THE MARRIAGES, BIRTHS, AND DEATHS IN ENGLAND.

Tuis Return comprises the Birpirs and Deaths registered by 2190 Registrars in all the districts of England during the Winter quarter ending March ${ }^{\text {Ist, }}$ 1853; and the Marriages in more than i2000 churches or chapels, about 3373 registered places of worship unconnected with the Established Church, and 624 Superintendent Registrars' offices, in the quarter that ended December 3 1st, 1852.

The Return of Marriages is not complete; but the defects are inconsiderable, and approximative numbers have been supplied from the records of previous years.
The marriages in the last quarter, and in the whole of the year 1852, have greatly exceeded in number those of any previous return; and this increase of families, confirming other accounts, implies that the condition of the great body of the people is prosperous. But the prosperity of a nation is sometimes overpowered by death, and it has happened that the mortality at the close of the year 1852 , as well as in the winter of the present year, has, notwithstanding the activity of trade, been unusually high, through the inclemency of the season, the prevalence of epidemics, and perhaps the partial destruction of the potato crop.

Marriages, Births, and Deaths, returned in the Years 1841-53 and in the Quarters of those


* The numbers up to 1850 have appeared in the Annual Reports.


## MARRIAGES.

94416 persons were married in the last quarter of the year 1852 , the three months after harvest, the Christmas quarter, in which, according to the customs of England, the greatest number of weddings are celebrated. This number, however, exceeds the numbers in the corresponding quarter of any previous year; and if the whole year is taken, it shows a proportional excess. There were 158439 marriages in the year $185^{2}$, 153740 in 1851 , and, only ten years ago, 118825 in the year 1842 . The marriages in the five years $1838-4^{2}$ were 605219 , in the five years $1848-5^{2}$ they were 745030 . The marriages in England from 1843 to 1852 were at such a rate that I in 60 people married annually; the proportion in 1852 was I in 57 ; while in the last quarter of the year 1852 it was $I$ in 48 . The increase is greatest in in the last quarter of the year 1852 it was I in 48 . The increase is greatest in in the other divisions is less remarkable ; and in the South Midland, as well as the in the other divisions is less remarkable; and in the South Midl
Eastern Counties, the rate of marriages was below the average.

## BIRTHS.

161598 births were registered in the quarter ending March 3Ist, 1853. The number is slightly less than the number registered in the corresponding quarter of the year 1852, but in excess of the number registered in the winters of any the year 1852, but in excess of the number registered in the winters of any
previous years. The greatest number of births is registered generally in the previous years. The greatest number of births is registered generally in the
spring, but in 1852 it happened exceptionally that the births in the winter exceeded the births in the spring quarter. The annual proportion of births since exceeded the births in the spring quarter. The annual proportion of births since
1843 has been I in 30 ; in the winter quarter the average rate is I in 29 ; in the 1843 has been I in 30 ; in the winter quarter the aver
winter quarter of the present year it has been r in 28 .

As the births regeasm of population. tered in the winter quarter were 161598 , and the deaths 10241 , the natural increase of which we have an account is 43357 . The natural
England: $\dagger$-Annual Rate per Cent. of Marriage, Birth, and Death, during the Years
$1843-53$, and the Quarters of those Years.

|  | 16318 | 16516 | 16716 | 16919 | 17124 | 17331 | 17541 | 17754 | 17977 | 18195 | - | 18195 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Years - | 1843 | 1844 | 1845 | 1846 | 1847 | 1848 | 1849 | 1850 | 1851 | 1852 | $\begin{gathered} \text { Mean, } \\ 1843-52 . \end{gathered}$ | 1853 |
| Marriages <br> Births <br> Deaths | $\begin{array}{r} 759 \\ 3 \cdot 232 \\ 3 \cdot 123 \end{array}$ | $\begin{gathered} -801 \\ 3.274 \\ 2 \cdot 161 \end{gathered}$ | $\begin{array}{r} .860 \\ 3.251 \\ 2.090 \end{array}$ | $\begin{array}{r} -861 \\ 3.385 \\ 2 \cdot 307 \end{array}$ | $\begin{array}{r} .793 \\ \begin{array}{r} .193 \\ 3.472 \end{array} \\ \hline \cdot 472 \end{array}$ | $\begin{array}{r} .798 \\ 3.299 \\ 2.307 \end{array}$ | $\begin{array}{r} .899 \\ 3.296 \\ 2.513 \end{array}$ | $\begin{array}{r} .860 \\ \left.\begin{array}{r} 8.843 \\ 2.078 \end{array}\right) \end{array}$ | $\begin{array}{r} \cdot 855 \\ \begin{array}{r} -845 \\ 2 \cdot 202 \\ 2 \cdot 202 \end{array} \end{array}$ | - 881 3.472 2.269 |  | $=$ |
|  |  |  |  |  |  | MARR | IAGES |  |  |  |  |  |
| Quarters ending the ast day of March June $\qquad$ September December $:$ |  |  | $\begin{gathered} 771 \\ 849 \\ 880 \\ 1.038 \end{gathered}$ | $\begin{aligned} & 7575 \\ & .882 \\ & .882 \\ & .988 \end{aligned}$ | $\begin{aligned} & .655 \\ & .856 \\ & .895 \\ & -940 \end{aligned}$ | $\begin{array}{r} .661 \\ .805 \\ .865 \\ .961 \end{array}$ | $\begin{aligned} 661 \\ .822 \\ .766 \\ \hline 986 \end{aligned}$ | $\begin{array}{r} 702 \\ .888 \\ 1840 \\ 1.009 \end{array}$ | $\begin{array}{r}740 \\ .860 \\ .819 \\ 1.000 \\ \hline\end{array}$ | $\begin{array}{r}783 \\ .883 \\ 883 \\ 1.038 \\ \hline\end{array}$ | - 690 <br> .888 <br> .888 <br> 984 | - |
|  | births. |  |  |  |  |  |  |  |  |  |  |  |
| March <br> June <br> September <br> December | $\begin{aligned} & 3 \cdot 1420 \\ & 3: 24 \\ & 3.114 \\ & 3 \cdot 174 \end{aligned}$ | $\begin{aligned} & 3.507 \\ & 3: 34 \\ & 3.123 \\ & 3.115 \end{aligned}$ | $\begin{aligned} & 3.491 \\ & 3.291 \\ & 3.140 \\ & 3.103 \end{aligned}$ | $\left\lvert\, \begin{aligned} & 3.498 \\ & 3 \cdot 5 \cdot 51 \\ & 3.51 \\ & 3.256 \end{aligned}\right.$ | $\begin{aligned} & 3.488 \\ & 3 \cdot 65 \\ & 2.945 \\ & 2.935 \end{aligned}$ | $\left\lvert\, \begin{aligned} & 3.252 \\ & 3.474 \\ & 3.211 \\ & 3.038 \end{aligned}\right.$ | $\left\lvert\, \begin{aligned} & 3.575 \\ & 3.553 \\ & 3.5056 \\ & 3.053 \end{aligned}\right.$ |  | $\left\lvert\, \begin{aligned} & 3 \cdot 569 \\ & 3.559 \\ & 3.531 \\ & 3 \cdot 279 \end{aligned}\right.$ | $\begin{array}{\|l\|l\|l\|} \hline 3.585 \\ 3: 556 \\ 3.294 \\ 3 \cdot 343 \end{array}$ | 3.471 3.428 3.174 3.155 | $3 \cdot 581$ <br> $\vdots$ |
|  | DEATHS. |  |  |  |  |  |  |  |  |  |  |  |
| March <br> June <br> September <br> December | $\begin{aligned} & 2 \cdot 373 \\ & 2.149 \\ & 1.866 \\ & 2.119 \end{aligned}$ | $\begin{aligned} & 2 \cdot 467 \\ & 2.077 \\ & 1.913 \\ & 2.175 \end{aligned}$ | $\left\lvert\, \begin{aligned} & 2 \cdot 554 \\ & 2 \cdot 114 \\ & 1 \cdot 776 \\ & 1 \cdot 908 \end{aligned}\right.$ | $\begin{aligned} & 2.157 \\ & 2.144 \\ & 2.382 \\ & 2.545 \end{aligned}$ | $\begin{aligned} & 2 \cdot 850 \\ & 2 \cdot 506 \\ & 2.163 \\ & 2.389 \end{aligned}$ | $\begin{aligned} & 2 \cdot 794 \\ & \begin{array}{l} 2 \cdot 713 \\ 2.005 \\ 2.108 \end{array} \end{aligned}$ | $\begin{aligned} & 2 \cdot 462 \\ & 2 \cdot 461 \\ & 3.507 \\ & 2.199 \\ & 2.199 \end{aligned}$ | $\begin{aligned} & 2 \cdot 261 \\ & 2.103 \\ & 1.917 \\ & 2.045 \end{aligned}$ | $\begin{aligned} & 2 \cdot 391 \\ & 2 \cdot 228 \\ & 2.020 \\ & 2.182 \end{aligned}$ | $\begin{aligned} & 2 \cdot 364 \\ & 2 \cdot 2 \cdot 27 \\ & 2 \cdot 190 \\ & 2 \cdot 197 \end{aligned}$ |  | ${ }^{2 \cdot 620}$ |

[^0]increase of population, owing to the high rate of mortality, is less than usual, and less by 12000 than it was in the winter quarter of 1852 . The tide of emigration still rolls on, and in the winter 57729 persons left the ports of the United Kingdom at which there are Government Emigration Agents.* 43493 emigrants sailed from Liverpool, 7249 from London, and 2129 from Plymouth ; but it must be borne in mind that a large number of the emigrants from Liverpool are Irish, who resort to that port for the convenience of embarkation.

The price of provisions has still further advanced; wheat, which in the winter quarter of 1852 was $40 s$. Iod., is in the present season $45 s .7 d$. ; beef, by the carcase, at Leadenhall and Newgate markets has risen from $4 \frac{1}{8} d$. to $4 \frac{1}{2} d$. a pound; mutton, from $4 \frac{3}{4} d$. to $5 \frac{3}{4} d$. a pound; and potatoes (York regents), which were $70 s$. in the winter of 1852 , are $127 s .6 \mathrm{~d}$. a ton in the winter of 1853 ; a price which, it is to be feared, places this esculent beyond the reach of many poor families. It may be here stated, that the potato cannot be replaced by bread, beans, or pease alone, and that in its absence an extra allowance of fruit, green vegetables, or herbs is required. Scurvy, in consequence of the neglect of this precaution, prevailed extensively in the spring of the year 1847 , after the first great destruction of the potato crop.
The average Prices of Consols, of Wheat, Meat, and Potatoes; also the average Quantity of
Wheat sold and imported weekly, in each of the Seven Quarters ending March 31 st , 1853 .

| Quarters ending | AveragePriceofConsols. |  | $\dagger$ Wheat sold in the 290 Cities and Towns in England and Wales making Returns. | + Wheat and Wheat Flour entered for Home Consumption at Chief Ports of Great Britain. | Averag of Meat Lead and Newga (by the | Prices per lb. at nhall Markets Carcase). | Potatoes (York Regents) per Ton at Waterside Market, Southwark |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | A verage Number of Quarters weekly. |  | Beef. | Mutton. |  |
| $\begin{aligned} & 1851 \\ & \text { Sept. } 30 \end{aligned}$ | $\begin{aligned} & £ \\ & 96 \frac{1}{2} \end{aligned}$ | 40s. 7 d. | 74,714 | 91,040 | $\begin{aligned} & 3 d .-5 d . \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d \text {. }-5 \frac{3}{3} d \text {. } \\ & \text { Mean } 4 \frac{4}{4} d . \end{aligned}$ | $\begin{aligned} & 90 s .-110 s \\ & \text { Mean ioos. } \end{aligned}$ |
| $\begin{gathered} \text { Dec. } 31 \\ 185_{2} \end{gathered}$ | $97 \frac{7}{8}$ | 36s. 7 d . | 109,506 | 47,986 | $\begin{aligned} & 3 d .-5 d . \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{3}{4} d . \\ & \text { Mean } 4 \frac{3}{4} d . \end{aligned}$ | $\begin{aligned} & 65 s-75 s . \\ & \text { Mean } 70 s . \end{aligned}$ |
| Mar. 31 | $97 \frac{1}{4}$ | 40s. $\mathrm{Iod}$. | 95,532 | ${ }^{27,540}$ | $\begin{aligned} & \frac{3}{4} d .-5 d . \\ & \text { Mean } 4 \frac{1}{8} d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{3}{9} d . \\ & \text { Mean } 4 \frac{3}{4} d . \end{aligned}$ | 6os.-80s. <br> Mean $70 s$. |
| June 30 | $99 \frac{6}{8}$ | 40s. Iod. | 87,949 | 54,675 | $\begin{aligned} & 3 \frac{1}{4} d .-4 \frac{3}{4} d . \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d \text {. }-5 \frac{1}{4} d \text {. } \\ & \text { Mean } 4 \frac{1}{2} d . \end{aligned}$ | $\begin{aligned} & 85 s .-1 \text { ros. } \\ & \text { Mean } 97 s .6 d . \end{aligned}$ |
| Sept. 30 | 100 | 41s. 2 d . | 78,712 | 67,912 | $\begin{aligned} & 3 \frac{1}{4} d .-5 d . \\ & \text { Mean } 4 \frac{1}{8} d . \end{aligned}$ | $\begin{aligned} & 4^{4 d .-6 d .} \\ & \text { Mean } 5 d . \end{aligned}$ | 80s.-100s Mean $90 s$. |
| Dec. 31 | $100 \frac{5}{8}$ | 40s. 5 d. | 111,224 | 72,870 | $\begin{aligned} & 3 d .-5 d . \\ & \text { Mean } 4 d . \end{aligned}$ | $4 \frac{1}{4} d .-6 \frac{1}{4} d$. Mean ${ }^{\frac{1}{4}} d$. | $\begin{aligned} & \text { 90s.-120s. } \\ & \text { Mean ro5s. } \end{aligned}$ |
| $\begin{aligned} & \text { Ma53 } \\ & \text { Mar. } 31 \end{aligned}$ | $99{ }^{\frac{5}{8}}$ | 45s. 7 d. | 95,115 | 63,530 | $\begin{aligned} & 3 \frac{3}{4} d .-5^{\frac{1}{4} d .} \\ & \text { Mean } 4 \frac{1}{2} d . \end{aligned}$ |  <br> Mean $5 \frac{3}{4} d$. | $\left\lvert\, \begin{aligned} & \text { r 1os. } 145 \mathrm{~s} . \\ & \text { Mean } 127 \mathrm{~s} .6 \mathrm{~d} \end{aligned}\right.$ |

$\dagger$ Note.-The total number of quarters of wheat sold in England and Wales for the 13 weeks ending Sept. 30 th, 1851 , was 971,276 ; for the 13 weeks ending Dec. 31 st, $1,423,582$; for the $\mathbf{1 3} 3$
weeks ending March 31 st, $1852,1,241,921$; for the 13 weeks ending June 30 hh, $1,143,330$; for the weeks ending March 31 st, $1852,1,241,921$; for the 13 weeks ending June 30 th, $1,143,339$; for the
13 weeks ending Sept. 30 th, $1,023,251$; for the 13 weeks ending Dec. 31 st, $1,445,906$; for the 13 weeks ending March 31 st, $1853,1,236,493$. The total number of quarters entered for Home Consumption was respectively $1,183,523 ; 671,803 ; 358,024 ; 710,780 ; 882,850 ; 947.310$; and 825,886 ; the second total, however, embraces the returns of 14 weeks.

## STATE OF THE PUBTIC HEALTH.

11824 I deaths have been registered in the first three months of the present year, a number exceeding by 11559 the deaths in the winter quarter of $185_{2}$, and by

* Return with which the Registrar General has been favoured by the Emigration Commissioners.
still more the deaths in any previous winter, except the winters of 1847 and 1848 , when influenza and cholera prevailed. The annual mortality in England has, within the last io years, been at the rate of 2.252 per cent. ; on an average of the 10 winter quarters the rate has been 2.467 per cent.; in the winter of the present year $2 \cdot 620$ per cent. The annual rate of mortality was raised in both the town and the country; in 117 districts, comprising the chief towns, from 2.759 to 2.888 per cent.; in 507 country and small town districts, from $2 \cdot 246$ to $2 \cdot 397$ per cent. The ratio is increased by the season more in the country than it is in the towns which, however, still maintained their fatal pre-eminence, destroying by their dirt and imperfect sanatory arrangements, out of the same population, 5 lives to every 4 who die in the open country.
Small-pox, scarlatina, typhus, influenza, or bronchitis have prevailed in many places, and are the proximate causes of the excessive mortality.
The excess of mortality has been general, but it has been greatest in the South-western Division (V.), in the Division (VI.) on the Severn, in Wales, and in Lancashire: on the whole, the western side of the island appears to have sustained the heaviest losses.
London has latterly been unusually unhealthy, but the excess of deaths is chiefly referable to the depression of the temperature in February and March ; and in the 13 weeks the deaths, allowing for increase of population, have not exceeded the numbers in the winter quarters of 1849 and 185 I . Of the zymotic class of diseases, scarlatina (574), hooping-cough (702), and typhus (662), were the most fatal. Consumption has been unusually fatal, and the deaths were 1872 to 1630 in the winter quarter of 1849 . Bronchitis was fatal to a greater number of persons (1880) than consumption, or to 600 more than died of that disease in the winter quarters of 1849,1850 . Carbuncle has been unusually fatal; the deaths in the last five winter quarters have been $\mathrm{I}, 2,3,17,20$. There is no decline in the deaths from delirium tremens, or intemperance, or poison. The deaths by fractures and contusions exhibited a remarkable increase ; they have been in the five last winter quarters $114,139,163,16 \mathrm{I}$, and 18 I .
In the South Eastern Division (II.) the most remarkable feature is the high mortality in Croydon. The deaths in this district from all causes in the winter quarter were 275 ; while in the four previous winter quarters they were 194, 155 , I39, and I44. The Registrar in his note simply states, that fever caused the increase of deaths, and that it has now happily subsided. No further notice is

| Deaths in the Winter Quarters. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1843 | 1844 | 1845 | 1846 | 1847 | 1848 | 1849 | 1850 | 1851 | 1852 |  | 1833 |
| In 117 Districts, | 43748 | 46136 | 49996 | 43850 | 56105 | 57710 | 51017 | 46066 | 52333 | 52408 | 49939 | 57052 |
|  | 51178 | 54888 | 54668 | 45634 | 63567 | 62322 | 55052 | 52541 | 5313 | 51274 | 547237 | 61149 |
| Total | 9992 | 101024 | 104664 | 8988 | 119672 | 1 | $1{ }^{106069}$ | 956 | 6 | 106682 | 1046006 | + |

Population ; Deaths ; and Mortality per Cent. in the Winter Quarters, 1843-53.

| In 117 Districts, comprising thechief towns In 507 Districts, comprising chiefly small towns and country pa- | Population enumerated |  | $\begin{aligned} & \text { Deaths in } \\ & 100 \text { Winter } \\ & \text { Quarters, } \\ & 1843-52 . \end{aligned}$ | AnnualRate ofMortalityWf 10 .WinterQuarters,1843-52. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { June } 6-7 \text { th, } \\ & 1841 \text {. } \end{aligned}$ | March 31st, 1851. |  |  |  |
|  | 6,612,958 | 7,795,882 | 499,369 | 2.759 | 2.888 |
|  | 9,301,190 | 10,126,886 | 547,237 | 2.246 | 2:397 |
| All England - | 15,914,148 | 17,922,768 | 1,046,606 | 2.467 | 2.620 |

here necessary, as the disease has been the subject of investigation by able sanatory inquirers appointed by Her Majesty's Government. Fever has also prevailed at Brenchley in the Tunbridge District, and at Fawley in the New Forest.
In the South Midland Division, Hatfield, Chesham, Wendover, Waddesdon, Leckhampstead, Henley, Towcester, Bedford, Wisbeach, and Ely, have experienced a higher mortality than the average, chiefly from fever or bronchitis; at tho present time there are several bad cases of fever in Daventry. Romsey, in Hunpresent time there are several bad cases of fever in Daventry. Romsey, in Hun-
tingdon, has suffered from intermittent and other fevers, from erysipelas, and from boils. The registrar of Luton, the seat of the straw-plait works, says, the population boils. The registrar of Luton, the seat of t.
has increased by 2000 persons since 185 r .
In the Eastern Division influenza has prevailed in a part of the Maldon district; mumps in Coggeshall ; typhus in Dunmow; fever in parishes of Stow; small-pox in several districts of Norfolk. In Rougham typhus has prevailed; it is in a low damp district, and "the dwellings are little better than pigsties or " hovels."

In the Soutii Western Division a fever nearly as fatal as the Croydon fever broke out at Longbridge Deverill (Warminster), where the deaths in three months, without including those in other parts of the sub-district, were 27 . The ravages of the fever, it is said, were confined to the space of 100 yards square. Small-pox has prevailed in Exeter and the surrounding districts, where, by the cruel negligence and ignorance of their parents, the lives of many children are sacrificed. The increased mining operations and the increase of population in Cornwall are referred to by the registrars. Cornwall as well as Somersetshire has suffered from scarlatina and small-pox.
The deaths in the West Midland Division (VI.) were 14832 , a number considerably exceeding the average. Small-pox was fatal to many children in Bristol. Typhus was fatal in Albrighton, in Shropshire, and in Wem, where the disease was in one case communicated to the family by a child returning from service after an attack of fever, which resulted in the death of the father and 2 children.

The Registrar of St. Mary, Shrewsbury, where the deaths exceeded the births registered, states, that there has been much sickness during the quarter, partly from damp and floods and partly from the want of better sanatory regulations. " The nuisance (he says) in this district by the dye-waste water running from the " thread manufactory into the Shrewsbury Canal, a stagnant water, causing an " offensive and abominable stench, is very injurious to the health of a dense and
" complaining population. It is, however, gratifying to add, that the authorities " are taking up this and other nuisances in order to their removal."
Fever and scarlatina and bronchitis have been fatal in several districts of Staffordshire, Worcestershire, and Warwickshire. The Registrar of Holy Trinity, Coventry, has the following remarks on the inefficiency of the medical attendance on the poor: "Although out of the ro6 deaths 78 are entered as 'certified,' there " is reason to believe that comparatively very few of these received any systematic " medical treatment, but that the certificates were obtained from professional men " whose attention had been called to the cases almost at the last moment, when " death appeared to be inevitable. During this quarter I have registered the births " of 11 illegitimate children, and ro deaths of the same class."
In the North Midland Division (VII.) the mortality has been considerably above the average in Ashby, Lincoln, Spilsby, Basford, Nottingham, Southwell, Belper, and Bakewell, and chiefly from scarlatina, fever, and small-pox. Fever has been very prevalent in several villages round Lincoln, and in Lincoln would, probably, have been more fatal had it not been for the improved condition of the labouring classes and the effective drainage of the country.
In the North-Western Division (VIII.) the mortality of Liverpool was high, but not so high as in previous years ; the mortality of Manchester was above its average, so was that of Bolton, Blackburn, and Preston.

The Registrar of St. George, Liverpool, says: "There has been a continued current " of emigration flowing through the town from various parts to distant shores,
" but the numbers of births and deaths have not been much affected thereby."
The Registrar of Hulme, Chorlton, near Manchester, adverting to the rapid growth of the population, says: "Former years, however, bear little comparison with " the last, during which many new entire streets have been formed, acres covered, " and almost every vacant space built upon ; still the houses are occupied almost " before finished or fit for habitation. This indicates a very prosperous condition
" of the working classes, by whom these tenements are chiefly occupied."
In the York Division (IX.) the mortality was above the average in Sheffield, Selby, Howden, Sculcoates, York; scarlatina, small-pox, and fever have been prevalent diseases. "Sheffield," the registrar of the south sub-district says, " is "full of strangers, and they are temporarily at least more healthy than the " indigenous inhabitants. The immigrants come from Lincoln, Notts, Northamp" ton, Norfolk, principally, with some from the East Riding of York. Certainly " there has been a great improvement in diet within the last few years." The Common Lodging House Act is said to operate beneficially in Sheffield (West).

The health of the Northern Division (X.) was somewhat below the average. The mortality in Hexham, Morpeth, Glendale, Penrith, and Cockermouth exceeded the average of those districts. The cold weather has been severely felt ; scarlatina, small-pox, and fever have prevailed. In Southwick and Monkwearmouth offensive nuisances abound.

Wales has experienced a high rate of mortality; the deaths in the last winter quarter $(7,853)$ exceeded the deaths $(6,737)$ in the winter quarter of 1852 by 1,116 . Small-pox, scarlatina, measles, hooping-cough, and fever have prevailed; and the cold weather has been fatal. Typhus in Hope, Wrexham, is ascribed to the neglect of sanatory measures.

The Registrars of several districts call attention to the neglect of vaccination, and to the consequent mortality from small-pox, although many instances such as the following occur, everywhere confirming the confidence of the medical profession in the protection which is furnished by efficient vaccination :- "In several " families," says the Registrar of Basford, Nottingham, "where the children are " numerous, one unvaccinated, a child, has taken small-pox and died; the other " children, all of whom had been vaccinated, entirely escaped the disease. This "I have clearly ascertained by repeated visits since the occurrence of the deaths " in these families."
The outbreaks of cholera in Russia demand the attention of the people of England ; and should accelerate all the arrangements for the supply of pure water, the drainage of towns, and the removal of nuisances.

The disturbed meteorology of the quarter, the high temperature of January, the low temperature of February and March, the extreme transitions of heat and cold, the unusual falls of snow, the hail, the fogs, the thunderstorms, the lightning, the zodiacal lights, auroras, solar halos, and lunar halos in England, the South of Scotland, and parts of Ireland, are described by Mr. Glaisher (page I I) from continuous observations made at fifty stations by the enterprise of private observers (chiefly) under his assiduous superintendence. It is difficult to overrate the value which these observations possess and will acquire, as the diseases of men, the crops of the agriculturists, as well as the health of their herds, and many manufacturing processes, depend on the state of the weather to an extent which has not yet been determined.

MARRIAGES Registered in the Quarters ending December 3 1st, 1848-52; BIRTHS and DEATHS Registered in the Quarters ending March 3 Ist, $1849-53$, in the Divisions, Counties, and Districts of England.


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| $\begin{array}{r} N \\ N H \\ N \\ N \\ \hline \end{array}$ |  |  | $\begin{aligned} & \text { Mo } \\ & \text { Hg o } \\ & \text { ga } \end{aligned}$ |  |  |
|  |  | $\begin{array}{r} \text { w } \\ \text { A }{ }^{2} \\ \text { cor } \\ \hline \end{array}$ | $\begin{aligned} & \text { no } \\ & \text { cic } \\ & \text { gh~ } \end{aligned}$ | $\overbrace{\infty}^{\infty} \underset{\infty}{\infty}$ | 㥕 |
| $\begin{aligned} & \text { जr } \\ & \text { cor } \\ & \omega=0 \\ & \hline \end{aligned}$ |  |  | $\begin{aligned} & \text { er } \\ & \text { No } \\ & \text { No } \end{aligned}$ |  |  |
|  | EN No | $\begin{array}{r} \text { tä } \\ \text { gion } \\ \hline \end{array}$ | $\begin{aligned} & \text { en } \\ & \text { co } \\ & \text { w } \\ & \text { No } \\ & \hline \end{aligned}$ |  |  |
| $\begin{aligned} & \infty \\ & 0 \\ & 0 \text { or } \\ & 0 \\ & 0 \end{aligned}$ | $\begin{array}{r} \text { men ou } \\ \text { I } \alpha \infty \text { on } \\ \hline \end{array}$ | $\begin{aligned} & A 0_{0}^{\infty} \\ & c=0 \\ & =0 \\ & \hline \end{aligned}$ |  |  |  |
| $\begin{array}{r} N O \\ N_{0}^{2} \\ \omega_{0} 0 \\ \hline \end{array}$ |  | 들 | $\begin{aligned} & \text { Hew } \\ & \text { onc } \\ & 0.6 \end{aligned}$ |  |  |
| $\begin{array}{r} \text { NA } \\ \text { No } \\ \text { oñ } \\ \hline \end{array}$ |  |  |  |  |  |
|  |  |  |  |  |  |
|  |  |  | $\begin{aligned} & N \\ & 0 \\ & 0 \\ & 0 \\ & 0 \\ & \omega_{\infty} \\ & \hline \end{aligned}$ |  |  |
|  |  |  |  |  |  |
| $\begin{aligned} & N \omega_{N}^{N} \\ & \sim_{N}^{\prime} 0_{0} \\ & \sim 10 \end{aligned}$ | $\begin{aligned} & \text { worn } \\ & \text { Nos } \\ & \cline { 1 - 1 } \text { Nör } \end{aligned}$ |  | $\begin{aligned} & \text { AN } \\ & \omega_{0} \\ & 0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |
|  | $\begin{aligned} & \text { No N N } \\ & \text { NO N } \\ & \text { OHAN } \end{aligned}$ |  |  |  |  |
|  |  | $\begin{aligned} & \infty+\infty \\ & \text { y去 } \\ & \text { yf } \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { IN } \\ & \text { GN } \\ & \text { in } \\ & \hline 10 \end{aligned}$ |  |  |
|  | $\begin{aligned} & \text { wos } \\ & \text { Ho } \\ & \text { co } \\ & \hline \end{aligned}$ |  | $\begin{aligned} & \text { HN } \\ & \text { O } \\ & + \text { on } \\ & \hline \end{aligned}$ |  |  |
|  |  | $\begin{aligned} & \text { Ho } \\ & \text { O. } \\ & 0.0 \\ & 0 \\ & 0 \end{aligned}$ |  |  |  |

＊In the present publication the＂Registration Counties＂comprise groups of entire Registration Districts，or Poor Law Unions；and when a District runs into two or more Counties，
t has been placed with the County in which the greater part of the Population is situated ：hence these groups of Districts rarely，if ever，correspond with the strict boundaries of the respective Counties named．

A TABLE OF THE DEATHS IN LONDON FROM ALL CAUSES,
Registered in the March Quarters of the 5 Years 1849 to 1853

| Causes of deati. | uarters ending Marc |  |  |  |  | Causes of deat | Quarters ending Mare |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1849 | 1850 | 185 | 1852 |  |  |  |  |  |  |  |
| All Causes - Specified Causes <br> I. Zymotic Diseases <br> Sporadic Diseases : <br> II. Dropsy, Cancer, and other <br> variable Seat -- - <br> III. Tubercular Diseases $\left.\begin{array}{l}\text { Diseases of the Brain, Spi- } \\ \text { nal Marrow, Nerves and }\end{array}\right\}$ Senses - $---\overline{-}$ <br> VI. Diseases of the Lungs and $\{$ <br> of the other Organs of <br> of the other Organs of <br> Liver, and other Organs <br> of Digestion <br> VIII. Diseases of the Kidneys, <br> IX. Childbirth, Diseases of <br> X. Rhe Uterus, \&c. - - <br> the Bones, Joints, \&c. <br> Cellular Tissue, \&c. <br> XII. Malformations XIII. Premature Birth and De- <br> XIV. Atrophy - <br> XVI. Sudden*- <br> and Intemperance - Cold, |  | $\begin{gathered} 13219 \\ 13136 \\ 2126 \end{gathered}$ | $\begin{gathered} 15410 \\ 15323 \\ 2999 \end{gathered}$ | $\begin{aligned} & 14481 \\ & 14399 \\ & 2702 \end{aligned}$ |  |  |  | 135 |  |  |  |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} 100 \\ 296 \\ 816 \\ 29 \\ 39 \\ 82 \\ 6 \\ 68 \end{gathered}$ |  |
|  |  |  |  |  | 2861 |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  | $\begin{aligned} & 75 \\ & 19 \\ & 19 \end{aligned}$ |  |  |  |
|  |  |  |  |  |  |  |  |  | ${ }_{3}^{7}$ |  |  |
|  |  |  |  |  | 0 | Convily |  |  | ${ }_{32}$ | $\begin{aligned} & 281 \\ & \begin{array}{l} 501 \\ 154 \end{array} \end{aligned}$ | 17 <br> 176 <br> 176 |
|  | 1687 | 2226 | 2472 | 2588 | 2586 | Disea |  |  | $\begin{gathered} 82 \\ 58 \end{gathered}$ | $\begin{array}{cc}47 & 154 \\ 43\end{array}$ |  |
|  |  | 1638 | ${ }_{6}^{1634}$ | $\begin{gathered} 1625 \\ 655 \end{gathered}$ | $\begin{gathered} 1805 \\ 648 \end{gathered}$ | Perie |  |  |  |  |  |
|  | 168 |  |  |  |  |  |  |  |  |  | ${ }_{\text {23 }}^{23}$ |
|  |  | 2802 | 3522 | 2840 | 3585 |  |  |  |  | 67 | 79 |
|  | 2986 |  |  |  |  |  |  |  |  |  |  |
|  |  |  | 815 | 19 | 821 |  |  |  |  | 138 |  |
|  |  |  |  |  |  |  |  |  | 139 |  | 175 |
|  | 164 | 165 |  | 194 | 188 |  |  |  |  | 178 | ${ }_{23}^{175}$ |
|  | 123 | 122 | 109 | 112110 |  | Quinsey <br> Enteritis <br> Peritonitis - | $\left\|\begin{array}{c} 150 \\ 26 \\ 20 \\ 101 \end{array}\right\|$ |  |  |  |  |
|  | 121 | 101 |  |  | 122 |  |  |  |  |  |  |
|  |  |  |  | 109 11 <br> 22 4 |  | Peritonitis - <br> Ascites - <br> Ulceration of Intestines, \&c. <br> Hernia |  |  |  |  |  |
|  |  | 24 |  |  | 42 |  | 19 <br> 26 <br> 39 |  |  |  |  |
|  |  | ${ }_{320}^{43}$ |  | ${ }^{50}$ | ${ }_{4}^{53}$ |  |  | 30 13 | 30 | 27 10 | 39 14 |
|  |  |  |  |  |  | Stricture (of the Intestinal Canal |  | 14 |  | 10 | , |
|  | ${ }_{662}$ | ${ }^{290}$ |  | ${ }^{860}$ | cisi | Disense of S | 79 | 76 | 64 | 84 | 76 |
|  |  | 455 | 573 | 127 | 576 | Disease of |  | 44 |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  | ${ }^{7}$ |
|  |  |  |  |  |  | Disease of Sple |  |  |  |  |  |
| Meaales ${ }^{\text {S }}$ | 288 <br> 776 <br> 17 | ${ }_{3}^{393}$ | ${ }_{363}^{275}$ | ${ }_{151}^{381}$ | 184 | Neph |  |  |  |  | 1154 |
| Stariatina | ${ }_{905}^{776}$ | ${ }_{42} 19$ | ${ }_{781}^{206}$ | ${ }_{539}^{366}$ | ${ }_{702}^{574}$ | Disease | 25 | 34 | 40 | 46 |  |
| Croup |  | 79 | 109 | 97 | ${ }_{93}^{93}$ | Ischuria |  | 2 | 5 |  |  |
| Diarrhea | 284 | ${ }_{207}^{25}$ | ${ }_{223}^{328}$ | ${ }_{225}^{34}$ | ${ }_{221}^{26}$ | Stianete |  |  |  |  | 11 |
| Dysentery | ${ }_{516}^{42}$ | ${ }_{8}^{43}$ | ${ }_{7}^{30}$ | ${ }_{13}^{28}$ | ${ }_{7}^{28}$ | Cystitis |  |  |  |  |  |
| Influenza |  | 38 | 205 | 40 | 51 | Disease of Kidneys, | ${ }_{93}$ | 81 | 65 | ${ }_{93}$ |  |
| Ague - | ${ }_{6}^{16}$ |  |  | 10 |  | Paramenia- |  |  |  |  |  |
| Remitten |  |  |  |  |  | Ovarian |  |  |  |  |  |
| Typhus | 699 | 404 | 521 | 527 | 662 | Disease |  |  | 30 |  |  |
| Childbi | 112 |  | 47 | 62 | 4 | Arthritis - |  |  |  |  |  |
| Rheumat |  | ${ }^{21} 19$ |  | 18 |  | Rheume | 54 | 析 68 | 60 46 | 60 42 | ${ }_{48}^{69}$ |
| Syphilis | 22 |  |  |  |  | C |  |  |  |  |  |
| Hydrophobia- |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  | Dsass or |  |  | 14 | 14 |  |
| morr | ${ }_{27}^{248}$ | 55214 | ${ }_{251}^{45}$ | ${ }_{220}^{63}$ | 266 |  |  | $\begin{aligned} & 18 \\ & 8 \\ & 40 \end{aligned}$ | 231356 | $\begin{aligned} & 19 \\ & 12 \end{aligned}$ |  |
| Abscess: |  |  |  |  |  |  |  |  |  |  |  |  |
| ${ }_{\text {Uicer }}^{\text {Fisula - }}$ |  |  | ${ }_{7}^{21}$ | ${ }_{3}^{12}$ |  | Perlect ${ }_{\text {Prion and }}$ Atrophy - ${ }^{\text {a }}$ |  |  |  |  |  |
| Mortification- |  |  |  | 44 | ${ }^{46}$ | Colde see |  |  |  |  |  |
| Gout - |  | 2 | ${ }_{11}^{236}$ | ${ }_{15}^{231}$ | ${ }^{243}$ | Poison- ${ }^{\text {Burns and Sealc }}$ |  |  |  |  | ${ }_{98}^{24}$ |
|  |  |  |  |  |  | Hanging, \&c. : |  |  |  |  |  |
| Scrofula - ${ }_{\text {Tabes }}$ Mesenterica | $\left.\begin{array}{\|c} 198 \\ 1880 \\ 380 \end{array} \right\rvert\,$ | $\left.\begin{gathered} 72 \\ 158 \\ 1626 \\ 370 \end{gathered} \right\rvert\,$ | $\left\|\begin{array}{r} 87 \\ 175 \\ 1792 \\ 418 \end{array}\right\|$ | $\begin{array}{\|c\|} 131 \\ 188 \\ 181 \\ 448 \end{array}$ | $\begin{gathered} 196 \\ 185 \\ 1872 \\ 433 \end{gathered}$ | Fractures and Contusions Wounds <br> Causes not specified | (144 $\begin{array}{r}16 \\ 106 \\ 107\end{array}$ | $\begin{array}{r} 19 \\ 19 \\ \hline \end{array}$ |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
| Hyd |  |  |  |  |  |  |  | ${ }_{83}^{9}$ | $\stackrel{9}{87}$ | ${ }_{82}^{11}$ | 13 <br> 146 |

 * Under the head of sudden deaths are classed not only deaths described as sudden, of which the cause has not been
ascertained or
causes," sc. \&ectated; but also all deaths returned by the coroner in vague terms, such as "found dead," "natural

On the Meteorology of England, the South of Scotland, and parts of Ireland, during the Quarter ending March 31 Ist, $1853 . \quad$ By James Glaisher, Esq., F.R.S., Sec. of the British Meteorological Society.
The very high temperature of the last two months of the preceding year continued till the end of January; the daily temperature during this month was frequently $8^{\circ}$ and $9^{\circ}$ in excess, and not seldom amounted to $12^{\circ}, 13^{\circ}$, or $14^{\circ}$. The mean temperature of the month was $42^{\circ} \cdot 4$, exceeding the average of 80 years by $6^{\circ} \cdot \%$. The mean temperature of the 3 months ending January was $46^{\circ} \cdot 3$, to this value was in 1806 and $180 \%$, when the mean temperature of the same three months was $43^{\circ} \cdot 6$. On February ist a period of weather of the opposite character suddenly set in, the daily temperature being in defect on every day till March 4th occasionally to the amount of $10^{\circ}$ or $12^{\circ}$; during this interval of time the temperature was occasionally very low, the weather was exceedingly severe, and snow more or less fell on every day. The average defect of daily temperature for the period was $5^{\circ} .4$. From March $5^{\text {th }}$ to March 14th the weather was mild, the average excess of daily day till the 27 th to a considerable depth in some places, and the defect of daily temperature to the end of the quarter amounted to $6^{\circ}$.
The quarter has been remarkable for the extremes of heat and cold for the season, and for an unusual number of days on which snow has fallen in the months of February and March. The mean temperature of the air at Greenwich for the quarter ending February, constituting the 3 winter months, was $41^{\circ} \cdot 1$, being $3^{\circ} \cdot 5$ above the average of 80 years.

| $\begin{gathered} 1853 . \\ \text { Months. } \end{gathered}$ | Temperature of |  |  |  |  |  |  |  |  |  | Elastic Force of Vapour. |  | Weight ofVapour in Vapour in aCubie Foot of Air. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Air. |  |  | Evaporation. |  | Dew Point. |  | Daily Range. |  | $\begin{gathered} \text { Water } \\ \text { of the } \\ \text { of hames. } \end{gathered}$ |  |  |  |  |
|  | Mean. | Diff. <br> from <br> ave- <br> rage of <br> 80 <br> years. | Diff. <br> from <br> are <br> rage of <br> ras <br> years. | Mean. | Diff. <br> from <br> are- <br> rage of <br> Il <br> years.$\|$ | Mean. | Diff. <br> from <br> ave- <br> rage of <br> 11 <br> years. | Mean. | Diff. from ave- rage of 12 years. |  | Mean. |  | Mean. |  |
| $\begin{aligned} & \text { Jan. } \\ & \text { Feb. } \\ & \text { Mar.: } \end{aligned}$ | $\begin{gathered} 0 \cdot \\ 42 \cdot 4 \\ \hline 3 \cdot 3 \\ 38 \cdot 5 \end{gathered}$ | $\begin{gathered} \circ \\ +6 \cdot 7 \\ -4.9 \\ -2 \cdot 4 \end{gathered}$ | $\begin{gathered} 0 \\ +4 \cdot 4 \\ \hline-6.4 \\ -\quad .06 \end{gathered}$ | $\begin{aligned} & \circ \cdot 8.8 \\ & 39.0 \\ & 35 \cdot 0 \\ & 35 \cdot 8 \end{aligned}$ | $\begin{gathered} \circ \\ +2 \cdot 7 \\ -6.9 \\ -5.8 \\ \hline \end{gathered}$ | $\begin{gathered} \circ \\ \frac{0}{36 \cdot 2} \cdot 2 \\ 37 \cdot 1 \\ 31 \cdot 7 \end{gathered}$ | $\begin{gathered} 0 \\ +1 \cdot 1 \\ \hline-8 \cdot 4 \\ -4 \cdot 4 \end{gathered}$ | $\begin{gathered} \circ \cdot \\ \substack{10 \cdot 1 \\ 10 \cdot 1 \\ 16 \cdot 1} \end{gathered}$ | $\begin{gathered} 0 \\ +0.1 \\ -0.5 \\ +2 \cdot 1 \end{gathered}$ | $\begin{aligned} & \begin{array}{l} 0 \\ 425 \cdot 5 \\ 37.6 \\ 40 \cdot 4 \end{array} \end{aligned}$ | $\begin{aligned} & \text { in } \\ & .23 \\ & .197 \\ & \hline 198 \end{aligned}$ |  | $\begin{aligned} & \frac{\mathrm{gr}}{2} \mathrm{r} \\ & \frac{2}{2}, 0 \\ & 2 \cdot 3 \end{aligned}$ | $\begin{aligned} & \mathrm{gr} . \mathrm{i} \\ & -0.1 \\ & -0.7 \\ & -0.4 \end{aligned}$ |
| Iean | 38:1 | -0.2 | $-17$ | 35.5 | $-3: 3$ | 317 | -3:9 | $12 \cdot 1$ | +1. | 40.2 | '199 | -02 | $2^{2} 3$ | -0.3 |
| $\begin{gathered} 1853 . \\ \text { MONTHS. } \end{gathered}$ | $\begin{gathered} \text { Degree } \\ \text { of of } \\ \text { Humidity. } \end{gathered}$ |  | $\begin{gathered} \text { Reading } \\ \text { of } \\ \text { Barometer. } \end{gathered}$ |  | Weight of a Cubic Foot of Air. |  | Rain. |  | $\begin{aligned} & \text { Daily } \\ & \text { Doili } \\ & \text { zontal } \\ & \text { mone- } \\ & \text { montion } \\ & \text { of the } \\ & \text { Air. } \end{aligned}$ | Reading of Thermometer on Grass. |  |  |  |  |
|  | Mean. | Diff.fromare-rage of11years. | Mean. | $\begin{gathered} \text { Diff. } \\ \text { from } \\ \text { frae } \\ \text { rage of } \\ \text { rears. } \\ \text { years. } \end{gathered}$ | Mean. | $\left\lvert\, \begin{gathered} \text { Diff. } \\ \text { from } \\ \text { rave } \\ \text { rageo of } \\ \text { Hears. } \\ \text { years. } \end{gathered}\right.$ | Amount. | Diff. <br> from <br> ave- <br> rage of <br> 38 <br> years. |  | Number of Nightsit was |  |  | $\begin{gathered} \text { Low- } \\ \text { Lest } \\ \text { Read- } \\ \text { ing } \\ \text { Night. } \end{gathered}$ | High-estaRead-indNight. |
|  |  |  |  |  |  |  |  |  |  | $\begin{gathered} \text { At or } \\ \text { below } \\ 322^{\circ} \end{gathered}$ | $\begin{gathered} \text { Be- } \\ \text { tween } \\ \text { seon } \\ \text { and } 40^{\circ} \end{gathered}$ | ${ }_{\text {Alore }}^{\substack{\text { a }}}$ |  |  |
| Jan. $\begin{aligned} & \text { Teb. } \\ & \text { Mar.: }\end{aligned}$ | $\begin{aligned} & .808 \\ & .888 \\ & .788 \end{aligned}$ |  | $\begin{aligned} & \text { in } \\ & 29.570 \\ & 29.5250 \\ & 29.780 \end{aligned}$ | $\begin{gathered} \text { in. } \\ -179 \\ -.243 \\ -.003 \end{gathered}$ | $\begin{aligned} & \mathrm{gr} \mathbf{r}_{52}^{52} \\ & 552 \\ & 550 \end{aligned}$ | $\begin{aligned} & \mathrm{grr} \\ & \begin{array}{l} 8 \\ +3 \\ +4 \end{array} \end{aligned}$ | $\begin{aligned} & \text { in. } \\ & 2.0 \\ & 0.9 \\ & 0 \cdot 9 \end{aligned}$ | $\begin{gathered} \text { in. } \\ +0.2 \\ +0.8 \\ 0-0.1 \end{gathered}$ | $\begin{gathered} \text { Miles. } \\ 1187 \\ 98 \\ 58 \end{gathered}$ | $\begin{aligned} & 18 \\ & 25 \\ & 27 \end{aligned}$ | $\begin{aligned} & 8 \\ & 3 \\ & 3 \\ & \hline \end{aligned}$ | 5 0 0 1 | $\begin{gathered} 0 \cdot 0 \\ \begin{array}{c} 220 \\ 12: 8 \\ 12.2 \end{array} \end{gathered}$ |  |
| Mean | -799 | -063 | 29:625 | -142 | 548 | + 0 | $\mathrm{Sum}_{4 \cdot 4}$ | $\begin{aligned} & \operatorname{Sum}_{-0^{\circ}} \end{aligned}$ | 91 | ${ }_{70}$ | $\begin{aligned} & \mathrm{Sum}_{14} \end{aligned}$ | $\frac{\text { Sum }}{6}$ | 12'2 | 43.8 |


