222	18,014	113,637	10,181	7152	2817	61	151
1844	132,249	10	14,930	85,176	1558	18,335	120,009	12,240	2280	3446	55	175
1845	143,743	10	16,013	92,867	1706	18,919	129,515	14,228	2816	7181	3977	180
1846	145,664	14	17,135	92,995	1862	18,503	130,509	15,155	3027	7669	4167	224
1847	135,845	14	17,052	84,863	1968	16,979	120,876	14,969	2961	7483	4258	184
1848	138,230	18	16,896	86,519	2170	15,871	121,469	16,761	3658	8060	4790	186
1849	141,883	18	16,697	90,644	2593	13,230	123,182	18,701	4199	8662	5558	229
1850	152,744	8	17,413	98,669	3136	11,733	130,959	21,785	5623	9626	6207	260
1851	154,206	8	17,781	99,406	3351	10,412	130,958	23,248	6570	9540	6813	260
1852	158,782	8	19,461	106,497	3610	4,306	133,882	24,900	7479	10017	7100	247
1853	164,520	8	20,624	109,166	3814	4,430	138,042	26,478	8375	10149	7598	288
1854	159,727	15	21,048	105,050	3811	4,185	134,109	25,618	7813	9873	7593	287
1855	152,113	14	20,386	99,546	3804	4,001	127,751	24,362	7344	9296	7441	224
1856	159,337	9	21,336	104,280	4045	3,949	133,619	25,718	7527	9710	8097	312
1857	159,097	9	21,250	102,062	3748	3,962	131,031	28,066	7360	10686	9642	311
1858	156,070	15	19,858	100,432	3787	3,990	128,082	27,988	6643	11094	9952	220
1859	167,723	19	20,345	107,737	4204	3,905	136,210	31,513	7756	12519	10844	324
1860	170,156	14	20,742	108,685	4243	3,686	137,370	32,786	7900	13342	11257	312
1861	163,706	16	20,090	102,955	4048	3,588	130,697	33,009	7782	13182	11725	262
1862	164,030	18	19,486	102,870	3966	3,393	129,733	34,297	7345	13870	12723	300
1863	173,510	19	19,298	109,572	4312	3,542	136,743	36,767	8095	14714	13589	51
1864	180,387	12	19,874	118,564	4257	3,376	141,083	39,304	8659	15627	14611	349
1865	185,474	23	20,722	116,745	4170	3,444	145,104	40,370	8742	16429	14792	54
1866	187,776	17	20,297	118,274	4281	3,171	146,040	41,736	8911	17215	15246	63
1867	179,154	17	19,395	112,533	3981	3,004	138,930	40,224	7918	16865	15058	68
1868	176,962	23	18,186	110,824	4125	2,877	136,038	40,924	7517	17150	15878	73
1869	176,970	19	17,384	110,964	3993	2,722	135,082	41,888	7281	17526	16745	50
1870	181,655	14	17,005	115,689	4008	1,871	137,986	43,669	7391	18024	17848	48

YEARS ended 31st December	MARRIAGES CONTRACTED BETWEEN				RE-MARRIED.		UNDER AGE.		SIGNED THE MARRIAGE REGISTER WITH MARKS.			
	Bachelors and Spinners.	Bachelors and Widows.	Widowers and Spinners.	Widowers and Widows.	Widowers.	Widows.	Men.	Women.	Men.	Women.	Marriages in which both Signed with Marks.	Marriages in which one Signed with Marks.
1841	—	—	—	—	—	—	5362	16,285	39,954	59,680	—	—
1842	—	—	—	—	15,619	10,579	5387	16,003	38,031	56,965	—	—
1843	—	—	—	—	16,305	10,811	5511	16,403	40,520	60,715	—	—
1844	—	—	—	—	16,941	11,183	5515	17,410	42,912	65,073	—	—
1845	119,539	6023	11,835	6341	18,176	12,369	6287	19,376	47,665	71,229	—	—
1846	121,324	5907	12,212	6131	18,343	12,128	6313	20,001	47,488	70,145	—	—
1847	112,576	6705	11,667	5897	17,564	11,602	5556	18,118	42,429	61,877	32,622	39,062
1848	113,284	5920	12,702	6324	19,026	12,244	6092	19,436	43,166	62,771	32,974	39,989
1849	116,134	6102	13,155	6492	19,647	12,594	6650	21,105	44,027	65,135	—	—
1850	124,081	6575	14,558	7580	22,138	14,155	7453	23,109	47,572	70,606	—	—
1851	126,018	6625	14,313	7250	21,563	13,875	7737	24,286	47,439	69,812	36,186	44,879
1852	130,672	6696	14,044	7370	21,414	14,066	8551	26,978	48,421	70,772	36,636	45,921
1853	135,023	7139	14,739	7619	22,358	14,758	9131	29,219	49,983	72,204	37,345	47,497
1854	131,141	6826	14,189	7571	21,760	14,397	9210	28,797	47,843	68,175	35,255	45,508
1855	123,398	6775	14,280	7660	21,940	14,435	8386	27,207	44,846	62,672	32,139	43,240
1856	129,960	7163	14,462	7752	22,214	14,915	9120	29,218	45,900	64,133	32,238	45,557
1857	130,317	6903	14,293	7579	21,372	14,487	8885	28,798	44,013	61,765	30,518	44,742
1858	127,168	6711	14,547	7644	22,191	14,355	9145	28,664	42,141	58,733	28,781	43,312
1859	137,009	7059	15,494	8161	23,654	15,219	10397	32,041	44,807	63,127	30,574	46,786
1860	139,440	7098	15,358	8260	23,618	15,358	10797	32,927	43,401	61,677	28,904	47,770
1861	133,712	7034	15,067	7893	22,960	14,927	10415	31,927	40,204	56,770	26,333	44,203
1862	134,727	6846	14,566	7891	22,457	14,737	10615	32,464	38,801	54,405	25,075	43,056
1863	142,934	7082	15,269	8225	23,494	15,307	11475	34,527	41,262	57,416	26,626	45,426
1864	147,914	7511	16,117	8845	24,962	16,356	11934	36,235	41,998	58,402	26,582	47,236
1865	151,742	7887	16,590	9255	25,845	17,142	12410	37,260	41,664	57,828	26,216	47,060
1866	153,658	7990	16,467	9661	26,128	17,651	12569	37,610	40,609	56,395	25,169	46,666
1867	145,570	7917	16,304	9863	25,667	17,280	12299	36,144	37,879	51,606	22,664	44,157
1868	144,578	7521	15,762	9101	24,863	16,622	12658	37,245	35,628	49,244	21,009	42,854
1869	144,516	7724	15,722	9008	24,730	16,732	12775	37,813	35,199	48,758	20,748	42,461
1870	148,848	8134	15,366	9307	24,673	17,441	13598	38,205	35,999	49,532	21,021	43,489

* In cases of mixed marriages between Protestants and Roman Catholics some couples are married twice, and are counted twice in the Registers.

TABLE 4.—Proportional Number of Persons Married in the several Counties of England during the Year 1870; of Persons who signed the Register with Marks; of Persons not of full Age; and of Re-marriages.

REGISTRATION COUNTIES.	PERSONS MARRIED TO 1,000 PERSONS LIVING.	SIGNED THE MARRIAGE REGISTER WITH MARKS.		PERSONS NOT OF FULL AGE.		RE-MARRIAGES.	
		Of 100 Men Married.	Of 100 Women Married.	In 100 Men Married.	In 100 Women Married.	WIDOWERS.	WIDOWS.
ENGLAND	16.2	19.8	27.3	7.5	21.6	13.6	9.6
I.—LONDON	18.9	8.8	14.5	3.9	15.0	13.5	9.7
II.—SOUTH EASTERN COUNTIES.							
1 Surrey (extra-metropolitan)	12.3	13.7	10.4	3.2	16.5	11.0	8.6
2 Kent (extra-metropolitan)	13.7	16.9	16.3	5.2	23.3	11.6	9.4
3 Sussex	13.7	16.8	13.0	5.8	21.2	12.4	7.7
4 Hampshire	14.7	16.3	14.6	4.1	20.2	12.0	9.8
5 Berkshire	13.7	21.2	15.1	6.2	17.9	13.0	9.9
III.—SOUTH MIDLAND COUNTIES.							
6 Middlesex (extra-metropolitan)	9.7	16.3	11.5	4.2	15.3	11.9	7.6
7 Hertfordshire	11.0	29.6	24.2	9.4	21.0	10.1	6.7
8 Buckinghamshire	12.7	25.2	24.3	12.5	26.2	11.3	6.4
9 Oxfordshire	13.1	19.6	15.0	5.8	19.1	14.5	9.6
10 Northamptonshire	14.0	20.0	22.0	12.6	26.4	12.4	6.9
11 Huntingdonshire	12.7	28.3	23.1	10.9	27.2	10.3	4.9
12 Bedfordshire	13.3	32.5	35.6	18.1	26.0	13.7	6.7
13 Cambridgeshire	14.3	28.4	25.0	10.3	22.6	12.9	9.3
IV.—EASTERN COUNTIES.							
14 Essex	12.1	24.6	18.3	7.3	24.0	13.3	9.7
15 Suffolk	13.4	31.0	22.2	9.0	21.7	15.5	9.1
16 Norfolk	14.2	29.5	23.6	8.6	21.3	15.9	8.9
V.—SOUTH WESTERN COUNTIES.							
17 Wiltshire	13.1	21.3	19.3	8.8	19.4	14.1	8.5
18 Dorsetshire	13.5	21.2	18.6	7.5	16.5	12.9	6.7
19 Devonshire	15.6	17.0	19.4	5.3	15.6	12.9	9.8
20 Cornwall	13.0	23.9	29.3	7.6	19.5	11.8	7.1
21 Somersetshire	13.4	22.3	21.3	7.8	17.7	14.1	8.9
VI.—WEST MIDLAND COUNTIES.							
22 Gloucestershire	17.5	17.8	19.2	8.4	18.2	13.8	9.0
23 Herefordshire	12.9	26.4	22.6	3.3	13.5	13.9	9.9
24 Shropshire	13.7	25.5	26.8	4.5	15.2	12.2	8.6
25 Staffordshire	17.3	36.0	44.1	12.1	31.5	12.5	10.7
26 Worcestershire	15.5	25.5	28.0	6.9	22.1	12.2	8.7
27 Warwickshire	16.1	22.5	28.8	8.9	24.8	13.7	9.5
VII.—NORTH MIDLAND COUNTIES.							
28 Leicestershire	16.1	21.0	27.1	13.5	27.1	13.2	7.6
29 Rutlandshire	11.8	14.5	10.9	7	8.7	12.3	5.8
30 Lincolnshire	14.3	17.7	17.2	4.4	17.9	14.1	8.4
31 Nottinghamshire	17.4	22.2	31.0	12.3	26.3	14.3	9.6
32 Derbyshire	15.6	20.5	26.0	9.1	24.9	15.6	9.7
VIII.—NORTH WESTERN COUNTIES.							
33 Cheshire	15.5	19.3	30.0	7.5	19.9	14.7	9.4
34 Lancashire	18.5	20.5	39.4	9.4	23.5	15.0	10.8
IX.—YORKSHIRE.							
35 West Riding	17.6	19.7	36.3	10.0	27.6	14.9	10.3
36 East Riding (with York)	18.0	14.2	22.2	6.8	23.2	15.5	11.9
37 North Riding	15.0						

TABLE 5.—Marriages in England. The Proportion per Cent. of **Minors** of each Sex, and Males and Females who signed the Register with Marks, and of Persons who were **Widowers** or **Widows**, in each of the Thirty Years 1841-70.

YEARS ended 31st December	TO 100 MARRIAGES.								
	THE PROPORTION UNDER 21 YEARS OF AGE.			THE PROPORTION WHO SIGNED THE MARRIAGE REGISTER WITH MARKS.			THE PROPORTION OF		
	Males.	Females.	Mean.	Males.	Females.	Mean.	Widowers.	Widows.	Mean.
1841	4.38	13.29	8.84	32.7	48.8	40.8	12.90	8.99	10.95
1842	4.53	13.47	9.00	32.0	47.9	40.0	13.14	8.90	11.02
1843	4.45	13.25	8.85	32.7	49.0	40.9	13.17	8.73	10.95
1844	4.17	13.16	8.67	32.4	49.2	40.8	12.81	8.46	10.64
1845	4.37	13.48	8.93	33.2	49.6	41.4	12.64	8.60	10.62
1846	4.33	13.73	9.03	32.6	48.2	40.4	12.59	8.33	10.46
1847	4.09	13.34	8.72	31.2	45.5	38.4	12.93	8.54	10.74
1848	4.41	14.06	9.24	31.2	45.4	38.3	13.76	8.86	11.31
1849	4.69	14.88	9.79	31.0	45.9	38.5	13.85	8.88	11.37
1850	4.88	15.13	10.01	31.1	46.2	38.7	14.49	9.27	11.88
1851	5.02	15.75	10.39	30.8	45.3	38.1	13.98	9.00	11.49
1852	5.39	16.99	11.19	30.5	44.6	37.6	13.49	8.86	11.18
1853	5.55	17.76	11.66	30.4	43.9	37.2	13.59	8.97	11.23
1854	5.77	18.03	11.90	30.0	42.7	36.4	13.62	9.01	11.32
1855	5.61	17.89	11.70	29.5	41.2	35.4	14.42	9.40	11.96
1856	5.72	18.34	12.03	28.8	40.2	34.5	13.94	9.36	11.65
1857	5.58	18.10	11.84	27.7	38.8	33.3	13.75	9.11	11.43
1858	5.86	18.37	12.12	27.0	37.6	32.3	14.22	9.20	11.71
1859	6.20	19.10	12.65	26.7	37.6	32.2	14.10	9.07	11.59
1860	6.35	19.35	12.85	25.5	36.2	30.9	13.88	9.03	11.46
1861	6.36	19.50	12.93	24.6	34.7	29.7	14.03	9.12	11.5
1862	6.47	19.79	13.13	23.7	33.2	28.5	13.69	8.98	11.34
1863	6.61	19.90	13.26	23.8	33.1	28.5	13.54	8.82	11.18
1864	6.62	20.09	13.36	23.3	32.4	27.9	13.84	9.07	11.48
1865	6.69	20.08	13.39	22.5	31.2	26.9	13.98	9.24	11.59
1866	6.69	20.03	13.36	21.6	30.0	25.8	13.91	9.40	11.66
1867	6.87	20.17	13.52	21.1	28.8	25.0	14.33	9.65	11.99
1868	7.15	21.05	14.10	20.1	27.8	24.0	14.05	9.39	11.72
1869	7.22	21.37	14.30	19.9	27.6	23.8	13.97	9.45	11.71
1870	7.49	21.58	14.54	19.8	27.8	23.6	13.58	9.60	11.59

* The proportion of Widowers and Widows in the Year 1841 is for the September and December quarters only.

