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42(R7)

TWENTY-THIRD
ANNUAL REPORT

OF THE

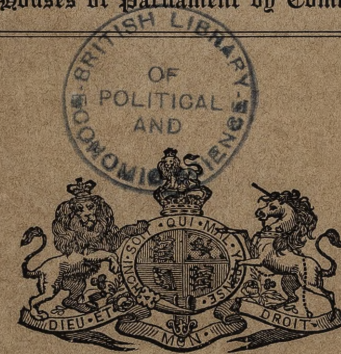
REGISTRAR-GENERAL

OF

BIRTHS, DEATHS, AND MARRIAGES

IN ENGLAND.

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



LONDON:

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FOR HER MAJESTY'S STATIONERY OFFICE.

1862.

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Dated 1860

REPORT

TO

The Right Honourable Sir GEORGE GREY, Bart., M.P., Her Majesty's
Principal Secretary of State for the Home Department,
&c. &c. &c.

*General Register Office, Somerset House,
15th April 1862.*

SIR,
I HAVE the honour to submit to you my Annual Report for the year 1860.

The aggregate number of names enrolled in the Register Books of England and Wales, in that year, was not equal to the number in 1859; but the decrease is not a subject of regret, for it arose chiefly from the fact that the mortality was comparatively low in 1860. The deaths were 18,000 less than they had been in the previous year; the births were nearly 5000 less; but the marriages were more numerous than they had been either then or at any former time.

The men and women married in the year were 340,312; the children born 684,048; the persons of all ages who died 422,721; and together they formed a total of 1,447,081, which, however, does not consist to its full extent of *different* persons; for it unfortunately happened to a certain proportion of them, that they were implicated in two out of the three events. To many, the first dawn of life abruptly descended into night. To some the year of marriage was the year of death.

The facts to which the present Report relates belong to the year which preceded that of the Census. When the population was enumerated on 8th April 1861, it was found to be 20,066,224; and that its rate of increase in the last decennium had been 12 per cent. Accepting these

TABLE I.—Estimated POPULATION, with the Number of MARRIAGES, BIRTHS, and DEATHS registered in England in each Year from 1838 to 1860.

| Years ended Dec. 31st | Estimated POPULATION in England in the Middle of the Years.* | MARRIAGES. | PERSONS <i>Married.</i> | BIRTHS (exclusive of Still-born). | DEATHS. | Excess of Births over Deaths. |
|--------------------------|--|------------|----------------------------|---|---------|-------------------------------------|
| 1838 | 15,312,256 | 118,067 | 236,134 | 463,787 | 342,760 | 121,027 |
| 1839 | 15,515,296 | 123,166 | 246,332 | 492,574 | 338,984 | 153,590 |
| 1840 | 15,721,029 | 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 | 16,128,793 | 118,825 | 237,650 | 517,739 | 349,519 | 168,220 |
| 1843 | 16,320,479 | 123,818 | 247,636 | 527,325 | 346,445 | 180,880 |
| 1844 | 16,519,565 | 132,249 | 264,498 | 540,763 | 356,933 | 183,830 |
| 1845 | 16,721,081 | 143,743 | 287,486 | 543,321 | 349,366 | 194,155 |
| 1846 | 16,925,051 | 145,664 | 291,328 | 572,625 | 390,315 | 182,310 |
| 1847 | 17,131,512 | 135,845 | 271,690 | 539,965 | 423,304 | 116,661 |
| 1848 | 17,340,492 | 138,230 | 276,460 | 563,059 | 399,833 | 163,226 |
| 1849 | 17,552,020 | 141,883 | 283,766 | 578,159 | 440,839 | 137,320 |
| 1850 | 17,766,129 | 152,744 | 305,488 | 593,422 | 368,995 | 224,427 |
| 1851 | 17,982,849 | 154,206 | 308,412 | 615,865 | 395,396 | 220,469 |
| 1852 | 18,193,229 | 158,782 | 317,564 | 624,012 | 407,135 | 216,877 |
| 1853 | 18,404,421 | 164,520 | 329,040 | 612,391 | 421,097 | 191,294 |
| 1854 | 18,616,386 | 159,727 | 319,454 | 634,405 | 437,905 | 196,500 |
| 1855 | 18,829,104 | 152,118 | 304,236 | 635,043 | 425,703 | 209,340 |
| 1856 | 19,042,548 | 159,337 | 318,674 | 657,453 | 390,506 | 266,947 |
| 1857 | 19,256,680 | 159,097 | 318,194 | 663,071 | 419,815 | 243,256 |
| 1858 | 19,471,472 | 156,070 | 312,140 | 655,481 | 449,656 | 205,825 |
| 1859 | 19,686,895 | 167,723 | 335,446 | 689,881 | 440,781 | 249,100 |
| 1860 | 19,902,918 | 170,156 | 340,312 | 684,048 | 422,721 | 261,327 |

* The Population of each of the years since 1851 is deduced from the ascertained rate of increase observed in the twenty years, 1841-61; and an allowance is made for the decrease in the rate during the latter ten years.

results in conjunction with another fact which the last four censuses have revealed, viz., that the rate of increase has constantly descended during the last forty years, it is estimated that the population of England in the middle of the year 1860 was 19, 902, 918.

It will serve, with a multitude of other facts that are familiar to most readers, to give a vivid impression of the *vitality* of the English people, to state that when young men who have now barely reached their majority were born the annual marriages were about 120,000, and that in 1860 they exceeded 170,000.

The marriage-rate was well maintained through the greater part of the year, but especially in the Spring quarter, when Cheshire and Lancashire and generally the manufacturing districts appear to have regarded their position with a cheerful spirit. The average marriage-rate in 23 years was 1.64 per cent. (in other words 164 persons were married to 10,000 living in the population); but the rate in 1860 rose to 1.71. The average birth-rate in the same series of years was 3.311 per cent., whereas the rate in this year was 3.437; a satisfactory result, though not equal to that of 1859. The average death-rate was 2.231 per cent., but 1860 was unusually healthy, and its rate of mortality did not exceed 2.124, which is less than it had been in any of the twenty-two years during which the Registration Act had been in operation, with the exception of 1843, 1845, 1850, and 1856.

The whole year will be distinguished in meteorological annals; but it was the weather of the last six months that appears to have exercised its beneficial influence on the public health, and to have invested the facts with the value of a crucial experiment. At Greenwich the cold weather, which set in towards the end of January, continued with the exception of three weeks in May till the end of June. Wind, with frequent gales of long duration, prevailed during the whole period. The summer (July, August, September) witnessed a continuance of cold weather, which was "bad," in other respects besides cold; there was frequent rain, much cloud, scanty sunshine. But there was little diarrhoea, and the mortality fell remarkably. The last quarter of the year was generally cold; from the

TABLE II.—Proportion of MARRIAGES, BIRTHS, and DEATHS to the Population of England.

| Years ended Dec. 31st | To 100 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 | .771 | 1.542 | 3.029 | 2.238 | 130 | 65 | 33 | 45 |
| 1839 | .794 | 1.588 | 3.175 | 2.185 | 126 | 63 | 31 | 46 |
| 1840 | .780 | 1.560 | 3.195 | 2.238 | 128 | 64 | 31 | 44 |
| 1841 | .769 | 1.538 | 3.215 | 2.159 | 130 | 65 | 31 | 46 |
| 1842 | .737 | 1.474 | 3.211 | 2.168 | 136 | 68 | 31 | 46 |
| 1843 | .759 | 1.518 | 3.231 | 2.123 | 132 | 66 | 31 | 47 |
| 1844 | .801 | 1.602 | 3.273 | 2.161 | 125 | 62 | 31 | 46 |
| 1845 | .860 | 1.720 | 3.251 | 2.089 | 116 | 58 | 31 | 48 |
| 1846 | .861 | 1.722 | 3.383 | 2.306 | 116 | 58 | 30 | 43 |
| 1847 | .793 | 1.586 | 3.152 | 2.471 | 126 | 63 | 32 | 40 |
| 1848 | .797 | 1.594 | 3.247 | 2.306 | 125 | 63 | 31 | 43 |
| 1849 | .803 | 1.616 | 3.294 | 2.512 | 124 | 62 | 30 | 40 |
| 1850 | .860 | 1.720 | 3.340 | 2.077 | 116 | 58 | 30 | 48 |
| 1851 | .858 | 1.716 | 3.425 | 2.199 | 117 | 58 | 29 | 45 |
| 1852 | .873 | 1.746 | 3.430 | 2.238 | 115 | 57 | 29 | 45 |
| 1853 | .894 | 1.788 | 3.327 | 2.288 | 112 | 56 | 30 | 44 |
| 1854 | .858 | 1.716 | 3.408 | 2.352 | 117 | 58 | 29 | 43 |
| 1855 | .808 | 1.616 | 3.373 | 2.261 | 124 | 62 | 30 | 44 |
| 1856 | .837 | 1.674 | 3.453 | 2.051 | 119 | 60 | 29 | 49 |
| 1857 | .826 | 1.652 | 3.443 | 2.180 | 121 | 61 | 29 | 46 |
| 1858 | .802 | 1.604 | 3.366 | 2.309 | 125 | 62 | 30 | 43 |
| 1859 | .852 | 1.704 | 3.504 | 2.239 | 117 | 59 | 29 | 45 |
| 1860 | .855 | 1.710 | 3.437 | 2.124 | 117 | 58 | 29 | 47 |
| Mean . . | .820 | 1.639 | 3.311 | 2.231 | 122 | 61 | 30 | 45 |

NOTE.—The Table may be read thus:—In the year 1838 to every 100,000 persons living there were 771 marriages or 1542 persons married, 3029 births, 2238 deaths; the number of persons living to every marriage, person married, birth or death, was 130, 65, 33, and 45 respectively. A correction for increase of population has been made in calculating the above results.

18th December to the 29th the weather was of singular severity, the temperature at Greenwich having fallen in two instances to 7° and 8°. At Nottingham it fell to 8° below zero. There is no instance on record of a mean temperature for the four important months June, July, August, and September, being so low as it was in 1860. The fall of rain at Greenwich in June was 5.8 in. The rain-table does not extend further back than 1815, but in the long period that elapsed since that year there was no example of so great a fall in June. This amount, however, was greatly exceeded in more southern parts, especially Hampshire. The mean temperature of the air was below the average of 19 years in every month, except January, May, and October. The rain collected at Greenwich was 32 in., which is nearly 7 in. more than the average; and it fell on 192 days. The cold checked the development of those seeds of disease with which human beings are surrounded, particularly in towns; the abundant showers and high winds swept them away; and the result was a salubrious summer.

TABLE III.—MARRIAGES registered in ENGLAND in each Year from 1841 to 1860.

| YEARS ending 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. | | Superintendent Registrar's Office. | Quakers. | Jews. |
| | | | | | | | | | Roman Catholics. | Other Christian Denominations. | | | |
| 1841 | 122,406 | 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 | 123,318 | 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 | 13,335 | 120,000 | 12,240 | 2280 | 6284 | 3446 | 55 | 175 |
| 1845 | 143,743 | 10 | 16,013 | 92,867 | 1706 | 18,019 | 129,515 | 14,228 | 2816 | 7181 | 3977 | 74 | 180 |
| 1846 | 145,664 | 14 | 17,135 | 92,995 | 1862 | 18,503 | 130,500 | 15,155 | 3027 | 7669 | 4167 | 68 | 224 |
| 1847 | 135,845 | 14 | 17,052 | 84,863 | 1968 | 16,979 | 120,876 | 14,969 | 2961 | 7483 | 4258 | 83 | 184 |
| 1848 | 138,230 | 13 | 16,396 | 86,519 | 2170 | 15,871 | 121,469 | 16,761 | 3658 | 8060 | 4790 | 67 | 186 |
| 1849 | 141,883 | 18 | 16,697 | 90,644 | 2593 | 13,230 | 123,182 | 18,701 | 4199 | 8662 | 5558 | 53 | 229 |
| 1850 | 152,744 | 8 | 17,413 | 98,669 | 3136 | 11,733 | 130,959 | 21,785 | 5623 | 9626 | 6207 | 69 | 260 |
| 1851 | 154,206 | 8 | 17,781 | 99,406 | 3351 | 10,412 | 130,958 | 23,248 | 6570 | 9540 | 6813 | 65 | 260 |
| 1852 | 158,782 | 8 | 19,461 | 106,497 | 3610 | 4,306 | 133,882 | 24,900 | 7479 | 10017 | 7100 | 57 | 247 |
| 1853 | 164,520 | 8 | 20,624 | 109,166 | 3814 | 4,430 | 138,042 | 26,478 | 8375 | 10149 | 7698 | 68 | 288 |
| 1854 | 159,727 | 15 | 21,048 | 105,050 | 3811 | 4,185 | 134,109 | 25,618 | 7813 | 9873 | 7593 | 52 | 287 |
| 1855 | 152,113 | 14 | 20,386 | 99,546 | 3804 | 4,001 | 127,751 | 24,362 | 7344 | 9296 | 7441 | 57 | 224 |
| 1856 | 159,337 | 9 | 21,336 | 104,280 | 4045 | 3,949 | 133,619 | 25,718 | 7527 | 9710 | 8097 | 72 | 312 |
| 1857 | 159,097 | 9 | 21,250 | 102,962 | 3748 | 3,962 | 131,031 | 28,066 | 7360 | 10686 | 9642 | 67 | 311 |
| 1858 | 156,070 | 15 | 19,858 | 100,432 | 3787 | 3,990 | 128,082 | 27,988 | 6643 | 11094 | 9952 | 70 | 220 |
| 1859 | 167,723 | 19 | 20,345 | 107,737 | 4204 | 3,905 | 136,210 | 31,513 | 7756 | 12519 | 10844 | 70 | 324 |
| 1860 | 170,156 | 14 | 20,742 | 108,685 | 4243 | 3,686 | 137,370 | 32,786 | 7800 | 13342 | 11257 | 75 | 312 |

| YEARS ending 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. | Marriages in which one Signed. |
| 1841 | — | — | — | — | — | — | 5362 | 16,285 | 39,954 | 59,680 | — | — |
| 1842 | — | — | — | — | 15,619 | 10,579 | 5387 | 16,003 | 38,081 | 56,965 | — | — |
| 1843 | — | — | — | — | 16,305 | 10,811 | 5511 | 16,403 | 40,520 | 60,715 | — | — |
| 1844 | — | — | — | — | 16,941 | 11,133 | 5515 | 17,410 | 42,912 | 65,073 | — | — |
| 1845 | 119,539 | 6028 | 11,835 | 6341 | 18,176 | 12,369 | 6287 | 19,376 | 47,665 | 71,229 | — | — |
| 1846 | 121,324 | 5997 | 12,212 | 6131 | 18,343 | 12,128 | 6313 | 20,001 | 47,488 | 70,145 | — | — |
| 1847 | 112,576 | 5705 | 11,667 | 5397 | 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 | 124,031 | 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 | 69,312 | 36,186 | 44,879 |
| 1852 | 130,372 | 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 | 8886 | 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 | 6908 | 14,293 | 7579 | 21,872 | 14,487 | 8885 | 28,798 | 44,013 | 61,765 | 30,518 | 44,742 |
| 1858 | 127,165 | 6711 | 14,547 | 7644 | 22,191 | 14,355 | 9145 | 28,064 | 42,141 | 58,738 | 28,781 | 43,312 |
| 1859 | 137,005 | 7058 | 15,493 | 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 | 47,270 |

The fall of rain was greatest between latitudes 49° and 51°, near the first of which the amount in the year was 48 in. ; next to that region it was greatest between 53° and 56°. The smallest quantity fell at stations in the intervening space.

The excess of births over deaths was great ; it amounted to 261,327. Reckoning from the middle of the previous year to the same period in 1860, the natural increase may be stated at 716 daily, but the actual increase was probably 592. If the latter estimate is correct, it follows that while Irishmen, Scotchmen, colonists, and foreigners poured their tributary rills into the population, the great stream of emigration reduced it below its *natural* level, and the result was an average daily loss of 124 persons. The Emigration Commissioners account for a considerable part of the efflux, for it appears from their Reports that the number of emigrants of English origin returned to them was about 33,339, or a daily average of 91.

MARRIAGES.

There were 170,156 marriages in the year, of which 137,370 were solemnized according to the rites of the Established Church. It was mentioned above that marriages were more numerous than in the pre-

TABLE IV.

| YEARS. | MARRIAGES. | | Estimated to 100 persons living. | | Price of Wheat per Quarter. |
|-----------------------------------|------------------------|--------------------------------------|---|--|-----------------------------|
| | To 100 persons living. | By Banns to one Marriage by Licence. | Marriages of the higher and middle Classes. | Marriages of the Artizans and Labourers and other Classes. | |
| 1 | 2 | 3 | 4 | 5 | 6 |
| AVERAGE : | | | | | s. d. |
| Of 7 years of highest prices | .804* | 4.936 | .135 | .669 | 66 3 |
| Of 6 years of intermediate prices | .845 | 5.431 | .131 | .714 | 52 3 |
| Of 7 years of lowest prices | .830 | 5.429 | .129 | .701 | 43 2 |
| 1855 | .808 | 4.883 | .137 | .671 | 74 8 |
| 1854 | .858 | 4.991 | .143 | .715 | 72 5 |
| 1847 | .793 | 4.977 | .133 | .660 | 69 9 |
| 1856 | .837 | 4.888 | .142 | .695 | 69 2 |
| 1841 | .769 | 4.940 | .129 | .640 | 64 4 |
| 1842 | .737 | 5.072 | .121 | .616 | 57 3 |
| 1857 | .826 | 4.803 | .142 | .684 | 56 5 |
| 1846 | .861 | 5.427 | .134 | .727 | 54 8 |
| 1853 | .894 | 5.293 | .142 | .752 | 53 3 |
| 1860 | .855 | 5.240 | .137 | .718 | 53 3 |
| 1844 | .801 | 5.705 | .119 | .682 | 51 3 |
| 1845 | .860 | 5.799 | .126 | .734 | 50 10 |
| 1848 | .797 | 5.121 | .130 | .667 | 50 6 |
| 1843 | .759 | 5.490 | .117 | .642 | 50 1 |
| 1849 | .808 | 5.429 | .126 | .682 | 44 3 |
| 1858 | .802 | 5.058 | .132 | .670 | 44 3 |
| 1859 | .852 | 5.296 | .135 | .717 | 43 10 |
| 1852 | .873 | 5.472 | .135 | .738 | 40 9 |
| 1850 | .860 | 5.666 | .129 | .731 | 40 3 |
| 1851 | .858 | 5.591 | .130 | .728 | 38 6 |

* Disregarding the decimal point, this will read 804 marriages were celebrated to every 100,000 of the population ; 135 were marriages by licence, 669 were marriages by banns. It may be assumed that these two groups represent the whole of the corresponding classes of society, whether belonging to the Church or not.

vious year ; and it appears that all denominations, established and non-established, participated more or less in the increase. A very trifling decrease in Jewish marriages, which numbered 312, constituted the only exception. Those in the Superintendent Registrar's office (11,257) also increased ; and they formed rather more than a third of the whole number (32,786) not celebrated in the Established Church. Roman Catholic marriages (7,800) formed part of the remainder. Seventy-five were performed at Quakers' meetings.

Of the 137,370 marriages in Church, 108,685 were performed after publication of banns, 20,742 by licence, 4,243 upon Superintendent Registrar's certificate, 14 by special licence. But this statement is given as indicating proportions, not as a representation of the exact numbers, for in 3686 cases the clergy omitted to state whether the marriages were by licence or banns. The instances, however, in which this neglect occurs, exhibit a decided annual decrease.

The proportion of marriages by banns to those by licence was 5.24 to one. Wheat was at an average price of 53s. 3d., which may be termed "intermediate." By comparing groups of years, distinguished as dear, cheap, and moderate, it will be seen that those when moderate prices ruled were most favourable in the general opinion of the unmarried for laying the foundation of domestic establishments. The year 1860 helped to confirm that result. If *licence* and *banns* be taken as the respective badges of capital and labour, it may be shown that in years of middle and low prices marriage was most frequent in the working classes ; in years of high prices it was most frequent in the middle and upper classes ; but in the "intermediate" priced year of 1860 the marriage-rate was remarkably well maintained amongst rich and poor alike.

Of the bachelors who married, 139,440 chose spinsters, and of the widowers who married, 8260 selected widows. The bachelors who married widows were not quite so many as the widowers who got widows ; but it happened singularly enough, that the widowers who married spinsters were exactly equal to both. In other words, the whole number of widows who renewed the nuptial vow was 15,358 ; and the number of spinsters who married widowers was 15,358. All these proportions are kept with much uniformity year after year.

TABLE V.—MARRIAGES. The Proportion per Cent. of *Minors* of each Sex, of Males and Females who signed the Register with Marks, and of Persons who were *Widowers* or *Widows*.

| YEARS ended 31st December | To 100 Married. | | | | | | | | |
|---------------------------|---------------------------------------|----------|-------|---|----------|-------|-------------------------|---------|--------|
| | The Proportion under 21 Years of Age. | | | The Proportion who signed the Marriage Register with Marks. | | | The Proportion who were | | |
| | Males. | Females. | Mean. | Males. | Females. | Mean. | Widowers. | Widows. | Mean. |
| 1841 | 4.38 | 13.29 | 8.83 | 32.7 | 48.8 | 40.8 | *12.30 | *8.09 | *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 | 10.63 |
| 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 | 13.84 | 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 | 11.28 |
| 1854 | 5.77 | 18.03 | 11.90 | 30.0 | 42.7 | 36.4 | 13.62 | 9.01 | 11.32 |
| 1855 | 5.51 | 17.89 | 11.70 | 29.5 | 41.2 | 35.4 | 14.42 | 9.49 | 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 | 18.57 | 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 |

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

Re-marriages.—The number of widowers who entered into wedlock was to that of widows nearly as 8 to 5. Among persons who married, the proportion of those who did not marry for the first time was 11 per cent.