Thunderstorms occurred, or thunder was beard and lightning seen, on the 2d, 5 th, and 8th January at Whitehaven; on the 11th at Hartwell House and Linslade; on the 15 th at Guernsey; and on the 1st at Jersey and Guernsey. On the 15th, r6th, and 1 1th February at North Shields ; and on the the 22d at North Shields; and on the 27th at Holkham.
Thunder was heard, but lightning was not seen, on the 21 ist January at Grantham. On the 16 th February at Newcastle; and on the I 3 th Mareh at Grantham.
Lightring was seen, but thunder was not heard, on the 4 th January at North Shields ; on the 7 th at Cardington; on the 1 rth at Clifton, Bicester, Oxford, Stone, Hartwell Rectory, Cardington, and February at Stone and Hartwell Rectory. On the 4th March at Durham ; on the 13 th at Jersey and on the 3oth at Stone and Hartwell Rectory.
Hail fell on the $5^{\text {th }}$ January at Ennis and Liverpool; on the 6th at Lewisham, Oxford, Stone, Hartwell Rectory, Bedford, and Ennis; on the irth at Stone, Hartwell Rectory, Ennis, and Stonyhurst; on the 15 th at Guernsey and Falmouth; on the 17 th at North Shields; on the 2 Ist at Hartwell House, Hartwell Rectory Ennis, Grantham, Shields ; and on the 26th at Falmouth and Stone. On the 4th February at Guernsey, Aylesbury,
and North Shields ; on the 5th at Guernsey; on the 7 th at Dunino; on the 8th at Ennis and North
 North Shields; on the 13th at Guernsey ; on the 17th at Falmouth; on the 20th at Hartwell Rectory;
on the 22d at Hawarden ; on the 23d at Ryde, Grantham, Hawarden, and Dunino; on the 25 th at Hartwell Rectory; on the 26th at Jersey, Falmouth, Truro, Liverpool, Manchester, and North Shields; on the 27 th at Jersey, Falmouth, and Truro; and on the 28 th at Jersey and Stonyhurst. On the 1st March at Jersey, Hartwell Rectory, and Wakefield; on the 2d at Hartwell Rectory and and Hawarden ; on the 16th at Nottingham; on the 1 7 th at Ennis; on the 18th at Falmouth, Ennis, on the 19th at Jersey; on the 20th at Hawarden and Gainsborough; on the 2 Ist at Jersey, Falmouth, Truro, Hawarden, and North Shields; on the 22d at Falmouth, Lewisham, Bedford, Hawarden, and North Shields; on the 23d at Lewisham, Greenwich, Ennis, and North Shields; on the 24th at Lewisham, Hartwell Rectory, and Ennis; and on the 25 th at Hartwell Rectory.
Fog was prevalent on Ist January at North Shields; on the roth at Grantham ; on the 14th at Lewisham, Grantham, and Stonyhurst; on the 16th at Midhurst, Norwich, and Grantham ; on the
18th at Lewisham ; on the 19th at Clifton, Linslade, and Stonyhurst; on the 21st at Southampton and Lewisham ; on the 24th at Paddington and Grantham ; on the 25th at Paddington ; on the 26th at Paddington, Grantham, and Manchester; on the 27th at Grantham ; on the 28th at Ennis and Grantham; on the 30 th at Paddington ; and on the 31 st at Clifton, Lewisham, Paddington, Linslade and Leeds. On Ist February at Midhurst, Clifton, Lewisham, Paddington, St. John's Wood, Bicester Stone, Hartwell House, Hartwell Rectory, Linslade, Grantham, Wakefield, Leeds, and Stonyhurst on the 2d at Midhurst, Lewisham, Paddington, St. John's Wood, and Stonyhurst; on the 4 th and
5th at Manchester ; on the 6th at Southampton, Paddington, Grantham, and Wakefield; on the 8th at Clifton, Ennis, Wakefield, and Leeds ; on the 1 ith at Royston ; on the 13 th at Marichester ; on the $15^{\text {th }}$ at Lewisham; on the 19th at Stone and Grantham; on the 22d at Manchester ; and on the 28th at Greenwich. On 5 th March at Stone, Grantham, Manchester, and Wakefield ; on the 6th at Bicester, Norwich, and North Shields ; on the 7 th and 8 th at Midhurst, Clifton, and Norwich; on the $9^{\text {th }}$ at Ryde, Midhurst, Clifton, Lewisham, Greenwich, Paddington, St. John's Wood, Bicester, Linslade, and Wakefield; on the 11 th at Paddington, St. John's Wood, Linslade, and Wakefield;
on the 12th at Clifton, Lewisham, Greenwich, St. John's Wood, Grantham, and Wakefield; on the 13th at Lewisham, Wakefield, and North Shields; on the 15th at Clifton and Stone; on the 16th at Clifton, Bicester, Stone, and Hartwell House ; on the 2 Ist at Paddington; on the 24 th at Midhurst, Clifton, and Greenwich ; on the 25 th at Manchester ; on the 26 th at Hartwell Rectory on the 28th at Clifton ; on the 22 th at Manchester and Wakefield ; on the 30 th at Midhurst and Wakefield ; and on the 3 Ist at Wakefield.
On 7th February at Durham, and on the 27 th at Nottinghat on 31 st at Nottingham and Durham. On 7th February at Durham, and on the 27 th at Nottingham. On 8th March at Rose Hill and
Nottingham ; on the roth at Hartwell House and Durham ; on the 11 th at Rose Hill ; on the 27 th at Durham; on the 28th at Grantham ; on the 29th at Stone, Hartwell House, Grantham, Nottingham, and Durham; and on the 3oth at Grantham.
Aurore were seen on 4th January at Hawarden; on the $5^{\text {th }}$ at Stone and Hawarden; on the 7 th at Clifton, Rose Hill, Oxford, Stonyhurst, and Dunino ; on the 8th at Stonyhurst ; on the 15 th at Clifton; and on the $\mathbf{1}_{5}$ 1st at Grantham and Durham. On 14th February at Whitehaven; on the 26th at Guernsey; on the 27th at Nottingham, Hawarden, Stonyhurst, and Whitehaven, and on the 28th at Stone and Hartwell Rectory. On 7th March at Midhurst, Clifton, Hawarden, and Durham ; on the 8th at Clifton, Stonyhurst, and Durham; on the roth and rith at Dunino; on the ryth at Bicester, Stone, and Hartwell Rectory; on the 2 Ist at Holkham; and on the 29th at Stone.
Solar Halos were seen on 1 3th January at Greenwich; on the 16th at Nottingham, Stonyhurst,
and North Shields; on the 1 th and North Shields; on the 17 th at Nottingham and North Shields; and on the. 20th at Hartwell
Rectory. On 7 th February at Stonyhurst; on the roth at Hawarden and Stonyhurst ; on the and 13 th at Nottingham ; on the 15 th at Royston and Liverpool ; on the 16 th and 1 I th at Nottingham ; on the 18th at North Shields; on the 26th at Nottingham ; on the 27 th at Grantham ; and on the 28th at Stonyhurst and Dunino. On 4th March at Hawarden ; on the 9th at Stone, Hartwell Rectory, and Aylesbury; on the 11th at stone and Hartwell hectory; on the 14th at Whitehaven on the 20th at Dunino; on the 22d at Hartwell House; on the 23d at Stone, Hartwell Rectory, and Nottingham ; on the 26th and 30th at Dunino ; and on the 31st at Midhurst, Stone, Hartwell Rectory Lunar Halos Ryde, Stone, and Hartwell R 3 danuary at Hawarden; on the 14th at Grantham ; on the 15 th at hurst, Bicester, Oxford, Stone, Hartwell Rectory, Cardington, and Grantham ; on the 2oth a Midhurst, Lewisham, Greenwich, St. John's Wood, Oxford, Stone, Hartwell House, Cardington, Grantham, Nottingham, Hawarden, Liverpool, and Dunino; on the 2 Ist at Nottingham; on the 22d at Wakefield; on the 25 th at Hartwell House; and on the 29th at Durham. On 14th February at Nottingham; on the 15 th at Liverpool ; on the 18th at Durham; on the 19th at Royston; on the 21st at Nottingham, Stonyhurst, and Durham; on the 22d at Nottingham, Hawarden, Liverpool,
North Shields, and Dunino; on the 23d at Liverpool; and on the 25th at Midhurst. On 14th March at Stone and Hartwell Rectory ; on the 16th at Warrington; on the 19th at Stone, Hartwell Rectory, Liverpool, Manchester, Whitehaven, and Durham; on the 20th at Clifton, Hawarden, Warriggton, Liverpool, Manchester, Stonyhurst, Durham, and North Shields; on the 21st at Oxford and Cardington; on the 22d at Stone, Hartwell House, Hartwell Rectory, Nottingham, and Hawarden; on the 23d at Stone, Hartwell Rectory, and Cardington; and on the 24th at Midhurst
and Liverpool.

Meteorological Table, Quarter ending March 3 1st, 1853.

|  | 若䓪 |
| :---: | :---: |
|  | Mean Pressurie of dry $A$ dir readuced to the level of the |
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|  | or |
|  |  |
|  |  |
|  |  |
|  |  |
|  | Mean estir Strength. |
|  |  |
| H®¢ | Mean Amount of Cloud, |
|  | which it fell. |
|  | Amount colleet |
|  | a cubie footo |
| $\bigcirc{ }^{\circ} \mathrm{O}$ |  |
|  | Mean degree of |
| Nock |  |
|  |  |
|  |  |




MONTHLY METEOROLOGICAL TABLE FOR THE QUARTER ENDING MARCH $31 s t, 1853$.
The Observations have been reduced to Mean values，and the Hygrometrical results have been deduced－from Glaisher＇s Tables．

| Names of Stations and Observers． | Year 1853. | Mean Pressure of |  |  | Temperature of the Air． |  |  |  |  |  |  |  |  | Mean Tem－ perature of |  | Wind． |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  | $\frac{\stackrel{y y}{\circ}}{\frac{3}{4}}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| JERSEY， <br> Rev．S．Kine |  | $\begin{aligned} & 29732 \\ & 29.691 \\ & 29.675 \\ & 29 \end{aligned}$ | .275 | $\left\|\begin{array}{l} 0: 970 \\ 1: 872 \end{array}\right\|$ | $\begin{aligned} & 46.4 \\ & 37 \div 6 \end{aligned}$ | $\left\lvert\, \begin{aligned} & 44_{5}^{5} \cdot 1 \\ & 37^{\prime} \cdot 2 \end{aligned}\right.$ | $\left\|\begin{array}{l} 455^{\circ} \\ 37 \end{array}\right\|$ | $\begin{aligned} & 55.0 \\ & 49.0 \end{aligned}$ | $\begin{aligned} & 34: 0 \\ & 28.0 \end{aligned}$ | $\begin{aligned} & 2.0 \\ & 200 \\ & \text { a } \end{aligned}$ | $\begin{aligned} & 49 \cdot 4 \\ & 43 \cdot 0.0 \end{aligned}$ | $\begin{aligned} & 41: 2 \\ & 32: 1 \end{aligned}$ | $\left\|\begin{array}{c} 8 \cdot 2 \\ 10 \cdot 9 \\ 10.9 \end{array}\right\|$ | $\begin{aligned} & 43: 8 \\ & 36 \cdot 1 \end{aligned}$ | $\begin{aligned} & 414 \\ & 34 \div 1 \\ & 370 \end{aligned}$ | 2：5 |  |  | $\begin{aligned} & 7 \\ & 9 \end{aligned}$ | $\begin{aligned} & \frac{4}{4 \cdot 4} \\ & 2 \cdot 3 \end{aligned}$ | $\begin{aligned} & 2.2 \\ & 3 \end{aligned}$ |  |  | $\begin{aligned} & 10.8 \\ & 3: 8 \end{aligned}$ |  |
| ， |  |  |  |  |  | 40．9 |  |  |  |  |  | 34.8 42.6 4 | 9 | ${ }_{4}{ }_{4}{ }_{3}^{6}$ | 37．8 |  |  |  |  | ${ }^{1}{ }_{5}^{1} \cdot 4$ | ${ }_{3}^{9}$ |  |  |  | 549 |
| KINs，F．R．S．， |  |  | $\cdot 219$ |  | 36.8 40.0 |  |  |  |  |  |  | ${ }^{34 \cdot 1} 8$ | ${ }^{5}$ | ${ }_{38}^{36 \cdot 1}$ | ${ }^{335}{ }^{3}{ }^{\circ}$ | ${ }^{1} 1: 6$ |  |  | ${ }^{6} 120$ | － $\begin{aligned} & 3.0 \\ & 1.6 \\ & 1\end{aligned}$ | ${ }_{2}^{2} \cdot 6$ | － |  |  | － |
| － |  |  |  |  | ${ }_{35}^{45 \cdot 2}$ | － $45^{4.0}$ | ${ }^{45 \cdot 1}$ |  |  | 2.0 | 50．5 |  | 7 |  |  | 1：4 |  |  |  |  |  |  |  |  | 549 |
|  |  |  |  |  | 32．2 | ${ }^{37}{ }^{42} \cdot 6$ |  | 54.0 58.0 | 21．0 | ${ }^{33 .}$ | 先．5 4 | ${ }_{31}^{31.4}$ | ${ }_{3}{ }^{1}$ |  |  | ${ }_{1}^{1.3}$ |  |  | ${ }^{6} 618$ | ＋1：8 | － |  |  |  | ＝ |
|  | Jan． |  | 194 |  | $\frac{46}{36} \%$ |  |  | $555^{\circ}{ }^{5}$ 50 50 | － | ${ }^{28}{ }^{\circ}$ | 50 43.2 | $39 \cdot 7$ $30 \cdot 9$ | ${ }^{3} 5$ | 43.0 34.9 | 39：8 | （ |  |  | ${ }^{0} 234$ |  | 3：00 | $0 \cdot 6$ |  | ${ }_{3}{ }^{6}$ | ${ }_{5}^{541}$ |
|  |  |  |  |  | ${ }_{4}{ }_{4}{ }^{2} \cdot 1$ | － 48.4 |  |  | 25．0 |  | ${ }_{53}^{43} 1$ | 35：8 | 17\％${ }^{12}$ |  | 36：3 | － |  |  | 29 | － | ${ }_{2}{ }_{2}^{2} .7$ | 0．7 |  |  | 557 |
| TORQUAY， | $\left\{\begin{array}{l}\text { Jan．} \\ \text { Feb．}\end{array}\right.$ | ${ }^{29}{ }_{29}{ }^{\text {a }} 702$ | 62 |  | ${ }^{46}{ }^{46} \cdot{ }^{\circ}$ |  |  | 54.0 47.0 |  | $21^{\circ} 0$ | ${ }^{48}{ }^{48} \cdot 6$ | $40 \cdot 5$ 31.7 | ${ }_{8}^{8.1}$ | ${ }_{32}{ }^{42} \cdot 6$ | ${ }^{39}{ }_{27}{ }^{3}$ | $3^{\circ} 0$ |  |  | － $\begin{aligned} & 17 \\ & 14 \\ & 14\end{aligned}$ | －${ }_{\text {4 }}$ | －3：0 | 0.7 |  |  | ${ }_{5}^{542}$ |
| EDward Vivian，Esc． |  |  |  |  | 40.6 44.2 |  |  |  | 220．0 | 229．0 |  | 387 37 37 | －9 <br> 11 <br> 11 <br> 1 |  | 20．9 $30 \cdot 9$ 39.0 | $2 \cdot 0$ |  |  | － 14.15 | a 0.9 0.9 0.7 | 2． | \％ 8 |  |  | ${ }^{552} 5$ |
| $\underset{D}{E X I}$ |  | 29：990 | $\stackrel{184}{.185}$ | 10 | $44^{2}$ | $43 \cdot 3$ | 43 5 | $55^{\circ} 7$ |  | $27^{7} 7$ | ${ }^{49} 1{ }^{4 \cdot 1}$ | 39，${ }^{37}{ }^{\text {a }}$ | ${ }_{11}^{11} 6$ | ${ }_{35}^{41}{ }_{0}^{6}$ | $9^{\circ}$ |  |  |  |  | －${ }_{3}^{2 \cdot 7}$ | ${ }_{2}$ |  |  |  | ${ }^{541}$ |
|  |  |  |  |  | － |  |  |  |  |  | $49^{\circ} 0$ |  | 8 |  |  |  |  |  |  | 1 ${ }^{1} \cdot 7$ | ${ }^{\circ} 2$ |  |  |  | － $\begin{aligned} & 549 \\ & 539\end{aligned}$ |
| VENTNOR，ISLE OF WIG Dr．Martin． | Feb． |  | －202 <br> 24 |  |  | 45 36 $36 \cdot 7$ |  | ${ }^{55} 5$ |  |  |  |  |  |  |  |  |  |  | － 11 | （10．7 | $\begin{aligned} & 3.2 \\ & \hline 2.4 \\ & 2 \cdot 6 \\ & 20 \end{aligned}$ |  |  |  | ${ }^{539} 5$ |
|  | Jan． |  |  |  | 43．8 |  |  |  |  | ． |  |  |  | ${ }_{41} \cdot 6$ | 9 |  |  |  |  | $5{ }_{5}{ }^{5} 2$ | ${ }^{3} \cdot 0$ |  |  |  |  |
| sQ．，м．B．м．S |  |  |  | $\mathrm{l}^{1}$ | 39.4 | ${ }^{38.4}$ |  | ${ }^{46}{ }^{46}{ }^{2} 9$ | ${ }_{20}^{20.0}$ | 26．2 |  |  | － 4 | \％ 6 |  |  |  |  |  | 0．9 |  |  |  |  | 553 |
| RY |  |  |  |  | 5 ${ }^{3}$ | ${ }^{42}{ }_{34}^{42} \cdot 5$ |  |  |  | 30．8 | $49^{\circ} 2$ | $36 \cdot 3$ 27.9 |  |  |  |  |  |  |  |  | －9 |  |  |  | ${ }^{542}$ |
|  | Ja |  | $\stackrel{212}{275}$ |  | ${ }^{2}$ |  |  |  |  |  | $48^{40^{\circ}}{ }^{\circ}$ |  |  |  |  |  |  |  |  | 3＇9 | ${ }^{1}$ |  |  |  | 告 51 |
| F．G．BA， | Feb． |  | － 1 | 0．7 | 34.0 37.9 |  |  | 52． |  | － | 年39：3 |  | ${ }_{9}^{9}$ |  |  | （1．61 |  |  | （18） | \％ 0 1 0 | －${ }^{2}$ | 0．4 |  |  |  |
|  | Jan． |  | $\stackrel{275}{299}$ |  |  |  | 3：5 |  |  |  | － 0 | － 8.5 |  |  | － |  |  |  | \％ 818 | 5．5． | 3．2 | 0：3 |  |  | 541 |
| DREw， | $\begin{aligned} & \text { Feb. } \\ & \text { Mar. } \end{aligned}$ | （29.551 <br> 29.850 <br> 20.005 | － 2199 | 1．305 | ${ }_{3}^{34.4}$ |  |  | 48．0 | $\left\lvert\, \begin{aligned} & 24 \\ & 24 \\ & 0.0 \end{aligned}\right.$ | 26．0 | 42\％．4 |  |  |  | 34：3 |  |  |  | $5{ }^{5} 11$ | $\begin{aligned} & 0.2 \\ & 0.8 \end{aligned}$ | $\begin{aligned} & 2.4 \\ & 2.5 \\ & 2.5 \end{aligned}$ | $\begin{aligned} & 0.3 \\ & 0.4 \\ & 0.4 \end{aligned}$ |  |  | ${ }^{550}$ |
| MI | n． | ${ }^{29}{ }_{29} \cdot 6655$ |  | （\％970 | ${ }_{33}^{43} \cdot \frac{2}{8}$ | ${ }^{41}{ }^{42}$ |  |  |  | ${ }^{27^{\circ} \cdot 0}$ | ${ }_{38}^{47}$ | ${ }^{36 \cdot 2}$ |  |  | ${ }^{38 \cdot 5}$ | ${ }^{1+6}$ |  |  | 2 <br> 7 <br> 7 <br> 4 <br> 4 | 5.3 <br> 0.7 |  | $\stackrel{0}{0.3}$ |  |  | 544 |
|  |  | ${ }_{29}{ }^{\text {－467 }}$ | ${ }_{-241}^{211}$ |  |  |  |  |  |  | 26．5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| CLIFTON（B | Jan． | a 29 29.479 297 | － 277 |  |  |  | 4．4．5 38.4 $38 \cdot 0$ |  |  | ${ }_{27}^{26.7}$ | ${ }_{46}{ }^{\text {a }}$ ． 9 | ${ }^{28 \cdot 5}$ | － |  |  |  |  |  | －${ }^{0} 118$ |  |  | 0.6 |  |  | 541 551 549 |
|  | J | ${ }^{29} 29675$ | －249 | 1．074 | 32：4 | 42. | 38：4 |  |  |  |  | 1 | － |  |  |  | S．W． A $^{\text {N N }}$ N．E． |  |  |  |  |  |  |  | 549 |
| Secretary B．M．s． |  |  | ${ }_{-206}^{188}$ |  | ${ }_{38}{ }^{3.1}$ |  | 38.5 | ${ }^{46}$ |  | 45．8 |  | 29.5 30.9 30.5 |  |  |  | ${ }^{0 \cdot 6}$ |  |  |  |  |  |  |  |  | ${ }^{553}$ |
| ROYAL OBSERTATO | Jan， | 29．570 | ． 231 |  |  | ${ }^{42} \times 1.4$ |  |  |  | ${ }_{\text {a }}^{24 \cdot 7}$ | ${ }^{47}{ }^{47} \cdot 6$ | ${ }^{37 \cdot 5}$ | $10^{-1}$ |  |  | － |  |  |  |  |  |  |  |  | ${ }^{542}$ |
| MARY＇S HOSPITAL（PAD |  | ${ }^{29}{ }_{29}^{29} 780$ |  |  |  | $38^{\circ} 0$ |  | $60^{\circ} 5$ | ． | ${ }^{39} 7$ | ${ }_{4} 7^{\circ} 0$ |  | ${ }^{16.1}$ | 35．88 |  |  |  |  | 14 |  |  | ${ }^{0} 0 \cdot 6$ |  |  | 边 550 |
| DINGTON）， |  |  | $\begin{aligned} -247 \\ -240 \\ -296 \end{aligned}$ |  | $\begin{aligned} & 3.29 \\ & 34 \cdot 2 \\ & 38 \cdot 2 \end{aligned}$ | $\begin{aligned} & 3 \div \cdot 8 \\ & 38: 8 \end{aligned}$ | $\begin{aligned} & 434.5 \\ & 34.5 \\ & 38.5 \end{aligned}$ | $\overline{49} \cdot \overline{9}$ | $22^{3} \cdot 9$ <br> $25^{\circ}$ | 27.0 | ${ }_{47}^{39.9}$ |  |  |  |  |  |  |  |  |  |  | －${ }^{0}{ }^{-6}$ |  |  | 541 |


|  |  |
| :---: | :---: |
|  | Months．${ }^{\text {\％\％}}$ |
|  <br>  | $\begin{array}{\|l\|l} \hline \text { Air and Water, } \\ \text { or MNan Read } \\ \text { ing of the Ba- } \\ \text { In } \\ \text { rometer. } \end{array}$ |
|  | Water or Elas－ Vapour． |
|  | $\begin{aligned} & \text { Range of Barometer } \\ & \text { Readings in the } \\ & \text { Month. } \end{aligned}$ |
|  <br>  | From Dry mometer． |
|  <br>  | $\begin{array}{\|l\|l} \hline \begin{array}{l} \text { From Self- Segistring } \\ \text { resterm. } \\ \text { reis } \\ \hline \end{array} \\ \hline \end{array}$ |
|  <br>  | Adopted． |
|  <br>  | Highest． |
| N，\＄ొ <br>  | Lowest． |
|  <br>  | Range in the Month． |
|  <br> H． | Mean of all the Highest． |
|  <br>  | Mean of all the Lowest． |
|  | $\begin{aligned} & \text { Mean Daily } \\ & \text { Range. } \end{aligned}$ |
| 母 <br>  | Evaporation． |
|  <br> ¢\％ | Dew Point． |
|  | Estimated Strength． |
|  | Direction． |
|  | $\begin{aligned} & \text { Mean Amount of } \\ & \text { Cloud. } \end{aligned}$ |
|  | Number of Days it fell． |
| H－\％ |  |
| Nonder | $\begin{aligned} & \text { Mean Weight of } \\ & \text { Yapour in at cubic } \\ & \text { foot of Air. } \end{aligned}$ |
|  | Mean additional <br> Weight required to <br> saturate ai cubic <br> foot of Air． |
|  | Mean Degree of |
|  | Mean whole Amount of water in a vertical column of Atmosphere column of A tmosphere |
|  | Mean Weight of a cubic foot of Air． |


| $\begin{array}{\|l\|l\|} \text { Year } \\ 1853, \end{array}$ | Mean Pressure of |  |  | Temperature of the Air. |  |  |  |  |  |  |  | Mean Temperature of |  | Wind. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 空 品 |  |  |  |  |  |  | + |  |  |  |  |  | $\begin{aligned} & \dot{H} \\ & \dot{H} \\ & \text { à } \\ & \stackrel{\rightharpoonup}{\circ} \\ & A \end{aligned}$ |  |  |

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Messrs. E. J. and A. S. H. Lowe M.B.M.S.

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David Tennant, Esq., M.B.M.S.
, Esq., M.B.M.S. $\left\{\begin{array}{l|l|l|}\hline \mathrm{Feb} & 29^{\circ} \\ \text { Mar. } & 29^{\circ} \cdot 6\end{array}\right.$
Alderley Edge.-The observations in January were taken on 22 days only. The reading of the barometer on 12th March, at 7 h . 30 m . A.m., has been altered, conjecturally, from $29^{\circ} 690$ to $29^{\circ} 490$. Bowdon.March. Several readings of all the elements evidently erroneous. Leeds.-January. The barometer reading on the 23d, at 3 P. M. altered from $30^{\circ} 532$ to $30^{\circ} 132$, and the reading of the wet-bulb ther-
mometer on the 24 th, at 3 h . P.M., altered from $57^{\circ}$ to $37^{\circ}$. February ; the barometer reading on the 21 st, at 3 h . P.M., altered from $30^{\circ} 512$ to $30^{\circ} 012$. March; several readings of all the elements evidently
 given as $0^{\circ} \cdot 3$ higher than the dry-bulb. The mean temperature of January was $3^{\circ} \cdot 6$ above; February, $6^{\circ} \cdot 8$ below ; and March, $40^{\circ} 9$ below the average of 20 years.
Note. - Second rain gauges are placed: At Jersey at the height of 6 feet; the amount collected was $7 \cdot 6$ inches. At Newport, 3 feet; the amount was 6.9 inches. At Clifton, 50 feet; the amount


## THE MARRIAGES, BIRTHS, AND DEATHS

IN ENGLAND.

This Return comprises the Births and Deaths registered by 2190 Registrars in all the districts of England during the spring quarter ending June 30th, 1853 ; and the Marriages in 12025 churches or chapels, about 3396 registered places of worship unconnected with the Established Church, and $6_{25}$ Superintendent Registrars' offices, in the quarter that ended March 3 1st, 1853.

The Return of Marriages is not complete; but the defects are inconsiderable, and approximative numbers have been supplied from the records of previous years.

The increase of marriages proceeded at an accelerated rate through the first three months of the year ; in April, May, and June the births of children exceeded the average numbers of preceding spring quarters, but fell a few hundreds short of the births in the spring quarters of the two previous years.

The spring in town and country was unhealthy ; and the mortality, chiefly owing to the cold weather and the scarcity of potatoes, was considerably above the average.
Marriages, Births, and Deaths, returned in the Years 1841-53 and in the Quarters of those Years.


[^2]35014 marriages were celebrated in the first quarter of the year, or 2081 more than were celebrated in the corresponding quarter of 1852 . The unexampled increase of marriages is shown in the annexed Table, where it will be observed that in the winter quarters 48894 persons married in 1841,54960 in 1847,70028 in 1853. The increase in the marriages is most conspicuous in London, in the seaports, and in the manufacturing towns; in Northamptonshirè, Devonshire, Cornwall, Gloucestershire, Shropshire, Staffordshire, Worcestershire, Leicestershire, NottingGamshire, Cheshire, Lancashire, the West Riding of Yorkshire, Westmorland, and Monmouthshire ; in Portsmouth, Plymouth, Southampton, Bristol; in Northampton Bath, Stroud, Wolverhampton, Dudley, Birmingham, Nottingham, Chester, ManBath, Stroud, Wolverhampton, Dudey, In all the most prosperous districts of chester, Leeds, Sheffiel, Merthyr Iydil. In Dover, in Brighton, in St. George the country the marriages increased. declined.

## BIETHS.

The births fluctuate less than either the marriages or the deaths, and in the three quarters ending June $1851-52-53$ the numbers were 159138 , 159136 , and 158118 , or nearly the same in amount, but considerably above the average of preceding years. The births, on an average of 10 spring quarters, were at the rate of 3.428 per cent. ; in the last quarter ending June 30 th the rate was 3.507 on the population.

INCREASE OF POPULATION.
As the births of 158,718 children and the deaths of 107,861 persons of all ages were registered in the quarter, a balance of 50857 remains in favour of the popu-
England $: \dagger$-Annual Rate per Cent. of Marriage, Birth, and Death, during the Years 1843-53, and the Quarters of those Years.


[^3]lation. The excess of births over deaths is less by 8 or 12 thousands than the excess in the corresponding quarters of the three previous years; chiefly owing to the high rate of mortality in 1853 . I 15,959 emigrants sailed from the ports of the United Kingdom at which there are Government Emigration Agents; 78205 to the United States, 20107 to British North America, 17152 to the Australian Colonies, and 495 to other places. 7884 of the emigrants sailed from Glasgow and Greenock, 16993 from Irish ports, 74646 , including many Irish, from Liverpool, 2095 from Plymouth, 3722 from Southampton, and 10619 from London.* The emigration from the United Kingdom has been at the rate of 8920 a week, equal to the number of inhabitants in a majority of the 368 municipal boroughs of Great Britain. In Scotland and Ireland the births and deaths of the population are left unregistered, so that it is impossible to determine the rate of natural increase in the United Kingdom ; but at the rate prevailing in England, which it exceed, the excess of births over deaths would be 79820 , or less by 36139 than the II5959 emigrants.

The price of provisions during the quarter was considerably higher than the uling prices in the corresponding months of the year 852 . wheat was than the average at $44 \mathrm{~s} .6 d_{\text {., }}$ a quarter ; beef, by the carcase, in London at $4 \frac{7}{8} d$. per pound;
The average Prices of Consols, of Wheat, Meat, and Potatoes; also the average Quantity of Wheat sold and imported weekly, in each of the Eight Quarters ending June 30 th, 1853 .

| Quarters ending | Average <br> Price of Consols (for Money). | Average Price of Wheat per Quarter in <br> England and Wales. | + Wheat sold in the 290 Cities and Towns in England and Wales making Returns. | $\dagger$ Wheat and Wheat Flour entered for Home Consumption at Chief Ports of Great Britain. | Average Prices of |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Meat per lb. at Leadenhall and Newgate Markets (by the Carcase). |  | $\|$Potatoes <br> (York <br> Regents) <br> per Ton at <br> Waterside <br> Market, <br> Southwark. |
|  |  |  | $\triangle$ verage Number of Quarters weekly. |  | Beef. | Mutton. |  |
| $\begin{aligned} & 1851 \\ & \text { Sept. } 30 \end{aligned}$ | $e_{96 \frac{1}{2}}$ | 40s. 7 d. | 74,714 | 91,040 | $\begin{aligned} & 3 d .-5 d \text {. } \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{3}{4} d . \\ & \text { Mean } 4 \frac{3}{4} d . \end{aligned}$ |  |
| $\begin{gathered} \text { Dec. } 31 \\ 1852 \end{gathered}$ | $97 \frac{7}{8}$ | 36s. 7 d. | 109,506 | 47,986 | $\begin{aligned} & 3 d .-5 d . \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{3}{3} d . \\ & \text { Mean } 4 \frac{3}{4} d . \end{aligned}$ | $\begin{aligned} & 65 s .-75 s . \\ & \text { Mean } 70 \mathrm{~s} . \end{aligned}$ |
| Mar. 31 | $97 \frac{1}{4}$ | 40s. 10 c . | 95,532 | 27,540 | $\begin{aligned} & \frac{1}{4} d .-5 d . \\ & \text { Mean } 4 \frac{1}{8} d . \end{aligned}$ | $\begin{aligned} & 3_{4}^{3} d .-5_{3}^{3} d . \\ & \text { Mean } 4 \frac{3}{4} d . \end{aligned}$ | $\begin{aligned} & \text { 6os.-_8os. } \\ & \text { Mean } 70 s . \end{aligned}$ |
| June 30 | 99 $\frac{6}{8}$ | 40s. 10d. | 87,949 | 54,67 | $\begin{aligned} & 3 \frac{1}{4} d .-4 \frac{3}{4} d . \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{1}{2} d . \\ & \text { Mean } 4 \frac{1}{2} d . \end{aligned}$ | $\begin{aligned} & 85 s .-110 s . \\ & \text { Mean } 97 s .6 d . \end{aligned}$ |
| Sept. 30 | 100 | 41s. $2 d$. | 78,712 | 67,912 | $\begin{aligned} & 3 \frac{1}{4} d .-5 d . \\ & \text { Mean } 4 \frac{1}{8} d . \end{aligned}$ | $\begin{aligned} & 4^{d .-6 d .}-6 . \\ & \text { Mean } 5^{d} . \end{aligned}$ | $80 s .-100 s$. Mean gos. |
| Dec. 31 1853 | $100 \frac{5}{8}$ | 40s. 5 d. | 111,224 | 72,870 | $\begin{aligned} & 3 d .-5 d . \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 4 \frac{1}{4} d .-6 \frac{1}{2} d . \\ & \text { Mean } 5 \frac{1}{4} d . \end{aligned}$ | $\begin{aligned} & \text { 90s.- } 120 \mathrm{~s} . \\ & \text { Mean 105s. } \end{aligned}$ |
| Mar. 31 | $99 \frac{5}{8}$ | 45s. 7 d. | 95,115 | 63,530 | $\begin{aligned} & 3 \frac{3}{2} d .-5 \frac{1}{4} d . \\ & \text { Mean } 4 \frac{1}{2} d . \end{aligned}$ | $\begin{aligned} & 4 \frac{3}{3} d .-6 \frac{3}{3} d . \\ & \text { Mean } 5 \frac{3}{4} d . \end{aligned}$ | $\begin{aligned} & 110 s .-145 s . \\ & \text { Mean } 127 s .6 d . \end{aligned}$ |
| June 30 | $100 \frac{4}{8}$ | 44s. 6 d. | 84,559 | 82,623 | $4 d .-5 \frac{3}{4} d \text {. }$ | $5 d .-6 \frac{3}{4} d$. | 10. 145 . |
|  |  |  |  |  |  | Mèan $5 \frac{7}{8} d$. | Mean 127s.6d. |

$\dagger$ Note. -The total number of quarters of wheat sold in England and Wales for the 13 weeks ending Sept. 30 th, 1851 , was 971,276 ; for the 13 weeks ending Dec. 3 rst, $1,423,582$; for the 13 weeks ending March 31 1st, $1852,1,241,921$; for the 13 weeks ending June 30 oth, $1,143,339$; for the 13 weeks ending Sept. 30 oth, $1,023,251$; for the 13 weeks ending Dec. 31 Ist, $1,445,906$; for the 13 weeks ending March $3 \mathbf{1 s t}$, $1853,1,236,493$; for the 13 weeks ending June 30 th, 1853 , $1,099,26 \mathbf{r}$. 358,024 ; 710,780 of quate 10 , $1,183,523 ; 671,803$ 358,$024 ; 710,780 ; 882,850 ; 947,310 ; 825,886$; and $1,074,095$; the second total, however,
embraces the returns of 14 weeks.

* Return with which the Registrar General has been favoured by the Emigration Commissioners,
mutton $5 \frac{7}{8} d$. per pound ; potatoes (York regents) at $127 s .6 d$. per ton. The price of wheat was 10 per cent., beef 22 per cent., mutton 31 per cent., potatoes 3 I per cent. higher in April, May, June 1853 than in the corresponding months of 1852 . It is evident that the price of wheat bears no longer any constant relation to the price of the other chief articles of food consumed by the rich or the poor ; and it must be considered a fortunate circumstance that the price of bread is not now likely to fluctuate so largely as the prices of the more perishable articles with which the markets of England are supplied from a comparatively limited area.


## state of the public health.

107,86I deaths were registered in the 3 months of April, May, and June. This number is the highest that has ever been registered before in the corresponding season, and exceeds by 7048 the deaths in the spring quarter of 1852 . The rate of mortality in England is highest in the winter ( 2.467 per cent.), lowest in the summer quarter ( $2 \cdot 129$ per cent.), while the mortality of the spring quarter $(2.223)$ holds an intermediate rank, near the average of the year. This average is exceeded by the present return, which shows a mortality at the rate of 2.383 is exceeded by the corresponding quarter of every per cent. per annum ; higher than the rear in $1843-52$, except the spring quarter of when the population was infested by scurvy and its attendant diseases after the great failure of the potato crop by scurvy and its attendant diseases after the great fate autumn influenza broke in 1846. The rate of mortality was then 2.506 ; in the
out, and cholera followed on its footsteps in 1848 and 1849 .
The mortality of the quarter was above the average both in the town and in the The mortality of the quarter was above the average both in the districts, comcountry districts; the annual rate of mortality was $2 \cdot 606$ in 1 I 7 districts, com-
prising the chief towns, and 2.196 per cent. in 508 districts, extending over the prising the chief tow
rest of the kingdom.
The population of England is, there is reason to believe, collectively healthier The population of England is, there is reason to believe, collectively healthier
than any equal amount of population in any other kingdom; but the rapid increase than any equal amount of population in any other kingdom; but the rapid increase in the proportion of the town population,-in which the mortality is 27 per cent. higher than it is in the country, and the sickness, the suffering, the debility, the physical degeneracy of race are in an equal excess,-makes this question of the health of towns and the fertilization of the surrounding fields one of the great questions of the day demanding immediate solution. It is difficult for the imagination to conceive all the beneficent effects that would flow from the possible diminution of

Deaths in the Spring Quarters.

| $\left.\begin{array}{l}\text { In } 117 \text { Districts, comprising } \\ \text { the chief towns }\end{array}\right\}$ In 508 Districts, comprising chiefly small towns andcountry parishes - - | 1843 | 1844 | 1845 | 1846 | 1847 | 1848 | 1849 | 1850 | 1851 | 1852 | $\left\|\begin{array}{c} \text { Total } \\ \mid 1843-52 \end{array}\right\|$ | 1853 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 40343 | 38977 | 40847 | 43737 | 51585 | 46552 | 48070 | 42886 | 47774 | 48357 | 449128 | 51734 |
|  | 46891 | 46360 | 48302 | 46494 | 55133 | 53178 | 54083 | 49989 | 51865 | 52456 | 504751 | 56127 |
| Total - | 87234 | 85337 | 89149 | $\overline{90231}$ | 166718 | 99730 | 102153 | 92875 | 99639 | 100813 | $\overline{953879}$ | 107861 |

Population ; Deaths; and Montality per Cent. in the Spring Quarters, 1843-53.

| In 117 Districts, comprising the In 508 Districts, comprising chiefly small towns and country parishes <br> All England - | Population enumerated |  |  | $\begin{aligned} & \text { Annual } \\ & \text { Rate of } \\ & \text { Mortality } \\ & \text { of lo } \\ & \text { Spring } \\ & \text { Quarters, } \\ & 1843-52 . \end{aligned}$ |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | June 6-7th, 1841. | March 31st, 1851. |  |  |  |
|  | 6,612,958 | 7,795,882 | 449,128 | $2 \cdot 471$ | 2.606 |
|  | 9,301,190 | 10,126,886 | 504,751 | $2 \cdot 067$ | 2-196 |
|  | 15,914,148 | 17,922,768 | 953,879 | $2 \cdot 223$ | 2.383 |

the mortality which the subjoined figures express in town and in country throughout the changing seasons of the year.

January, February, March
April, May, June
July, August, September
October, November, December
The Year

| Average annual number of * |  |  |
| :---: | :---: | :---: |
| Deaths to every 10000 persons living in Towns. | Deaths to every 10000 persons living in the Country. | Lives destroyed by the matters which are poisons in houses, streets, and streams, but are fertilizing manures in fields. |
| 69 | 56 | 13 |
| 62 | 52 | 10 |
| 63 | 46 | 17 |
| 64 | 49 | 15 |
| ${ }_{2} 58$ | 203 | 55 |

* This Table is derived from the returns of the 10 years $1843-52$.

In London the mortality has considerably exceeded the average, and it is chiefly due to diseases of the respiratory organs, typhus, hooping-cough, diarrhea, and violence of various kinds. 12 deaths were referred to privation, 26 to poison, 88 to burns and scalds, 86 to hanging and suffocation, 8 I to drowning, 26 to poison, 88 to injuries of various kinds, 33 to wounds; and in nearly all these cases the numbers exceed those returned in previous years. The violent deaths, including a few from intemperance, want of breast-milk, and privation, in London, increas from in 1840 to 2140 in 1852 ; and in the last quarter the excess in deaths from riol alone over the deaths of 1852 was 13I The incese omnibuses, and new mechanical forces of every kind, as well as the the streets, may partly account for this loss of life, as well injuries and mutilations not fatal-in the battle of every day as for the numerous The mortality in the South Eastern Counties every day.
the greatest excess has occurred in Godstone, Croydon, Bromley the average, and the greatest excess has occurred in Godstone, Croydon, Bromley, Dover, Eastbourne, Lewes, the Isle of Wight, Alverstoke. Woking has been unusually healthy. In the South Midland Counties Wisbeach ene, and other districts.
of mortality; the deaths in three Wisbeach continues to experience a high rate of mortality; the deaths in three months, out of a population of 36215 , were 274. In Cambridge, on the other hand, the deaths out of a population of 27815 were only Iro. Hooping-cough and bronchitis prevailed at Wisbeach; while in Cambridge the Registrar reports, that "great improvements have been made by " the local authorities in the sanatory arrangements ; they have been assisted very materially by the reports and suggestions of the medical profession."
Romford, Tendring, Colchester, Witham, and Saffron Walden in Essex; Sudbury, Thingoe, and Stow in Surfork, experienced a high rate of mortality. Typhus, has been fatal to many persons in High Easter, Dunmow ; in Downham, Norfors ague and fever have prevailed ; in Norwich the mortality has not exceeded, and in the whole county has been below the average.
In the South Western Counties the general mortality has slightly exceeded the average. The typhus in Longbridge Deverill broke out a second time ; and the deaths in the sub-district equal the births. In one house the man a and 6 children were all attacked, and one child, nine years of ace, Exmouth fever has prevailed. In Whipton, Heavitree, At children are suffering, and 2 have died; "still the people refuse ow ; several Barnstaple typhus and small-pox have prevailed; the deaths have expox. In births. The emigration from Redruth has been extensive, have exceeded the consequently decreased ; in another district of Cornwall, have ays: "The births and deaths are much below the averale Lerrin, the Registrar " leaving this district deaths are much below the average. Numbers are yearly "which is the only explanation I can give of the dy, or for America and Australia,

Measles has been very fatal in Truro. In Frome the deaths from pulmonary diseases are much above the average; the same diseases have prevailed in Bath.
In the West Midland Counties the mortality is somewhat above the average; small-pox prevails in Gloucestershire ; Bristol, Gloucester, and Stroud have neglected vaccination ; carbuncles, boils, and purulent eruptions have been very prevalent in Stow-on-the-Wold as well as in London. This extensive epidemic has not yet obtained all the attention which it deserves from the medical profession.; A bad form of scarlatina has prevailed in Staffordshire, "the cause of which," the Registrar of Bilston conceives, " is insufficient drainage, cesspools stagnating, " and filth of the most offensive character accumulated in the yards and folds " of the poor, who have been the victims of the fever." The excess of births in West Bromwich and Westbury-on-Severn is ascribed to the increase of population caused by employment on railways. The prosperous state of trade and the improved circumstances of the people are also mentioned in connexion with a low rate of mortality.

The deaths in Lincolnshire have been below, in Notitinghamshire and DerbyshIRe above the average. The Registrar of Leake in Leicestershire says :- "Several " deaths have occurred during the quarter from scarlatina and from small-pox. " The latter disease has been very prevalent in a village belonging to my district. " The ignorance and wilful stupidity which exist amongst a certain class of people " are astonishing; neither threats nor entreaties can induce them to have their " children vaccinated. A young woman, near her confinement, and the mother of " two other children, who refused to be vaccinated herself or have her children " vaccinated, was seized with small-pox. On June 12th I attended her; the " disease was confluent; she became a most loathsome object, and in this state "gave birth to a girl on the 15 th, and died on the 18th. The infant took the " disease, and has since died. I have vaccinated a large number of children and " a few adults, but the same prejudice still exists with others, and this frightful " disease is yet progressing. I am firmly convinced that if every child was properly "vaccinated under the age of 12 months there would be no cases of small-pox, or " it would be so modified as to require little notice. I am of opinion that the " disease would in the end be extirpated."

Cheshire and Lancashire have not been more than usually unhealthy. 2759 deaths were registered out of a population of 411,515 in Liverpool and West Derby; 2365 in Manchester and Salford out of 315,956 . The mortality in these districts was below the average to which they are subject. This district, says the Registrar of Hulme, Chorlton, " never was in a more healthy state. No kind of epidemic prevails. "The operative classes are all well employed, and although "the prices of various kinds of provisions are on the advance, there appears a " general disposition to increase wages in proportion."

In Yorksmire 11442 deaths were registered. The mortality exceeded the average, and most notably in Skipton, Keighley, Huddersfield, Halifax, Bradford, Sheffield, Rotherham, Doncaster, Thorne, and Driffield. In Leeds and Hull the mortality declined. One death from cholera was registered in the workhouse, Horton, Bradford. Influenza prevailed in Leyburn ; scarlatina in Reeth.

In the Northern Counties 5621 deaths were registered. Ague, typhus, and hooping-cough have prevailed in many of the Durham colliery districts; 23 persons died of measles in Yarm, Stockton.