TABLE 6.—Number, and Annual Rate per 1000 living, of Marriages in England in each Quarter of the Thirty-three Years 1838-70.

YEARS.	MARRIAGES REGISTERED.				ANNUAL MARRIAGE RATE.*			
	In the Quarters ending the last day of				In the Quarters ending the last day of			
	March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.
1838	23,201	29,801	27,764	37,301	6.18	7.83	7.19	9.63
1839	24,679	31,339	29,887	37,261	6.49	8.12	7.64	9.49
1840	26,395	30,786	29,221	36,263	6.77	7.87	7.37	9.11
1841	24,447	32,551	29,397	36,101	6.26	8.22	7.31	8.95
1842	25,860	30,048	27,288	35,629	6.54	7.49	6.71	8.74
1843	25,285	31,113	28,847	38,373	6.32	7.67	7.01	9.34
1844	26,337	34,268	31,675	39,919	6.44	8.34	7.60	9.55
1845	29,551	35,003	35,003	43,889	7.21	8.49	8.30	10.38
1846	31,417	37,111	35,070	42,036	7.57	8.82	8.22	9.83
1847	27,480	35,197	32,439	40,729	6.55	8.26	7.51	9.40
1848	28,398	34,721	32,995	42,116	6.61	8.05	7.55	9.61
1849	28,429	35,844	33,874	43,736	6.61	8.22	7.68	9.86
1850	30,567	37,636	37,636	45,337	7.02	8.88	8.40	10.10
1851	32,724	38,635	37,316	45,531	7.41	8.63	8.22	10.00
1852	32,977	40,092	38,400	47,313	7.30	8.85	8.38	10.27
1853	35,149	40,446	39,899	49,026	7.78	8.83	8.59	10.52
1854	33,234	40,518	38,182	47,793	7.27	8.74	8.13	10.14
1855	29,186	38,549	37,308	47,070	6.31	8.22	7.85	9.88
1856	33,427	38,820	39,089	48,001	7.07	8.19	8.13	9.96
1857	33,321	41,267	38,669	45,840	7.05	8.61	7.96	9.40
1858	29,918	39,890	38,599	47,663	6.26	8.23	7.85	9.67
1859	35,382	42,042	39,803	50,496	7.32	8.58	8.01	10.13
1860	35,150	43,777	40,541	50,688	7.11	8.83	8.07	10.06
1861	33,274	42,012	39,884	48,536	6.73	8.39	7.85	9.53
1862	33,953	40,853	40,600	48,624	6.77	8.05	7.91	9.48
1863	35,528	44,146	41,932	51,904	7.00	8.60	8.08	10.00
1864	37,988	44,599	44,675	53,125	7.31	8.59	8.51	10.12
1865	36,807	45,827	45,827	56,988	7.08	8.72	8.63	10.72
1866	37,579	48,577	46,257	55,363	7.14	9.13	8.60	10.29
1867	36,441	45,589	44,086	53,038	6.83	8.46	8.09	9.74
1868	36,664	45,364	43,509	51,393	6.73	8.32	7.89	9.32
1869	37,752	43,202	43,978	52,038	6.91	7.82	7.87	9.31
1870	36,455	46,720	43,900	54,580	6.58	8.34	7.76	9.62
Mean Annual Rate per 1000 in each quarter					6.86	8.38	7.90	9.76

Note.—The three months January, February, and March contain 90 days, and in leap year 91 days; the three months April, May, and June 91 days; and each of the two last quarters of the year 92 days. For this inequality a correction has been made in the above calculations.

* These rates may thus be read without reference to the decimal points:—In the March quarter of 1838, to 100,000 persons living, there were 618 marriages registered.

TABLE 7.—Number of Buildings registered for the Solemnization of Marriages, and on the Register on 31st December 1870.

ENGLAND : DIVISIONS AND REGISTRATION COUNTIES.	TOTAL.	PRESBY- TERIANS.						WESLEYAN METHODISTS.						CALVINISTIC METHODISTS.		New Jerusalem Church, Catholic and Apostolic Church.	All others.				
		Church of Scotland.	United Presbyterians.	Presbyterian Church in England.	Independents.	Baptists.	United Brethren or Mo- navians.	Roman Catholics.	Unitarians.	Original Connexion.	New Connexion.	Primitive Methodists.	Bible Christians.	West. Meth. Asso. and West. Reformers, generally forming the United Meth. Free Ch. Other Wesleyan Me- thodists.	Calvinistic Methodists.			Countess of Hunting- don's Connexion.			
ENGLAND	6425	20	77	92	1827	1289	20	679	167	992	96	317	54	210	22	304	35	30	19	175	
I.—LONDON.																					
Middlesex (part of)	303	5	5	11	89	52	1	45	6	35	1	4	-	7	-	5	1	3	6	27	
Surrey (part of)	90	1	1	1	31	27	-	7	2	8	1	1	-	2	-	-	-	-	-	3	
Kent (part of)	33	-	-	2	11	10	-	4	-	5	-	-	-	-	-	-	-	-	-	1	
II.—SOUTH EASTERN COUNTIES.																					
Surrey (extra-metropolitan)	68	-	-	-	32	13	-	10	1	6	-	1	-	1	-	-	-	1	-	3	
Kent (extra-metropolitan)	151	1	-	-	46	39	-	17	4	23	-	4	1	2	-	-	-	4	1	3	
Sussex	106	-	-	1	37	27	-	11	4	12	-	-	2	-	-	3	-	-	-	5	
Hampshire	135	-	1	3	46	30	-	12	4	19	-	6	7	1	-	-	-	1	1	4	
Berkshire	55	-	-	-	14	13	-	7	1	10	-	6	-	1	-	-	-	1	-	2	
III.—SOUTH MIDLAND COUNTIES.																					
Middlesex (extra-metropol.)	54	-	-	-	19	12	-	11	1	5	-	-	-	-	-	-	-	-	1	5	
Hertfordshire	58	-	-	-	27	18	-	3	1	6	-	-	-	-	-	-	-	2	-	1	
Buckinghamshire	56	-	-	-	20	26	-	2	-	5	-	2	-	1	-	-	-	-	-	1	
Oxfordshire	48	-	-	-	14	10	-	9	1	7	-	2	-	3	-	-	-	1	-	1	
Northamptonshire	86	-	-	-	30	34	1	4	1	12	-	1	-	2	-	-	-	-	-	1	
Huntingdonshire	27	-	-	-	4	15	1	-	-	4	-	-	-	-	-	-	-	-	-	1	
Bedfordshire	62	-	-	-	13	26	2	1	-	16	-	3	-	-	-	-	-	-	-	2	
Cambridgeshire	75	-	-	-	24	32	-	3	1	9	-	4	-	1	-	-	-	1	-	1	
IV.—EASTERN COUNTIES.																					
Essex	129	-	-	-	69	23	-	10	-	15	-	2	-	-	-	-	-	2	-	3	
Suffolk	108	-	-	-	43	36	-	6	3	10	-	6	-	1	1	-	-	-	-	6	
Norfolk	123	-	-	1	25	37	-	7	4	17	1	16	-	8	-	-	-	1	-	2	
V.—SOUTH WESTERN COUNTIES.																					
Wiltshire	109	-	-	-	39	40	2	4	1	9	-	8	-	1	-	-	-	-	-	3	
Dorsetshire	64	-	-	-	26	6	-	9	4	14	-	5	-	-	-	-	-	-	-	1	
Devonshire	212	-	-	3	65	43	1	8	11	38	-	1	19	7	-	-	-	-	-	14	
Cornwall	98	-	-	-	10	8	-	5	-	40	2	4	15	13	-	-	-	1	-	1	
Somersetshire	175	-	-	-	57	35	2	10	7	35	-	5	5	7	-	-	-	1	1	9	
VI.—WEST MIDLAND COUNTIES.																					
Gloucestershire	171	-	1	1	57	48	2	9	3	24	1	5	2	6	-	3	4	-	-	5	
Herefordshire	38	-	-	-	7	9	1	2	-	5	-	10	-	-	-	-	-	-	-	2	
Shropshire	87	-	-	-	32	11	-	11	1	9	2	12	-	1	1	5	-	-	-	1	
Staffordshire	172	-	-	2	36	18	-	37	4	46	9	16	-	2	-	-	-	1	-	1	
Worcestershire	74	-	-	1	11	18	-	12	6	14	3	1	-	1	-	-	-	4	-	3	
Warwickshire	130	1	-	1	36	27	-	24	5	18	2	2	-	2	-	-	-	2	1	7	
VII.—NORTH MIDLAND COUNTIES.																					
Leicestershire	81	-	-	-	21	30	-	7	3	13	2	2	-	1	-	-	-	-	-	2	
Rutlandshire	9	-	-	-	3	4	-	-	-	1	-	-	-	-	-	-	-	-	-	1	
Lincolnshire	136	-	-	-	21	33	-	7	3	34	3	28	-	6	2	-	-	-	-	1	
Nottinghamshire	63	-	-	-	17	15	-	6	3	11	3	3	-	2	-	-	-	-	-	1	
Derbyshire	108	-	-	-	28	13	-	11	3	24	1	10	-	15	-	-	-	1	2	1	
VIII.—NORTH WESTERN CO.																					

TABLE 8.—Marriages of Divorced Men and Women in each of the Ten Years 1861-70, and the Districts in which they were celebrated in 1870.

Table with columns for Marriages of Divorced Men and Women in ENGLAND in the Years, MARRIAGES BETWEEN, No. of District, and MARRIAGES of Divorced MEN and WOMEN in DISTRICTS in 1870. Includes sub-sections for 'TOTAL in the 10 Years 1861-70' and 'In DIVISIONS and DISTRICTS in 1870'.

TABLE 9.—Legitimate and Illegitimate Births in each of the Twenty-six Years 1845-70 in England, and the Proportion of Males to Females born in each of the Twenty Years 1851-70.

Table with columns for YEARS, BIRTHS REGISTERED (TOTAL, LEGITIMATE, ILLEGITIMATE), Males born to every 100 Females born, Males born in Wedlock to every 100 Females so born, Males born out of Wedlock to every 100 Females so born, and Children born out of Wedlock to every 100 Births.

TABLE 10.—Number and Proportion of Male and Female Children born in and out of Wedlock in the several Counties of England during the Year 1870.

Table with columns for REGISTRATION COUNTIES, MALE CHILDREN BORN, FEMALE CHILDREN BORN, BORN IN WEDLOCK (Males, Females), BORN OUT OF WEDLOCK (Males, Females), and various ratios (MALES born to every 100 FEMALES born, etc.). Includes sections for ENGLAND, LONDON, SOUTH EASTERN COUNTIES, SOUTH MIDLAND COUNTIES, EASTERN COUNTIES, SOUTH WESTERN COUNTIES, WEST MIDLAND COUNTIES, NORTH MIDLAND COUNTIES, NORTH WESTERN COUNTIES, YORKSHIRE, NORTHERN COUNTIES, and MONMOUTHSHIRE AND WALES.

TABLE 11.—Proportion of Male and Female Children born in the several Counties of England in each of the Eleven Years 1860-70.

Table with columns for REGISTRATION COUNTIES, 1860-1870, and Mean proportion in the 10 Years 1860-69. Rows include ENGLAND, I.—LONDON, II.—SOUTH EASTERN COUNTIES (Surrey, Kent, Sussex, Hampshire, Berkshire), III.—SOUTH MIDLAND COUNTIES (Middlesex, Hertfordshire, Buckinghamshire, Oxfordshire, Northamptonshire, Huntingdonshire, Bedfordshire, Cambridgeshire), IV.—EASTERN COUNTIES (Essex, Suffolk, Norfolk), V.—SOUTH WESTERN COUNTIES (Wiltshire, Dorsetshire, Devonshire, Cornwall, Somersetshire), VI.—WEST MIDLAND COUNTIES (Gloucestershire, Herefordshire, Shropshire, Staffordshire, Worcestershire, Warwickshire), VII.—NORTH MIDLAND COUNTIES (Leicestershire, Rutlandshire, Lincolnshire, Nottinghamshire, Derbyshire), VIII.—NORTH WESTERN COUNTIES (Cheshire, Lancashire), IX.—YORKSHIRE (West Riding, East Riding, North Riding), X.—NORTHERN COUNTIES (Durham, Northumberland, Cumberland, Westmorland), XI.—MONMOUTHSHIRE AND WALES (Monmouthshire, South Wales, North Wales).

TABLE 12.—Births to 1000 Persons living in the several Counties of England during each of the Eleven Years 1860-70.

Table with columns for REGISTRATION COUNTIES, 1860-1870, and Mean of 10 Years 1860-9. Rows include ENGLAND, I.—LONDON, II.—SOUTH EASTERN COUNTIES (Surrey, Kent, Sussex, Hampshire, Berkshire), III.—SOUTH MIDLAND COUNTIES (Middlesex, Hertfordshire, Buckinghamshire, Oxfordshire, Northamptonshire, Huntingdonshire, Bedfordshire, Cambridgeshire), IV.—EASTERN COUNTIES (Essex, Suffolk, Norfolk), V.—SOUTH WESTERN COUNTIES (Wiltshire, Dorsetshire, Devonshire, Cornwall, Somersetshire), VI.—WEST MIDLAND COUNTIES (Gloucestershire, Herefordshire, Shropshire, Staffordshire, Worcestershire, Warwickshire), VII.—NORTH MIDLAND COUNTIES (Leicestershire, Rutlandshire, Lincolnshire, Nottinghamshire, Derbyshire), VIII.—NORTH WESTERN COUNTIES (Cheshire, Lancashire), IX.—YORKSHIRE (West Riding, East Riding, North Riding), X.—NORTHERN COUNTIES (Durham, Northumberland, Cumberland, Westmorland), XI.—MONMOUTHSHIRE AND WALES (Monmouthshire, South Wales, North Wales).

TABLE 13.—Number, and Annual Rate per 1000 Persons living, of Births in England during each Quarter of the Thirty-three Years 1838-70.