TABLE VI.—ENGLAND. MARRIAGES.—PROPORTIONAL NUMBER OF MARRIAGES IN THE SEVERAL COUNTIES OF ENGLAND DURING THE YEAR 1860; OF PERSONS WHO SIGNED THEIR NAMES; OF PERSONS NOT OF FULL AGE; AND OF THE RE-MARRIAGES OF WIDOWERS AND WIDOWS.

| No. | REGISTRATION COUNTIES. | Marriages to 100 persons living. | Signed their Names in Writing. | | 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. |
| | | | | | | | In 100 Men Married. | In 100 Women Married. |
| | ENGLAND - - - | *855 | 74.5 | 63.8 | 6.35 | 19.35 | 13.88 | 9.03 |
| | I.—LONDON - - - | 1.010 | 88.8 | 81.4 | 3.44 | 13.66 | 14.20 | 9.71 |
| | II.—SOUTH EASTERN COUNTIES. | | | | | | | |
| 1 | Surrey (<i>extra-metropolitan</i>) - - - | *623 | 76.3 | 82.0 | 3.48 | 17.90 | 11.59 | 8.53 |
| 2 | Kent (<i>extra-metropolitan</i>) - - - | *752 | 76.2 | 75.9 | 4.21 | 21.43 | 11.03 | 8.99 |
| 3 | Sussex - - - - - | *710 | 77.1 | 81.6 | 3.93 | 18.01 | 12.88 | 7.87 |
| 4 | Hampshire - - - - - | *811 | 77.4 | 76.1 | 3.60 | 16.90 | 12.95 | 10.98 |
| 5 | Berkshire - - - - - | *694 | 70.9 | 75.8 | 4.78 | 17.63 | 16.64 | 9.83 |
| | III.—SOUTH MIDLAND COUNTIES. | | | | | | | |
| 6 | Middlesex (<i>extra-metropolitan</i>) - - - | *516 | 79.5 | 80.1 | 4.44 | 16.83 | 13.33 | 6.88 |
| 7 | Hertfordshire - - - - - | *595 | 61.1 | 66.6 | 8.16 | 21.63 | 12.81 | 7.07 |
| 8 | Buckinghamshire - - - - - | *718 | 68.0 | 65.0 | 9.38 | 21.71 | 13.74 | 7.11 |
| 9 | Oxfordshire - - - - - | *704 | 69.5 | 71.7 | 5.89 | 18.34 | 13.53 | 8.22 |
| 10 | Northamptonshire - - - - - | *846 | 73.0 | 69.2 | 10.29 | 25.21 | 12.55 | 7.10 |
| 11 | Huntingdonshire - - - - - | *704 | 63.3 | 67.9 | 11.27 | 28.30 | 9.83 | 6.95 |
| 12 | Bedfordshire - - - - - | *794 | 59.0 | 54.8 | 15.02 | 26.26 | 14.30 | 6.03 |
| 13 | Cambridgeshire - - - - - | *698 | 64.5 | 65.5 | 9.73 | 23.55 | 13.03 | 8.79 |
| | IV.—EASTERN COUNTIES. | | | | | | | |
| 14 | Essex - - - - - | *645 | 63.3 | 69.1 | 6.30 | 22.25 | 14.79 | 9.60 |
| 15 | Suffolk - - - - - | *692 | 62.1 | 69.7 | 6.16 | 20.03 | 15.81 | 8.32 |
| 16 | Norfolk - - - - - | *742 | 64.6 | 70.0 | 7.12 | 18.71 | 14.27 | 8.07 |
| | V.—SOUTH WESTERN COUNTIES. | | | | | | | |
| 17 | Wiltshire - - - - - | *695 | 68.6 | 69.8 | 7.54 | 16.41 | 16.29 | 9.12 |
| 18 | Dorsetshire - - - - - | *788 | 70.8 | 71.0 | 7.74 | 16.32 | 14.78 | 7.95 |
| 19 | Devonshire - - - - - | *846 | 77.7 | 72.6 | 5.04 | 15.13 | 12.94 | 8.79 |
| 20 | Cornwall - - - - - | *766 | 64.9 | 56.9 | 8.78 | 20.82 | 10.82 | 6.52 |
| 21 | Somersetshire - - - - - | *744 | 69.9 | 69.4 | 7.48 | 16.33 | 14.76 | 8.41 |
| | VI.—WEST MIDLAND COUNTIES. | | | | | | | |
| 22 | Gloucestershire - - - - - | *898 | 77.0 | 73.2 | 6.53 | 16.53 | 14.97 | 9.02 |
| 23 | Herefordshire - - - - - | *690 | 69.1 | 71.1 | 3.28 | 13.13 | 9.71 | 9.58 |
| 24 | Shropshire - - - - - | *705 | 64.0 | 59.9 | 4.05 | 15.00 | 13.30 | 8.70 |
| 25 | Staffordshire - - - - - | *914 | 60.2 | 48.3 | 9.74 | 28.68 | 12.91 | 9.63 |
| 26 | Worcestershire - - - - - | *873 | 70.3 | 63.6 | 7.18 | 21.75 | 12.60 | 7.66 |
| 27 | Warwickshire - - - - - | *850 | 74.2 | 64.0 | 7.97 | 21.84 | 13.57 | 9.20 |
| | VII.—NORTH MIDLAND COUNTIES. | | | | | | | |
| 28 | Leicestershire - - - - - | *799 | 75.3 | 66.3 | 10.64 | 21.23 | 15.42 | 7.56 |
| 29 | Rutlandshire - - - - - | *698 | 82.4 | 78.8 | 4.24 | 13.94 | 8.48 | 9.70 |
| 30 | Lincolnshire - - - - - | *744 | 77.0 | 72.3 | 4.49 | 20.07 | 14.48 | 7.69 |
| 31 | Nottinghamshire - - - - - | *824 | 72.4 | 61.4 | 8.35 | 23.34 | 15.90 | 8.50 |
| 32 | Derbyshire - - - - - | *799 | 77.8 | 64.5 | 6.63 | 19.94 | 14.90 | 9.60 |
| | VIII.—NORTH WESTERN COUNTIES. | | | | | | | |
| 33 | Cheshire - - - - - | *852 | 72.9 | 54.9 | 5.65 | 16.13 | 14.50 | 8.54 |
| 34 | Lancashire - - - - - | 1.027 | 71.4 | 45.9 | 8.17 | 21.43 | 14.67 | 9.91 |
| | IX.—YORKSHIRE. | | | | | | | |
| 35 | West Riding - - - - - | *931 | 75.1 | 53.4 | 7.73 | 24.60 | 14.48 | 8.76 |
| 36 | East Riding (with York) - - - - - | *965 | 83.6 | 71.1 | 5.73 | 21.20 | 14.64 | 9.52 |
| 37 | North Riding - - - - - | *756 | 81.9 | 74.3 | 4.30 | 18.07 | 13.71 | 6.76 |
| | X.—NORTHERN COUNTIES. | | | | | | | |
| 38 | Durham - - - - - | *844 | 74.4 | 57.8 | 7.33 | 26.96 | 13.54 | 10.62 |
| 39 | Northumberland - - - - - | *885 | 84.1 | 69.4 | 3.95 | 14.86 | 11.96 | 7.98 |
| 40 | Cumberland - - - - - | *732 | 80.3 | 66.4 | 4.73 | 16.52 | 10.99 | 7.00 |
| 41 | Westmorland - - - - - | *708 | 85.1 | 77.7 | 5.35 | 16.74 | 13.49 | 7.91 |
| | XI.—MONMOUTHSHIRE AND WALES. | | | | | | | |
| 42 | Monmouthshire - - - - - | *846 | 56.5 | 48.9 | 4.46 | 21.53 | 11.88 | 10.37 |
| 43 | South Wales - - - - - | *799 | 64.4 | 42.1 | 5.77 | 15.94 | 12.47 | 8.58 |
| 44 | North Wales - - - - - | *679 | 61.1 | 46.1 | 4.65 | 11.25 | 14.90 | 7.91 |

The Table may be read thus by omitting the decimal points:—In England, among every 100,000 persons living 855 marriages took place; of 1,000 men married 745, of 1,000 women 638, signed the marriage register by writing their names; of 10,000 men married 635 were not of full age, of 10,000 women married 1935 were not of full age; of 10,000 men married 1338 were widowers, of the same number of women married 903 were widows.

Minors.—Of persons under 21 years of age who married in the year there were 10,797 males, 32,927 females. The proportion of minors to the total number of those who contracted marriage was 13 per cent. The number of women under age was more than three times as great as that of men.

Signatures of Persons marrying.—43,401 men and 61,677 women signed the marriage registers with marks. The ability to practise the art of penmanship to the extent of writing one's own name, and probably sufficient skill to carry the art beyond that limit, is more common now than it was in 1853, when about 50,000 men and 72,000 women signed with marks. This happened only seven years before 1860, and when those who married were fewer than they were in that year.

It must be gratifying to observe, that education, even though it be no more than the elementary, mechanical part of it, has made steady progress among the people during the last twenty years. The test of the marriage signature is the more unexceptionable, because it is not extracted directly for the purpose of proving proficiency and obtaining a reward, and because it shows that the art had been sufficiently acquired to remain with its possessor for years after school had been left, though it may have been that with hard labour on the farm or in the workshop opportunities were scanty for the practice of it. Nor is the ability to write one's own name contemptible as a measure of education; it is only small when compared with the greatness of human attainments. If a man can write his own name, it may be presumed that he can read it when written by another; still more that he will recognise that and other familiar words when he sees them in print; and it is even probable he will spell his way through a paragraph in a newspaper.

In 1841 and some subsequent years, the proportion of men who signed with marks was 33 to a hundred married. In 1847–52 it was 31; since 1852 it has fallen to 26. Within twenty years the proportion among women has fallen from 49 to 36. The progress in writing is constant; and any slight fluctuations which the tables show would naturally arise in consequence of the annual marriages having been comparatively more or less numerous in rural or town districts, where education is less or more advanced.

TABLE VII.—ENGLAND. NUMBER AND ANNUAL RATE PER CENT. OF MARRIAGES IN EACH QUARTER OF THE YEARS 1838–60.

| YEARS. | MARRIAGES registered. | | | | ANNUAL RATE per Cent. of MARRIAGES. | | | |
|--------|--|--------|--------|--------|--|-------|-------|-------|
| | 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 | *618 | *783 | *719 | *963 |
| 1839 - | 24,679 | 31,339 | 29,887 | 37,261 | *649 | *812 | *764 | *949 |
| 1840 - | 26,395 | 30,786 | 29,221 | 36,263 | *677 | *787 | *787 | *911 |
| 1841 - | 24,447 | 32,551 | 29,397 | 36,101 | *626 | *822 | *781 | *895 |
| 1842 - | 25,860 | 30,048 | 27,288 | 35,629 | *654 | *749 | *671 | *874 |
| 1843 - | 25,285 | 31,113 | 28,847 | 38,573 | *632 | *767 | *701 | *934 |
| 1844 - | 26,387 | 34,268 | 31,675 | 39,919 | *644 | *834 | *760 | *955 |
| 1845 - | 29,551 | 35,300 | 35,003 | 43,889 | *721 | *849 | *830 | 1.038 |
| 1846 - | 31,417 | 37,111 | 35,070 | 42,066 | *757 | *882 | *822 | *983 |
| 1847 - | 27,480 | 35,197 | 32,439 | 40,729 | *655 | *826 | *751 | *940 |
| 1848 - | 28,398 | 34,721 | 32,995 | 42,116 | *661 | *805 | *755 | *961 |
| 1849 - | 28,429 | 35,844 | 33,874 | 43,736 | *661 | *822 | *766 | *986 |
| 1850 - | 30,567 | 39,204 | 37,636 | 45,337 | *702 | *888 | *840 | 1.010 |
| 1851 - | 32,724 | 38,635 | 37,316 | 45,531 | *741 | *863 | *822 | 1.000 |
| 1852 - | 32,977 | 40,092 | 38,400 | 47,313 | *730 | *885 | *836 | 1.027 |
| 1853 - | 35,149 | 40,445 | 39,899 | 49,026 | *778 | *883 | *859 | 1.052 |
| 1854 - | 33,234 | 40,518 | 38,182 | 47,793 | *727 | *874 | *813 | 1.014 |
| 1855 - | 29,186 | 38,549 | 37,308 | 47,070 | *631 | *822 | *785 | *988 |
| 1856 - | 33,427 | 38,820 | 39,089 | 48,001 | *707 | *819 | *813 | *996 |
| 1857 - | 33,321 | 41,267 | 38,669 | 45,840 | *705 | *861 | *796 | *940 |
| 1858 - | 29,918 | 39,890 | 38,599 | 47,663 | *626 | *823 | *785 | *967 |
| 1859 - | 35,382 | 42,042 | 39,808 | 50,496 | *732 | *858 | *801 | 1.013 |
| 1860 - | 35,150 | 43,777 | 40,541 | 50,688 | *711 | *883 | *807 | 1.006 |

In connexion with the decrease in marks, it may be mentioned that the annual proportion of persons *under age* married within twenty years

TABLE VIII.—Showing the NUMBER of BUILDINGS REGISTERED for the SOLEMNIZATION of MARRIAGES, and on the Register on 31st December 1860.

| ENGLAND DIVISIONS AND REGISTRATION COUNTIES. | TOTAL. | SCOTTISH PRESBY- TERIANS. | | | United Presbyterian Church in England. | Independents. | Baptists. | United Brethren or Moravians. | Roman Catholics. | Unitarians. | WESLEYAN METHODISTS. | | | | | | | CALVINISTIC METHODISTS. | | New Church. Catholic and Apostolic Church. | All others. | |
|--|--------|---------------------------------|-------------------------|--|--|---------------|-----------|--|---------------------|-------------|------------------------|-------------------|--------------------------|----------------------|---------------------------------------|---|-------------------------------------|--|----|---|----------------|--|
| | | Church of Scotland. | United Presbyterians | Presbyterian Church in England. | | | | | | | Original Connexion. | New Connexion. | Primitive Methodists. | Bible Christians. | Wesleyan Methodist Association. | Wesleyan Reformers. Other Wesleyan Me- thodists. | Welsh Calvinistic Methodists. | Countess of Hunting- don's Connexion. | | | | |
| ENGLAND | 4403 | 16 | 56 | 60 | 1453 | 976 | 10 | 540 | 152 | 481 | 60 | 120 | 27 | 47 | 29 | 70 | 138 | 41 | 23 | 17 | 87 | |
| DIVISIONS. | | | | | | | | | | | | | | | | | | | | | | |
| 1 LONDON | 303 | 4 | 4 | 6 | 107 | 63 | 1 | 43 | 9 | 19 | 2 | 1 | 2 | 1 | 3 | 3 | 3 | 3 | 6 | 24 | 6 | |
| 2 SOUTH EASTERN | 363 | 1 | 1 | 2 | 134 | 90 | 1 | 41 | 15 | 41 | 1 | 1 | 1 | 1 | 3 | 15 | 1 | 1 | 3 | 6 | 6 | |
| 3 SOUTH MIDLAND | 341 | 1 | 1 | 1 | 128 | 139 | 2 | 22 | 4 | 31 | 1 | 6 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 2 | 2 | |
| 4 EASTERN | 257 | 1 | 1 | 1 | 107 | 70 | 1 | 22 | 7 | 26 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 5 SOUTH WESTERN | 477 | 1 | 1 | 1 | 161 | 103 | 2 | 33 | 27 | 77 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 6 WEST MIDLAND | 469 | 1 | 1 | 1 | 140 | 103 | 1 | 24 | 13 | 51 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 7 NORTH MIDLAND | 277 | 1 | 1 | 1 | 78 | 76 | 1 | 27 | 10 | 40 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 8 NORTH WESTERN | 578 | 4 | 8 | 16 | 152 | 63 | 1 | 137 | 37 | 61 | 18 | 15 | 1 | 14 | 1 | 15 | 5 | 4 | 11 | 1 | 1 | |
| 9 YORK | 406 | 1 | 1 | 2 | 129 | 55 | 2 | 56 | 13 | 73 | 15 | 24 | 1 | 8 | 6 | 13 | 5 | 4 | 3 | 1 | 4 | |
| 10 NORTHERN | 254 | 7 | 41 | 28 | 42 | 12 | 1 | 50 | 3 | 33 | 7 | 12 | 1 | 5 | 4 | 5 | 1 | 1 | 1 | 1 | 3 | |
| 11 WELSH | 678 | 1 | 1 | 1 | 275 | 202 | 1 | 25 | 9 | 29 | 1 | 1 | 1 | 1 | 1 | 1 | 129 | 1 | 1 | 1 | 1 | |
| I.—LONDON. | | | | | | | | | | | | | | | | | | | | | | |
| Middlesex (part of) | 214 | 4 | 4 | 4 | 72 | 37 | 1 | 31 | 7 | 15 | 1 | 1 | 1 | 1 | 3 | 3 | 3 | 3 | 5 | 19 | 3 | |
| Surrey (part of) | 59 | 1 | 1 | 1 | 24 | 16 | 1 | 8 | 2 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| Kent (part of) | 30 | 1 | 1 | 1 | 11 | 10 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| II.—SOUTH EASTERN DIV. | | | | | | | | | | | | | | | | | | | | | | |
| 1 Surrey (extra-metropolitan) | 34 | 1 | 1 | 1 | 18 | 5 | 1 | 5 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 2 Kent (extra-metropolitan) | 112 | 1 | 1 | 1 | 35 | 34 | 1 | 11 | 4 | 18 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 3 Sussex | 69 | 1 | 1 | 1 | 25 | 17 | 1 | 7 | 5 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| 4 Hampshire | 100 | 1 | 1 | 1 | 41 | 23 | 1 | 11 | 3 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| 5 Berkshire | 48 | 1 | 1 | 1 | 15 | 11 | 1 | 7 | 2 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| III.—SOUTH MIDLAND DIV. | | | | | | | | | | | | | | | | | | | | | | |
| 6 Middlesex (extra-metropol.) | 34 | 1 | 1 | 1 | 18 | 8 | 1 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 7 Hertfordshire | 47 | 1 | 1 | 1 | 29 | 14 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 8 Buckinghamshire | 41 | 1 | 1 | 1 | 16 | 12 | 1 | 3 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 9 Oxfordshire | 38 | 1 | 1 | 1 | 11 | 11 | 1 | 3 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 10 Northamptonshire | 65 | 1 | 1 | 1 | 23 | 28 | 1 | 3 | 1 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 11 Huntingdonshire | 23 | 1 | 1 | 1 | 4 | 16 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 12 Bedfordshire | 44 | 1 | 1 | 1 | 10 | 22 | 1 | 1 | 1 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 13 Cambridgeshire | 49 | 1 | 1 | 1 | 14 | 24 | 1 | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| IV.—EASTERN DIVISION. | | | | | | | | | | | | | | | | | | | | | | |
| 14 Essex | 91 | 1 | 1 | 1 | 48 | 17 | 1 | 10 | 1 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | |
| 15 Suffolk | 77 | 1 | 1 | 1 | 37 | 28 | 1 | 4 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 16 Norfolk | 89 | 1 | 1 | 1 | 22 | 25 | 1 | 8 | 4 | 13 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 5 | |
| V.—SOUTH WESTERN DIV. | | | | | | | | | | | | | | | | | | | | | | |
| 17 Wiltshire | 72 | 1 | 1 | 1 | 27 | 28 | 1 | 3 | 2 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 18 Dorsetshire | 44 | 1 | 1 | 1 | 20 | 4 | 1 | 8 | 4 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 19 Devonshire | 163 | 1 | 1 | 1 | 58 | 35 | 1 | 8 | 14 | 20 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 9 | |
| 20 Cornwall | 66 | 1 | 1 | 1 | 8 | 6 | 1 | 6 | 1 | 24 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 21 Somersetshire | 132 | 1 | 1 | 1 | 48 | 30 | 2 | 8 | 7 | 21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 7 | |
| VI.—WEST MIDLAND DIV. | | | | | | | | | | | | | | | | | | | | | | |
| 22 Gloucestershire | 119 | 1 | 1 | 1 | 44 | 39 | 1 | 10 | 3 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| 23 Herefordshire | 20 | 1 | 1 | 1 | 4 | 6 | 1 | 2 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 24 Shropshire | 58 | 1 | 1 | 1 | 21 | 10 | 1 | 10 | 1 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 25 Staffordshire | 123 | 1 | 1 | 1 | 31 | 14 | 1 | 33 | 4 | 21 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 26 Worcestershire | 52 | 1 | 1 | 1 | 10 | 11 | 1 | 8 | 5 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| 27 Warwickshire | 97 | 1 | 1 | 1 | 30 | 23 | 1 | 21 | 5 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| VII.—N. MIDLAND DIV. | | | | | | | | | | | | | | | | | | | | | | |
| 28 Leicestershire | 67 | 1 | 1 | 1 | 22 | 24 | 1 | 8 | 2 | 7 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 29 Rutlandshire | 6 | 1 | 1 | 1 | 3 | 3 | 1 | 3 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 30 Lincolnshire | 83 | 1 | 1 | 1 | 18 | 20 | 1 | 6 | 3 | 16 | 2 | 9 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 31 Nottinghamshire | 56 | 1 | 1 | 1 | 15 | 19 | 1 | 4 | 2 | 9 | 2 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 32 Derbyshire | 65 | 1 | 1 | 1 | 20 | 10 | 1 | 9 | 3 | 8 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| VIII.—N. WESTERN DIV. | | | | | | | | | | | | | | | | | | | | | | |
| 33 Cheshire | 95 | 1 | 1 | 1 | 29 | 8 | 1 | 13 | 10 | 13 | 3 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 2 | |
| 34 Lancashire | 483 | 4 | 7 | 13 | 123 | 55 | 1 | 124 | 27 | 48 | 15 | 12 | 1 | 11 | 1 | 10 | 3 | 4 | 11 | 1 | 12 | |
| IX.—YORK DIVISION. | | | | | | | | | | | | | | | | | | | | | | |
| 35 West Riding | 304 | 1 | 1 | 2 | 100 | 45 | 2 | 34 | 10 | 53 | 13 | 14 | 1 | 7 | 6 | 10 | 1 | 1 | 3 | 1 | 3 | |
| 36 East Riding (with York) | 61 | 1 | 1 | 1 | 18 | 8 | 1 | 10 | 2 | 10 | 2 | 6 | 1 | 1 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | |
| 37 North Riding | 41 | 1 | 1 | 1 | 11 | 2 | 1 | 12 | 1 | 10 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| X.—NORTHERN DIVISION. | | | | | | | | | | | | | | | | | | | | | | |
| 38 Durham | 98 | 1 | 1 | 1 | 17 | 5 | 1 | 25 | 1 | 18 | 6 | 5 | 1 | 2 | 2 | 2 | 1 | 1 | 1 | 1 | 1 | |
| 39 Northumberland | 101 | 6 | 26 | 21 | 10 | 6 | 1 | 16 | 1 | 6 | 1 | 3 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 40 Cumberland | 41 | 1 | 4 | 3 | 1 | 1 | 1 | 1 | 1 | 5 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 41 Westmorland | 14 | 1 | 1 | 1 | 4 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| XI.—WELSH DIVISION. | | | | | | | | | | | | | | | | | | | | | | |
| 42 Monmouthshire | 101 | 1 | 1 | 1 | 32 | 47 | 1 | 9 | 1 | 6 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 43 South Wales | 377 | 1 | 1 | 1 | 177 | 127 | 1 | 10 | 8 | 11 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |
| 44 North Wales | 200 | 1 | 1 | 1 | 63 | 28 | 1 | 6 | 1 | 12 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 | |

showed a remarkably steady increase. The labouring population, when

of births, as distinguished by sex, will probably be found, in a series of years, to be perhaps nearly the same in a district as it is in England. In Rutlandshire the proportion of boys born to a hundred girls, in 1859, was 111.3; in 1860 it was 99.5.

Seasons.—The annual birth-rate fell from 3.7 in the first quarter to 3.2 in the last. It continued to fall through the four seasons; which, however, does not hold as a general rule. The rule is that births are more numerous in the first half of the year than in the second.

TABLE IX.—ENGLAND. BIRTHS, 1860.—NUMBER and PROPORTION of Male and Female Children born in and out of Wedlock.

| REGISTRATION COUNTIES. | Male Children born. | Female Children born. | Born in Wedlock. | | Born out of Wedlock. | | MALES born to every 100 FEMALES so born. | MALES born in Wedlock to every 100 FEMALES so born. | MALES born out of Wedlock to every 100 FEMALES so born. | CHILDREN born out of Wedlock to every 100 Births. |
|----------------------------------|---------------------|-----------------------|------------------|----------|----------------------|----------|--|---|---|---|
| | | | Males. | Females. | Males. | Females. | | | | |
| ENGLAND | 349,799 | 334,249 | 327,640 | 312,715 | 22,159 | 21,534 | 104.7 | 104.8 | 102.9 | 6.4 |
| I.—LONDON | 47,645 | 45,769 | 45,645 | 43,827 | 2,000 | 1,942 | 104.1 | 104.1 | 103.0 | 4.2 |
| II.—SOUTH EASTERN COUNTIES. | | | | | | | | | | |
| 1 Surrey (extra-metropolitan) | 4174 | 3921 | 4001 | 3721 | 173 | 200 | 106.5 | 107.5 | 86.5 | 4.6 |
| 2 Kent (extra-metropolitan) | 8741 | 8197 | 8335 | 7715 | 406 | 482 | 106.6 | 108.0 | 84.2 | 5.2 |
| 3 Sussex | 5511 | 5320 | 5172 | 4949 | 339 | 371 | 103.6 | 104.5 | 91.4 | 6.6 |
| 4 Hampshire | 7245 | 6949 | 6884 | 6583 | 361 | 366 | 104.3 | 104.6 | 98.6 | 5.1 |
| 5 Berkshire | 3166 | 3025 | 2950 | 2797 | 216 | 228 | 104.7 | 105.5 | 94.7 | 7.2 |
| III.—SOUTH MIDLAND COUNTIES. | | | | | | | | | | |
| 6 Middlesex (extra-metropolitan) | 2869 | 2653 | 2753 | 2537 | 116 | 116 | 108.1 | 108.5 | 100.0 | 4.2 |
| 7 Hertfordshire | 2873 | 2680 | 2676 | 2488 | 197 | 192 | 107.2 | 107.6 | 102.6 | 7.0 |
| 8 Buckinghamshire | 2506 | 2381 | 2328 | 2237 | 178 | 144 | 105.2 | 104.1 | 123.6 | 6.6 |
| 9 Oxfordshire | 2963 | 2697 | 2735 | 2498 | 228 | 199 | 109.9 | 109.5 | 114.6 | 7.5 |
| 10 Northamptonshire | 4300 | 3998 | 4067 | 3762 | 233 | 236 | 107.6 | 108.1 | 98.7 | 5.7 |
| 11 Huntingdonshire | 1026 | 974 | 978 | 932 | 48 | 42 | 105.3 | 104.9 | 114.3 | 4.5 |
| 12 Bedfordshire | 2431 | 2303 | 2234 | 2106 | 197 | 197 | 105.6 | 106.1 | 100.0 | 8.3 |
| 13 Cambridgeshire | 3055 | 2981 | 2833 | 2783 | 222 | 198 | 102.5 | 101.8 | 112.1 | 7.0 |
| IV.—EASTERN COUNTIES. | | | | | | | | | | |
| 14 Essex | 6164 | 6025 | 5805 | 5695 | 359 | 330 | 102.3 | 101.9 | 108.8 | 5.7 |
| 15 Suffolk | 5223 | 5240 | 5055 | 4828 | 468 | 412 | 105.4 | 104.7 | 113.6 | 8.2 |
| 16 Norfolk | 6941 | 6590 | 6165 | 5923 | 776 | 637 | 105.3 | 104.1 | 116.3 | 10.7 |
| V.—SOUTH WESTERN COUNTIES. | | | | | | | | | | |
| 17 Wiltshire | 3781 | 3614 | 3516 | 3377 | 265 | 237 | 104.6 | 104.1 | 111.8 | 6.8 |
| 18 Dorsetshire | 2967 | 2826 | 2776 | 2623 | 191 | 203 | 105.0 | 105.8 | 94.1 | 6.8 |
| 19 Devonshire | 9069 | 8666 | 8532 | 8165 | 537 | 501 | 104.7 | 104.5 | 107.2 | 5.9 |
| 20 Cornwall | 6293 | 5989 | 5961 | 5652 | 332 | 337 | 105.1 | 105.5 | 98.5 | 5.4 |
| 21 Somersetshire | 7154 | 6984 | 6711 | 6537 | 443 | 447 | 102.4 | 102.7 | 99.1 | 6.3 |
| VI.—WEST MIDLAND COUNTIES. | | | | | | | | | | |
| 22 Gloucestershire | 7011 | 6786 | 6650 | 6398 | 361 | 388 | 103.3 | 103.9 | 93.0 | 5.4 |
| 23 Herefordshire | 1622 | 1531 | 1479 | 1397 | 143 | 134 | 105.9 | 105.9 | 106.7 | 8.8 |
| 24 Shropshire | 4219 | 3929 | 3809 | 3557 | 410 | 372 | 107.4 | 107.1 | 110.2 | 9.6 |
| 25 Staffordshire | 16147 | 15391 | 15179 | 14477 | 968 | 914 | 104.9 | 104.8 | 105.9 | 6.0 |
| 26 Worcestershire | 5131 | 4880 | 4809 | 4557 | 322 | 323 | 105.1 | 105.5 | 99.7 | 6.4 |
| 27 Warwickshire | 10474 | 10087 | 9902 | 9560 | 572 | 527 | 103.8 | 103.6 | 108.5 | 5.3 |
| VII.—NORTH MIDLAND COUNTIES. | | | | | | | | | | |
| 28 Leicestershire | 4315 | 4148 | 3971 | 3830 | 344 | 318 | 104.0 | 103.7 | 108.2 | 7.8 |
| 29 Rutlandshire | 388 | 390 | 358 | 360 | 30 | 30 | 99.5 | 99.4 | 100.0 | 7.7 |
| 30 Lincolnshire | 6735 | 6594 | 6176 | 5985 | 559 | 609 | 102.1 | 103.2 | 91.8 | 8.8 |
| 31 Nottinghamshire | 6120 | 5798 | 5556 | 5274 | 564 | 524 | 105.6 | 105.3 | 107.6 | 9.1 |
| 32 Derbyshire | 5267 | 4972 | 4879 | 4598 | 388 | 374 | 105.9 | 106.1 | 103.7 | 7.4 |
| VIII.—NORTH WESTERN COUNTIES. | | | | | | | | | | |
| 33 Cheshire | 8087 | 7994 | 7481 | 7393 | 606 | 601 | 101.2 | 101.2 | 100.8 | 7.5 |
| 34 Lancashire | 45854 | 43653 | 42939 | 40881 | 2915 | 2772 | 105.0 | 105.0 | 105.2 | 6.4 |
| IX.—YORKSHIRE. | | | | | | | | | | |
| 35 West Riding | 29150 | 27805 | 27176 | 25918 | 1974 | 1887 | 104.8 | 104.9 | 104.6 | 6.8 |
| 36 East Riding (with York) | 4508 | 4546 | 4445 | 4189 | 363 | 357 | 105.8 | 106.1 | 101.7 | 7.7 |
| 37 North Riding | 3682 | 3495 | 3345 | 3191 | 337 | 304 | 105.4 | 104.8 | 110.9 | 8.9 |
| X.—NORTHERN COUNTIES. | | | | | | | | | | |
| 38 Durham | 11244 | 10538 | 10638 | 9968 | 606 | 570 | 106.7 | 106.7 | 106.3 | 5.4 |
| 39 Northumberland | 6091 | 5840 | 5645 | 5355 | 446 | 485 | 104.3 | 105.4 | 92.0 | 7.8 |
| 40 Cumberland | 3347 | 3369 | 2939 | 2962 | 408 | 407 | 99.4 | 99.2 | 100.2 | 12.1 |
| 41 Westmorland | 999 | 976 | 907 | 859 | 92 | 117 | 102.4 | 105.6 | 78.6 | 10.6 |
| XI.—MONMOUTHSHIRE AND WALES. | | | | | | | | | | |
| 42 Monmouthshire | 3691 | 3510 | 3516 | 3334 | 175 | 176 | 105.2 | 105.3 | 99.4 | 4.9 |
| 43 South Wales | 12645 | 12170 | 11820 | 11362 | 825 | 808 | 103.9 | 104.0 | 102.1 | 6.6 |
| 44 North Wales | 6375 | 6065 | 5909 | 5575 | 466 | 490 | 105.1 | 106.0 | 95.1 | 7.7 |