The deaths in the Welce Division ( 7288 ) exceed the average; hooping-cough prevailed in Newport, Swansea, and Haverfordwest ; small-pox and bronchitis in Cardiff and Carmarthen. The excess of births and deaths in Rheidol, Aberystwith, is referred to the great increase of the mining population. Small-pox, scarlatina, and typhus still prevail in the Wrexham District. "The Board of Guardians are "causing proceedings to be taken against the owners and occupiers of houses, as " directed by the Nuisances Removal and Diseases Prevention Act, and in all cases " where they have summoned have succeeded in getting convictions."

MARRIAGES Registered in the Quarters ending March 31st, 1849-53; BIRTHS and DEATHS Registered in the Quarters ending June 30th, 1849-53, in the Divisions, Counties, and Districts of England.

| DIVISIONS. | POPULATION.* |  | MARRLAGES. |  |  |  |  | BIRTHS. |  |  |  |  | DEATHS. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Registered in the Quarter ending the last Day of |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  | March. |  |  |  |  | June. |  |  |  |  | June. |  |  |  |  |
|  | 1841 | 1851 | 1849 | 1850 | 1851 | 1852 | 1853 | 1849 | 1850 | 1851 | 1852 | 1853 | 1849 | 1850 | 1851 | 1852 | 1853 |
| ENGLAND . . . . . | 15914148 | 17927609 | 28429 | 3056 | 32619 | 32933 | - | 153693 | 155865 | 159138 | 159136 | 158718 | 102153 | 92871 | 99639 | 100813 | 107861 |
| 1 London . | 1948417 | 2362236 | 4377 | 4794 | 5220 | 5576 | 5862 | 18138 | 1828 r | 19199 | 19822 | 20628 | 13009 | 11233 | 13160 | 12998 |  |
| 2 South Eastern . . | 14.79863 | 1628386 | 2032 | 2153 | 2198 | 2310 | 2461 | 12396 | 12564 | 12663 | 12902 | 12639 | 8388 | 7730 | 7597 | 77.96 | 14594 8632 |
| 3 South Midland . | 1141494 | 1234332 | 1610 | 1589 | 1586 | 1615 | 1692 | 10642 | 10701 | 10716 | 10584 | 10169 | 6521 | 6130 | 6189 | 6168 | 6795 |
| 4 Eastern . . . . | 1040616 | 1113982 | 1533 | 1476 | 1488 | 1497 | 1457 | 9460 | 9569 | 9760 | 9583 | 9337 | 5778 | 5829 | 5994 | 5923 | 6279 |
| 5 South Western | 1740032 | 1803291 | 2806 | 2882 | 3064 | 3091 | 3338 | 14442 | 14606 | 14758 | 14855 | 14550 | 9472 | 9061 | 9352 | 9611 | 10024 |
| 6 West Midland . . . | 1906753 | 2137536 | 3332 | 3479 | 3928 | 3872 | 4294 | 18620 | 18809 | 19187 | 19597 | 19422 | 12091 | 11115 | 12662 | $1{ }^{1} 557$ | 12681 |
| 7 North Midland. . . | 1110203 | 1214538 | 1789 | 1765 | 1904 | 1984 | 2102 | 10361 | 10688 | 10753 | 10417 | 10499 | 6544 | 6021 | 6521 | 6494 | 6913 |
| 8 North Western . - | 2064526 | 2488438 | 4556 | 5278 | $5^{6} 73$ | 5735 | 6171 | 24181 | 2505.7 | 25264 | 25009 | 25195 | 16733 | 14651 | 15812 | 17565 | 17592 |
| 9 York . . . . . - | 1584116 | 1789047 | 3128 | 3654 | 3895 | 3664 | 3982 | 16,203 | 16641 | 17299 | 17264 | 174.65 | 10368 | 9695 | 10751 | 10546 | 11442 |
| 10 Northern if Welsh | 826710 | 969126 | 1553 | 1568 | 1733 | 1780 | 1685 | 9033 | 8767 | 9470 | 8873 | 8986 | 5405 | 4944 | 4985 | 5301 | 5621 |
| II Welsh | 1066402 | 1186697 | 1713 | 1929 | 1930 | 1804 | 1970 | 10217 | 10182 | 10069 | 10230 | ${ }_{10132}$ | 7844 | 6462 | 6616 | 6854 | 7288 |
| $\left.\begin{array}{l} \text { Persons travelling by } \\ \text { Railways and Canals } \end{array}\right\}$ | 5016 |  |  |  | .. |  |  |  |  | , |  |  | 78.4 |  |  | 684 | 7288 |
| 1. London. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Middlesex (part of) <br> Surrey (part of) | 1444999 | ${ }^{1} 745601$ | 3296 |  |  | 4283 | 4366 | 13242 | 13480 | 14105 | 14513 | 15082 | 9407 | 8194 | 9599 | 9583 | 10566 |
| Surrey (part of) <br> Kent (part of) | 399247 | 482435 | 902 | 1021 | 1058 | 1066 | 1224 | 3861 | 3832 | 4098 | 4266 | 4420 | 2860 | 2400 | 2826 | 2776 | 3164 |
| Kent (part of) . | 171 | 134200 | 179 | 195 | 200 | 227 | 272 | 1035 | 969 | 996 | 1043 | 1126 | 742 | 639 | 735 | 639 | 864 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^4]

A TABLE OF THE DEATHS IN LONDON FROM ALL CAUSES,
Registered in the June Quarters of the 5 Years 1849 to 1853 .

| causes or deati. | Quarters ending June |  |  |  |  | Causes of death. | Quarters ending June |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1819 | 1850 | 1851 | 1852 | 1853 |  | 1849 | 1850 | 1851 | 1852 | 1853 |
| cified Ca | 13008 | 111238 | ${ }_{12956}^{1393}$ | 13096 | 14867 | Ceph | 515 | ${ }_{307}^{137}$ | ${ }_{154}^{154}$ | ${ }_{295}^{127}$ | ${ }_{352}^{152}$ |
|  |  |  |  |  |  |  | 278 | ${ }_{262}$ | 267 | ${ }_{233}^{233}$ | - |
| motic Diseases - | 3203 | 2032 | 2862 | 2828 | 297 | Deilirem Treme | ${ }^{33}$ | 4 | ${ }_{6}^{32}$ | ${ }_{3}^{39}$ | ${ }^{42}$ |
| dic Disease |  |  |  |  |  | ${ }_{\text {cher }}^{\text {chorea- }}$ - | $\overline{7}_{7}^{7}$ | $\begin{gathered} 4 \\ 64 \\ 64 \end{gathered}$ | $9{ }_{9} 9$ | ${ }_{95}^{9}$ | 118 |
| Dropsy, Cancer, and other |  |  |  |  |  | Insanity | 21 |  | 20 | ${ }^{36}$ | ${ }_{32}{ }^{2}$ |
| Diseases of uncertain or $\begin{aligned} & \text { variable Seat - }\end{aligned}$ | ${ }^{553}$ | 526 | 547 | 603 | 665 | Convulsions |  | ${ }^{417} 1$ | 511 142 | ${ }^{466}$ | ${ }^{542}$ |
| Thuerculuar Diseases- | 2399 | 2118 | 2584 | 2545 | 802 | Pericarditis |  |  |  |  |  |
| Diseases of the Brain, Spi <br> nal Marrow, Nerves and | 1571 | 1479 | 1545 | 1461 | 1682 |  | - | $\begin{gathered} 24 \\ 422 \\ 422 \end{gathered}$ | $\begin{gathered} 32 \\ 14 \\ 1 \end{gathered}$ | ${ }^{37}$ | 27 30 80 |
|  | 487 | 472 | 508 | 520 | 612 | Disease of Heart, |  |  |  |  |  |
| Biseases of the Lingss and D | 487 | 472 | 508 | ${ }^{2} 20$ | 12 | ${ }_{\text {Laryngitis }}^{\text {Bronelitis }}$ - | ${ }_{745}^{44}$ | ${ }_{690}^{696}$ | ${ }_{861}^{82}$ | ${ }_{64}^{64}$ | 70 380 45 |
| of the other Organs of Respiration | 1922 | 1726 | 2117 | 2088 | 2709 | ${ }^{\text {Plourisy }}$ Pneumonia | - 48 | $\xrightarrow{35}$ | ${ }_{909}^{35}$ | ${ }_{783}^{49}$ | ${ }_{9}^{45}$ |
| VII. Disessese of the St | 783 | 710 | 797 | 763 | 885 | Asthma ${ }^{\text {Disease of }}$ Lur | 118 | ${ }_{96}^{127}$ |  | 119 | 183 <br> 100 |
| Dis Diseasestion of the Kidne |  | 10 |  |  | 158 | Teething |  |  |  |  |  |
| . | 136 | 130 | 156 | 171 | 158 | Quinsey |  |  | 11 |  | ${ }_{19}^{10}$ |
| Child irth, Dise. | 101 | 122 | 105 | 132 | 39 | Gastrits |  | ${ }_{87} 87$ | ${ }_{73}$ | 84 |  |
| cheumatism, Dis | 92 | 102 | 101 | 105 | 118 | Peritonitis - |  | 55 21 | ${ }_{32}^{51}$ | 年 26 | ${ }_{43}^{47}$ |
| disease of the | 20 |  | 23 | 30 | 30 | Uicerr |  |  |  |  |  |
| - | 35 | 43 | 31 | 1 | 44 | Hernia- |  | ${ }_{36}$ | 42 | ${ }_{30}^{27}$ | 4 |
| (1)Premature <br> biity | 298 | 288 | 360 | 381 | 356 | Intussusception |  |  | 10 | 15 | 10 |
| IV. Atrophy ${ }^{\text {a }}$ |  | 239 | 318 | ${ }^{305}$ | 479 | Stricture (of the Inte | 11 | 9 | 10 | 16 | 10 |
|  | ${ }_{172}^{465}$ | ${ }_{180}^{484}$ | ${ }^{510} 105$ | ${ }_{107}^{573}$ | 128 | Diseasc of Stomach, 8 | ${ }_{1}^{66}$ | 55 | $\stackrel{63}{1}$ | 72 | 1 |
| XVII. $\begin{gathered}\text { Violence, Privation, Cold, } \\ \text { and } \\ \text { Intemperance - }\end{gathered}$ | 427 | 454 | 457 | 443 | 589 | Hapatitis ${ }^{\text {J }}$ |  |  |  |  |  |
|  |  |  |  |  |  | Jauunce Disease of Liver Disease of Spleen |  |  |  | 130 6 | 461 4 |
| Smanl Pox | ${ }_{368}^{113}$ | ${ }_{\text {cos }}^{103}$ | ${ }_{4}^{209}$ | ${ }_{179} 7$ |  | Disase V VIII |  |  |  |  |  |
| $\mathrm{Me}^{\text {Measles }}$ Seat | ${ }^{397}$ | 234 |  | ${ }_{563}$ | ${ }_{480}^{428}$ |  |  |  | 32 | 47 | 26 |
| ${ }_{\text {Hooping }}$ Cough ${ }^{\text {Croup }}$ : $:$ | ${ }_{7}^{739}$ |  | ${ }_{7}^{734}$ | ${ }_{96}^{468}$ | 857 79 | see Disease of Kidne |  |  | 3 |  | ${ }_{3}$ |
| ${ }_{\text {Then }}^{\text {Thrush }}$ - | - $\begin{array}{r}35 \\ 240\end{array}$ | 23 200 | ${ }_{191}^{22}$ | ${ }_{168}^{23} 1$ | ${ }_{2}^{27}$ | Diabetes |  |  | 10 | 1 | 12 |
| Diarrhea | ${ }_{41} 4$ | 205 | 194 | ${ }_{35}$ | ${ }_{42}$ | ${ }_{\text {Cystitis }}{ }^{\text {Stane }}$ |  |  |  |  |  |
| Cholera- : : : | ${ }_{16}^{268}$ | ${ }_{36}^{9}$ | 108 | ${ }_{3}^{8}$ | 29 | Stricture of the Ureth |  | $6$ | ${ }_{77}$ | 20 70 | ${ }_{73}^{19}$ |
| Purpura and Scurvy: | $1{ }^{14}$ | 13 | 11 | ${ }_{5}^{21}$ | ${ }_{9}^{13}$ | Paramenis_ IX, |  |  |  |  |  |
|  | 22 |  |  |  |  | ${ }_{\text {Praramen }}^{\text {Prana }}$ Dropsy |  |  |  |  |  |
| ${ }_{\text {Infantile }}^{\text {Intever }}$ - | 512 | ${ }_{426}^{10}$ | 41181481 | 10 483 | 11 678 | Childbirth, se |  |  |  |  | ${ }_{36}^{49}$ |
| Metrias or Puerperal | 57 | 51 | 30 | 54 | 31 |  |  |  |  |  |  |
| Rhteumatic Fever, seeRheum |  |  |  | ${ }_{20}^{20}$ |  | Arthrumisis, |  |  |  |  | ${ }_{58}^{4}$ |
| ${ }_{\text {Erysipelas - : }}$ S |  |  |  |  |  | Disease of Joi |  |  |  |  |  |
| Noma orCanker, see Mortification |  |  |  |  | 6 | Carbuncle - |  |  |  |  |  |
| Hydrophobia- - |  | - |  | - | 1 | $\begin{aligned} & \text { Philegmon - }{ }^{-}{ }^{-}{ }^{-} \text {Disease of Skin, } \end{aligned}$ |  |  |  | 14 | ${ }_{11}^{4}$ |
| Hmmorrhage- |  |  |  |  |  | Intemperance |  | ${ }_{4}^{23}$ | 5 | 8 | 18 |
| Dropsy ${ }^{\text {discess }}$ : |  | 17 |  | ${ }_{34}$ | 24 | Want of Breast Milk, |  |  |  | 48 |  |
| ${ }_{\text {Ulicer }}$ U |  |  |  |  | 8 | Privation and Atrophy | 4 | - | 5 | 1 |  |
| Mortification: |  |  | ${ }_{206}^{51}$ | ${ }_{24}^{34}$ | ${ }_{27}^{57}$ | Cold, see Privation |  |  |  |  |  |
| Cancer : : | 192 | ${ }_{12}^{219}$ | 206 | ${ }_{23}^{24}$ | 270 | ${ }_{\text {Poison - }}^{\text {Burns and }}$ Sealds |  |  |  |  | 68 |
|  |  |  |  |  |  | Hanging, \&c. - |  |  |  |  |  |
| Scrofuln | 112 | ${ }_{173}^{77}$ | 115 190 | ${ }_{194}^{124}$ | ${ }_{262}^{101}$ |  |  |  | ${ }_{31}^{159}$ | ${ }_{121}^{19}$ | ${ }_{171}^{171}$ |
| Phthisis or Con | 1788 | ${ }_{5}^{1548}$ | 815 | ${ }_{1790}^{179}$ |  | ${ }_{\text {Other Violence }}{ }^{-}$- |  |  |  |  |  |
| Hydrocephalus |  | 320 | 464 | 437 | 468 | Causes not specifled | 81 | 106 | 137 | 77 | 163 |




On the Meteorology of England, the South of Scotland, and parts of Ireland, during the Quarter ending June 30th, 1853 . By James Glatsuer, Ese, F.R.S., Sec. of the British Meteorological Socicty.
Till April 17 th the daily temperature of the air was alternately in excess and defect to the amount of several degrees, and was $1^{\circ} \cdot 7$ in excess in the period. On April 20 th a period of very cold weather set in, and continued till May 15 th ; on some days the defect amounted to $8^{\circ}, 9^{\circ}, 10^{\circ}$, and on two days to the very large amounts of $13^{\circ}$ and $14^{\circ}$; the average defect for the period was $4^{\circ} \cdot 9$. From May 16th to May 27 th the weather was fine, and the excess of daily temperature was 4.2 .2 ;
from May 28 th to the end of the quarter, with very few exceptions, the weather was cold and unseasonable, and the average daily defect of temperature was $\mathrm{I}^{\circ} \%$. The weather during the whole quarter has been unsettled; rain has fallen frequently, there has been an unusual prevalence of N.E. and N.W. winds, and the temperature has been very variable.
The mean temperature of the air at Greenwich for the quarter ending May, constituting the 3 spring months, was $45^{\circ} \cdot 2$, being $1^{\circ} \cdot 2$ below the average of 80 years.


Nore.-In reading this table it will
( + ) plus signifies above the average.
Thunderstorms occurred, or thunder was heard and lightning seen, on the 3d April at Stone, Hartwell House, Hartwell Rectory, Aylesbury, and Linslade; on the 7th at Newcastle; on the 8th a
Greenwich; on the 20 th at Midhurst ; on the 22d at Clifton; on the 23 d at Hartwell House Greenwich; on the 20th at Midhurst; on the 22d at Clifton; on the 23d at Hartwell House, Ayles-
bury, and Cardington ; on the 24th at Holkham, North Shields, and Dunino; on the 25 th at Jersey and Liverpool; on the 27 th at Durham; and on the 28th at Newcastle. On the 9th May at Grantham ; on the 16th at. Midhurst and Clifton ; on the 27 th at Greenwich and Cardington; on the 28 th at Rose Hill, Bicester, Oxford, Stone, Hartwell House, Hartwell Rectory, Aylesbury, Nottingham, and Hawarden; on the 29th at Lewisham and Greenwich; and on the 3oth at Torquay, Midhurst, and Clifton. On the 1 ith June at Lewisham, Greenwich, Bicester, Stone, Hartwell House, Hartwell Rectory, Aylesbury, and Liaslade; on the 14th at Lewisham, Bedford, Dunino, and
Arbroath ; on the 18th at Newcastle ; on the 19th at Hawarden, Warrington, Liverpool, and Arbroath; on the 10 th at Bicescastle, Stone, Hartwell House, Hartwell Rectory, Aylesbury, Linslade, and Royston; on the 2 ist at Newport; on the 23d at Manchester, Stonyhurst, and Dunino; on the 24th at Greenwich, Paddington, Bicester, Oxford, Stone, Hartwell House, Hartwell Rectory, Ayles bury, Linslade, Cardington, Bedford, Norwich, Holkham, Nottingham, and Dunino; on the 25 th a Nottingham ; and on the 3 oth at Nottingham, Warrington, and Manchester.
Thunder was heard, but lightning was not seen, on the ist April at St. John's Wood; on the 7th at North Shields; on the ${ }^{23}$ d at Stone and Nottingham; on the 24 th at Nottingham, Stonyhurst, and Dunino; and on the 25 th and 27 th at Hawarden. On the 8th May at Paddington; on the
0th at Royston and Nottingham ; on the 14th at Guernsey; on the 16 th at Stonyhurst; on the 1 $\boldsymbol{7}$ th 9th at Royston and Nottingham; on Holkiam ; on the 27 th at Stone, Hartwell Rectory, and Royston ; on the 28th at Exeter, Linslade, and Cardington; and on the 29th at Norwich, Grantham, and Arbroath. On the 5th June at Wakefield; on the 6th at Grantham and Nottingham; on the

8th at Stonyhurst ; on the 9 th at Norwich; on the roth at Stone ; on the 1 th at Rose Hill, Stone, and Nottingham ; on the 12th at Oxford, Cardington, and Nottingham ; on the 13 th at Nottingham ; on the 14th at Lewisham, Greenwich, St. John's Wood, Stone, Hartwell Rectory, Aylesbury, Cardington, Nottingham, Wakefield, North Shields, Dunino, and Arbroath; on the 15 th at Stone and Norwich; on the 19th at Cardington, Bedford, Nottingham, Warrington, and Stonyhurst ; on the 2oth at Jersey, Clifton, Rose Hill, Stone, Cardington, and Bedford; on the 21 st at Jersey; on the ${ }^{23}$ d at Bowdon, North Shields, Dunino, and Arbroath; on the 24 th at Lewisham, Rose Hin, Stone, and Dunino; on the 27 th at Aylesbury and Nottingham; on the 28 th at Nottingham; on the 29 th
at Nottingham and Wakefield; and on the 30 th at Hartwell Rectory, Linslade, Wakefield, and Stonyhurst. Lightning was seen, but thander was not heard, on the 8th April at Clifton; and on the 19th at
North Shields. On the 16th May at Greenwich and Rose Hill. On the 7 th June at Nottingham ; on the roth at Linslade; and on the 14th at Oxford.
Hail fell on the 1st April at Lewisham, Greenwich, Linslade, Nottingham, and Liverpool ; on the 3d at Oxford and Stone ; on the 7th at Rose Hill, Hawarden, Newcastle, and North Shields; Warrington, Manchester, Durham, Newcastle, North Shields, and Dunino ; on the 12th at Oxford and North Shields; on the 13th at Guernsey, Midhurst, Clifton, Lewisham, Greenwich, Bicester, Oxford, Stone, Hartwell House, Hartwell Rectory, Aylesbury, Linslade, Royston, Cardington, Bedford, Norwich, Grantham, Holkham, Hawarden, Gainsborough, Warrington, Liverpool, and North Shields; on the 18th at Hawarden ; on the 2oth at Midhurst, Bicester, Stone, and Hartwell Rectory; on the 23 d at Lewisham, Greenwich, Stone, Cardington, Hawarden, North Shields, and Durham, Neweastle, and North Shields ; on the 25 th at Jersey, Guernsey, Ryde, Hartwell Rectory Linslade, Grantham, Hawarden, Warrington, Liverpool, Manchester, North Shields, Dunino, and Arbroath ; on the 26th at Helston, Bicester, Norwich, Grantham, Nottingham, Hawarden, Stonyhurst, and Dunino ; on the 27 th at Neweastle; and on the 30 th at Liverpool. On the 7 th May at Guernsey, Stone, Bedford, Holkham, Nottingham, Hawarden, Gainsborough, Warrington, Stonyhurst, Durham, North Shields, and Arbroath ; on the 8th at Midhurst, Greenwich, Stone, Hartwell House, Shields, and Arbroath; on the 9th at Helston, Exeter, Clifton, Lewisham, Greenwich, Bicester, Oxford, Stone, Hartwell House, Hartwell Rectory, Aylesbury, Linslade, Cardington, Grantham, North Shields, and Arbroath; on the roth at Jersey, Lewisham, Gainsborough, North Shields, Dunino, and Arbroath; on the 11 th at Dunino; on the 28th at Rose Hill and Oxford; and on the 29th at Lewisham, Greenwich, Oxford, and Linslade. On the 6th June at York; on the 14th at North Shiels; on the 19th at Helston, Nottingham, Ha Jersey and Guernsey; and on the 30 th at Warrington
Grantham, Nottingham, and Hawarden ; on the 6th at Hawarden Hartwell Rectory, and Hawarden ; on the 8th at Hawarden, Stonyhurst, and ; on the 7 th at Stone, ${ }^{24} 4^{\text {th }}$ at Hawarden. On 4th May at Hawarden and North Shields; on the 14th at Manchester; and on the 24th at Nottingham. On the 22d June at Greenwich
Snow fell on the 8th, 13th, 22d, 23d, 24th, 25 th, and 26 th of April at various places. On the 7 th May at Midhurst, Clifton, Rose Hill, Bicester, Oxford, Stone, Hartwell Rectory, Royston, Holkham, Nottingham, Hawarden, Warrington, Liverpool, Manchester, Wakefield, Stonyhurst, York, Durham, Newcastle, North Shields, and Arbroath ; on the 8th at Midhurst, Greenwich, Oxford, Stone, Hartwell House, Wakefield, York, Newcastle, North Shields, Dunino, and Arbroath ; on the 9th at Stone, Linslade, Nottingham, Hawarden, Gainsborough, Warrington, Liverpool, Manchester, Wakefield, Stonyhurst, York, North Shields, and Dunino ; on the 1oth at Stone, Hartwell Rectory, Grantham,
Gainsborough, North Shields, and Dunino ; on the 1 ith at Dunino; and on the 3 Ist at Greenwich.
Fog was prevalent on 5 days in April, on 19 days in May, and on 10 days in June.
Lunar Halos were seen on 7 days in April at the different stations, and on the 2 Ist May at North
Lilac in flower on the 10th May at Guernsey ; on the 15 th at Jersey ; on the 17 th at Helston; on the 18th at Gainsborough; on the 21st at Oxford, Stone, and Wakefield; on the 22d at Rose Hill; on the 23d at Hartwell Rectory; on the 24th at Linslade, Hawarden, and Warrington ; on the 28th at Nottingham ; on the 29th at Bedford; and on the 3 oth at Cardington. On the ist June at
Wheat in ear on the th June in th anse of Wighs Dunino.
Aylesbury; on the 15 th at Linslade, Cardington, and Bedford; on the 23d at Hawarden; and on the 27 th at Nottingham.
Wheat in flower on the 13 th June in the Isle of Wight; on the 18th at Aylesbury ; on the 20 th at Rose Hill ; on the 24th at Jersey; on the 26th at Linslade and Grantham ; on the 28th at Gainsorough; and on the 3oth at Cardington Bedford, and Nottingham
The cuckoo was first heard on 16 th April at Bicester ; on the 18 th at Hartwell Rectory and Gains orough; on the 24th at Stone and Hartwell House ; on the 28th at Nottingham; and on the 3oth at Warrington.
Sicester, Granthre seen on the 3d April at Stone; on the 7 th at Hartwell Rectory; on the 16 th at Bicester, Grantham, and Gainsborough; on the 17
Warrington; and on the 30 th at Guernsey and Clifton.


The mean of the numbers in the first column is 29 .590 inches, and it represents that portion of the reading of the barometer due to
the pressure of nir ; the remaining portion, or that due to the pressure of water, is 0 osio inch; the sum of these two numbers is





Quarterly Meteorological Table for different Parallels of Latitude.

| Parallels of latitude, \&c. |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mid 53^{\circ} \cdot 177^{\circ} \cdot 233^{\circ} \cdot 614^{\circ} \cdot 834^{\circ} 0403^{\circ} \cdot 649^{\circ} 6146^{\circ} 1$ |  |  |  |  |  | O-790 | ${ }^{\text {in }}$ in. |  |  |
| ${ }^{\text {In teme countes }}$ Neort and | - | 6.0 5 5 |  |  |  |  |  |  |  |  |
| South of latitude ${ }^{\text {S }}$ |  |  |  |  |  |  | ${ }^{0 \cdot 793}$ |  |  |  |
|  |  | ${ }^{5 \cdot 6}$ |  |  |  |  | ${ }^{0}{ }_{0}^{0} 7799$ | 9 |  |  |
|  |  | ${ }_{5}^{6.5}$ |  |  |  |  | $0 \cdot 8$ |  |  |  |
| Neweastle and Aorrth ${ }^{\text {Dunino and Arbroath - - }}$ : |  | ${ }_{5}{ }^{5}$ |  |  |  |  |  |  |  |  |

In the formation of this oabe the results irom Jese and from Yentnor are not combined, on account of the much higher temperathe ranges of temperature of the two places. The results from Ventnor are not eombine
ture, and less range of temperature than those at the other stations in the sile of Wight.

The Observations have been reduced to Mean values, and the Hygrometrical results have been deduced - from Glaisher's Tables,

| NAMES of STATrons and Observers. |  |  |  |  | mperature of the Air |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |  | $\begin{aligned} & \text { 离 } \\ & \text { Büy } \end{aligned}$ | 安 | $\stackrel{3}{3}_{\square}^{3}$ |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Y, <br> yle, EsQ. <br> Heutre, Ese. <br> Vivian, Ese. <br> TER, M.B.M.S. ISLE OF WIGHT, <br> XAM, EsQ., M.B.M.S. <br> nBarrow,Esq., M.B.M.S. <br> GRKER, EsQ., F.R.C.S., S. <br> ESQ., PH. D., M.B.M.S. <br> D, Esq., M.B.M.S. <br> BRISTOL), <br> r, <br> SERVATORY, ONOMER ROYA |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |


|  |  |
| :---: | :---: |
|  |  |
|  |  |
|  | Water or ElasVapour. |
|  | Range of of Reading Month. |
|  |  |
|  | From Self-  <br> registering  <br> Therm.  |
|  | Adopted. |
|  | Highest. |
| \#\#\%g\%etu | Lowest. |
|  | Range in |
| $0^{\circ}$ | ( Mean of all the |
|  | Mean of all the |
| ${ }^{\circ}$ | $\begin{aligned} & \text { Mean Daily } \\ & \text { Range. } \end{aligned}$ |
|  | Evaporation. |
|  | Dew Point. |
|  | Kentimated |
| بn zan <br>  <br>  | Direction. |
| 111 |  |
|  | Number of Day |
|  | ${ }_{\text {Amount }}^{\text {A }}$ leoled- |
|  |  |
|  |  |
|  |  |
|  |  |
|  | Mean Weight of a cubic toot of Air. |

Names of Stations and Observers.



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S. Shellabear, Esq., M.B.M.S., As IGHFIELD HOUSE, NOTTINGHAM,
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Alderley Edge.-The observations in April were taken on 20 days only. Wakefield Prison.-April; the reading of the dry bulb thermometer on the 20th at 3 h . P.M. has been altered from $35^{\circ}$ to $55^{\circ}$. June; the reading of the barometer on the 1st at $9 \mathrm{~h} . \mathrm{p}$
construction not admitting of accurate results.

Note.-Second rain gauges are placed: At Jersey at the height of 6 feet; the amount collected was $5 \cdot 8$ inches. At Newport, 8 feet; the amount was $7 \cdot 8$ inches. At Clifton, 50 feet; the amounts. was $8^{\circ} 9$ inches. At Oxtord, 22 feet; the amount was 6.6 inches. At Hartwell Rectory, 4 feet; the amount was $7^{\circ} 9$ inches. At Cardington, 36 feet; the amount was $5^{\circ} 1$ inches. At Holkham.
4 feet ; the amount was $4 \cdot 6$ inches. At Nottingham, 25 feet; the amount was $7^{\circ} 4$ inclies. And at Warrington, 342 feet ; the amount was $5^{\circ} 8$ inches.

# THE MARRIAGES, BIRTHS, AND DEATHS 

IN ENGLAND.

This Return comprises the Births and Deaths registered by 219 r Registrars in all the districts of England during the summer quarter ending September 30th, 1853 ; and the Marriages in 12039 churches or chapels, about 3424 registered places of worship unconnected with the Established Church, and 625 Superintendent Registrars' offices, in the quarter that ended June 30 th, 1853.

The Return of Marriages is not complete ; but the defects are inconsiderable, and approximative numbers have been supplied from the records of previous years.

The marriages exceeded the average in the quarter ending in June. For the quarter that ended in September 30th the births have also been above the average number, while the deaths have been fewer than is usual in proportion to the population. The mortality of the town population has experienced a marked diminution during the summer ; but one town has suffered severely, and others are threatened by Asiatic cholera.

## MARRIAGES.

40335 marriages were celebrated in the quarter that ended in June 1853; a number exceeding by 328 the marriages in the corresponding quarter of the
Marriages, Birtes, and Deaths, returned in the Years 1841-53 and in the Quarters of those Years.

| Years - | 1841 | 1842 | 1843 | 1844 | 1845 | 1846 | 1847 | 1848 | 1849 | 1850 | 1851* | 1852 | 1853 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Marriages Births <br> Deaths | 122496 <br> 512158 <br> 343847 | 118825 517739 349519 | 123818 527325 346445 | 132249 <br> 540763 <br> 356933 | $\begin{aligned} & 143743 \\ & 543521 \\ & 349366 \end{aligned}$ | $\left\|\begin{array}{l} 145664 \\ 572625 \\ 390315 \end{array}\right\|$ | $\begin{aligned} & 135845 \\ & 539965 \\ & 423304 \end{aligned}$ | $\begin{aligned} & 138230 \\ & 563059 \\ & 399833 \end{aligned}$ | $\begin{aligned} & 141883 \\ & 578159 \\ & 440839 \end{aligned}$ | $\begin{aligned} & 152744 \\ & 593422 \\ & 368995 \end{aligned}$ | $\begin{aligned} & 154206 \\ & 615865 \\ & 395174 \end{aligned}$ | $\begin{aligned} & 158439 \\ & 624171 \\ & 407938 \end{aligned}$ | - |
| \% | Marriages. |  |  |  |  |  |  |  |  |  |  |  |  |
| Quarters ending the last day of March - June September December - |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 24447 32551 | 25860 30048 |  | 26387 34268 | 29551 | 31417 | 27480 | 28398 | 28429 | 30567 | 32724 | 32933 | 35014 |
|  | 29397 | 27288 | 28847 | 31675 | 35003 | 35070 | 32439 | 32995 | 33874 | 37636 | 37316 | 38291 | 0335 |
|  |  |  |  |  | 43889 | 42066 | 40729 | 42116 | 43736 | 45337 |  | 47208 | - |
|  | BIRTHS. |  |  |  |  |  |  |  |  |  |  |  |  |
| March <br> June September December - | 133720 129884 | 135615 134096 | 136837 | 143578 | 143080 | 145108 | 146453 | 139736 | 153772 | 144551 | 157286 | 161776 | 161598 |
|  | 1238868 | 134096 123296 | 131279 128161 | 136941 130078 | 136853 132369 | 149450 | 139072 127173 | 149760 140359 | 153693 135223 | 155865 | 159073 150594 | 159136 | 158718 |
|  | 124686 | 124732 | 131048 | 130166 | 131219 | 139349 | 127267 | 133204 | 135223 13541 | 1469095 | 150594 148912 | 151193 152066 | 147581 |
|  | DEATHS. |  |  |  |  |  |  |  |  |  |  |  |  |
| March - | 99069 | 96314 | 94926 | 101024 | 104664 | 89484 | 119672 | 120032 |  |  |  |  |  |
| June -- | 86134 | 86538 82339 | 87234 76792 | 85337 79708 | 89149 | 90231 | 106718 | 99727 | 102153 | 92871 | 99468 | 100813 | 107861 |
| December - | 83204 | 82339 84328 | 76792 87493 | 79708 | 74872 80681 | 101663 108937 | 93435 103479 | $\begin{aligned} & 87638 \\ & 00122 \end{aligned}$ | 135227 97589 | 85849 91845 | 91381 99019 | 100497 99946 | 92332 |

[^5]previous year．The marriages in the spring quarter have thus gradually risen previous year．The marriages in the spring quarter have thus gradually risen
from 30048 in 1842 to 40335 in 1853 ．The increase of marriages within the last from 30048 in $184^{2}$ to 40335 in 1853 ．in London，Cornwall，Staffordshire，Cheshire， five years is particularly conspicuo
Monmouthshire，and South Wales．
．
147581 births were registered in the quarter ending September 30 th．This is above the average number ；but it is less by 3612 than the numbers（ 151193 ）which were registered in the corresponding quarter of 1852．The decrease is，singularly enough，observable in every county except Middlesex，Surrey，Cornwall，Stafford－ shire，Rutlandshire，Cheshire，Lancashire，Cumberland，and Monmouthshire．

## INCREASE OF POPULATION．

As 14758 I births and only 92332 deaths were registered，a balance of 55249 remains in the population．The births and deaths are not registered in Scotland and Ireland，as they are in nearly all other civilized countries，so that the increase of the population of the United Kingdom cannot be ascertained；but if the excess of births in those divisions of the United Kingdom bears the same proportion to the population as it does in England and Wales，the increase by natural causes must be population 83000 But 87467 emigrants sailed from the ports of the United Kingdom at which there are Government Emigration Agents in the quarter ending September 30 th， which there are Government Emigration Agents in the quarter the other for emigrants 1853 ；so that allowing on one hand for births unregistered，on the other for unreturned，it is probable that the population of the United Kingdom has dechined rather than increased during the summer． 13623 of the emigrants sailed from London，Plymouth，and Southampton； 63600 from Liverpool ； 2807 from Glasgow and Greenock； 7437 from Irish ports．＊As a large proportion of the emigrants
England：$\dagger$－Annual Rate per Cent．of Marriage，Birth，and Death，during the Years

|  | 16318 | 16516 | 16716 | 16919 | 17124 | 17331 | 17541 | 17754 | 17977 | 18195 | － | 18195 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Years－ | 1843 | 1844 | 1845 | 1846 | 1847 | 1848 | 1849 | 1850 | 1851 | 1852 | Mean， $1843-52$ | 1853 |
|  | $\begin{array}{r} 759 \\ \begin{array}{c} 759 \\ 2.232 \\ 2 \cdot 123 \end{array} \end{array}$ | $\begin{aligned} & 8.801 \\ & 3.274 \\ & 2 \cdot 161 \end{aligned}$ | $\begin{array}{r} 8800 \\ \begin{array}{r} 3.251 \\ 2.090 \end{array} \end{array}$ | $\begin{aligned} & .861 \\ & 3.385 \\ & 2.307 \\ & 2.307 \end{aligned}$ | $\begin{array}{r} 793 \\ 3.153 \\ 2.472 \end{array}$ | $\begin{array}{r} 798 \\ \begin{array}{r} 7.299 \\ 2.307 \end{array} \end{array}$ | $\begin{array}{\|r} -89 \\ 3.296 \\ 2.513 \\ \hline \end{array}$ | $\begin{array}{r} .860 \\ \begin{array}{r} 8 \cdot 343 \\ 2 \cdot 078 \end{array} \end{array}$ | $\begin{array}{r} 8.858 \\ 3 \cdot 426 \\ 2 \cdot 198 \end{array}$ | － $\begin{gathered}\text { 3．481 } \\ 2.269\end{gathered}$ | $\begin{array}{r}\text { 8288 } \\ \begin{array}{c}3.308 \\ 2.252\end{array} \\ \hline\end{array}$ | － |
|  | MARRIAGES． |  |  |  |  |  |  |  |  |  |  |  |
| Quarters ending the last day of March September December | $\begin{aligned} & .632 \\ & .7650 \\ & .793 \\ & .934 \end{aligned}$ |  <br> 844 <br> 844 <br> 780 <br> 7955 | $\begin{array}{r} \\ 781 \\ 849 \\ 893 \\ 1800 \\ 1.038 \\ \hline\end{array}$ |  <br> 785 <br> .882 <br> .882 <br> .983 | － 65 <br> .856 <br> 785 <br> 940 | －661 <br> 805 <br> .755 <br> 961 | $\begin{aligned} & .661 \\ & .822 \\ & .766 \\ & \hline 966 \end{aligned}$ | 780 .888 880 1.010 | 742 884 884 1.001 1 | $\begin{array}{r}730 \\ \begin{array}{r}738 \\ 883 \\ 834 \\ 1.038\end{array} \\ \hline\end{array}$ | $\cdot 691$ <br> .882 <br> .888 <br> .885 <br> 88 | $\stackrel{7768}{ }{ }^{781}$ |
|  | BIRTHS． |  |  |  |  |  |  |  |  |  |  |  |
| March <br> June September December | $\begin{aligned} & 3.420 \\ & 3.234 \\ & 3.114 \\ & 3.174 \end{aligned}$ | $\begin{aligned} & 3.507 \\ & 3.334 \\ & 3.123 \\ & 3.115 \end{aligned}$ | （ $\begin{aligned} & 3.491 \\ & 3.291 \\ & 3 \\ & 3.1040 \\ & 3.103\end{aligned}$ | $\begin{aligned} & 3 \cdot 498 \\ & 3 \cdot 51 \\ & 3.5151 \\ & 3 \cdot 256 \end{aligned}$ | 3．488 3．265 2.965 2.938 2 | 3.252 3.44 3.214 3.038 3 | $\begin{aligned} & 3.575 \\ & 3.523 \\ & 3.506 \\ & 3.053 \end{aligned}$ | $\begin{gathered} \begin{array}{r} 3.32 \\ 3.530 \\ 3.281 \\ 3.253 \end{array} \end{gathered}$ | $\left\lvert\, \begin{aligned} & 3 \cdot 567 \\ & 3.567 \\ & 3.521 \\ & 3 \cdot 274 \end{aligned}\right.$ | $\begin{aligned} & 3.585 \\ & \hline 3.516 \\ & 3.294 \\ & 3 \cdot 343 \end{aligned}$ | （3.470 <br> 3.428 <br> 3.174 <br> 3.155 | $\begin{aligned} & 3 \cdot 581 \\ & 3 \cdot 507 \\ & 3 \cdot 215 \end{aligned}$ |
|  | DEATHS． |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{aligned} & 2.373 \\ & 2.149 \\ & 1.866 \\ & 2.119 \end{aligned}$ | $\begin{aligned} & 2 \cdot 467 \\ & 2 \cdot 077 \\ & 1.993 \\ & 2 \cdot 175 \end{aligned}$ | $\begin{aligned} & 2 \cdot 554 \\ & 2.144 \\ & 1.776 \\ & 1.908 \end{aligned}$ | $\begin{aligned} & 2 \cdot 157 \\ & \begin{array}{l} 2 \cdot 144 \\ 2 \cdot 382 \\ 2.385 \\ 2.545 \end{array} \end{aligned}$ | $\begin{aligned} & 2 \cdot 850 \\ & \begin{array}{l} 2.506 \\ 2.163 \\ 2.389 \end{array} \end{aligned}$ | $\begin{aligned} & 2 \cdot 794 \\ & 2 \cdot 931 \\ & 2 \cdot 05 \\ & 2 \cdot 108 \end{aligned}$ | $\begin{aligned} & 2 \cdot 4.42 \\ & 2.41 \\ & 3.057 \\ & 2.199 \end{aligned}$ | $\begin{aligned} & 2 \cdot 261 \\ & 2.107 \\ & 1.917 \\ & 2.045 \end{aligned}$ | $\begin{aligned} & 2 \cdot 388 \\ & 2 \cdot 224 \\ & 2 \cdot 0.07 \\ & 2 \cdot 177 \end{aligned}$ | $\begin{aligned} & \begin{array}{l} 2.364 \\ 2.227 \\ 2.190 \\ 2.197 \end{array} \end{aligned}$ | 2.467 2.223 2.129 2.186 2.18 | $\begin{aligned} & 2.620 \\ & 2.383 \\ & 2.012 \end{aligned}$ |


 91 days；the 3 months April，May，June， 1 das
＊Return with which the Registrar General has been favoured by the Emigration Commissioners．
from Liverpool，as well as from the Irish ports，are natives of Ireland，it follows that the population of Ireland is decreasing，and that the population of England is slowly increasing，while the contributions of both countries within the last three years to the colonial plantations are without example．

Prices of Provisions．
It will be seen in the annexed Table that the prices of the chief articles of foos are much higher than they were in the corresponding quarter of the last year ；the rise in the price of wheat is 26 ，mutton 23 ，beef 24 ，potatoes 3 I per cent．

The rate of wages has been raised in several trades；and at the same time the labourers and artizans have been more fully employed．
The average Prices of Consols，of Wheat，Meat，and Potatoes；also the average Quantity of

| Quarters ending | AveragePriceofConsols（forMoney）． | Average Price of Wheat perQuarter in England and Wales． | $\dagger$ Wheat sold in the 290 Cities and Towns in England and Wales making Returns． | $\dagger$ Wheat and Wheat Flour entered for Home Consumption at Chief Ports of Great Britain． | Average Prices of |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Meat per lb．at Leadenhall and Newgate Markets （by the Carcase）． |  | Potatoes （York Regents） per Ton at Waterside Market， Southwark． |
|  |  |  | Average Number of Quarters weekly． |  | Beef． | Mutton． |  |
| $\begin{aligned} & 1851 \\ & \text { Sept. } 30 \end{aligned}$ | $\stackrel{\mathcal{E}}{96 \frac{1}{2}}$ | 40s． 7 d． | 74，714 | 91，040 | $\begin{aligned} & 3 d .-5 d . \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 3_{4}^{3} d .-5 \frac{3}{3} d . \\ & \text { Mean } 4 \frac{3}{4} d . \end{aligned}$ | $\begin{aligned} & \text { 90s.- } 110 s . \\ & \text { Mean roos. } \end{aligned}$ |
| $\begin{gathered} \text { Dec. } 31 \\ 1852 \end{gathered}$ | $97 \frac{7}{8}$ | 36s． 7 d． | 109，506 | 47，986 | $\begin{aligned} & 3 \text { d. }-5 d . \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{3}{3} d . \\ & \text { Mean } 4 \frac{3}{4} d . \end{aligned}$ | $\begin{aligned} & 65 s .-75 s . \\ & \text { Mean } 70 s . \end{aligned}$ |
| Mar． 31 | $97^{\frac{1}{4}}$ | 40s．Iod． | 95，532 | 27，540 | $\begin{aligned} & 3 \frac{1}{4} d-5 d \text {. } \\ & \text { Mean } 4 \frac{1}{8} d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{3}{4} d . \\ & \text { Mean } 4 \frac{3}{4} d . \end{aligned}$ | 6os．－8os． <br> Mean $70 s$. |
| June 30 | $99 \frac{6}{8}$ | 40s．Iod． | 87,949 | 54，675 | $\begin{aligned} & 3 \frac{1}{4} d .-4 \frac{3}{4} d . \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{1}{4} d . \\ & \text { Mean } 4 \frac{1}{2} d . \end{aligned}$ | $\begin{aligned} & 85 s .-110 s . \\ & \text { Mean 97s.6 } . \end{aligned}$ |
| Sept． 30 | 100 | 41s． 2 d． | 78，712 | 67，912 | $\begin{aligned} & 3 \frac{1}{4} d .-5 d \text {. } \\ & \text { Mean } 4 \frac{1}{8} d \text {. } \end{aligned}$ | $\begin{gathered} 4 d .-6 d . \\ \text { Mean } 5 d . \end{gathered}$ | $\begin{aligned} & \text { 8os.- } 100 s . \\ & \text { Mean } 90 s . \end{aligned}$ |
| Dec． 31 1853 | $100 \frac{5}{8}$ | 40s． 5 d． | III，224 | 72，870 | $\begin{aligned} & 3 d .-5 d . \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & \text { 4⿳亠丷厂} \\ & \text { Mean } d \text { 年 } d . \\ & \frac{1}{4} d . \end{aligned}$ | $\begin{aligned} & \text { 9os.-120s. } \\ & \text { Mean ros. } \end{aligned}$ |
| Mar． $3^{1}$ | $99^{\frac{5}{8}}$ | 45s． 7 d ． | 95，115 | 63，530 | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{1}{4} d . \\ & \text { Mean } 4 \frac{1}{2} d . \end{aligned}$ | $\begin{aligned} & \text { 43 }{ }^{\frac{3}{2} d-6 \frac{3}{3} d .} \\ & \text { Mean } 5 \frac{3}{4} d . \end{aligned}$ | IIOS．－145s． Mean $127 s .6 d$ |
| June 30 | $100 \frac{4}{8}$ | 44s． 6 d． | 84,559 | 82，623 | $\begin{aligned} & 4 d \text {. } 5 \frac{3}{3} d . \\ & \text { Mean } 4 \frac{7}{8} d . \end{aligned}$ | $\begin{aligned} & 5^{5 d .-6 \frac{3}{3} d .} \\ & \text { Mean } 5 \frac{1}{8} d . \end{aligned}$ | $\begin{aligned} & 110 s .-145 s . \\ & \text { Mean } 127 s .6 d \end{aligned}$ |
| Sept． 30 | 97 | 51s． 10 d ． | 86，087 | 120，020 | $4 \frac{1}{4} d$ ．$-6 d$ ． | $5 d$. | 110s．－1258． |
|  |  |  |  | 4 12 \} zat | Mean $5 \frac{1}{8} d$ ． | Mean 6 $\frac{1}{8} d$ ． | Mean I 7 7 7.6 d ． |

$\dagger$ Note．－The total number of quarters of wheat sold in England and Wales for the 13 weeks T Note．－The total number of quarters of wheat sold in England and Wales for the 13 weeks
ending Sept． 30 th， $185 \mathbf{1}$ ，was $97 \mathbf{1}, 276$ ；for the 13 weeks ending Dec． 31 st， $\mathbf{1}, 423,582$ ；for the 13 weeks ending March 31 st， $1852,1,241,921$ ；for the 13 weeks ending June 30 oth， $1,143,339$ ；for the 13 weeks ending Sept． 30 th， $1,023,251$ ；for the 13 weeks ending．Dec． 31 st， $1,445,906$ ；for the 13 weeks ending March 3 rst， $1853,1,236,493$ ；for the 13 weeks ending June 30 th， $1853,1,099,26 \mathrm{r}$ ； for the 13 weeks ending Sept． 30 th， $1853,1,119,128$ ．The total number of quarters entered for Home Consumption was respectively $1,183,523 ; 671,803 ; 358,024 ; 710,780 ; 882,850 ; 947,310$ ；
825,$886 ; 1,074,095$ ；and $1,560,255$ ；the second total，however，embraces the returns of 14 weeks．
The low temperature，the excess of rain，the cloudy sky，and the other meteoro－ logical phenomena of the quarter are ably described by Mr．Glaisher．See pp．30， 3 I．

## State of the public health．

92332 deaths have been registered during the quarter ；a number less by 8165 than the number of persons（ 100497 ）whose deaths were recorded in the summer quarter of 1852 ．The depression of the mortality extended over nearly every county except Durham and Northumberland；and indeed over all except a few districts of those counties．
A similar depression of the mortality was observed in the summer quarter of I848，immediately before the outbreak of the epidemic cholera．

The mortality during the quarter of the districts comprising the chief towns and a population of 7795882 was at the rate of 2.4 per cent. per annum nearly; the mortality of the districts of small towns and country parishes was at the rate of $\mathrm{I} \cdot 7$ per cent. The average rates are higher; or $2 \cdot 6$ and $\mathrm{I} \cdot 9$ per cent.