YEARS.	BIRTHS.				ANNUAL BIRTH RATE.*			
	In the Quarters ending the last day of				In the Quarters ending the last day of			
	March.	June.	September.	December.	March.	June.	Sept.	Dec.
1838	113,815	121,781	114,734	113,457	30.3	32.0	29.7	29.3
1839	123,543	128,806	120,115	120,110	32.5	33.4	30.7	30.6
1840	132,305	129,059	119,822	121,117	34.0	33.0	30.2	30.4
1841	133,720	129,884	123,868	124,686	34.2	32.8	30.8	30.9
1842	135,615	134,096	123,296	124,732	34.3	33.4	30.3	30.6
1843	136,837	131,279	128,161	131,048	34.2	32.3	31.1	31.7
1844	143,578	136,941	130,078	130,166	35.1	33.3	31.2	31.2
1845	143,080	136,853	132,369	131,219	34.9	32.9	31.4	31.0
1846	145,108	149,450	138,718	139,349	35.0	35.5	32.5	32.6
1847	146,453	139,072	127,173	127,267	34.9	32.7	29.5	29.4
1848	139,736	149,760	140,359	133,204	32.5	34.7	32.1	30.4
1849	153,772	153,693	135,223	135,471	35.8	35.2	30.6	30.5
1850	144,551	155,865	146,911	146,095	33.2	35.3	32.8	32.5
1851	157,286	159,073	150,594	148,912	35.6	35.5	33.2	32.7
1852	161,803	159,031	151,222	151,956	35.8	35.1	32.9	33.0
1853	161,729	158,697	147,602	144,363	35.8	34.6	31.8	31.0
1854	160,785	172,457	154,724	146,439	35.2	37.2	32.9	31.1
1855	166,225	165,277	154,700	148,841	36.0	35.3	32.6	31.2
1856	169,250	173,263	157,462	157,478	35.8	36.6	32.8	32.7
1857	170,420	170,444	161,181	161,016	36.0	35.6	33.2	33.0
1858	170,959	169,115	157,445	157,962	35.8	34.9	32.0	32.1
1859	175,532	175,864	168,394	170,091	36.3	35.9	33.9	34.1
1860	183,180	174,028	164,121	162,719	37.1	35.1	32.7	32.3
1861	172,933	184,820	172,033	166,620	35.0	36.9	33.9	32.7
1862	181,990	185,554	172,709	172,431	36.3	36.6	33.7	33.6
1863	186,341	189,340	173,439	178,297	36.7	36.9	33.4	34.4
1864	192,947	188,835	181,015	177,478	37.1	36.4	34.5	33.8
1865	194,130	192,988	181,941	179,010	37.3	36.7	34.2	33.7
1866	196,753	192,437	179,086	185,594	37.4	36.2	33.3	34.5
1867	194,763	199,660	190,782	183,144	36.6	37.1	35.0	33.6
1868	198,584	202,839	192,583	192,852	36.4	37.2	34.9	35.0
1869	203,775	188,618	190,394	190,594	37.3	34.1	34.1	34.1
1870	206,366	203,615	192,521	190,285	37.3	36.4	34.0	33.6
Mean Annual Rate per 1,000 in each Quarter	-	-	-	-	35.4	35.1	32.5	32.2

* These rates may thus be read without reference to the decimal points:—In the March quarter of 1838, to 10,000 persons living there were 303 births registered. In the calculation of these rates a correction has been made for the varying number of days in the different quarters, see note to Table 6.

TABLE 14.—Proportional Number of Births in each Quarter to 1000 Births in the Average Quarter* of each of the Thirty-three Years 1838-70.

YEARS.	NUMBER OF BIRTHS IN THE AVERAGE QUARTER.	PROPORTIONAL NUMBER OF BIRTHS.				
		In the AVERAGE QUARTER (assumed to be 1000).	FIRST QUARTER ending March 31.	SECOND QUARTER ending June 30.	THIRD QUARTER ending Sept. 30.	FOURTH QUARTER ending Dec. 31.
1838	115,947	1000	995	1053	981	971
1839	123,144	1000	1017	1049	967	967
1840	125,576	1000	1059	1033	949	959
1841	128,040	1000	1059	1017	959	965
1842	129,435	1000	1062	1039	944	955
1843	131,831	1000	1052	999	964	985
1844	135,191	1000	1068	1018	957	957
1845	135,880	1000	1068	1009	966	957
1846	143,156	1000	1027	1047	961	965
1847	134,991	1000	1099	1032	934	935
1848	140,765	1000	998	1070	991	941
1849	144,540	1000	1078	1066	927	929
1850	148,356	1000	974	1051	990	985
1851	153,966	1000	1022	1033	978	967
1852	156,003	1000	1038	1019	969	974
1853	153,098	1000	1056	1037	964	943
1854	158,601	1000	1026	1090	968	916
1855	158,761	1000	1060	1044	966	930
1856	164,363	1000	1035	1060	952	953
1857	165,790	1000	1042	1031	964	963
1858	163,870	1000	1057	1034	953	956
1859	172,470	1000	1032	1022	968	978
1860	171,012	1000	1077	1023	954	946
1861	174,102	1000	1007	1064	980	949
1862	178,171	1000	1035	1044	961	960
1863	181,855	1000	1039	1043	946	972
1864	185,069	1000	1047	1026	973	954
1865	187,017	1000	1051	1035	965	949
1866	188,468	1000	1053	1023	942	977
1867	192,087	1000	1023	1041	985	946
1868	196,714	1000	1015	1036	974	975
1869	193,345	1000	1067	978	977	978
1870	193,197	1000	1055	1030	963	952

* A correction has been made in the calculations for the inequality in the number of days in the different quarters, see note to Table 6.

TABLE 17.—ENGLAND.—Deaths REGISTERED at different Ages in each of the Thirty-three Years 1838-70.—Males.

Table with columns: YEARS, ALL AGES, Under 1 Year, 1, 2, 3, 4, Under 5 Years, 5-10-, 15-, 20-, 25-, 35-, 45-, 55-, 65-, 75-, 85-, % and upwards, ?

TABLE 18.—ENGLAND.—Deaths REGISTERED at different Ages in each of the Thirty-three Years 1838-70.—Females.

Table with columns: YEARS, ALL AGES, Under 1 Year, 1, 2, 3, 4, Under 5 Years, 5-10-, 15-, 20-, 25-, 35-, 45-, 55-, 65-, 75-, 85-, % and upwards, ?

TABLE 19.—ENGLAND.—Mortality per 1000 at different Ages in Thirty Years 1838-67.*—Males.

YEARS.	AGES.—MALES.												
	ALL AGES.	0-	5-	10-	15-	25-	35-	45-	55-	65-	75-	85-	95 and upwds.
MEAN OF 30 YEARS.													
1838-67	23.3	72.4	8.8	5.0	7.9	9.9	13.0	18.2	31.5	68.5	147.7	309.2	446.9
MEANS OF 10 YEARS.													
1841-50	23.1	71.5	9.2	5.1	8.2	9.9	12.8	18.4	31.9	67.1	148.3	306.1	440.5
1851-60	23.1	73.0	8.6	4.9	7.7	9.5	12.6	17.9	30.7	66.5	146.8	303.1	437.1
MEANS OF 5 YEARS.													
(3 Years.)													
1838-40	23.3	72.3	9.6	5.2	8.4	10.2	13.0	18.5	32.5	67.6	144.1	293.8	433.8
(5 Years.)													
1841-45	22.2	69.0	8.9	4.9	7.8	9.4	12.1	17.4	30.4	65.3	143.8	299.1	431.8
1846-50	24.1	74.1	9.6	5.4	8.6	10.5	13.4	19.4	33.4	68.9	152.9	313.2	449.3
1851-55	23.6	74.2	8.8	5.2	8.1	9.9	12.9	18.6	31.5	66.8	150.8	305.0	449.6
1856-60	22.7	71.9	8.3	4.6	7.4	9.2	12.4	17.1	30.0	66.2	142.7	301.2	424.6
1861-65	23.9	73.7	8.6	4.7	7.5	10.0	13.7	17.9	31.6	72.0	147.4	321.0	464.0

Note.—The Table may thus be read:—Of each 1000 children living under five years of age, 72.4 died in the 30 years 1838-67; in the five years 1841-45 this proportion averaged 69.0 per 1000; and in the five years 1861-65 it was 73.7.

* The population used in these calculations is deduced from the ascertained rate of increase observed in the 20 years 1841-61. As the ages of the population enumerated in April 1871 are not yet available, there are no means of determining, with any degree of accuracy, the numbers living at the different ages in recent years. The rate of mortality at each group of ages has not therefore been calculated for insertion in this and the two following Tables since the year 1867.

TABLE 20.—ENGLAND.—Annual Rates of Mortality per 1000 of Males at different Ages in each of the Thirty Years 1838-67.*

YEARS.	DEATHS TO 1000 LIVING.												
	AGES.—MALES.												
	ALL AGES.	0-	5-	10-	15-	25-	35-	45-	55-	65-	75-	85-	95 and upwds.
1838	23.4	70.1	9.0	5.2	8.5	10.8	13.6	19.5	34.1	70.5	148.1	298.7	437.0
1839	22.8	71.5	9.0	5.1	8.2	9.9	12.7	18.0	31.9	65.0	139.1	280.0	396.9
1840	23.7	75.3	10.8	5.4	8.3	10.0	12.7	18.0	31.4	67.2	145.0	302.8	447.5
1841	22.4	68.4	9.6	5.1	8.1	9.8	12.2	17.9	31.4	64.8	142.7	296.5	431.6
1842	22.4	70.6	9.0	5.0	7.8	9.3	11.9	17.3	30.4	65.7	145.7	294.1	431.4
1843	22.0	69.1	8.5	4.8	7.7	9.2	12.1	17.2	30.1	65.3	140.7	287.1	426.5
1844	22.4	70.0	9.0	4.7	7.6	9.3	12.2	17.5	30.5	66.7	146.2	316.4	405.9
1845	21.7	66.8	8.2	4.7	7.8	9.2	11.9	17.2	29.7	64.1	143.7	301.1	463.4
1846	23.9	77.8	8.3	5.1	8.6	10.2	12.6	18.0	31.3	66.7	150.3	321.3	491.7
1847	25.4	76.1	9.7	5.5	9.3	10.9	14.3	20.7	36.5	73.0	172.8	354.6	543.3
1848	23.9	74.2	10.4	5.3	8.6	10.2	13.0	18.7	32.7	67.2	149.5	305.5	411.0
1849	25.8	75.3	11.3	6.5	9.5	12.4	15.7	22.6	36.5	71.9	151.6	299.3	419.2
1850	21.4	67.0	8.2	4.7	7.2	8.8	11.6	17.2	29.8	62.8	140.1	285.3	381.2
Mean of 30 Years (1838-67).	23.3	72.4	8.8	5.0	7.9	9.9	13.0	18.2	31.5	68.5	147.7	309.2	446.9
1851	22.8	73.0	8.7	4.9	7.8	9.5	12.4	17.9	30.3	64.0	140.6	282.5	419.4
1852	23.2	75.0	9.1	5.2	8.0	9.7	12.3	18.1	30.6	62.9	142.0	286.6	445.4
1853	23.8	73.3	8.5	5.1	8.3	10.2	13.2	19.4	32.4	69.2	159.7	321.0	497.3
1854	24.4	77.7	9.4	5.6	8.4	10.4	13.6	19.3	31.7	66.8	149.1	290.9	414.3
1855	23.5	71.9	8.2	5.0	7.8	9.7	12.9	18.5	32.6	71.3	162.8	344.2	471.8
1856	21.4	67.5	7.2	4.6	7.4	9.0	11.9	16.4	23.8	61.6	131.0	280.9	367.0
1857	22.6	72.5	7.8	4.7	7.4	9.2	12.2	17.0	29.5	64.6	143.8	302.3	403.7
1858	23.9	76.8	10.5	5.0	7.7	9.3	12.5	17.3	30.5	68.0	147.0	317.7	477.3
1859	23.3	75.0	9.3	4.8	7.4	9.2	12.6	17.4	30.2	66.4	140.2	293.8	437.5
1860	22.2	67.6	6.8	4.1	7.1	9.1	12.7	17.3	30.9	70.4	151.6	311.3	437.3
1861	22.7	71.8	6.7	4.3	7.3	9.2	12.7	16.9	30.1	68.9	146.5	310.9	448.4
1862	22.5	69.6	7.7	4.4	7.2	9.4	12.8	17.3	30.3	67.6	140.6	298.5	365.8
1863	24.2	77.4	10.3	5.0	7.4	9.7	13.3	17.3	30.6	69.2	140.8	312.5	488.5
1864	25.0	75.4	9.9	5.0	7.8	10.8	14.9	19.0	33.9	77.6	154.1	343.4	532.5
1865	24.6	74.1	8.2	4.8	7.8	11.2	14.8	19.2	33.1	76.7	155.0	339.7	485.0
1866	24.7	73.8	7.9	4.7	7.9	11.7	15.5	19.5	32.8	78.4	154.6	342.6	487.1
1867	23.1	68.0	6.6	4.1	7.3	10.8	14.3	17.6	31.6	78.9	157.4	355.4	521.5

* See Notes to Table 19.

TABLE 20.—ENGLAND.—Annual Rates of Mortality per 1000 of Males at different Ages in each of the Thirty Years 1838-67.

DEATHS TO 1000 LIVING.

TABLE 21.—ENGLAND.—Mortality per 1000 at different Ages in Thirty Years 1838-67.—Females.*

YEARS.	AGES.—FEMALES.												
	ALL AGES.	0-	5-	10-	15-	25-	35-	45-	55-	65-	75-	85-	95 and upwds.
MEAN OF 30 YEARS.													
1838-67	21.5	62.5	8.7	5.1	8.2	10.2	12.3	15.7	28.6	57.5	135.4	283.1	492.1
MEANS OF 10 YEARS.													
1841-50	21.6	61.4	9.1	5.3	8.5	10.6	12.8	15.9	28.2	61.3	135.1	283.8	444.5
1851-60	21.4	63.3	8.4	5.1	8.1	10.0	12.0	15.1	27.5	56.9	133.6	281.3	428.2
MEANS OF 5 YEARS.													
(3 Years.)													
1838-40	21.5	61.8	9.8	5.5	8.6	10.3	12.8	16.0	28.3	57.6	132.6	267.9	386.8
(5 Years.)													
1841-45	20.6	58.8	8.9	5.0	8.2	10.0	12.1	15.0	27.0	59.4	131.2	280.2	420.5
1846-50	22.6	63.9	9.3	5.7	8.9	11.3	13.5	16.7	29.4	63.2	138.9	287.3	468.4
1851-55	21.8	64.1	8.5	5.3	8.4	10.4	12.4	15.6	27.9	59.0	136.2	283.6	440.1
1856-60	21.0	62.6	8.3	4.8	7.8	9.5	11.6	14.7	27.1	54.9	130.9	278.9	416.3
1861-65	21.6	63.8	8.3	4.8	7.8	9.7	11.7	15.7	29.9	53.1	136.3	286.7	442.5

Note.—The Table may thus be read:—Of each 1000 children living under five years of age, 72.4 died in the 30 years 1838-67; in the five years 1841-45 this proportion averaged 69.0 per 1000; and in the five years 1861-65 it was 73.7.