In and out of wedlock.—Of children born out of wedlock, 22,159 were boys, 21,534 were girls; the total number was 43,693. Illegitimate children were 6.4 per cent. of the whole number born. In Cumberland, where the proportion rose to its maximum, it was double that amount; viz. 12.1 per cent.; in Norfolk it was 10.7; in Westmorland 10.6; in Shropshire 9.6; in Nottinghamshire 9.1. It was also high in Bedfordshire, Suffolk, Herefordshire, Lincolnshire, and the North Riding of Yorkshire. The proportion of children born out of wedlock in London (4.2 per cent. in the Tables) is very probably understated. There is much greater facility for the suppression of facts in large cities than in

TABLE X.—BIRTHS to 100 Persons living in each COUNTY, during each of the Years 1851-60.

| COUNTIES. | Births to 100 Persons living. | | | | | | | | | | Average Annual Rate. 1851-60. |
|----------------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------------------------------|
| | 1851. | 1852. | 1853. | 1854. | 1855. | 1856. | 1857. | 1858. | 1859. | 1860. | |
| ENGLAND | 3.425 | 3.430 | 3.327 | 3.408 | 3.373 | 3.453 | 3.443 | 3.366 | 3.504 | 3.437 | 3.417 |
| I.—LONDON | 3.300 | 3.362 | 3.343 | 3.390 | 3.356 | 3.372 | 3.397 | 3.320 | 3.408 | 3.372 | 3.362 |
| II.—SOUTH EASTERN COUNTIES. | | | | | | | | | | | |
| 1 Surrey (extra-metropolitan) | 2.928 | 2.919 | 2.870 | 2.853 | 2.758 | 2.924 | 2.907 | 2.925 | 3.097 | 3.031 | 2.921 |
| 2 Kent (extra-metropolitan) | 3.324 | 3.265 | 3.110 | 3.180 | 3.110 | 3.231 | 3.356 | 3.133 | 3.327 | 3.139 | 3.218 |
| 3 Sussex | 3.152 | 3.196 | 3.017 | 3.067 | 2.919 | 3.092 | 3.043 | 2.961 | 3.111 | 2.965 | 3.052 |
| 4 Hampshire | 3.178 | 3.144 | 3.143 | 3.075 | 2.916 | 3.188 | 3.222 | 3.119 | 3.186 | 3.138 | 3.131 |
| 5 Berkshire | 3.117 | 3.159 | 2.933 | 2.982 | 2.899 | 3.068 | 3.081 | 3.010 | 3.272 | 3.016 | 3.052 |
| III.—SOUTH MIDLAND COUNTIES. | | | | | | | | | | | |
| 6 Middlesex (extra-metropolitan) | 2.912 | 3.007 | 2.959 | 3.060 | 2.923 | 3.042 | 3.003 | 2.996 | 3.166 | 3.017 | 3.009 |
| 7 Hertfordshire | 3.400 | 3.200 | 3.053 | 3.047 | 2.967 | 3.161 | 3.245 | 3.074 | 3.265 | 3.134 | 3.155 |
| 8 Buckinghamshire | 3.419 | 3.377 | 3.134 | 3.195 | 3.160 | 3.203 | 3.198 | 3.490 | 3.324 | 3.285 | 3.285 |
| 9 Oxfordshire | 3.262 | 3.362 | 3.033 | 3.154 | 2.971 | 3.247 | 3.259 | 3.180 | 3.434 | 3.307 | 3.221 |
| 10 Northamptonshire | 3.505 | 3.447 | 3.272 | 3.335 | 3.445 | 3.529 | 3.563 | 3.502 | 3.625 | 3.613 | 3.484 |
| 11 Huntingdonshire | 3.573 | 3.351 | 3.228 | 3.206 | 3.196 | 3.410 | 3.459 | 3.363 | 3.491 | 3.377 | 3.365 |
| 12 Bedfordshire | 3.663 | 3.612 | 3.372 | 3.302 | 3.302 | 3.431 | 3.541 | 3.315 | 3.634 | 3.380 | 3.456 |
| 13 Cambridgeshire | 3.433 | 3.476 | 3.153 | 3.202 | 3.172 | 3.350 | 3.304 | 3.298 | 3.486 | 3.308 | 3.318 |
| IV.—EASTERN COUNTIES. | | | | | | | | | | | |
| 14 Essex | 3.280 | 3.218 | 3.080 | 3.103 | 3.133 | 3.234 | 3.268 | 3.146 | 3.361 | 3.238 | 3.206 |
| 15 Suffolk | 3.380 | 3.265 | 3.085 | 3.136 | 3.086 | 3.264 | 3.302 | 3.234 | 3.474 | 3.208 | 3.243 |
| 16 Norfolk | 3.308 | 3.240 | 2.995 | 3.189 | 3.029 | 3.219 | 3.186 | 3.187 | 3.427 | 3.162 | 3.194 |
| V.—SOUTH WESTERN COUNTIES. | | | | | | | | | | | |
| 17 Wiltshire | 3.226 | 3.195 | 2.933 | 3.174 | 3.024 | 3.189 | 3.149 | 3.140 | 3.256 | 3.126 | 3.141 |
| 18 Dorsetshire | 3.247 | 3.153 | 3.041 | 3.028 | 2.980 | 3.034 | 3.075 | 3.137 | 3.296 | 3.183 | 3.117 |
| 19 Devonshire | 3.006 | 3.039 | 2.939 | 2.889 | 2.803 | 2.922 | 2.905 | 2.959 | 3.027 | 3.013 | 2.950 |
| 20 Cornwall | 3.398 | 3.419 | 3.404 | 3.476 | 3.339 | 3.453 | 3.395 | 3.379 | 3.525 | 3.374 | 3.416 |
| 21 Somersetshire | 3.089 | 3.122 | 2.919 | 3.024 | 2.914 | 2.996 | 2.934 | 2.997 | 3.139 | 3.052 | 3.019 |
| VI.—WEST MIDLAND COUNTIES. | | | | | | | | | | | |
| 22 Gloucestershire | 3.116 | 3.162 | 3.027 | 3.134 | 3.112 | 3.067 | 3.068 | 3.139 | 3.134 | 3.123 | 3.107 |
| 23 Herefordshire | 2.799 | 2.931 | 2.766 | 2.985 | 2.742 | 2.958 | 2.921 | 2.901 | 3.006 | 2.975 | 2.898 |
| 24 Shropshire | 2.807 | 2.818 | 2.755 | 2.984 | 2.887 | 3.072 | 3.077 | 3.068 | 3.214 | 3.143 | 2.983 |
| 25 Staffordshire | 3.936 | 4.022 | 3.954 | 4.145 | 4.227 | 4.230 | 4.143 | 4.152 | 4.165 | 4.165 | 4.114 |
| 26 Worcestershire | 3.308 | 3.340 | 3.265 | 3.472 | 3.334 | 3.430 | 3.359 | 3.384 | 3.519 | 3.430 | 3.384 |
| 27 Warwickshire | 3.666 | 3.830 | 3.636 | 3.779 | 3.721 | 3.754 | 3.692 | 3.647 | 3.698 | 3.707 | 3.713 |
| VII.—NORTH MIDLAND COUNTIES. | | | | | | | | | | | |
| 28 Leicestershire | 3.640 | 3.494 | 3.330 | 3.414 | 3.364 | 3.442 | 3.352 | 3.279 | 3.466 | 3.477 | 3.426 |
| 29 Rutlandshire | 3.083 | 2.877 | 2.989 | 3.080 | 2.942 | 3.055 | 3.108 | 3.134 | 3.075 | 3.293 | 3.064 |
| 30 Lincolnshire | 3.324 | 3.265 | 3.116 | 3.176 | 3.211 | 3.363 | 3.336 | 3.251 | 3.375 | 3.301 | 3.272 |
| 31 Nottinghamshire | 3.408 | 3.464 | 3.339 | 3.523 | 3.469 | 3.575 | 3.701 | 3.480 | 3.699 | 3.709 | 3.543 |
| 32 Derbyshire | 3.412 | 3.484 | 3.333 | | | | | | | | |

smaller towns and villages. But the proportion was about as low in the extra-metropolitan parts of Surrey and Middlesex; in Huntingdonshire and Monmouthshire.

DEATHS.

There were 422,721 deaths, of which 215,238 were those of males, 207,483 those of females. The rate of mortality was 2.124 per cent., whilst the average annual rate of ten years, 1851-60, was 2.224. In that series of years, 1856, in which the rate fell to 2.051, furnishes the only instance in which the mortality was as low as in 1860. The death-rate in London was 2.249 in 1860; the average was 2.377.

TABLE XI.—PROPORTIONAL Number of BIRTHS in each QUARTER to 1000 BIRTHS in the Average Quarter of each Year, 1838-60.

| 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 | 1037 | 1019 | 969 | 974 |
| 1853 | 153,098 | 1000 | 1056 | 1037 | 964 | 943 |
| 1854 | 158,601 | 1000 | 1026 | 1090 | 963 | 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 |

TABLE XII.—ENGLAND. BIRTHS and DEATHS registered in each Quarter of the Years 1838 to 1860.

| YEARS. | BIRTHS. | | | | DEATHS. | | | |
|--------|--|---------|------------|-----------|--|---------|------------|-----------|
| | In the Quarters ending the last day of | | | | In the Quarters ending the last day of | | | |
| | March. | June. | September. | December. | March. | June. | September. | December. |
| 1838 | 118,815 | 121,781 | 114,734 | 113,457 | 98,152 | 90,877 | 72,877 | 80,854 |
| 1839 | 123,543 | 128,806 | 120,115 | 120,110 | 89,740 | 87,969 | 76,280 | 84,995 |
| 1840 | 132,305 | 129,059 | 119,822 | 121,117 | 98,896 | 90,339 | 80,822 | 89,630 |
| 1841 | 133,720 | 129,884 | 123,868 | 124,686 | 99,069 | 86,134 | 75,440 | 83,204 |
| 1842 | 135,615 | 134,096 | 123,296 | 124,732 | 96,314 | 86,538 | 82,339 | 84,328 |
| 1843 | 136,887 | 131,279 | 128,161 | 131,048 | 94,926 | 87,234 | 76,792 | 87,493 |
| 1844 | 143,578 | 136,941 | 130,078 | 130,166 | 101,024 | 85,337 | 79,708 | 90,864 |
| 1845 | 143,080 | 136,853 | 132,369 | 131,219 | 104,664 | 89,149 | 74,872 | 80,681 |
| 1846 | 145,108 | 149,450 | 138,718 | 139,349 | 89,484 | 90,230 | 101,664 | 108,937 |
| 1847 | 146,453 | 139,072 | 127,173 | 127,267 | 119,672 | 106,718 | 93,435 | 103,479 |
| 1848 | 139,736 | 149,760 | 140,359 | 133,204 | 120,032 | 99,727 | 87,638 | 92,436 |
| 1849 | 163,772 | 153,693 | 135,223 | 135,471 | 105,870 | 102,153 | 135,227 | 97,589 |
| 1850 | 144,551 | 155,865 | 146,911 | 146,095 | 98,430 | 92,871 | 85,840 | 91,845 |
| 1851 | 157,286 | 159,073 | 150,594 | 148,912 | 105,359 | 99,458 | 91,499 | 99,080 |
| 1852 | 161,803 | 159,031 | 151,222 | 151,956 | 106,358 | 100,625 | 100,382 | 99,770 |
| 1853 | 161,729 | 158,697 | 147,602 | 144,363 | 118,119 | 107,647 | 92,201 | 103,130 |
| 1854 | 160,785 | 172,457 | 154,724 | 146,439 | 111,843 | 102,586 | 113,843 | 109,633 |
| 1855 | 166,225 | 165,277 | 154,700 | 148,841 | 134,542 | 106,493 | 87,646 | 97,022 |
| 1856 | 169,250 | 173,263 | 157,462 | 157,478 | 103,014 | 100,099 | 91,155 | 96,238 |
| 1857 | 170,430 | 170,444 | 161,181 | 161,016 | 108,665 | 100,046 | 100,528 | 110,576 |
| 1858 | 170,959 | 169,115 | 157,445 | 157,962 | 125,319 | 107,142 | 98,142 | 118,553 |
| 1859 | 175,532 | 175,864 | 168,394 | 170,091 | 121,580 | 105,631 | 104,216 | 109,354 |
| 1860 | 183,180 | 174,028 | 164,121 | 162,719 | 122,617 | 110,869 | 86,312 | 102,923 |

From a comparison of the rates of mortality in different counties, it will appear that the highest degree of health in the year was attained in the extra-metropolitan portion of Surrey, where less than 18 persons in a thousand living died. No other county, each being taken as a whole, presented so favourable a result. In the healthier year of 1856 the same part of England was equally, but not more healthy. In that year the healthiest county in England was Westmorland, where the death-rate fell below 16 to a thousand; but in 1860 Westmorland was not so fortunate as many other counties, for in it the rate was nearly 20, though the average does not much exceed 18. It was in the Spring (or second) quarter that the health of that northern county was in an unfavourable state.

Seasons.—The rate of mortality in 1860 was comparatively low, but the fact was due to the unusual salubrity of the summer, or third quarter. The rate fell in that season to 1.718 per cent. for England, which is lower than that of any of the twenty-two preceding summers. The healthy year of 1856 had not a very healthy summer, for the death-rate was then nearly 1.9, the average being about 2.

The meteorology of the summer of 1860 has been already described in general terms. Many details connected with the public health in the different seasons of that year, as it appeared to be affected by temperature, rain, sanitary condition, &c., will be found in the following summary of the Quarterly Returns.

SUMMARY OF THE QUARTERLY REPORTS, 1860.

First Quarter—January, February, March, 1860.

The first quarterly return of the year 1860 presents nearly average results. The marriages were not quite so numerous as they were in the same quarter of 1859, but exceeded those of any corresponding period in the 11 years 1848-58; the marriage-rate, namely, the proportion of

TABLE XIII.—ENGLAND. DEATHS.—ANNUAL RATE OF MORTALITY of Males and of Females, 1838-60.

| YEARS. | DEATHS. | | Deaths of Males to 100 Deaths of Females. | Of equal Numbers living, the Number of Male Deaths to every 100 Deaths of Females. |
|------------------------------|-------------------------------|-----------------------------------|---|--|
| | Of Males to 100 Males living. | Of Females to 100 Females living. | | |
| 1838 | 2.335 | 2.133 | 105 | 109 |
| 1839 | 2.275 | 2.090 | 104 | 109 |
| 1840 | 2.372 | 2.203 | 103 | 108 |
| 1841 | 2.238 | 2.083 | 103 | 107 |
| 1842 | 2.241 | 2.098 | 102 | 107 |
| 1843 | 2.202 | 2.047 | 103 | 108 |
| 1844 | 2.242 | 2.083 | 103 | 108 |
| 1845 | 2.170 | 2.012 | 103 | 108 |
| 1846 | 2.395 | 2.221 | 103 | 108 |
| 1847 | 2.546 | 2.330 | 103 | 107 |
| 1848 | 2.391 | 2.224 | 103 | 108 |
| 1849 | 2.581 | 2.445 | 101 | 106 |
| 1850 | 2.143 | 2.013 | 102 | 106 |
| 1851 | 2.292 | 2.110 | 103 | 109 |
| 1852 | 2.339 | 2.142 | 103 | 109 |
| 1853 | 2.398 | 2.183 | 104 | 110 |
| 1854 | 2.456 | 2.254 | 103 | 109 |
| 1855 | 2.365 | 2.163 | 104 | 109 |
| 1856 | 2.147 | 1.960 | 104 | 110 |
| 1857 | 2.267 | 2.098 | 102 | 108 |
| 1858 | 2.399 | 2.224 | 102 | 108 |
| 1859 | 2.335 | 2.148 | 103 | 109 |
| 1860 | 2.223 | 2.030 | 104 | 110 |
| Average of 23 years, 1838-60 | 2.320 | 2.145 | 103 | 108 |

The Table may be read thus:—In the year 1838 to every 100 males living there were 2.335 deaths of males; to every 100 females living there were 2.133 deaths of females; and to every 100 females who died there were 105 deaths of males. The last column shows the relative mortality of males and females; and that out of equal numbers living the deaths of males were 109 to every 100 deaths of females in 1838.

persons married to the then existing population, was also slightly above the average for the quarter. The birth-rate was above the average of the ten preceding winter quarters. The death-rate was slightly above the winter average, but below the rates of the two previous winters. The weather in the beginning of January was warm, but remained so cold and ungenial afterwards as to retard vegetation and to swell the return of deaths. The prosperity of trade and the sanitary improvements of towns produced a countervailing effect.

TABLE XIV.—ANNUAL RATE of MORTALITY per Cent. in each COUNTY during each of the Years 1851-1860.

| No. | COUNTIES. | Deaths to 100 Persons living. | | | | | | | | | | Ave- rage Annual Rate, 1851-60. |
|-----|----------------------------------|-------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|---|
| | | 1851. | 1852. | 1853. | 1854. | 1855. | 1856. | 1857. | 1858. | 1859. | 1860. | |
| | ENGLAND | 2.199 | 2.238 | 2.288 | 2.352 | 2.261 | 2.051 | 2.180 | 2.309 | 2.239 | 2.124 | 2.224 |
| | I.—LONDON | 2.338 | 2.261 | 2.441 | 2.943 | 2.431 | 2.209 | 2.241 | 2.390 | 2.269 | 2.249 | 2.377 |
| | II.—SOUTH EASTERN COUNTIES. | | | | | | | | | | | |
| 1 | Surrey (extra-metropolitan) | 1.710 | 1.732 | 1.834 | 1.896 | 1.944 | 1.768 | 1.648 | 1.877 | 1.813 | 1.767 | 1.802 |
| 2 | Kent (extra-metropolitan) | 1.916 | 1.922 | 2.033 | 2.188 | 2.083 | 1.947 | 1.933 | 2.129 | 2.049 | 1.863 | 2.011 |
| 3 | Sussex | 1.902 | 1.826 | 1.869 | 1.897 | 1.971 | 1.734 | 1.743 | 2.070 | 2.058 | 1.881 | 1.895 |
| 4 | Hampshire | 1.947 | 2.007 | 2.020 | 2.081 | 2.292 | 1.921 | 1.939 | 2.067 | 2.036 | 1.902 | 2.026 |
| 5 | Berkshire | 2.005 | 2.055 | 2.087 | 2.049 | 2.173 | 1.856 | 1.869 | 2.132 | 2.043 | 1.972 | 2.024 |
| | III.—SOUTH MIDLAND COUNTIES. | | | | | | | | | | | |
| 6 | Middlesex (extra-metropolitan) | 2.011 | 2.033 | 2.073 | 2.525 | 2.047 | 1.930 | 2.009 | 2.001 | 2.047 | 1.998 | 2.067 |
| 7 | Hertfordshire | 1.846 | 1.830 | 1.824 | 1.865 | 1.975 | 1.818 | 1.955 | 1.938 | 1.927 | 1.947 | 1.893 |
| 8 | Buckinghamshire | 2.072 | 2.038 | 2.190 | 2.063 | 2.244 | 1.915 | 2.034 | 2.121 | 2.163 | 1.981 | 2.082 |
| 9 | Oxfordshire | 2.149 | 2.007 | 2.090 | 2.185 | 2.110 | 1.775 | 2.031 | 2.249 | 2.090 | 1.966 | 2.065 |
| 10 | Northamptonshire | 1.956 | 2.118 | 2.184 | 2.230 | 2.238 | 1.950 | 2.043 | 2.091 | 2.308 | 2.137 | 2.126 |
| 11 | Huntingdonshire | 1.917 | 1.984 | 2.064 | 1.823 | 2.038 | 1.856 | 2.108 | 2.050 | 1.978 | 1.867 | 1.969 |
| 12 | Bedfordshire | 1.912 | 1.973 | 2.001 | 2.166 | 2.602 | 1.968 | 2.101 | 1.971 | 2.065 | 2.017 | 2.078 |
| 13 | Cambridgeshire | 2.032 | 1.963 | 2.117 | 2.155 | 2.324 | 1.916 | 2.065 | 2.007 | 2.021 | 1.950 | 2.055 |
| | IV.—EASTERN COUNTIES. | | | | | | | | | | | |
| 14 | Essex | 1.883 | 1.936 | 2.005 | 2.298 | 2.118 | 1.897 | 2.011 | 2.087 | 2.031 | 1.864 | 2.018 |
| 15 | Suffolk | 2.033 | 2.044 | 2.055 | 1.919 | 2.097 | 1.949 | 2.003 | 2.121 | 2.036 | 1.971 | 2.023 |
| 16 | Norfolk | 2.164 | 2.106 | 2.075 | 2.114 | 2.209 | 1.906 | 2.110 | 2.392 | 2.095 | 2.102 | 2.127 |
| | V.—SOUTH WESTERN COUNTIES. | | | | | | | | | | | |
| 17 | Wiltshire | 2.089 | 2.121 | 2.210 | 2.054 | 2.254 | 1.825 | 1.909 | 2.081 | 2.112 | 2.001 | 2.066 |
| 18 | Dorsetshire | 1.882 | 1.959 | 1.971 | 1.870 | 2.005 | 1.641 | 1.901 | 2.185 | 2.072 | 1.868 | 1.935 |
| 19 | Devonshire | 1.930 | 2.038 | 1.970 | 1.938 | 2.070 | 1.745 | 1.948 | 2.067 | 2.092 | 1.971 | 1.977 |
| 20 | Cornwall | 2.146 | 2.148 | 2.101 | 1.953 | 2.076 | 1.909 | 1.970 | 2.074 | 2.019 | 2.040 | 2.044 |
| 21 | Somersetshire | 2.006 | 2.001 | 2.033 | 1.852 | 2.106 | 1.735 | 1.848 | 2.153 | 2.083 | 1.963 | 1.978 |
| | VI.—WEST MIDLAND COUNTIES. | | | | | | | | | | | |
| 22 | Gloucestershire | 2.189 | 2.252 | 2.198 | 2.113 | 2.186 | 1.866 | 1.983 | 2.245 | 2.122 | 1.951 | 2.111 |
| 23 | Herefordshire | 1.890 | 2.063 | 2.135 | 1.828 | 2.278 | 1.923 | 1.949 | 2.085 | 2.212 | 1.912 | 2.028 |
| 24 | Shropshire | 2.018 | 1.888 | 2.085 | 1.957 | 2.074 | 1.796 | 2.003 | 2.084 | 2.087 | 2.112 | 2.010 |
| 25 | Staffordshire | 2.503 | 2.373 | 2.557 | 2.839 | 2.425 | 2.268 | 2.619 | 2.605 | 2.464 | 2.194 | 2.485 |
| 26 | Worcestershire | 2.066 | 1.955 | 2.029 | 2.182 | 2.065 | 1.816 | 2.043 | 2.061 | 2.262 | 1.878 | 2.036 |
| 27 | Warwickshire | 2.466 | 2.293 | 2.362 | 2.637 | 2.206 | 2.075 | 2.405 | 2.423 | 2.370 | 2.043 | 2.328 |
| | VII.—NORTH MIDLAND COUNTIES. | | | | | | | | | | | |
| 28 | Leicestershire | 2.161 | 2.344 | 2.269 | 2.121 | 2.069 | 1.951 | 2.241 | 2.450 | 2.292 | 1.962 | 2.186 |
| 29 | Rutlandshire | 1.653 | 1.657 | 1.818 | 1.652 | 1.990 | 1.785 | 1.533 | 2.046 | 1.956 | 1.909 | 1.800 |
| 30 | Lincolnshire | 1.881 | 1.862 | 1.841 | 2.090 | 2.071 | 1.675 | 1.826 | 2.116 | 2.168 | 1.936 | 1.947 |
| 31 | Nottinghamshire | 2.145 | 2.135 | 2.421 | 2.350 | 2.050 | 2.124 | 2.196 | 2.466 | 2.548 | 2.054 | 2.249 |
| 32 | Derbyshire | 2.045 | 2.199 | 2.338 | 2.224 | 2.120 | 1.953 | 2.104 | 2.356 | 2.264 | 2.103 | 2.171 |
| | VIII.—NORTH WESTERN COUNTIES. | | | | | | | | | | | |
| 33 | Cheshire | 2.259 | 2.451 | 2.438 | 2.221 | 2.197 | 2.048 | 2.269 | 2.267 | 2.169 | 2.173 | 2.249 |
| 34 | Lancashire | 2.644 | 2.865 | 2.769 | 2.701 | 2.680 | 2.464 | 2.628 | 2.719 | 2.454 | 2.371 | 2.630 |
| | IX.—YORKSHIRE. | | | | | | | | | | | |
| 35 | West Riding | 2.442 | 2.505 | 2.457 | 2.438 | 2.223 | 2.212 | 2.368 | 2.491 | 2.396 | 2.360 | 2.389 |
| 36 | East Riding (with York) | 2.249 | 2.359 | 2.200 | 2.248 | 2.072 | 1.902 | 2.346 | 2.349 | 2.271 | 2.185 | 2.218 |
| 37 | North Riding | 1.803 | 1.949 | 1.883 | 1.961 | 2.063 | 1.748 | 1.919 | 1.939 | 2.178 | 2.027 | 1.947 |
| | X.—NORTHERN COUNTIES. | | | | | | | | | | | |
| 38 | Durham | 2.215 | 2.350 | 2.415 | 2.485 | 2.304 | 2.332 | 2.386 | 2.404 | 2.313 | 2.098 | 2.330 |
| 39 | Northumberland | 2.042 | 2.355 | 2.745 | 2.070 | 2.115 | 2.031 | 2.167 | 2.189 | 2.161 | 2.218 | 2.209 |
| 40 | Cumberland | 2.011 | 1.945 | 2.062 | 2.169 | 2.215 | 1.945 | 1.986 | 2.064 | 2.199 | 2.242 | 2.084 |
| 41 | Westmorland | 1.820 | 1.932 | 2.020 | 1.777 | 1.805 | 1.574 | 1.661 | 1.770 | 1.974 | 1.975 | 1.831 |
| | XI.—MONMOUTHSHIRE AND WALES. | | | | | | | | | | | |
| 42 | Monmouthshire | 2.062 | 2.163 | 2.411 | 2.487 | 2.355 | 2.037 | 2.161 | 2.465 | 2.412 | 2.026 | 2.258 |
| 43 | South Wales | 2.106 | 2.111 | 2.202 | 2.219 | 2.230 | 2.004 | 2.004 | 2.412 | 2.289 | 2.116 | 2.169 |
| 44 | North Wales | 1.856 | 2.015 | 2.076 | 1.962 | 2.145 | 1.894 | 1.938 | 2.026 | 2.047 | 2.225 | 2.018 |