The number of deaths in London was 12918 , which is below the average. The deaths by zymotic disease were 3456 , including 1232 by diarrhoea, and 137 by quarters of the preceding years; and the deaths from cholera did not exceed the quarrage of the 3 preceding summer quarters. 585 deaths were referred to typhus; and over the country scarlatina prevailed with great severity in several districts. The local epidemics are indicated in the Registrars' reports.

The appearance of the Asiatic cholera in London, and the terrific mortality which it has occasioned within a few weeks in the north of England, are of such Which it has occasioned within a few weeks in the n.
importance as to demand the whole of our attention.
As a means of guidance and a basis of reasoning it may be useful to present here a brief summary of the facts which regulated the course of the epidemic that broke out 5 years ago.

## The Cholera.

Evident cases of the epidemic of $1848-49$ were registered in London and in Sunderland during the first week of October. The deaths from cholera in all England were 1105 during the last three months of the year. The epidemic declined, and in April 1849 the deaths were only 107; in May 327. The great epidemic eruption began; and in June 2046 persons died of it, July 7570 , August ${ }_{15} 872$, September 20379, October 4654, November 844, December 163. The 15872 , September 20379 ,
thirty-sixth and thirty-seventh weeks of the year 1849 were the most fatal; the deaths from cholera in those two weeks were 12592. On the most fatal day, deaths from cholera in those the weeks were 1259
September 1 , the
The total deaths from cholera in 1849 were 53293. 12152 of the number were of persons under io years of age. The mortality by the disease was at the rate of 30 in 10000 of the inhabitants. Diarrhcea of a severe form was fatal in the same year to 18887 persons, chiefly children ; or to II in 10000 of the inhabitants.

The danger of dying by the epidemic was greatest at advanced ages; the rate of mortality was 13 in 10000 at the age of $12 ; 64$ in 10000 at the age of 70 ; the danger advancing progressively with age.
The duration of the fatal attacks of cholera is recorded in 39468 cases ; and it was found to be 50 hours on an average. More than half of the cases (20684) terminated within 24 hours.

In 85 of the $6_{2} 3$ districts of England no death from cholera was recorded.

| Deaths in the Summer Quarters. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1843 | 1844 | 1845 | 1846 | 1847 | 1848 | 1849 | 1850 | 1851 | 1852 | $\left\lvert\, \begin{gathered} \text { Total } \\ 1843-52 \end{gathered}\right.$ | 1853 |
| 117 Districts, | 36953 | 39933 | 36139 | 51405 | 49479 | 43445 | 78159 | 42777 | 46061 | 51635 | 474986 | 47645 |
| In 508 Districts, comprising chiefly small towns and | 39839 | 40775 | 38733 | 50258 | 43956 | 44317 | 57205 | 43267 | 45539 | 48862 | 452751 | 44675 |
| Total | $\overline{76792}$ | 79708 | 74872 | 101663 | $\overline{93435}$ | 87762 | 135364 | 86044 | 91600 | $\overline{100497}$ | 92773 | 92320 |

Only one death was referred to cholera in Herefordshire, and one in Westmoreland. The centres of the attacks of the great epidemic were London, Portsmouth, Plymouth, Bristol, Merthyr Tydfil, Wolverhampton, Liverpool, Hull, and Tynemouth. In the following districts the rate of mortality by cholera exceeded 100 to 10000 inhabitants: - It was in Hull 241, Merthyr Tydfil 234, Stoke Damerel 193, Salisbury 185, Neath 169, Liverpool 167, Plymouth 167, Sculcoates 152, East Stonehouse 148, Leeds 145, St. Germans 143, Wolverhampton I37. Tynemouth 129, Gravesend ing, Newcastle-under-Lyme I17, Hunslet (near Leeds) ro2. The districts which in London were most fatal were Rotherhithe 205, St. Olave 181, St. George Southwark 164, Bermondsey 161, St. Saviour 153, Newington 144, Lambeth 120. It was in Wandsworth roo.
The mortality was at the rate of 50 in 10000 on the coasts; 17 in 10000 over the inland districts. It was at the rate of 125 in 10000 in the districts including the large ports ; 47 in the districts of the secondary ports ; 15 in the other coast districts.
Of the inhabitants of low river and seaside districts, 85 in 10000 died by cholera; in London the loss was $\sigma_{2}$; in inland towns 38 ; in small towns and the country around the river sources only 12 in 10000 perished. Of the inland towns, Wolverhampton, Merthyr Tydfil, Manchester, and Leeds experienced the greater part of the mortality ; in the 35 other large inland towns the mortality was at the low rate of II in 10000.
In London the water supply had considerable influence on the mortality. The density of population and the poverty of the inhabitants were not without effect, but the effect of elevation of the soil transcended all other influences. On an average the mortality by cholera was in the several London districts at elevations average the mortality by cholera was in the several London districts at elevations
of less than 20 feet above Trinity high-water mark, ro2 in 10000; in the districts of less than 20 feet above Trinity high-water mark, 102 in 10000 ; in the districts
at an elevation of $20-40$ feet, 65 in 10000; of $40-60$ feet, 34 ; of $60-80$ feet, 27 ; of $80-100$ feet, 22 ; of 100 feet, 17 ; of 350 feet, 8 in 10000 inhabitants.

The present epidemic has appeared first, like all that have preceded it, in the seaports. The first well-defined cases in London were registered in August, and the epidemic may be dated from August 2oth; up to October rst the registered deaths, including some by English cholera, have amounted to 133. The origin of the last epidemic may be dated from October ist, 1848 ; and that of $1831-32$ also began in the month of October 183 r . The present epidemic has attacked us earlier in the year, but it has not yet in the aggregate been more fatal in London than it was during the same number of weeks in 1848.
In Newcastle-upon-Tyne, with a population of 89156 in 185 r , the mortality from cholera has raised the deaths by all causes from $\sigma_{3} 8$ to 2085 ; in Gateshead from 374 to 77 I in three months.* The epidemic poison was no sooner introduced into the region than it, as it were, exploded, and destroyed nearly 2000 lives
In neither of the previous epidemics was any such sudden destruction of life observed. Is the present epidemic-so quickly following the epidemic of $1848-9$ of a different and more fatal character? or are there local circumstances, independently of the nature of the epidemic, that account for the desolation that now surrounds Newcastle-upon-Tyne? These important questions can, it is evident,

* Newcastle-upon-Tyne. Deaths from all causes registered in each of the 4 quarters of the

| Years. | Quarters ending the last day of |  |  |  | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | March. | June. | September. | December. |  |
| 1848 | 820 | 575 | 475 | 420 |  |
| 1849 | 595 | 552 | 751 | 595 | 2290 2493 |
| 1850 | 463 | 531 | 525 | 571 | 2090 |
| 1851 1852 | 619 746 | 548 | 641 | 535 | 2343 |
| 1852 | 746 | 616 | 638 | 725 | (T) 2725 |
| 1853 | 693 | 592 | 2085 | - | (Three Quarters.) $3370$ |

only be definitively answered by careful inquiry into all the circumstances ; but enough has been elicited to justify us in refusing to admit at present that the epidemic is in its nature more destructive than its predecessors; while it yields an awful sanction to the hygienic law, which prohibits the use of impure water.

The Superintendent Registrars of Newcastle and Gateshead, in reply to inquiries which the Registrar General has made, state, and have forwarded documents showing, that from the 5 th of July last the town, which had been supplied before with salubrious water, was supplied largely "from the impure source of the Tyne, in the vicinity of the sewerage of the town."*

The fact cannot be questioned that the water with which Newcastle-upon-Tyne was supplied in $1848-9$ was comparatively pure; and that in 1853, when the calamitous loss of life was recorded on the registers, the city was supplied with water containing a strong solution of the contents of the sewers. The same effect was the result of the same cause in Hull in 1849. And other examples may be cited in which the converse happened, as at Exeter, where the inhabitants, after having suffered severely from cholera in 1832, obtained pure water, and escaped its ravages in 1848-9.

In the East and in Europe observation has shown that the cholera poison, be it what it may, is conveyed by water as well as air ; hence the following precaution was cited in the Cholera Report:
"The precautions to take against cholera, in regard to water, are well stated by "Dr. Snow; and they are of so simple a nature that, considering all the facts, no " person can prudently neglect them.
"Water into which sewers flow, or which is navigated by persons living in " boats, or which is in any other way contaminated by the contents of drains or "cesspools, should be entirely disused."

No person, to test the value of such a rule, would ever have proposed that a large town which was supplied with good water, and escaped with no considerable loss in a previous epidemic, should on the eve of another epidemic do all that is here forbidden. What no sceptical philosopher would have dared to propose as an experiment, what no haughty conqueror ever condemned the inhabitants of a subjugated city to endure,--this fine English town on the Tyne-the centre of the coal trade-of intelligence of every kind-and of engineering knowledge-has done and suffered. All the excreta, which are thrown into the streets or waterclosets, are washed down the acclivities of the streets into the river ; the fermenting mass is driven up and down by the tides, and has thence since July been pumped by the engine at Elswick all over the town through the water pipes for domestic uses: it has been used for ablution, it has been washed over the floors, it has been drunk as a beverage by many of the children and the wives, as well as large numbers of the higher and middle as well as the working men of the town. This sad fact in the history of Newcastle will be remembered when the loss of 1500 lives, by which it was followed, is forgotten.
No water was drawn from the Tyne after September 15 th, the cholera then raged with less intensity, and the epidemic speedily subsided.
The intensity of the epidemic at Neweastle-upon-Tyne is, under the circumstances, no decisive proof that in its essential form cholera is now more fatal than it was before ; but it is unquestionably a Warning to those towns which derive their water from polluted tidal rivers to abandon such sources, and to accelerate their works for supplying the population with pure water before June next, otherwise the death registers may, it is to be feared, be filled with the names of innumerable victims of a practice, which is as degrading as it is destructive to the English nation.

[^6]MARRIAGES Registered in the Quarters ending June 30th, 1849-53; BIRTHS and DEATHS Registered in the Quarters ending September 30th, $\mathbf{1} \dot{\$}_{49-53}$. in the Divisions, Counties, and Districts of England.


[^7]

6．West Midland Division．
22 Gloucestershire
23 Herefordshire
24 Shropshire
25 Staffordshire．
26 Worcestershire
27 Warwickshire

7．North Midland Division

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2 8 \text { Leicestershire}
29 Rutlandshire .
30 Lincolnshire
3I Nottinghamshire.
32 Derbyshire
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8．North Western Division．
33 Cheshire
34 Lancashire

9．York Division．
35 West Riding．
$3^{6}$ East Riding（with York）
37 North Riding
10．Northern Division． 38 Durham ．
39 Northumberland
40 Cumberland ． 40 Cumberland
I Westmorland．
11．Welsh Division．
42 Monmouthshire
43 South Wales ．
44 North Wales．

395533 96515 246313 528867 230387 408215
 21227 $\begin{array}{r}221227 \\ 23151 \\ \hline\end{array}$ 23151
356226 356226 270731 239791

365917 365917
1698609

1176514
221356 221376 186226

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|  | $\begin{gathered} \text { Nat No } \\ \text { Nat } \\ \hline \end{gathered}$ | Mỡö | ${ }^{2}$ | CNOWN |  |
|  | Nichoum |  |  | 以－ |  |
| $\begin{array}{r} \infty \text { wir } \\ \text { No } \\ + \pm .8 \\ \hline \end{array}$ | $\begin{array}{r} \text { \# No } \\ \text { चo } \\ \hline \end{array}$ | $\begin{array}{r} \text { way } \\ \text {-ng } \\ \hline \end{array}$ | $\begin{aligned} & \text { and } \\ & \text { iom } \\ & \hline \end{aligned}$ | ¢0．0．0 |  |
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| $\begin{array}{r} \text { Nug } \\ \text { Nat } \\ \text { No } \\ \hline \end{array}$ |  |  | SuN | F등NNNNNㅇNㅇN |  |
| $\begin{gathered} \text { ncon } \\ 0 \\ 0 \\ 0 \\ 0 \end{gathered}$ |  |  | $\begin{aligned} & \text { NN } \\ & \text { No } \\ & \text { EO } \\ & \hline \end{aligned}$ |  |  |
|  |  |  | N్N N |  | $\sim_{0}^{\sim} \sim_{\omega}^{\omega} \omega_{\omega}^{\omega}$ |
|  |  | $\begin{aligned} & \bullet \infty \\ & \underset{\sim}{\infty}+\infty \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { onn } \\ & \text { ocic } \\ & +\infty \\ & +\infty \end{aligned}$ |  |  |
| $\begin{aligned} & \sim_{\infty}^{\infty} \infty_{\infty}^{\infty} \\ & +\infty \\ & +\infty \\ & +\infty \end{aligned}$ | $\stackrel{N}{\omega} \stackrel{\infty}{\omega}$ |  | 岂 N |  |  |

On the Meteorology of England and Scotland, during the Quarter ending September 30 th, 1853. By James Glaisher, Esq., F.R.S., Sec. of the British Meteorological Society.
The daily temperatures have been below their averages throughout the quarter, with few and trifling exceptions. The month of July was wet; the fall of rain exceeded the double of the average fall for this month. The sky was cloudy. The first half of August was ine and dry, and was the only fine weather in the quarter. From the midale of August to the end of epopty, the air damp, with a thick and hazy atmosphere. The motion of the air was less than its average. During parts of the month of September different places in England and Seotland were visited by numerous swarms of a black fly (Aphis Fabœ); their appearance in a locality was sudden, and they continued till a brisk wind arose and carried them suddenly away. The numbers of these insects was extraordinary, and they were very annoying by settling in great numbers upon the face and hands.
The mean temperature of the air at Greenwich for the quarter ending August, constituting the 3 summer months, was $59^{\circ} 5$, being $0^{\circ} \cdot 4$ below the average of 80 years.

| $\begin{gathered} 1853 . \\ \text { Months. } \end{gathered}$ | Temperature of |  |  |  |  |  |  |  |  |  | Elastic Forceof Yavour. of Vapour. |  | Weight of <br> Vapour in a of Air. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Air. |  |  | Evaporation. |  | Dew Point. |  | Daily Range. |  | $\begin{gathered} \text { Water } \\ \text { Tither } \\ \text { Thames. } \end{gathered}$ |  |  |  |  |
|  | Mean. | $\|$Diff. <br> from <br> rave- <br> raae <br> so <br> years. <br> y. | Diff. from ave- rage of 12 12 years. | Mean. | $\left\lvert\, \begin{gathered} \text { Diff. } \\ \text { froni } \\ \text { rave } \\ \text { rave of } \\ \text { years. } \\ \text { ye } \end{gathered}\right.$ | Mean. | $\left\lvert\, \begin{gathered} \text { Diff. } \\ \text { from } \\ \text { rave- } \\ \text { raze of } \\ \text { rears. } \\ \text { se } \end{gathered}\right.$ | Mean. | $\left\lvert\, \begin{gathered} \text { Diff. } \\ \text { from } \\ \text { are- } \\ \text { raye of } \\ \text { sears. } \\ \text { se } \end{gathered}\right.$ |  | Mean. |  | Mean. |  |
| $\begin{aligned} & \text { July. } \\ & \text { Aus. } \\ & \text { Supt.: } \end{aligned}$ | $\begin{aligned} & 6 \cdot 3 \\ & 66 \cdot 3 \\ & 60 \cdot 0 \\ & 55 \cdot 3 \end{aligned}$ | $\begin{array}{r} 0 \\ -1.0 \\ -0.5 \\ -1: 0 \end{array}$ | $\begin{array}{r} 0 \\ -1: 6 \\ -1: 2 \\ -1: 7 \end{array}$ |  | ( | $\begin{aligned} & 0 \cdot 2 \\ & 52 \cdot 2 \\ & 525 \\ & 50 \cdot 2 \end{aligned}$ | $\begin{aligned} & 0 \\ & \begin{array}{c} 2 \cdot 3 \\ z_{2}^{2 \cdot 1} \\ -1 \cdot 2 \end{array} \end{aligned}$ | $\begin{aligned} & 0 \cdot 1 \\ & 1711 \\ & 19.1 \\ & 18 \cdot 0 \end{aligned}$ | $\begin{gathered} 0 \\ -1 \cdot 3 \\ +1 \cdot 2 \\ +0.7 \end{gathered}$ |  | $\begin{aligned} & \text { in } \\ & -46 \\ & -476 \\ & -4750 \\ & \hline \end{aligned}$ | $\begin{gathered} \text { in } \\ =0.037 \\ =.034 \\ -.019 \end{gathered}$ | $\begin{aligned} & \mathrm{gr} \mathrm{f} \\ & 4.6 \\ & 4.6 \\ & 4.3 \end{aligned}$ | $\begin{gathered} \mathrm{gr} \\ =0.4 \\ 0.0 \\ -0.3 \end{gathered}$ |
| Mean | 58\%5 | -0.8 | $-1 \%$ | 54.8 | -16 | 51.6 | -1.9 | 18.1 | +0.2 | 61.8 | -395 | -030 | 4.5 | -0.3 |
| $\begin{gathered} 1853 . \\ \text { MONTHS. } \end{gathered}$ | $\begin{gathered} \text { Degree } \\ \text { Humidity. } \end{gathered}$ |  |  |  | $\begin{aligned} & \text { Weight of a } \\ & \text { Culhil Fon } \end{aligned}$$\begin{aligned} & \text { Cubli Foot } \\ & \text { of Air. } \end{aligned}$of Air. |  | Rain. |  | $\begin{aligned} & \text { Daily } \\ & \text { Hori- } \\ & \text { zontal } \\ & \text { move- } \\ & \text { ment } \\ & \text { of the } \\ & \text { Air. } \end{aligned}$ | Reading of Thermometer on Grass. |  |  |  |  |
|  |  |  | Number of Nights it was |  |  | $\begin{gathered} \text { Low- } \\ \text { est } \\ \text { Read- } \\ \text { ing } \\ \text { at } \\ \text { Night. } \end{gathered}$ |  |  | $\begin{gathered} \text { High } \\ \text { est } \\ \text { Read } \\ \text { ing } \\ \text { Night. } \end{gathered}$ |  |  |  |  |  |
|  | Mean. | Diff.fromave-rage of12years. |  |  |  | Mean. |  | Mean. |  | $\begin{array}{\|c\|} \text { Diff. } \\ \text { frome } \\ \text { rave } \\ \text { rage of } \\ 12, \\ \text { years. } \\ \hline \end{array}$ | Amount. | $\left\|\begin{array}{c} \text { Diff } \\ \text { from } \\ \text { rave } \\ \text { rave of } \\ \text { 38 } \\ \text { sears. } \end{array}\right\|$ |  |  |
|  |  |  | $\begin{gathered} \text { At or } \\ \text { below } \\ \text { 400 } \end{gathered}$ | $\left.\begin{array}{\|c\|} \text { Be- } \\ \text { tween } \\ \text { 400 } \\ \text { and } 500 \end{array} \right\rvert\,$ |  |  |  |  |  |  |  |  |  | ${ }_{\text {Abore }}$ |
| July. Aug. | $\begin{aligned} & 786 \\ & .777 \\ & -875 \end{aligned}$ | $\begin{aligned} & -0.096 \\ & =.110 \\ & -.056 \\ & \hline \end{aligned}$ | in. in. 29.78 ${ }_{29}^{29833}$ $\qquad$ | $\begin{gathered} \text { in. } \\ \hline .0 .077 \\ +0.008 \\ +0.001 \end{gathered}$ | $\begin{aligned} & \mathrm{gr} \\ & \hline \end{aligned}$ | $\begin{array}{r} \mathrm{gr} \\ +0 \\ +2 \\ +2 \\ \hline \end{array}$ | $\begin{aligned} & \text { in. } \\ & 6.0 \\ & 2.2 \\ & 2 \cdot 4 \end{aligned}$ | $\begin{gathered} \text { in. } \\ +\begin{array}{c} +8.4 \\ -0.3 \\ -0.1 \end{array} \end{gathered}$ | $\begin{gathered} \text { Miles. } \\ .116 . \\ 64 \\ 89 \end{gathered}$ | $\begin{array}{r} 0 \\ 8 \\ 13 \\ \hline \end{array}$ | $\begin{array}{r} 17 \\ 17 \\ 15 \\ \hline \end{array}$ | $\begin{gathered} 14 \\ 6 \end{gathered}$ | $\begin{aligned} & 42 \cdot 0 \\ & \begin{array}{c} 0.0 \\ 36 \cdot 2 \\ 3 i^{2} \end{array} \end{aligned}$ | $\begin{gathered} 6 \cdot 2 \\ 50 \cdot 2 \\ 54 \div 2 \\ 542 \end{gathered}$ |
| Mean | ${ }^{796}$ | -087 | 29785 | -019 | 527 | +1 | $\begin{aligned} & \text { Sum } \\ & 10 \cdot 6 \end{aligned}$ | $\begin{gathered} \text { Sum } \\ +3^{\prime} 0 \end{gathered}$ | 90 | $\mathrm{Sum}_{21}$ | ${ }_{\text {Sum }}$ | $\mathrm{Sum}_{22}$ | ${ }^{31} \cdot 0$ | $60 \cdot 2$ |

Nore. In reading this table it will be borne in mind that ne sige
( + ) plus signifies above the average.
Thunderstorms occurred, or thunder was heard and lightning seen, on the ist July at Hartwell Thunderstorms occurred, or thunder was heard and lightning seen, on the ist July at Hartwell House, Linslade, Cardington, Bedford, Holkham, and Dunino ; on the 6 th at Ryde; on the $\gamma^{\text {th }}$ at
Jersey, Guernsey, Exeter, Newport, Worthing, Clifton, St. John's Wood, Rose Hill, Bicester Oersey, Guernsey, Ext, Stone, Hartwell House, Hartwell Rectory, Aylesbury, and Linslade ; on the 8th at Helston Greenwich, Stone, and Hartwell House ; on the 9th at Jersey, Helston, Linslade, Norwich, Hawarden, Warrington, Liverpool, Manchester, and Stonyhurst ; on the 13 th at Jersey, Oxford, Stone, Hartwell House, Hartwell Rectory, Hawarden, and Liverpool; on the 16th at Gainsborough; on the ifth at Rose Hill, Bicester, Oxford, Stone, Royston, and Grantham; on the 18th at Hartwell House, Hartwell Rectory, Aylesbury, Royston, Cardington, North Shields, and Dunino; on the 19th at
Royston ; on the 22d at York; on the 26 th at Bedford ; on the 27 th at Guernsey and Newport Royston; on the 22 d at York; on the 26 th at Bedford; on the 27 th at Guernsey and Newport ; the 25 th at Exeter; and on the 26th at Helston, Midhurst, Clifton, Durham, and Dunino. On the ist September at Rose Hill, Bicester, Oxford, Hartwell House, Aylesbury, Cardington, Hawarden, Gainsborough, Warrington, and Manchester ; on the 10th at Granthain, Gainsborough, and StonyLurst ; and on the 24th at Rose Hill, Bicester, and Oxford
Thunder was heard, but ligltining was not seen, on the ist July at Exeter, Bicester, Stone, HartRectory Helston and Holkham ; on the gth at Helston, Stone, Hartwell Rectory, Cardington, and Holkham ; on the 1oth at Ryde ; on the 12th at North Shields; on the 13th at Guernsey, Rose Hill, Bicester, Cardington, and Warringtoa ; on the 14th at Grantham and Wakefield; on the 15 th at Greenwich; on the 16 th at Granthan ; on the 1;th at Hartwell House and Hartwell Rectory ; on the

18th at Rose Hill, Bicester, Stone, Grantham, Gainsborough, and Dunino; on the 19th at Hartwell 18th at Rose Hill, Bicester, Stone, Grantham, Gainsborough, and Dunino; on the 19th at Hartwell
House and Cardington ; on the 26th and 27th at Guernsey; and on the 28th at Cardington. On House and Cardington; on the 26th and at Bicester; on the 23 d at Wakefield ; on the 25 th at Grantham ; on the 26 th at Midhurst, Royston, Stonyhurst, and North Shields; on the 27th at Wakefield; and on the 30th at Warrington. On the ist September at Stone, Hartwell Rectory, and Grantham ; on the roth at Cardington, Grantham, and Wakefield; on the 24th at Lewisham, Greenwich, Stone, and Hartwell Rectory; on the 25 th at Helston and Aylesbury; and on the 30 th at Stone.

Lightning was seen, but thunder was not heard, on the 7 th July at Helston, Oxford, and Cardington; on the 8th at Rose Hill, Bicester, Oxford, and Cardington ; on the 15th at Stone ; on the 18th
at Newcastle; and on the 27 th at Greenwich, Aylesbury, and Linslade. On the 10th August at Stone and Hartwell Rectory; on the 25th at Helston ; on the 26th at Helston and Newcastle ; on the 27 th at Grantham; and on the 30th at Hawarden, Warrington, Liverpool, and Wakefield. On the Ist September at Midhurst, Greenwich, Stone, Hartwell Rectory, Aylesbury, Royston, Cardington, Bedford, Grantham, Wakefield, Stonyhurst, and York ; on the 15th at Truro; on the 24th at Hartwell Rectory; and on the 25 th at North Shields.
and Hartwell Rectory; and on the 3oth at Manchester On the 17 th at Stone, Hartwell House, Bedford; on the 23d at Stonyhurst; on the 24th at Rose Hill, Oxford, Hartwell Rectory, Stonyhurst, and North Shields ; on the 25th at Ryde and Liverpool ; on the 26 th at Liverpool; and on the 30 th at Stonyhurst.
Remarkable falls of rain on the 9th July at Helston was $\mathbf{1} .5$ in., at Norwich $\mathbf{1} \cdot 6$ in., at Hawarden
3.6 in., at Warrington 1.4 in., at Liverpool 2.0 in., at Stonyhurst 1.6 in. 3.6 in ., at Warrington 1.4 in ., at Liverpool $2 \cdot 0$ in., at Stonyhurst 1.6 in ., and at North Shields
2.1 in., on the 10 th at Falmouth $1 \cdot 2$ in. and at Truro $1 \cdot 7$ in.; on the 13 th at Bedford $1 \cdot 7$ in. and
 at Lewisham $2 \cdot 8 \mathrm{in}$. in 17 hours, at Greenwich $2 \cdot 6$ in., at St. John's Wood $\mathrm{I} \cdot 3 \mathrm{in}$., at Rose Hill $\mathbf{1} \cdot 7$ in. in a few hours, at Bicester $1 \cdot 5$ in., at Stone 1.8 in., at Hartwell Rectory $2 \cdot 0$ in., at Aylesbury $2 \cdot 3$ in. in 8 hours, at Linslade $1 \cdot 8 \mathrm{in}$. in 12 hours, at Royston $1 \cdot 5$ in., at Grantham $1 \cdot 2$ in., at Hawarden I 3 in., and at North Shields $1 \cdot 0$ in. ; on the 15 th at Stonyhurst $1 \cdot 4$ in., and at Arbroath $1 \cdot 0$ in. ; and on the 28 th at Lewisham $1 \cdot 0$ in., at Greenwich $1 \cdot \mathrm{r}$ in., of which $0 \cdot 25$ fell in 20 minutes, and at St. in in to hours, at Hawarden $1 \cdot 3$ in., and at Alderley Edre $1 \cdot 2$ in.; on the 20 oth at Greenwich 0.25 in. fell in 5 minutes, and on the 22 d 0.72 in . fell in 10 hours; on the 23 d at Worthing $1 \cdot 2$ in.; on the $25^{\text {th }}$ at North Shields $1 \cdot 1$ in.; on the 26 th at Stone $1 \cdot 1$ in., and at Hartwell Rectory $1 \cdot 1 \mathrm{in}$.; and on the 27 th at Clifton $1 \cdot 4 \mathrm{in}$. On the 1 ist September at Guernsey $1 \cdot 0$ in. in 9 hours, and at North Shields $1 \cdot \circ$ in. ; on the roth at Gainsborough $1 \cdot \circ$ in. ; on the 12 th at Wakefield $1 \cdot 1$ in. and at North Shields $1 \cdot 6 \mathrm{in}$.; on the $1^{\text {th }}$ th at Clifton $\mathrm{I} \cdot \circ$ in.; on the $25^{\text {th }}$ at Stonyhurst $1 \cdot \circ \mathrm{in}$. ; and on the 27 th at Holkham was 0.8 in . in 6 hours.
On the was prevalent on the 20th July at Bicester, Stone, Hartwell House, and Hartwell Rectory. On the 5 th August at Stone and Harwell House ; on the 6th at Hartwell House ; on the roth at Rectory ; on the 19th at St. John's Wood; on the 23d at Midhurst and 18th at Stone and Hartwell at Lewisham, Greenwich, St. John's Wood, Stone, Hartwell House, and Hartwell Rectory. On the 5th September at Manchester ; on the 6th at Clifton ; on the 7 th at Gainsborough and Manchester ; on the 8th at Clifton; on the 9 th at St. John's Wood and Wakefield; on the inth at Lewisham, Greenwich, St. John's Wood, Bicester, Stone, Hartwell Rectory, Grantham, Gainsborough, and
North Shields; on the 14th at Clifton, Lewisham, Bicester, Stone, Hartwell House Hartwell Rectory, Wakefield, and North Shields; on the 16th at Midhurst, Lewisham, Greenwich, Stone Hartwell Rectory, Grantham, Gainsborough, and North Shields; on the 17 th at Clifton, Stone, Hartwell House, Hartwell Rectory, Grantham, Gainsborough, and North Shields; on the 18th at Stone, Hartwell House, Hartwell Rectory, and Grantham ; on the igth at Clifton; on the 2oth at Midhurst, Bicester, and Linslade ; on the 2 Ist at Bicester, Stone, Hartwell House, and Hartwell Rectory; on the 24th at Bicester; on the $2{ }^{2}$ th at Midhurst; and on the 29th at Lewisham and Greenwich.

Aurore were seen on 12 th July, 20th, 26 th, and 3 oth August at Hawarden; and on the 3 rst at Arbroath. On the ist September at Greenwich; on the 2d at Exeter, Clifton, Greenwich, Hawarden, Warrington, Liverpool, Manchester, York, Durham, and Dunino; on the 3d at Clifton; on the 8th at Arbroath; and on the 28th at Durham.

Solar Halos were seen on 20 days during the quarter.
Mock Sun was seen on the 29 th September, about 8 h .45 m . A.m. at Stone and Hartwell Rectory.
Lunar Rainbow was seen on the 25 th Ser
Lunar Rainbow was seen on the 25 th September, at 9 h .30 m . P.M. at Durham,
Stone, Hartwell Rectory, and Cardington ; on the ath at Holkham; on the 10th at ; on the 8th at the 11th at Hawarden and Gainsborough; on the 14th at Rose Hill; on the 18th at Warrington; and on the 26 th at Dunino.
The wheat crop was small in breadth, and rather light; it was generally of good quality; a good part was spring sown. Oats not very good, and a good deal carried unripe. Potatoes diseased
everywhere. Harvesting operations late.

Meteorological Table, Quarter ending September 30th, 1853.







Quarterly Meteorological Table for different Parallels of Latitude,



The Observations have been reduced to Mean values, and the Hygrometrical results have been deduced - from Glaisher's Tables.


Truro:-July, The reading of the barometer is too high, it should be about $29 \cdot 89$ in. Exeter:-The readings of the barometer have been reduced by one tenth of an inch for index error. Ventnor:-August,


|  |  |
| :---: | :---: |
|  |  |
|  <br>  | $\begin{array}{\|l\|l\|} \hline \text { Air and Water } & \text { Z } \\ \text { on Mean Read } \\ \text { ing of the Ba- } \\ \text { rometer. } \\ \hline \end{array}$ |
|  | Water or Elastio Force of Vapour. |
|  | Range of Barometer Month. |
|  <br>  | From Dry mometer Bulb Ther |
|  <br>  | From Selfregistering Therm |
|  <br>  | Adopted. |
|  <br>  | Highest. |
|  <br>  | Lowest. |
|  <br>  | Range in the Month. |
|  <br>  | Mean of all the Highest. |
|  <br>  | Mean of all the Lowest. |
|  <br>  | Mean Daily Range. |
|  <br>  | Evaporation. ${ }^{\text {a }}$ |
|  <br>  | Dew Point. |
|  | Estimated Strength. |
|  x $x=4 x$ x <br>  <br>  | Direction. |
|  | $\begin{aligned} & \text { Mean Amount of } \\ & \text { Cloud. } \end{aligned}$ |
|  | it fell. |
|  | $\begin{aligned} & \text { Amount col- } \\ & \text { lected. } \end{aligned}$ |
|  | $\begin{aligned} & \text { Mean Weight of } \\ & \text { Yapour in in } \\ & \text { foot of Air. } \end{aligned}$ |
|  | Mean Weight required to add aturnte saturate ${ }^{\text {a }}$ font of Air. |
|  | Mean Degree Humidity. |
|  | Mean whole Amount of water in a vertical of water in a vertical enlumn of Atmnsphere |
| E9\% | Mean Weight of a euhic toot of Air. |

[^8] the results. Roy
the mean results.


Holkham.-July; the reading of the barometer is too high,-it should be about $29^{\circ} 840 \mathrm{in}$. Gainsborough.-September; the reading of the barometer seems to be a tenth of an inch too small. Hightield House. -August; the reading of the barometer is too high, it should be about $299^{\circ} 800 \mathrm{in}$. Alderley Edge. -25 th September, 7 h .30 m . A.M.; the reading of the barometer $29^{\circ} 884$ in. has been altered to $28^{\circ} 884 \mathrm{in}$.
Note.-Second rain gauges are placed : At Jersey at the height of 6 feet; the amount collected was $7^{\circ} 7$ inches. At Newport, 3 feet; the amount was $7^{\circ} 5$ inches. At Clifton, 50 feet; the amount was $11{ }^{\circ} 4$ inches. At Oxford, 22 feet; the amount was $7 \cdot 5$ inches. At Hartwell Rectory, 4 feet; the amount was $9 \cdot 1$ inches. At Cardington, 36 feet
4 feet ; the amount was $8^{\circ} 3$ inches. At Nottingham, 25 feet; the amount was $8 \cdot 8$ inches. And at Warrington, $34 \frac{1}{2}$ feet; the amount was $9^{\circ} 4$ inches.

## THE MARRIACES, BIRTHS, AND DEATHS

IN ENGLAND.

This Return comprises the Births and Deaths registered by 2191 Registrars in all the districts of England during the autumn quarter ending December 31st, 1853; and the Marriages in 12039 churches or chapels, about 3454 registered places of worship unconnected with the Established Church, and ${ }_{2}{ }_{5}$ Superintendent Registrars' offices, in the quarter that ended September 30th, 1853.

The Return of Marriages is not complete; but the defects are inconsiderable, and approximative numbers have been supplied from the records of previous years.

The murriages in the quarter that ended on September 30 th are not only above the average, but the proportion to the population exceeds any of the proportions previously recorded. The births in the quarter that ended on December 3 Ist are also above the average. The mortality, particularly in towns and cities, is high, and exceeds the mortality in every autumn quarter since 1843 , except in 1846,1847 , when the potato disease commenced, and diarrhoa and influenza became epidemic.

The returns, therefore, present a mixed result: the marriages indicate that the circumstances of the great body of the people were considered by them prosperous. But the public health has suffered, and is still over the coming year threatened by Asiatic cholera. All the measures of improvement should therefore be accelerated.

It will be a happy circumstance if the germs of diseases which first affected the potato and the vine, and other plants, in the year of high temperature 1846, and have led to the loss of so much food, should be partially destroyed by the severe cold that set in at the close of the year.
Marriages, Births, and Deaths, returned in the Years 1841-53 and in the Quarters of those Years.


[^9]79572 persons were married during the quarter ending September 30 th, 1853, , a number considerably exceeding that of any corresponding quarter since the Registration Act came into operation: in 1837 , and 2990 more than were married in the same period of 1852 , when the large number of
$765_{5} 82$ persons were married. 76582 persons were married.
The increase was spread over each of the eleven divisions of England and Wales, and the only counties in which a decrease is observable are Hampshire, Berkshire, Northamptonshice, Rutlandshire, donshire, Bedfordshire, and Westmorland. Marriages increased in most of the important seats of manufactures and commerce, but an augmented number is more particularly apparent in the mining districts of Cornwall and South Wales, of Staffordshire and Durham. In the September quarter of the last five years, the number of marriages was, in Truro, $76,90,80,91$, and 134; in Redruth, 101, $95,127,112$, and 143 ; in Wolverhampton, 188, 256, 287, 289, and 313 ; Walsall, $57,87,97$,
88, and 107; West Bromwich, $157,191,158,179$, and 225 ; Dudley, 265, 313, 294, 326, and 88, and 107; West Bromwich, 157, 191, 158, 179, and 225;
4.30 ; Stockton, 104, 115, 107, 126, and 132; Sunderland, 161, 193, 191, 197, and 240; South 430 ; Stockton, 104, 115, 107, 126, and i32; Sunderland, 161, 193, 191, 197, and 240; South
Shields, $72,74,104,90$, and 109; and in the districts of Cardiff, Merthyr Tydfil, Bridgend, and Neath, $360,437,424,501$, and 580 marriages were celebrated in the September quarter of the past five years. In Preston, the number of marriages (252) is slightly in excess of the number ( 244 ) recorded in the third quarter of the -previous year, although fewer than in the corresponding periods of 1850 and 1851 , when the numbers reached 281 and 277 respectively. On an average of the corresponding quarters of ro years ( $1843-1852$ ), the number of marriages was at the annual rate of 788 to every 100
100000 persons living.

## BIRTHS

144444 births were registered in the last 3 months of the year. This number, though slightly above the average, shows a considerable diminution on the numbers registered in the same period of the 2 preceding years ( 148912 and 152066 respectively). This decrease is observable in nearly
the whole of the country; the only counties which exhibit an increase in the number of births the whole of the country; the only counties which exhibit an increase in the number of birlys
being the Metropolitan and Extra-metropolitan parts of Surrey, Huntingdon, Staffordshire, and South Wales.
England:*-Annual Rate per Cent. of Marriage, Birti, and Deati, during the Years

| $\left.\begin{array}{c} \text { Estimated Popula- } \\ \text { tion of Entiand } \\ \text { in thousands in } \\ \text { ine middie of } \\ \text { thach Year } \end{array}\right\}$ | 16318 | 16516 | 16716 | 16919 | 17124 | 17331 | 17541 | 17754 | 17977 | 18195 | - | 18195 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Years | 1843 | 1844 | 1845 | 1846 | 1847 | 1848 | 1849 | 1850 | 1851 | 1852 | $\mathrm{c}_{\text {Mean, }}^{\text {M }}$ 183-52., | 1853 |
| Marriages Births <br> Deaths | $\begin{array}{r} 7.759 \\ 3.232 \\ 2.123 \end{array}$ | $\begin{aligned} & .801 \\ & 3.274 \\ & 2.161 \end{aligned}$ | $\begin{array}{r} \cdot 860 \\ \begin{array}{r} -8251 \\ 2.059 \end{array} \\ 2.090 \end{array}$ | $\begin{array}{r} .861 \\ 3.650 \\ 2.307 \end{array}$ | $\begin{aligned} & \hline .793 \\ & 3.153 \\ & 2 \cdot 472 \end{aligned}$ | $\begin{array}{\|c} 7.798 \\ 3.249 \\ 2.307 \\ \hline \end{array}$ | $\begin{array}{r} 809 \\ 3-296 \\ 2 \cdot 513 \end{array}$ | $\begin{array}{r} 860 \\ \left.\begin{array}{l} 8.343 \\ 2.078 \\ 2.078 \end{array} \right\rvert\, \end{array}$ | $\begin{array}{r} 8.88 \\ \begin{array}{r} 8.426 \\ 3.198 \\ 2.198 \end{array} \end{array}$ | 881 <br> $\begin{array}{l}\text { 3472 } \\ 2.269\end{array}$ |  | ( ${ }_{2}^{3 \cdot 406}$ |
|  |  |  |  |  |  | MARR | AGE |  |  |  |  |  |
| Quarters ending the last day of <br> March June September December | .632 <br> 767 <br> 701 <br> .934 | .644 <br> .834 <br> 760 <br> .955 | 721 849 830 1.038 | 757 .882 .882 .883 | .655 <br> .886 <br> 85 <br> .940 <br> 94 | .661 <br> .865 <br> .755 <br> 961 <br> 9 |  <br> 661 <br> 882 <br> 86 <br> .986 <br> 88 | $\begin{array}{r}780 \\ .888 \\ 808 \\ 1.010 \\ \hline\end{array}$ |  <br> 742 <br> 864 <br> 888 <br> 1.001 <br> 8 | 730 .883 .834 1.038 | -691 <br> .842 <br> .788 <br> .985 | $\begin{array}{r}.776 \\ .889 \\ .867 \\ \hline\end{array}$ |
|  | BIRTHS. |  |  |  |  |  |  |  |  |  |  |  |
| March September December | $\begin{aligned} & 3.420 \\ & 3.234 \\ & 3.114 \\ & 3.174 \end{aligned}$ | ( $\begin{aligned} & \text { 3.507 } \\ & 3 \\ & 3.34 \\ & 3.123 \\ & 3.115\end{aligned}$ | ( $\begin{aligned} & 3.491 \\ & 3.291 \\ & 3.140 \\ & 3.103\end{aligned}$ | 3.4.4883.551 <br> 3.251 <br> 3.256$\|$ | 3.488 <br> $\begin{array}{l}\text { 3.265 } \\ 2.945 \\ 2.938\end{array}$ | 3.252 <br> 3.474 <br> 3.211 <br> 3.038 | 3.575 3.523 3.056 3.056 3.053 | 3.321 $\left.\begin{aligned} & 3.530 \\ & 3.281 \\ & 3.253\end{aligned} \right\rvert\,$ | 3.567 <br> 3.557 <br> 3.321 <br> 3.274 | 3.585 <br> 3.516 <br> 3.294 <br> 3.343 | (3.470 <br> 3 <br> 3.428 <br> 3.174 <br> 3.155 | 3.581 <br> 3.507 <br> 3.515 <br> 3.176 |
|  | DEATHS. |  |  |  |  |  |  |  |  |  |  |  |
| March $\substack{\text { June } \\ \text { September } \\ \text { December }}$ | $\begin{aligned} & 2 \cdot 373 \\ & 2.149 \\ & 1.866 \\ & 2.119 \end{aligned}$ | 2.467 <br> 2.077 <br> 1.973 <br> 2.175 | ($2 \cdot 554$ <br> $2 \cdot 54$ <br> 1.1776 <br> $1-908$ | 2.157 2.154 2.382 2.545 2.54 | $\begin{aligned} & 2.850 \\ & 2.506 \\ & 2.506 \\ & 2.389 \end{aligned}$ | $\begin{aligned} & 2.794 .794 \\ & 2.313 \\ & 2.005 \\ & 2.108 \end{aligned}$ | $\begin{aligned} & 2 \cdot 4646 \\ & \hline 2.341 \\ & 3.057 \\ & 2.199 \end{aligned}$ | $\begin{aligned} & 2.261 \\ & 2.107 \\ & 1.917 \\ & 2.045 \end{aligned}$ |  | 2.364 2.327 2.190 $2 \cdot 197$ | le $\begin{aligned} & 2 \cdot 467 \\ & 2.273 \\ & 2.129 \\ & 2 \cdot 186\end{aligned}$ | (er $\begin{aligned} & \text { 2.620 } \\ & 2.383 \\ & 2.012 \\ & 2 \cdot 272\end{aligned}$ |

The number of births registered during the last quarter being 144444 , and the number of deaths 103341, there remains a balance of 41103 as the natural increase of the population during that
period. Large numbers of persons are still attracted to the Australian Colonies, as well period. Large numbers of persons are still attracted to the Australian Colonies, as well as to America and other places, although a small decrease in the emigration is perceptible on the numbers
of the corresponding quarter of 185 . From the 4 English ports which make returns, 5045 persons of the corresponding quarter of 1852 . From the 4 English ports which make returns, 50457 persons
emigrated during the last 3 months; namely, from London, 6810 ; Plymouth, 2851 ; Liverpool, emigrated during the last 3 months; namely, from London, 6810 ; Plymouth, $2851 ;$ Liverpool,
$3773^{2}$; and Southampton, 3064 . In addition, 1795 persons sailed from the ports of Glasgow and 37732 ; and Southampton, 3064 . In addition, 1795 persons sailed from the ports of Glasgow and
Greenock, and 2431 from Irish ports, giving a total of $54683^{*}$ for the United Kingdom, against 55315 during the last quarter of 1852 . It must be borne in mind, in any estimate of the increase of population, that the births and deaths refer only to England and Wales, and that of the emigrants leaving English ports a large though an unascertained number are of Irish birth.