* The population used in these calculations is deduced from the ascertained rate of increase observed in the 20 years 1841-61. As the ages of the population enumerated in April 1871 are not yet available, there are no means of determining, with any degree of accuracy, the numbers living at the different ages in recent years. The rate of mortality at each group of ages has not therefore been calculated for insertion in this and the two following Tables since the year 1867.

TABLE 22.—ENGLAND.—Annual Rates of Mortality per 1000 of Females at different Ages in each of the Thirty Years 1838-67.*

DEATHS TO 1000 LIVING.

TABLE 22.—ENGLAND.—Annual Rates of Mortality per 1000 of Females at different Ages in each of the Thirty Years 1838-67.*

YEARS.	AGES.—FEMALES.												
	ALL AGES.	0-	5-	10-	15-	25-	35-	45-	55-	65-	75-	85-	95 and upwds.
1838	21.5	60.1	9.0	5.4	8.5	10.4	13.2	16.8	30.4	58.8	135.2	266.0	370.8
1839	21.0	61.1	9.4	5.3	8.5	10.1	12.5	15.6	27.6	55.3	126.6	253.2	364.0
1840	22.0	64.2	11.1	5.7	8.7	10.3	12.7	15.7	28.5	58.9	136.1	284.4	425.6
1841	20.8	58.6	9.6	5.2	8.4	10.1	12.3	15.4	27.4	58.4	133.8	282.6	427.1
1842	21.0	60.3	9.2	5.1	8.3	10.1	12.2	15.2	27.3	60.2	130.3	284.1	402.2
1843	20.5	59.1	8.5	4.9	7.9	9.8	12.3	14.8	26.7	58.9	129.4	276.0	442.2
1844	20.8	59.1	9.0	5.0	8.1	10.1	12.0	15.2	27.4	60.8	133.7	283.6	426.2
1845	20.1	56.8	8.0	4.8	8.2	9.8	11.9	14.6	26.4	58.8	129.0	274.8	404.7
1846	22.2	67.0	8.1	5.4	8.7	10.5	12.4	15.5	27.5	61.9	136.4	302.5	506.3
1847	23.8	65.8	9.5	5.8	9.2	11.8	14.2	17.8	31.9	70.0	157.7	320.0	520.0
1848	22.2	64.2	10.0	5.7	8.8	10.9	13.0	15.8	28.3	61.0	134.8	275.5	460.3
1849	24.5	65.1	11.0	6.6	10.0	13.5	16.1	19.9	33.3	66.2	139.3	279.7	428.6
1850	20.1	57.5	8.1	4.9	7.8	9.9	11.7	14.7	26.1	57.3	126.3	258.9	427.1
Mean of 30 Years (1838-67).	21.5	62.5	8.7	5.1	8.2	10.2	12.3	15.7	28.6	57.5	135.4	283.1	432.1
1851	21.2	63.0	8.6	5.3	8.2	10.1	11.9	15.2	26.8	58.5	128.2	263.6	450.2
1852	21.6	64.4	8.8	5.4	8.4	10.3	12.1	15.1	26.5	56.6	131.6	276.2	413.5
1853	22.0	63.4	8.1	5.4	8.7	10.6	12.4	15.8	28.3	60.2	140.7	293.5	472.1
1854	22.7	67.8	9.2	5.6	8.7	11.0	13.1	16.4	28.3	58.1	133.0	269.5	421.6
1855	21.7	61.6	8.0	5.0	8.3	10.0	12.4	15.4	29.3	61.5	147.6	315.2	443.0
1856	19.7	58.9	7.3	4.6	7.6	9.3	11.3	14.0	25.1	51.2	119.8	242.7	366.9
1857	21.1	63.8	7.7	4.7	7.9	9.4	11.5	14.6	27.1	55.8	131.2	281.4	454.5
1858	22.3	67.5	10.4	5.4	8.2	9.8	11.9	14.8	27.6	57.3	137.8	297.0	458.5
1859	21.6	65.2	9.4	5.3	7.9	9.7	11.7	15.1	27.0	53.9	129.2	276.4	404.6
1860	20.3	57.5	6.9	4.4	7.5	9.4	11.5	15.0	28.6	56.3	136.5	297.1	396.9
1861	20.6	62.0	6.8	4.4	7.8	9.3	11.2	14.7	28.2	52.5	131.2	266.1	444.8
1862	20.5	60.2	7.5	4.6	7.5	9.3	11.4	14.9	28.5	52.3	129.8	271.7	397.3
1863	21.9	67.2	10.0	5.2	7.7	9.6	11.6	15.1	29.0	50.9	131.4	289.2	435.7
1864	22.6	65.4	9.5	5.1	8.0	10.1	12.2	16.8	32.4	56.5	145.4	305.8	448.5
1865	22.0	64.4	7.9	4.7	7.9	10.0	12.2	16.9	31.7	53.2	143.8	300.4	486.4
1866	22.3	64.6	7.4	4.6	8.0	10.3	12.7	17.3	32.7	53.4	146.9	306.1	420.0
1867	20.6	58.4	6.3	3.9	7.3	9.3	11.5	16.1	31.1	51.2	148.4	299.3	442.2

* See Notes to Table 21.

TABLE 23.—Number, and Annual Rate per 1000 Persons living, of Deaths in England during each Quarter of the Thirty-three Years 1838-70.

YEARS.	DEATHS.				ANNUAL DEATH RATE.*			
	In the Quarters ending the last day of				In the Quarters ending the last day of			
	March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.
1838	96,152	90,877	72,877	80,854	26.2	23.9	18.9	20.9
1839	89,740	87,969	76,980	84,995	23.6	22.8	19.5	21.6
1840	98,896	90,339	80,322	89,630	25.4	23.1	20.4	22.5
1841	99,069	86,134	75,440	83,204	25.4	21.7	18.8	20.6
1842	96,214	86,538	82,389	84,328	24.4	21.6	20.3	20.7
1843	94,926	87,234	76,792	87,493	23.7	21.5	18.7	21.2
1844	101,024	85,337	79,708	90,864	24.7	20.8	19.1	21.8
1845	104,664	89,149	74,872	80,681	25.5	21.4	17.8	19.1
1846	89,484	90,230	101,664	108,937	21.6	21.4	23.8	25.5
1847	119,672	106,718	93,435	103,479	28.5	25.1	21.6	23.9
1848	120,032	99,727	87,638	92,436	27.9	23.1	20.1	21.1
1849	105,870	102,153	135,227	97,589	24.6	23.4	30.6	22.0
1850	95,430	92,871	85,849	91,345	22.6	21.1	19.2	20.5
1851	105,359	99,458	91,499	99,080	23.9	22.2	20.2	21.8
1852	106,358	100,625	100,382	99,770	23.6	22.2	21.9	21.7
1853	118,119	107,647	92,201	103,130	26.1	23.5	19.9	23.1
1854	111,843	102,586	113,843	109,633	24.5	22.1	24.2	23.3
1855	134,542	106,493	87,646	97,022	29.1	22.7	18.4	20.4
1856	103,014	100,099	91,155	96,238	21.8	21.1	19.0	20.0
1857	108,665	100,046	100,528	110,576	23.0	20.9	20.7	22.7
1858	125,819	107,142	98,142	118,553	26.3	22.1	20.0	24.1
1859	121,580	105,631	104,216	109,354	25.2	21.6	21.0	22.0
1860	122,617	110,869	86,312	102,923	24.8	22.4	17.2	20.4
1861	121,215	107,558	101,232	105,109	24.5	21.5	19.9	20.6
1862	122,019	107,392	92,381	114,774	24.3	21.2	18.0	22.4
1863	128,066	118,121	112,504	115,116	25.2	23.0	21.7	22.2
1864	142,977	116,880	112,223	123,451	27.5	22.5	21.4	23.5
1865	140,410	115,892	113,362	121,245	27.0	22.0	21.3	22.8
1866	138,136	128,551	116,650	117,352	26.2	24.2	21.7	21.8
1867	134,008	112,355	108,513	116,197	25.2	20.9	19.9	21.3
1868	119,676	110,010	130,482	120,454	21.9	20.2	23.7	21.8
1869	133,086	118,947	114,644	123,141	24.4	21.5	21.5	22.9
1870	143,773	121,128	124,297	126,131	26.0	21.6	22.0	22.3
Mean Annual Rate per 1000 in each Quarter				25.0	22.1	20.7	21.9	

* These rates may thus be read, without reference to the decimal points:—In the March quarter of the year 1838, to 10,000 of the population there were 262 deaths registered. A correction has been made in the calculations for the inequality in the number of days in the different quarters, see note to Table 6.

TABLE 24.—Proportional Number of Deaths in each Quarter to 1000 Deaths in the Average Quarter* of each of the Thirty-three Years 1838-70.

YEARS.	NUMBER OF DEATHS IN THE AVERAGE QUARTER.	PROPORTIONAL NUMBER OF DEATHS				
		In the AVERAGE QUARTER (assumed to be 1000).	FIRST QUARTER ending March 31.	SECOND QUARTER ending June 30.	THIRD QUARTER ending Sept. 30.	FOURTH QUARTER ending Dec. 31.
1838	85,690	1000	1145	1061	850	944
1839	84,746	1000	1059	1038	900	1003
1840	89,922	1000	1099	1005	899	997
1841	85,962	1000	1152	1002	878	963
1842	87,380	1000	1108	990	942	965
1843	86,611	1000	1096	1007	887	1010
1844	89,233	1000	1133	956	893	1018
1845	87,342	1000	1198	1021	857	924
1846	97,579	1000	917	925	1042	1116
1847	105,826	1000	1131	1008	883	978
1848	99,958	1000	1200	998	877	925
1849	110,210	1000	961	927	1227	885
1850	92,249	1000	1066	1007	931	996
1851	93,849	1000	1066	1006	926	1002
1852	101,784	1000	1045	989	986	980
1853	105,274	1000	1122	1022	876	980
1854	109,476	1000	1036	940	1031	993
1855	106,426	1000	1280	1001	816	903
1856	97,627	1000	1061	1031	923	980
1857	104,954	1000	1050	955	950	1045
1858	112,414	1000	1134	955	865	1046
1859	110,195	1000	1118	961	938	983
1860	105,680	1000	1166	1054	812	968
1861	108,778	1000	1129	990	923	953
1862	109,142	1000	1133	986	839	1042
1863	118,460	1000	1095	999	942	964
1864	123,383	1000	1159	949	901	991
1865	122,727	1000	1159	946	916	979
1866	125,172	1000	1118	1029	924	929
1867	117,768	1000	1152	956	914	973
1868	120,156	1000	1001	921	1081	997
1869	123,707	1000	1090	964	919	1027
1870	128,332	1000	1130	943	957	970

* A correction has been made in the calculations for the inequality in the number of days in the different quarters, see note to Table 6.

TABLE 25.—Area, estimated Population, and Marriages, Births, and Deaths in the United Kingdom, in the Year 1870.

	AREA IN STATUTE ACRES.	AREA IN HECTARES.	Estimated POPULATION in the middle of the Year 1870.	MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.
UNITED KINGDOM	77,286,901	31,275,782	31,205,444	249,225	498,450	1,099,287	713,600
Great Britain - -	56,964,260	23,051,796	25,792,784	205,443	410,886	908,210	589,396
England and Wales -	37,324,883	15,104,307	22,457,366	181,655	363,310	792,787	515,329
Scotland - - -	19,639,377	7,947,489	3,335,418	23,788	47,576	115,423	74,067
Ireland - - -	20,322,641	8,223,986	5,412,660	43,782	87,564	191,077	124,204

Note.—The registered Marriages, Births, and Deaths for Ireland were 28,335, 150,052, and 90,635 respectively. By the authority of the Registrar General of Ireland these numbers have been corrected in the above table for defective registration. It has been assumed that the marriages, births, and deaths in Ireland in the year 1870 were in the same proportion to population as the marriages, births, and deaths in England and Wales.

TABLE 26.—Proportion per 1000 of Marriages, Births, and Deaths to the Population of the United Kingdom, in the Year 1870.

	ACRES TO A PERSON.	HECTARES TO A PERSON.	To 1000 PERSONS LIVING.			
			MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.
UNITED KINGDOM - -	2.48	1.002	7.99	15.98	35.23	22.87
Great Britain - - -	2.21	.894	7.97	15.94	35.21	22.85
England and Wales - -	1.66	.673	8.09	16.18	35.30	22.95
Scotland - - - - -	5.89	2.333	7.13	14.26	34.61	22.21
Ireland - - - - -	3.75	1.519	8.09	16.18	35.30	22.95

Note.—The total area of a country, divided by its population, gives the average area to each person. The reciprocal gives the "density" of the population, or the population to each acre, square mile, or other measure.

TABLE 27.—Population, Area, Births, and Deaths in the Islands in the British Seas in the Twenty Years 1851-1870.

YEARS.	ISLANDS IN THE BRITISH SEAS.		ISLE OF MAN.		ISLAND OF JERSEY.		GUERNSEY AND ADJACENT ISLANDS.	
	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.
1851	4,114	3,681	1,494	1,440	1,696	1,258	924	983
1852	4,301	2,906	1,530	887	1,768	1,423	1,003	646
1853	4,010	2,741	1,439	1,008	1,676	1,091	895	642
1854	4,239	3,118	1,552	1,249	1,639	1,201	1,048	668
1855	3,881	2,873	1,397	965	1,524	1,241	960	667
1856	3,949	2,534	1,431	849	1,582	1,112	936	573
1857	3,810	2,716	1,431	931	1,424	1,154	955	631
1858	4,004	2,671	1,442	965	1,566	1,110	996	596
1859	3,953	2,947	1,575	949	1,451	1,273	927	725
1860	3,812	2,667	1,409	948	1,557	985	846	734
1861	3,962	2,662	1,541	904	1,562	1,132	859	626
1862	3,857	2,552	1,492	850	1,542	1,114	823	588
1863	4,123	2,681	1,647	944	1,676	1,135	805	602
1864	3,975	3,094	1,629	1,356	1,543	1,166	803	572
1865	4,017	3,426	1,644	1,466	1,604	1,240	769	720
1866	3,897	3,341	1,559	1,203	1,611	1,486	727	652
1867	3,780	3,168	1,573	921	1,477	1,486	730	761
1868	3,941	2,962	1,557	1,007	1,603	1,265	781	690
1869	3,606	2,862	1,480	1,079	1,424	1,224	702	559
1870	4,027	3,006	1,575	1,132	1,824	1,217	623	657

POPULATION.				
Enumerated				
1851	143,126	52,387	57,020	33,719
1861	143,447	52,469	55,613	35,365
1871	144,323	53,763	56,627	33,936

AREA IN STATUTE ACRES.				
	226,684	180,000	28,717	17,967

Note.—The above numbers have been compiled from returns furnished to the Registrar General by Lieutenant-Colonel J. F. Murray, Government Secretary of Jersey, Colonel W. Bell, Government Secretary of Guernsey, &c., and by Mr. S. Harris, Registrar General of the Isle of Man.