Marriages.—In the first three months of 1860 the total number of men and women who married was 70,300, being a great decrease on the 100,992 married in the preceding Christmas quarter. The difference, it may be re-assuring to know, is not the result of sudden depression in trade or other calamity, but of laws of habit and convenience, by virtue of which the closing months of the year are most, and the opening months least, preferred for the accomplishment of nuptial vows. The annual marriage-rate for January, February, and March was 1.422 per cent., whilst the average rate for the same period is 1.416.

TABLE XV.—PROPORTIONAL Number of DEATHS in each QUARTER to 1000 Deaths in the Average Quarter of each Year, 1838-60.

| 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 | 1100 | 1005 | 899 | 997 |
| 1841 | 85,962 | 1000 | 1152 | 1002 | 878 | 968 |
| 1842 | 87,380 | 1000 | 1102 | 990 | 942 | 965 |
| 1843 | 86,611 | 1000 | 1096 | 1007 | 887 | 1010 |
| 1844 | 89,233 | 1000 | 1132 | 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 | 973 |
| 1848 | 99,958 | 1000 | 1201 | 998 | 877 | 925 |
| 1849 | 110,210 | 1000 | 961 | 927 | 1227 | 885 |
| 1850 | 92,249 | 1000 | 1067 | 1007 | 931 | 996 |
| 1851 | 93,349 | 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 | 928 | 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 |

TABLE XVI.—ENGLAND. ANNUAL RATE per Cent. of BIRTH, and DEATH, during each Quarter of the Years 1838-1860.

| YEARS. | BIRTH RATE. | | | | 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 | 3.032 | 3.198 | 2.970 | 2.928 | 2.615 | 2.387 | 1.887 | 2.086 |
| 1839 | 3.248 | 3.338 | 3.069 | 3.059 | 2.359 | 2.280 | 1.949 | 2.164 |
| 1840 | 3.395 | 3.301 | 3.021 | 3.044 | 2.538 | 2.310 | 2.038 | 2.252 |
| 1841 | 3.424 | 3.278 | 3.082 | 3.092 | 2.537 | 2.174 | 1.877 | 2.063 |
| 1842 | 3.431 | 3.344 | 3.032 | 3.058 | 2.436 | 2.158 | 2.025 | 2.067 |
| 1843 | 3.420 | 3.234 | 3.114 | 3.174 | 2.373 | 2.149 | 1.866 | 2.119 |
| 1844 | 3.507 | 3.334 | 3.123 | 3.115 | 2.467 | 2.077 | 1.913 | 2.175 |
| 1845 | 3.491 | 3.291 | 3.140 | 3.103 | 2.554 | 2.144 | 1.776 | 1.908 |
| 1846 | 3.498 | 3.551 | 3.251 | 3.256 | 2.157 | 2.144 | 2.382 | 2.545 |
| 1847 | 3.488 | 3.265 | 2.945 | 2.938 | 2.850 | 2.506 | 2.163 | 2.389 |
| 1848 | 3.252 | 3.474 | 3.211 | 3.038 | 2.794 | 2.313 | 2.005 | 2.108 |
| 1849 | 3.575 | 3.523 | 3.056 | 3.053 | 2.462 | 2.341 | 3.057 | 2.199 |
| 1850 | 3.321 | 3.530 | 3.281 | 3.253 | 2.261 | 2.107 | 1.917 | 2.045 |
| 1851 | 3.563 | 3.553 | 3.318 | 3.271 | 2.387 | 2.222 | 2.016 | 2.176 |
| 1852 | 3.583 | 3.511 | 3.293 | 3.299 | 2.355 | 2.222 | 2.186 | 2.166 |
| 1853 | 3.579 | 3.464 | 3.177 | 3.099 | 2.614 | 2.349 | 1.985 | 2.214 |
| 1854 | 3.513 | 3.721 | 3.293 | 3.108 | 2.447 | 2.213 | 2.423 | 2.326 |
| 1855 | 3. | | | | | | | |

The marriage-rate for the quarter was as high as 1.556 in 1853, and as low as 1.252 in 1858.

Births.—The births of 183,180 children were registered in the quarter that ended on March 31st; or 7648 in excess of the numbers registered in the corresponding quarter of the previous year. The birth-rate of the quarter was 3.707; or 0.152 in excess of the average rate.

Increase of Population.—The births registered in the 91 days of the quarter exceeded the deaths by 60,563. So the natural recorded increase of the population of England and Wales was at the rate of 666 daily; the probable increase of the population of the United Kingdom was at the rate of 999 daily. 20,784 emigrants, including 917 foreigners, sailed from the ports of the United Kingdom during the quarter; 5954 were of English origin, and went to the United States and the Australian Colonies in nearly equal numbers; only 9 went in this cold season direct to the North American colonies.

Prices, the Weather, and Pauperism.—The births, deaths, and marriages of the population are influenced by the weather, the prices of food, and the activity of trade.

The average price of wheat was 44s. 5d. a quarter, while in the corresponding quarters of the two previous years it was respectively 46s. 5d. and 40s. 8d. There has been little fluctuation in the price. Beef was sold on an average at 5 $\frac{1}{8}$ d. a pound by the carcase at Leadenhall and Newgate Markets; the average of the highest prices of the best beef having been 6 $\frac{3}{4}$ d., of the lowest prices 3 $\frac{3}{4}$ d. The price of the inferior beef was 1d. a pound lower than it was in the winter of the preceding year; so the price fell 21 per cent. The superior beef only fell from 6 $\frac{3}{4}$ d. to 6 $\frac{1}{2}$ d. The average price of mutton was 5 $\frac{3}{4}$ d. a pound; the price of inferior mutton was 4 $\frac{3}{4}$ d., the superior mutton was 6 $\frac{3}{4}$ d. a pound. The price of the inferior mutton was the same as it was last year; the price of the best mutton was a farthing lower. The York Regent potatoes sold on an average at 130s. a ton at the waterside market, Southwark; so the price though lower than it was in the winter quarter of 1858 was 44 per cent. higher than the average price (90s.) of last year.

The mean temperature of the three months was 38.8°; February, being the coldest month, 35.7°; and March, 41.1°, little warmer on the average than January, 39.7°. The characteristics of the season were: warmth on New Year's Day (16° above the average temperature), and in the following days until January 25th, when cold weather set in and continued to the end of the quarter; the frequent and great changes of the atmospheric pressure; and an almost continuous succession of gales of wind.

Mr. Glaisher has described the meteorology of the quarter in detail.

Pauperism is declining.

State of the Public Health.—122,617 deaths were registered in the winter quarter. The rate of mortality for the quarter was 2.481 per cent., or slightly above the average of the season (2.460); which in the absence of epidemics is always the most fatal in England.

The rate of mortality in the chief town districts was 2.636; in the small town and country districts 2.338 per cent. The latter rate is above, the former below, the average of those districts respectively.

The deaths in the quarter, at the rates actually prevailing in the healthier districts of the country, would have amounted to 88,372; the actual deaths amounted to 122,617. Consequently the deaths from causes induced by the unfavourable sanitary condition in which large numbers of the people live amount to 34,245.

The mortality of LONDON was above the average; it is described in the Weekly Tables.

9985 persons died in the SOUTH-EASTERN COUNTIES; in Surrey out of London the quarterly mortality was above the average of the two preceding years; in Kent and Sussex below the average. In Portsmouth the births and deaths were increased by the accessions to Her Majesty's dockyards.

The population of Southampton is in a comparatively healthy state. Small-pox was prevalent in the Abingdon district; the Registrar printed notices at his own expense, and affixed them on the church doors. Some parents were stubborn, others were negligent; and their children consequently suffered or died of small-pox.

The deaths in the SOUTH-MIDLAND DIVISION were below the average. 17 cases of fever occurred in Sunbury, Staines; and apparently owed their origin to bad sanitary arrangements. 71 deaths happened in the Colney Hatch Lunatic Asylum. The enforcement of sanitary regulations is imperatively needed in the Toddington sub-district, where 44 deaths were registered. In Caxton 4 deaths from diphtheria, 3 in one family, were recorded. About the fens of Cambridge ague and typhoid fever prevailed.

10,064 children were born and 2972 persons married in the EASTERN COUNTIES; 6579 deaths were registered, and the mortality was much lower than it was in the winter of 1858, but higher than it was in the preceding winter. The births in Colchester, which is a garrison town, are unusually numerous; the deaths are below the average, but influenza and whooping-cough have prevailed. The cold winds have undoubtedly been severely felt in Norfolk and Suffolk; but the considerable amount of sickness has not greatly raised the mortality. In Stalham and Fincham, however, the deaths exceeded the births; 16 persons died of diphtheria in Stalham, 8 in Fincham.

10,850 persons died in the SOUTH-WESTERN COUNTIES; where 15,904 children were born and 6430 persons married. The mortality rate was lower than in the two previous years. Poole in Dorsetshire has been in an unhealthy state; influenza apparently prevailed there with some intensity, and proved fatal to children and old people. The deaths (83) nearly equalled the births (88); the deaths in the whole district were 109. Small-pox and measles prevailed in South Devon. In Exmouth the Registrar says:—"The deaths are one fourth above the average. 12 were from small-pox; but only one after vaccination, and in this case the variolous eruption appeared seven days after the operation. Vaccination has been attended with the most beneficial effects, and has arrested the progress of the disease. I believe there is scarcely a case remaining in this district." Vaccination in this case was performed while the small-pox matter was developing itself in the system; hence it was not a case of small-pox after protection by vaccination had been effected. Such cases are ignorantly cited as instances of small-pox after vaccination. Vaccination is much neglected and small-pox has been fatal in Plymouth. Small-pox, whooping-cough, and measles have raised the deaths in Bideford (16) above the average. A great number of illegitimate children are sometimes born in a small sub-district at the same time; thus, in Lyme 6 of 27 children were born out of wedlock in the last quarter.

Disease is propagated in parts of Cornwall by defective sanitary arrangements. Thus diphtheria has been fatal in Kea. The Registrar of Callington makes the following observation:—"This district is at this time rather unhealthy. During the quarter I have registered 8 deaths from typhus (probably typhoid), 2 of which, those of mother and child, were in one house, and now the father and three other children are ill. The medical officer in his report to the board of guardians, dated 28th March, says that "these children absolutely require removal from the wretched hot-bed of fever in which they now lie; they require careful and constant nursing, cleanliness, ventilation, beef-tea and libitum, port wine, and various other articles." Again at Camborne 6 deaths occurred from scarlatina, 2 from diphtheria, 8 from fever; the latter occurring in parts of the town where drainage and sewerage are much neglected.

In the WEST MIDLAND COUNTIES the marriages and births were above, the deaths below, the average numbers. 8026 persons married; 23,833

children were born; 14,909 persons died. The health of the large towns of this division is evidently improving; the fatality of disease is less than it was in Bristol and Clifton, where the deaths during the three last winters were 1194, 979, 876; in Birmingham and Aston 2046, 1923, 1740. If the municipal authorities succeed in supplying all the towns with pure water, and removing all the disinfected nightsoil and refuse to the fields, they will witness still further diminutions in the heavy death-rate which is now levied on the inhabitants.

South Staffordshire contains a great number of enterprising men who are doing much valuable work; they extract coal or iron, and manufacture hardware; but their attention has not hitherto been seriously directed to the preservation of the health of the people, who suffer from all kinds of pestilential diseases, and are in a deplorable sanitary state. In the district of Wolverhampton alone, for example, 980 deaths occurred in 91 days; the mortality was high before, and while Birmingham is getting better, the health of the district of Wolverhampton is every year getting worse. Several hundreds of the inhabitants are every year disabled by sickness; funerals are a staple trade; parents lose their children, wives their husbands, and children their fathers, by the poison of the place; workmen and people in trade are cut down at all ages in alarming numbers. Mechanism and chemical knowledge and capital abound in the Wolverhampton district; why should they not be applied to render the sanitary arrangements perfect? The deaths are below the average in Wednesbury, and this the Registrar attributes to improvements which the Local Board of Health has effected in "supplying the town with pure water, attending to the sewerage, and compelling people, as far as possible, to cultivate habits of cleanliness." This is satisfactory.

The marriages and births increased, the deaths decreased in the NORTH MIDLAND COUNTIES, where 3942 persons married, 11,875 children were born, and 7540 deaths were registered. Fever and diphtheria have proved fatal in some districts. Thus typhus prevailed in three villages of Oakham; it was apparently the result of overcrowded sleeping rooms and want of ventilation. Diphtheria, scarlatina, and typhus, were fatal in several villages of Spilsby; diphtheria killed 13 young persons under 26 years of age in North Kelsey. The Registrar of East Retford comments justly on the severity of the weather, to which he ascribes "the fearful mortality" throughout the whole of his district. The Registrar of St. Ann, Nottingham, on the other hand, records 224 births and only 127 deaths. "The deaths," he says, "are below the average of corresponding quarters;" adding, "the sanitary arrangements are excellent and carefully carried out, to which cause, no doubt, the decrease in the mortality may in some measure be attributed." It is evident that the severity of the season must have been felt all over the kingdom; yet notwithstanding the effects of the weather, the mortality decreased wherever sanitary arrangements were sedulously worked. Even careful observers, sometimes, it may be remarked, refer the excessive mortality of their districts to the weather, or to some other causes over which people have little or no control. They do not bear in mind that foul air is more fatal than cold air, and that food and clothing and active employment keep out the cold.

The marriages as well as births increased, the rate of mortality decreased in LANCASHIRE and YORKSHIRE. 11,048 persons married, 23,195 births, and 16,024 deaths, were registered in Lancashire; 8034 persons married, 19,148 births, and 12,610 deaths, were registered in Yorkshire. The mortality fell in Liverpool and Manchester. The decrease of the mortality is ascribed to the rise of wages, the active employment of the people in the factories, and to the sanitary improvements, which are so imperatively required in these two great counties.

In the NORTHERN COUNTIES 4114 persons married; 10,879 births, and 6683 deaths were registered. The deaths are rather more numerous than

they were last year; but the mortality is lower. Small-pox, diphtheria, scarlatina, and fever prevailed in some districts, especially those which are left in a dirty state.

In MONMOUTHSHIRE and WALES 4366 persons married; 11,776 births, and 8190 deaths, were registered. The mortality was below the average of Wales.

Second Quarter—April, May, June, 1860.

The leading facts in the Return may be stated thus:—the marriages were increasing; the births were fewer than in the same quarter of 1859, and were also fewer than they would have been if the average spring birth rate had been maintained; the deaths exhibit in no faint characters the effects of an ungenial season, and the rate of mortality was higher, with only two exceptions, than in any corresponding quarter of the previous ten years. The general aspect of the Return is not satisfactory.

Marriages.—87,554 persons married in the quarter; and the rate of marriage was 1'766, exceeding the average by '051. The marriages rose from 39,890 in the spring quarter of 1858 to 43,777 in the corresponding quarter of the present year. From this fact it may be inferred that the prospects of the working classes have been growing brighter, and that their real condition has improved. The increase of marriages has been greatest in Cheshire and Lancashire, in London, and generally in the manufacturing districts; but an increase is observable in every division except the Eastern Counties.

Births.—The number of boys and girls born in the quarter was 174,028, the number in the previous quarter that ended March 31st having been 183,180. On an average of years as many children are born in the spring quarter as in the winter, but in the present year there was, as these figures show, a decrease that is not unimportant.

The births in the quarter were to the population in the annual proportion of 3'512 per cent., whilst the average rate is 3'559. It may be added, that the birth-rate was lower than in any spring quarter of the previous ten years, except those of 1852, 1853, and 1858, and in each of those periods the mortality was above the average, as was also the mortality of the antecedent winter quarters.

Increase of Population.—In the 91 days of the quarter the births exceeded the deaths by 63,159. This excess represents the natural increase of the population in that period; the increase, aided by ingress from Scotland, Ireland, and more distant parts, is more considerable.

The emigration of the last quarter consisted of 48,626 persons, who sailed from ports in the United Kingdom at which there are Government emigration officers. By distributing 8260, who are not distinguished as regards the country of their birth, proportionally over the rest who are thus distinguished, it appears that 9437 were English, 3461 Scotch, 33,438 Irish, and 2290 were foreigners. The United States were the destination of three fourths of the whole number. Of the English emigrants 5945 chose the United States, 2792 the Australian Colonies. Although in the emigration to America the Irish were five times as numerous as the English, a considerably less number of the former, as compared with the latter went to Australia; whilst as regards persons of Scotch origin, it is remarkable that nearly as many went to the North American Colonies as to the United States, and more than twice as many went to Australia as to either of those parts of America. National character is in part the cause of these differences; but they are chiefly to be referred to the better or worse condition in life of the emigrants.

Prices, the Weather, and Pauperism.—Wheat has risen in price; the average in the three months ending June 30th, was 52s. 8d. per quarter. In the same period of last year it was 47s. 3d., and in that of 1858 it was 44s. 1d. The dearness both of bread and meat has been sensibly

felt by the labouring class. The average price of beef was $5\frac{3}{4}d.$ per lb., that of mutton $6\frac{1}{2}d.$ as sold in the carcass at Leadenhall and Newgate Markets. Taking for review the nine quarterly periods that have passed since March 1858, beef has lately risen above previous prices, that of the early part of last year being excepted; and mutton has ranged still higher. The average price of superior mutton was last quarter $7\frac{1}{2}d.$, higher by three farthings than in the previous nine months; that of superior beef was $6\frac{3}{4}d.$, and showed a less increase. Inferior beef was a penny dearer than it had been in the beginning of the year. The prices of both qualities of beef and mutton were higher than in the June quarters of 1858-9, except that of inferior beef ($4\frac{3}{4}d.$), which was the same as respects the two June quarters of 1859-60. York Regent potatoes sold at the waterside market, Southwark, at an average price of $142s. 6d.$ per ton: they were not so dear as in the same quarter of 1858 ($162s. 6d.$), but much dearer than in that of last year ($97s. 6d.$).

The numbers of paupers, both in-door and out-door, were less last quarter than they were in the same period of 1859; but the decrease was inconsiderable. A decrease more important is observed when they are compared with those of 1858.

The temperature of the air, barometrical pressure, rain and other elements of the weather, which has been of unusual character, are minutely and skilfully described by Mr. Glaisher. He states that both days and nights in April were remarkably cold; those in May were both somewhat warmer than usual; in June both were cold, particularly the high day-temperatures, which were lower than in May though usually they are higher by seven degrees. April was colder than it had been previously in any year since 1839; and we must travel back to 1821 to find so cold a June. June was colder than May at Guernsey, in Cornwall and Devonshire, and near the sea, south of latitude 53° . The mean temperature of the quarter at Greenwich was $50^{\circ} 5'$, which is less by $2^{\circ} 3'$ than the average of the same quarter in 19 years. At Greenwich the rain-fall in June was 5.8 in.; as far back as 1815 there is no instance of so large a fall in June. This fall was, however, greatly exceeded at stations south of Greenwich, particularly in Hampshire.

State of the Public Health.—The deaths registered in the three months that ended June 30th were 110,869; a larger number than was returned in any previous June quarter (1848-59). The extent to which life was invaded and destroyed by causes that have been described, badness of weather and dearth of food, can be only partially discovered by comparing the mortality with an average derived from seasons both healthy and unhealthy; but it may be stated that the annual rate of mortality last quarter was 2.237 per cent. of the population, while the average of ten previous springs was 2.195. In other words the mortality was such that if it had been maintained for a year, out of a hundred thousand persons 42 would have died in excess of the number to whom a season that could not be represented as healthy, but only of average character, would have been fatal.

If the mortality had been at the rate of 17 in a thousand annually, which is ascertained to be the rule of selected healthy districts, instead of the actual rate (22), the deaths in the whole of England and Wales last quarter would have been 84,927; and 25,942 persons would, when the period had closed, still have formed as many units in the sum of human existence. An excess of deaths which is not decreed by inexorable fate may very properly be termed "unnatural," though it is quite true that, only the conditions being different, it is nature that *killeth* as well as *giveth life*.

It is a remarkable and interesting fact that if two millions of acres on which the chief towns of England are situated, be distinguished from the remaining thirty-five that hold small towns and country parishes, it is found that the rate of mortality on the former (2.328 per cent. per

annum) was *below* the average of last quarter, whereas on the latter the rate, 2.154, was *above* the average. The average rates were respectively 2.373 and 2.041. Although the time may be distant when cities will be as healthful as rural districts, or the inferiority which our English poet ascribed to "the town" as the handiwork of man become much less apparent in point of salubrity than it is at present, it cannot be questioned that large populations have even now advantages of a nature favourable to health which villages do not possess. The highest attainable health is probably to be sought in a happy combination of both states—*rus in urbe*. The words of an excellent popular writer may prove to be no dream, but a well-founded expectation; he believes that we shall ultimately obtain "a complete interpenetration of city and country, a complete fusion of their different modes of life, and a combination of the advantages of both, "such as no country in the world has ever seen."* But it may be asked, whether it is forbidden by this last expression to accept as a perfect model even Nebuchadnezzar's Babylon, which the distinguished writer himself has extolled.

In LONDON 14,932 persons died in the quarter. The metropolis lost about a thousand more lives than in the healthier spring of 1859. Pulmonary complaints were very fatal. The mortality from zymotic diseases generally was comparatively low; in this class measles chiefly prevailed.

The SOUTH-EASTERN COUNTIES returned 9214 deaths, against 8830 and 8468 in the springs of 1858-59. The parish of Barming in the Maidstone district suffered from angina maligna; Worth in Sussex from diphtheria, which also attacked Newport in the Isle of Wight. Scarletina was fatal in Southampton; and the Registrar of Landport, Portsea Island, states that the "long winter and cold spring" had produced a high mortality in his district.