## Prices of Provisions.

The chief articles of food have greatly risen in price since the three months ending December: 1852 ; wheat, which was then $40 s .5 d$. per quarter, has risen to $69 s$. Iod., being an increase of 73 per cent.; and at this higher price an average weekly sale of 79002 quarters took place in the towns of 40 s. 5 d . Beef and mutton rose in price; and potatoes, which were weekly when the price was Market, Southwark, in December 1852, rose to $150 \%$. in the December quarter, 1853 , being an augmentation in price equivalent to 43 per cent. The continued activity of trade and the increased rate of wages has enabled the labouring classes for the most part to cope with the dearness of pro-
visions; but, in conjunction with the severity of the weather and the exorbitant price of fuel, it has been a season of trial; which has, however, been borne with exemplary patience and fortitude by
those who were most exposed to its rigours. The
The average Prices of Consols, of Wheat, Meat, and Potatoes; also the average Quantity of
Wheat sold and imported weekly, in

| Quarters ending | AveragePrice of Consols (for Money). | Average Price of Wheat per Quarter in England and Wales. | $\dagger$ Wheat sold in the 290 Cities and Towns in England and Wales making Returns. | $\dagger$ Wheat and Wheat Flour entered for Home Consumption at Chief Ports of Great Britain. | Average Prices of |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Meat per lb. at Leadenhall and Newgate Markets (by the Carcase). |  | Potatoes (York Regents) per Ton at Waterside Market, Southwark. |
|  |  |  | Average Number of Quarters weekly. |  | Beef. | Mutton. |  |
| $\begin{array}{r} 1852 \\ \text { Mar. } 31 \end{array}$ | $\begin{gathered} £ \\ 97 \frac{1}{4} \end{gathered}$ | 40s. rod. | 95,532 | 27,540 | $\begin{aligned} & \frac{3}{4} d .-5 d . \\ & \text { Mean } 4 \frac{1}{8} d . \end{aligned}$ | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{3}{4} d . \\ & \text { Mean } 4 \frac{3}{4} d . \end{aligned}$ | 60s.- $80 s$. Mean 70 . |
| June 30 | 996 | 40s. rod. | 87,949 | 54,675 | $\begin{array}{\|l\|} 3 \frac{1}{4} d .-4 \\ \text { Mean } 4 d . \\ \text { M } d . \end{array}$ | $\begin{aligned} & 3 \frac{3}{4} d .-5 \frac{1}{4} d . \\ & \text { Mean } 4 \frac{1}{2} d . \end{aligned}$ | $\begin{aligned} & 85 s .-110 s . \\ & \text { Mean 97s.6d. } \end{aligned}$ |
| Sept. 30 | 100 | 41s. 2 d . | 78,712 | 67,912 | $\begin{aligned} & 3_{\frac{1}{4}}^{\frac{1}{d} .-5 d .} \\ & \text { Mean } 4 \frac{1}{8} d . \end{aligned}$ | $\begin{aligned} & \stackrel{4 d}{d}-_{-}-6 d . \\ & \text { Mean } \\ & \hline d . \end{aligned}$ | $\begin{gathered} \text { 80s.- } 100 s . \\ \text { Mean } 908 . \end{gathered}$ |
| $\begin{array}{r} \text { Dec. } 31 \\ 1853 \end{array}$ | $100 \frac{5}{8}$ | 40s. 5 d. | 111,224 | 72,870 | $\begin{aligned} & 3 d .-5 d \text {. } \\ & \text { Mean } 4 d . \end{aligned}$ | $\begin{aligned} & 4 \frac{1}{4} d .-6 \frac{1}{4} d . \\ & \text { Mean } 5 \frac{1}{4} d . \end{aligned}$ | $\begin{aligned} & \text { 90s.- } 120 s . \\ & \text { Mean ro5s. } \end{aligned}$ |
| Mar. 31 | $99 \frac{5}{8}$ | 45s. 7 d . | 95,115 | 63,530 | $\begin{aligned} & 3 \frac{3}{3} d .-5 \frac{1}{2} d . \\ & \text { Mean } 4 \frac{1}{2} d . \end{aligned}$ | $\begin{aligned} & 4 \frac{3}{3} d \text { - } 6 \frac{3}{d} d . \\ & \text { Mean } 5 \frac{5}{4} d . \end{aligned}$ | $\begin{aligned} & 110 s .-145 s . \\ & \text { Mean } 127 s .6 \mathrm{~d} \text {. } \end{aligned}$ |
| June 30 | $100 \frac{4}{8}$ | 44s. $6 d$. | 84,559 | 82,623 | $\begin{aligned} & 4 d .-5 \frac{3}{4} d . \\ & \text { Mean } 4 \frac{7}{8} d . \end{aligned}$ | $\begin{aligned} & 5 d .-6 \frac{3}{4} d . \\ & \text { Mean } 5 \frac{7}{8} d . \end{aligned}$ | $\begin{aligned} & \text { 1 1 } 0 s .-145 s . \\ & \text { Mean } 127 \mathrm{~s} .6 \mathrm{~d} . \end{aligned}$ |
| Sept. 30 | 97 | 51s. 1od. | 86,087 | 120,020 | $4 \frac{1}{4} d$. $-6 d$. Mean $5 \frac{1}{8} d$. | $\begin{aligned} & 5 d .-7 \frac{1}{4} d \text {. } \\ & \text { Mean } 6 \frac{1}{8} d . \end{aligned}$ | $\begin{aligned} & \text { I ros. }-125 s . \\ & \text { Meanili } 7 \mathrm{~s} .6 \mathrm{~d} . \end{aligned}$ |
| Dec. 31 | $93 \frac{6}{8}$ | 69s. Iod. | 79,002 | 91,627 | $\begin{aligned} & 4 d .-6 d . \\ & \text { Mean }{ }_{5} d . \end{aligned}$ | $\begin{aligned} & 4 \frac{1}{2} d .-7 d \text {. } \\ & \text { Mean } 5 \frac{3}{8} d . \end{aligned}$ | $\begin{aligned} & 135 s,-165 s . \\ & \text { Mean } 150 \text {. } \end{aligned}$ |

$\dagger$ Note.-The total number of quarters of wheat sold in England and Wales for the 13 weeks 13 weeks ending Sept. 30 th, $1,223,251$; for the 13 weeks ending Dec. 31 st, $1,445,306$; for the 13 weeks ending March 31 1st, $1853,1,236,493$; for the 13 weeks ending June 30 th, $1853,1,099,261$; or the 13 weeks ending Sept. 30 th, $1853,1,119,128$; and for the 14 weeks ending Dec. 3 1st, 1835 1,106,027. The total number of quarters entered for Home Consumption was respectively 358,024 ; 710,$780 ; 882,850 ; 947,310 ; 825,886 ; 1,074,095 ; 1,560,255 ;$ and $1,191,149$ ( 13 weeks).
*From a Return with which the Registrar General has been favoured by the Emigration

The fall of snow, the low temperature, and the other meteorological phenomena of the quarter, are fully and ably described by Mr. Glaisher (see pp. 58, 59).

## State of the public healith.

There died last quarter in England and Wales 103341 persons. The period was unhealthy, and a greater number of lives was lost to the population than in any other autumnal quarter of the last 13 years, with only two exceptions,--the fourth quarter of 1846 , when the deaths rose to 108937 ; and that of 1847 , when they were 103479 . The annual mortality has been at the rate of 2.252 per cent. in the 10 years $1843-52$; it was $2 \cdot 186$ in the last quarters of those years; and last quarter it was 2.272. Cold weather thards the latter class have also suffered much from fever, especially scarlatina, in many parts of the country
London makes a large contribution to this excess of mortality ; for in the metropolitan division the deaths in October, November, and December rose to 16390 , which is more by 2709 than took place in the same quarter of the previous year. In the last fourteen weeks of 1853,17390 persons died in London, and more than the usual proportion of these were carried off by zymotic diseases (those of epidemic character), principally cholera, typhus, scarlatina, hooping-cough, and diarrheea.
Cholera and typhus killed almost equal numbers, viz. 728 and 724 ; scarlatina and hooping-cough were rival powers of destruction, for 668 and 667 are claimed as their respective shares; $5^{6} 5$ were rival powers of diarrhœa, besides 41 by dysentery. It is to be observed that these diseases, severally, not only produced more than the average number of deaths in this quarter, but showed a disposition to increase as the year drew to a close. In the summer months cholera was fatal in 137 cases, it rose to 728 in autumn; typhus (inchaing contioun coough from 426 to 667 . Diarrhœea forms an exception, having declined from 1232 in the summer to 565 in the autumnal quarter. Croup nearly doubled its comparatively small rate of mortality, and measles also became more fatal towards the end of 1853 .
Whilst the young suffered from their peculiar diseases, the old had their own maladies to contend with. The number of deaths at all ages from diseases of the respiratory organs (exclusive of phthisis and hooping-cough) were, in the 14 weeks, 3291. There died between 600 and 700 more than is usual in the same season. Bronchitis was fatal in 1460 cases, pneumonia in 1389, phthisis in 1914. ${ }^{15}$ persons in London suffered death from cold, and the privation, from some cause, of neces-
saries of life ; 27 were the victims of their own intemperate habits. It is probable that want in saries of life; 27 were the victims of their own intemperate hace disease, or carried it to a fatal issue, where the register does not reveal their operation.
In the last quarter large town populations were unhealthy, but, judging from the mortality, smaller In the last quarter and the inhabitants of the open country appear to have enjoyed as much health as usual. In 117 districts, comprising the chief towns, the rate of mortality per annum was 2.778 to 100 inhabitants ; the annual mortality in 10 autumn quarters (1843-52) was $2 \cdot 634$. In 507 districts, con sisting chiefly of small towns and country parishes, the mortality was $1 \cdot 911$; the average was $1 \cdot 965$ Country Registrars refer in their Reports to measles and other complaints prevailing among children
in some instances these appeared in a mild form, and in others not mentioned they were probably much less destructive than in towns.
In the South Eastern Division (II.) the deaths ragistered were 7956 , which scarcely differs from the number recorded in the sama quarter of 1852 , and affords a not unfavourable result. But in Maidstone and Margate. Fever had also prevailed at Folkegh, scarlatina having been prevalent rar of the latter place reports that "the number of deaths $(29)$ exceeds the avercherey. The Regisonsequence chiefly of a severe epidemic of fever (of typhoid type), in which the proportion of fatal cases was about I in 8. The disease originated among the Irish poor, imported for the purpose of hop-picking, and was distinctly propagated by personal contagion." In Hampshire, both at Kingston (Portsea Island) and Southampton, small-pox had been prevalent, as well as fever to a great extent at the former

The deaths registered in the South Midland Division (III.) were 6057 , not so many as in most previous seasons. They were few in the counties of Hertford, Oxford, and Bedford. Both Peterborough and Daventry in Northamptonshire had suffered, the former from small-pox and scarlatina, he latter from typhus. In the sub-district of Soham in Cambridgeshire, the deaths, which had been 50 in the corresponding quarter of 1852 , rose to 112 last quarter, in consequence of cholera in great deal of fever prevailed at Stretham, and 2 cases of cholera occurred at in the same county, the parish of Sutton diarrhoea attacked the inmates of almost every house. The deaths were $6 I$ in the sub-district of Ely, against 39 in the corresponding quarter of $185^{2}$, and 17 of those were caused by cholera
Only 5106 deaths were registered in the Eastern Division (IV.) Diarrhœa was epidemic at West Ham in Essex, and cholera made its appearance, but without being fatal in any case. The district of Norwich lost many lives from small-pox. The Registrar of Coslany, which forms part of it, counts 10 deaths from this disease, besides 18 from fever, making nearly a third of the whole number regother of its sub-districts the deplorable facts to defect of sanatory arrangements. In Conisford, ere no fewer were no fewer than 19. In not one of these 19 cases had the sufferers been previously vaccinated. The uneducated, says the Registrar, have a great dislike to such protection. Choleraic diarrhoea
prevailed at Downham in Norfolk.

The returns are on the whole favourable for the South Western Division (V.), in which the eaths of the autumn quarters fell to 8498 ; but in parts of it, Chippenham (where typhus and scarlatina prevailed) and Exeter (where the Registrar of St. Sidwell states that health has suffered from the severity of the weather and the high price of fuel and "all sorts of provisions"), the mortality was December. It visited Stoke Damarel in cholera, and 44 persons died of it in November and unhealthy, and the deaths in it rose to 1899 . Scarlatina raged in Falmouth district, and in its subdistrict Constantine about 100 cases, 16 of which were fatal, occurred chiefly among the poor. The cottagers have dung-pits near their dwellings, from which, in the Registrar's opinion, the disease is fed. In the district of Redruth the average of deaths in the autumns of 1849-52 was 280, last quarter they were 419 ; scarlatina has been the largest contributor to so great an increase. Cholera was fatal to 32 persons; and diarrhoea, measles, and hooping-cough are also mentioned by the Registrar

The West Midland Division (VI.) has in some parts suffered severely ; the deaths were 12612 , or more than 800 above the average of corresponding quarters. Scarlatina, whose traces have been already seen in so many parts, committed great ravages in the counties of Stafford and Warwick The kegistrar of Fenton (Stoke-upon-Trent) states, that in the streets where the disease has been most prevalent, the houses are entirely without sewers, and the cellars are flooded with stagnant the plague apparently had discharged its fury 123 above the average, and 149, or nearly a half of the whole number were from ; they were description of scarlatina which prevailed in summer, and spread with renewed force during autumn Birmingham suffered a sharp attack; it was common in Worcestershire, in Shrewsbury, and other parts of shropshic. the deaths wich, wheve the are than㲘 cholera, and in Leig whe
The deaths rose to 6541 in the North Midland Division (VII.). Three of the five counties of Grantham, Lincoln, Horncastle, suffered much; also Worksop, Radford, Nottingham, South Boston, The mortality from the disease was high in Derby, Ashborne, Chesterfield, Bakewell, Chapel-en-le,

Frith, and Hayfield. Speaking of the homes of 1000 persons in Chesterfield and its neighbourhood, the Registrar says, "The sanatory condition of the Irish labourers is deplorable." Cholera was fatal to 9 lives at Holbeach. Small-pox prevailed at Nottingham and Ashborne.

In the North Western Division (VIII.) the deaths rose to 17851 . It consists of Cheshire and Lancashire, both of which were overrun by the epidemic so fatal to the young. Stockport had an attack of the most violent kind, and the Registrar of Heaton Norris, one of its sub-districts, states that the disease created almost as much alarm as cholera. Here, in consequence of the "turn-out" and dearness of food, families were ill prepared for such a visit. Congleton, Wigan, Bury, Chorlton, Ashton-under-Lyne, Oldham, Rochdale, and Ulverstone suffered. Half of the total deaths in Ulverstone sub-district were from scarlatina. 20 deaths (out of 116) from small-pox were registered in the sub-district of Congleton. 163 deaths from cholera are reported in Liverpool; a few also in West Derby ; one at Wigan. A decrease in births at Wigan and Preston is attributed to strikes causing a movement of families from those places. The deaths were 864 in the district of Stockport, or 342 above the average. They were 223 in that of Congleton, or 57 above the average. In the districts of Liverpool, Wigan, and Chorlton, the deaths rose to 2270,692 , and 1005 . Manchester registered 2148 , also a high mortality. In Preston 676 were registered, 73 above the average.

The Yori Division (IX.) in which 10676 deaths occurred, furnishes more favourable returns, except for some of the large towns, Bradford, Sheffield, York, \&c., where the mortality was great. Scarlatina, aided by cold, wet and changeable weather, pervaded these and other parts in all the Ridings. At Doncaster, which suffered from it, the mortality was high. Leeds and Hull were more fortunate. A German emigrant died at the latter place from cholera; a woman died of it in Bradford; a tailor of the same disease at Barnsley. The linen trade was depressed at Barnsley, the coal trade in great activity. Fancy manufacture had improved at High Hoyland.
The 5770 deaths in the Northern Division (X.) are not few, but they show a decrease on those of the summer quarter. Cholera was diffused here to a wide extent. Fatal cases of it in the December quarter are reported as follows : 13 at Stockton, io at Bishop Auckland, 6 in Saint Nicholas, Durham, 3 or 4 at Easington, 7 at Hetton-le-Hole, one at Chester-le-Street, 18 in Sunderland, 15 in Westoe (South Shields), 94 at Gateshead, 124 in Tynemouth, one at Allendale (Hexham), 13 at Bedlington (Morpeth), 44 in Cockermouth. It continued to raise the mortality in Newcastle. Scarlatina was severe at Whitehaven on the west coast, and in Alnwick on the east. It prevailed along the coast of the latter district, but spared the parts remote from the sea. It was also fatal at Kirkby Lonsdale in Westmoreland.

In the Welsif Division (XI.) the deaths, 5884, were a little above the average. Scarlatina visited Cardigan, Wrexham, Ruthin, and Corwen with severity. At Cowbridge 40 families have been attacked by typhus, which originated at a ball, where the guests supped over a stable, and on premises which were in a filthy state from want of drainage.

Mr. Leigh, Registrar of Deansgate, a sub-district of Manchester, has made some useful observations on the public health of that locality, and the propagation of those diseases which have produced so great a mortality, in a letter addressed to the Registrar-General, which will be found at page 46.

MARRIAGES Registered in the Quarters ending September 30th, 1849-53; BIRTHS and DEATHS Registered in the Quarters ending December 31st, $1849-53$, in the Divisions, Counties, and Districts of England.


[^10]
6. West Midland Division.

22 Gloucestershire 23 Herefordshire 24 Shropshire
25 Staffordshire.
26 Worcestershire
${ }_{27}$ Warwickshire

395533 96515 246313 528867 530387 408215
7. North Midland Division.

28 Leicestershire 9 Rutlandshire .
30 Lincolnshire .
3I Nottinghamshire.
32 Derbyshire
221227 23151 356226 270731 239791
8. North Western Division.

## 33 Cheshire

34 Lancashire
9. York Division

35 West Riding.
36 East Riding (with York)
37 North Riding
10. Northern Division.

38 Durham
39 Northumberland
40 Cumberland
41 Westmorland.
if. Welsh Division.

| 42 Monmouthshire . . . | 151021 |
| :--- | :--- | :--- |
| 43 | South Wales. |
| 44 North Wales. : . . | 529364 |
| 386017 |  |

*The Registration Counties consist of groups of entire Registration Districts; which Districts are, in general, identical with the Poor Law Unions. As the principle has been adopted of placing a District or Union which extends into more than one
he boundaries of the Counties proper.

On the Meteorology of England and Scotland, during the Quarter ending December $31 s t$, 1853 . By James Glaisher, Esq., F.R.S., Sec. of the British Meteoroloyical Society.
The temperature, till 20 th October, was $1.8^{\circ}$ below its average, in the period from 2 ist October to 8th November it was $5 \cdot 3^{\circ}$ above, and from 9 th November to the end of the year it was $4 \cdot 8^{\circ}$ below During the period from 9th November there were several instances of very low temperatures; on some days the mean for the day was $10^{\circ}, 11^{\circ}, 12^{\circ}$, and in one case $13^{\circ}$ below the respective averages. With the exception of the interval between 2 ist October and 8 th November the weather has been cold throughout the quarter.
The maximum cold for the season, in the whole country, took place during the night common to December 28th and 29th. This cold extended from the most southern to the most northern station.
The reading of the barometer was low in October; it was very high in November. The excess reading in November over that in October was nearly four-tenths of an inch at all places ; it decreased by December in England, but still farther increased in Scotland
The fall of rain was one-third above its average in October, and fell short of the average in November and December, except in Cornwall and Devonshire. The general deficiency for the
quarter is about one inch.
Snow fell at a few places north of the parallel of $53^{\circ}$ on 1 th November; at places north of $51^{\circ}$ generally over England after the middle of December.
The direction of the wind has generally been a compound of the north or east, except in the
nterval from 2 Ist October to 8th November, when it was mostly south-west.
The air has been drier than usual, particularly in December, in which month the difference of air and dew-pont temperature, notwithstanding the low value of the former, was greater than usual
Fog was very prevalent in October and November, particularly between the parallels of latitude f $51^{\circ}$ and $52^{\circ}$. In November it was more or less prevalent on 28 days, and on some days extended all over the country. At times it was very dense within a band extending across the country between he above parallels of latitude. In December fog was most prevalent below the parallel of $53^{\circ}$

The mean temperature of the air at Greenwich for the quarter ending November, constituting the 3 autumn monthis, was $49^{\circ} \cdot 4$, being $0^{\circ} \cdot 1$ above the average of 80 years.

| $\begin{gathered} 1853 . \\ \text { MONTH. } \end{gathered}$ | Temperature of |  |  |  |  |  |  |  |  |  | Elastic Force of Vapour. |  | Weight of Vapour in a of Air. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Air. |  |  | Evaporation. |  | Dew Peint. |  | Daily Range. |  | $\begin{gathered} \text { Water } \\ \text { of the } \\ \text { nitames. } \end{gathered}$ |  |  |  |  |
|  | Mean. | Diff. <br> from <br> ave- <br> rage of <br> ro <br> years. <br> yen | $\left\|\begin{array}{c}\text { Diff. } \\ \text { from } \\ \text { ave- } \\ \text { rage of } \\ 12 \\ \text { 12 } \\ \text { years. }\end{array}\right\|$ | Mean. | $\left\|\begin{array}{c} \text { Diff. } \\ \text { from } \\ \text { ave- } \\ \text { rage of } \\ 12 \\ \text { years. } \end{array}\right\|$ | Mean. | $\substack{\text { Diff. } \\ \text { from } \\ \text { are } \\ \text { raze } \\ \text { raf } \\ \text { 12 } \\ \text { sears. } \\ \hline}$ | Mean. | $\substack{\text { Diff. } \\ \text { from } \\ \text { ave- } \\ \text { rave of } \\ \text { rat } \\ \text { years. } \\ \text { years. }}$ |  | Mean. | Diff. <br> from <br> are- <br> rage of <br> 12 <br> years. | Mean. | Diff. from rave- rave of rap years. |
| $\begin{aligned} & \text { Oct. } \\ & \text { Nov. } \\ & \text { Dop. } \end{aligned}$ | $\begin{aligned} & \circ \\ & \begin{array}{c} 0 \cdot 9 \\ 42 \cdot 1 \\ 34 \cdot 0 \end{array} \end{aligned}$ | $\begin{gathered} 0 \\ +\begin{array}{c} 0.6 \\ \hline-0.8 \\ -4.8 \end{array} \end{gathered}$ | $\begin{gathered} 0 \\ +{ }^{\circ} 13 \cdot 3 \\ -7.3 \\ -7 \cdot 0 \end{gathered}$ | $\begin{aligned} & \circ \\ & \hline 9 \cdot 4 \\ & 41 \cdot 4.3 \\ & 33 \cdot 0 \end{aligned}$ | $\begin{gathered} 0 \\ +0.1 \\ +1.5 \\ \hline 6.5 \end{gathered}$ | $\begin{aligned} & \stackrel{\circ}{47 \cdot 7} 7 \begin{array}{l} 40 \cdot 1 \\ 301 \cdot 3 \end{array} \end{aligned}$ | $\begin{gathered} 0 \\ +{ }^{2}+7 \\ -6.7 \end{gathered}$ |  | $\begin{gathered} + \\ +188 \\ +0.9 \\ +0.3 \end{gathered}$ |  |  | $\begin{gathered} \text { in. } \\ +0.08 \\ +0.008 \\ -0048 \end{gathered}$ | $\begin{gathered} \mathrm{gr} \cdot \\ \begin{array}{l} 3 \\ 3: 1 \\ 2 \cdot 1 \end{array} \end{gathered}$ | gr: |
| Mean | $42 \cdot 3$ | $-1 \cdot 2$ | $-2.7$ | $41 \cdot 2$ | -2.6 | 39.7 | -14 | $12 \cdot 0$ | +10 | $45 \cdot 7$ | 269 | --009 | $3 \cdot 1$ | -0.1 |
| $\begin{aligned} & 1853 . \\ & \text { MONTH. } \end{aligned}$ | $\begin{gathered} \text { Degree } \\ \text { Humidity. } \end{gathered}$ |  |  |  | Weight of a Cubic Foot of Air. |  | Rain. |  | DailyHorizontal moveof the Air. | Reading of Thermometer on Grass. |  |  |  |  |
|  |  |  | Number of Nights it was |  |  | $\begin{gathered} \text { Lew- } \\ \text { Rest } \\ \text { Read- } \\ \text { ing } \\ \text { ng } \\ \text { Night. } \end{gathered}$ |  |  | High-RetsRead-indatNight. |  |  |  |  |  |
|  | Mean, | $\begin{gathered} \text { Diff. } \\ \text { from } \\ \text { rove } \\ \text { rage of } \\ \text { years. } \end{gathered}$ |  |  |  | Mean. | Diff. <br> from <br> rave- <br> rage of <br> ye <br> years. | Mean. |  | $\begin{gathered} \text { Diff. } \\ \text { from } \\ \text { rave } \\ \text { rage of } \\ \text { years. } \end{gathered}$ | Amount. | $\|$Diff, <br> from <br> are- <br> rave of <br> 38 <br> years. |  |  |
|  |  |  | $\begin{gathered} \text { At or } \\ \text { below } \\ 32^{2} \end{gathered}$ | $\begin{gathered} \text { Be- } \\ \text { tween } \\ \text { swa } \\ \text { and } 400^{\circ} \end{gathered}$ |  |  |  |  |  |  |  |  |  | Above 400 |
| $\begin{aligned} & \text { Otct. } \\ & \text { Dover } \\ & \text { Depo } \end{aligned}$ | $\begin{array}{r} \cdot 901 \\ .934 \\ \cdot 9.93 \\ \hline \end{array}$ | $\begin{aligned} & -.037 \\ & =.027 \\ & -0.055 \\ & \hline \end{aligned}$ | $\begin{aligned} & \text { in. } \\ & \begin{array}{c} 29.58 \\ 29.591 \\ 29.904 \end{array} \end{aligned}$ | $\begin{gathered} \text { in. } \\ -117 \\ +.234 \\ -036 \end{gathered}$ | $\begin{aligned} & \mathrm{gr} \mathrm{r}_{5}^{51} \\ & 5499 \\ & 5566 \end{aligned}$ | $\begin{array}{r} \mathrm{gr} . \\ \begin{array}{c} 4 \\ +7 \end{array} \end{array}$ | $\begin{aligned} & \text { in. } \\ & 4.5 \\ & 0.5 \\ & 0.7 \end{aligned}$ | $\begin{aligned} & \text { in. } \\ & +1.5 \\ & +1.1 \\ & +1 \cdot 4 \end{aligned}$ | $\begin{gathered} \text { Miles. } \\ 73 \\ 56 \\ 52 \\ 52 \end{gathered}$ | $\begin{aligned} & { }^{5} . \\ & { }_{24} \end{aligned}$ | $\begin{gathered} 12 \\ 4 \\ 7 \\ \hline \end{gathered}$ | $\begin{array}{r} 14 \\ 3 \\ 0 \\ \hline \end{array}$ |  | $\begin{aligned} & 0.0 \\ & \begin{array}{c} 50.0 \\ 46.0 \\ 377^{2} \end{array} \end{aligned}$ |
| Mean | -916 | -040 | 29768 | + ${ }^{027}$ | 545 | + 3 | $\mathrm{Sum}_{6.5}$ | $\operatorname{sum}_{-1 \cdot 0}$ | 60 | $\mathrm{S}_{47}$ | $\mathrm{Sum}_{23}$ | $\mathrm{Sum}_{17}$ | 11.0 | $50^{\circ} 0$ |

Thunderstorms occurred, or thunder was beard and lightning seen, on the 8th October at Greenwich, Paddington, Stone, Hartwell House, Hartwell Rectory, and Aylesbury ; and on the 27th at Lewisham, Greenwich, Paddington, and Thwaite, Suffolk. On the 5 th November at Guernsey; and on the 26 th at Guernsey and Truro. On the 27 th December at Liverpool ; and on the 28 th at Durham, Newcastle, and North Shields.
Thunder was heard, but lightning was not seen, on the ist October at Warrington; on the 8th at ruro, Lewisham, and Stone; on the 9 th at Guernsey; on the 12th at Ryde; on the 22 d at Arbroath; on the 25 th at the Isle of Man ; and on the 26 th and 27 th at Stonyhurst. On the 30 th

Lightning was seen, but thunder was not heard, on the Ist October at Oxford and Norwich; on the axtord, Stone, Hartwell Rectory, Aylesbury, Notingham, and Durham; on the 2 ist at Arbroath; on the 26 th at Jersey, Guernsey, Stone, Hartwell Rectory, and Norwich; on the 27 th at Jersey, Guernsey, Exeter, Rose Hill, Oxford, Stone, Hartwell Rectory, Aylesbury, Liuslade, Cardingone at Greenwich, Oxford, Stone, and Hartwell Rectory ; on the 8th at Arbroath; on the 2oth at Dunino, on the 25 th at Truro ; and on the 26th at Exeter. On the 28th December at.Stonyhurst.
Hail fell on the 1st October at Liverpool ; on the 2 d at Jersey, Linslade, and Hawarden; on the 3 d at the Isle of Man ; on the 8th at Hartwell Rectory ; on the 13th at Stone; on the 16th at Jiver pool and Whitehaven; on the 2 Ist and 23 d at Durham ; and on the 26 th at Nottingham. On the 16th November at Truro ; on the 24th at Bicester and Dunino ; on the 45 th at Dunino; and on the 26 th at Guernsey. On the roth December at Helston ; on the 1ith at Truro ; on the 15 th at Guernsey, Truro, Holkham, North Shields, and Dunino; on the 16 th at Guernsey, North Shields, and
Dunino ; on the 19th at Torquay and Dunino ; on the Dunino; on the 19th at Torquay and Dunino; on the 20th at Dunino; on the 21st at Guernsey, North
Shields, and Dunino; on the 22d at Guernsey; on the 23d at Guernsey and North Shields. on the $24^{\text {th }}$ at Guernsey ; on the 25 th at Guernsey and Whitehaven ; on the 27 th at Helston F in the and Truro; on the 28th at Helston, Truro, North Shields, and Dunino; on the 3oth at Exeter and Isle of Man; and on the 3 rst at Falmonth, Exeter, and Oxford.
Snow fell on the 17 th November at Hawarden and North Shields. It fell generally at places north of latitude $57^{\circ}$ on the 24 th. After the 15th. December it fell nearly at every station, and on the 27 th, 28 th, and 29 th, at Jersey and Guernsey. The fall on the 15 th December was in many places as deep as 6 inches.
Fog was prevalent on 20 days in October, and principally confined to the space between the latitudes of $51^{\circ}$ and $52^{\circ}$; occasionally it extended to the Isle of Wight, and as far north as Lancashire. In November it was present on every day, with the exception of the 5 th and 29th. It was most it has been for many years. In the returns from 51 and $52^{\circ}$, and at times it was more dense than and Devonshire, no mention of fog was made. With these exceptions the fog was mentioned in every place from the Isle of Wight to Arbroath. In December tog was prevalent on 20 days, but was most frequent between the latitudes of $53^{\circ}$ and $54^{\circ}$; at some places in the south it was only noticed on 3 or 4 days.
Aurore were seen on the 17 th October at Durham; on the 23 d at Dunino; on the 25 th at Notingham, Durham, Dunino, and Arbroath; on the 29th at Whitehaven; on the 30th at Dunino ; and on the 3 ist at Clifton, Lewisham, Greenwich, Car ington, Norwich, Grantham, and Nottingham. On the 1st November at Oxford ; on the 2d at Whitehaven ; on the 8th at the Isle of Man, on the No North Shields ; and on ith at Dunino; the 5 th December at Helston and Nottingham ; on the fth Stonyhurst, Isle of Man, Whitehaven, Durham, North Shields, Dunino, and Arbroath; on the 8th at Durham ; on the 23 d at Greenwich ; on the 24th at Clifton ; on the 26th and 27 th at Falmouth ; on the 28th at Warrington ; on the 29th at Jersey and Cifton ; and on the 30th at Jersey.

Lunar Halos were seen on 20 days throughout the quarter.
Solar Halos were seen on the 15 th October at Stone, and Hartwell Rectory ; on the 24th at Nottingham; and on the 27 th at Grantham. On the 8th November at Greenwich, Stone, Hartwell Rectory, Grantham, and Nottingham; on the 9 th at Nottingham; on the roth at Stone and Hartwell Rectory; on the 1 ith at Greenwich and Aylesbury ; on the 1 2th at Nottingham; on the 14th at Dunino; on the 18th at Clifton and Hawarden; and on the 20th and 27 th at Clifton. On 13th at Dunino ; on the 17th at Hawarden; on the 18th at Grantham and Nottingham ; on the 19th at Nottingham ; and on the 29th at Grantham ; and on the 31st at Stone and Hartwell ; Rectory

Harvest was completed on the 1st November at Gainsborough ; on the 2d at Hartwell Rectory and


The mean of the numbers in the first column is $29^{\circ} 653$ inches, and it represents that portion of the reading of the barometer due the pressure of air; the remaining portion, or that due to the pressure of water, is 0.261 inch; the sum of these two numbers is $29^{\circ} 914$ inches, and it represents the mean reading of the barometer for the quarter at the level of the sea.

The highest readings of the thermometer in air were $70^{\circ} 0$ at Jersey, $68^{\circ} 9$ at Lewisham, and $68^{\circ} 0$ at Helston, Falmouth, Aylesbury and Derby. The lowest were $6^{\circ \cdot 0}$ at Linslade, $9^{\circ} \cdot 5$ at Wakefield, $10^{\circ} 2$ at Warrington, $10^{\circ} \cdot 4$ at Grantham, $10^{\circ} 5$ at , Bentnor, and Hawarden; and the greatest at Midhurst, Helston, Bicester, Lewisham Tottingham, Wakefield, Bowdon, Exeter, and Aylesbury
Rain fell on the least number of days at Ryde, Rose Hill, St. John's Wood, Aylesbury, Liverpool, and Jersey; and on the greatest number at Truro, Wakefield, North Shields, Grantham, Whitehaven, Falmouth, Narrington, Greenwich, Derby, and Stonyhurst. The least falls took place at Bedford, Liverpool, Bicester, Oxford, Derby, Stone, Hartwell Rectory, and Gainsborough, and the mean amount at these places is $5^{\circ} 3$ inches. The largest falls occurred at Falmouth, Truro, Helston, Dunino, Whiteharen, Torquay, Durham, and Newport, and their mean is $11^{\circ} 5$ inches.

Quarterly Meteorological Table for different Parallels of Latitude.

PARALLELS OF LATITUDE, \&c.

|  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |


|  | Rain. | . |
| :---: | :---: | :---: |
|  | $\stackrel{\square}{\circ}$ | \% |
|  | \% | - ${ }^{\text {E }}$ |
|  | 枈 | $\bigcirc$ |
|  |  | $\bigcirc$ |
|  |  | \% |
|  | \% む | Е్ర ర ¢ ఫ \% |
|  |  | ¢ ๕ ¢ |

$\qquad$

| In the Counties of Cornwall and Devonshire |  |  |  | 52 | ${ }_{11}^{\text {in. }} 4$ | ${ }_{3}^{\text {gr }}$. | ${ }_{0}^{\text {gr. }}$ ¢ | 0*854 | $\operatorname{in}_{3 \cdot 9}$ | $\begin{array}{\|c\|c\|} \hline \mathrm{gr} \\ \hline \end{array}$ | $\begin{gathered} \text { feet } \\ 124 \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Newport and Ryde - - - - - | 43.7 | $443^{\circ} 442^{\circ} 339$ | ${ }_{7} \cdot 0$ | 36 | ${ }^{9} 9.5$ | ${ }_{3} \cdot 1$ | $0 \cdot 5$ | ${ }^{-} \cdot 861$ | ${ }_{3 \cdot 8}$ | 545 | 72 |
| South of latitude $510^{\circ}$ | $43^{\circ} 763{ }^{\circ} 318^{\circ} 6$ | $1^{\circ} 1333^{\circ} 744^{\circ} 742^{*} 240^{\circ} 7$ | 6.7 | 43 | $8 \cdot 7$ | $3 \cdot 1$ | 0.4 | 0.881 | $3 \cdot 8$ | 5 | 56 |
| Between the latitudes of 510 and 520 | $41^{\circ} 8684^{\circ} 7113^{\circ} 5$ | $1 \cdot 534 \cdot 951 \cdot 240^{\circ} 6388^{\circ} 9$ | $7 \cdot 2$ | 43 | $5 \cdot 9$ | 3.0 | 0.3 | $10^{\circ} 902$ | 3.6 | 544 | 213 |
| Between the latitudes of 530 and $544^{\circ}$ |  |  | ${ }_{6}{ }_{6} \cdot 2$ | 47 | $5 \cdot 9$ 6.3 | ${ }_{3}^{2 \cdot 9}$ | $0 \cdot 4$ | 0.880 $0.90:$ | 3.7 3 | 546 | 188 130 |
| Isle of Man - - | $44^{*} 460^{\circ} 6222^{\circ}$ | $10^{*} \cdot 327 \cdot 8 \cdot 37 \cdot 742 \cdot 439 \cdot 9$ | 6.3 | 54 | ${ }_{10}{ }^{\circ} \cdot$ | ${ }_{3}{ }^{1} 1$ | 0.4 | 0.860 | $3 \cdot 7$ | 543 | 103 |
| Liverpool and Whitehaven | $44^{\circ} 0660^{\circ} 623^{\circ}$ | $6{ }^{\circ} 625^{\circ} 037{ }^{\circ} 042^{\circ} 440{ }^{\circ} 4$ | $7 \cdot 2$ | 47 | $8 \cdot 3$ | $3 \cdot 2$ | 0.4 | 17897 | $3 \cdot 8$ | 545 | 64 |
| Durham, Newcastle, and North Shields - | $41.757^{\circ} 111{ }^{\circ} 7$ |  | $7 \cdot 8$ | 47 | $9 \cdot 0$ | 3.0 | $0 \cdot 3$ | 1-918 | $3 \cdot 6$ | 545 | 199 |
| Dunino and Arbroath - - - - | $40^{\circ} 7660^{\circ} 019$ | $10^{\circ} 2330^{\circ} 3440^{\circ} 5388^{\circ} 836$ | $6 \cdot 1$ | 45 | $10^{\circ} 0$ | $2^{*} 7$ | $0 \cdot 4$ | 0.861 | $3 \cdot 2$ | 545 | 50 |

In the formation of this Table the results from Jersey and Guernsey have not been combined, on account of the difference between the ranges of temperature of the two places. The results from Ventnor are not combined, on account of the much higher tempera-

MONTHLY METEOROLOGICAL TABLE FOR THE QUARTER ENDING DECEMBER 31st, 1853.
The Observations have been reduced to Mean values, and the Hygrometrical results have been deduced - from Glaisher's Tables.