TABLE 28.—Estimated Population of England, France, and of Austria, in the middle of each of the Eighteen Years 1853 to 1870.

YEARS.	ENGLAND and WALES.	FRANCE.*	AUSTRIA.†
1853	18,404,368	36,225,000	31,328,874
1854	18,616,310	35,910,496	31,493,583
1855	18,829,000	35,974,930	31,200,576
1856	19,042,412	36,039,364	31,425,385
1857	19,256,516	36,154,398	32,053,235
1858	19,471,291	36,236,322	32,361,905
1859	19,686,701	36,331,642	32,750,697
1860	19,902,713	36,522,404	33,108,529
1861	20,119,314	37,386,313	33,399,945
1862	20,352,140	37,521,486	33,719,323
1863	20,590,356	37,657,134	23,078,057
1864	20,834,496	37,733,278	23,317,544
1865	21,085,139	37,929,918	20,876,643
1866	21,342,864	38,067,064	20,835,008
1867	21,608,236	38,204,696	20,986,536
1868	21,882,059	38,342,818	21,185,021
1869	22,164,847	38,481,444	20,217,531
1870	22,457,366	38,365,965	20,385,493

* M. LEGOYT, late director of the Statistical Department of France, favoured the Registrar General with the returns for France for the years 1853-61 and for the year 1866. The population in the four years 1862-65, and in the years 1867-69 was estimated by means of the average annual rate observed between the two enumerations of 1861 and 1866. The estimate for 1870 has been supplied by the French Government. The population of the three last annexed departments, viz., Savoie, Savoie-Haute, and Alpes-Maritimes, is included subsequently to the year 1870.

† The Registrar General has, from time to time, been indebted to the Chief of the Statistical Department of Austria for the figures relating to that empire. The population returned above includes Hungary, Croatia, Slavonia, and Transylvania from 1853 to 1862 inclusive; after 1862 the population of those parts of the empire is excluded. From 1853 to 1864 the States of Italy were included; since 1864 they are excluded. The apparent decrease in the population between 1863 and 1869, is due to a change in the boundaries of the Empire of Austria and the kingdom of Hungary.

TABLE 29.—Annual Rate of Mortality per 1000 in Great Britain, England, France, Austria, and in Italy, including the Deaths of Soldiers at Home and Abroad, 1857 to 1870.

YEARS.	GREAT BRITAIN.	ENGLAND and WALES.	FRANCE.	AUSTRIA.	ITALY.
1857	21'69	21'84	23'75	29'49	—
1858	22'97	23'23	24'12	31'94	—
1859	22'13	22'44	26'96	30'68	—
1860	21'42	21'27	21'40	29'82	—
1861	21'47	21'64	23'18	31'21	—
1862	21'59	21'46	21'67	30'73	—
1863	23'03	23'03	22'49	31'01	30'78
1864	23'83	23'84	22'76	31'66	29'62
1865	23'27	23'38	24'31	29'98	29'75
1866	23'45	23'58	23'28	32'07	28'93
1867	21'95	21'98	22'65	27'53	34'12
1868	22'13	22'18	23'96	23'72	30'45
1869	22'76	22'63	—	23'12	27'70
1870	22'84	22'94	23'83	23'89	—

TABLE 30.—Number and Proportion of Marriages, Births, and Deaths in England, France, and in Austria, per 1000 of the Population, 1853-70.

(The returns relating to France have been supplied by the French Government; those relating to Austria by the Chief of the Statistical Department of Austria, from time to time.)

YEARS.	NUMBER OF MARRIAGES, BIRTHS, and DEATHS.			PROPORTIONS per 1000 of MARRIAGES, BIRTHS, and DEATHS to the POPULATION.		
	England.	France.*	Austria.†	England.	France.*	Austria.†
MARRIAGES.						
1853	164,520	280,609	263,627	8.94	7.75	8.41
1854	159,727	270,896	241,799	8.58	7.54	7.68
1855	152,113	283,335	228,515	8.08	7.88	7.32
1856	159,337	284,401	295,970	8.37	7.89	9.42
1857	159,097	295,510	281,643	8.26	8.17	8.79
1858	156,070	307,056	280,558	8.02	8.47	8.67
1859	167,723	298,417	242,371	8.52	8.21	7.40
1860	170,156	288,936	289,119	8.55	7.91	8.73
1861	163,706	305,203	286,244	8.14	8.16	8.57
1862	164,030	303,514	304,188	8.06	8.09	9.02
1863	173,510	301,376	199,833†	8.43	8.00	8.67†
1864	180,387	299,579	194,837	8.66	7.93	8.36
1865	185,474	298,838	167,004	8.80	7.88	8.00
1866	187,776	301,390	141,072	8.80	7.92	6.77
1867	179,154	299,521	187,079	8.29	7.84	8.91
1868	176,962	301,197	196,274	8.09	7.86	9.26
1869	176,970	298,787	208,787	7.98	—	10.33
1870	181,655	237,444	197,497	8.09	6.19	9.69
BIRTHS.						
1853	612,391	936,967	1,279,226	33.27	25.87	40.75
1854	634,405	923,461	1,208,853	34.08	25.72	38.88
1855	635,043	902,336	1,151,039	33.73	25.08	36.89
1856	657,453	952,116	1,245,330	34.53	26.42	39.63
1857	663,071	940,709	1,373,988	34.43	26.02	42.87
1858	655,481	969,343	1,364,905	33.66	26.75	42.18
1859	689,881	1,017,896	1,413,983	35.04	28.02	43.17
1860	684,048	956,375	1,342,992	34.37	26.20	40.56
1861	696,406	1,005,073	1,334,727	34.61	26.88	39.96
1862	712,684	995,137	1,358,116	35.02	26.52	40.28
1863	727,417	1,012,794	920,439†	35.33	26.90	39.88†
1864	740,275	1,005,880	942,826	35.53	26.62	40.43
1865	748,069	1,006,753	816,753	35.48	26.54	39.12
1866	753,870	994,288	817,346	35.32	26.12	44.18
1867	768,349	1,002,621	729,037	35.56	26.24	34.74
1868	786,858	984,020	832,684	35.96	25.66	39.30
1869	773,381	—	812,474	34.89	—	40.19
1870	792,787	1,000,319	825,017	35.30	26.07	40.47
DEATHS.						
1853	421,097	795,607	1,096,119	22.88	21.96	34.99
1854	437,905	992,779	1,177,888	23.52	27.65	37.40
1855	425,703	937,942	1,435,949	22.61	26.07	46.02
1856	390,506	837,082	1,002,068	20.51	23.23	31.89
1857	419,315	858,785	947,317	21.80	23.75	29.57
1858	449,656	874,186	1,036,148	23.09	24.12	32.02
1859	440,781	979,333	1,004,295	22.39	26.96	30.66
1860	422,721	781,635	986,923	21.24	21.40	29.81
1861	435,114	866,597	1,048,016	21.63	23.18	31.38
1862	436,566	812,973	1,043,403	21.45	21.67	30.94
1863	473,837	846,917	693,016†	23.01	22.49	31.10†
1864	495,531	860,330	708,339	23.78	22.76	30.16
1865	490,909	921,887‡	646,980	23.28	24.31‡	30.99
1866	500,689	885,559‡	846,991§	23.46	23.26‡	33.32§
1867	471,073	866,366	590,352	21.80	22.68	28.13
1868	480,622	918,517	621,588	21.96	23.96	29.34
1869	494,828	—	583,995	22.32	—	28.89
1870	515,329	1,106,206	595,146	22.95	28.83	29.19

* The returns for France since the year 1860 include the three newly annexed departments. The deaths of Frenchmen abroad—civil or military—are registered in the books of the commune in which was their last domicile. M. Legoyt revised the population and the numbers of marriages, births, and deaths for the years 1853-65. The returns for 1869 have not been received in consequence of the disorganization during 1870 produced by the war.

† The returns for Austria include Hungary, Croatia, Slavonia, and Transylvania from 1853 to 1862 inclusive; since 1862 the returns exclude those portions of the empire. From 1853 to 1864 the States of Italy are included; since 1864, however, they are excluded.

‡ Cholera was prevalent in France in 1865 and 1866.—(M. Legoyt.)

§ Dr. Ficker attributed the excessive mortality in the year 1866 to cholera and the war.

TABLE 31.—Italy (inclusive of VENETIA). Population, Numbers, and Proportions per 1000 of Marriages, Births, and Deaths, in each of the Seven Years 1863 to 1869.

YEARS.	NUMBERS.					PROPORTIONS PER 1000 TO POPULATION.			
	ESTIMATED POPULATION, 31st Dec.	MARRIAGES.	PERSONS MARRIED.	BIRTHS. Exclusive of	DEATHS. Still-born.	MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.
1863	24,680,974	201,225	402,450	964,137	760,164	8.17	16.34	39.06	30.78
1864	24,882,633	189,759	379,518	933,795	737,136	8.02	16.04	37.73	29.62
1865	25,097,182	226,458	452,916	961,234	746,685	9.23	18.46	38.30	29.75
1866	25,344,192	142,024*	284,048	980,200	733,190	5.37	10.74	38.67	28.93
1867	25,404,723	170,456	340,912	927,396	866,865	6.72	13.44	36.51	34.12
1868	25,527,915	182,743	365,486	900,416	777,223	7.16	14.32	35.27	30.45
1869	25,766,217	205,237	410,574	952,134	713,832	7.97	15.94	36.95	27.70
1870 †	—	—	—	—	—	—	—	—	—

* The decrease of marriages in 1866 may be attributed to the law which then came into operation removing the civil registration from the parochial authorities to the communes; there had been a marked increase in the previous year resulting from a wish to evade the law about to come into operation. Doubtless many of the marriages solemnized in the churches during 1866 escaped registration.

† No return has been received for 1870.

TABLE 32.—Spain. Population, Numbers and Proportions per 1000, of Marriages, Births and Deaths in each of the Ten Years 1861 to 1870.

YEARS.	NUMBERS.					PROPORTIONS PER 1000 TO POPULATION.			
	ESTIMATED POPULATION.	MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.	MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.
1861	15,879,868	130,731	261,462	624,096	417,764	8.23	16.46	39.30	26.31
1862	16,065,124	128,696	257,392	615,919	430,663	8.01	16.02	38.33	26.81
1863	16,210,263	124,176	248,352	606,800	461,661	7.66	15.32	37.43	28.48
1864	16,340,323	126,303	252,606	629,546	499,486	7.73	15.46	38.53	30.57
1865	16,423,793	128,917	257,834	622,050	538,580	7.85	15.70	37.87	32.79
1866	16,579,090	131,981	263,962	618,981	463,684	7.96	15.92	37.34	27.97
1867	16,716,151	118,409	236,818	624,212	487,151	7.08	14.16	37.34	29.14
1868	16,853,212	111,684	223,368	579,464	548,690	6.63	13.26	34.38	32.56
1869	16,883,986	137,120	274,240	602,287	550,660	8.12	16.24	35.67	32.61
1870	16,935,613	105,543	211,086	599,786	509,669	6.23	12.46	35.42	30.09

NOTE.—The Population enumerated at the Census of 1860 was 15,673,536. The estimated Population for the Years 1861-7 has been deduced from the Excess of Births over Deaths in each Year. This method of estimating the population is sanctioned by the Junta General de Estadística at Madrid. The decline of registered marriages in 1870 is believed to be due to the introduction of civil registration, which occurred during that year.

TABLE 33.—Average Strength of the Army at Home, in the Year 1870.

(Furnished to the Registrar General by direction of H.R.H. the General Commanding in Chief.)

	UNITED KINGDOM.		ENGLAND, WALES, AND CHANNEL ISLANDS.		SCOTLAND.		IRELAND.	
	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.
Cavalry - - -	711	11,088	456	6,919	34	571	221	3,598
Infantry - - -	3,043	57,198	1,961	37,362	140	2,253	942	17,583
Royal Artillery - -	665	13,458	573	11,091	10	359	82	2,008
Royal Engineers - -	403	3,104	362	2,652	8	95	33	357
Total - - -	4,822	84,848	3,352	58,024	192	3,278	1,278	23,546

		Officers and Men.	
		1869.	1870.
British Army at Home	- - -	86,278	89,670
„ „ Abroad	- - -	100,390	90,774
Total	- - -	186,668	180,444

TABLE 34.—Average Strength, Deaths, and Annual Rate of Mortality per 1000 of the Army in the United Kingdom in 1870.

	AVERAGE STRENGTH.		DEATHS.		ANNUAL RATE OF MORTALITY PER 1000.	
	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.
UNITED KINGDOM	4,822	84,848	66	963	13.69	11.35
Great Britain - - -	3,544	61,302	59	749	16.65	12.22
Ireland - - -	1,278	23,546	7	214	5.48	9.09

TABLE 35.—Average Strength of the British Army Abroad in each of the Years 1867-1870. (Furnished to the Registrar General by the Adjutant-General by direction of H.R.H. the General Commanding in Chief.)

	1867		1868		1869		1870	
	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.
Cavalry - - -	400	5,653	365	5,171	363	5,144	289	4,286
Infantry - - -	4,112	82,976	3,820	77,925	3,573	71,818	3,082	64,988
Royal Artillery	1,177	16,444	1,169	16,949	1,165	16,459	1,093	15,278
Royal Engineers	389	1,577	384	1,484	372	1,501	341	1,417
Total - - -	6,078	106,650	5,738	101,529	5,473	94,917	4,805	85,969

TABLE 36.—Number of Deaths in the British Army during each of the Four Years 1867-1870.

(Furnished to the Registrar General by the Adjutant-General by direction of H.R.H. the General Commanding in Chief.)

CORPS.	1867			1868			1869			1870														
	GREAT BRITAIN.	IRELAND.	ABROAD.	GREAT BRITAIN.	IRELAND.	ABROAD.	GREAT BRITAIN.	IRELAND.	ABROAD.	GREAT BRITAIN.	IRELAND.	ABROAD.												
	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.												
Cavalry and Infantry -	27	598	8	149	69	1,323	25	686	3	156	53	1,275	15	551	5	138	52	1,808	40	580	5	187	47	1,217
Royal Artillery -	10	120	-	18	10	353	12	159	-	30	16	344	5	140	1	25	13	456	14	147	-	24	13	315
Royal Engineers	4	13	-	3	2	22	4	12	-	1	6	22	1	20	1	1	-	18	5	22	2	3	4	13
Total -	41	731	8	170	81	2,203	41	857	3	187	75	1,641	21	711	7	164	65	2,282	59	749	7	214	64	1,545

TABLE 37.—Annual Rate of Mortality per 1000 amongst the OFFICERS and NON-COMMISSIONED OFFICERS and MEN in the Army Abroad, in each of the Thirteen Years 1858-70. (Deduced from the Strength and Deaths as given in the two preceding Tables.)