In the SOUTH MIDLAND COUNTIES the mortality was high, except in Huntingdonshire. Typhus was imported from Luton into Wheathampstead (St. Albans) and six deaths from it occurred within a distance of 100 yards. Cesspools and pigsties, till then undisturbed, were at length abolished to stay the infection. Northampton suffered severely from small-pox, which was fatal in 34 cases in St. Giles, and in 25 in All Saints. Ague was very prevalent at Sutton in Cambridgeshire.

The EASTERN COUNTIES show an increase in the deaths, which number 6226. The medical attendant of a lady who died at Colchester from erysipelas considers that bad sewerage was the cause of the death: "The public sewers in the neighbourhood were so defective in trapping, "that the house [where she lived] was poisoned with the stench." The Registrar of Radwinter mentions that the parish of Hempstead has generally more deaths from fever than all the rest of his district; and he complains of the indecent overcrowding of cottages. It is stated that ague has probably never been so prevalent at Wenhasston (Blything) as in last quarter; it was caused by the miasma from saturated marsh lands near the sea. Able-bodied men were the class most subject to it. In Norfolk diphtheria has prevailed at Holt, South Walsham, and Wells; small-pox at King's Lynn, where it has been fatal to the unvaccinated.

The deaths rose above 10,000 in the SOUTH-WESTERN COUNTIES; they were nearly 900 more than in two corresponding quarters. They were numerous in Wiltshire, Devonshire, and Cornwall. In Chippenham, where measles has been very prevalent, the total deaths rose from about 100 to 133. The same complaint was fatal at Lympton and Bideford in Devonshire, also at Saltash in Cornwall; and its fatality was believed to be owing to the cold wet season. Scarletina was prevalent and fatal in Corfe Castle sub-district, and Camborne. "The unusual severity of the "weather" caused 25 deaths by whooping-cough, out of 82, at St. Agnes, Truro. Plymouth suffered much from small-pox.

* Charles Kingsley's *Miscellanies*: Great Cities.

The WEST MIDLAND COUNTIES appear to have been on the whole healthy, but the mortality was high in certain localities. In Gloucester district, where the total deaths rose from about 165 to 253, measles was very fatal; it also "prevailed to an alarming extent" at Newhall (Burton-upon-Trent), where the want of sanitary arrangements is reported as the chief cause of increased mortality in the parish. Scarletina attacked Whitchurch and Market Drayton in Shropshire, and was fatal in many cases. Four children died from diphtheria at Yarkhill in Herefordshire.

The NORTH MIDLAND COUNTIES were not unhealthy, except Lincolnshire, in many parts of which measles prevailed fatally; and at Gedney Hill there was ague. Hayfield in Derbyshire returned 12 deaths from diphtheria. The returns from Cheshire and Lancashire (NORTH WESTERN) were not in the aggregate heavy; but measles, so common in other parts, visited Heaton Norris, Macclesfield, Liverpool, West Derby, Manchester, Salford, and Preston; 17 deaths from small-pox at West Leigh. The mortality rose a little in YORKSHIRE. Ripponden (Halifax) suffered greatly from scarlatina. Many children died from measles in Leeds. Diphtheria caused numerous deaths at Campsall, Aberford, Richmond, and in the ill-drained village of Borrowby at Northallerton. Bad drainage and impure water caused an outbreak of typhus in East Cowton (Northallerton). Mention has been made by the Registrar more than once of the bad sewerage at Sherburn, a few miles from Scarborough. In the NORTHERN COUNTIES at Little Chilton (Stockton) marshy ground bred much ague of a virulent character. Southwick village (Sunderland) is described as in "most dreadful" sanitary condition. In WALES, out of 46 deaths in Kenarth, 14 were from diphtheria, which was also very fatal at Llanarmon.

Third Quarter.—July, August, September, 1860.

The temperature during the quarter was unusually low, the sky cloudy, the earth often sunless, and the weather generally bad, in the language of meteorology; nevertheless, the progress of the phenomena which the returns record is satisfactory. The mortality was much below the average, the births little differed from it; the marriages became more frequent. Sanitary improvements have gone on, and the general result of the wet weather has been a better supply of water, the purification of the sewers, and the retardation of putrefaction, as well as of the zymotic changes which produce diarrhoea. Fruit has been comparatively abundant, and its consumption has also had a salutary effect. Mr. Leigh, of Manchester, justly says, "the dependence of diarrhoea upon a high temperature seems to be most marked, for fruit has been unusually plentiful, and it has been eaten most freely without ill effect."

The ultimate results of the extraordinary season will be watched with interest as they are revealed in future returns.

Marriages.—81,082 persons married in the quarter; and the marriage-rate was 1·614, or higher than in any corresponding quarter since 1856, but slightly below the average of ten summer quarters.

The increase of marriages was most striking in London and in Lancashire.

Births.—164,121 children were born and registered in the ninety-two days of July, August, and September. The number is less than the number in the last year, but exceeds largely the numbers registered in the corresponding summer quarters of any previous year. The increase of births is most considerable in London, Lancashire, Cheshire, and Yorkshire. The birth-rate of the quarter was 3·267; the average of the season being 3·280.

Increase of Population.—The excess of births over the deaths in the quarter was 77,809; so the natural increase of the population of England

and Wales was at the rate of 846 daily; and if the rest of the population increased equally fast the natural increase of the United Kingdom must have been at the rate of 1266 daily. The increase exceeds any on record.

About 10,874 emigrants of English origin sailed from the ports of the United Kingdom at which there are Government emigration agents; 5134 to the United States, 336 to the North American colonies, 4115 to the Australian colonies, and 1289 to other parts. 33,734 emigrants sailed from these ports, of whom about 1433 were of foreign origin. Half of the Scotch and only about one eighth of the Irish go to the Australian colonies.

Prices, the Weather, and Pauperism.—The prices of provisions have been high during the thirteen weeks. Taking the corresponding weeks of 1859 as the starting point, the price of wheat rose 34 per cent., beef 7 per cent., mutton 11 per cent., potatoes 59 per cent. The average prices during the thirteen weeks were: wheat 59s. 1d. a quarter, beef 5½d., mutton 6¾d. a pound by the carcase in the Leadenhall and Newgate markets; York Regent potatoes 135s. a ton at Waterside Market, Southwark. The prices of the lower qualities of beef were stationary (4¼d.), and the prices of the higher qualities rose from 6¼d. to 7d. a pound. The prices of the lower and higher qualities of mutton rose ½d. and ¾d. in the pound in the twelvemonth, and were respectively 5¼d. and 7½d. a pound during the thirteen weeks.

The mean temperature of the thirteen weeks at Greenwich was 56°·2; which is less by 3°·3 than the mean temperature of the corresponding seasons of 89 preceding years. The temperatures of July, August, and September were all below the average to nearly an equal extent. There is no other instance on record of so low a mean temperature of the four months June, July, August, and September as 55°·9. By going back to 1771 Mr. Glaisher, however, finds a mean temperature of 56°·0. The fall of rain in the three months was 9·6 inches, which is 2·1 inches in excess of the average. The fall of rain has been 25·1 inches at Greenwich during 9 months, and has varied at the several stations from 16·8 inches at Scarborough to 42·6 inches at Lampeter in Cardiganshire. The excess of rain at Greenwich in the nine months is 6·0 inches. Upon this subject and others Mr. Glaisher in his valuable report gives some interesting details; and among them may be mentioned the time at which the crops as well as some fruits ripened. According to his reports the potato disease is not so bad in the south as it is in the north of England.

Pauperism is declining; on an average 769,360 were in the receipt of relief, while the number in the corresponding weeks of the previous year was 783,449.

State of the Public Health.—86,312 deaths were registered in the three months ending in September, or less by 17,904 than the deaths (104,216) registered in the corresponding quarter of 1859. To every six deaths in the last there were only five in the present summer. The rate of mortality was 17; whereas the average of the season is 20 per 1000.

The reduction of the mortality is observable in the town and in the country districts; but it is by far the greatest in the town districts. The rate of mortality in the town districts fell from 23·77, which is the average of 10 summer quarters 1850-59, to 18·61 per 1000; in the country and small town districts from 17·51 to 15·84, or 5·16 degrees in the town and 1·67 in the country districts.

This is exceedingly gratifying; and if the supply of vegetables prove adequate through the year, it is not probable that the reaction will deprive the population of all its gains. The drainage of the banks of the Thames and of the other marshy districts of the country would secure the inhabitants from the attacks of neuralgia, rheumatism, ague, and fever which often follow rainy seasons.

In LONDON the mortality was low; the prevailing diseases have been described in the Quarterly Summary of the Weekly Tables.

The SOUTH EASTERN DIVISION has been healthy; the deaths much below the average in every county. 3 deaths from diphtheria were registered at Leatherhead, and Woking is said to have suffered exceptionally, but in Chobham, Ripley, and Kingston the deaths were much below the average. The deaths in St. Peter's, Brighton, were below the average, and the district has been unusually healthy. The sewers have been well flushed and cleansed by the constant rains. In Kent nearly every district was healthy; but in Ashford scarlatina prevailed; in Barham diphtheria. Portsmouth, generally an unhealthy place, has suffered less than usual; 400 persons died in the district. In Southampton the mortality has been low; none of the epidemic diarrhoea has appeared in Winchester.

5358 deaths were registered in the SOUTH MIDLAND COUNTIES, and in every county the mortality was below the average. In the parish of Knebworth, Hertfordshire, with a population of 200, however, 12 children died of diphtheria, and several are suffering from it now. Small-pox is still epidemic in Northamptonshire; Daventry and Peterborough are especially mentioned. Small-pox is also very prevalent in Newmarket.

The EASTERN COUNTIES have been healthy; the deaths, which were 6158 in the previous summer quarter, amounted only to 4563. Diphtheria caused 7 deaths in the South Walsham sub-district of Blofield, but is mentioned in no other district of Norfolk, Essex, or Suffolk. In Watton, Wayland, two families were attacked by typhoid fever, brought, the registrar asserts, from London; otherwise the district was healthy. The sanitary arrangements have been a great benefit to this district. Colchester is now healthy; and there has been no death from diarrhoea.

The SOUTH-WESTERN COUNTIES out of a population of nearly two millions lost 7050 by death; whereas the deaths in the previous summer quarter were 8515. Every county, Wilts, Dorset, Devon, Cornwall, Somerset, alike enjoyed this immunity. Out of a population of about six thousand in Wilton only one death occurred in thirty-two days. Small-pox has attacked several children in Summercourt, Newlyn, where vaccination has been very generally neglected. In Clutton, Somersetshire, the reduced mortality is referred to improved sanitary arrangements, better dwellings, more provident habits, and fuller employment in the coal mines and husbandry than is generally obtained in the neighbourhood. The deaths in Bath have fallen in three successive summer quarters from 406 to 370, and 286. In the Bridport district the deaths (75) were more numerous than they were in the previous summer (59); and as is evident from a local inquiry, the mortality of the town is so high as to admit of great reduction by sanitary arrangements; which the enlightened part of the inhabitants appear to be disposed to adopt.

The WEST MIDLAND COUNTIES generally experience a mortality above the average; but there are signs of improvement which cannot be entirely accounted for by the flooding of the sewers by the rains. The decrease in the mortality of Wolverhampton, Walsall, West Bromwich, and Dudley, where the water supply was imperfect, is enormous; and in nearly all of them certain sanitary arrangements have been introduced. The deaths in Birmingham and Aston during the last three summer quarters have been 1854, 1814, and 1243: the mortality has fallen one-third part.

It is probable that the ordinary water supply of a place is bad when its mortality is greatly reduced by heavy rains.

The NORTH MIDLAND COUNTIES lost less by 1045 lives in the last summer quarter (5421) than they lost in the summer preceding. Diphtheria has nevertheless prevailed in parts of Lincolnshire, the inhabitants of which will do well to study the experience of Fiskerton. There diphtheria was very prevalent, and killed 11 persons. The drainage of the parish was

very defective, "there being open dykes close to some of the houses containing water, &c. in a putrid and stinking state, without any fall to pass it away." It was reported to the Board of Guardians by the registrar, the defects of drainage were remedied, and there has been no fresh case during the last month. The district is healthy.

In Belper vaccination is much neglected; small-pox has made its appearance, and has been fatal in 9 cases. Fever has been very fatal in Dronfield.

In the NORTH WESTERN COUNTIES 13,954 deaths were registered, the deaths in the previous quarter having been 15,506. The system of *middens* prevails in Lancashire, and the dirt is there not washed away by rain as it is in sewers; which may account for the circumstance that the reduction of the mortality is less in this county than it is elsewhere. The registrars of the West Derby district, a part of which is in the borough of Liverpool, call attention to the diminished rate of mortality. "Sanitary measures," one of them says, "under the Health Act have greatly improved this district." Scarlatina has been very prevalent in the Lancaster sub-district; it was fatal in 15 cases, and had it not been for the superior sanitary arrangements the registrar believes "it would have been four times as fatal, for in an ill-drained group of twenty houses a quarter of a mile from the town the disease was the cause of 3 deaths."

The deaths in Yorkshire were 9797, or less by 1189 than the deaths in the summer quarter of the previous year. There is no reduction in the high mortality of the Leeds or of the Hunslet districts; indeed, diarrhoea prevailed there, and the deaths were 1481, or 170 more than in the summer quarter of the previous year. The causes of the high mortality deserve the careful attention of the intelligent authorities of that important town.

Hull and Sculcoates experienced a great reduction of mortality.

The deaths in the northern counties amounted to 5149, and were to some extent below the average number. Scarlatina and typhus have been prevalent in Durham and in Tynemouth.

The mortality in Monmouthshire and Wales was below the average; 5501 deaths were registered.

The weather of this quarter may be looked at as an experiment on the health of the people. Employment has been easily obtained by workmen, but the prices of provisions have been high. And this general survey seems to establish the fact, that the salubrity of the season is chiefly due to two circumstances; the reduced temperature of summer, and the abundant supply of water by rain. The low temperature retarded the putrefaction of the town impurities; and the water washed them away; so both the forces acting in the same direction, gave a great result. A careful study of the circumstances of each locality by which the result was produced, cannot fail to be instructive; and to confirm the faith of the authorities in the simple sanitary elements with which nature works.

If Wolverhampton is, as the Registrar conjectures, extraordinarily healthy, "because the frequent rains have swilled away the impurities from which in hot summer weather noxious effluvia arise, thereby preventing the sickness, and diarrhoea more especially, caused by such vapors in the air, and impurities in the water supply," why should Wolverhampton ever be again as unhealthy and as dangerous to its inhabitants as it was before? It is true the town has no command over the rain; but it has unquestionably the power to wash away the impurities from its cesspools and its sewers. Its engineers can supply the town with sweet waters in abundance for the use of the inhabitants. If the Birmingham and Aston district too lose only 1243 inhabitants by death when the town is well washed, why should they ever die again at the rate of last summer when 1815 of the people perished?

The remedy is too simple to obtain immediately all the attention it deserves from the municipal authorities. But they cannot do better than imitate the great oriental dignitary suffering from leprosy, as our towns are now suffering from other diseases, who although he was wroth when told to "wash and be clean," yet finally obeyed the injunction, and was healed.

Fourth Quarter.—October, November, December, 1860.

The Quarterly Returns are favourable, and imply that the population was not only more prosperous but healthier than usual. The marriage rate was slightly above the average, so that the prospects of the working classes were in their own opinion good; the births slightly decreased, and the mortality fell below the average. The improvement in health was greatest in the town districts.

The accounts of births and deaths for the year 1860 show an increase of the birth and a decrease of the death rate.

Marriages.—101,376 persons married in the quarter; and this is the greatest number that have ever married before in the same season.

The quarterly marriage rate (per cent. per annum) was 2.012, the average being 2.001.

The same excess is observed in the marriages of the year 1860; for 340,312 persons married, and the marriage rate was 1.710, the average rate being 1.694.

The greatest increase of marriages is observed in the manufacturing districts of Yorkshire and Lancashire.

Births.—162,719 children were born and registered in the last quarter of the year 1860; or more by 4757 than were registered in the last

quarter of 1858, and 7372 less than the number in the last quarter of 1859. The birth-rate of the quarter was 3.230; the average of the quarter being 3.234.

684,048 children were registered in the year 1860; and the annual birth-rate was 3.437, making .020 above the annual average. Taking one day with another through the year, 1874 children were born daily.

Increase of Population.—The births exceeded the deaths in the quarter by 59,796, and that was the natural increase of the population.

TABLE XVIII.—The AVERAGE PRICES of CONSOLS, of WHEAT, of MEAT, and of POTATOES, in each of the Years, and in each Quarter of the Years 1852–1860; and also the AVERAGE NUMBER of PAUPERS RELIEVED on the last day of each Week, in each of the Years and in each Quarter of the Years 1857 to 1860.

| YEARS. | Average Price of CONSOLS (for Money). | Average Price of WHEAT per Quarter in England and Wales. | PAUPERISM. | | Average Prices of | | | | | |
|--------|---------------------------------------|--|--|-----------|--|-------|---|-------|------------------|-------|
| | | | Average Number of Paupers relieved on the last day of each WEEK. | | MEAT per lb. at Leadenhall and Newgate Markets (by the Carcase). | | POTATOES (York Regents) per Ton at Waterside Market, Southwark. | | | |
| | | | In-door. | Out-door. | BEEF. | | MUTTON. | | | |
| | £ | s. d. | | | Range of Prices. | Mean. | Range of Prices. | Mean. | Range of Prices. | Mean. |
| 1852 | 99 | 40 10 | — | — | 3½–5 | 4½ | 4–5½ | 4½ | 79–103 | 91 0 |
| 1853 | 97 | 52 11 | — | — | 4–5½ | 4½ | 4½–7 | 5½ | 116–145 | 130 6 |
| 1854 | 91½ | 72 5 | — | — | 4½–6½ | 5½ | 4½–7 | 5½ | 107–131 | 119 0 |
| 1855 | 90 | 74 8 | — | — | 4½–6½ | 5½ | 4½–6½ | 5½ | 94–107 | 100 6 |
| 1856 | 93 | 69 2 | — | — | 4½–6½ | 5½ | 4½–6½ | 5½ | 78–93 | 85 6 |
| 1857 | 91½ | 56 5 | 121,669 | 737,287 | 4½–6½ | 5½ | 4½–7 | 5½ | 108–134 | 120 8 |
| 1858 | 97 | 44 3 | 120,140 | 751,031 | 4½–6½ | 5½ | 4½–6½ | 5½ | 104–136 | 120 0 |
| 1859 | 95 | 43 10 | 110,504 | 705,051 | 4½–6½ | 5½ | 4½–7 | 5½ | 79–109 | 94 0 |
| 1860 | 94 | 53 3 | 110,603 | 687,752 | 4–6½ | 5½ | 5–7½ | 6 | 120–145 | 132 6 |

TABLE XVII.—ENGLAND. ANNUAL RATE of MORTALITY per Cent. in TOWN and COUNTRY DISTRICTS in each Quarter of the Years 1850–1860.

| | POPULATION enumerated. | | Quarters ending | ANNUAL RATE of MORTALITY per Cent. in each Quarter of the Years | | | | | | | | | | | |
|---|------------------------|------------|-----------------|---|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|-------|
| | 1851. | 1861. | | 1850. | 1851. | 1852. | 1853. | 1854. | 1855. | 1856. | 1857. | 1858. | 1859. | Mean 1860–59 | 1860. |
| | | | | | | | | | | | | | | | |
| In 125 Districts and 23 Sub-districts comprising the CHIEF TOWNS | 8,247,017 | 9,306,780 | March | 2.403 | 2.693 | 2.627 | 2.838 | 2.758 | 3.138 | 2.413 | 2.535 | 2.779 | 2.669 | 2.685 | 2.636 |
| | | | June | 2.229 | 2.451 | 2.413 | 2.538 | 2.475 | 2.426 | 2.313 | 2.247 | 2.378 | 2.262 | 2.323 | |
| | | | Sept. | 2.207 | 2.347 | 2.574 | 2.316 | 3.066 | 2.081 | 2.191 | 2.401 | 2.274 | 2.310 | 2.377 | 1.861 |
| | | | Dec. | 2.327 | 2.491 | 2.466 | 2.650 | 2.696 | 2.309 | 2.273 | 2.580 | 2.766 | 2.379 | 2.494 | 2.312 |
| | | | Year | 2.292 | 2.496 | 2.520 | 2.586 | 2.749 | 2.489 | 2.298 | 2.441 | 2.549 | 2.405 | 2.482 | 2.284 |
| In the remaining Districts and Sub-districts of England and Wales comprising chiefly SMALL TOWNS and COUNTRY PARISHES | 9,680,592 | 10,259,444 | March | 2.139 | 2.126 | 2.124 | 2.425 | 2.179 | 2.716 | 1.975 | 2.090 | 2.503 | 2.377 | 2.265 | 2.338 |
| | | | June | 1.995 | 2.027 | 2.060 | 2.190 | 1.988 | 2.141 | 1.936 | 1.947 | 2.061 | 2.060 | 2.041 | 2.154 |
| | | | Sept. | 1.670 | 1.733 | 1.853 | 1.700 | 1.860 | 1.638 | 1.636 | 1.770 | 1.745 | 1.902 | 1.751 | 1.584 |
| | | | Dec. | 1.803 | 1.908 | 1.911 | 1.836 | 2.005 | 1.737 | 1.751 | 1.939 | 2.077 | 2.025 | 1.910 | 1.789 |
| | | | Year | 1.902 | 1.949 | 1.987 | 2.038 | 2.008 | 2.073 | 1.825 | 1.949 | 2.097 | 2.091 | 1.992 | 1.966 |

Names of the 125 Districts and 23 Sub-districts comprising the chief towns:—All the Districts of London (36), and Kingston, Richmond, Gravesend, Medway, East and West Maidstone Sub-districts, Canterbury, Thanet, Hastings, Brighton, Portsea Island, Alverstoke (Gosport), Southampton, Winchester Sub-district, Reading, Brentford, Edmonton, St. Clement Sub-district, Headington, Oxford, Northampton, Cambridge, West Ham, Colchester, Bury St. Edmunds, Ipswich, Yarmouth, Norwich, King's Lynn, Melksham, Salisbury, Exeter, Plymouth, East Stonehouse, Stoke Damerel (Devonport), Redruth, Bath, Bedminster Sub-district, Bristol, Clifton, St. Nicholas Gloucester, and St. John the Baptist Gloucester Sub-districts, Cheltenham, Hereford City Sub-district, Shrewsbury, Wolstanton, Stoke-upon-Trent, Wolverhampton, Walsall, West Bromwich, Dudley, Stourbridge, Worcester, Birmingham, Aston, Coventry, Leicester, Lincoln Home Sub-district, Radford, Nottingham, Derby, Stockport, East Macclesfield, West Macclesfield, and Sutton Sub-districts, Chester Castle and Chester Cathedral Sub-districts (Great Boughton), Liverpool, West Derby, Wigan, Warrington, Leigh, Bolton, Bury, Barton-upon-Irwell, Chorlton, Salford, Manchester, Ashton, Oldham, Rochdale, Haslingden, Burnley, Blackburn, Preston, Todmorden, Huddersfield, Halifax, Bradford, Hunslet, Leeds, Dewsbury, Wakefield, Ecclesall Bierlow, Sheffield, Bootham, Micklegate, and Walmgate Sub-districts (York), Sculcoates, Hull, 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), Merthyr Tydfil, and Llangafelach and Swansea Sub-districts (Swansea).