| Names of Stations and Observers. | Year | Mean Pressure of |  |  | Temperature of the Air. |  |  |  |  |  |  |  |  | Mean Temperature of |  | Wind. |  | Rain. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Mean. |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  | A |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | $\mathrm{in}_{3} \cdot$ |  | 5 |  | $\mathrm{in}_{5}$. | gr. |
|  | Oct. | ${ }_{29}^{29}{ }^{\circ} \cdot 604$ | $\stackrel{373}{ }{ }^{286}$ | ${ }^{1} \cdot 18184$ | $54 \cdot 0$ 47 | ${ }_{46}^{5 \cdot 19}$ |  | $700^{\circ}$ 600 | 41.0 35.0 | ${ }_{25}^{29.0}$ | ${ }_{51}{ }^{59} \cdot 6$ | 48.8 42.9 | 10.6 8.7 | $51 \cdot 8$ <br> $45 \cdot 2$ <br> 5 | 50.1 42.6 | ${ }_{2}^{2 \cdot 9}$ | W. . s s. N.E. |  | 11 | 3.3 1.6 1 | 4.3 3.3 0.4 | 0.5 | :888 | ${ }_{5}^{5} \cdot{ }^{1}$ | 529 543 |
| REV.S. King, M.A., F.R.A.S., M.B.M.S. | Nov. | 29.758 | - 227 | 1.376 | 4.0 40.1 5.6 | $40 \cdot 0$ $40^{\circ} \cdot 3$ | + $40^{4.0}$ | 63.3 61.0 | $35^{\circ} \cdot 0$ $45^{\circ}$ | 28.3 28.0 | 43.3 | 48.6 36.6 51.2 | 6.7 6.2 | $38^{\circ} 2$ 51 515 | - 35.6 |  | N.E. \& S.E. |  | 9 ${ }^{9}$ | $1 * 5$ 4.2 | $2 \cdot 6$ $4 \cdot 2$ | 0.4 0.6 | -885 | $\stackrel{3}{5 \cdot 1}$ | 548 548 529 |
| RRNSEY, | Oct. | 29.594 $29 \cdot 967$ | -369 -299 | 1.276 | 53.6 $43^{\circ} 0$ | 53.3 48.2 | 53.4 48.1 | ${ }^{611^{\circ} 0}$ | $45^{4} 0^{\circ}$ | 16.0 | 57.4 | ${ }^{51.2}$ | 6.2 6.0 | 51.5 | ${ }_{4}^{49}{ }^{4}{ }_{5}^{6}$ | 1. | S.W. \& S.E. | 6.0 $5 \cdot 8$ 50 | 21 10 | 4.2 2.3 | 4.2 $3 \cdot 4$ | ${ }_{0}^{0}{ }^{\circ}{ }_{6}^{6}$ | $\bigcirc 882$ | $\stackrel{5}{4 \cdot 1}$ | 529 |
| R. Hoskins, F.R.S., M.B.M.S. | Nov. | ${ }^{29}{ }^{\text {c }} 771$ | -238 | $1 \cdot 385$ | $41^{\circ}$ | $41^{\circ} 2$ | 41.1 | 52.0 | $30^{\circ} 0$ | 22.0 | +4.4 | ${ }^{3} 38^{\circ} 0$ | 6.4 | $39^{\circ}+$ | 37.1 | 1.8 |  | 6.4 | 16 | $2 \cdot 0$ | $2 \cdot 8$ | 0.4 | :871 | 3.3 | 547 |
| STO | Oct. | 29.613 | -317 | 11.976 | 53.9 | 53.5 | 53.7 | $68^{\circ} 11$ | $38^{\circ} 0$ | 30 | $61{ }^{\circ} \mathrm{B}$ | 48.2 | $12 \cdot 6$ | $5^{51} 6$ | ${ }^{49}{ }^{\circ} 6$ | $2 \%$ | S.W. \& | 6.4 | 20 | 4.8 4.4 | ${ }_{3}{ }^{\circ} \cdot{ }^{\circ}$ | $0 \cdot 6$ | :871 | ${ }^{5} \cdot 1$ | 529 |
| M. P. Motle, EsQ. |  | ${ }_{29}^{29}{ }^{2} \cdot 944$ | $\stackrel{\square}{: 302}$ | 1.116 | $4{ }_{4}^{4} \cdot 1$ | $4{ }_{41}{ }^{\circ} \mathrm{F}$ | ${ }^{48} 1 \cdot 9$ | ${ }^{62}{ }^{6} \cdot 0$ | - $26{ }^{\circ}$ |  | ${ }_{47 \cdot 9} 5$ | 45.7 | $12 \%$ | ${ }_{3}^{46}{ }^{4} \cdot 5$ | ${ }^{76}{ }^{4} 5$ | $1 \cdot 8$ | E. \& N.E. | ${ }_{6}{ }^{\circ} \mathrm{O}$ | 18 | 2.9 | ${ }_{2}{ }^{*} 7$ | 0.5 | $\stackrel{8}{83}$ | ${ }_{3}$ | ${ }_{5} 517$ |
|  | Oct. | ${ }^{29} \cdot 534$ |  | $1 \cdot 2610$ | $53^{\circ} 2$ | 54.0 | 53.5 | $68^{\circ} 0$ | 43.0 | $25^{\circ} \cdot 0$ | $61 \cdot 1$ | 48.9 | 12.2 |  | - | 1.8 | N., N.W., \& S.S.w. | $5^{\circ}{ }^{\circ}$ | 24 | $5 \cdot 1$ |  |  |  |  |  |
| FALMOUT | Nov. | 29.886 |  | 0.9+1) | 48.7 41.6 | $48^{4.6}$ | $48^{\circ} 7$ 41.7 | $6^{62^{\circ}}{ }^{\circ} \mathrm{O}$ | ${ }^{29.0}$ | 33.0 | $550^{4}$ 45.8 | $42 \times 6$ | 13.8 9.6 |  |  | $1 \cdot 2$ | N ${ }^{\text {N }}$ | 6.5 6.7 | 12 | $4 \cdot 9$ 29 |  |  |  |  |  |
|  | Dec. | 29.747 29611 | 346 | $1 \begin{aligned} & 1.3411 \\ & 1 \\ & 1\end{aligned}$ | ${ }_{51}{ }^{41} \cdot 6$ | ${ }_{52}{ }^{41}{ }^{\circ}$ | 53.4 | ${ }_{64} 4^{\circ} 0$ | ${ }_{36} 5^{\circ} 0^{\circ}$ | $2{ }^{31}$ | 49.2 | ${ }_{47}{ }^{3} \cdot{ }_{4}$ | 11.8 | $50 \cdot 6$ | $47 \cdot 8$ | $1 \cdot 4$ |  | ${ }_{7} \cdot 1$ | 27 | $4 \cdot 7$ | $4 \cdot 0$ | 0.8 | -830 | 4.8 | 530 |
| TRURO, |  | ${ }^{29} \cdot 986$ | $\stackrel{285}{ }$ | 1-0,0 | $48^{\circ} 4$ | 4102 | ${ }_{47} \cdot 5$ | $60^{\circ} 0$ | $29^{\circ} 0$ | 31.0 | 53.6 | $39 \cdot 7$ | 13.9 | $45^{\circ} 1$ | $42^{\circ} 2$ | $0 \cdot 7$ | E. N. | $6 \cdot 7$ | 19 | 4.9 | $3 \cdot 3$ | 0.6 | $\bigcirc 835$ | $5 \cdot 9$ | 543 |
| r. Barham. | Nov. | ${ }_{29}{ }^{\circ} 848$ | ${ }_{-227}$ | 1*350 | 40.9 | $39^{-9}$ | $40^{\circ} 5$ | 52\% | ${ }_{23} 3^{\circ} 0$ | $2{ }^{29} 0$ | 45.3 | 34.4 | $8 \cdot 9$ | $38^{\circ} 5$ | 35.6 | $1 \cdot 2$ | E. N.E. | 6.7 | 18 | $2 \cdot 9$ | 2.6 | 0.5 | -849 | 3.1 | 549 |
|  | Oct. |  | - 334 |  | $54^{\circ}{ }^{\circ}$ | $52 \cdot 2$ | 52.8 | ${ }^{63.0}$ | $4^{4} 1^{\circ} 0$ | ${ }^{22^{\circ} 0^{\circ}}$ | 57\% ${ }^{5}$ | $4{ }^{4 \cdot 1}$ | 8.2 | $44^{\circ} 8$ | $46^{\circ} 8$ | $2 \cdot 6$ | S.W. | - | 21 | $\stackrel{4.8}{8 .}$ | ${ }_{3.8}^{8.8}$ | 0.9 | -817 | 4.6 | = |
| Edward Vivian, Esq. | Nov. |  | $\stackrel{282}{\cdot 216}$ |  | 47 40 40 | 46.4 38.7 | ${ }^{46}{ }^{\circ} \cdot 8$ | 59.0 $52^{\circ} 0$ | 31.0 | 28*0 | 50 $42^{\circ} 6$ | 43 ${ }^{\circ}{ }^{\circ}{ }^{\circ}$ | ${ }_{7}^{7} \cdot{ }_{7} \cdot 6$ | $44^{\circ} 6$ $37 \cdot 2$ | ${ }_{34}{ }^{1} \cdot 8$ | $2 \cdot 2$ |  |  | 14 | $\stackrel{2}{3.6}$ | 2. ${ }_{2}$ | ${ }^{0} 0.5$ | -847 | 3.9 <br> 3.0 |  |
|  | Oet. | 29.552 | - 345 | $1 \cdot 217$ | 52.7 | 51.4 | 51:8 | 64.2 | $35^{\circ} 0$ | $2{ }^{29} 2$ | 58.7 | $46^{\circ} \cdot 2$ | 12.5 | 49.8 | 47.7 | $2 \cdot 0$ | W. \& N . | 5.5 | 22 | $3 \cdot 7$ <br> .7 | 3.9 | 0.6 | -874 | 4. | 532 |
| $\begin{aligned} & \text { XET } \\ & \text { Dr, } \end{aligned}$ | Nov. | 299.926 | $\stackrel{72}{ } \cdot \mathbf{2}$ | 1-199 | 44*3 | ${ }_{34}{ }^{4} \cdot 2$ | ${ }^{44}{ }^{4} \cdot 1$ | -59.0 | $\stackrel{24}{27^{*} \cdot 5}$ | 34.8 <br> 3.9 <br> 8 | 51.3 41.8 | ${ }_{37}^{37}{ }^{-9}$ | 13.4 10.6 | ${ }^{42} \cdot 7$ | ${ }^{40} 0^{\circ} 8$ | ${ }^{1} \cdot 5$ | N. ${ }^{\text {N }}$ | $5 \cdot 2$ 6.1 | 12 | 2.4 | ${ }_{2}{ }^{3}{ }_{3}^{2}$ | $0 \cdot 4$ | -889 | 3. | 545 |
|  | O | 29.897 | -354 | -1.250 | 52*6 | ${ }_{52} \cdot 9$ | ${ }^{52} 7$ | ${ }_{71}{ }^{-8}$ | 36 | ${ }^{35} \cdot 3$ | $60^{\circ} 5$ | 47.4 | $13 \cdot 1$ | $50^{\circ} 6$ | ${ }_{48}{ }^{5} 5$ | 1.9 |  | 6.2 |  |  | 4.0 | 0.6 | $\cdot 81$ | $4 \cdot 9$ | 528 |
| HIGH STREET, EXETER, | Oct. | 29.922 | ${ }_{-281}^{354}$ | ${ }^{0} 92$ | ${ }_{45}{ }^{\circ} \cdot 6$ | ${ }_{45}{ }^{\circ} 8$ | ${ }^{45} 5^{\circ} 5$ | 61.7 | 24.5 | ${ }^{37} \cdot 2$ | 53.1 | $33^{4.2}$ | 13.9 | 43.9 | 41.8 | $1 \cdot 2$ | N., N.E., \& N.W. | 6.4 | - | - | $3 \cdot 3$ | 0.4 | -885 | 3.9 | 544 |
| Henry S. Ellis, Esq. | Dec. | $29 \cdot 758$ | $\stackrel{220}{ }$ | $1 \because 0$ | $37 \%$ | $38^{\circ}$ | $37 \cdot 9$ | ${ }_{5} 53^{\circ} 2$ | 17.5 | 3.7.7 | 43.4 | $33^{\circ}{ }^{\circ}$ | $10^{\circ} 4$ | $36^{\circ} 6$ | 34.7 | 1.6 | N \& N.W. | $6 \cdot 8$ |  |  | ${ }_{4}^{2.6}$ | 0.3 | -892 | 3.0 | 550 |
|  | Oct. | $29 \cdot 616$ $30 \cdot 150$ | -389 | 1.216 | - | ${ }^{54} 4{ }^{\circ} \mathrm{F}$ | $54 \cdot 2$ $47 \cdot 5$ | $62^{\circ}{ }^{\circ}$ 600 | 40.0 350 | 22.0 | ${ }_{51}^{58}{ }^{2}$ | $50 \cdot 1$ 43 | $8{ }_{7} 8.7$ | = | 515*4 | - | S.W., ${ }_{\text {S }}$ S.E., \& E. | - | 22 | 6.7 1.3 | + ${ }_{3} \cdot 6.4$ | 0.4 0.6 | $\stackrel{910}{\square}$ | 5 <br> 4 | 529 546 |
| Dr. Martin. | Nov. | ${ }_{29}{ }^{30} 1765$ | -293 | 0.968 1.656 |  | ${ }^{47}{ }^{\text {P }}$. 8 | ${ }^{47} 8^{\circ} 8$ | $54^{6} 0$ | $\stackrel{34 *}{ }$ | ${ }^{20} 0^{\circ}$ | ${ }_{42}{ }^{51}$ | ${ }_{35}{ }^{43} 2$ | $7 \cdot 1$ |  | ${ }_{33}{ }^{4} 4$ |  | N., N.E |  | 12 | ${ }_{0} \cdot 6$ | ${ }_{2} \cdot 5$ | 0.5 | -82i | $2 \cdot 9$ | 549 |
|  |  | $29^{9} 687$ | - 346 | 1-068 | 52.6 | 51.7 | 52.2 | $64^{\circ} 0$ | $32^{\circ} 0$ | $32^{\circ} 0$ | $59^{\circ} 4$ | $46^{\circ}{ }^{\circ}$ | 13.4 | $50^{\circ} 0$ | 47.7 | $2 \cdot 8$ |  | $7 \cdot 9$ | 22 | $7 \cdot 7$ | 3.9 | $0 \cdot 6$ | -859 | 4. | 532 |
| NEW PORT, J. C. Blox | Noy. | 30.096 | -268 | 0.888 | 43.7 | 43.2 | ${ }^{43.5}$ | $60^{\circ} 1$ | ${ }^{23.5}$ | 36.6 | $50 \cdot 3$ | ${ }^{36} 6^{\circ} 9$ | 13.4 | ${ }_{32}{ }^{2} \cdot{ }^{2}$ | ${ }^{40} 0^{\circ} 5$ | $1 \cdot 3$ | S., N.E., \& E. | 6.5 | 8 | ${ }^{1}{ }^{\circ} 7$ |  | ${ }_{0}^{0.3}$ | $\stackrel{.901}{\square 885}$ | 3.7 | 550 |
| J. C. | Dec. | ${ }^{29} 9 \cdot 929$ | $\cdot^{2} 208$ | $1 \cdot 236$ | 36.9 | ${ }^{36}{ }^{\circ}{ }^{\circ}$ | ${ }^{36}{ }_{51} 8$ | 50.9 64.0 | 18.9 35 | 32.0 28 |  | 32.0 | ${ }^{8 \cdot}{ }^{8}{ }^{-1}$ | $35^{\circ} \mathrm{H}$ 49.5 | ${ }_{47}^{33} \cdot 1$ | ${ }_{0}^{2.1}$ | N.W., \& S.E. | ${ }_{7} 7 \cdot 3$ | 21 | 0.8 6.8 | ${ }_{3}{ }_{3}{ }^{4}$ | 0.3 0.7 | ${ }^{-885}$ | ${ }_{4}^{2} \cdot 7$ | 555 531 |
| RYDE, | Oct. | ${ }^{29}{ }^{29}{ }^{\circ} 613$ | ${ }_{-259}^{338}$ | 1.180 | ${ }_{44}{ }^{5} \cdot 9$ | 51.4 | ${ }_{43}{ }^{51} 9$ | 64.0 | ${ }_{26}{ }^{\text {a }}$ - 4 | $3{ }^{28} \cdot 6$ | ${ }_{49}{ }^{5} 8$ | ${ }_{37}{ }^{46}$ | 12* | ${ }_{41}{ }^{\circ} 9$ | ${ }_{39}{ }^{4}$ | ${ }_{0} \cdot 6$ | N.W. \& S.W. | $5 \cdot 3$ | 7 | $1 \cdot 5$ | 3.0 | 0.5 | -852 | ${ }_{3}{ }^{4} 6$ | 548 |
| Benjamin Barrow,Esq., M.B.M.s. | Nov | 39.826 29 | - 194 | ${ }^{1} \cdot 1.163$ | ${ }_{38}{ }^{4} \cdot 9$ | ${ }_{37} \cdot 0$ | ${ }_{37}{ }^{4} \cdot 4$ | ${ }^{62}{ }^{\circ} \mathrm{O}$ | $22 \cdot 4$ | ${ }_{29}{ }^{35} 6$ | ${ }^{42^{\circ} 0}$ | 31.9 | $10^{*} 1$ | ${ }^{35}{ }^{\circ} 0$ | ${ }_{31}{ }^{3} \cdot{ }_{3}$ | $0 \%$ | , | 7.1 | 5 | 0.4 | 2.3 2.9 | 0.5 | $\bigcirc 811$ | $2 \cdot 7$ | 552 |
| WORTHING, | Oct. | $29^{\circ} 690$ | - 345 | $1 \cdot 000$ | 53.5 | 51.6 | $52 \cdot 2$ | $60^{\circ} 2$ | 38.6 | ${ }^{21}{ }^{\circ} 6$ | 56.3 | $49^{\circ} \cdot$ | 7.3 | 49.9 | $47 \cdot 6$ | 1.9 | S.W., S., \& N.E. | $6 \cdot 8$ | 24 | $7{ }^{7} \cdot 6$ | ${ }_{3}{ }^{3}$ | $0 \cdot$ | -854 | ${ }_{3}{ }^{\text {. }}$ | 532 |
| W. G. Barker, Esq., F.R.C.S., | Nov. | $30^{0.0977}$ | $\cdot{ }^{2} 284$ | 0.946 | ${ }^{43}{ }^{\circ} 9$ | 44.5 | 44*3 | 57.5 | -30.3 | ${ }^{27 \cdot 2}$ | $47 \cdot 9$ $39 \cdot 1$ | ${ }_{31}{ }^{4} \cdot{ }^{\circ} 0^{2}$ | 6.7 6.1 | $43 \cdot 3$ 34.8 | ${ }_{32} 2^{\circ}{ }_{5}^{\circ}$ | $1 \cdot 3$ | N.E., N.W. \& S. | ${ }_{6}^{5 .}{ }^{\circ}$ | 13 | ${ }_{0}{ }^{\circ} \cdot 2$ | ${ }_{2}{ }^{3} 4$ | 0.3 | -92 | 2.9 | 549 555 |
| M.B.M.S. | Dec. | 29`897 | $\stackrel{204}{ }$ | $1{ }^{1} 224$ | 36.5 52.5 | 36.0 | ${ }_{51}{ }^{36}{ }^{\circ} \mathrm{L}$ | 64.0 | ${ }^{22^{\circ} 5}$ | $28^{\circ}$ | 39. |  |  | ${ }_{49} 9$ | ${ }^{32}{ }^{\circ} 7$ |  |  | ${ }_{7} \cdot 6$ | 25 | ${ }_{6} \cdot 1$ | ${ }_{4} \cdot 1$ | $0 \cdot 4$ | -917 | ${ }_{5} \cdot 0$ |  |
| SOUTHAMPTON, ${ }_{\text {J. Drew, Esq., Ph. D., F.R.A.S., }}$ | Oct. Nov. |  | .$_{253}$ |  | ${ }_{42}{ }^{52}{ }^{5}$ | ${ }_{44}{ }^{5} 3$ | ${ }_{43}{ }^{\circ} 7$ | $60^{\circ} 0$ | 26.8 | ${ }_{33 \cdot} 2$ |  |  |  | 41.6 | $38^{\circ} 8$ | - |  | $6^{6} \cdot 0$ | 9 | ${ }^{1} \cdot 6$ | $2 \cdot 9$ | 0.5 | -845 | $3 \cdot 4$ | - |
| M.R.M.S. | Dec. |  | $\stackrel{200}{ }$ |  | 36.6 | $37 \cdot 7$ | $37 \cdot 3$ | 53.6 | ${ }^{19} \cdot 0$ | 34.6 |  |  |  | 35.3 | $32 \cdot 2$ |  |  | $77^{7.0}$ | 9 | ${ }_{0}{ }^{\circ} \cdot 4$ | 2.4 | 0.4 | -837 | 2. |  |
| IDHURST | Oct. | 29.619 | $\bigcirc 351$ | $1 \cdot 159$ | 52.3 | ${ }^{50 \cdot 3}$ | 51.3 | $65^{6} 8$ | ${ }^{33 \cdot}{ }^{\circ}$ | ${ }^{32}{ }^{\circ} 1$ | 58.4 | $44^{\circ} \cdot 2$ | 14.2 | ${ }^{49}{ }^{\circ}{ }^{8}$ | ${ }^{48} 8^{\circ} 2$ | 2.1 | S.W. \& S |  | 19 | ${ }^{7 \cdot 0}$ | 4.00 | 0.5 | ${ }^{9} 901$ | ${ }^{4} \cdot 8$ | 532 |
| C. Hulard, Esq., B.A., M.B.m.S. | Nov. | $30 \cdot 020$ $29 \cdot 850$ | - 196 | 1. 1.170 | ${ }_{35} 5^{\circ} 0$ | ${ }_{34}{ }^{4} \cdot 1$ | ${ }_{34} \cdot 7$ | $52^{\circ}{ }^{0}$ | $14 \cdot 4$ | 37\% | ${ }^{50 \cdot 8}$ | $28^{\circ}{ }^{3} 0$ | $12 \cdot 8$ | 33.6 | ${ }_{31} \cdot 9$ | $1 \cdot 8$ | N.E., N., \& S.E. | 7.5 |  | 1 | $2 \cdot 3$ | $0 \cdot 3$ | 842 | 2.7 | 557 |
|  | Oct. | $\stackrel{2}{9} 431$ | -324 | 1-192 | $50^{\circ} 7$ | $49^{\circ} 2$ | $49^{*} 9$ | $62 \cdot 5$ | 31.4 | $31^{\circ} 1$ | 56.4 | 43.9 | 12.5 | $48^{\circ} 0$ | $45^{\circ} 9$ | 0.8 | Var. | 6.5 | 24 | 3.9 | $3 \cdot 7$ | 0.5 | - | - | 530 |
| CLIFTON (BRISTOL), | Nov. | $29 \cdot 847$ | -250 | 0.932 | $41^{\circ} 5$ | $40 \cdot 9$ | $41^{\circ} 2$ | $56^{\circ} 5$ | $22^{\circ} 2$ | 34.3 | $47 \cdot 8$ | $34 \cdot 9$ | 12.9 | $40^{\circ} 0$ | 38.3 | $0: 3$ | Var. | $6_{7.2}$ | 13 | $2 \cdot 9$ | 2.9 2.4 | 0.3 | $\cdot \cdot 907$ | 3.4 | 548 |
| W. C. Burder, ESQ., M.B.M.S. | Dec. | $29^{\circ} 705$ | - 210 | $1 \cdot 242$ | ${ }^{35}{ }^{\circ} 1$ | $35^{\circ} 0$ | $35^{\circ} 0$ | ${ }_{51}^{51.3}$ | 10.7 30 | ${ }^{40} 0^{\circ} 6$ | ${ }^{38}{ }^{\circ} 9$ | $31^{\circ} \cdot 0$ | 7.9 | ${ }^{33} \cdot{ }^{\text {a }}$ - 1 | ${ }^{32}{ }^{\circ}{ }^{3}$ | $0 \cdot 6$ | N.E. |  |  | 0.6 |  |  |  |  | 553 533 58 |
| LEWISHAM, <br> W. Richardson, Esq., Assistant | Oct. Nov. | $29^{\circ} 641$ $30^{\circ} 040$ | ${ }_{-}{ }_{-253}^{388}$ | 1.127 0.890 | ${ }^{51}{ }^{\circ}{ }^{\circ}{ }^{\circ}$ | $50 \cdot 7$ $41^{\prime} 7$ | ${ }^{51} 1^{\circ}{ }^{\circ} 8$ | $68^{\circ} 9$ 61.2 | $32 \cdot 8$ 24.5 | ${ }_{36}{ }^{36}{ }^{\circ} 7$ | 59.4 48.9 | 44.0 | ${ }_{13}{ }^{15}{ }^{\circ} \mathrm{C}$ | $40^{\circ} \frac{1}{5}$ | ${ }_{37}{ }^{4}{ }^{\circ} 7$ | $0 \cdot 6$ | Va | 9 | 10 | ${ }_{1}{ }^{4} 6$ | 3.0 | $\stackrel{0}{0}$ | 900 | 3. | 551 |
| Secretary B.M.S. ${ }^{\text {dse., Asoliblant }}$ | Dec. | ${ }_{29}{ }^{\circ} 877$ | -194 | $1 \cdot 185$ | $34^{\circ} 0$ | $34 \cdot 7$ | $34^{\circ} 4$ | $49^{\circ} 0$ | $20^{\circ} 0$ | ${ }_{29}{ }^{\circ} 0$ | $39 \cdot 4$ | $30^{\circ} 0$ | ${ }^{9} 4$ | $33^{2} 2$ | $31 * 3$ | $0 \cdot 4$ | N.E. \& N.W. | 8.6 | 12 | ${ }^{\circ} 6$ | 2. | $0 \cdot$ | -898 | 27 | 557 |

[^11]

|  |  |
| :---: | :---: |
|  | Months． 歇馬 |
|  <br>  |  |
|  | Water or Elas－ Vapour． |
|  | Range of Barometer Readings in the Month． |
|  <br>  | $\underset{\text { Bulb Ther－}}{\text { From }}$ Bulb Ther－ mometer． |
|  <br>  | From Self－ Therm．范 $\square$ |
|  <br>  | Adopted． |
|  <br>  | Highest． |
| Нฟif <br>  | Lowest． |
|  <br>  | Range in the Month． |
|  <br>  | Mean of all the Highest． |
| बें $\dot{\text { on }}$ <br>  | Mean of all the Lowest． |
|  | Mean Daily Range． |
|  <br>  |  |
|  <br>  <br> Noivicocicicosi－i |  |
|  | Estimated Strength． |
|  | Direction． |
|  | $\begin{aligned} & \text { Mean Amount } \\ & \text { Cloud. } \end{aligned}$ |
|  | Number of Days it fell． |
| 为 | Amount col－ lected． |
|  | Mean Weight of Vapour in a cubic Vapour in |
|  | Mean Weight required to saturate a cubic foot of Air． |
|  | Mean Degree of Humidity． |
|  | Mean whole Amoun of water in a vertical column of Atmosphere |
|  | Mean Weight of a |


Entield．－The harometer readings are discordant．The instrument is not good．Hartwell Honse．－The reading of the minimum thermometer on luth October was altered trom $59^{\circ} 0^{\circ}$ to $39^{\circ} 0^{\circ}$ ．Royston．－
The mean readings of all the elements are deduced from the last 20 days only．
Highfield House．－The readings of the larometer are all too high by $0^{\circ} 1$ inch nearly；no further use has been made of
 readings of the barometer have been altered from $29^{\circ} 090$ and $29^{\circ} 030$ to $30^{\circ} 090$ and $30^{\circ}$ respectively，and on the sth the reading of the maximum thermometer has been increased from $5.0^{\circ}$ to $60^{\circ}$ Stonyhurst．-24 th December，at 9 h ．A．M．The reading of the barometer has been altered from $29{ }^{\circ} 600$ to $29^{\circ} 900$ ．York．－The reading of the wet bulb thermometer in October seems to be too high by
something more than one degree，causing the dew point to be too high by 30 ，and the degree of humidity throughout the quarter is too great．Durham．The monthly falls of rain seem to be misplaced．


A TABLE OF THE DEATHS IN LONDON FROM ALL CAUSES
Registered in the December Quarters of the 5 Years 1849 to 1853.

| CAUSES OF DEATH. | Quarters ending December |  |  |  |  | CaUses of deate. | Quarters ending December |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1849 | 1850 | 1851 | 852 | 1853 |  | 1849 | 1850 | 1851 | 1852 |  |
|  | 12818 | ${ }_{12443}^{1244}$ | 13880 | 282 | $\begin{gathered} 173965 \\ 17365 \end{gathered}$ |  | $\begin{aligned} & 120 \\ & 324 \end{aligned}$ | $\begin{aligned} & 122 \\ & 332 \\ & 32 \end{aligned}$ | $\begin{aligned} & 113 \\ & 330 \\ & 307 \end{aligned}$ | $\begin{aligned} & 211 \\ & 288 \\ & 0.1 \end{aligned}$ | 154 |
|  |  |  |  |  |  | Paralsy | 257 <br> 29 | 280 <br> 38 | ${ }_{38}^{277}$ | 27 | $\begin{array}{r}367 \\ 25 \\ \hline 1\end{array}$ |
| I. Zymotic Diseases - - | 3227 | 2708 | 3137 | 2851 | 4256 | Choream | 71 | 7 |  | 118 11 | 117 |
| Sporadic Diseases : |  |  |  |  |  | ${ }_{\text {Eppilepsy }}^{\text {Tetanus }}$ : | 73 | 79 | 75 | $\begin{array}{r} 118 \\ 4 \\ 48 \end{array}$ | - 117 |
| Dropsy, Cancer, and other Diseses of uncertain or $\}$ | 593 |  |  | 598 |  | Insent | ${ }_{773}^{26}$ | ${ }_{441}^{24}$ | ${ }_{4}^{27}$ | ${ }_{508}^{23}$ | 45 561 561 |
| Diseases of uncertain or variable Seat - | 593 | 564 | 574 | 598 | 707 | $\xrightarrow{\text { Convulsions }}$ Disease of Brain, | 146 | 155 | 139 | 174 | 191 |
| Tuberular Diseases-- ${ }_{\text {den }}$ | 2035 | 2012 | 2390 | 2219 | 2626 | Pericarditis V . |  |  |  |  |  |
| 1 Marrow, Nerves and | 1454 | 1476 | 495 | 1492 | 1812 |  | 20 412 | 21 | ${ }_{525}^{25}$ | 474 | ${ }_{577}^{28}$ |
| Discases of the Heart and ${ }^{\text {Slond }}$ Sessels | ${ }^{66}$ | 525 | 582 | 17 | 629 | Laryngitis - VI. |  |  |  |  |  |
| VI. Diseoses of the Lungs and |  |  |  | 2359 |  |  |  | ${ }_{51}^{922}$ | 1050 50 10 |  | 1460 44 |
| of the other Organs of Respiration | 2133 | 2262 | 2510 | 2359 |  | ${ }_{\text {Plearisy }}$ Pneumonia |  | ${ }_{216}^{94}$ | $\underset{216}{105}$ | $\underset{\substack{305 \\ 105}}{151}$ | ${ }_{221}^{138}$ |
| $\left.\begin{array}{l}\text { Diseases of the Stomach, } \\ \text { Liver, and other Organs }\end{array}\right\}$ | 703 | 734 | 781 | 807 | 828 | Asthma ${ }^{\text {Disease of }}$ Lu |  | ${ }_{15}^{216}$ | ${ }_{96}^{216}$ | 151 91 | ${ }_{123}^{221}$ |
| IIII. Diseases of of the Kidne |  |  |  |  |  |  |  |  |  |  | 48 |
|  |  | 153 | 160 | 168 | 200 | Quinse |  |  | ${ }_{21}^{31}$ |  |  |
| IX. Chididirth, Diseases of of | 124 | 107 | 14 | 121 | 118 | Gastritis |  | ${ }_{91}^{16}$ |  |  | ${ }^{94}$ |
| X. Rheumatism, Diseases of $\}$ | 98 | 108 | 99 | 112 | 106 | ${ }_{\text {Peritanitis }}^{\text {Pete }}$ : : | ${ }_{33}^{47}$ | 488 |  | $\begin{aligned} & 51 \\ & 53 \\ & 33 \end{aligned}$ | ${ }_{42}^{50}$ |
| I. Diseeseses of to the Ski |  |  |  |  |  | Ascter ${ }^{\text {U }}$ - |  | 229 | - 38 | 38 41 41 | 35 30 30 |
| Celluar Tissue, \&c. | 39 | 47 | 24 50 | 58 | $\begin{gathered} 26 \\ 52 \end{gathered}$ | Hernia : |  |  |  |  | ${ }_{40}^{40}$ |
| XIII. Premature Birth and De-\} | 293 | 340 | 399 | 385 | 454 | Intusurseption Stricture (of the |  |  |  |  |  |
| XIV. Atrophy ${ }^{\text {bility }}$ - | 339 | 269 | ${ }^{297}$ | 323 | 477 | Stricture (of the In |  |  |  |  |  |
| V. Age ${ }^{\text {a }}$ - ${ }^{\text {a }}$ - | 191 | ${ }_{147}^{536}$ | ${ }^{606}$ | ${ }_{126}^{556}$ | ${ }_{167}^{687}$ | Disease of Stomach, |  |  |  |  |  |
| XVII. Violenee, Privation, | 402 | 437 | 524 | 576 | 728 | Hepratitis |  |  |  |  |  |
|  |  |  |  |  |  | Jauseace or Disease of Dise |  |  |  | ${ }_{4}^{157} 4$ | +163 |
| all Pox |  |  |  |  |  | Disease of Silie |  |  |  | 12 |  |
| Measles, | ${ }_{486}^{338}$ | ${ }_{429}^{264}$ | ${ }_{603}^{204}$ | ${ }_{952}^{121}$ | ${ }_{668}^{31}$ |  | ${ }_{31}$ | 35 | 39 | 30 | ${ }_{58}$ |
| Hooping Cough | ${ }_{80}^{273}$ | ${ }_{89}^{424}$ |  |  |  | Ischurisease of Ki |  |  |  |  | 3 |
| Croup Thush : | - ${ }_{48}^{38} 4$ | 39 316 3 |  | ${ }_{34}^{27}$ | 44 |  |  |  |  |  |  |
| Diarrhcea | ${ }_{79}^{482}$ | ${ }_{316}^{41}$ |  |  | 511 | ${ }_{\text {Stone }}{ }_{\text {cstitis }}{ }^{-}$- : |  |  |  |  |  |
| Chilera - : | 494 | ${ }_{26}^{23}$ |  |  |  | Stricture of the Urethra | ${ }_{6}^{6}$ | ${ }_{64}^{12}$ |  | $\begin{gathered} 9 \\ 76 \end{gathered}$ | ${ }_{84}^{15}$ |
| Purpura and Scurva |  | ${ }^{13}$ | 18 | 14 | ${ }_{4}^{15}$ | Peremix |  |  |  |  |  |
|  |  | ${ }_{23}^{5}$ |  |  |  | ${ }^{\text {Paramenia- }}$ Oramian Drops |  |  |  |  |  |
| Infantile Fever : | 12 | ${ }_{619}$ | $\begin{gathered} 12 \\ 770 \end{gathered}$ | 634 | 13 724 | Childbirth, see Metri <br>  | ${ }_{42}^{60}$ |  | 59 40 |  | ${ }_{31}^{68}$ |
|  | 56 | 55 | 69 | 46 | 42 |  |  |  |  |  |  |
|  |  |  |  |  |  | Rheumatism |  |  |  |  | 61 |
| sipelas : : |  | ${ }_{29}^{87}$ |  |  |  | Disease of Joints, |  |  |  |  |  |
| Syphilis ${ }^{\text {Noma }}$ OTanker |  |  | 11 | ${ }_{5}$ | ${ }_{3}^{4}$ | Carbuncle |  |  |  |  |  |
| Hydrophobia - |  |  | - | - |  | segas |  | ${ }_{13}^{4}$ | 8 | 13 11 |  |
|  |  |  |  |  |  |  |  |  |  |  | ${ }^{27}$ |
| Hxmorr |  | 58 <br> 183 <br> 85 | 38 29 20 |  |  |  |  |  |  | 2 | 9 9 8 |
| Abseess |  |  |  |  |  | Want of Breast Miver | 37 | 51 | 77 | 54 | 85 |
| Fistula | 2 |  |  |  |  | Neglect |  |  |  |  |  |
| Mrortitication: | 36 24 |  | ${ }_{223}^{43}$ | ${ }_{228}^{45}$ | ${ }_{325}^{44}$ | Cold, see |  |  |  |  | ${ }_{3}^{1}$ |
| Cout-: | 14 | 17 | 11 | 10 | 10 | Burns and Scalds | 58 41 41 | $\begin{aligned} & 49 \\ & 45 \end{aligned}$ |  | ${ }_{93}^{66}$ |  |
|  |  |  |  |  |  | Drowning |  |  |  | 年 108 | 113 245 |
|  |  |  |  |  | ${ }_{225}^{122}$ | Frac |  |  |  |  |  |
| $\stackrel{\text { Ph }}{\text { Ph }}$ | 1473 | ${ }^{14585}$ | ${ }_{373}^{1737}$ | (1662 | $\begin{array}{r}194 \\ 345 \\ \hline\end{array}$ | Other Violence | 18 59 | 111 | 12 114 | 11 | ${ }_{225}^{25}$ |





Letter to the Registrar General on the Causes of Death in England by William Farr, Esq., M.D., F.R.S.

Sir,
The public health in the year 1853 underd Felruary 1856. which can be only discovered by year 1853 underwent some changes mortality differed little mortality differed little from the general average.

The temperature of the year at Greenwich was $47^{\circ} 7^{\circ}$, so it was $I^{\circ} 7^{\circ}$ below the average of 12 recent years. The defect of temperature became greater as the year advanced, and the mean temperature of the last three months $\left(4^{\circ} 3^{\circ}\right.$ ) was $2^{\circ} 7^{\circ}$ below the average. The rain fall was 20 inches, or nearly two inches above the average. The dew point ( $41^{\circ} 7^{\circ}$ ) was low, and the atmosphere was less humid than it is usually. Upon looking over the tables, the increase in the diseases of the respiratory organs is remarkable; and thus is seen again on a large scale the connexion between these diseases and a low temperature of the air.

Cholera was epidemic on the continent, and it was deemed right to give some warning of its approach in the first quarterly report, which "appeared in April. "The outbreaks of cholera in Russia" it was observed "demand the attention of the people of England, and should accelerate " all the arrangements for the supply of pure water, the drainage of towns, " and the removal of nuisances."
The epidemic broke out in London in August; and as the evils at which the above warning was directed were found extraordinarily rife in Newcastle-upon-Tyne, the epidemic raged with extraordinary violence in that town.* In London the mortality was as usual low for some time after the first appearance of the epidemic, and did not prevail with great intensity until the next summer. In the Report on the diseases of 1854 , I hope to be able to give some account of the eruption of this great epidemic which began in 1853 and attained its acme in the next year. Upon referring to the tables, it will be observed, that the total deaths from referring to the tables, it will be observed, that the total deaths from
cholera in 1853 were 4419 , of which 1927 occurred in Newcastle-uponcholera in 1853 were 4
Tyne and in Gateshead.
421,097 deaths were registered in the year 1853 , and the causes were specified in 414,198 instances, leaving 6899 deaths in which no cause sufficiently explicit to admit of classification was returned; and 4018 in which inquests were generally held, could only be classed under the head of "sudden deaths," as no information was given respecting the nature or the seat of disease. All the other causes may be briefly discussed under
five great heads.

## Zymotic Diseases.

The deaths from these diseases were 85,600 in number, or 21 per cent. f the total number.
Scarlatina, hooping-cough, diarrhoea, and typhus (including all the forms of continued fever) were the most fatal diseases of the class. The number of deaths from each of these causes ranged from hooping-cough II,200, to typhus 18,013. Of small-pox 3151 persons died, of measles 4895 , of croup 3660 , of thrush 1202 , of influenza 1789 , of dysentery 1891 . The deaths from cholera during the four years ending in 1853 were 886 , 1132 , 1381, and 4419.

* See the able Report of Mr. Simon and Mr. Hume.


## Constitutional or Spectific Diseases.

The deaths from these causes were 22 per cent. of the total deaths, or 90,998 , and among them are 5663 deaths by cancer. The 10,302 deaths by dropsy include many cases in which the dropsy was an incident of heart disease, or of derangement of the kidneys.

TABLE (1)-Causes of Death registered in England in each of the Years 1850, 1851, 1852, and 1853


Consumption is more fatal than any other single disease in England, and 54,918 deaths are referred to that head. The deaths from this cause were 46,614 in 1850, and have since that year increased progressively without any very evident reason. The 8005 deaths from hydrocephalus are not all the consequences of tubercular affections, but are in many instances simply cases of effusion on the brain after inflammation. It is difficult, however, without autopsies to distinguish the two forms of disease.
Table (2)-ENGLAND. Causes of Death. To $1,000,000$ Persons living, the Deathe from each


The evident inflammations of the brain in children are placed with cephalitis in the next class．

## Local or Monorganic Diseases．

Under this head are placed the inflammations and other local diseases of the eight systems of organs．The deaths are 156,724 ，of which $5^{2,016}$ were the consequence of diseases of the nervous system， 56,436 of diseases
Table（3）．－ENGLAND．Causes of Death．To every 1，000，000 Deaths from All Causes，the propor－
tional Numbers from each Class of Causes，and from each Cause，in the Years 1851，1852，and 1853.

| causes of deate． | $\begin{aligned} & \text { Proportional } \\ & \text { Number } \\ & \text { to } 1,000,000 \\ & \text { Deaths. } \end{aligned}$ |  |  | Causes of death． |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1851 | 1852 | 1853 |  | ． 1851 | 1852 | 1853 |
| USES | 1，000，00 | 1，000，00 | 1，000，00r | 544 Pericarditis | $\begin{aligned} & 1,499 \\ & \hline \end{aligned}$ | $\begin{gathered} 1,471 \\ 664 \end{gathered}$ | ${ }^{1,354}$ |
| ymotic Diseasse（ Z ．） | 222，007 | 230，777 | 06，663 | 46 Disease of $\bar{H}$ |  | 29，123 | 31，058 |
| Specific Diseases（S．）： <br> 2 Diseases of uncertain or variable Seat <br> 3 Tubercular Diseases | ${ }_{\text {c }}^{464,804}$ | ${ }_{\text {cose }}^{49,026}$ | $\xrightarrow{40,299} 170,486$ | 647 Laryngitis－ <br> Bronchitis | $\begin{gathered} 2,416 \\ 44,495 \\ \hline, 520 \end{gathered}$ |  |  |
| － |  |  |  | ${ }_{50}^{49}$ Pleurisy ${ }_{\text {Pneumonia }}{ }^{\text {－}}$ |  |  | ${ }_{\substack{2,064 \\ 58,181}}^{2}$ |
| 4 Diseases of the Nervous System | $\left\lvert\, \begin{array}{\|c} 128,265 \\ 30,404 \end{array}\right.$ | $\begin{array}{\|c\|c\|c\|c\|c\|c\|c\|c\|} \hline 121258 \\ 31 \end{array}$ | $\begin{array}{\|c\|c\|} \hline \frac{125,582}{33,173} \end{array}$ | 52 Disease of Lungs，\＆c． | $\begin{gathered} 30,507 \\ 12,5,505 \\ 6,805 \end{gathered}$ | $\substack{10,761 \\ \text { 6，415 }}$ | $\underbrace{}_{\substack { \text { che } \\ \begin{subarray}{c}{1,4187 \\ 6,886{ \text { che } \\ \begin{subarray} { c } { 1 , 4 1 8 7 \\ 6 , 8 8 6 } }\end{subarray}}$ |
|  | － $\begin{gathered}125,450 \\ 59,739\end{gathered}$ |  | ${ }_{\substack{136,255 \\ 57,600}}^{\substack{\text { a }}}$ |  |  | 11，020 |  |
|  | 8，789 | ${ }_{9,213}$ | ， 3,400 |  | （1， 949 | 1，776 | ， |
| Childbirth and Diseases of the Or | 8.561 | 8，117 | 8，772 | ${ }_{56} 56$ Eatreritis | 艮， 1,996 | ${ }_{9,742}^{1,7}$ | ， |
| 10 Diseases of the Orvans of Locomotion | ${ }_{2,161}^{6,205}$ | ${ }^{6,572}$ | ${ }^{6,447} 1$ | ${ }_{58}^{57}$ Peritonitis＝ | －${ }_{\text {3，216 }}^{1,760}$ | 1，743 | 3，064 |
| DISEASES OF Growtr nutrition， |  |  |  |  |  | 37 | ${ }_{\substack{2,467 \\ 1,881}}^{10,}$ |
| Malformand DECAX（D．）： |  |  |  | ${ }_{61}^{60}$ Hernia | ${ }_{2}^{1,848}$ | 2，717 | ${ }_{2}^{1,769}$ |
| Malformatuns ${ }^{\text {Preataure Birth and Debility }}$ Atrophy | 年， 4,787 | $\substack{\begin{subarray}{c}{4,1,505 \\ 42,604} }} \\{\hline 8,64} \end{subarray}$ |  | ${ }_{63}^{62}$ Intrissusure（option $($ it Intestinal Canal） | ${ }_{617}^{699}$ | ${ }_{727}^{624}$ | － |
| ${ }_{\text {Age }}{ }^{\text {Atrophy }}$ | 66，883 | 65，869 | 70，352 | 4 Disease | 5，748 | 5，392 |  |
| 16 Sudden Deaths（Causes unascertained） | 8，897 | 8，968 | 9，701 |  | 3，738 | 3，981 | 220 |
| 17 External Causes（E．） | 34，88 | 36，1 | 35，761 |  | $\substack{3,588 \\ 9,540 \\ 170}$ | － | ${ }_{\text {9，993 }}^{\text {9，9，}}$ |
| ${ }_{2}$ Small－pox | 18，022 |  | $\xrightarrow{7,607}$ | 69 Disease of Spleen |  |  |  |
|  |  | ${ }^{47,166}$ |  | $8{ }_{71}^{70}$ Nephritis Nephria（or Bright＇s Disease） | \％${ }_{1,227}^{47}$ | ${ }_{1}^{1,423}$ | 1，548 |
| ${ }_{5}^{4}$ Horoping－cough |  | 10，134 | ci，836 | ${ }_{72}^{71}$ Nephriria（or Bright＇s Disease） |  |  |  |
| ${ }_{7}^{6}$ Thiarrh Diarhea | －3，023 |  | $\underbrace{\text { a }}_{\substack{2,902 \\ 3+2,24}}$ | ${ }_{74}^{73}$ Diabetes | ${ }_{\text {1，}}^{1,037}$ b25 | ${ }_{519}^{1,004}$ |  |
| 8 Dysentery | ${ }_{\substack{5 \\ 5,622 \\ 2,92}}$ | cick6,82 <br> 3,49 | cistis |  | ${ }_{6}^{545}$ | ${ }_{6}^{577}$ | 570 582 58 |
| ${ }_{10}{ }^{\text {a }}$ Influenza ${ }^{-}$ | ${ }_{5,537}^{2,922}$ | ${ }_{\text {3，394 }}^{\substack{3,492}}$ | ${ }_{\substack{\text { 4，} \\ 4,319}}^{10,69}$ | ${ }_{77}$ Disease of Kidneys，\＆ce． | 4，099 | 4，306 | 4，329 |
| 11 Purpura and Seurvy | ${ }_{430}^{638}$ | ${ }_{\substack{584 \\ 377}}$ |  | 978 Paramenia |  |  |  |
| ${ }_{13}{ }^{3}$ Ague Remittent ${ }^{\text {Fever }}$ | 1，562 | 63 | 1，712 | arian Dropsy |  |  |  |
| ${ }_{15}^{14} 15$ ITfrantile Fever | 2，081 | 1，9888 |  | S1 Disease of Uterus，\＆ |  | 1，746 | 1，794 |
| 16 Metrria（or Puerper |  |  | ， | 1082 Arthritis |  |  |  |
| ${ }_{17}^{17}$ Rheumatic |  | （isk | $\substack { 1,91 \\ \begin{subarray}{c}{1,375 \\ 1,502{ 1 , 9 1 \\ \begin{subarray} { c } { 1 , 3 7 5 \\ 1 , 5 0 2 } } \end{subarray}$ | Siseumatis |  | $3,668$ | ${ }^{3,784}$ |
| ${ }_{20}^{19}$ Syphilis ${ }^{\text {Noma }}$（or Canker） | 1，539 | ${ }^{1,5256}$ |  |  |  |  |  |
| ${ }_{21}^{20}$ Hydraporobia－ |  |  | ${ }_{27}^{27}$ | 1185 Carbuncle |  |  | $c608746$ |
| 222 Hrmorrhage－ | 3，540 | 3，613 | ${ }_{\text {a }}^{3,317}$ | Ski， |  | 579 |  |
| ${ }_{24}^{23}$ Aropesy |  | ${ }_{2,607}^{24,43}$ |  | 1288 Cranosis－ |  |  |  |
| ${ }_{26}^{25}$ Ulicer Fistula $=$ | （816 | ${ }_{7}^{739}$ | 847 <br> 281 <br> 251 |  |  | ${ }_{849}^{604}$ | ${ }_{708}^{674}$ |
| 27 Mortitication |  |  |  |  |  |  |  |
| ${ }_{29}^{28}$ Cancer Gout $=$ | ${ }^{13,425}, 551$ | ${ }^{13,674} 5$ | 2t | 13－16－（See above．） |  |  |  |
| $3{ }_{31}^{30}$ Scrofofula |  |  |  |  |  |  |  |
|  |  |  |  | 96 Privation of Food |  | ${ }_{1,481}^{135}$ | 1，52 |
| ${ }_{4}^{34} 34$ Cephalitis ${ }^{\text {a }}$－ |  |  |  | ${ }_{99}^{98}$ Cold Cogleet | 134 | ${ }_{165}^{57}$ |  |
| ${ }_{35}$ Apoplexy <br> 36 Paralysis | 20，444 | ${ }_{19,756}^{19,78}$ | 20，221 | 100 Poison |  |  |  |
| ${ }_{3}^{37}{ }_{3}^{36}$ Deiririum Tremen | 1，294 | ${ }_{\text {1，216 }}^{182}$ | $\xrightarrow{\substack{1,299 \\ 162}}$ |  |  | ¢，448 | $\substack{6,2 \\ 3,2}$ <br> 3 |
|  | 4， 4,528 | ${ }_{4}^{4,832}$ |  | （103 Drowning |  |  |  |
| ${ }_{41}^{40}$ Tetanus Insanity $-=$ |  |  | 1，1， | ${ }^{105}$ Frea Wratures and Contu | 5 | 54 | 13,48 <br> 1,3 <br> 18 |
| ${ }_{43}^{42}$ Disease | 6才，97 | ¢1，388 |  | Other Violen | 2，745 | 2，400 | 1，74 |


of the respiratory system，and 48,272 of diseases of the other organs of the body．Of roo deaths from all causes 38 are the results of these local deseases， I2 $_{2} .6$ of the diseases of the nervous system， 13.6 of the diseases of the respiratory organs．If the deaths from consumption be added，the $13^{\circ} 6$ become $26^{\circ} 9$ ．Convulsions are the most fatal disease of the class， yet they are often mere dynamic states of the brain，nerves and muscular system，and not the result of any visible well－defined change of structure which the not the result of any visible well－defined change of structure which the anatomist can perceive．Infants and very young children Epilepsy，which superven 10，819 girls， 13,973 boys，died of this disease． males and which supervenes after puberty，was fatal to 2120 persons， 1158 males and 962 females．Chorea，a singular convulsive disease，is returned as the cause of death to 67 persons， 40 females and only 27 males． the causes of dompled the causes of death without reference to the mental disease．Of the 476 persons whose deaths are referred to insanity， 267 are females．Delirium tremens，one of the results generally of slow poisoning by alcohol，was fatal to 430 men and to only 79 women．Tetanus or lock－jaw supervenes on wounds，which are incidental to more men than women；hence 82 men and 34 women died of tetanus．Apoplexy and paralysis complicate each other，and are nearly equally fatal ；thus， 8406 persons died of apoplexy and 8378 of paralysis，generally at advanced ages，the deaths of males preponderating in apoplexy，of females in paralysis．Such are the maladies of that wonderful system of organs which especially distinguish man from the inferior animals；some at the various stages of life paralyzing him，some deranging his powers of motion，and others assailing his passions or his intellect．
The heart and blood vessels failed in 13,740 instances， 315 deaths having been set down to aneurism， 56 I to pericarditis，and 12,864 to other diseases of the heart or of the vessels．Aneurism to 83 females，killed 232 males． the other diseases of this central system affected both sexes almost equally． To this class belong many of the deaths under dropsy；it increases as the diagnostic power of the medical profession increases．

Among the diseases of the respiratory organs bronchit were exceedingly prevalent，and were nearly equally fitis and pneumonia In 1850 and 1853 bronchitis was fatal to equally fatal in the year 18.53 ． respectively，pneumonia to and was the pneumonia to 20,303 and 24,098 ．Asthma also increased， and was the direct cause of 5143 deaths．Laryngitis，pneumonia，pleurisy， also destroyed all diseases of the respirires to 10,804 females．The deaths of males from all diseases of the respiratory organs were 30,764 ，of females 25,672 of consumption，one of the tubercular diseases，however， 25,955 males and 28，963 females died．
The discases of the digestive organs were fatal to nearly an equal number of males $(15,934)$ and females（ 11,926 ）．Teething was fatal to 4678 and ileus are the 68 diseases of the intestinal canal ； 9 deaths are referred to the pancreas 6898 to the liver， 64 to the spleen，I2，2 I I to the intestinal canal．Teething enteritis，hernia，intussusception，and liver disease were more fatal to males than to females ；while from gastritis，peritonitis，ascites，ulceration and stricture of the intestinal tube，and from spleen disease women were the greatest sufferers．
The deaths from the diseases of the remaining systems were not numerous 3893 persons died of diseases of the urinary organs， 3343 of diseases of the oryans of generation， 2670 of diseases of the bones and muscles，and 766 ．aiseases of the integumentary system．Stone，stricture，and all th upon the other urinary organs，are much more fatal to men than to women upon the other hand 333 r of the 3343 deaths in the class of diseases of the
organs of reproduction, including childbirth, befel women ; 3063 women died in childbirth or of its incidental diseases, including 795 by metria died in childbirth or of its incidental or puerperal fever. To every 200 children born alive one mother it will be observed, have increased since 1850 ; but the deaths under phlegmon have declined to nearly an equal extent.