YEARS.	OFFICERS.	NON-COMMISSIONED OFFICERS and MEN.
1858	35.13	67.01
1859	21.11	33.96
1860	16.39	26.03
1861	15.74	25.67
1862	13.46	19.81
1863	15.86	16.82
1864	17.35	18.93
1865	15.76	21.02
1866	12.64	15.49
1867	13.33	20.66
1868	13.07	16.16
1869	11.88	24.04
1870	13.32	17.97

TABLE 38.—Army serving at Home and Abroad.

		1861
Officers and Men born in ENGLAND - - -		130,469
„ „ SCOTLAND - - -		20,901
„ „ IRELAND - - -		71,556
„ „ FOREIGN PARTS - - -		6,635
TOTAL - - - - -		229,561

TABLE 39.—Deaths of Officers and Men in the Army Abroad, and Estimated Numbers belonging to Great Britain and to England and Wales, in each of the Thirteen Years 1858-1870.

YEARS.	DEATHS of OFFICERS AND MEN in the ARMY ABROAD.	Estimated proportion of Numbers in Col. 2. belonging to	
		GREAT BRITAIN.	ENGLAND AND WALES.
1	2	3	4
1858	7,363	4,275	3,486
1859	4,150	2,409	1,965
1860	3,293	1,912	1,559
1861	3,097	2,042	1,760
1862	2,544	1,677	1,445
1863	2,209	1,457	1,255
1864	2,493	1,644	1,417
1865	2,578	1,700	1,465
1866	1,802	1,188	1,024
1867	2,284	1,506	1,298
1868	1,716	1,132	975
1869	2,347	1,548	1,334
1870	1,609	1,061	914

NOTE.—The number of Deaths in the cols. 3 and 4 are estimated on the assumption that the soldiers abroad belonged to the different parts of the British Empire in the proportions indicated in Table 38.

TABLE 40.—Austria. Annual Rate of Mortality per 1,000 in the Army in each of the Fourteen Years 1857-70.

YEARS.	ESTIMATED STRENGTH.	DEATHS.	ANNUAL RATE of MORTALITY per 1,000.
1857	379,374	8,646	22.79
1858	347,696	8,577	24.67
1859	527,772	16,638	31.52
1860	384,302	11,903	30.97
1861	459,300	8,763	19.08
1862	400,895	6,800	16.96
1863	467,154	5,811	12.44
1864	559,599	6,928	12.38
1865	552,148	5,261	9.53
1866	646,636	11,942	18.46
1867	615,409	4,432	7.22
1868	614,826	3,422	5.57
1869	609,072	3,533	5.80
1870	610,662	3,918	6.42

TABLE 41.—Number of Births and Deaths of British* Subjects at Sea, exclusive of Soldiers, Marines, invalided Seamen from the Royal Navy, and Seamen on Ships' Articles, in each of the Fifteen Years 1856-1870, reported by the Captains or Commanding Officers of Vessels to the Registrar General of Seamen at the Termination of their respective Voyages in Ports of the United Kingdom.—(Furnished to the Registrar General by the Registrar General of Seamen.)

	MALES.	FEMALES.	TOTAL.
1856 (imperfect)	71	66	137
1857	168	142	310
1858	132	117	249
1859	135	132	267
1860	136	114	250
1861	110	108	218
1862	146	148	294
BIRTHS at Sea - 1863	159	185	344
1864	203	177	380
1865	210	202	412
1866	213	202	415
1867	162	177	339
1868	147	125	272
1869	134	124	258
1870	169	146	315
Total	2,295	2,165	4,460
1856 (imperfect)	121	78	199
1857	238	140	378
1858	253	182	435
1859	524	303	827
1860	241	156	397
1861	213	121	334
1862	221	148	369
†DEATHS at Sea - 1863	347	231	578
1864	379	210	589
1865	483	315	798
1866	690	363	1,053
1867	441	214	655
1868	389	196	585
1869	318	184	502
1870	509	264	773
Total	5,367	3,105	8,472

* British subjects are not particularly described in these returns, but foreign names have been excluded. A column headed *Place of Birth* was formerly contained in these returns, for the purpose of distinguishing passengers as British subjects or Foreigners, but in many cases it was not filled up by masters, in consequence of their inability to obtain the information after the death had taken place. British and Foreign seamen are distinguished.

† The deaths of soldiers, marines, and seamen from the Royal Navy, who were passengers in British Merchant Ships, were 33 in 1856, 59 in 1857, 156 in 1858, 196 in 1859, 196 in 1860, 69 in 1861, 122 in 1862, 116 in 1863, 96 in 1864, 140 in 1865, 134 in 1866, 97 in 1867, 81 in 1868, 51 in 1869, and 27 in 1870. The number is 1,623 in fifteen years, which, if added to the 8,472 above, makes 10,095, the total number of deaths of British subjects at sea in 1856-70, exclusive of those of merchant seamen. The Entries in the "Marine Register" of Births in 1870 were but 89, and of Deaths 207.

TABLE 42.—Mortality of Merchant Seamen at Sea, in the Nineteen Years 1852-70.*

YEARS.	STRENGTH.	DEATHS.	ANNUAL RATE OF MORTALITY.
			To 1000 living.
1852	159,563	2,205	13.8
1853	172,525	3,276	19.0
1854	162,416	2,772	17.1
1855	168,537	3,318	19.7
1856	173,918	3,549	20.4
1857	176,387	3,444	19.5
1858	177,832	3,486	19.6
1859	172,506	3,430	19.9
1860	171,592	3,760	21.9
1861	171,957	3,580	20.8
1862	173,863	3,620	20.8
1863	184,727	3,380	18.3
1864	195,756	3,893	19.9
1865	197,643	4,600	23.3
1866	196,371	4,866	25.8
1867	196,340	5,283	26.9
1868	197,502	5,237	26.6
1869	195,490	4,832	24.7
1870	195,962	4,523	23.1
In the 19 years 1852-70	3,440,887	73,054	21.2

* Deduced from a return of the number of accounts of wages and effects of seamen (exclusive of masters) dying before the termination of the voyage, received by the Registrar General of Seamen. Since 1867 the return includes seamen dying ashore in foreign parts, whose wages and effects are delivered to the consuls or officers of the hospitals on their discharge from their ships.

If a seaman die on the passage from Sunderland to Calcutta, his death is reported at Calcutta, and his wages and effects are accounted for and transmitted home, if the vessel be not to return direct to the United Kingdom. But if a passenger die on board a ship which does not return to a British port immediately, but trades for a time in foreign parts, considerable delay may occur before his death is reported. In all cases, however, the date is given, and in the accompanying tables the births and deaths are classed according to the years in which they occurred. In some passenger-ships women are employed as stewardesses, and are counted as part of the crew. They therefore form part of the strength in this Table, and if the death of a stewardess occur in the course of a voyage, it is included in the column of Deaths.

When a ship is lost with all persons on board, the owners return the number and names of the crew, and the names of the passengers, when known, to the Registrar General of Seamen.

TABLE 43.—Aggregate Number of Names on the Registers at the End of each of the Thirty-four Years 1837-70; also the Number of Searches in the Registers at the Central Office (exclusive of Searches in Non-parochial Registers), and Amount of Fees received.

YEARS.	AGGREGATE NUMBER				NUMBER OF SEARCHES in the REGISTERS at the CENTRAL OFFICE.	ANNUAL AMOUNT OF FEES RECEIVED and PAID into H.M. EXCHEQUER.
	OF PERSONS MARRIED.	OF BIRTHS.	OF DEATHS.	OF NAMES REGISTERED.		
1837	116,958	164,116	148,701	429,775	Not known.	£ s. d.
1838	353,092	627,903	491,461	1,472,456		6 10 0
1839	599,424	1,120,477	830,445	2,550,346		18 16 6
1840	844,754	1,622,730	1,190,132	3,657,666		33 5
1841	1,089,746	2,134,938	1,533,979	4,758,663		124 7 6
1842	1,327,396	2,652,677	1,883,498	5,863,571		290 15 0
1843	1,575,032	3,180,002	2,229,943	6,984,977		620 311 16 6
1844	1,839,530	3,720,765	2,586,876	8,147,171		705 342 16 6
1845	2,127,016	4,264,236	2,936,242	9,327,544		744 329 11 6
1846	2,418,344	4,836,911	3,326,557	10,581,812		881 329 7 0
1847	2,690,084	5,376,876	3,749,861	11,816,771	941 339 13 0	
1848	2,966,494	5,939,935	4,149,694	13,056,123	1,030 365 11 6	
1849	3,250,260	6,518,094	4,590,533	14,358,887	1,162 357 1 6	
1850	3,555,748	7,111,516	4,959,528	15,626,792	1,223 366 13 0	
1851	3,864,160	7,727,331	5,354,924	16,946,465	1,442 419 10 6	
1852	4,181,724	8,351,393	5,762,059	18,295,176	1,658 467 5 0	
1853	4,510,764	8,963,784	6,183,156	19,657,704	1,676 505 4 0	
1854	4,830,218	9,598,189	6,621,061	21,049,468	2,340 563 7 6	
1855	5,134,444	10,233,232	7,046,764	22,414,440	2,492 592 9 0	
1856	5,453,118	10,890,685	7,437,270	23,781,073	2,853 653 15 0	
1857	5,771,312	11,553,756	7,857,085	25,182,153	2,965 630 1 6	
1858	6,083,452	12,209,237	8,306,741	26,599,430	4,063 815 1 6	
1859	6,413,898	12,899,118	8,747,522	28,065,533	5,052 949 17 6	
1860	6,759,210	13,583,166	9,170,243	29,512,619	5,636 1,031 18 0	
1861	7,086,622	14,279,572	9,605,357	30,971,551	6,133 1,099 1 6	
1862	7,414,682	14,992,256	10,041,923	32,448,861	7,297 1,250 12 0	
1863	7,761,702	15,719,673	10,515,760	33,997,135	7,715 1,280 17 6	
1864	8,122,476	16,459,948	11,011,291	35,593,715	8,346 1,371 13 6	
1865	8,493,424	17,208,017	11,502,200	37,203,641	9,016 1,487 12 0	
1866	8,868,976	17,961,887	12,002,889	38,833,772	10,970 1,890 15 6	
1867	9,227,284	18,730,236	12,473,962	40,431,482	11,306 1,906 16 6	
1868	9,581,208	19,517,094	12,954,584	42,052,886	11,926 2,031 11 0	
1869	9,935,148	20,290,475	13,449,412	43,675,035	13,326 2,247 7 6	
1870	10,298,453	21,083,262	13,964,741	45,346,461	15,303 2,456 19 6	

NOTE.—The numbers for 1837 were registered in the half year ending 31st December.

TABLE 44.—Annual Rate of Mortality per 1000 in Town and Country Districts of England in each Quarter of the Eleven Years 1860-1870.

Table with columns for Area in Statute Acres, Population enumerated (1851, 1861), Quarters ending, and Annual Rate of Mortality per 1000 in each Quarter of the Years (1860-1870).

Note.—A correction has been made for the inequality of days in the quarters, also for the extra day in leap years.

Following are the names of the 131 Districts and 57 Sub-districts comprising the CHIEF TOWNS:—All the 28 Districts of London; Croydon, Kingston, Richmond, Gravesend, Medway, Tunbridge; West and East Maidstone Sub-districts (Maidstone); Canterbury; Minster Sub-district (Sheppey); Thanet, Dover, Hastings, Brighton; Shoreham Sub-district (Steyning); Portsea Island, Alverstoke, Southampton; Winchester Sub-district (Winchester); Reading, Brentford, Edmonton; St. Clement Sub-district (Headington); Oxford, Northampton; Peterborough Sub-district (Peterborough); Bedford and Kempston, and Bedford and Cardington Sub-districts (Bedford); Luton Sub-district (Luton); Cambridge, West Ham, Colchester, Bury St. Edmunds, Ipswich, Yarmouth, Norwich, King's Lynn, Melksham; Salisbury Sub-district (Alderbury); Weymouth Sub-district (Weymouth); Exeter; Torquay Sub-district (Newton Abbott); Plymouth, East Stonehouse, Stoke Damerel, Truro, Redruth; St. Mary Magdalen and St. James Sub-districts (Taunton); Bridgwater Sub-district (Bridgwater); Bath; Bedminster Sub-district (Bedminster); Bristol, Clifton; St. Nicholas and St. John Baptist Sub-districts (Gloucester); Cheltenham; Hereford City Sub-district (Hereford); Madeley, Shrewsbury; Stafford Sub-district (Stafford); Newcastle-under-Lyme Sub-district (Newcastle-under-Lyme); Wolstanton, Stoke-upon-Trent; Burton-on-Trent Sub-district (Burton-on-Trent); Wolverhampton, Walsall, West Bromwich, Dudley, Stourbridge; Kidderminster and Lower Minton Sub-districts (Kidderminster); Worcester, Birmingham, Aston, Coventry, Warwick; Loughborough Sub-district (Loughborough); Leicester; Boston Sub-district (Boston); Lincoln Home Sub-district (Lincoln); Great Grimsby Sub-district (Caistor); Radford, Nottingham; Newark Sub-district (Newark); Derby, Hayfield, Stockport; East and West Macclesfield and Sutton Sub-districts (Macclesfield); Runcorn Sub-district (Runcorn); Congleton Sub-district (Congleton); Chester Castle and Chester Cathedral Sub-districts (Chester); Birkenhead, Liverpool, West Derby, Prescot, Wigan, Warrington, Leigh, Bolton, Bury, Barton-upon-Irwell, Chorlton, Salford, Manchester, Ashton, Oldham, Rochdale, Haslingden, Burnley, Blackburn; Chorley Sub-district (Chorley); Preston; Lancaster Sub-district (Lancaster); Keighley, Todmorden, Huddersfield, Halifax, Bradford, Hunslet, Holbeck, Bramley, Leeds, Dewsbury, Wakefield, Barnsley, Ecclesall Bierlow, Sheffield; Doncaster Sub-district (Doncaster); Bootham, Micklegate, and Walmgate Sub-districts (York), Sculcoates, Hull; Scarborough Sub-district (Scarborough); Darlington Sub-district (Darlington); Stockton, Hartlepool; St. Oswald and St. Nicholas Sub-districts (Durham); Houghton-le-Spring, Sunderland, South Shields, Gateshead, Newcastle-upon-Tyne, Tynemouth; St. Cuthbert and St. Mary Sub-districts (Carlisle); Whitehaven Sub-district (Whitehaven); Kendal Sub-district (Kendal); Newport Sub-district (Newport); Cardiff Sub-district (Cardiff); Merthyr Tydfil; Llangafelach and Swansea Sub-districts (Swansea); Llanelly Sub-district (Llanelly); Pembroke Sub-district (Pembroke).