The three months January, February, March, contain 90, in leap year 91 days; the three months April, May, June, 91 days; each of the last two quarters of the year, 92 days. For this inequality a correction has been made in the calculations, also for the difference between 365 and 365.25 days, and 366 and 365.25 days in leap year.

| QUARTERS ending | Average Price of CONSOLS (for Money). | Average Price of WHEAT per Quarter in England and Wales. | In-door. | Out-door. | Range of Prices. | Mean. | Range of Prices. | Mean. | Range of Prices. | Mean. |
|-----------------|---------------------------------------|--|----------|-----------|------------------|-------|------------------|-------|------------------|-------|
| 1852:— | | | | | | | | | | |
| March | 97½ | 40 10 | — | — | 3½–5 | 4½ | 3½–5½ | 4½ | 60–80 | 70 0 |
| June | 99 | 40 10 | — | — | 3½–4½ | 4 | 3½–5½ | 4½ | 85–110 | 97 6 |
| Sept. | 100 | 41 2 | — | — | 3½–5 | 4½ | 4–6 | 5 | 80–100 | 90 0 |
| Dec. | 100½ | 40 5 | — | — | 3–5 | 4 | 4½–6½ | 5½ | 90–120 | 105 0 |
| 1853:— | | | | | | | | | | |
| March | 99½ | 45 7 | — | — | 3½–5½ | 4½ | 4½–6½ | 5½ | 110–145 | 127 6 |
| June | 100½ | 44 6 | — | — | 4–5½ | 4½ | 5–6½ | 5½ | 110–145 | 127 6 |
| Sept. | 97 | 51 10 | — | — | 4½–6 | 5½ | 5–7½ | 6½ | 110–125 | 117 6 |
| Dec. | 93½ | 69 10 | — | — | 4–6 | 5 | 4½–7 | 5½ | 135–165 | 150 0 |
| 1854:— | | | | | | | | | | |
| March | 91 | 79 6 | — | — | 4½–6½ | 5½ | 4½–7 | 5½ | 120–160 | 140 0 |
| June | 88½ | 78 4 | — | — | 4½–6½ | 5½ | 4½–6½ | 5½ | 137–172 | 155 0 |
| Sept. | 93½ | 63 10 | — | — | 4½–6 | 5½ | 5–7 | 6 | 75–85 | 80 0 |
| Dec. | 93½ | 68 0 | — | — | 4½–6½ | 5½ | 5–7 | 6 | 95–105 | 100 0 |
| 1855:— | | | | | | | | | | |
| March | 91½ | 69 11 | — | — | 4½–6½ | 5½ | 4½–6½ | 5½ | 105–120 | 112 6 |
| June | 90½ | 73 4 | — | — | 4½–6½ | 5½ | 4½–6½ | 5½ | 110–130 | 120 0 |
| Sept. | 90½ | 76 1 | — | — | 5–6½ | 5½ | 5–7 | 6 | 69–79 | 74 0 |
| Dec. | 88½ | 79 4 | — | — | 4½–6½ | 5½ | 4½–6½ | 5½ | 90–100 | 95 0 |
| 1856:— | | | | | | | | | | |
| March | 90½ | 72 4 | — | — | 4½–6½ | 5½ | 4½–6½ | 5½ | 78–93 | 86 0 |
| June | 93 | 68 8 | — | — | 4½–6½ | 5½ | 5–6½ | 5½ | 70–90 | 80 0 |
| Sept. | 95 | 72 3 | — | — | 4½–6½ | 5½ | 5–7 | 6 | 75–80 | 78 0 |
| Dec. | 92½ | 63 4 | — | — | 3½–6½ | 5½ | 4½–6½ | 5½ | 90–110 | 100 0 |
| 1857:— | | | | | | | | | | |
| March | 93½ | 56 10 | 135,121 | 777,426 | 4½–6½ | 5½ | 5½–7½ | 6½ | 100–120 | 110 0 |
| June | 93 | 56 9 | 119,241 | 732,284 | 4½–6½ | 5½ | 4½–6½ | 5½ | 105–150 | 127 6 |
| Sept. | 90½ | 59 11 | 109,371 | 702,644 | 4½–6½ | 5½ | 4½–7 | 5½ | 95–115 | 105 0 |
| Dec. | 89½ | 52 0 | 122,942 | 736,794 | 4½–6½ | 5½ | 4½–7 | 5½ | 130–150 | 140 0 |
| 1858:— | | | | | | | | | | |
| March | 96½ | 46 5 | 138,376 | 835,641 | 4½–6½ | 5½ | 4½–7 | 5½ | 130–175 | 152 6 |
| June | 97½ | 44 1 | 119,234 | 752,278 | 4½–6 | 5½ | 4½–6½ | 5½ | 140–185 | 162 6 |
| Sept. | 96½ | 44 7 | 107,197 | 705,301 | 4½–6½ | 5½ | 4½–6½ | 5½ | 65–90 | 77 6 |
| Dec. | 98½ | 41 9 | 115,751 | 710,904 | 4–6½ | 5½ | 4½–6½ | 5½ | 80–95 | 87 6 |
| 1859:— | | | | | | | | | | |
| March | 95½ | 40 8 | 122,854 | 742,964 | 4½–6½ | 5½ | 4½–7 | 5½ | 80–100 | 90 0 |
| June | 92½ | 47 3 | 109,150 | 710,410 | 4½–6½ | 5½ | 5–7 | 6 | 85–110 | 97 6 |
| Sept. | 95½ | 44 0 | 100,582 | 682,867 | 4½–6½ | 5½ | 4½–6½ | 5½ | 65–105 | 85 0 |
| Dec. | 96½ | 43 4 | 109,429 | 683,962 | 4–6½ | 5½ | 4½–6½ | 5½ | 85–120 | 102 6 |
| 1860:— | | | | | | | | | | |
| March | 94½ | 44 5 | 118,523 | 717,264 | 3½–6½ | 5½ | 4½–6½ | 5½ | 115–145 | 130 0 |
| June | 94½ | 52 8 | 107,050 | 692,384 | 4½–6½ | 5½ | 5½–7½ | 6½ | 125–160 | 142 6 |
| Sept. | 93½ | 59 1 | 101,680 | 667,680 | 4½–7 | 5½ | 5½–7½ | 6½ | 125–145 | 135 0 |
| Dec. | 93½ | 56 9 | 115,158 | 673,680 | 3½–6½ | 4½ | 4½–6½ | 5½ | 115–130 | 122 6 |

In the year the *natural increase* of England and Wales was 261,327 souls; 716 daily. If Scotland and Ireland increased at the same rate the natural increase of the population of the United Kingdom must have been at the rate of 1069 daily.

Emigration carried off a part of the increase. In the quarter about 7074 English emigrants sailed from the ports at which there are Government Emigration Offices; nearly in equal proportions to the United States and the Australian colonies.

Prices, the Weather, and Pauperism.—The scarcity or the abundance of the principal articles of food is shown by their prices.

Wheat was 56s. 9d. a quarter; or 31 per cent. higher in price than it was in the corresponding quarter of 1859. Beef at the Leadenhall and Newgate markets was sold, by the carcase, at 4⁷/₈d. a pound; or nearly ¹/₂d. less. Mutton was on an average 5³/₄d. a pound, and remained the same as in the last months of 1859. The potato crop partially failed; and York Regents, at the waterside market, were sold at 122s. 6d. a ton; or at the rate of 1¹/₂ lb. for a penny. The price of this universal article

TABLE XIX.—MEAN ANNUAL VALUE OF METEOROLOGICAL ELEMENTS

| NAMES OF STATIONS. | Elevation in feet above the Sea level. | Latitude. | 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 | 49 33 0 N. | 29.682 | 1.132 | 59.3 | 39.5 | 19.8 | 53.1 | 45.7 | 7.4 | 47.8 | 45.0 |
| Helston | 106 | 50 7 0 | 29.820 | 1.172 | 56.1 | 44.0 | 12.1 | 58.3 | 45.9 | 12.4 | 48.8 | 41.2 |
| Truro | 43 | 50 17 0 | 29.903 | 1.224 | 63.0 | 31.5 | 31.4 | 56.4 | 43.3 | 13.1 | 50.2 | 42.7 |
| Exeter, Elmbrook | 110 | 50 44 0 | 29.705 | 1.239 | 63.6 | 33.1 | 30.5 | 54.9 | 42.0 | 12.9 | 48.0 | 42.3 |
| Exeter, 200 High-street | 164 | 50 44 0 | 29.716 | 1.265 | 63.6 | 35.1 | 28.5 | 52.4 | 43.0 | 9.4 | 48.3 | 43.9 |
| Ventnor | 150 | 50 35 0 | 29.746 | 1.137 | 51.5 | 36.6 | 14.9 | 53.6 | 36.7 | 16.9 | 49.3 | 43.1 |
| Osborne | 172 | 50 42 0 | 29.708 | 1.208 | 63.6 | 34.2 | 29.4 | 56.4 | 42.3 | 14.1 | 48.1 | 44.9 |
| Worthing | 34 | 50 45 0 | 29.876 | 1.103 | 61.5 | 33.4 | 28.1 | 53.2 | 41.8 | 11.4 | 47.4 | 42.8 |
| Fairlight | 528 | 50 53 0 | .. | .. | 59.8 | 32.2 | 27.6 | 51.7 | 40.2 | 11.5 | 45.2 | 42.4 |
| Little Bridy | 387 | 50 41 0 | 29.890 | 1.226 | 62.7 | 30.3 | 32.4 | 54.6 | 40.0 | 14.6 | 46.6 | 43.2 |
| Barnstaple | 31 | 51 5 15 | 29.842 | 1.230 | 64.8 | 33.7 | 31.1 | 55.5 | 42.9 | 12.6 | 48.7 | 43.7 |
| Aldershot Camp | 350 | 51 15 25 | 29.554 | 1.146 | 65.4 | 30.9 | 34.5 | 55.2 | 39.8 | 15.4 | 47.3 | 42.8 |
| Clifton | 228 | 51 28 0 | 29.617 | 1.268 | 61.8 | 30.9 | 30.9 | 54.3 | 41.3 | 13.0 | 46.6 | 42.3 |
| Royal Observ., Greenwich | 159 | 51 28 38 | 29.698 | 1.216 | 64.8 | 30.8 | 34.0 | 56.4 | 40.6 | 15.8 | 47.0 | 42.4 |
| St. John's Wood | 171 | .. | 29.888 | 1.106 | 63.6 | 32.3 | 31.3 | 55.2 | 41.0 | 14.2 | 47.5 | 43.0 |
| Guildhall | .. | .. | 29.834 | 1.164 | 62.8 | 36.8 | 26.0 | 54.9 | 43.9 | 11.0 | 48.3 | 44.3 |
| Whitehall | 42 | 51 30 14 | 29.834 | 1.090 | 64.6 | 34.3 | 30.3 | 55.3 | 42.2 | 13.1 | 48.5 | 41.3 |
| Camden Town | 125 | 51 31 57 | 29.737 | 1.217 | 64.0 | 31.0 | 33.0 | 55.2 | 41.0 | 14.2 | 47.4 | 41.4 |
| Battersea | 13 | 51 28 0 | 29.862 | 1.161 | 63.1 | 31.8 | 31.3 | 53.8 | 40.3 | 13.5 | 47.0 | 43.3 |
| Oxford | 210 | 51 45 0 | 29.646 | 1.238 | 62.0 | 29.4 | 32.6 | 53.3 | 38.4 | 14.9 | 46.2 | 41.9 |
| Hartwell House | 250 | 51 49 0 | 29.567 | 1.127 | 64.2 | 29.5 | 34.7 | 54.4 | 39.0 | 15.4 | 46.6 | 41.7 |
| Hartwell Rectory | 290 | 51 49 0 | 29.530 | 1.170 | 63.3 | 30.1 | 33.2 | 54.7 | 40.1 | 14.6 | 46.4 | 41.3 |
| Gloucester | 100 | 51 52 0 | 29.757 | 1.225 | 64.0 | 30.2 | 33.8 | 54.8 | 38.7 | 16.1 | 47.1 | 42.3 |
| Royston | 271 | 52 2 40 | 29.597 | 1.203 | 64.4 | 28.5 | 35.9 | 54.7 | 39.6 | 15.1 | 46.0 | 42.2 |
| Cardington | 100 | 52 7 0 | 29.662 | 1.206 | 64.0 | 28.8 | 35.2 | 54.6 | 39.8 | 14.8 | 46.6 | 42.3 |
| Aspley | 460 | 52 6 0 | 29.780 | 1.145 | 57.8 | 34.6 | 23.2 | 50.0 | 42.3 | 7.7 | 45.4 | 43.0 |
| Bedford | 100 | 52 8 0 | 29.753 | 1.153 | 64.6 | 30.8 | 33.8 | 55.1 | 41.1 | 14.0 | 47.3 | 41.2 |
| Lampeter | 420 | 52 7 0 | 29.417 | 1.266 | 63.5 | 26.9 | 36.6 | 54.6 | 39.0 | 15.6 | 46.0 | 42.8 |
| Norwich | 48 | 52 37 0 | 29.803 | 1.188 | 62.8 | 30.6 | 32.2 | 53.8 | 40.9 | 12.9 | 46.6 | 42.9 |
| Grantham | 190 | 52 54 52 | 29.639 | 1.254 | 62.5 | 31.2 | 31.3 | 52.4 | 41.0 | 11.4 | 45.8 | 41.2 |
| Belvoir Castle | 260 | 52 53 40 | 29.537 | 1.228 | 63.8 | 28.3 | 35.5 | 53.6 | 39.2 | 14.4 | 45.3 | 42.1 |
| Derby | 174 | 52 55 0 | 29.630 | 1.268 | 61.1 | 28.4 | 32.7 | 52.8 | 40.0 | 12.8 | 47.2 | 38.8 |
| Holkham | 39 | 52 57 0 | 29.785 | 1.251 | 61.7 | 28.0 | 33.7 | 52.7 | 40.4 | 11.3 | 45.0 | 41.7 |
| Nottingham | 174 | 52 57 30 | 29.615 | 1.324 | 64.8 | 26.4 | 38.4 | 54.6 | 38.7 | 15.9 | 46.5 | 40.4 |
| Hawarden | 260 | 53 11 15 | 29.581 | 1.250 | 61.6 | 31.5 | 30.1 | 52.6 | 40.9 | 11.7 | 45.8 | 40.3 |
| Liverpool | 37 | 53 24 48 | 29.850 | 1.255 | 60.1 | 36.4 | 23.7 | 52.3 | 44.1 | 8.2 | 47.5 | 41.5 |
| Manchester | 123 | 53 29 0 | 29.715 | 1.320 | 63.5 | 28.1 | 35.4 | 54.0 | 38.7 | 15.3 | 46.0 | 41.2 |
| Wakefield | 115 | 53 40 50 | 29.707 | 1.300 | 64.4 | 26.6 | 37.8 | 54.1 | 38.4 | 15.7 | 46.0 | 40.7 |
| Leeds | 138 | 53 48 0 | 29.669 | 1.301 | 64.1 | 30.0 | 34.1 | 53.6 | 39.9 | 13.7 | 46.8 | 39.6 |
| Stonyhurst | 381 | 53 50 42 | 29.390 | 1.325 | 61.9 | 28.3 | 33.6 | 53.0 | 39.8 | 13.2 | 45.3 | 40.6 |
| Ben Rhydding | 510 | 53 55 12 | 29.296 | 1.316 | 60.1 | 29.4 | 30.7 | 51.3 | 38.4 | 12.9 | 43.6 | 40.2 |
| York | 50 | 53 59 0 | 29.752 | 1.317 | 62.0 | 28.8 | 33.2 | 51.2 | 40.7 | 10.5 | 45.3 | 42.2 |
| Scarborough | 97 | 54 17 0 | 29.702 | 1.258 | 58.7 | 33.0 | 25.7 | 48.1 | 41.3 | 6.8 | 45.1 | 41.5 |
| Isle of Man | 103 | 54 6 0 | 29.727 | 1.354 | 60.6 | 30.5 | 30.1 | 53.7 | 41.3 | 12.4 | 46.2 | 43.5 |
| St. Paul's Parsonage | 16 | 54 52 0 | 29.770 | 1.416 | 62.4 | 27.3 | 35.1 | 51.5 | 38.7 | 12.8 | 45.6 | 40.2 |
| Bywell | 74 | 54 56 43 | 29.700 | 1.383 | 63.0 | 30.0 | 33.0 | 53.8 | 40.1 | 13.7 | 45.7 | 40.9 |
| Allenheads | 1360 | 54 48 44 | 28.332 | 1.330 | 55.7 | 25.4 | 30.3 | 47.5 | 36.0 | 11.5 | 40.8 | 37.0 |
| High House | 411 | 55 24 9 | 29.427 | 1.380 | 60.7 | 29.0 | 31.7 | 52.3 | 37.5 | 14.8 | 44.4 | 41.4 |
| North Shields | 124 | 55 0 7 | 29.754 | 1.300 | 60.0 | 29.4 | 30.6 | 49.2 | 39.1 | 10.1 | 44.7 | 41.0 |

of food rose progressively in the last three months of the three years 1858-59-60 from 87s. 6d. to 102s. 6d. and 122s. 6d. a ton. To supply its deficiency other antiscorbutic vegetables, fruit, or herbs are required.

The meteorology of the season was peculiar, and is fully described by Mr. Glaisher. The season was unusually cold; and on December 18th, and afterwards, the cold became intense. On Christmas Day, the temperature of the air fell to 7°, on the 29th to 8° Fahrenheit. The extreme temperatures varied in different parts of the country; thus on Christmas Day the temperature fell in Guernsey to 30°, Helston to 32°, Truro to 26°, Ventnor to 24°, and on the south coast to 17° and 20°; these temperatures gradually decreasing in the latitude of 51¹/₂° to 6°, 7°, and 8°; and further north to zero; at Nottingham the lowest reading was noted as 8° below zero; further north than 54° of latitude the readings increased to 12° at Alnwick, and 16° at Scarborough.

The atmospheric pressure was also low, and a large amount of rain fell in December; the quantity varying in different parts. The rain-fall of the year at Greenwich was 32 in., at Truro 50.7 in., at Barnstaple

in the Year 1860. By JAMES GLAISHER, Esq., F.R.S.

| 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. | Mean estimated Strength. | Wind. | | | | Mean Amount of Cloud (0-10). | Number of Days it fell. | Amount collected. | NAMES OF STATIONS. |
|-------------------------------|---|---|--|-------------------------------------|--------------------------|------------------------|----|----|----|------------------------------|-------------------------|-------------------|---------------------------|
| | | | | | | Relative Proportion of | | | | | | | |
| | | | | | | N. | E. | S. | W. | | | | |
| .306 | 3.5 | 0.5 | 87 | 540 | 1.7 | 8 | 5 | 7 | 9 | 5.0 | 200 | 48.0 | Guernsey. |
| .319 | 3.6 | 0.5 | 83 | 549 | 2.3 | 7 | 5 | 5 | 11 | 6.0 | 206 | 42.7 | Helston. |
| .283 | 3.2 | 0.9 | 75 | 541 | 2.5 | 10 | 5 | 5 | 9 | 5.3 | 235 | 50.7 | Truro. |
| .280 | 3.2 | 0.7 | 81 | 543 | 1.4 | 10 | 5 | 6 | 8 | 5.3 | 223 | 33.4 | Exeter, Elmbrook. |
| .295 | 3.3 | 0.6 | 85 | 542 | 1.5 | 8 | 4 | 7 | 11 | 6.8 | 276 | 35.9 | Exeter, 200 High-street. |
| .283 | 3.2 | 0.8 | 80 | 541 | .. | 5 | 6 | 6 | 13 | .. | 183 | 36.2 | Ventnor. |
| .309 | 3.5 | 0.4 | 83 | 541 | 0.8 | 6 | 6 | 7 | 11 | 6.6 | 148 | 35.5 | Osborne. |
| .280 | 3.2 | 0.6 | 83 | 545 | 1.7 | 7 | 6 | 7 | 9 | 5.9 | 173 | 34.5 | Worthing. |
| .276 | 3.3 | 0.2 | 93 | .. | 1.1 | 7 | 5 | 8 | 10 | 6.1 | 151 | 29.4 | Fairlight. |
| .287 | 3.2 | 0.4 | 89 | 540 | .. | 7 | 5 | 6 | 10 | 6.3 | 237 | 43.8 | Little Bridy. |
| .292 | 3.3 | 0.7 | 83 | 543 | 1.4 | 6 | 6 | 8 | 10 | 4.3 | 220 | 50.0 | Barnstaple. |
| .290 | 3.2 | 0.6 | 84 | 540 | 0.4 | 6 | 5 | 7 | 11 | 6.4 | 183 | 33.4 | Aldershot Camp. |
| .280 | 3.1 | 0.6 | 83 | 542 | 0.5 | 7 | 6 | 5 | 11 | 6.2 | 221 | 40.6 | Clifton. |
| .282 | 3.2 | 0.6 | 84 | 543 | .. | 5 | 5 | 8 | 11 | 7.4 | 192 | 31.6 | Royal Observ., Greenwich. |
| .295 | 3.2 | 0.6 | 84 | 540 | .. | 7 | 5 | 7 | 11 | 7.5 | 236 | 34.4 | St. John's Wood. |
| .302 | 3.4 | 0.5 | 85 | 543 | .. | .. | .. | .. | .. | .. | 165 | 27.9 | Guildhall. |
| .283 | 3.0 | 0.9 | 77 | 544 | .. | 6 | 5 | 6 | 11 | .. | 175 | 27.5 | Whitehall. |
| .270 | 3.0 | 0.8 | 80 | 543 | .. | 6 | 6 | 7 | 10 | 6.3 | 196 | 30.1 | Camden Town. |
| .290 | 3.3 | 0.4 | 87 | 545 | 1.9 | 9 | 6 | 8 | 7 | 6.6 | 165 | 27.7 | Battersea. |
| .284 | 3.2 | 0.5 | 83 | 543 | .. | .. | .. | .. | .. | 6.0 | 182 | 31.1 | Oxford. |
| .282 | 3.2 | 0.6 | 86 | 541 | 0.7 | 9 | 3 | 9 | 9 | 6.4 | 115 | 32.3 | Hartwell House. |
| .274 | 3.0 | 0.5 | 83 | 540 | 1.1 | 8 | 5 | 6 | 11 | 6.7 | 139 | 25.1 | Hartwell Rectory. |
| .285 | 3.1 | 0.6 | 85 | 543 | .. | 7 | 5 | 5 | 12 | 7.0 | 193 | 28.1 | Gloucester. |
| .279 | 3.2 | 0.5 | 87 | 542 | .. | 7 | 4 | 8 | 10 | 6.7 | 274 | 29.4 | Royston. |
| .282 | 3.3 | 0.5 | 85 | 543 | 1.0 | 8 | 5 | 7 | 9 | 6.5 | 196 | 25.3 | Cardington. |
| .287 | 3.3 | 0.3 | 91 | 537 | .. | 7 | 4 | 6 | 12 | 4.9 | 190 | 31.4 | Aspley. |
| .270 | 3.1 | 0.7 | 80 | 543 | .. | .. | .. | .. | .. | 7.3 | .. | .. | Bedford. |
| .290 | 3.3 | 0.3 | 90 | 538 | 0.9 | 6 | 5 | 8 | 10 | 6.8 | 215 | 54.3 | Lampeter. |
| .287 | 3.2 | 0.5 | 87 | 545 | 1.6 | 5 | 5 | 9 | 10 | 6.2 | 151 | 33.2 | Norwich. |
| .269 | 2.9 | 0.5 | 83 | 535 | 0.4 | 6 | 5 | 8 | 10 | 7.2 | 214 | 23.1 | Grantham. |
| .280 | | | | | | | | | | | | | |

50.0 in., at Lampeter 54.3 in., at Stonyhurst 50.4 in., the four highest; at Liverpool 26.7 in., Grantham 28.1 in., Gloucester 28.1 in., Rose Hill (Oxford) 25.4 in. the London Stations, Battersea, Whitehall, and Guildhall, 27.7.

Pauperism gradually declined; and the paupers fell from 826,655 to 793,391, and 788,838 receiving relief on an average during the last quarters of the years 1858-59-60.

State of the Public Health.—102,923 deaths were registered in the last quarter of the year 1860, and the annual rate of mortality during the season was 2.043. The mortality was 0.140 below the average.

Upon making up the account for the year the deaths are found to be 422,721; and the annual rate of mortality 2.124; or a little more than 21 in 1000. The average of the preceding 10 years is 22. So one life in every 1000 living was saved.

Yet the mortality of England and Wales is still greatly in excess of the rate experienced in the least unhealthy districts. The deaths instead of 102,923 would at that rate have been 78,833; so during the 92 days 24,090 persons died unnatural deaths in the least unhealthy country in Europe.

The densest districts are still the unhealthiest. In the population of town districts, exceeding nine millions at the census of 1861, the mortality was at the rate of 23 in 1000; in the country districts, of more than ten millions, the rate of mortality was 18 in 1000; so the chances of dying in the two groups of districts were as 23 to 18. There is a wide field open for sanitary improvement in the country as well as in towns, and it is gratifying to find that the progress is now evident; for the mortality of the town districts has declined from 25 to 23, and of the country districts from 19 to 18.

Upon looking at the country generally we find that the epidemic diphtheria still prevails in parts of the kingdom; measles, whooping-cough, small-pox, scarlatina, fever are also so frequently mentioned in the Registrar's notes that they may be considered prevailing epidemics.

It is the characteristic of these zymotic diseases that they do not depend upon general atmospheric conditions, but are often very fatal in one community, while they are entirely absent from another in the same climate.

In LONDON the mortality was below the average; the deaths were 15,618.

In the SOUTH EASTERN COUNTIES, Surrey, Kent, Sussex, Hampshire, and Berkshire, the mortality was much below the average of the same season of the two preceding years; the deaths were 8161. The deaths in the Invalid Convict prison, Woking, it is said, are dimi-

TABLE XX.—MEAN ANNUAL VALUE OF METEOROLOGICAL ELEMENTS

| PARALLELS of LATITUDE. | Barometer. | | Thermometer. | | | | | | Mean Temperature | |
|------------------------------|------------|-------------------------|---------------------------------------|--------------------------------------|---------------------------------|---|--|-------------------|------------------|-------------------|
| | Mean. | Mean of Monthly Ranges. | 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. |
| Between the latitudes— | in. | in. | ° | ° | ° | ° | ° | ° | ° | ° |
| 49° and 50° | 29.682 | 1.132 | 59.3 | 39.5 | 19.8 | 53.1 | 45.7 | 7.4 | 47.8 | 45.0 |
| 50° and 51° | 29.743 | 1.193 | 60.6 | 34.5 | 26.1 | 54.6 | 41.7 | 12.9 | 48.0 | 43.0 |
| 51° and 52° | 29.807 | 1.173 | 63.0 | 33.4 | 30.2 | 54.4 | 40.3 | 11.1 | 47.1 | 42.1 |
| 52° and 53° | 29.666 | 1.230 | 63.6 | 30.0 | 33.6 | 51.4 | 40.3 | 11.1 | 45.1 | 42.3 |
| 53° and 54° | 29.661 | 1.305 | 62.3 | 29.6 | 32.7 | 52.6 | 40.0 | 12.6 | 45.8 | 42.3 |
| 54° and 55° | 29.646 | 1.350 | 60.1 | 29.2 | 30.9 | 50.9 | 39.4 | 11.5 | 44.7 | 40.6 |
| 55° and 56° | 29.590 | 1.340 | 60.3 | 29.2 | 31.1 | 50.7 | 38.3 | 12.4 | 44.5 | 41.2 |
| Between the latitudes— | | | | | | | | | | |
| 49° and 56° | 29.668 | 1.246 | 61.5 | 32.2 | 29.3 | 52.6 | 42.0 | 10.6 | 46.2 | 42.8 |

nished by a better state of the drainage. In an isolated cottage, on an elevated common in Coulsdon parish, Croydon, four children of one family died of diphtheria within a month. Three deaths from the same disease occurred in the family of a bricklayer living in Shenfield (Wokingham, Berkshire). The registrar visited the place. "The house," he says, "is completely isolated, but is situated on a cold, clayey, undrained soil. The interior of the dwelling is in a much better condition than that of cottages generally."