## Diseases of Growth, Nutrition, and Decay.

The deaths by diseases of this group are 62,046 , including the deaths of 18,968 children frail and often prematurely born, 865 deaths resulting from malformations, and 13,072 deaths from atrophy and wastings away without any evident organic disease. By old age 29,14I persons died, namely, 12,598 old men, and $\tau 6,543$ old women. Malformation and premature births were fatal to more males than females.
Violent Deaths, or Deaths from Evident External Causes.
14,812 deaths of this class are recorded in the year. 373 deaths were the direct effects of intemperance, exclusive of 509 deaths by delirium tremens and other diseases which should properly be referred to this head; 78 deaths are referred to the want of food, 103 to cold, 21 to neglect and 632 to the want of breast milk, the natural food of infants.

By poison 400 persons died, by burns and scalds 2590 , by hanging and suffocation 1249, by drowning 2508 , by wounds 574 , by fractures and contusions 555 I , and by other violence 724 .
Deaths by poison were less numerous in the two years $1852-3$ ( 779 ) than in the two previous years ( $1850-1$ ) 899 .
The deaths by violence to every ro,000 living were 8, and 36 in every 1000 deaths were by violence. These deaths are on the increase in Iooo dea.

Violent deaths in the aggregate killed 10,725 males and 4087 females. Burns and scalds alone are more fatal to females (1377) than to males ( 1213 ).
I beg to submit to you an improved scheme of the statistical nosology, I beg to submit to you an improved scheme of with two papers which consideration at the Statistical Congress of Paris.

I have the honour to be, Sir,
Your obedient and humble Servant, William Farr.

R E P O R T
on the
Nomenclature and Statistical Classification of Diseases, for Statistical Returns.

The first Statistical Congress in Brussels passed a resolution. Feb. 15. arussels passed a resolution to the effect that it is desirable to construct a uniform nomenclature of the Causes of Death, applicable in all countries. Dr. d'Espine and I were requested to prepare a Report on the subject for the Second Congress in Paris. After some correspondence with Dr. d'Espine, I carefully revised the Statistical Nosology which has been in use in England since 1838: and further relying upon the willingness of the members of the medical profession in the United Kingdom to co-operate in carrying out such an important national object as that to which attention had been directed by the Statistical Congress, the Nosology in its first form was submitted, with the approbation of the Registrar General, to a certain number of English, Scotch, and Irish physicians and surgeons whose attention has in various ways been directed to the study and classification of diseases. Several of ways been directed to the study and classification of diseases. Several of
them favoured me with valuable notes and suggestions, of which I have availed myself in the present arrangement.
These distinguished men must not, however, be held in any way responsible for defects either in the plan or in the execution of the work.

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## REPORT

on the
Nomenclaturee and Statistical Classification of Diseases.

Periodical Returns of the fatal diseases and injuries of the population have been published in London since the commencement of the seven teenth century; in the Department of the Seine, since 1809; and in some States the national registers contain a column in which the cause of death is inscribed. Since 1837 the causes of death have been classified and have been published in England in conformity with the principles of a statistical nosology which is there in use; and at the Census of 1851 the diseases and infirmities of the population of Ireland were returned and classed in the same order as the deaths.

The progress of the natural sciences is greatly promoted, as experience has shown, by the adoption of a nomenclature which can be used in every country, and which leaves but little doubt that the same thing is designated by the same or by strictly synonymous words. The utility of a uniform nomenclature in the registration of the causes of death was so strongly felt at the first Statistical Congress, that the members expressed their opinion in the subjoined resolution ; and Dr. Marc d'Espine and I were requested to prepare a Report on the ground that we had for several years the practical direction of statistical inquiries on this subject in Geneva and in England.

The resolution is to this effect :-
"Il y a lieu de former une nomenclature uniforme des causes de décès Bulletin, " applicable à tous les pays. Cette nomenclature, dont l'importance ne p.116. " peut être méconnue, fera l'objet d'études ultérieures, et pourra être " arrêtée dans un prochain congrès."

Objects of the Record and Tabulation of the Diseases of Mankind.
The state of health among the people differs in different times and in different places; and the principal purpose of the registration of diseases is to determine the degree of their variation in each district, and in each class of the population, as well as the extent to which they are modified by circumstances.

The causes of insalubrity are thus discovered at their source by death itself; and it is found that in many instances these causes admit of removal by sanatory measures.
The deaths that are the direct result in any way of human agency undergo judicial investigation, which is often aided by the purely statistical inquiry.

The difficulties that attend the inquiry into the diseases of a whole population are numerous. They may be referred to several heads. The phenomena are sometimes exceedingly complicated, and those of the greatest importance pass within the human body. Medical science is, notwithstanding all its achievements, still imperfect; the medical observers all over the country are not always familiar with the latest improvements in the practice of their art, and it often happens that they are only called to see their patients in the last days of illness. In parts of our towns, as
well as in remote parishes of the country, many young children and old people die without being seen by any medical man.

No perfect record of the diseases of mankind can, therefore, we believe, be obtained in the present state of civilization; but experience justifies us in saying that the record of the ascertained facts, and of the opinions of the existing race of medical practitioners in Europe, is of value, and admits of many practical applications.

Persons by whom the Cause of Death should be certified.
The medical man who attends the sick in illness should be called upon in the case of death to give a certificate stating the diseases of which the patients died, the duration of disease (when known), and the date of the last visit.
Where any person dies who has not been attended by a qualified medical man, the body should be inspected, and the certificate filled up when practicable, by a district health officer, or by some speciallyappointed medical man.
The plan that is pursued in Geneva, in Brussels, in Paris, and in other cities, of appointing a medical officer to visit everybody, and to report independently on the cause of death to an appointed health officer, who has thus the opportunity of comparing the certificates from two sources, is calculated to insure accuracy, and deserves to be adopted in towns. But in the country districts economy of skilled labour is indispensable. If there the sick poor, while alive, are inadequately supplied with medical advice and medicines, it is vain to expect that two skilled officers can be specially employed to find out the causes of death.
The public registers should embody in simple terms the last results of judicial or other investigations into the causes of death.

## Nomenclatare for Registers.

Notwithstanding the differences of doctrine, there is now a general agreement all over Europe in the designation of diseases, and popular terms can in many instances be employed without risk of inaccuracy.
In each country-that the public register might be intelligible to the people-the common names should be used where they briefly and distinctly designate a disease, except in cases where the vulgar name may be offensive. It is, however, desirable for statistical purposes that the names of diseases should be devoid of all ambiguity, and, to facilitate the abstracts, that they should be single. Such double names as are used in botany and the other sciences of natural objects would be cumbersome, and are not required.
In the national register we recommend the use of the popular names; substituting for them, however, the ordinary technical name whenever it is necessary for the sake of accuracy or of brevity.
In popular and judicial nomenclature names have been employed expressive of imperfect knowledge of the causes of death, and some of these sive of imperfect knowledge of the causes of death, and some of these
names must be adopted. Thus, a person dies suddenly at home, and the names must be adopted. Thus, a person dies suddenly at home, and the cause is not discovered; or a man is found dead from home, without evident injury; such cases are returned under "sudden death," or simply
"found dead," with the addition of any important circumstance. "found dead," with the addition of any important circumstance.
A class of names in universal use, such as "dropsy," and frequently occurring in the mortuary registers, is looked upon with little favour by pathologists; some of whom have proposed that such names shall be altogether discarded. And it is undoubtedly true that many cases of dropsy, convulsion, paralysis, and other forms of disease are every day
traced to organic lesion of the heart, kidney, brain, or other organ; but can this be done in all cases with all the assistance derived from the autopsy? can the lesion on which those diseases depend be discovered with certainty where the medical man sees the patient only for a short time under unwhere the medicale circumstances?
The permission to use vague terms in these cases, it is objected, encourages negligence; but the refusal to recognize those terms that express imperfect knowledge has an obvious tendency to encourage reckless conjecture. It appears, therefore, to be a safer course to retain, for the present, terms of this kind, and at the same time to urge observers to refer specifically to the primary organic lesion wherever it can be satisfactorily determined. Certain deaths occur in birth, in teething, in puberty, in child-bearing, in the climacteric ages, in old age, which can be referred to no definite disease-to no circumstance except the peculiarities of the condition of the organization at those periods ; names designating these conditions must, therefore, be recognized.

Nomenclature for Mortuary 7 ables.
Latin names might be used in the National Tables of the causes of death, which would then be designated in a way everywhere intelligible among scientific men; but the same object will be attained by using strictly among scientific men; but the same odjects. A list of these names in the Latin English, French, and German languages is appended.*
The names which designate fatal diseases of Common occurrence, and which should appear in all the tables, are printed in the Nosology in small capitals.

## Nomenclature of Diseases and Injuries that produce Sickness or Disability.

It is evidently desirable to extend the same system of nomenclature to diseases which, though not fatal, cause disability in the population, and now figure in the tables of the diseases of armies, navies, hospitals, prisons, lunatic asylums, public institutions of every kind, and sickness societies, as well as in the census of countries like Ireland, where the diseases of all the people are enumerated.

I have therefore included in the general list the greater part of those diseases, such as ulcers, itch, blindness and infirmities of various kinds, to serve for the classification of the diseases that affect the health, as well as of diseases that are fatal.

These diseases, as well as the diseases that are not prevalent in Europe, are omitted in the Mortuary List.

Nosology : Classification of Diseases and Causes of Death.
The causes of death were tabulated in the early Bills of Mortality (Tables mortuaires) alphabetically; and this course has the advantage of not raising any of those nice questions in which it is vain to expect physicians and statists to agree unanimously. But statistics is eminently a science of classification; and it is evident, on glancing at the subject cursorily, that any classification that brings together in groups diseases that have considerable affinity, or that are liable to be confounded with each other, is likely to facilitate the deduction of general principles.

[^12]Classification is a method of generalization. Several classifications may, therefore, be used with advantage ; and the physician, the pathologist, or the jurist, each from his own point of view, may legitimately classify the diseases and the causes of death in the way that he thinks best adapted to facilitate his inquiries, and to yield general results.
The medical practitioner may found his main divisions of diseases on their treatment as medical or surgical ; the pathologist, on the nature of the morbid action or product ; the anatomist, or the physiologist on the tissues and organs involved; the medical jurist, on the suddenness or the slowness of the death; and all these points well deserve attention in a statistical classification.
In the eyes of national statists the most important elements are, however, brought into account in the ancient subdivision of diseases into plagues, or epidemics and endemics-into diseases of common occurrence (sporadic diseases), which may be conveniently divided into three classes, and into injuries the immediate results of violence or of external causes.

Class I.-Epidemic, Endemic, and Contagious Diseases.Zymotici [Morbi populares, vel Demici ?]
This class includes fever, small-pox, plague, influenza, cholera, and the other diseases which have the peculiar character of suddenly attacking great numbers of people at intervals in unfavourable sanatory conditions. The diseases of this class distinguish one country from another-one year from another ; they have formed epochs in chronology; and, as Niebuhr has shown, have influenced not only the fate of cities, such as Athens and Florence, but of empires ; they decimate armies, disable fleets; they take the lives of criminals that justice has not condemned ; they redouble the dangers of crowded hospitals; they infest the habitations of the poor, and strike the artizan in his strength down from comfort into helpless poverty ; they carry away the infant from the mother's breast, and the old man at the end of life; but their direst eruptions are excessively fatal to men in the prime and vigour of age.
Pestilence and famine have always obtained the special attention of governments; and epidemical maladies have a special claim now to the attention of the statist, inasmuch as by prophylactic methods, of which vaccination is an example, and by hygienic arrangements, the ravages of epidemics may be greatly diminished. They are more than other diseases under public control, and may be diminished to a large extent by sanatory measures.
The diseases of the class may be referred conveniently to four groups, of which (1) fever, (2) syphilis, (3) scurvy, and (4) worms, are types.
New names are wanted to designate new groups of phenomena, which might perhaps be less equivocally designated by letters of the alphabet ; but, to assist the memory, words have been employed which, by their etymology, will suggest the group. We do not, however, in any case accept the etymological sense as a definition or at, however, in any case of causes which a name designates. Thus parts of the of the group specific transformation in the diseases of the frst the body undergo a speciic transormation in the diseases of the first class, and they have been designated Zrmotic diseases (Zymotici) in England, without any
intention to imply that these diseases are fermentation intention to imply that these diseases are fermentations.
The list has been drawn up so as to include all the principal diseases which have prevailed as epidemics or endemics ; and all those which are communicable either by human contract or by animals in a state of disease, as well as the diseases that result from the scarcity and the deterioation of the necessary kinds of food, or from parasitic animals.

The Miasmatic diseases (Order 1) are diffusible through the air or water, and are attended by fevers of various forms; the matter by which they are communicated is derived from the human body (as in small-pox) or from the earth (as in ague). (Types : small-pox, ague.)
The Enthetic diseases (Order 2) (from ev $\theta$ eros, put in, implanted) may be properly called contagious, as they are communicated by contract, puncture, or inocculation. (Types: syphilis, glanders). The venom passes through the skin.
The Dietic diseases (Order 3) arise when the blood is supplied with improper or bad food. (Types : scurvy, ergotism.
The Parasitic diseases (Order 4.) attack especially dirty populations, and infest the skin, the intestinal canal, and all the structures of the body They are rarely fatal ; and many pathologists contend that the parasitic vegetable or animal products are the accidental consequences of the diseases which they accompany.
The subsequent diseases fall under two great classes differing most in the property which those of the first class have of pervading several organs at once, or in succession; while the diseases of the other class consist essentially of functional or structural derangements of particular organs of the human body.

## Class II-Constitutional Diseases.-Cachectici

The diseases of this class are sporadic ; they are sometimes discovered to be hereditary ; they are rarely confined to one part, but before death ensues they affect several organs, in which new morbid products are often deposited.
The first order of Diathetic diseases includes gout, dropsy, cancer, mortification.
The second order of tubercular diseases includes scrofula, tabes mesenterica, consumption, and hydrocephalus.

## Class III.-Local Diseases-Monorganici.

There are sporadic diseases, in which the functions of particular organs or systems are disturbed or obliterated with or without inflammation and its products : some of the diseases are hereditary.
The diseases of the brain, spinal marrow, and nerves, form the first order (1), under the designation of the diseases of the nervous system, or, more briefly, brain diseases. The diseases of the organs (2) of circulation, (3) of respiration, (4) of digestion, and (5) of the urinary, (6) reproductive, (7) locomotive, and (8) integumentary systems, constitute eight orders of local diseases
[The division into general and local diseases is found to work well; as functional disorder is more easily discovered than the precise nature of the lesions of internal organs which are rarely examined after death. The evidence may be sufficient to show that there is disease in the brain, or the chest, or the intestines, but may not enable the observer to determine whether it is or is not the result of imflammation. Such cases are classed as "diseases of the brain," \&c.]

## Class IV.-Developmental Diseases.-Metamorphici.

The fextus in utero, the infant prematurely born, the infant in the act of birth, or shortly after birth ; the chiid in the first or second teething; the boy or the girl at the age of puberty; the woman in childbirth, or at the critical age when the reproductive function ceases; the person of advanced
age-are all liable to peculiar disorders, which in certain instances are causes of death, and are in the common nomenclature designated "still-" " birth," " premature birth," "infantile debility," "malformation," " teething," "chlorosis," "childbirth," "climacteric disease," "old age." We place all the cases in this class apart, and join with them atrophy or asthenia, and what is sometimes called "premature old age," in which the nutritive process is interrupted, without other evident disease. They are all the incidental attendants on the formative, reproductive, and nutritive processes; or the results of undetected diseases at the periods of life when those processes undergo great changes.

> Class V.-Violent Deaths or Diseases.-Thanatici.

All the preceding diseases are modified, and some are induced, by external agents ; but the present class comprises the evident results of physical and chemical forces acting on the orgnanization. Burns, asphyxias, wounds, poisonings, stings, are types of the several sub orders of the class.
Fire, asphyxia, mechanical forces, poisons, stings, induce specific diseases, which present a regular succession of phenomena, and should in all cases have names. Thus, as it is the "burn" and not the fire that is the cause of death ; so it is the disease to which "arsenic" gives rise, rather than the arsenic, that we should register.
Human agency plays so important a part in this class, that it might be made the basis of the division into orders. Thus a man may die (1) a glorious death in battle (pro patriâ mori); he may die (2) by an act of glorious death in battle pro patria mori); he may (3) ignominiously on the homicide (murder, manslaughter) ; he may die (3) ignominiously on the
scaffold (execution) ; or, (4) abaandoning the post in which God has placed scaffold (execution); or, (4) abaridoning the post in which God has placed
him, he may take away his own life (suicide) ; (5) he may die by a surgical him, he may take away his own life (sucicide)
operation ; and (6) he may die by accident.
If this grouping be adopted, the mode in which death is produced by If this grouping be adopted, the mode in which death is produced by
wounds, chemical injuries, poisons, asphyxias, and mechanical forces, wounds, chemical injuries,
would form secondary heads.

Secondary Analysis of Causes of Death.
At the instance of the Registrar General, instructions have been prepared under the several heads of the Nosology, for the use of medical men and under the several heads of the Nosology, for the use of medical men and
coroners in England.* In the several countries of Europe similar instruccoroners in England.* In the several countries of Europe similar instruc-
tions would be required, and might be modified so as to meet the peculiar tions would be required, and
circumstances of each nation.
ircumstances of each nation.
The most important point to attend to in the instructions is the regisThe most important point to attend to in the instructions is the regis-
tration of the secondary diseases which intervene in the course of other tration of the secondary diseases which intervene in the cours
diseases, and the record of the duration of every fatal disease.
diseases, and the record of the duration of every fatal disease.
To render the analysis of the causes of death complete, it will be necessary to subject a certain number of them to a second analysis; showing, for example, the various ways in which childbirth is fatal, the circumstances in which fatal accidents occur, the cases of measles that terminate in bronchitis or pneumonia, of scarlatina that pass into dropsy, and the duration of each fatal case. These analyses would be interesting chiefly to medical statists.

## Conclusion.

I have thus sketched in outline the classification of diseases from the statistical point of view, and have arranged them all under the five groups * Copies of the Statistical Nosology may be had by qualified Medical Practitiontrs, on * Copies of the Statistical Nosology
application to the Registrar General.
of Epidemic diseases (zymotici or demici), Constitutional diseases (cachectici), Local diseases (monorganici), Developmental diseases (metamorphici), and diseases that are the direct result of violence (thanati).

The general statist will gain a notion of the three first classes, by comparing them with the disorders arising in a most elaborate machine -from electrical, magnetic, or chemical action, and from the wear and tear of its particular parts. The fourth class is exemplified by defects of construction and by general decay. The fifth class is represented by the act of breaking the machine to pieces, disintegrating it parts, and putting an end to its movements, which when once stopped cannot be putting an end
By studying the causes which are injurious and fatal to men in our countries and in our cities, statists will contribute to the removal of evils which shorten human life and to the improvement of the race of men, so that citizens of civilized States may be made to excel barbarians as much in strength as they do in the arts of peace and of war.
In the words of Bacon, "If physicians [and we may add governments] " will learn and use the true approaches and avenues of nature, they may " wall learn and use the much as the poet saith-

> "Et quoniam variant morbi, variabimus artes ;
" Mille mali species, mille salutis erunt."

Form of Medical Certificate of the Cause of Death [in use in England].
To the Registrar of the Sub-district in which the Death took place. To the Registrar of the Sub-district in which the Death took place.
I hereby certify that I attended John Jones, Carpenter, aged 21 years last Birthday; that I last saw him on January 11th, 1847, that he died on last Birthday; that I last saw him on January 11th, 1847, that he died on
January 12, 1847, at 7, King Street, Mary-le-bone, and that the cause of his death was

| (a) <br> First. <br> (b) <br> Second. | Cause of Death. | Duration of <br> Diseases. | Signed, Edward Lawrence. <br> Pneumonia |
| :--- | :--- | :--- | :--- |
|  | 19 days | 3 days |  |
| Prof1 1 Title, M.D. |  |  |  |
| Address, 15, Soho Square. |  |  |  |

Suggestions to [English] Medical Practitioners respecting the mode of returning the Causes of Denth.
(1.) State the causes of death in terms as precise and brief as possible; and use, if convenient, the names recommended in the Nosology, for the sake of uniformity. The space assigned for the entry in the Register Book will contain about ten words.
(2.) Write the causes of death, where there are more than one, under each other, in the order of their appearance, and not in the presumed order of their importance.
(3.) The duration of primary and secondary diseases in these returns will always be considered to imply the time intervening between the first appearance of well-marked characteristic symptoms and death. Small-pox, scarlatina, erysipelas, typhus, and all febrile and inflammatory diseases,
should, however, be dated from the rigours and symptoms, not from the later appearance of the eruptions, \&c. The time in the certificate, opposite the primary disease will, therefore, include the whole term of illness. Thus:-

$$
\left\{\begin{array}{l}
\text { Scarlatina maligna } \\
\text { Purulent infiltration }
\end{array}\right.
$$

- 21 days.
implies that the earliest symptoms of scarlatina occurred 21 days (p.m.) death, that 7 days before death purulent infiltration was observed, and that a post mortem inspection of the body was instituted. So-

$$
\left\{\begin{array}{l}
\text { Hooping cough }- \\
\text { Paralysis of motor nerves (right side) } \\
\text { Pneumonia }
\end{array}\right.
$$

understood to mean that symptoms of the cough appeared 16 weeks, of the paralysis 4 weeks, of the pneumonia 3 weeks before death. Confusion has been produced in some returns by inattention to this point.

$$
\left\{\begin{array}{l}
\text { Childbirth }-\quad \text { of labour to death must be invariably understood). } 4 \text { days (from comencement } \\
\text { Metria } \\
\text { first symptoms till death). }
\end{array}\right.
$$

$\left\{\begin{array}{l}\text { Chilldirth } \\ \text { Placenta previa, with profuse hæmorrhage, }\end{array}\right.$
$\left\{\begin{array}{l}\text { Placenta previa, with profuse hæmorrhage, }\end{array}\right.$
Diarrhœa
Smallpox - -
first rigours till death understood $)$
first rigours till death understood). - -
Convulsions death).
(Vaccinated with doubtful effect 3 years ago.
Smallpox (confluent) first attack.
vaccinated. 8
vaccinated 8 years ago-one good cicatrix.
The term "vaccinated" is preferable to "after vaccination," for the latter as generally employed is ambiguous.
By the method now recommended, the use of conjunctive particles and other unimportant words is avoided. "Delirium tremens, brought on by excessive drinking of spirituous liquors ( 6 days)," might be abridged thus:-
$\left\{\begin{array}{l}\text { Excessive use of spirits } \\ \text { Delirium tremens }\end{array}\right.$
\{Delirium tremens

- 6 days

The former arrangement does not show clearly to what the duration ( 6 days) refers.
No attempt should be made to guess the duration of latent stages of diseases; but it will generally be possible to fix on a point of time near the access, when the patient had no symptoms of disease, and another, when the symptoms were unequivocal; if the disease be dated from the middle point of the intervening time, the results will admit of comparison. midae point of the intervening time, the results will admit of comparison.
The duration should be stated in minutes or hours, when the disease is fatal in less than 48 hours; in days, in diseases of less than 50 days' duration ; in weehs or years, for diseases of still longer duration. Month duration; in weehs or years, for diseases of still longer duration. Month
is an uncertain measure of time ; when used in the returns, it will be is an uncertain measure of time
deemed the twelfth part of a year.
(4.) State, in fatal cases of small-pox, whether vaccination had been performed wITH EFFECT, and WHEN ; and in smallpox, measles, scarlatina, typhus, rheumatism, mania, delirium tremens, apoplexy, and the like diseases, whether it be the second, third, \&c. attack, whenever the patient has sustained more attacks than one. In ague, epilepsy, convulsive diseases, angina pectoris, syncope, and other maladies which occur in fits
or paroxysms, date the illness from the first fit ; and add the duration of the last fatal fit ; thus, epilepsy 5 years ; last fit 6 hours.
(5.) Surgeons, in all cases of operation, should return (a) the primary disease or injury; (b) the operation ; (c) the secondary diseases, such as erysipelas, purulent deposits, \&c. and should state also the time from commencement of the primary diseases-the time from the operation-and the time from the appearance of secondary disease, reckoning in each instance to the death. Example:
$\left\{\begin{array}{l}\text { Femoral hernia } \\ \text { Strangulated } \\ \text { Operation } \\ \text { Peritonitis } \\ \text { Heart and kidneys diseased (p.m.) }\end{array}\right.$
(6.) It sometimes happens that the nature of the fatal disease cannot be discovered - even after a post mortem examination of all the organsand still more frequently in the absence of an examination. In such cases it is better to name one or more of the leading symptoms and peculiar appearances than to assign a specific cause on imperfect, inadequate appearances than to assign a specific cause on imperfect, inadequate
evidence. P.M. should be added when the causes of death have been evidence. P.M. should be added w.
verified by a post mortem inspection.
(7.) Certificates of the causes of death are received from Members of the Colleges of Physicians and Surgeons; Licentiates of the London Society of Apothecaries; Medical Graduates of an University ; Practitioners legally qualified by having been in practice before 1815 .
If the forms should by accident fall into the hands of any UNQUALIFIED PRACTITIONER, he is recommended not to fill them up.

## STATISTICAL NOSOLOGY．

［Nors．－The latinized names of classes and of orders are derived from Greek Norte－which may help the memory，and suggest，but will never define，the classes． The English names of classes are used in nearly the ordinary senses，and＂constitutional＂ here legitimately acquires a definite meaning．Instead of＂Diseases of the Nervous System，＂I have employed the name＂Brain Diseases，＂thus designating by the name of the principal organ the diseases of all the divisions of this great system．On the same principle the diseases of the circulatory，respiratory，digestive，urinary，reproductive， ocomotive，and integumentary systems are named．］
（Z．）I．Zymotic Diseases ：－Zymotici．（ Yón $^{2}$ ；leaven．）
Diseases that are either epidemic，endemic，or contagious； induced by some specific body，or by the want or by the bad quality of food．
（C．）II．Constitutional Diseases ：－Cachectici．（кaxegia，bad habit of body．）．
Sporadic diseases；affecting several organs in which new morbid products are often deposited；sometimes hereditary．
（L．）III．Local Diseases：Monorganici．（ $\mu$＇yos，alone，without others；＂̈pyavov，organ．）
Sporadic diseases，in which the functions of particular Sporadic diseases，in which the functions of particular
organs or systems are disturbed or obliterated，with or organs or systems are disturbed or hereditary．
without inflammation；sometimes heredital
（D．）IV．Developmental Diseases ：－Metamorphici．（ $\mu \varepsilon \tau \alpha \mu \dot{\rho} \rho \rho \omega \sigma t$ ， change of form．）
Special diseases，the incidental result of the formative，repro－ ductive，and nutritive processes．
（V．）V．Violent Diseases or Deaths：－Thanatici．（ $\theta$ ávator，violent deaths．）
Diseases which are the evident and direct results of physical or chemical forces，acting either by the will of the suf－ ferer，of other persons，or accidentally．

## Order．

Class I．－1．Miasmatic diseases：－Miasmatici．（ $\mu i \alpha \sigma \mu \alpha$, stain， defilement．）
2．Enthetic diseases ：－Enthetici．（èveroos，put in ；im－ planted．）
3．Dietic diseases：－Dietici．（（ठíaıra，way of life ；diet．）
4．Parasitic diseases：－Parasitici．（ $\pi \alpha$ рá⿱宀⿰丿九七七os，parasite．）
Class II．－1．Diathetic diseases：Diathetici．（（orá $\theta \varepsilon \sigma \iota \leq$, condition， diathesis．）
2．Tubercular diseases：－Phthisici．（ $\phi$ if $\tau \iota$ ，wasting away．）
Class III．－1．Brain diseases ：－Cephalici．（кє $\phi a \lambda \grave{\eta}$, head．）
2．Heart diseases ：－Cardiaci．（кapòia，heart．）
3．Lung diseases：－Pneumonici．（ $\pi v \varepsilon \dot{\nu} \mu \omega \nu$ ，lung．）
4．Bowel diseases ：－Enterici．（es
5．Kidney diseases ：－Nephritici．（ขє甲роц，kidney．）
6．Gennetic diseases：－Aidoici．（aiôoica，pudenda．）
7．Bone and muscle diseases ：－Myostici．（ $\mu \tilde{\nu} \varsigma$ ，muscle； js＇éov bone．）
8．Skin diseases ：－Chrotici．（xpos，skin．）

$$
\begin{aligned}
& \text { Developmental diseases of children:-Paidiaci. ( } \pi \text { aioía, } \\
& \text { youth.) }
\end{aligned}
$$

Class IV．－1．Developmental diseases of children：－Paidiaci．（ $\pi$ acoía，
youth．） Developmen
woman．）
3．Woman．）（ （ $\gamma \tilde{n} p \alpha{ }^{\text {s }}$ ，old age．）
4．Diseases of nutrition ：－Atrophici．（ $\dot{\alpha} \tau \rho \circ \not{ }^{\prime} a$ ，atrophy．）
Class V．－1．Accident：－Tychici．（ $\tau v^{\prime} \chi \eta$ ，chance．）
2．Battle ：－Polemici．（ $\pi^{\prime} \lambda \varepsilon \mu \circ \varsigma$, a battle，fight．）
3．Homicide：－Androphonici．\} (axńp, man ; aủròs, self;

5．Execution ：－Demiotici．（ $\delta \eta \mu \iota \omega \tau \nmid \eta \varsigma$, executioner．）

Class I．Zymotic Diseases．－Zymotici．

## Order 1．－Miasmatici．

［N．B．－Medical men of the respective nations are requested to employ these names whenever they are applicable in certifying the cause of death，and in Statistica Tables．Only the names in capital letters are now required in the Tables of the Causes of Death．］

| English． | Latin． | French． | German． |
| :---: | :---: | :---: | :---: |
| Small Pox． Varioloid． | Variola． <br> Varioloides． | Variole． Varioloide． | Wahre oder Mens－ chen－pocken，oder Menschen－Blattern． |
| Chicken pox． | Varicella． | Varicelle． | Wasser－Blattern． |
| Miliaria： | Miliaria． | Miliaire．（Suette mil．） | Friesel． |
| Measles． | Morbilli． | Rougeole． | Masern． |
| Scarlatina． <br> （a．）Angina ma－ ligna（classed with Scarlatina） | Scarlatina． <br> （a．）A．maligna． | Scarlatine． <br> （a．）Angine gangre neuse． | Scharlach Fieber． <br> （a．）Brandige bräune． |
| Quinst． | Tonsillia（new＊）． （Tonsillitis．） | Esquinancie． | Mandelbräune． |
| Diphtheria． | Diphtheria． | Diphthérite． | Rachencroup． |
| Mumps． | Parotia（new）． （Parotitis．） | Oreillon． | Ohrdrüsenbräune． |
| Croup． | Trachealia（new）． （Cynanche trachealis．） | Croup． | Croup． |
| Whooring Cough． | Pertussis． | Coqueluche． |  |
| Typhoid fever． | Febris typhoides． | Fiè vre typhoide． | Nervenfieber． |
| Relapsing fever． | Febris recurrens． |  |  |
| Typhus． | Typhus． | Typhus． |  |
| Erysipelas． Erythema． | Erysipelas． Erythema． | Erysipèle． Erythème． | Rose ；Rothlauf． |
| Pyemia． | Pyemia． | Pyohémie． | Eiterfieber． |
| Hospital Gangrene． | Gangrena nosoco－ mialis． | Gangrène d＇hôpital． | Hospitalbrand． |

＊The word＂new＂is inserted against terms used in the＂Statistical Nosology，＂ nd now proposed to be adopted．

| English. | Latin. | French. | German. |
| :---: | :---: | :---: | :---: |
| Meteta | Febris puerperarum. | Fièvre puerperale. | Kindbettieber. |
| Pestis (plague). | Pestis. | Peste. | Pest. |
| Carbuncle, | Anthrax. | Anthrax malin. | Carbunkel. |
| Boil. | Furunculus. | " benin. | Blutschwür. |
| Influenza. | Influenza.* | Grippe. | Grippe. |
| Dysent | Dysenteria. | Dyssenterie. | Ruhr. |
| Diarrhga. | Diarrhœa. | Diarrhée. | Durchfall. |
| Cholera. | Cholera. | Cholêra. | Cholera. |
| Yellow Fever. | Typhus icterodes. | Fièvre jaune. | Gelbes Fiener. |
| Remitient Fever. | Febris remittens | Fièvre rémittente. | Remittent-Fieber. |
| (Hong Kong and other fevers.) | Febris tropicorum. | Fièvre des tropiques. |  |
| Ague. | Febris intermittens. | Fièvre intermittente. | Wechselfieber. |
| Rheumatism. | Rheumatismus acutu (Febris rheumatic | s. Rheumatisme. <br> a.) | Rheumatis |

Sxphilis (primary). Syphilis (primarius). Syphilis (primitive). Primäre Syphilis. Syphilis (secondary). Syphilis (secundarius). Syphilis (secondaire).Secundäre Syphilis. Gonorrhœa. Gonorrhœa. Gonorrhée. Tripper. Leprosy. Lepra. Lépre.
LIeluding Greek Elephantiasis, or the leprosy of Moses. Aleppo evil, yaws, pellagra,

Including Greek Elephantiasis, or the
radesyge, are endemic in some countries.
Purulent ophthalmia. Ophthalmia purulenta. Ophthalmie puru-


Hydrophob
Necusia.
(Infection by punc-
ture in dissec-
tion.)
Malignant pustule. Pustula maligna. Pustule maligne. Milzbrandcarbunkel.

| Order 3.-Dietici. |  |  |  |
| :---: | :---: | :---: | :---: |
| Famine fever. | Febris à fame. | Fièvre de faim. | Hungerfieber. |
| Scurvy. | Scorbutus. | Scorbut. | Scorbut. |
| Purpura. | Purpura. | Purpura. | Purpura oder Blut. flecken Krankheit. |
| $\dagger$ Rickets (?) | Rachitis. (?) | Rachitisme. (?) | Englische Krankheit. |
| $\dagger$ Bronchocele. (?) | Bronchocele. (?) | Bronchocele (? | Kropf. |
| $\dagger$ Cretinism. (?) | Cretinismus. (?) | Crétinisme. (?) |  |
| Ergotism. | Ergotismus. | Ergotisme. Alcoholisme. | Mutterkornvergiflung Trunksucht oder |
| Alcoholism. <br> (Includes Int | Alcoholismus. perance, Delirium | mens, and Cat | .) Saüferdyskrasie. |
| Order 4.-Parasitici. |  |  |  |
| Thrush. | Aphtha. | Aphthe. |  |
| Porrigo. | Porrigo. | Porrigo. | Kopfgrind. |
| Scabies. | Scabies. | Scabies ou Gal | Krätze, Milbenkrätze. |
| Phthiriasis. | Morbus pedicula | Phthiriase. | Läusesucht. |

[^13]$\dagger$ Until the direct cause of these diseases is determined, they are inserted in this class.


Class II. - Constitutional Diseases.-Cachectici.


| Scrofula. | Scrofula. | Scrofule. |  |
| :---: | :---: | :---: | :---: |
| (a) Psoas abscess. White swelling. | Abscessus psoanus. | Abscès du psoas. | Lendenmuskelabscees |
| Tuberculosis Mesenterica. | Tuberculosis Mesenterica. | T | Gekrösschwindsucht. Tuberculose Bauch- |
| Tubercular peritonitis. | Peritonitis tuberculosa. | Péritonite tuberculeuse. | fellentzündung. |
| Phthisis. (Hæmoptysis). | Phthisis. <br> (Hæmoptysis.) | Phthisie. (Hémoptysie). | Schwindsucht. |
| Hydrocephalus, (with tubercular deposit). | Hydrocephalus. Meningia tuberculosa. | Hydrocéphale. <br> Meningite tuberculeuse. | (Blutspucke <br> Wasserkopf. |

Class III.-Local Diseases.-Monorganici.

| English. | Latin. | French. | German. |
| :---: | :---: | :---: | :---: |
| Meningitis. | Meningitis. | Meningite. | Meningitis. |
| Encephalitis (including acute hydrocephalus). | Encephalitis. | Encéphalite. | Gehirnentzündung und AcuterWasserkopf. |
| Cephalitis. | Cephalitis. | Céphalite. | Cephalitis. |
| Myelitis. | Myelitis. | Myélite. | Rückenmarkentzündung. |
| Apoplexy. | Apoplexia. | Apoplexie. | Schlagfluss, Nervenschlag. |
| Paralysis (of ). | Paralysis. | Paralysie. | Lähmung. |
| Shaking palsy. | Paralysis agitans. |  | Zitterkrampf. |
| Chorea. | Chorea. | Chorée (danse de Saint Guy). | Veitstanz. |
| Delirium Tremens | Delirium tremens. |  | Säuferwahnsinn. |
| Manta.* | Mania. | Folie. | Manie. |
| Monomania. | Monomania. | Monomanie. | Monomanie. |
| Dementia. | Dementia. | Démence. |  |
| Epilepsy. | Epilepsia. | Epilepsie. | Fallsucht. |
| Hysteria. | Hysteria. | Hystérie. | Muttersucht. |
| Tetanus. | Tetanus. | Tétanos. | Starrkrampf. |
| Convulstons. | Convulsio (?) | Convulsions. | Krämpfe. |
|  | Eclampsia. | Eclampsie. | Krampf der Gebärenden. |
| Laryngismus. | Laryngismus. | Laryngisme. |  |
| Neuralgia. (Tic Douloureux). | Neuralgia. | Névralgie. | Neuralgie. |
| Neuroma. | Neuroma. | Nérrôme. |  |
| Ophthalmitis. | Ophthalmitis. | Ophthalmie. | Augenentzündung. |
| Blindness. | Cæcitas. | Cécité. | Blindheit. |
| Otitis. | Otitis. | Otite. | Ohrentzündung. |
| Deafness. | Surditas. | Surdité. | Taubheit. |
| Order 2.-Cardiaci. |  |  |  |
| Carditis. | Carditis. | Cardite. |  |
| Pericarditis. | Pericarditis. | Péricardite. | Herzbeutelentzün- |
| Endocarditis. | Endocarditis. | Endocardite. | dung. |
| Disease of heart valves. | Morbus cordis valvularum. | Maladie des valvules du cour. | Klappenfehler. |
| Heart hypertrophy. | Hypertrophia cordis. | Hypertrophie du cœur. | Herzhypertrophie. |
| Heart atrophy. | Atrophia cordis. | Atrophie du cœur. | Herzatrophie. |
| Heart fatty degeneration. | Cordis degeneratio. | Dégénérescence du ceur. | Fettige herzentartung. |

* Fright, excessive laughter, grief, and some other mental affections, are in rare instances returned as causes of death.

| English. | Latin. | French. | German. |
| :---: | :---: | :---: | :---: |
| Aneurism of the heart - |  |  |  |
| $\qquad$ of the Aorta, of popliteal artery, \&c. | aortæ, \&c. | Anévrisme de l'aorte. | e. Aortenaneurisma. |
| Angina pectoris. | Angina pectoris. | Angine pectorale. | Brustbraüne. |
| Fainting. | Syncope. | Syncope. | Ohnmacht. |
| Arteritis. | Arteritis. | Artérite. |  |
| Atheroma (of arteries). | Atheroma (arteriarum.) | Athérome (des artères). | - Atheroma. |
| Phlebitis. | Phlebitis. | Phlebite. | Venenentzündung. |
| Varicose veins. | Varix. | Varices. | Krampfadern. |
| Order 3.-Pneumonici. |  |  |  |
| Epistaxis. | Epistaxis. | Epistaxis. | Nasenbluten. |
| Laryngitis <br> (Edema of the glottis). | Laryngitis. <br> (Edema glottidis.) | Laryngite. <br> (Cdème de la glotte.) | Kehlkopfentzündung. (Stimmentzündung.) |
| Laryngismus stridulus. | Laryngismus stridulus. | Pseudo-croup. | Stimmritzenkrampf. |
| Bronchitis. | Bronchitis. | Bronchite. | Luftrohrenentzündung. |
| Pleurisy. | Pleuritis. | Pleurésie. | Brustfellentzündung. |
| Hydrothorax. | Hydrothorax. | Hydrothorax. | Brustwassersucht. |
| Empyema. | Empyema. | Empyème. | Empyem. |
| Pneumothorax. | Pneumothorax. | Pneumothorax. |  |
| Congestion of lungs. | Apoplexia pulmonalis. | Apoplexie pulmonaire. | Lungenschlag. |
| Pneumont | Pneumonia. | Pneumonie. | Lungenentzündung. |
| Pleuripneumonitis. | Pleuripneumonitis. | Pleuripneumonie. | Brustfell und lungenentzündung. |
| Asthma. | Asthma. | Asthme. | Engbrustigkeit. |
| Emphysema (of lungs). | Emphysema. | Emphysème des poûmons. | Emphysem. |
| Grinder's asthma. | Asthma tritorum. |  | Grinder'sches Asthma ${ }^{\text {a }}$ |
| Miner's asthma. <br> Spurious mela- | Asthma metalli- |  | Miner'sche Asthma. |
| nosis. |  |  | Unächte Melanose. |
|  | Order 4. | -Enterici. |  |
| Glossitis. | Glossitis. | Glossite. | Zungenentzündung. |
| Stomatitis. | Stomatitis. | Stomatite. | Mundentzïndung. |
| Pharyngitis. | Pharyngitis. | Pharyngite. | Schlundkopfentzïndung. |
| CEsophagitis. | CEsophagitis. | Esophagite. | Speiserörhenentzündung. |
| Gastritis. | Gastritis. | Gastrite. | Magenentzündung. |
| Enteritis. | Enteritis. | Entérite. | Darmentzündung. |
| Peritonitis. P | Peritonitis. | Péritonite. | Bauchfellentzündung. |
| Ileus. (Constipation.) | Ileus. (Constipatio.) | Ileus. <br> (Constipation.) | Kothbrechen. (Verstopfung.) |
| Intussusception. I | Intussusceptio. | Intussusception. | Darmverschlingung, Volvulus. |


| English. | Latin. | French. | German. |
| :---: | :---: | :---: | :---: |
| Hernia. | Hernia. | Hern | Engeweidebrüche. |
| (Congenital) | (Congenitalis.) | (Congénitale.) | Angeborner Bruch. |
| (Femoral.) | (Femoralis.) | (Fémorale.) | Schenkelhalsbruch. |
| (Inguinal.) | (Inguinalis.) | (Inguinale.) | Leistenbruch. |
| (Scrotal.) | (Scrotalis.) | (Scrotale.) | Hodenbruch. |
| (Umbilical.) | (Umbilicalis.) | (Ombilicale.) | Nabelbruch. |
| (Ventral.) | (Ventralis.) | (Abdominale.) | Bauchbruch. |
| $\begin{aligned} & \text { Stricture (of ili- } \\ & \text { um, \&c.) } \end{aligned}$ | $\begin{aligned} & \text { Contractura (ilii, } \\ & \text { \&c.) } \end{aligned}$ | $\begin{aligned} & \text { Contracture } \\ & \text { 'lilén etc.) } \end{aligned}$ | Dünndarmverenge- rung. |
| $\begin{aligned} & \text { Ulceration (of } \\ & \text { ilium, \&ce.) } \end{aligned}$ | Uleus (ilii, \&c.) | $\begin{aligned} & \text { Ulération } \\ & \text { lilién, etc.) } \end{aligned}$ | Dündarmverschwä- rung. |
| Perforation (of ilium, \& c.) | Perforatio (ilii, \&e.) | $\underset{\text { Perforation }}{\text { Pilén, etc.) }} \text { (de }$ | Dünndarmperforation. |
| Dyspepsia. | Dyspepsia. | Dyspepsie. | Dyspepsie. |
| Pyrosis. | Pyrosis. | Pyrosis. | Sodbrennen. |
| Gastralgia. | Gastralgia. | Gastralgie. | Gastralgie. |
| Hæmatemesis. | Hæmatemesis. | Hématémèse. | Blutbrechen |
| Melena. | Melæna. | Méléne. |  |
| Hæmorrhoids. | Hæmorrhois. | Hémorrhoides. | Hämorrhoide |
| Fistula. | Fistula. | Fistule. | Fistel. |
| Pancreatic Disease. | Morbus Pancreaticus. | Pancréatie. | Entzündung der Pancreas. |
| Splenitis. | Splenitis, | Splénite. | - der Milz. |
| Hepatitis. | Hepatitis. | Hépatite. | Lebe |
| Jaundice. | Icterus. | Itè̀re. | Gelbs |
| Gall stones. | Chololithus. | Calcul biliaire. | Gallensteine. |
| Cirrhosis. | Cirrhosis. | Cirrlose. | Cirrhose ; granulirte Leber. |
| Ascites. | Ascites. | Ascite. | Bauchwassersucht. |
| Order 5.-Nephritici. |  |  |  |
| Neprritis. | Nephritis. | Néphrite. | Nierenentzïndung. |
| Ischuria. | Ischuria. | Ischurie. | Harnverhaltung. |
| Diuresis. | Diuresis. | Diuress. | Unvermogen den Harn zu halten. |
| Nephria. <br> (Bright's disease Albuminuria. | Nephria. | Néphrine. | Brightsche Krankheit. |
| Diabetes. | Diabetes. | Diabète. | Harnruhr. |
| Stone. <br> (Uric acid, \&ce.) | Calculus. | Calcul. | Steinkrankheit. |
| Gravel. | Calculus. | Gravelle. | Harngries. |
| Hæmaturia. | Hæmaturia. | Hématurie. | Blutharnen. |
| Crstritis. | Cystitis. | Cystite. | Blasenentzündung. |
| Disease of the prostate gland. | Morbus prostaticus. | Prostatite. | Vorsteherdrüsenkrankheit. |
| Contractura URETHRA. | Contractura urethre | Uréthrosténie. | Verengerung der Harnröhre |
| Order 6.-Gennetici. |  |  |  |
| Varicocele. | Varicocele. | Varicocèle. | Krampfaderbruch. |
| Orehitis. | Orchitis. | Orchite. | Hodenentzündung. |
| Hydrocele. | Hydrocele. | Hydrocèle. | Wasserbruch, |


| English. | Latin. | French. | German. |
| :---: | :---: | :---: | :---: |
| Hysteritis. | Hysteritis. | Hystérite. | Gebärmutterentzündung. |
| Ovarian dropsr. | Hydrops ovarii. | Ovarémie. | Eierstockswassersucht. |
| Ovarian tumor. | Tumor ovarii. | Ovarite. | Eierstocksge- |
| Uterine tumor. Polypus of uterus. | Tumor uteri. Polypus uteri. | Tumeur utérine. Polypes de l'uuérus. | Uterusgeschw ülste. Uteruspolypen. |
| Order 7.-Myostici. |  |  |  |
| Synovitis. | Synovitis. | Synovite. | Gelenkkapselentzündung. |
| Ostitis, (including periostitis and endostitis). | Ostitis. | Ostéite. | Knochen- und KnochenhautEntzündung. |
| Exostosis. | Exostosis. | Exostose. | Exostose. |
| ${ }^{\text {Brittle-bones. }}$ | Fragilitas ossium. |  |  |
| Soft-bones. <br> Curvature of spine. | Mollities ossium. Curvatura spinæ. | Ostéomalacie. | Knochenerweichung. |
| Caries. | Caries. | Carie. | Rückgrathverkrümmung. |
| Necrosis. | Necrosis. <br> (Fractura ossis-vide <br> Class V.) | Nécrose. | Knuchenfrass. |
| Muscular atrophy. | Atrophia musculorum. | Atrophie musculaire. | Muskelatrophie. |
| Order 8.-Chrotici. |  |  |  |
| Roseola. | Roseola. | Roséole. | Reseola. |
| Urticaria, | Urticaria. | Urticaire. | Nesselfriesel. |
| Eczema. | Eczema. | Eczéma. | Eczem, Hitzbläschen |
| Herpes. | Herpes. | Herpès. | Herpes, Flechte. |
| Pemphigus. | Pemphigus. | Pemphigus. | Pemphigus, Blasenausschlag. |
| Rupia. | Rupia. | Rupia. | Rupia. |
| Ecthyma | Ecthyma. | Ecthyma. | Ecthyma. |
| Impetigo. | Impetigo. | Impetigo. | Impetigo, Ansprungnässender Grind, oder Pustelflechte. |
| Acne. | Acne. | Acné. | Acne, Finne. |
| Mentagra. | Mentagra. | Mentagre. | Mentagra, Bartinne. |
| Lichen. | Lichen. | Lichen. | Lichen, Schwind- knötchen. |
| Prurigo. | Prurigo. | Prurigo. | Prurigo, Hautjucken. |
| Psoriasis. | Psoriasis. | Psoriasis. | Psoriasis, Schuppengrind. |
| Pityriasis. | Pityriasis. | Pityriasis. | Pityriasis, Hautkleie. |
| Iehthyosis. | Ichthyosis. | Ichthyose. | Iehthyosis, Fischhaut. |
| Phiegmos. | Phlegmon. | Phlegmon. | Phlegmon. |
| Whitlow. | Paronychia. | Panaris. | Wurm, Panaritium. |
| Abscess (external). | Abscessus (externus) | ). Abscès. | Abscess. |

Class IV.-Developmental Diseases:-Metamorphici.

| English. | Latin. | French. | German. |
| :---: | :---: | :---: | :---: |
| Stillborn. | Natus mortuus. | Mort-né. | Todgeboren. |
| Premature Birth. | Premature natus. | Accouchement pré. mature. | Unzeitiggeboren. |
| Atelectasis. | Atelectasis pulmonum. | Faiblesse. | Lungen-atelektasie. |
| Malformations: | Vitia conformationis: | Malformations: | Missbildungen: |
| Cyanosis. | Cyanosis. | Cyanose. | Cyanose. |
| Spina bifida. | Spina bifida. | Spina bifida. | Spina bifida. |
| Anusimperforatus. | Anus imperforatus. | Imperforation de l'anus. | Atresia ani. |
| Idiocy. | Fatuitas. | Idiotisme. | Idiotismus. |
| $\left.\begin{array}{c} \text { Congenital Deaf- } \\ \text { Dumbness. } \end{array}\right\}$ | Mutitas. | Sourd-mutité. | Taubstummheit. |
| Teething. | Dentitio. | Dentition. | Zahnung. |



| Order 3.-Developmental Diseases of Old People:-Geratici. |  |
| :---: | :---: |
| Old age. | Senectus. |
|  | Sénilité. |
| Altersschwäche. |  |


| ORDER 4.-Diseases of Nutrition:-Atrophici. |  |  |  |
| :--- | :---: | :---: | :---: |
| Atrophy, Debility, <br> (includes prema- <br> ture old age). |  |  |  |
| Atrophia, asthenia. Atrophie. |  |  | Atrophie. |


| English. | Latin. | French. | German. |
| :---: | :---: | :---: | :---: |
| Lightning. | Fulmen. | Foudroyé. | Blitzschlag. |
| Sunstroke. | Insolatio. | Coup de soleil. | Sonnenstich. |
| Drowning. | Submersio. | Submersion. | Ertrinken. |
| Hanging. | Suspendium. | Suspension. | Erhängen. |
| Suffocation. | Suffocatio. | Suffocation. | Erstickung. |
| Fracture of - | Fractura - | Fracture de - | Bruch von - |
| Contusion of - | Contusio - | Contusion de - | Contusion von- |
| Concussion of - | Commotio - | Commotion de - | Erschütterung von- |
| Gunshot wound. | Vulnus a tormento. | Plaie d'arme à feu. | Schusswunden. |
| Cut ; Stab. | Vulnus cultro; sieâ. | Coupure; Piqûre. | Schnittwunden. |
| Poisoning. | Venenatio. | Empoisonnement. | Gift. |
| Privation. | Privatio. | Indigence. | Armuth. |
| Otherwise. | Aliter | Autrement. | Ander |

Order 2.-Battle:-Polemici.
On the field: In pugnâ terrestri: Sur champ de ba-
Gunshot wound.
Cut; Stab.
Vulnus a tormento.
Plaie d'arme à feu. pugione. Coupure; Piqûre. Aliter.