TABLE 45.—Average Annual Rate of Mortality to 1000 of the Population in England and its 11 Registration Divisions in the Two Decades 1851-60 and 1861-70, and in the Year 1870.

Table showing Average Annual Rate of Mortality to 1000 Living for various Divisions (England, London, South Eastern Counties, etc.) across different years and quarters.

* The mortality for the year 1870 is the mean of the quarterly rates.

TABLE 46.—The Average Prices of Consols, of Wheat, of Meat, and of Potatoes, and also the Average Number of Paupers relieved on the last day of each Week, in each of the Nineteen Years 1852-70, and in each Quarter of the Ten Years 1861-1870.

Large table containing Average Price of Consols, Average Price of Wheat, Average Number of Paupers Relieved, and Average Prices of Meat and Potatoes for years 1852-70 and quarters 1861-70.

TABLE 51.—LONDON.—Annual Rate of Mortality in each of the 31 Years 1840-1870, in FIVE GROUPS of METROPOLITAN DISTRICTS.

	LONDON.	WEST DISTRICTS.	NORTH DISTRICTS.	CENTRAL DISTRICTS.	EAST DISTRICTS.	SOUTH DISTRICTS.
Area in Square Miles	122.0	16.8	21.0	3.5	9.3	71.4
Decennial Increase of Population per Cent., 1861-71 } Enumerated Population, 1871 (revised numbers) }	16.1	22.5	21.6	{ -12.8 (decrease). }	11.9	25.2
ANNUAL RATE OF MORTALITY PER 1000.						
MEAN OF 31 YEARS.						
YEARS. 1840-1870	24.3	22.8	22.9	25.3	26.1	24.7
MEANS OF 10 YEARS.						
1840-9	25.2	23.5	23.1	25.1	26.6	26.6
1850-9	23.6	22.3	22.1	24.2	24.9	24.4
1860-9	24.3	22.6	23.4	26.5	26.8	23.2
MEANS OF 5 YEARS.						
1840-4	24.4	23.3	23.1	24.6	25.5	24.9
1845-9	25.9	23.7	23.1	25.6	27.7	28.2
1850-4	24.2	22.8	22.0	24.3	25.2	25.8
1855-9	23.1	21.9	22.1	24.1	24.6	22.9
1860-4	24.1	22.8	22.9	26.4	25.9	23.3
1865-9	24.5	22.3	23.9	26.5	27.6	23.2
YEARS.						
1840	25.0	24.1	23.9	24.5	25.7	25.9
1841	24.0	22.4	22.4	25.0	25.1	24.4
1842	23.5	22.6	22.6	23.6	24.4	23.9
1843	24.7	23.3	23.1	25.3	26.4	24.8
1844	25.0	23.9	23.3	24.4	25.9	25.6
1845	23.2	22.5	21.0	24.0	24.6	23.8
1846	23.3	21.6	21.9	22.9	24.1	24.6
1847	27.0	24.5	25.4	27.9	29.4	27.7
1848	25.8	23.6	23.4	25.3	28.7	27.2
1849	30.1	26.1	23.7	27.9	31.8	37.6
1850	21.0	19.6	19.8	21.1	21.7	21.9
1851	23.4	22.0	22.2	24.1	24.3	24.0
1852	22.6	21.5	21.2	23.9	23.3	23.0
1853	24.4	22.3	22.4	25.1	26.5	25.3
1854	29.4	23.5	24.4	27.4	30.0	34.8
1855	24.3	23.0	23.3	25.1	25.5	24.6
1856	22.1	21.5	21.1	23.0	23.3	21.8
1857	22.4	21.2	21.5	23.8	24.6	21.5
1858	23.9	22.4	22.9	24.5	25.8	24.0
1859	22.7	21.4	21.7	24.1	24.0	22.6
1860	22.5	22.2	21.2	23.3	24.1	22.1
1861	23.2	22.1	22.3	25.4	24.0	22.8
1862	23.6	22.0	22.0	26.3	26.0	22.7
1863	24.5	23.0	23.8	27.1	26.5	23.3
1864	26.6	24.6	25.4	30.0	29.0	25.4
1865	24.6	22.7	24.5	27.5	26.4	23.2
1866	26.5	22.6	25.3	27.5	34.0	24.1
1867	23.0	21.8	23.1	25.1	24.2	22.0
1868	23.6	22.3	22.9	25.6	25.6	22.9
1869	24.6	22.2	23.5	26.8	28.0	23.9
1870	24.1	23.8	23.6	26.1	25.1	23.5
Average Number living to One Death annually (1840-70)	41	44	44	40	38	40

NOTE.—The populations upon which these rates of mortality have been calculated are deduced from the numbers enumerated at the four Censuses of 1841, 1851, 1861, and 1871. The deaths used are those registered in the complete years. Certain alterations affecting the West and Central groups of districts were made in the year 1868, but corrections have not been made in the results given in this Table for years prior to 1861.

EMIGRATION FROM THE UNITED KINGDOM. (From the Thirty-first Report of the Emigration Commissioners.)

TABLE 52.—Emigration in each of the Fifty-six Years from 1815 to 1870 inclusive.

YEARS.	NORTH AMERICAN COLONIES.	UNITED STATES.	AUSTRALIAN COLONIES AND NEW ZEALAND.	ALL OTHER PLACES.	TOTAL.
1815	680	1,209	*	192	2,081
1816	3,370	9,022	*	118	12,510
1817	9,797	10,280	*	557	20,634
1818	15,136	12,429	*	222	27,787
1819	23,534	10,674	*	579	34,787
1820	17,921	6,745	*	1,063	25,729
1821	12,955	4,958	*	384	18,297
1822	16,013	4,137	*	279	20,429
1823	11,355	5,032	*	163	16,550
1824	8,774	5,152	*	99	14,025
1825	8,741	5,551	485	114	14,891
1826	12,818	7,063	903	116	20,900
1827	12,648	14,526	715	114	28,003
1828	12,084	12,817	1,056	135	26,092
1829	13,307	15,678	2,016	197	31,198
1830	30,574	24,887	1,242	204	56,907
1831	58,067	23,418	1,561	114	83,160
1832	66,339	32,872	3,733	196	103,140
1833	28,808	29,109	4,093	517	62,527
1834	40,060	33,074	2,800	288	76,222
1835	15,573	26,720	1,860	325	44,478
1836	34,226	37,774	3,124	293	75,417
1837	29,884	36,770	5,054	326	72,034
1838	4,577	14,332	14,021	292	33,222
1839	12,658	33,536	15,786	227	62,207
1840	32,293	40,642	15,850	1,958	90,743
1841	38,164	45,017	32,625	2,786	118,592
1842	54,123	63,852	8,534	1,835	128,344
1843	23,518	28,335	3,478	1,881	57,212
1844	22,924	43,660	2,229	1,873	70,686
1845	31,803	58,538	830	2,330	93,501
1846	43,439	82,239	2,347	1,826	129,851
1847	109,680	142,154	4,949	1,487	258,270
1848	31,065	188,233	23,904	4,887	248,089
1849	41,367	219,450	32,191	6,490	299,498
1850	32,961	223,078	16,037	8,773	280,849
1851	42,605	267,357	21,532	4,472	335,966
1852	32,873	244,261	87,881	3,749	368,764
1853	34,522	230,885	61,401	3,129	329,937
1854	43,761	193,065	83,237	3,366	323,429
1855	17,966	103,414	52,309	3,118	176,807
1856	16,378	111,837	44,584	3,755	176,554
1857	21,001	126,905	61,248	3,721	212,875
1858	9,704	59,716	39,295	5,257	113,972
1859	6,689	70,303	31,013	12,427	120,432
1860	9,786	87,500	24,302	6,881	128,469
1861	12,707	49,764	23,738	5,561	91,770
1862	15,522	58,706	41,843	5,143	121,214
1863	18,083	146,813	53,054	5,808	223,758
1864	12,721	147,042	40,942	8,195	208,900
1865	17,211	147,258	37,283	8,049	209,801
1866	13,255	161,000	24,097	6,530	204,882
1867	15,503	159,275	14,466	6,709	195,953
1868	21,062	155,532	12,809	6,922	196,325
1869	33,891	203,001	14,901	6,234	258,027
1870	35,295	196,075	17,065	8,505	256,940
TOTAL	1,391,771	4,472,672	988,423	160,771	7,013,637
Average annual emigration from the United Kingdom					
From 1815 to 1870 125,243					
For the 10 years ending 1870 196,757					

* The Customs returns do not distinguish the emigration to Australia during these 10 years, but it appears from other sources that the emigrants who went to this country were in 1821, 320; in 1822, 875; in 1823, 543; in 1824, 780; and in 1825, 458 persons. These numbers are not included in the totals of this Table.

TABLE 53.—Emigration in 1870.

DESTINATION.	AGE, SEX, &c. OF EMIGRANTS EMBARKED.										NATIVE COUNTRY OF EMIGRANTS.					
	Adults.				Children, from 1 to 12 Years.		Infants.		Not distin- guished as to Age.		TOTAL.	English.	Scotch.	Irish.	Foreigners.	Not distin- guished.
	Married.		Single.		M.	F.	M.	F.	M.	F.						
	M.	F.	M.	F.												
To the United States -	19,935	24,183	73,112	34,144	16,735	14,762	4,797	4,079	2,742	1,586	196,075	68,935	16,640	67,891	38,281	4,328
To British North America	4,155	4,938	12,246	4,109	3,987	3,697	1,157	951	43	12	35,295	20,824	3,467	2,877	8,072	55
To Australasia - -	1,933	2,074	6,030	3,798	1,366	1,359	242	218	33	12	17,065	11,165	2,192	3,169	491	48
To all other places - -	2,294	962	2,055	741	857	335	97	62	1,149	453	8,505	4,369	636	346	1,552	1,602
To all places from ports at which there are Go- vernment Emigration Officers - - - - -	26,173	31,392	92,252	42,183	22,036	19,978	6,022	5,242	3,967	2,063	251,308	101,840	22,697	73,593	47,145	6,033
To all places from other ports - - - - -	2,144	765	1,191	609	409	175	271	68	-	-	5,632	3,453	238	690	1,251	-
TOTAL - - - - -	28,317	32,157	93,443	42,792	22,445	20,153	6,293	5,310	3,967	2,063	256,940	105,293	22,935	74,283	48,396	6,033

TABLE 54.—Occupations, Sex, and general Destination of the Emigrants in 1870, so far as can be ascertained from the PASSENGER LISTS furnished by the CUSTOM HOUSE AUTHORITIES.

OCCUPATION.	UNITED STATES.	BRITISH NORTH AMERICA.	AUSTRAL-ASIA.	ALL OTHER PLACES.	TOTAL.
ADULT MALES.					
Agricultural Labourers, Gardeners, Carters, &c. - - - - -	380	181	1,161	28	1,750
Bakers, Confectioners, &c. - - - - -	185	38	35	3	261
Blacksmiths and Farriers - - - - -	107	52	67	8	234
Bookbinders and Stationers - - - - -	13	5	4	-	22
Boot and Shoe Makers - - - - -	427	74	51	3	555
Braziers, Tinsmiths, Whitesmiths, &c. - - - - -	73	19	24	-	116
Brick and Tile Makers, Potters, &c. - - - - -	123	27	10	-	160
Bricklayers, Masons, Plasterers, Slaters, &c. - - - - -	704	267	90	7	1,068
Builders - - - - -	35	7	12	1	55
Butchers, Poulterers, &c. - - - - -	105	23	32	5	165
Cabinet Makers and Upholsterers - - - - -	105	22	15	2	144
Carpenters and Joiners - - - - -	2,022	514	190	15	2,741
Carvers and Gilders - - - - -	24	2	-	-	26
Clerks - - - - -	543	141	264	133	1,081
Clock and Watch Makers - - - - -	15	7	11	3	36
Coach Makers and Trimmers - - - - -	19	3	14	3	39
Coal Miners - - - - -	533	3	19	-	555
Coopers - - - - -	504	14	20	1	539
Cutlers - - - - -	36	1	1	-	38
Domestic Servants - - - - -	342	53	64	12	471
Dyers - - - - -	39	7	7	-	53
Engine Drivers, Stokers, &c. - - - - -	17	10	8	2	37
Engineers - - - - -	203	64	80	47	394
Engravers - - - - -	22	5	1	-	28
Farmers - - - - -	5,665	1,477	414	37	7,593
Gentlemen, Professional Men, Merchants, &c. - - - - -	6,598	1,246	1,077	1,024	9,945
Jewellers and Silversmiths - - - - -	45	5	9	6	65
Labourers, General - - - - -	50,572	9,841	1,603	186	62,202

TABLE 54 continued.—OCCUPATIONS, SEX, and general DESTINATION of the EMIGRANTS in 1870.

OCCUPATION.	UNITED STATES.	BRITISH NORTH AMERICA.	AUSTRAL-ASIA.	ALL OTHER PLACES.	TOTAL.
ADULT MALES—continued.					
Locksmiths, Gunsmiths, &c. - - - - -	16	11	2	-	29
Millers, Maltsters, &c. - - - - -	50	23	10	2	85
Millwrights - - - - -	206	4	16	-	226
Miners and Quarrymen - - - - -	4,144	144	425	56	4,769
Painters, Paperhangers, Plumbers, and Glaziers - - - - -	193	84	36	4	317
Pensioners - - - - -	3	14	2	1	20
Printers - - - - -	65	23	16	1	105
Rope Makers - - - - -	3	3	3	-	9
Saddlers and Harness Makers - - - - -	30	14	14	3	61
Sail Makers - - - - -	6	-	-	-	6
Sawyers - - - - -	24	30	9	1	64
Seamen - - - - -	166	32	48	16	262
Shipwrights - - - - -	23	35	27	-	85
Shopkeepers, Shopmen, Warehousemen, &c. - - - - -	221	46	123	45	435
Smiths, General - - - - -	868	54	16	-	938
Spinners and Weavers - - - - -	407	24	3	-	434
Sugar Bakers, Boilers, &c. - - - - -	27	-	1	3	31
Surveyors - - - - -	11	7	4	-	22
Tailors - - - - -	624	33	30	7	694
Tallow Chandlers and Soap Makers - - - - -	2	-	-	-	2
Tanners and Curriers - - - - -	14	4	7	2	27
Turners - - - - -	16	5	4	-	25
Wheelwrights - - - - -	17	6	21	2	46
Wool Combers and Sorters - - - - -	1	-	5	-	6
Trades and Professions not before specified - - - - -	7,374	499	552	248	8,673
Not distinguished - - - - -	9,080	1,198	1,306	2,432	14,016
ADULT FEMALES.					
Domestic and Farm Servants, Nurses, &c. - - - - -	8,677	760	2,103	116	11,656
Gentlewomen and Governesses - - - - -	600	143	172	93	1,008
Milliners, Dressmakers, and Needlewomen - - - - -	232	7	172	1	412
Married Women - - - - -	24,183	4,938	2,074	962	32,157
Shopwomen - - - - -	-	8	7	-	15
Trades and Professions not before specified - - - - -	74	8	62	3	147
Not distinguished - - - - -	24,561	3,183	1,282	528	29,554
CHILDREN.					
Male Children, 1 to 12 years - - - - -	16,735	3,987	1,366	357	22,445
Female do. do. - - - - -	14,762	3,697	1,359	335	20,153
Infants, Males - - - - -	4,737	1,157	242	97	6,293
Do. Females - - - - -	4,079	951	218	62	5,310
Not distinguished as to age, Males - - - - -	2,742	43	33	1,149	3,967
Do. Do. Females - - - - -	1,586	12	12	453	2,063
TOTAL - - - - -	196,075	35,295	17,065	8,505	256,940

TABLE 55.—RETURN of the AGES, RATING, and CAUSES of DEATHS of 4523 Seamen reported to the BOARD OF TRADE as having died in the British Merchant Service in the Year 1870. (Parliamentary Return, No. 168, Session of 1871.)