In the SOUTH MIDLAND COUNTIES 6020 persons died; the mortality in nearly every county being below that of the two preceding years. The Watford district in which the mortality was high (144 deaths) was visited by whooping-cough and measles, followed by inflammation of the lungs; the King's Langley sub-district also suffered severely from the former epidemic. The sanitary state of Watford requires attention. Small-pox is still exceedingly fatal in Northamptonshire, and the neighbouring counties have not escaped. 25 deaths from small-pox were registered in St. Giles, Northampton, and 32 in Wellingborough.

In the EASTERN COUNTIES 5253 deaths were registered; less by five hundred than in the corresponding quarter of the previous year. Diphtheria destroyed four lives in a house in Chipping Ongar, two of girls of 18 and 16, two of boys of 10 and 5 years of age. The deaths in Wells, Walsingham, were raised by diphtheria, ague, and remittent fever assuming occasionally the typhoid form.

The deaths (8301) in the SOUTH-WESTERN COUNTIES were less by 1801 than the deaths in the corresponding quarter of 1858. The reduction was observed in all the counties, Wilts, Dorset, Devon, Cornwall, and Somerset. Wilton suffered severely from scarlatina; Plymouth from small-pox. The high mortality of Redruth is accounted for by scarlatina and whooping-cough. The sanitary state of Redruth is bad, otherwise 354 persons would not have died in the district in three months. Bathaston and Bath have been comparatively healthy.

The 12,020 deaths in the WEST MIDLAND COUNTIES show an improved state of health, for the number is less by 2527 than the deaths in the autumn quarter of 1858; and the reduction is evident in every county. Bristol, Cheltenham, and Birmingham were comparatively healthy, and so were the usually insalubrious districts of South Staffordshire. Diphtheria is still ranging about the parishes of these counties; it killed ten children in the parish of Great Barrington, Stow-on-the-Wold, and several are still under medical treatment. Shrewsbury lost some lives; the deaths were increased in Oswestry; and in Overton, Ellesmere, sixteen fatal cases of the disease were registered. The registrar of St. Martin, Birmingham, remarks that the continuous rain has effectively cleansed the

in the Year 1860 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. | Mean estimated Strength. | Wind. | | | | Mean Amount of Cloud (0-10). | Number of Days it fell. | Amount collected. | PARALLELS of LATITUDE. |
|-------------------------------|---|---|---|-------------------------------------|--------------------------|-------|----|----|----|------------------------------|-------------------------|-------------------|-------------------------|
| | | | | | | N. | E. | S. | W. | | | | |
| in. | grs. | gr. | | grs. | | | | | | | days. | in. | Between the latitudes,— |
| .306 | 3.5 | 0.5 | 87 | 540 | 1.7 | 8 | 5 | 7 | 9 | 5.0 | 200 | 48.0 | 49° and 50° |
| .277 | 3.3 | 0.5 | 84 | 545 | 1.5 | 7 | 4 | 6 | 10 | 6.6 | 204 | 40.0 | 50° and 51° |
| .268 | 3.2 | 0.5 | 84 | 542 | 0.9 | 7 | 5 | 7 | 10 | 6.5 | 180 | 31.2 | 51° and 52° |
| .270 | 3.1 | 0.5 | 80 | 540 | 1.2 | 6 | 4 | 7 | 10 | 6.7 | 204 | 32.5 | 52° and 53° |
| .270 | 3.0 | 0.6 | 85 | 543 | 1.6 | 6 | 6 | 7 | 10 | 7.1 | 172 | 35.3 | 53° and 54° |
| .253 | 3.0 | 0.5 | 86 | 538 | 1.7 | 6 | 7 | 6 | 10 | 5.6 | 208 | 38.3 | 54° and 55° |
| .266 | 3.0 | 0.4 | 88 | 542 | 1.8 | 8 | 6 | 5 | 10 | 6.5 | 212 | 37.0 | 55° and 56° |
| .275 | 3.2 | 0.5 | 85 | 540 | 1.5 | 7 | 5 | 6 | 10 | 6.3 | 192 | 37.5 | Between the latitudes,— |
| | | | | | | | | | | | | | 49° and 56° |

sewers, and has consequently diminished the deaths in his very flat neighbourhood. At Leamington 14 deaths from small-pox were registered. The registrar of Holy Trinity, Coventry, says, that the "births" were 180; the deaths 67. Notwithstanding the unprecedented distress "which has prevailed in Coventry, consequent upon the utter prostration of the ribbon trade, the rate of mortality has been extremely low, there "being only 67 deaths against 132 deaths in the corresponding quarter of "last year; 98 in 1858, and 100 in 1857."

The care of the mothers of Coventry has, it would seem, counteracted some of the effects of privation; so the neglect of their homes, by mothers at work in these manufactures, is apparently more fatal than starvation.

In the NORTH MIDLAND COUNTIES the reduction of mortality was great; the deaths from 7986 in 1858 fell to 5889. Each county and nearly every district exhibited improvement. In Nottingham the deaths fell from 732 in 1858 to 414. The mortality was exceedingly high; and it has now fallen within the usual limits. The diminished fatality is ascribed by the registrars to sanitary arrangements, and to the judicious activity of the health officers. Measles has been fatal in 34 cases at Derby; where the total deaths were 296.

The deaths in the NORTH WESTERN COUNTIES were 17,196; the deaths being nearly the same number as in the year 1859, but less by 2909 than in 1858. Those who have watched the progress of the health of Liverpool will observe with gratification that the mortality of the two districts of Liverpool and West Derby fell successively from 3912 to 3084, and to 2994 in the last quarters of the three years 1858-9-60. The increase of deaths in the Dale-street sub-district is ascribed by the Registrar to the inclemency of the weather, and to the privations and diseases that are caused by intoxicating drinks. In Manchester and Salford there is a corresponding improvement. The young children which were formerly not attended by medical men in illness now obtain the advantages of medical advice, chiefly through the Registrar requiring a medical certificate of the cause of death. It is "a singular instance," Mr. Leigh says, "of a great and salutary change in the habits of a class, effected by a "comparatively simple cause."

11,684 deaths were registered in YORKSHIRE. Measles has pervaded the county; and in some places as in Bradford raised the mortality considerably. In Leeds the mortality declined. The importance of skill in the conduct of the coroners inquests is illustrated by the following two cases in the Malton sub-district:—"In a house in Norton a girl, aged 7 "years, was seized with sickness at dinner on Wednesday, and on the "following morning she died. An inquest was held on the body, when a "verdict of 'convulsions' was returned. Eight days afterwards, in the "same house, a brother of the deceased, aged 6 years, died from 'choleraic "diarrhœa,' after two days' illness."

TABLE XXI.—METEOROLOGY OF GREENWICH in the Eleven Years 1849-1860.

| YEARS. | Mean Weekly Movement of the Air in Miles.* | Fall of Rain in Inches. | Mean Dryness of Atmosphere. | Mean Temperature of the Air. | MEAN Temperature of the AIR in the Quarters ending the last day of | | | |
|--------|--|-------------------------|-----------------------------|------------------------------|--|-------|-------|------|
| | | | | | March. | June. | Sept. | Dec. |
| | | | | | ° | ° | ° | ° |
| 1849 | 1808 | 23.7 | 6.7 | 49.9 | 41.9 | 51.7 | 61.0 | 44.8 |
| 1850 | 1841 | 19.6 | 6.4 | 49.3 | 39.4 | 53.5 | 59.6 | 44.7 |
| 1851 | 1790 | 20.2 | 6.6 | 49.4 | 41.9 | 51.5 | 59.8 | 43.7 |
| 1852 | 1781 | 34.4 | 7.3 | 50.6 | 41.4 | 51.2 | 61.8 | 48.1 |
| 1853 | 1587 | 29.6 | 6.0 | 47.8 | 38.1 | 51.8 | 58.5 | 42.3 |
| 1854 | 1781 | 17.3 | 5.7 | 49.1 | 40.8 | 51.7 | 59.8 | 43.7 |
| 1855 | 1659 | 21.1 | 5.3 | 46.9 | 34.1 | 50.5 | 60.4 | 42.7 |
| 1856 | 1775 | 21.9 | 5.7 | 49.1 | 40.0 | 52.3 | 59.9 | 44.2 |
| 1857 | 1562 | 21.4 | 5.4 | 51.1 | 39.2 | 53.8 | 63.3 | 47.9 |
| 1858 | 1625 | 17.0 | 6.6 | 49.3 | 37.8 | 54.3 | 61.0 | 43.8 |
| 1859 | 1598 | 25.9 | 6.2 | 50.8 | 43.3 | 53.7 | 62.8 | 43.3 |
| 1860 | 1676 | 32.0 | 4.6 | 47.0 | 38.8 | 50.5 | 56.2 | 42.6 |

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

Northallerton has been visited by typhus, scarlatina, and measles; wheat, oats, and beans are now standing in the fields covered with snow.

The deaths in the NORTHERN COUNTIES were 6295, exhibiting a slight increase. Scarlatina has ravaged some districts in unfavourable sanitary conditions. During the three months damp, fog, and excessive cold have prevailed at Newcastle. Typhoid fever has been fatal in Low Longtown, and is still prevailing there.

In WALES and MONMOUTHSHIRE the deaths, 6486 in number, are below the average. Diphtheria has been fatal in some districts, and the registrar of Llanfair notices among the unfavourable circumstances the bad harvest and the inferior quality of the bread in his district.

The severe weather occurred late in December, and its effects on the mortality will only be fully apparent in the next return.

HEALTH OF LONDON IN 1860.

GREAT cities represent the civilization of their age, and offer great facilities for the study of masses of mankind under singular circumstances. But the materials for this study have been only recently collected. Little more than the stony monuments of the cities of antiquity remain. Babylon had vast walls and palaces; Thebes had a hundred gates, out of which, Homer tells us, twenty thousand chariots issued. But what was the condition of their people? The numbers are unknown. At Rome itself, in later days, the citizen gave in his name and age, with the name and age of his wife and children, to the censors in the curule chairs; but the slaves of the city figured only among the property; so that while the census has supplied history with the numbers of Roman citizens, it has left no records of the population. The deaths of citizens were recorded; but no table of the numbers survives, except of those destroyed at intervals by plague. The marriages, the births, were not reckoned; and only exceptional social phenomena are depicted in the pages of the poets, antiquarians, and historians. So that while the arts have left monuments, literature masterpieces, and physical science treatises, no remains enable us to solve, with precision, any great social problems—to determine the condition of the people, the frequency of different orders of phenomena, the influence of soil, water, air, climate, food, institutions, on human life and on the human race.

The loss is irreparable; but the observations which are now registered in the great cities of the present day—in Berlin, Vienna, Petersburg, New York, Paris, and London—disclose the general circumstances of their populations, supply exact facts, and suggest means for improving the conditions under which the human race lives, and transmits its life to successive generations.

TABLE XXII.—LONDON.—BIRTHS and DEATHS in the Twelve Years 1849 to 1860.

| YEARS. | 1849 | 1850 | 1851 | 1852 | 1853 | 1854 | 1855 | 1856 | 1857 | 1858 | 1859 | 1860 |
|------------------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| BIRTHS | 72612 | 74564 | 78300 | 81250 | 82254 | 84885 | 85532 | 87430 | 89577 | 89012 | 92909 | 93414 |
| DEATHS | 68756 | 48950 | 55488 | 54638 | 60069 | 73697 | 61942 | 57274 | 59103 | 64083 | 61860 | 62309 |
| Excess of BIRTHS over DEATHS | 3856 | 25614 | 22812 | 26612 | 22185 | 11188 | 23590 | 30156 | 30474 | 24919 | 31049 | 31105 |
| BIRTHS — Males | 37168 | 37907 | 40056 | 41388 | 42132 | 42988 | 43501 | 44410 | 45885 | 45347 | 47330 | 47645 |
| BIRTHS — Females | 35444 | 36657 | 38244 | 39862 | 40122 | 41897 | 42031 | 43020 | 43692 | 43665 | 45579 | 45769 |
| DEATHS — Males | 34168 | 24634 | 28140 | 28063 | 30852 | 37151 | 31354 | 29076 | 29769 | 32579 | 31577 | 31657 |
| DEATHS — Females | 34588 | 24316 | 27348 | 26575 | 29217 | 36546 | 30588 | 28198 | 29334 | 31514 | 30283 | 30652 |
| ANNUAL MORTALITY per 1000 | 80.08 | 20.94 | 23.38 | 22.61 | 24.41 | 29.43 | 24.81 | 22.09 | 22.41 | 23.90 | 22.69 | 22.49 |

London is the greatest of the imperial cities; for its population in 1861 amounted to 2,803,989, living in 362,890 houses, peopling streets and squares extended over 122 square miles, along the terraces of land rising from the banks of the Thames.

No observations exist embracing the whole of the phenomena of the life of these numbers of both sexes and of different ages extending over a century, and severally varying in strength, in morality, in intellect, in industry, in health, in occupation, in effectual production and consumption.

But we have now before us the results of observations on a certain class of phenomena. The births, the deaths, and the causes of death are recorded shortly after they occur, and an analysis of the registers has been published weekly for twenty-one years.

The results are as valuable as an experimental philosopher could have deduced from his experiments if he had had the power to expose the population to great vicissitudes of heat and cold, of dampness and dryness; to the changes incidental to differences in the prices of food; to air and water of different degrees of impurity; and to destructive epidemics.

Some of these results were pointed out at the time when the facts were first observed, or in the annual reports, and others will undoubtedly be elicited by future investigations.

Thus we learn that in the same circumstances the same number of people die at the same ages of the same diseases, year after year; organized bodies being governed by laws as fixed as those which govern the stars in their courses.

Certain changes of condition, within given limits, produce no appreciable effects; but beyond those limits the effects are in some regulated proportion to the intensity of the causes; varying, however, also with the state of the bodies submitted to their action, as is evident by studying the effects on the two sexes at different ages.

Thus excessive heat and cold injure health, and increase the mortality, particularly in the former case, by giving rise to diarrhoea, in the latter to diseases of the respiratory organs; the effect generally being greatest in infancy and old age, and varying with age at rates regulated by laws.

The human body consists principally of water, in combination with some organic compounds and salts; and this compound of oxygen and hydrogen is in constant use for drink, ablution, and daily use, so that water is the life-blood of cities. Without water they cannot exist, and on its quality their salubrity depends to an extent which the observations of twenty-one years have determined.

The supply of water in London is derived from shallow wells, from deep wells, from the New River, and from the River Thames, or its tributaries the Lea and the Ravensbourne. The well waters are foul, and nearly all of them have in solution organic matter derived from cesspools.

TABLE XXIII.—LONDON.—DEATHS IN PUBLIC INSTITUTIONS, 1852–60.

| | 1852 | 1853 | 1854 | 1855 | 1856 | 1857 | 1858 | 1859 | 1860 |
|--------------------------------------|------|-------|-------|-------|-------|-------|-------|------|------|
| TOTAL DEATHS IN PUBLIC INSTITUTIONS | 8479 | 10116 | 12046 | 11310 | 10381 | 10079 | 10004 | 9638 | 9550 |
| IN WORKHOUSES | 4890 | 5955 | 6812 | 6552 | 5797 | 5714 | 5535 | 5228 | 5161 |
| PRISONS | 105 | 106 | 155 | 71 | 81 | 71 | 57 | 40 | 41 |
| MILITARY AND NAVAL ASYLUMS | 332 | 342 | 312 | 299 | 304 | 285 | 317 | 307 | 272 |
| GENERAL HOSPITALS | 2247 | 2675 | 3415 | 2956 | 2859 | 3008 | 3094 | 2927 | 3039 |
| HOSPITALS FOR SPECIAL DISEASES | 299 | 281 | 326 | 441 | 612 | 332 | 272 | 431 | 413 |
| LYING-IN HOSPITALS | 7 | 13 | 20 | 27 | 14 | 11 | 11 | 35 | 34 |
| } Women | | | | | | | | | |
| } Children | 26 | 22 | 43 | 40 | 31 | 23 | 32 | 51 | 57 |
| MILITARY AND NAVAL HOSPITALS | 183 | 263 | 441 | 404 | 282 | 180 | 211 | 187 | 173 |
| HOSPITALS AND ASYLUMS FOR FOREIGNERS | 31 | 59 | 57 | 64 | 61 | 63 | 53 | 46 | 47 |
| LUNATIC ASYLUMS | 359 | 400 | 465 | 456 | 340 | 392 | 422 | 381 | 313 |

The Thames has during this period been the great sewer of London, and in the years of the cholera epidemic was found charged with organic matter, of unquestionable origin. The Lambeth Water Company, the Southwark, and the Chelsea, in the first epidemic (1849), supplied the South and West Districts of London with Thames water, from the part of the river extending from Hungerford to some distance above Vauxhall Bridge, and the cholera was then fatal, as the table shows, to 14,125 persons in London, and it was equally fatal in the houses of the same districts and streets that were indiscriminately supplied by the Lambeth Company, which pumped its water from the foulest part of the Thames at Hungerford, and by the Southwark and Vauxhall Company, which took its water higher up the river, but within the tidal range.

It was shown in the Cholera report (1849), that, in 10,000 inhabitants living in the districts supplied with water taken from the Thames at Kew and Hammersmith, 15 died of cholera; that 48 died of cholera in districts supplied with the waters of the Amwell, the Lea, and the Ravensbourne; and that 123 out of the same number died of cholera in the districts supplied with waters taken from the foul part of the Thames between Battersea and Waterloo Bridge. "One, three, and eight," it was added in the report, "express the relative virulence of the epidemic in the three conditions."*

The Lambeth Company, in January 1852, wisely removed its source of supply at once up to a part of the Thames above Teddington Lock; another company lingered on its old site; and the epidemic cholera of 1854, therefore, found parts of the population of London on the south side of the river in very different conditions; the one supplied with very impure water by the Southwark Company; the other supplied with water much less impure provided by the Lambeth Company. The companies had been in competition, and they often supplied the same streets and districts, so their customers were nearly in all respects in the same sanitary conditions, with one exception; a gallon of the Southwark water contained 3.5 grains, of the Lambeth water 1.4 grains of organic matter. The dejections of the cholera patients of London were in the Southwark water in small quantities, but in quantities sufficient to augment the mortality week after week in every district; and in five weeks 2,284 persons died of cholera in 40,046 houses supplied with the Southwark water, while 294 had died in 26,107 houses supplied with the water taken higher up the Thames.†

TABLE XXIV.—LONDON.—DEATHS AND METEOROLOGY, 1849–60.

| YEARS. | Total Number of Deaths. | Mean Temperature of Air. | Dryness of Atmosphere. | Fall of Rain in Inches. | Mean Weekly Amount of Horizontal Movement of the Air, approximated to the results of Robinson's Anemometer by Revisions from Whewell's wells. | WEEKLY AVERAGE OF 1860. | | | | | |
|--------|-------------------------|--------------------------|------------------------|-------------------------|---|--------------------------|--------------------------|-------------------------------------|------------------------|-------------------------|---|
| | | | | | | Number of Deaths weekly. | Mean Temperature of Air. | Average daily Range of Temperature. | Dryness of Atmosphere. | Fall of Rain in Inches. | Amount of Horizontal Movement of the Air in each Week.* |
| 1849 | 68756 | 49°9 | 6°7 | 23.7 | Miles. 1808 | | | | | | |
| 1850 | 48950 | 49°3 | 6°4 | 19.6 | 1841 | | | | | | |
| 1851 | 55488 | 49°4 | 6°6 | 20.2 | 1730 | | | | | | |
| 1852 | 54638 | 50°6 | 7°3 | 34.4 | 1781 | | | | | | |
| 1853 | 60069 | 47°8 | 6°0 | 29.6 | 1507 | First Quarter } 1447 | 38°8 | 12°3 | 4°9 | 0°29 | 2109 |
| 1854 | 73697 | 49°1 | 5°7 | 17.3 | 1731 | Second Quarter } 1146 | 50°5 | 18°5 | 6°3 | 0°80 | 1734 |
| 1855 | 61942 | 46°9 | 5°3 | 21.1 | 1659 | Third Quarter } 994 | 56°2 | 17°4 | 4°5 | 0°70 | 1390 |
| 1856 | 57274 | 49°1 | 5°7 | 21.9 | 1775 | Fourth Quarter } 1169 | 42°6 | 11°4 | 2°6 | 0°35 | 1484 |
| 1857 | 59103 | 51°1 | 5°4 | 21.4 | 1562 | | | | | | |
| 1858 | 64093 | 49°3 | 6°6 | 17.0 | 1626 | | | | | | |
| 1859 | 61860 | 50°8 | 6°2 | 25.9 | 1598 | | | | | | |
| 1860 | 62309 | 47°0 | 4°6 | 32.0 | 1676 | | | | | | |

* By Robinson's Anemometer, adopted in place of Whewell's, which was used formerly.

† Report to Registrar General on Cholera in England 1848–9, page lxi.
 † Appendix to Registrar General's 17th Report, page 94.

The previous deduction was thus confirmed, and the subsequent investigation by a committee appointed by the Board of Health, to inquire into the deaths in every house supplied by the two companies, placed it beyond a doubt that the mortality of cholera in London was augmented by the impure water with which the population was supplied.

It will be remarked that the *quantity* of organic matter which was so evidently deleterious in the Southwark water amounted, according to the best existing methods of chemical analysis, to *two* grains in a gallon in excess of that in the Lambeth water; that is, 2 grains in 70,000 grains, or one part in 35,000. A person who *drank* a *quart* of the water would take only a grain of organic matter, and still less of the fatal ferment.

Animalcules and muscular fibre have been found in water containing minute quantities of organic matter; it is evident, therefore, that this fluid in rivers, which receive the sewage of towns, must often contain the elements of zymotic diseases, and can never be circulated through a population for any length of time with entire impunity. And water companies may be assured that the purest water is the most salubrious, and that which is likely to retain the firmest hold on the market.

It is therefore of the utmost importance to keep strict watch and ward over the quality of this fluid, which is now supplied to the inhabitants of London by companies enjoying a virtual monopoly under an Act of Parliament, which bound them to alter the sources of supply, or to improve the quality of the water, after the following dates:—

| | | | |
|------------------------|---|---|------------------|
| Grand Junction | - | - | 1855, August 31. |
| Southwark and Vauxhall | - | - | 1855, August 31. |
| West Middlesex | - | - | 1855, August 31. |
| Chelsea | - | - | 1856, August 31. |
| East London | - | - | 1856, August 31. |
| New River | - | - | 1857, June 30. |

And this is done much more effectually than it could be by any vexatious inspection of their works, through a careful periodical analysis of the

COMPARISON OF THE AVERAGE RESULTS obtained in the ANALYSES OF THE WATERS supplied by EIGHT LONDON COMPANIES in the Years 1851, 1854, 1856, and 1860.

| DESCRIPTION OF WATER. | Solid Constituent Grains of <i>Organic Matter</i> , per Gallon. | | | |
|---|---|----------|----------------|--------------|
| | 1851. | 1854. | 1856. | 1860. |
| GRAND JUNCTION WATER COMPANY (Thames at Kew until 1855.) | 3·07 | 1·92 | 1·38 | 1·74 |
| WEST MIDDLESEX WATER COMPANY (Thames at Hammersmith until 1855.) | 2·75 | 2·08 | ·96 | 1·68 |
| CHELSEA WATER COMPANY - - (Thames at Battersea until 1856.) | 2·38 | 5·41 | 1·42 | 1·67 |
| SOUTHWARK AND VAUXHALL WATER COMPANY (Thames at Battersea until 1855.) | 1·51* | 3·64 | 1·37 | 1·74 |
| LAMBETH WATER COMPANY - - (Thames at Thames Ditton until January 1852.) | 2·59 | 1·39 | 1·33 | 1·67 |
| NEW RIVER WATER COMPANY (River Lea, Springs, and Wells.) | 2·79 | 2·33 | ·97 | 1·69 |
| EAST LONDON WATER COMPANY (Lea River.) | 4·12 | 1·94 | 1·09 | 1·90 |
| KENT WATER COMPANY - - - (Ravensbourne, and in 1860 Wells.) | 2·61 | 1·48 | 1·37 | 1·99 |
| GOVERNMENT COMMISSION. | R. D. THOMSON, | HOFFMANN | R. D. THOMSON, | 12 analyses. |

The Table may be read thus:—The Grand Junction supplied water of various qualities, a gallon containing of organic matter of various kinds, 3·07 grains in 1851; 1·92 in 1854; 1·38 in 1856; 1·74 in 1860; the latter number being the mean result of *twelve* monthly analyses.

* This could not have been an ordinary sample of the water.

water as it is delivered, by one of the most eminent chemical analysts of the day. The publication of the results of the analysis in the Weekly Tables is perhaps of more utility than the publication of meteorological phenomena, over which public companies have no control.

The improvement in the water supply of London within the period is great and decisive; and it coincides with the reduction of the mortality. After the Census the data will exist for comparing the rates of mortality in the several districts of London supplied by wells and by the several water companies, with the mortality in towns where the waters are softer and purer.

From the twelve monthly analyses of the waters of each company by Dr. R. D. Thomson in 1860, it will be observed that the quantities of organic matter in the waters supplied by the Chelsea, Lambeth, West Middlesex, and New River Companies are nearly equal (1·67 to 1·69); the Grand Junction and the Southwark waters contain a little more impurity (1·74); the East London still more (1·90): the Kent water is, however, the worst, and contained 1·99 grains. A marked improvement will be observed in all since 1851, when their fatal effects in aggravating the mortality of cholera were first disclosed.

The Table (xxii) will show the rates of mortality during each of the twelve years 1849-60. The death-rate in 1000 living was 22·49 in 1860.

The mortality it will be observed was much below the average in the year 1860; and diarrhoea, which has destroyed every year so many lives, was not half so fatal as it was in 1859.

The mortality has indeed fallen notably since the improvement of the water supply of London.

And it will be borne in mind that contemporaneously with that measure, Health Officers and Inspectors of Nuisances were appointed in every district of London, under Lord Llanover's Act. This Act has been exceedingly salutary. In conjunction with the Health Officer of the City of London, these gentlemen have suppressed a great number of evils, have supplied the Boards of Works with valuable suggestions, and while they have already effected much good, have laid the foundation for more by their valuable reports.

GREAT BRITAIN.

The rates of marriage, birth, and death in England have been stated, and, with the assistance supplied by the Reports of the Registrar-General of Scotland, the rates that prevailed in Great Britain in the same year have also been ascertained.

In 1860 the number of persons married in Great Britain was 382,548; of children born the number was 789,752; of persons who died 490,776. The excess of births over deaths was 298,976.

The marriage-rate, or persons married to a hundred living, was less in Great Britain than it was in England, the rate in Scotland (1·386) having been considerably less than that (1·710) which prevailed south of the

TABLE XXV.—ESTIMATED POPULATION, MARRIAGES, BIRTHS, and DEATHS in GREAT BRITAIN, 1860.

| | Area. | | Estimated Population in the middle of the Year 1860. | Marriages. | Persons Married. | Births. | Deaths. |
|-------------------|------------|------------|--|------------|------------------|---------|---------|
| | Acres. | Hectars. | | | | | |
| England and Wales | 37,324,915 | 15,104,312 | 19,902,918 | 170,156 | 340,312 | 684,048 | 422,721 |
| Scotland | 20,047,462 | 8,112,627 | 3,047,721 | 21,118 | 42,236 | 105,704 | 68,055 |
| GREAT BRITAIN | 57,372,377 | 23,216,939 | 22,950,639 | 191,274 | 382,548 | 789,752 | 490,776 |

Note.—The population of Scotland has been deduced on the assumption that it increased up to 1860 at the same rate as it did in the 10 years 1851-61.

Tweed. The British rate was 1.666. But it was higher than in the previous year, in consequence of an increase in both the English and the Scottish marriage-rates.

The birth-rate of Great Britain (3.441) was slightly higher than that of England, for the Scotch rate (3.468) was higher than the English, which was 3.437. The English birth-rate of 1860 decreased on that of 1859; on the other hand the Scotch rate increased.

TABLE XXVI.—PROPORTION per Cent. of MARRIAGES, BIRTHS, and DEATHS to the Population of GREAT BRITAIN, 1860.

| | Arealty. | | To 100 Persons living. | | | |
|-------------------|--------------|---------|------------------------|------------------|---------|---------|
| | Acres | Hectars | Marriages. | Persons Married. | Births. | Deaths. |
| | to a Person. | | | | | |
| England and Wales | 1.88 | .76 | .855 | 1.710 | 3.437 | 2.124 |
| Scotland | 6.58 | 2.66 | .693 | 1.386 | 3.438 | 2.233 |
| GREAT BRITAIN | 2.50 | 1.01 | .833 | 1.666 | 3.441 | 2.138 |

The total area of a country, divided by its population, gives what is here called the "Arealty;" it is 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 XXVII.—NUMBER OF DEATHS in the BRITISH ARMY during 1857, 1858, 1859, and 1860 (furnished to the Registrar-General by the Adjutant-General by direction of H.R.H. the General Commanding in Chief).

| | 1857 | | | | | | 1858 | | | | | | 1859 | | | | | | 1860 | | | | | |
|----------------------|----------------|------------------------------------|-----------|------------------------------------|-----------|------------------------------------|----------------|------------------------------------|-----------|------------------------------------|-----------|------------------------------------|----------------|------------------------------------|-----------|------------------------------------|-----------|------------------------------------|----------------|------------------------------------|-----------|------------------------------------|-----------|------------------------------------|
| | 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. | 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 | 2 | 482 | 7 | 175 | 163 | 2,921 | 13 | 696 | 5 | 221 | 127 | 6,671 | 22 | 769 | 4 | 294 | 75 | 3,666 | 25 | 794 | 10 | 330 | 76 | 2,926 |
| Artillery | 7 | 53 | - | 14 | 4 | 118 | 2 | 153 | - | 20 | 7 | 462 | 6 | 127 | 1 | 17 | 4 | 355 | 4 | 181 | - | 17 | 8 | 238 |
| Engineers | 1 | 12 | - | - | 1 | 13 | 3 | 16 | - | - | 3 | 93 | 3 | 11 | - | 3 | 6 | 44 | 5 | 11 | - | - | - | 45 |
| Total | 35 | 547 | 7 | 189 | 168 | 3,052 | 18 | 865 | 5 | 241 | 137 | 7,226 | 31 | 907 | 5 | 314 | 85 | 4,065 | 34 | 986 | 10 | 347 | 84 | 3,209 |

TABLE XXVIII.—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 Five Years 1856, 1857, 1858, 1859, and 1860.

| YEARS. | Deaths of Officers and Men in the Army Abroad. | Estimated Numbers in Col. 2 belonging to | | |
|--------|--|--|--------------------|-------|
| | | Great Britain. | England and Wales. | |
| | | 1 | 2 | 3 |
| 1856 | | 2,580 | 1,498 | 1,222 |
| 1857 | | 3,220 | 1,869 | 1,525 |
| 1858 | | 7,363 | 4,275 | 3,486 |
| 1859 | | 4,150 | 2,409 | 1,965 |
| 1860 | | 3,293 | 1,912 | 1,559 |

The number of Deaths in the cols. 3 and 4 were estimated on the assumption that the soldiers abroad belonged to the different parts of the British Empire in the proportions indicated in the next Table derived from the Census Report, 1851, Occupations, Vol. I., Supplementary Tables, p. cccxlv., vi. See Table XXIX.

The rate of mortality was 2.138, which is higher than it was in England, but less than in Scotland, where the death-rate rose to 2.233. It will be interesting and useful to compare the rates of mortality in the different districts of England and Scotland, and to appreciate those conditions under which results of a favourable character in one country, and less favourable in the other, were produced, when the more extended abstracts of 1860 for Scotland are published.

In the Report for Scotland for 1855,* which contains a great deal of very valuable information, it is shown that the rate of mortality in that year was 2.06 per cent., whilst in England in the same year the rate was 2.26; and it is added, that "if this proportion be at or near the average mortality it will prove Scotland to be one of the very healthiest countries on the face of the globe, and that even England falls far behind Scotland in this respect." But it happened in the year which immediately followed, viz. 1856, that the English rate fell below the Scottish rate for 1855, for the former was then 2.05. It is not necessary, however, to travel out of the year 1855 to discover results which may be advantageously for England compared with analogous results in the Scotch tables. The rate of mortality in the Scotch towns was 2.64 per cent., whilst the rate that prevailed in English towns in the same year was 2.49. The rate in London was 2.43; and it was lower than that of Dundee, Paisley, Glasgow, or Greenock. The strong point of the northern kingdom seems to lie in her rural and especially her insular districts. In 1859 the death-rate of all Scotland was not so high as that of the rural districts of England.

But a comparison between the two countries, and between the principal towns in each, founded on the returns of an extended series of years, will be more satisfactory.

TABLE XXIX.—ARMY SERVING AT HOME AND ABROAD.

| | 1851 |
|----------------------------------|---------|
| Officers and Men born in England | 67,647 |
| " " Scotland | 15,300 |
| " " Ireland | 53,169 |
| " " Foreign Parts | 6,754 |
| Total | 142,870 |

It was inferred also that the 76,443 officers and men abroad in the army in 1851 should be added to the population of the several parts of the United Kingdom, also in the proportions indicated in the above Table. Thus the population of England and Wales at home in 1851 was 17,927,609; add the proportion of the army abroad (36,196) belonging to England and Wales, and its population becomes 17,963,805. The estimated population at home in 1860 was 19,902,918, and the population, including its share of the army abroad, was deduced from the following proportion:—

$$17,927,609 : 17,963,805 :: 19,902,918 : x = 19,943,100$$

Great Britain was dealt with on the same principles.

TABLE XXX.—ANNUAL RATE OF MORTALITY per Cent. per Annum, including the Deaths of Soldiers Abroad.

| YEARS. | GREAT BRITAIN. | ENGLAND and WALES. | FRANCE. |
|--------|----------------|--------------------|---------|
| 1856 | 2.041 | 2.053 | 2.306 |
| 1857 | 2.169 | 2.184 | 2.323 |
| 1858 | 2.297 | 2.323 | 2.398 |
| 1859 | 2.218 | 2.244 | 2.670 |
| 1860 | 2.142 | 2.127 | 2.139 |

* First detailed Annual Report of the Registrar General of Scotland, page xxiii.

His Royal Highness the General Commanding in Chief has favoured me with a return of the strength of the British army *abroad*, and of the deaths in it in 1860. The mean strength was 128,391, and the deaths were 3293. While the strength abroad was greater by 4682 than in the previous year, the deaths were fewer by 857.

It has been shown that the mortality of Great Britain was 2.138. Taking the due proportions of men and deaths for the part of the army belonging to that section of the United Kingdom, the mortality of the population including the army abroad was 2.142. In 1859 it was 2.218.

In France the public health appears to have been much better than it was in the previous year, for the rate of mortality amongst the French people declined from 2.670 (in 1859) to 2.139 (in 1860). The latter rate, though rather higher than that of England, agrees almost exactly with that of Great Britain. The marriage-rate and also the birth-rate

TABLE XXXI.—RETURN showing the AVERAGE STRENGTH of the ARMY ABROAD, in the Years 1857, 1858, 1859, and 1860. Furnished to the Registrar-General by desire of H.R.H. the General Commanding in Chief.

| | 1857 | | 1858 | | 1859 | | 1860 | |
|---------------|-----------|------------------------------------|-----------|------------------------------------|-----------|------------------------------------|-----------|------------------------------------|
| | 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 - - | 126 | 2,757 | 313 | 6,601 | 308 | 6,943 | 363 | 6,946 |
| Infantry - - | 2,327 | 65,361 | 3,103 | 90,907 | 3,236 | 100,839 | 4,289 | 104,215 |
| Artillery - - | 246 | 5,402 | 356 | 8,262 | 348 | 9,705 | 349 | 10,160 |
| Engineers - - | 107 | 1,350 | 125 | 2,000 | 134 | 2,196 | 125 | 1,944 |
| Total - - - | 2,806 | 74,870 | 3,900 | 107,830 | 4,026 | 119,683 | 5,126 | 123,265 |

TABLE XXXII.—ENGLAND and FRANCE. ESTIMATED POPULATION, REGISTERED MARRIAGES, BIRTHS, and DEATHS, in each of the Years 1856, 1857, 1858, 1859, and 1860.

| | ENGLAND and WALES. | | | | | FRANCE. | | | | |
|----------------------|--------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| | 1856 | 1857 | 1858 | 1859 | 1860 | 1856 | 1857 | 1858 | 1859 | 1860 |
| Estimated Population | 19,042,548 | 19,256,680 | 19,471,472 | 19,686,895 | 19,902,918 | 36,205,792 | 36,292,663 | 36,387,679 | 36,426,910 | 33,597,461 |
| Marrriages - - | 159,337 | 159,097 | 156,070 | 167,723 | 170,156 | 284,335 | 290,349 | 307,218 | 298,309 | 290,657 |
| Births - - - | 657,453 | 663,071 | 655,481 | 689,881 | 684,048 | 952,116 | 929,832 | 967,338 | 1,011,787 | 933,315 |
| Deaths - - - | 390,506 | 419,815 | 449,656 | 440,781 | 422,721 | 835,017 | 842,961 | 872,622 | 972,556 | 782,764 |

* According to the official Enumeration this Population includes 166,428 men, being the Effective Strength of the Army of the East in the Crimea in the month of January 1856. M. Legoyt has favoured the Registrar-General with the Returns of France for the years 1856, 1857, 1858, 1859, and 1860.

The births in France are exclusive of still-born.

† Exclusive of the population of the three newly annexed Departments.

TABLE XXXIII.—PROPORTION per Cent. of MARRIAGES, BIRTHS, and DEATHS to the Population of ENGLAND and WALES, and in FRANCE, 1856-60.

| | ENGLAND and WALES. | | | | | FRANCE. | | | | |
|-------------------|--------------------|-------|-------|-------|-------|---------|-------|-------|-------|-------|
| | 1856 | 1857 | 1858 | 1859 | 1860 | 1856 | 1857 | 1858 | 1859 | 1860 |
| Marrriages - - | *87 | *83 | *80 | *82 | *85 | *75 | *80 | *84 | *81 | *79 |
| Persons married - | 1.874 | 1.652 | 1.604 | 1.704 | 1.710 | 1.570 | 1.600 | 1.688 | 1.638 | 1.588 |
| Births - - - | 3.453 | 3.443 | 3.366 | 3.504 | 3.437 | 2.630 | 2.562 | 2.659 | 2.778 | 2.605 |
| Deaths - - - | 2.051 | 2.180 | 2.309 | 2.239 | 2.124 | 2.306 | 2.323 | 2.398 | 2.670 | 2.139 |

were lower than they were in England in the same year. The respective birth-rates were 2.605, and 3.437. To a thousand of the population in either country the number of English children born exceeded that of French children by eight.

BIRTHS AND DEATHS OF BRITISH SUBJECTS AT SEA.

A return with which I am favoured by the Registrar-General of Seamen shows that there were 3760 deaths of merchant seamen at sea in 1860. This is a greater number than in any of the eight previous years, 1852-9, although "the strength" was less than it had been since 1855. The rate of mortality was 2.19 per cent.; the mean of 1852-60 was 1.90.

The number of deaths of British subjects at sea in 1860 was 397, of which 241 were those of males, 156 those of females. Under this head the deaths of seamen on ship's articles, of soldiers, marines, and invalided seamen from the Royal Navy, are not included.

Two hundred and fifty children were returned as born at sea, viz., 136 boys and 114 girls. The number in five years (1856-60) is 1213.

The following extract from the Edinburgh Review of January 1862 (Art. *Wrecks, Lifeboats, and Lighthouses*), accounts for the great increase of deaths of *passengers* in 1859, which are shown in the accompanying table to have been 827; and also for the increased mortality of seamen in 1860:—

"With reference to the two latest years reported upon, viz. 1859 and 1860, it is remarkable, that while 1860 was marked by an almost unprecedented succession of continuous bad weather, and therefore by a greater number of wrecks and casualties from other causes than collisions, than were recorded in any of the preceding eight years, yet the actual loss of life was considerably less; the number of lives lost in 1860 by all causes being 536, and that in 1859 as high as 1645. But the great loss of life in 1859 was mainly attributable to the destruction of two or three fine passenger ships. By two wrecks alone, namely, those of the "Pomona" and the "Royal Charter," 870

TABLE XXXIV.—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 the Years 1856 to 1860 inclusive, reported by the Captains or Commanding Officers of Vessels to the Registrar General of Seamen upon Schedule C., deposited 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. | |
|----------------|--------------------|----------|--------|-----|
| Births at Sea | 1856 (imperfect) - | 71 | 66 | 137 |
| | 1857 - - - | 168 | 142 | 310 |
| | 1858 - - - | 132 | 117 | 249 |
| | 1859 - - - | 135 | 132 | 267 |
| | 1860 - - - | 136 | 114 | 250 |
| Total - - - | 642 | 571 | 1213 | |
| †Deaths at Sea | 1856 (imperfect) - | 121 | 78 | 199 |
| | 1857 - - - | 238 | 140 | 378 |
| | 1858 - - - | 253 | 182 | 435 |
| | 1859 - - - | 524 | 303 | 827 |
| | 1860 - - - | 241 | 156 | 397 |
| | 1377 | 859 | 2236 | |

* British subjects are not particularly described upon Schedule C., but foreign names have been excluded from this account.

† The deaths of soldiers, marines, and invalided seamen from the Royal Navy were 33 in 1856, 59 in 1857, 156 in 1858, 156 in 1859, and 196 in 1860. The number is 640 in five years, which if added to the 2236 above, makes 2876, the total number of deaths of British subjects at sea in 1856-60, exclusive of those of merchant seamen.

"lives were lost, whilst in 1860 the greatest number of lives lost in any one shipwreck was 37, and the next highest number 31. It appears, from the observations accompanying the Wreck Returns for 1860, that the entire number of lives lost by shipwreck during the last eleven years was 6883. And by another return, which includes the losses by collisions and by wrecks, we find that the total number of lives lost during the last nine years (from 1852 to 1860 inclusive) was 7201, the annual average of losses being 800. It is indeed a startling truth, and one worthy of emphasis, that *seven thousand two hundred lives* have been lost by marine casualties in nine years."

PROGRESS OF REGISTRATION.

Twenty-nine millions five hundred and twelve thousand six hundred and nineteen names of persons who had been born, had married, or had died, the accumulated contributions of twenty-three years and a half (1 July 1837—31 December 1860), had obtained places on the registers at the end of the year to which this report specially refers. The numbers are:—

| | |
|--------------------------------|-------------------|
| Persons married - - - - | 6,759,210 |
| Births - - - - - | 13,583,166 |
| Deaths - - - - - | 9,170,243 |
| TOTAL (23½ years) - - - | 29,512,619 |

In 1860 there were 5636 searches in the Registers at the Central Office, exclusive of those in the non-parochial registers.

The "Red Book of Lynn," which belongs to the corporation of that town, and is believed by some to be the oldest English paper book in existence, contains as its first entry the transcript of a will, dated 1309. Measures have been taken to preserve it; the leaves, which had been reduced to a loose cottony substance, and had threatened to fall in pieces, have been carefully resized, and there is a prospect that it will last for years to come. This instance of longevity in a manuscript book, which

TABLE XXXV.—MORTALITY OF MERCHANT SEAMEN at SEA, in the 9 Years 1852-60.*

| 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 | 178,918 | 3,549 | 20.4 |
| 1857 | 176,387 | 3,444 | 19.5 |
| 1858 | 177,832 | 3,436 | 19.6 |
| 1859 | 172,506 | 3,430 | 19.9 |
| 1860 | 171,592 | 3,760 | 21.9 |
| In the 9 years } 1852-60. | 1,535,276 | 29,240 | 19.0 |

* 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. This return does not include seamen dying ashore in foreign parts, whose wages and effects are delivered to the consuls or officers of the hospitals to which such men are sent; accounts of their effects are sent direct to the Board of Trade.

If a seaman dies 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 is not to return direct to the United Kingdom. But if a passenger dies 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.

A column headed *Place of Birth* was formerly contained in the schedule, 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. A column headed "Whether supposed to be a British subject or Foreigner" might be attempted. British and Foreign seamen are distinguished.

When a ship is lost with all persons on board, the owners return the number and names of the crew, but not of the passengers, to the Registrar-General of Seamen.

may have suffered some rough handling in the course of nearly six hundred years, deserves to be recorded, because it serves to show that by the use of a good quality of paper, and with due care bestowed on their preservation, it is possible the English registration books may be in existence and even good condition when half a dozen centuries or more have rolled over the dust of the nearly thrice ten millions of persons whose names are now written in them. In not very many generations the registers may have fulfilled in a great measure the main purposes for which, with much care and labour, they have been prepared; but in the progress of years they grow more venerable and valuable as national monuments; and though all the dead are not mighty, and but few are chosen for immortal fame, it concerns the national honour that the names of that vigorous race who planted the fields of England, and built up her commerce, should be legible in the registers as long as the wasting hand of Time will permit.

The number of marriages solemnized by British consuls abroad in 1860 was 151.

Before closing this Report, I may be permitted to advert to a circumstance which has sometimes been made the subject of observation, namely, the interval of time, which to some persons may appear to be longer than is necessary, between the close of the year to which the subjoined Tables relate and the date at which they are ready for publication. In the present instance the preparation of them, and work which must be done antecedently to that preparation, have occupied a period of fifteen months. It has been asked: Why this delay? The question may be put by some whose haste to gain knowledge is not immoderate, but who have not become acquainted practically with the immense labour involved in the construction of statistical tables, and in the calculations based on them. It is put by others whose great desire will not be satisfied till the statistics of the British empire for this current year are laid with the morning journal on their breakfast tables on New Year's day 1863, and who even then, because they live in an age of mechanical invention, for which by some process of thought they take credit to themselves, will not consider

TABLE XXXVI.—AGGREGATE NUMBER OF NAMES ON THE REGISTERS at the End of each Year 1837-60; also the NUMBER OF SEARCHES for REGISTERS at the CENTRAL OFFICE (exclusive of Searches in Non-parochial Registers).

| YEARS. | AGGREGATE NUMBER | | | | Number of Searches for Registers at the Central Office. |
|----------|---------------------|------------|------------|----------------------|---|
| | Of Persons married. | Of Births. | Of Deaths. | Of Names Registered. | |
| 1837 - - | 116,958 | 164,116 | 148,701 | 429,775 | Not known. |
| 1838 - - | 353,092 | 627,903 | 491,461 | 1,472,456 | |
| 1839 - - | 599,424 | 1,120,477 | 830,445 | 2,550,346 | |
| 1840 - - | 844,754 | 1,622,780 | 1,190,132 | 3,657,666 | 620 |
| 1841 - - | 1,089,746 | 2,134,938 | 1,533,979 | 4,758,663 | |
| 1842 - - | 1,327,396 | 2,652,677 | 1,883,498 | 5,863,571 | |
| 1843 - - | 1,575,032 | 3,180,002 | 2,229,943 | 6,984,977 | 705 |
| 1844 - - | 1,839,530 | 3,720,765 | 2,586,876 | 8,147,171 | |
| 1845 - - | 2,127,016 | 4,264,286 | 2,936,242 | 9,327,544 | |
| 1846 - - | 2,418,344 | 4,836,911 | 3,326,537 | 10,581,812 | 744 |
| 1847 - - | 2,690,034 | 5,376,876 | 3,749,561 | 11,816,771 | 881 |
| 1848 - - | 2,966,494 | 5,939,935 | 4,149,694 | 13,056,123 | 941 |
| 1849 - - | 3,250,260 | 6,518,094 | 4,590,333 | 14,358,687 | 1,030 |
| 1850 - - | 3,555,748 | 7,111,516 | 4,959,528 | 15,626,792 | 1,162 |
| 1851 - - | 3,864,160 | 7,727,331 | 5,354,924 | 16,946,465 | 1,228 |
| 1852 - - | 4,181,724 | 8,351,233 | 5,762,059 | 18,295,176 | 1,442 |
| 1853 - - | 4,510,764 | 8,963,784 | 6,183,156 | 19,657,704 | 1,558 |
| 1854 - - | 4,830,218 | 9,598,189 | 6,621,961 | 21,049,468 | 1,676 |
| 1855 - - | 5,134,444 | 10,233,232 | 7,046,764 | 22,414,440 | 2,340 |
| 1856 - - | 5,433,118 | 10,890,685 | 7,437,270 | 23,781,073 | 2,492 |
| 1857 - - | 5,771,312 | 11,553,756 | 7,857,085 | 25,182,153 | 2,853 |
| 1858 - - | 6,083,452 | 12,209,237 | 8,306,741 | 26,599,430 | 2,965 |
| 1859 - - | 6,418,898 | 12,899,118 | 8,747,522 | 28,065,538 | 4,063 |
| 1860 - - | 6,759,210 | 13,583,166 | 9,170,243 | 29,512,619 | 5,052 |

NOTE.—The numbers registered in 1837 are for the Half Year ending December 31st.

it their duty to be surprised at so remarkable a result. In answer to the question I have to state:—

1. That this office was established by Act of Parliament, primarily for the purpose of collecting, arranging, paging, examining, correcting, binding, and indexing the certified copies of the English registers, and of supplying stamped certificates of births, deaths, and marriages to all persons who may apply for them; that the certified copies are received quarterly, but the returns are not completed till nearly three months after the end of each quarter; and that the preparatory duties which I have mentioned, and which occupy a majority of the gentlemen engaged in the office during a period of eight months after the quarterly arrivals have begun, must be performed in respect to each volume before it can pass into the hands of the statistical clerks. As the work in the Record Department advances, each quarterly volume is released for the preparation of the statistical abstracts; but it will be seen that the entire number of volumes of any Registration year are not available for this purpose till the September following the termination of the year.

2. That in conformity with a provision of the Registration Act, a general abstract is prepared, in each year, of the number of births, deaths, and marriages registered during the foregoing year, in order that it may be laid before Parliament; but the detailed abstracts that constitute my "Annual Reports" are works of much labour and skill, and necessarily occupy considerable time in the preparation of them. These reports are not designed merely to answer a temporary purpose. They may be regarded as storehouses of facts which have been arranged on methods that are approved as the most useful and convenient, and to which, both now and in future years, students of vital statistics may resort for the elucidation of questions bearing on the social condition of the people, on national progress, on life, health, and disease. It is important that they should be *done well*. It is desirable only in the next degree that they should be *done quickly*.

It will be urged that the machinery of Registration should be employed to give immediate warning of epidemic diseases, to trace in contemporaneous reports their beginning, progress, and decline, and to assist in investigating general and local conditions in which they are developed. When the plague is at the door, the people will not wait till its history can be written in a blue book. This is quite true, and it will be sufficient to state in reference to it, that I publish a weekly report for London on the Tuesday following the termination of each week, and a quarterly report for England and Wales within a month after the close of each quarter.

For an account of the Causes of Death in 1860, I beg to refer you to a letter addressed to me by Dr. Farr, which will be found in the Appendix.

I have the honour to be,

Sir,

Your faithful servant,

GEORGE GRAHAM,

Registrar-General.