RATING OF THE SEAMEN WHO DIED.			
Mates - - -	355	Surgeons - - -	16
Midshipmen - - -	2	Stewards - - -	314
Quartermasters - - -	16	Cooks - - -	
Boatswains - - -	140	Carpenters - - -	130
Able seamen - - -	1,766	Sailmakers - - -	35
Ordinary seamen - - -	417	Minor capacities - - -	47
Apprentices and boys	362	Engineers - - -	70
		TOTAL	4,523

AGES OF SEAMEN AT DEATH.			
Under 21 years - - -	901	Over 60 years - - -	6
21-30 years - - -	1,821	Unknown - - -	652
31-40 years - - -	724		
41-50 years - - -	328	TOTAL	4,523
51-60 years - - -	91		

CAUSES OF DEATH OF SEAMEN.				
Class I.	Deaths.	ORDER 3.	Deaths.	
ORDER 1.		Laryngitis - - -	59	
Small-pox - - -	19	Bronchitis - - -		
Measles - - -	-	Pleurisy - - -		
Quinsy (included with diseases of Respiratory Organs, Class III., Order 3.)	-	Pneumonia - - -		
Fever - - -	254	Asthma - - -		
Erysipelas (included with diseases of Integumentary System, Class III., Order 8.)	-	Lung disease, &c. - - -		
ORDER 2.		ORDER 5.		
Dysentery - - -	137	Nephritis - - -	30	
Diarrhœa - - -	72	Ischuria - - -		
Cholera - - -	90	Bright's disease (Nephria) - - -		
Ague - - -	7	Calculus (Stone) - - -		
Yellow fever - - -	210	Cystitis - - -		
Rheumatism - - -	7	Kidney disease, &c. - - -		
ORDER 3.		ORDER 8.		
Purpura and Scurvy - - -	6	Phlegmon - - -	15	
Class II.		Ulcer - - -		
ORDER 2.		Skin disease, &c. - - -		
Phthisis - - -	200			
Class III.		Class V.		
ORDER 1.		ORDER 1.		
Cephalitis - - -	96	(ACCIDENT OR NEGLIGENCE.)		
Apoplexy - - -			Drowning - { by accident - - -	989
Paralysis - - -			{ by wreck - - -	1,655
Insanity - - -			Other accidental deaths - - -	302
Epilepsy - - -				
Convulsions - - -			ORDER 3.	
Brain disease, &c. - - -		(HOMICIDE.)		
ORDER 2.		Murder and Manslaughter - - -	13	
Pericarditis - - -	103	ORDER 4.		
Aneurism - - -			(SUICIDE.)	
Heart disease, &c. - - -			Means not stated - - -	21
		TOTAL specified Causes	4,285	
		Causes not specified	238	
		Total	4,523	

TABLE 56. POPULATION OF THE UNITED KINGDOM, with Army, Navy, and Merchant Seamen abroad belonging thereto.*

(See note at foot of pp. lxxx-lxxxi.)

Middle of the Census Years.	PERSONS.	MALES.	FEMALES.
1801 -	16,302,410	8,096,082	8,206,328
1811 -	18,532,522	9,194,348	9,338,174
1821 -	21,300,573	10,519,256	10,781,317
1831 -	24,423,588	12,004,025	12,419,563
1841 -	27,077,095	13,325,889	13,751,206
1851 -	27,764,034	13,656,998	14,107,036
1861 -	29,358,927	14,397,427	14,961,500
1871 -	31,865,070	15,565,923	16,299,147

* In estimating the number of men in the Army, Navy, and Merchant Service abroad, the proportion belonging to foreign countries and the colonies has been excluded. In 1811 the troops and seamen were 640,500, but as this number included natives of colonies and foreign parts, only 502,536 were taken.

[The above numbers have been deduced by raising the enumerated population of the United Kingdom, including the islands in the British Seas, and the Army, Navy, and Merchant Service abroad (see Table 9. p. 84. of Vol. III. Census of England and Wales, 1861, and Preliminary Census Report 1871, page xxiii), up to the middle of the respective Census years, by the addition of one quarter of a year's increase at the rate which prevailed during the previous decade. The numbers used for 1871 are unrevised, as published in the Preliminary Report.]

TABLE 57.—Logarithms of the above Population of the UNITED KINGDOM.

Middle of the Census Years.	PERSONS.	MALES.	FEMALES.
1801 - - -	7.2122518	6.9082749	6.9141489
1811 - - -	7.2679345	6.9635210	6.9702620
1821 - - -	7.3283913	7.0219850	7.0326718
1831 - - -	7.3878095	7.0793269	7.0941063
1841 - - -	7.4326020	7.1246962	7.1383408
1851 - - -	7.4434825	7.1353552	7.1494358
1861 - - -	7.4677402	7.1582849	7.1749751
1871 - - -	7.5033149	7.1921748	7.2121649

TABLE 60.—Mean Annual Value of Meteorological Elements

PARALLELS of LATITUDE, &c.	Mean Elevation in Feet above the Sea Level.	Barometer.		Thermometer.						Mean Temperature	
		Mean.	Mean Monthly Range.	Mean of the highest Monthly Readings.	Mean of the lowest Monthly Readings.	Mean Monthly Range of Readings.	Mean of all the highest Daily Readings.	Mean of all the lowest Daily Readings.	Mean Daily Range.	Of the Air.	Of the Dew- point.
Guernsey - - -	204	29.692	0.983	66.7	33.4	33.3	55.2	46.3	8.9	49.7	44.6
Between the latitudes,—											
50° and 51° - - -	77	29.724	1.091	72.6	26.2	46.4	57.0	42.7	14.3	49.3	43.6
51° and 52° - - -	188	29.703	1.120	77.1	22.0	55.1	58.1	40.9	17.2	48.7	42.3
52° and 53° - - -	160	29.682	1.208	74.7	23.6	51.1	56.9	41.1	15.8	48.4	42.3
53° and 54° - - -	249	29.683	1.293	71.1	25.4	45.7	55.3	41.4	13.9	47.4	41.0
54° and 55° - - -	278	29.648	1.332	71.1	22.1	49.0	54.4	39.7	14.7	46.4	42.0
North Shields - -	124	29.714	1.497	67.5	26.6	40.9	53.9	41.2	12.7	46.1	41.4
Miltown (Ireland) -	200	29.650	1.277	69.8	24.3	45.5	54.6	40.8	13.8	47.1	41.6
Between the latitudes,—											
50° and 55° - - -	190	29.688	1.209	73.3	23.9	49.4	56.3	41.2	15.1	48.0	42.2

TABLE 61.—Meteorology of Greenwich

YEARS.	Mean Weekly Movement of the Air in Miles.*		Fall of Rain in Inches.	Departure from Average of 22 Years.	Mean Dryness of Atmosphere.		Mean TEMPERATURE of the AIR.	Departure from Average of 22 Years.
	Miles.	Miles.			°	°		
1849 - - -	1808	+ 58	23.9	- 0.1	6.6	+ 0.7	50.0	+ 0.6
1850 - - -	1841	+ 91	19.7	- 4.3	6.1	+ 0.2	49.8	- 0.1
1851 - - -	1730	- 20	21.6	- 2.4	6.5	+ 0.6	49.2	- 0.2
1852 - - -	1781	+ 31	34.2	+10.2	7.4	+ 1.5	50.6	+ 1.2
1853 - - -	1597	-153	29.0	+ 5.0	6.2	+ 0.3	47.7	- 1.7
1854 - - -	1731	- 19	18.7	- 5.3	4.7	- 1.2	48.9	- 0.5
1855 - - -	1659	- 91	21.1	- 2.9	4.5	- 1.4	47.1	- 2.3
1856 - - -	1775	+ 25	22.2	- 1.8	5.6	- 0.3	49.0	- 0.4
1857 - - -	1562	- 88	21.4	- 2.6	5.2	- 0.7	51.0	+ 1.6
1858 - - -	1626	-124	17.8	- 6.2	6.5	+ 0.6	49.2	- 0.2
1859 - - -	1598	-152	25.9	+ 1.9	6.0	+ 0.1	50.7	+ 1.3
1860 - - -	1676	- 74	32.0	+ 8.0	4.6	- 1.3	47.0	- 2.4
1861 - - -	1666	- 84	20.8	- 3.2	5.0	- 0.9	49.4	0.0
1862 - - -	1680	- 70	26.2	+ 2.2	4.7	- 1.2	49.5	+ 0.1
1863 - - -	1775	+ 25	20.0	- 4.0	6.0	+ 0.1	50.3	+ 0.9
1864 - - -	1597	-153	16.7	- 7.3	7.0	+ 1.1	48.5	- 0.9
1865 - - -	1553	-197	29.0	+ 5.0	6.2	+ 0.3	50.3	+ 0.9
1866 - - -	1917	+167	30.7	+ 6.7	5.6	- 0.3	49.8	+ 0.4
1867 - - -	1981	+231	28.4	+ 4.4	5.6	- 0.3	48.6	- 0.8
1868 - - -	2029	+279	25.2	+ 0.8	6.8	+ 0.9	51.5	+ 2.1
1869 - - -	2043	+293	24.0	0.0	5.7	- 0.2	49.5	+ 0.1
1870 - - -	1872	+122	18.5	- 5.5	6.7	+ 0.8	48.7	- 0.7
Average - - -	1750	-	24.0	-	5.9	-	49.4	-

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

in the Year 1870 for different Parallels of Latitude.

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. Saturation = 100.	Mean Weight of a Cubic Foot of Air.	Wind.				Mean Amount of Cloud (0-10).	Rain.		PARALLELS of LATITUDE, &c.	
					Relative Proportion of					Number of Days it fell.	Amount collected.		
					N.	E.	S.	W.					
in. .806	grs. 3.5	gr. 0.7	83	grs. 541	1.5	9	7	7	8	4.7	129	25.1	Guernsey. Between the latitudes,—
.296	3.3	0.8	81	544	1.2	9	6	7	9	4.9	125	23.2	50° and 51°
.283	3.2	0.9	80	542	0.9	8	6	6	10	5.8	134	22.8	51° and 52°
.281	3.1	0.9	80	543	0.8	7	6	6	11	6.1	140	19.9	52° and 53°
.269	3.1	0.8	80	542	1.2	6	7	5	12	6.3	153	29.1	53° and 54°
.274	3.1	0.7	84	544	..	6	6	8	11	6.0	148	26.6	54° and 55°
.268	2.9	0.7	84	546	1.7	9	5	6	10	6.4	202	25.1	North Shields.
.271	3.1	0.8	82	543	1.9	7	5	11	8	4.8	172	26.5	Miltown (Ireland).
													Between the latitudes,—
.281	3.2	0.8	81	543	1.0	7	6	6	11	5.8	141	24.3	50° and 55°

in the Twenty-two Years 1849-1870.

MEAN TEMPERATURES of the AIR in the Quarters ending the last day of										YEARS.
March.	Departure from Average of 22 Years.	June.	Departure from Average of 22 Years.	Sept.	Departure from Average of 22 Years.	Dec.	Departure from Average of 22 Years.			
°	°	°	°	°	°	°	°			
41.9	+ 2.1	51.7	- 1.1	61.0	+ 0.6	44.8	+ 0.4			1849
39.4	- 0.4	53.5	+ 0.7	59.6	- 0.8	44.7	+ 0.3			1850
41.9	+ 2.1	51.5	- 1.3	59.8	- 0.6	43.7	- 0.7			1851
41.4	+ 1.4	51.2	- 1.6	61.8	+ 1.4	43.1	+ 3.7			1852
38.1	- 1.7	51.8	- 1.0	58.5	- 1.9	42.3	- 2.1			1853
40.8	+ 1.0	51.7	- 1.1	59.8	- 0.6	43.7	- 0.7			1854
34.1	- 5.7	50.5	- 2.3	60.4	0.0	42.7	- 1.7			1855
40.0	+ 0.2	52.3	- 0.5	59.9	- 0.5	44.2	- 0.2			1856
39.2	- 0.6	53.8	+ 1.0	63.3	+ 2.9	47.9	+ 3.5			1857
37.8	- 2.0	54.3	+ 1.5	61.0	+ 0.6	43.8	- 0.6			1858
43.3	+ 3.5	53.7	+ 0.9	62.8	+ 2.4	43.3	- 1.1			1859
38.8	- 1.0	50.5	- 2.3	56.2	- 4.2	42.6	- 1.8			1860
39.9	+ 0.1	51.8	- 1.0	60.4	0.0	45.5	+ 1.1			1861
41.0	+ 1.2	53.3	+ 0.5	58.8	- 1.6	45.0	+ 0.6			1862
42.6	+ 2.8	53.1	+ 0.3	58.8	- 1.6	46.8	+ 2.4			1863
37.9	- 1.9	53.1	+ 0.3	59.4	- 1.0	43.7	- 0.7			1864
36.5	- 3.3	56.2	+ 3.4	62.5	+ 2.1	46.0	+ 1.6			1865
41.2	+ 1.4	53.0	+ 0.2	58.9	- 1.5	46.2	+ 1.8			1866
38.9	- 0.9	53.5	+ 0.7	59.7	- 0.7	42.5	- 1.9			1867
41.4	+ 1.6	55.8	+ 3.0	63.9	+ 3.5	45.1	+ 0.7			1868
41.3	+ 1.5	52.0	- 0.8	61.4	+ 1.0	43.3	- 1.1			1869
38.0	- 1.8	54.4	+ 1.6	60.7	+ 0.3	41.6	- 2.8			1870
39.8	-	52.8	-	60.4	-	44.4	-			Average.