Autrement.
Taval engagement: In pugnâ navali: Combat navale:
Gunshot wound. Vulnus a tormento. Plaie d'arme à feu. (?)
Cut ; Stab. Vulnus gladio; Coupure; Piqûre.
Coupure; Piqûre.
Otherwise.
After land fight.
After sea fight. pugione.

Autrement. Post pugnam ter-
restrem. $\begin{gathered}\text { Blessures, plaies, etc. } \\ \text { après combat sur }\end{gathered}$ Post pugna valem.
(Showing nature of wound as above.)
Order 3.-Homicide* :-Androphonici.

| Burn; Scald. | Ambustio. | Brulûre. | Feuer; Verbrennung mit heissen Flussigkeiten. |
| :---: | :---: | :---: | :---: |
| Drowning. | Submersio. | Submersion. | Ertrinken. |
| Suffocation. | Suffucatio. | Suffocation. | Erstickung. |
| Fracture of - | Fractura. | Fracture de - | Bruch. |
| Blow on - | Ictus. | Coup sur - |  |
| Contusion of - | Contusio. | Contusion de - | Contusion. |
| Concussion of - | Concussio. | Commotion de- | Erschütterung. |
| Gunshot wound. | Vulnus a tormento. | Plaie d'arme à feu. | Schusswunden. |
| Cut; Stab. | Vulnus cultro; sicâ. | Coupure; Piqûre. | Schnittwunden. |
| Poisoning. | Venenatio. | Empoisonnement. | Gift. |
| Privation. | Privatio. | Indigence. | Armuth. |
| Otherwise. | Aliter. | Autrement. | Anders. |

[^14]| Order 4.-Suicide :-Autophonici. |  |  |  |
| :---: | :---: | :---: | :---: |
| English. | Latin. | French. | German. |
| Burn, | Ambustio. | Brulûre. | Feuer. |
| Drowning. | Submersio. | Submersion. | Ertrinken. |
| Hanging. | Suspendium. | Suspension. | Erhängen. |
| Suffocation. | Suffocatio. | Suffocation. | Erstickung. |
| Fracture, \&c. | Fractura, \&ce. | Fracture de | Bruch. |
| Gunshot wound. | Vulnus a tormento. | Blessure. | Schusswunden. |
| Cut; Stab. | Vulnus cultro; sicâ. | Coupure; Piqûre. | Schnittwunden. |
| Poison (by | ). Venenatio. | Empoisonnement. | Gift. |
| Privation. | Privatio. | Indigence. | Armuth. |


| Gunshot wound. | Vulnus a tormento. | Plaie d'arme à feu. | Schusswunden. |
| :--- | :--- | :--- | :--- |
| Beheading. | Decollatio. | Décapitation. | Enthauptung. |
| Hanging. | Suspendium. | Suspension. | Erhängen. |

N.B. - In every case of violent death it should be stated in the register whether the death was (1st) in battle; or was (2d) excusable or justifiable homicide; (3d) manslaughter; (4th) suicide; (5th) murder, infanticide, fratricide, parricide: (6th) execution.

The instruments employed, where human agency is concerned, as well as the animals, machines, and poisons or other bodies whereby the injury is inflicted, should be stated in all cases. The place of death or of injury, and the time which elapsed between the infliction of the injury and death should also be recorded. At the same time, the statement should be made as concise as it is clear and comprehensive.

Lists of Causes of Death; for Use in the Construction of Mortuary Tables.

The following pages (pp. 94-96) contain two lists of causes of death. The first,-that on the left side,-may be called the Tabular List, and comprises all the heads which it is proposed to admit into the complete tables, and under which atL deaths, from whatever cause, must be distributed. It represents those diseases which, under the same terms, or terms strictly synonymous with them, are found in practice to occur most frequently in the English registers. If the list were extended, by admitting into it the numerous modifications of disease that appear in the registers, it is obvious that the sheets would be too cumbrous for working, and that the tables made from them would be inconvenient for reference. Opposite each head in the working sheet will be a line on which the deaths can be indicated by penmarks, and vertical lines will be drawn for the distinction of ages.
The Supplemental List is subordinate to the first, and contains the principal special diseases which it may be considered desirable to note. But it should be observed, that every case marked here must also be enumerated under one or other head in the tabular list. The tabular heads under which it is proposed to place such special cases are shown by references in figures. In distributing the special cases over the tables they should, of course, be referred to those heads to which they are most nearly allied. It will be found that the special cases are few, and will not affect the larger numbers in the tables to any important extent. In England it has been numbers in the age opposite the particular usual to note list may be alweys extended at pleasure by the pen, but it is head. This to mate limits, printed on the working sheet
The diseases in the Supplemental List are separately tabulated.
The rinted on


* Other diseases of the brain, or diseases of the nervous system, not otherwise distinguished,
re referred to this head. Mutatis mutandis, the note applies to the corresponding heads in
are referred to this head.
other orders of this class.


## CAUSES OF DEATH



SUpplemental List o CHARABETERE, OR RARELAI
III. 2.-1. Carditis 3. Eypoctror ititis. $\underset{\text { Angina }}{ }$ Arteritis.
Hydropericar
Hine
III. 3.-2. ©dema glot-
4. Empyema.

Diaphragmitis
Pneumotho-
5. Pulmonary
6. $\begin{gathered}\text { apoplexy } \\ \text { Minder's } \\ \text { Miner's }\end{gathered}$ Emphysema.

Pyrosis.
Gastralgia.
Hamnatemesis.
Melatemes.
Meemorrhoids.
14. Gall-stones.
15. Cirrhosis.
III. 5.-5. Gravel
6. Cystir
II. 5.-8. Diuresis.

Hæmaturia
Dis. of pro-
state.
Dis. of blad-
der.

Hydrocele.
$\underset{\substack{\text { Ovarian } \\ \text { Ont. }}}{\text { Hu- }}$
mor.


## SPECIMEN TABLE

of
CAUSES OF DEATH OF FEMALES IN ENGLAND

In 1852,

IN THE PROPOSED FORM OF CLASSIFICATION.

* See note under III. 1.-10.

of CLASSIFICATION drawn ap at the instance of the STATISTICAL CONGRESS.



| $\begin{aligned} & \dot{\text { B }} \\ & \text { ढ゙ } \end{aligned}$ | Causes of Death. | Ages at Death. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 15 | 25 | 35 | 45 | 55 | 65 | 75 | 85 | $\underset{\substack{\text { and } \\ \text { upwards. }}}{\text { a }}$ | ? |
| I. | Order 1. |  |  |  |  |  |  |  |  |  |  |
|  | 1. Small pox | 222 | 143 | 46 | 29 | 12 | 4 | - | - | - | - |
|  | 2. Measles - | 21 | 11 | 2 | 2 | - | - | 1 | - | - | - |
|  | 3. Scarlatina | 200 | 60 | 36 | 15 | 8 | 2 | 1 | - | - | - |
|  | 4. Quinsy - - | 12 | 13 | 9 | 7 | 11 | 6 | 2 | 1 | - | - |
|  | 5. Croup - - | 2 | 2 | 2 | 1 | - | - | - | - | - | - |
|  | 6. Whooping Cough <br> 7. Typhus (and In- | 2 | - | 1 |  |  | - | - | - | - | 2 |
|  | fantile fever) - | 1,967 | 1,089 | 753 | 619 | 581 | 446 | 174 | 25 |  | 2 |
|  | 8. Erysipelas - | 75 | 80 | 98 | 74 | 83 | 124 | 78 | 21 | 2 | - |
|  | 9. Metria - | 260 | 448 | 251 | 13 | - | - | 7 | 21 | 2 | - |
|  | 10. Carbuncle | 1 | 3 | 6 | 10 | 12 | 15 | 11 | 3 | 1 | - |
|  | 11. Influenza | 21 | 23 | 29 | 35 | 86 | 189 | 142 | 22 | 3 | - |
|  | 12. Dysentery | 59 | 78 | 94 | 125 | 168 | 171 | 93 | 23 | 1 | - |
|  | 13. Diarrhœa | 114 | 182 | 174 | 194 | 299 | 525 | 525 | 113 | 8 | 1 |
|  | 14. Cholera - - | 22 10 | 38 6 | 43 7 | 41 2 | 49 5 | 54 5 | 27 3 | 5 | - | - |
|  | 16. Remittent fever - | 16 | 9 | 6 | 6 | 8 | 9 | 3 | - 1 | - | - |
|  | 17. Rheumatism | 123 | 116 | 90 | 94 | 127 | 145 | 53 | 6 | 1 | 1 |
| I. | Order 2. |  |  |  |  |  |  |  |  |  |  |
|  | 1. Syphilis <br> 2. Hydrophobia | 29 | 39 1 | 22 | 7 | 5 | - | 2 | - | - | - |
| I. | Order 3. |  |  |  |  |  |  |  |  |  |  |
|  | 1. Privation | 2 | 5 | 2 | 4 | 3 | 5 | 2 | - | - | - |
|  | 2. Purpura and Scurvy | 9 | 10 | 1 | 7 | 7 | 4 | 6 | 1 | - |  |
|  | 3. Intemperance | - | 14 | 20 | 20 | 12 | 8 | 2 | - | - | 2 |
| I. | Order 4. |  |  |  |  |  |  |  |  |  |  |
|  | 1. Thrush - | 1 | 2 | 2 | 1 | 3 | 1 | 6 | - | - | - |
|  | 2. Worms - | - | - | - | - | - | - | - | - | - | - |
| II. | Ordir 1. |  |  |  |  |  |  |  |  |  |  |
|  | 1. Gout | - | 2 | 3 | 4 | 8 | 11 | 5 | 1 | - | - |
|  | 2. Dropsy | 192 | 331 | 438 | 633 | 1,113 | 1,529 | 894 | 127 | 3 | 2 |
|  | 3. Cancer - | 46 | 185 | 604 | 985 | 978 | 682 | 302 |  | 2 | 1 |
|  | 4. Noma - | 10 | - | - | - | 1 | 1 | 2 | 1 | - | - |
|  | 5. Mortification | 10 | 16 | 23 | 28 | 48 | 138 | 169 | 59 |  | 1 |
| II. | Order 2. |  |  |  |  |  |  |  |  |  |  |
|  | 1. Scrofula - - | 213 | 157 | 95 | 70 | 60 | 43 | 10 | 1 | - | - |
|  | 2. Tabes Mesenterica | 80 | 28 | 24 | 25 | 16 | 12 | 1 | - | - | - |
|  | 3. Phthisis - - | 6,925 | 6,805 | 4,630 | 2,600 | 1,343 | 549 | 113 | 11 | - | 7 |
|  | 4. Hydrocephalus - | 56 | 11 | - 8 | 9 | - 5 | 5 | 11 | 1 | - | - |
| III. | Order 1. |  |  |  |  |  |  |  |  |  |  |
|  | 1. Cephalitis - | 239 | 136 | 92 | 46 | 40 | 22 | 10 | 4 | - | - |
|  | 2. Apoplexy | 131 | 193 | 287 | 506 | 834 | 1,022 | 607 | 95 | 8 | 3 |
|  | 3. Paralysis - | 51 | 92 | 185 | 397 | 800 | 1,364 | 1,036 | 174 | 8 | 1 |
|  | 4. Delirium Tremens | 1 | 10 | 20 | 11 | 10 | 3 | 1 | 2 | 8 | - |
|  | 5. Insanity - | 22 | 16 | 52 | 56 | 62 | 51 | 21 | 3 | - | - |
|  | 6. Chorea - | 19 | 5 | - | 3 | 1 | 1 | - | - | - | - |
|  | 7. Epilepsy | 185 | 151 | 125 | 102 | 85 | 85 | 40 | 12 | - | 2 |
|  | 8. Tetanus |  | 7 | 3 | 2 | 4 | 3 | 2 |  | - | - |
|  | 9. Convulsions | 44 121 | $\begin{array}{r}33 \\ 143 \\ \hline\end{array}$ | 18 153 | 12 | 12 | 13 | 11 | 2 | - | 1 |
|  | 10. BrainDisease, \&c. | 121 | 143 | 153 | 178 | 234 | 187 | 83 | 8 | 2 | 9 |


in the proposed FORM of CLASSIFICATION-continued.




Registrar-General on the International Statistical Congress held at Paris in 1855.

Sir,

## General Register Office,

The
The Statistical Congress was convened by the Government of the Emperor of the French, and met in Paris on September roth, $1855^{\circ}$ I was appointed to attend the Congress by you, and I had the honor to be associated on this occasion with Mr. Fonblanque and his assistant Mr. Valpy, of the Board of Trade. Viscount Ebrington and the Rev. Wyatt Edgill represented officially the London Statistical Society. Professor Leone Levi was delegated by some of the English Chambers of Commerce. The English representatives, with Dr. Greenhill, Dr. Balfour, Dr. Barnes, Dr. Johnson, Mr. Taylor, Mr. S. Brown, and others, attended in the sections where subjects with which they were most conversant were under discussion.
In conformity with the instructions of the Lords Commissioners of Her Majesty's Treasury, I have the honor to submit to you a Report on the proceedings of the Congress.

The Congress was in its first conception, and remains still, a purely practical institution : its main object is to bring the statistical information about the population, property, agriculture, industry, commerce, and administration of civilized states into forms, in some respects identical, in others analogous, and always admitting of strict and ready comparison.

In former ages the various governments of the world often concealed everything that could throw light on the condition of their people or on the resources of their states. When policy was a mystery it did not rely on truth, but on craft; and rarely took counsel of statistical science, which deals openly with facts, expressed in numbers, and seeks to apply to the affairs of nations the exact methods which in the hands of scientific men have already brought home from all the kingdoms of nature rich harvests for mankind.
The frank endeavours of the Governments of civilised states to enlighten and to aid each other, is a new and an auspicious sign.
In the programmes as well as in the discussions of Brussels and Paris, great discretion was exercised in eliminating everything that was likely to interfere with religious creeds or to excite the susceptibilities of nations living under different forms of government; and within the prescribed limits ample scope was found for discussions and inquiries, interesting to every government that has at heart the welfare of its people.
England sent a delegate to the first Congress; France was represented there officially by M. Legoyt ; Austria was represented by Baron Czœrnig ; Prussia by Mr. Dieterici; Spain by M. Ramon de la Sagra. Nearly all the small states and all the large states of Europe were represented, not only by men, like M. Villermé, eminent in statistical science, but by official delegates, except Russia, who did not send a representative to the Congress,
and thus isolating herself, refused to learn from the statistical science of Europe in 1853 the lessons which she has learnt by bitter experience in 1855 from the armies of England and France.
France pursued an entirely different course in 1853 ; and in 1855 a commission of eminent French statists having made the preliminary arrangements, M. Rouher, a leading minister, opened the session in an eloquent speech, and presided ably over the public sittings of the Congress at the Palace of the Legislature.
The Emperor, who, as it is well known, has himself cultivated the sciences, watched the proceedings with a lively interest, and very graciously expressed his satisfaction by receiving all the members of the Congress at the Tuileries.*
For the transaction of business, the Congress was subdivided into four sections, which met at nine o'clock in the morning, and worked every day in committee until one o'clock, when the Reports, as they were completed, were read, discussed, and voted at the public sittings. The following subjects were discussed and reported on by the Congress.

First section.-Statistical nosology; statistics of insanity ; statistics of epidemics; statistics of accidents.
Second section.-Statistics of agriculture; statistics of roads, railways, and ways of water communication; statistics of foreign commerce.
Third section.-Judicial statistics, criminal and civil; table of crimes and offences, so declared by the penal legislation of each state; and offences, so declared by the penal
statistics of penitentiary establishments.
Fourth section.-Statistics of provident institutions; statistics of great cities.
By those who have compared the statistics of England with the statistics of other countries it is admitted that, both in the statistics of population and of commerce, we have many things that are worthy of their imitation. It will be, however, of most practical use to bring under your notice now only a few of the important deficiencies in English statistics, as indicated as well by the practices of certain states as by the opinions of the Congress.
The official account of the transactions, containing all the Reports, will be shortly published by the French Government. And I shall have the honor to submit to you the whole of the Reports and the Recommendations of the Congress as soon as I receive printed copies from M. Legoyt, the secretary.

I noticed in my first Report that the Congress recommended the conIruction of territorial maps on the scale of $1-2500(=\cdot 0004)$, which is little less than the common English scale of $2 t \cdot 2$ inches to a mile. 4 map little less of the territory and of the configuration of a coummenced for some time, statistics; yet a map on the above scale,
is making little progress in Great Britain.
A map on the larger scale of $I$ in 500 , was recommended by the A map on the lar
Congress for towns.
Congress for towns.
With maps of this kind, on which every plot of ground in the kingdom is laid down, a registry of land and houses could be easily and accurately carried out. England is now divided into 628 districts, comprising subdistricts, which again are composed of townships or parishes ; and each is referred to in the census index by numbers, on the plan of the books, chapters, and verses of the Bible. Thus in the last census 135; 1; 1; is the numerical designation of Hendon district (135) ; Harrow sub-district ( I ) ; Harrow-on-the-Hill parish ( I ). It is only necessary to add a

* See the closing speech of M. Rouher, Ministre du Commeree, de l'Agriculture, et des Travaux Publics, in the Moniteur, 16th September 1855.
fourth series of figures to designate each plot of ground, whether built on or not, whether it has or has not a name on the map; and by its number and its relative position it could be immediately identified.
If the owner of each of the fields or plots of land in the country were registered before a competent court, and had stamped official copies of the register, with single counterparts of the map, numbered, the possession of land would be secured, and exchanges of ownership simplified. Titles of absolute ownership on this plan would be as brief as a five pound note, and leases for short or long terms would be equally brief; partial, temporary, reversionary, certain or contingent ownership-of land laid down and identified on the great map, might be secured by titles of little more extent.
The Statistical Congress at Paris adverted to another evident use of a great map, on the same scale as some of the foreign maps: it would facilitate the operation of taking the breadth of land under various crops, and of determining the annual produce of the earth : agricultural statistics would become more accurate and less difficult.
The utility of a good system of annual agricultural returns is sufficiently apparent ; but the advantage of ascertaining every year, on a large scale, apparent; but the advantage of aseertaining every year, on a large scale,
the produce of different soils, under different crops and different kinds of culture, through good and bad times, in every county of England, Scotcland, and Ireland, has not been sufficiently noticed, any more than the land, and Ireland, has not been sufficiently noticed, any more than the
advantages of determining the laws that regulate the growth and the advantages of determining the laws that regulate the growth and the
mortality of every kind of stock, both in a scientific and practical point mortality
The English census of 1851 contains the best account extant of any people classified under ages and occupations; but we have yet in England no industrial statistics - no complete account of the shops, workshops, manufactories, and great productive works of the United Kingdom-of their organization, or of their produce. The distribution of produce in the home markets is very imperfectly known.
It is evident that our commercial statistics must be imperfect under these circumstances. Mr. Fonblanque will report on this subject.
One of the reproaches with which this country was justly chargeable, at Brussels, as I reported to you, applies to it no longer. Scotland has now in operation a system under which the births and deaths are registered, as well as the greater part of the marriages. The practice of irregular surreptitious marriages, even to a limited extent, has undoubtedly been prejudicial to the staid morality, family life, and population of Scotland It will, we may hope, soon cease, and then all the marriages will be It will, we
Ireland has no civil registry of births or of deaths; and the marriages of the protestant part of the community alone are registered by the Regisof the protestant part of the community alone are registered by the Regis-
tran trar Generan of Ireland. The statists of Europe hear of this defect with astonishment. It is in many ways injurious to the people of Ireland, as it
renders the proof of their pedigree difficult; and when they have occasion renders the proof of their pedigree difficult; and when they have occasion to insure their lives, and even at other times, they are deprived of the readiest way of proving their age. The sanitary state of the country also remains imperfectly known. At the census great expense is incurred in collecting from the living imperfect accounts of the numbers, ages, and diseases of the dead during the ten preceding years. A Registrar General and a registration staff already exist in Ireland; so all that is required is that they should be enabled to do their work, and actually to register the births, deaths, and marriages of the population.

The cause of the neglect of registration in Ireland is misunderstood; for by some it is viewed as a form of English oppression, by others it is ascribed to the opposition of the Roman catholic priests. Now England
has never offered any opposition to such a measure; and as civil regishas never offered any opposition to such a measure; and as civil regis-
tration exists in Belgium, France, and other Roman catholic countries, tration exists in Belgium, France, and other Roman catholic counnries,
as well as in England and Scotland, it has evidently in it nothing inas well as in England and Scotland, it has evidently in it nothing in-
compatible with the practice of the Roman catholic church. Such compatible with the practice of the Roman catholic church. Such
arrangements should be made as might prevent any interference with the arrangements should be made as might prevent any interference with the
income that the priest, under the voluntary system in Ireland, necessarily income that the priest, under the voluntary sy
draws from marriages, baptisms, and burials.
draws from marriages, , laptisms, and burials.
The English schedules in the Registration Act do not yet contain some important heads of information already in certain foreign schedules; and the measures under the Code Napoleon to secure the authenticity of the recorded facts are more likely to be effectual than the arrangements under the English Act. The registration of Brussels, which will illustrate the French system, is described in a separate paper.
The question of the uniformity of weights, measures, and money was not on the programme; but, adverting to the facility which common unities would afford to the comparative statistics of all countries, the Congress expressed a wish to see brought into use a uniform system.*
I shall not discuss this question here ; but before a change so extensive in its operation can be carried out, it would, I think, be well that countries should agree to publish their statistics in their own weights, measures, or moneys, with an additional column expressing the relative quantities in some one standard. This standard, as regards measures and weights, should be the metrical decimal system, which, with some modern extensions, will be the best, and be the most likely to be generally adopted. It forms a symmetrical system, is generally applicable, and affords great facilities for every kind of calculation.
The quantities that we express in yards and miles would on this plan likewise be expressed, in the principal English Tables, in meters and kilometers ; the meter being not 1-1oth more than a yard, the kilometer, or rooo meters, not I-roth more than a thousand yards. $\dagger$ The quantities that are expressed in acres and square miles would also be expressed in hectars and square kilometers. The quantities that we denote by cubic yards would also be expressed in cubic meters. The liter, which is a somewhat smaller measure than our quart, and the hectoliter (I00 liters somewhat smaller measure than our quarl, and the thectoliter (100 liters 3 bushels), with their decimals, would express the quantities that we measure by quarts, gallons, bushels, quarters, liogsheads. The kiloliter, or 1000 liters, is the equivalent of the tun of our old ale measure. The kilogram (the weight of a liter of water, nearly $2 \frac{1}{5}$ lbs. avoirdupois, ) the quintal ( 100 kilograms) and the millier, ( 1000 kilograms, ) would denote all the quantities that we express in avoirdupois or troy pounds, hundreds, and tons.
If the quantities in the great summary tables were expressed in the national weights and measures, and in these conventionally international

* The following resolution passed unanimously:-"Le Congrès, considerant combien ladoption pour toutes les nations d’un système uniforme de poids, mesures, et monnaies, faciliterait 'étude comparative des statistiques des divers pays, emet le veu que ce système
uniforme soit mis en vigueur." unit The bilometer is 1000 metes
$=39 \cdot 5709$ inches. If meter and its compounds are used in English, they must evidently $=39.309$ inches.
The hectar is equal to roooo square meters, or to a square of roo meters to the side; the acre to a square of $22 \times \sqrt{10}$ yards $=69^{\circ} 57$ or yards to the side. A hectar is nearly $2 \frac{1}{2}$ acres, or more exactly $2 \cdot 47114$ acres.
The liter is in bulk equal to a cube, having the tenth of a meter to its side; the weight of a liter of distilled water (tem. $4^{0}$ Centigrade) is a kilogram; and 1000 kilo-
grams, that is the weight of rooo kiloliters of water, is very nearly a ton. The 1000th part of a ton is $2 \cdot 2400 \mathrm{lbs}$. avoirdupois, and a kilogram is $2 \cdot 2046$ lbs. The roooth part of a tun of old ale measure is nearly one liter.
measures and weights, the use of all statistical returns would be greatly facilitated.
The franc is too small a monetary unit for a large proportion of the transactions of the present day. To express the large sums that figure in statistical tables in franes is attended with the same kind of incon venience as to express the distance from London to Paris, or from town to town, in yards or centimeters. A gold unit must ultimately displace in national affairs the silver franc, which can only continue a subordinate counter*; but among the larger units in use the English pound sterling has the best claim to adoption. Its division into tenths (dec or florin) and thousandths (mil.) gives all the subordinate units that are required; for the cent is not absolutely necessary. If the French Government will coin a 25 -franc piece in gold it will very nearly correspond in value with the English "sovereign," $\dagger$ and the correspondence in weight of pure gold might be made exact by a slight modification on both sides of the Channel. The coins would then stand thus, in three metals :-


Under this system the values of nearly all the existing coins in extensive use in England and France would be expressed in simple decimal divisions of the pound sterling, called in England a "sovereign" in France a "Louis Napoleon." And instead of £ s.d. we should write £ f. m., that is pounds, Napoleon." And instead of $£ s . d$. we should wr
florins, mils, at the head of columns of accounts.
In silver the Spanish and the American dollars, the Romish scudo the Austrian florin, the rupee, the 'Turkish and the Egyptian piastres, by light changes could be made identical with the decimal divisions of the
The English shilling would be precisely a fifty-mil piece ; the sixpence twenty-five mil piece; the penny a four-mil piece $f$; the halfpenny a two-mil piece ; the farthing a one-mil piece.

[^15]The French franc would be a forty-mil piece ; the sou a two-mil piece exactly of the same value as the new English halfpenny, of which 25 would be change for a shilling,

Without awaiting, however, the identification of the coinage of the world, it will be actually sufficient for statistical purposes if each country in addition to the quantities and values in its own weights, measures, and monies, publish the chief results in the metrical weights and measure and in the pound sterling and its decimal parts.

Statistical Board.
In a small family, a small shop, or a small community, leading a simple ife, where the persons, the property, and the transactions are well known to the governing head, no records are required for his information; no accounts are kept. But if the family, the shop, or the township grows great,-if it expands into a vast establishment, a mercantile concern, or a state,-if it derives its income from various sources,-is engaged in a multitude of transactions,-employs a great variety of agents and power in combination,-is opposed to rivals, in struggles for foreign possessions, for power, or for existence in its own territory,-a classified account of its stock, its condition, its transactions, its changes, and its forces becomes indispensible. Without it the house falls into confusion; the operation insensible governed, paralyzed, or ruined
Such an account of a State is called its Statistics, arranged so as to display its elements, exhibit their combinations, and elicit the laws which regulate its state or development.

The utility of statistics, after long experience, is universally felt; and statistical inquiries are now instituted in every state of Europe, but not on a plan or a scale commensurate with the importance of the subject This plan or a scale commensurate with the opinion of the Congress of Brussels ; and at Paris an able report of the second section was read by Baron Czœernig, suggesting the creation of a central statistical board in each country.*
The proposal met with the approbation of the practical men present, and received the full sanction of the Congress. In Belgium the statistics, which were in confusion, have been reduced by the central commission into a well-digested work, which is of the greatest use, and reflects glory on the administration of the enlightened sovereign of that kingdom.

In the British empire a board to plan and to digest the national statistics is more necessary than it is on the continent: the population is more numerous than it is in any continental empire, and it is diffused ove a vast extent of territory, widely separated from the seat of government the occupations of the people are subdivided into innumerable branches the social condition and the economical transactions are varied and complicated; the field of statistical inquiry is extensive and diversified pomprehending the numbers, passions, crimes, civil contests, education comprence the birth, the deaths of men of man the intellect on or men or many races, ranks, and occupe amoun of every variety of moveable and. in mander many tamplicated to the parish, municipal, county, colonial, and national revenues.
silver coin would be required, although a ten-mil piece would probably be found con venient. The old copper halfpence and pence would be gradually displaced by $2-\mathrm{mil}$ pieces of the same size and value as the sou, 25 of which would be of the same value a a shilling, while 25 four-mil pieces, "new pennies," would be of the same value as florin. See the admirable papers of Professor de Morgan on the Decimal Coinage

* See Moniteur, 16th Sept. 1855, Doc. No. 4.

If it should be held, after a full consideration of the present extent of statistical inquiry, that the statistics of this country cannot be so well drawn up by one person or by one department as by the several existing departments acting in concert, and represented in a board, then some such arrangements as the following might be adopted, and would, I think, be found to work.
I shall not attempt here to suggest the outlines of a complete system of statistics for this country and its dependencies, but, taking the existing establishments, endeavour to point out how the special knowledge of different offices might be made available, while the whole may be organized so as to obtain the advantages of unity of design and uniformity of execution.
(r.) Finance Statistics.-The financial operations of this country are directed, controlled, and carried on chiefly by the Treasury, the Audit directed, controlled, and carried on chiefly by the Treasury, the Audit
Board, the Paymaster-General, the Commissioners of National Debt, the Board, the Paymaster-General, the Commissioners of National Debt, the
Comptroller of the Exchequer, and the Master of the Mint. The annual Comptroller of the Exchequer, and the Master of the Mint. The annual
accounts of the revenue, expenditure, debt, and stock of the nation should accounts of the revenue, expenditure, debt, and stock of the nation should be thrown into a statistical form. A small statistical branch in one of these offices, perhaps the Treasury, would prepare the finance statistics, for the annual or periodical reports.
(2.) Population and Health Statistics.-The census of Great Britain for 1851 was taken by the Registrar-General for England, with the aid of two assistants and an additional staff of clerks. The census of Ireland was taken by the Registrar-General for Ireland and an assistant commissioner.

The census, the registration of births, leaths, and marriages, and all the other matters connected with the population and their occupations, could be conveniently dealt with in the

Office of the Registrar General of England.

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" \text { ", " of Scotland. }
$$

(3.) Sickness Statistics would be a separate branch, to be reported on by the Board of Health, and the Registrar of Friendly Societies, in connection with the factory and mine inspectors.
The Commissioners in Lunacy would prepare a report on the lunatics and idiots of the kingdom.
(4.) Poor Law and Friendly Society and Charity Statistics.-This branch is connected with the two preceding, as infirmity and poverty are particular states of parts of the population. This special branch of statistics deals with the various degrees and causes of infirmity and of poverty ; the amounts expended on relief of various kinds; the effects of such relief on the poor. Digests of the expenditure and records of the operation of charitable institutions and of almsgiving on the people may be prepared; and a particular account should be given of the friendly societies and other societies for affording succour to the working classes. A statistical branch of the Poor Law Board may be charged with this report.
(5.) Statistics of Learning, Art, and Science.-Periodical reports would exhibit the progress of education, literature, art, and science, in all our institutions, including in separate sections the several classes of schools, the athenæums, the universities, the learned societies, the British Museum and public libraries, the publication of bouks, periodicals, and newspapers. A small branch, in the Privy Council Office, might be charged to collect and digest all the information that can be obtained under this head.
(6.) Church Statistics.-A statistical account of the state and of the changes in the clergy, in the churches and chapels, and in the people
attending, may be prepared in the office of one of the Ecclesiastical Commissions.
(7.) Juckicial Statistics, Criminul and Civil.-Reports and returns, as correct as can be procured, must be obtained, (1) of the crimes committed; (2) of the criminals detected, summarily convicted, or committed; of the decisions of justices of the peace, of stipendiary and other magistrates, of coroners' juries, of judges, in the several classes of courts ; of the results of the trials; of the average time that the trials occupy; of the number and condition of each class of prisoners under sentence for each class of crime: and other circumstances illustrative of the causes and consequences of crime, would be comprehended in this report. The Bankruptey and Insolvent courts, the County courts, the courts in which civil actions of every kind are tried, and the Chancery courts, would all contribute of every kind are tried, and the Cha
new and most important information.

A statistical branch at the Home Office, where Mr. S. Redgrave has laid the foundations of this branch of our statistics, could prepare the
report, aided by the police, and the prison inspectors. report, aided by the police, and the prison inspectors.
(8.) Statistics of Trade, Commerce, Manufactures, and Agriculture.The extensive reports on the trade and commerce of the country would be prepared by the statistical department of the Board of Trade, with the assistance of the revenue departments.
Three new working sections in connection with this department are required, embracing -
(r.) Ways of communication (roads, railroads, canals, navigable rivers and seas.)
(2.) Agriculture.
(3.) Manufactures and industry generally.

The first section may be conducted in the office of the Inclosure Commissioners, which may be in communication with the Ordnance Map department and the officers of the Geological Survey. The last section
may be dealt with in connection with the Census. may be dealt with in connection with the Census.
(9.) Army Statistics. The army reports should show its exact organization, civil and military; its classes, its annual recruits, its annual losses by battle, wounds, diseases, desertions, captures; its physical condition, its sickness, its punishments, its achievements as far as they can be expressed in numbers; a classified view of the articles in store (in the hands of the departments), of those supplied and destroyed in the year ; the value and cost per man of all the important items of expen-
diture, well classified. diture, well classified.
A section in the War Office would prepare these statistics. The Ordnance, the Royal Engineers, the Artillery, would, as separate classes, be included in the report. The ordnance supplies to the Navy would be written off, and would appear in the Navy report.
(Io.) Navy Statistics.-The Navy report would be on the same plan as the Army report, presenting precise views of the state and changes of men, ships, dockyards, and establishments of every kind. The value and the annual expenditure of stores, ships, arms, men, would be analyzed. The marines would be treated in a separate section. The merchant seamen and the coast guard would be also reported on. A statistical branch of the Admiralty would draw up this report, reduce the tables, and perform the necessary calculations.
(fi.) Colonial Statistics.-Some statistical forms are equally applicable to the United Kingdom and to the Colonies ; others would be special. A statistical branch of the Colonial Office would draw up the report, reduce the facts in the colonial returns into tabular forms, and make the necessary calculations.
XVI.

The Emigration Commissioners would co-operate with this branch of the Colonial Office and with the Registrars-General of the United Kingdom.
(12.) Indian Statistics.-Much valuable statistical information has been collected in India, and some of it has been published. In addition to the budget which is now brought before Parliament, a statistical account of that great portion of the British empire would be prepared by the statistical department of the India House.
(13.) Foreign Statistics.-A series of statistical returns would be sent home annually by the foreign ministers and consuls, which should be classified and analyzed at the statistical departments in England conclassified and analyzed at the stane subjects, assisted by such comments and informa-
versant with the several sum tion as the Foreign Office could furnish.
The General Statistical Board might consist of -
(I.) A president.
(2.) A vice-president. (3.) The head of the statistical department of the Board of Trade
(3.) The head or the statistich other of the statistical departments as the Government might designate from time to time.
(4.) A member nominated by the House of Lords.
(4.) A member nominated by the Speaker of the House of Commons.
(6.) A
(6.) Two members distinguished by their statistical and scientific works, nominated by Her Majesty's Government.
(8.) A secretary and an assistant secretary.

The board might appoint special reporters annually on any of the The board might appoint speciable would be explained and adequately discussed by competent men.

On some such plan this the whele sche the statistics of the empire ay be organized, so as to exhibit the principal facts and their relations to each other in a single volume. The more detailed statistical returns and reports of the several departments, as well as those called for by the Houses of Parliament and the Government, may be thrown into good well-considered forms, the trouble of consulting and using them being greatly diminished by the publication of the necessary calculations, with the "raw material," from which the results are derived.
Such a board, if the appointments were judiciously made, would carry out the objects which the two international Congresses held to be of great importance to all nations: it would prepare a body of statistics of immediate utility to our own country in the present day, and that would be studied with profit and interest by every successive generation of Enclishmen. The preliminary labours, if commenced now, would enhance Englishmen. The preliminary labours, if commenced nove, which, after the aris been well received in Brussels and in Paris, will, it is hoped, be next held in London.

## Classification of Diseases.

In the most advanced nations of Europe the causes of every death are registered, and although large numbers of the people die everywhere without that medical aid which should "come to all," still such infor wition is obtained as furnishes valuable evidences of the health of the mation is of the unwholesome and pestilential agencies which surrounc people, or of the unw Paris agreed to a nomenclature of the causes of them. The Congress of Paris agreed to a in England and Geneva. It adjourned to the next Congress the decision of the important question of statistical classification.

I submit to you the project which I have drawn up in order that it might be well considered with a view to a settlement at the next Congress.
The violent deaths in England were very imperfectly returned by the coroners when the first edition of the statistical nosology was framed, so that it was very often left uncertain whether deaths by drowning by falls, by poison, and by other causes, were accidents, suicides, or homicides. Considerable improvement has since taken place in the coroner's inquest, and still further improvement may be expected when every inquest is attended by a medical man who has studied medical jurisprudence ; so that we may hope to be able to fill in the abstract on the plan which I have now adopted, and which is in conformity with the views of my colleague Dr. D'Espine, and of our brethren generally on the continent.
I submit also, as an appendix to this Report, an inquiry into the ages and strength of the population of the Great Powers.
I beg to bring under your notice the cordial and the hospitable reception which the English received from the French minister, M. Rouher, from M. Rayer, from M. Villermé, and from other members of the French Commission. I have also to express my thanks especially to M. Legoyt, the talented secretary, for the assistance which he afforded me in various ways. It is my duty also to acknowledge friendly services which I received from all my colleagues.

I have the honor to be,
Sir,
Your very obedient Servant,
The Registrar General.
WILLIAM FARR.
$\qquad$

## THE GREAT POWERS.

(Supplement to the Report on the Yroceedings of the Statistical Congress in Paris.)

There are seven Great Powers in the world.
England, France, Turkey, and Austria have existed as great powers England, France, Pursy, Prussia, Russia, and the United States of America have entered this class within the last hundred years.

Spain was a reat power: she has still a large, and not unwarlike Sain was a great por various causes been left behind in the career population, whe of progress by the powers that were her rivals in the sixteench, sly equal to and eighteenth centuries. Her population is, however, nearly equal eo the population of Prussia, which is the smallest of the seven powers, and indeed has been raised into its present position, less by its people. The ness than by the military genius power of Turkey has also declined
None of the seven powers have colonies or foreign tributary territories, except France, which has Algeria, approaching France itself in extent, aith a few dependencies in Asia, Africa, and America, -and Great Britain, whose colonies and dependencies are inhabited by, it is said, one hundred and sixty-two millions of people.
Among the secondary States, Holland, Spain, Portugal, and Denmark have extensive colonial possessions.
The Asiatic provinces of Russia, and the outlying states of America tand in some respects in the same relations to the central powers of those two states as her colonies and tributary territories stand to England. They are not the elements but the results of power.
The aggressive and defensive powers of states are made up of many lements: the number of the men available for war is, next to the martial character of the people, one of the most important.
The annexed table compiled from the best accessible sources, shows the the anula females in each state. Th total populat and in Great Britain, in ages of the the France, in the at death populations of Austria and of Russia are deduced from the ages at or from other collateral facts which are described in the notes, and may be considered approximations that cannot be far from the truth. In determining the proportion of the sexes, and their ages, in Turkey, we have no assistance from any official source, and have been left to analogy and conjecture. The sexes and ages have been assumed to be in the same proportions as in Russia, which is the state to which Turkey, extending over the Danube, Asia Minor, Palestine, and Egypt, approximates now the most closely.

Ninety-seven in every 100 men in the Prussian armies of the present Ninety-seven in every 100 men in the Prussian are under forty years of age, and in England the proportions are also ninety-seven in 100 .

In the two armies that are recruited and maintained on such different principles, the proportional numbers of the age of 20 to 40 differ very little from 88 in $\mathbf{~ o ~ O ~ O ~ ; ~ n e a r l y ~} 9$ in to of the men are of that age; and with the navy, excluding the boys, the proportions of that age in the

British force are 85 . The youths under 20 are little more than apprentices.
The effective armed forces of all nations are drawn almost exclusively from men of the athletic age 20-40; and it becomes therefore important to ascertain the stock of such men in each of the great states.
Upon referring to the Table $I$. it will be observed that the seven states comprise 239 millions of people, or near a fourth part of the population of the earth. The men of the military age $(20-40)$, are thirty-four millions five hundred and three thousand in number ; and the numbers in each State range from 2,535,891 in Prussia, to $9,127,414$ in Russia
The armies of France and Austria appear to amount to about io in 100 of the population of the military age in their respective states, England had not before the war, including the English forces in the East Indies, 4 in 100 of the men of the military age under arms in the army and navy.
With respect to the powers and confederates engaged in the present war, the states may be thus arranged.
Russia has nine millions one hundred and twenty-seven thousand Four hundred and fourteen men of the military age.
She is now enced in war,
against England, that has four millions one hundred and eleven thousand four hundred and eighty-one men of the military age;
against France, that has five millions five hundred and forty-one thousand four hundred and sixty-two men of the military age (making with the men of England nive millions six hundred and fifty-two thousand nine hundred and forty-THREE,-numbers already superior to the Russians) ;
against Turkey, that has $4,784,490$ men of the military age, making for the three allies a stock of $14,437,433$ men of the military on which their armies and navies can draw to at least the extent of io per cent., or armies and navies of $1,443,743$ Englishmen, Frenchmen, and Turks, to oppose 9 12,74I Russians.*
The addition of Austria to the alliance would raise the numbers to ,968,004 against $912,74 \mathrm{I}$ Russians.
Russia has apparently for some years contemplated the seizure of the Turkish Empire, and if her schemes should be successful, she would rule over 13,91 I, 904 men of the military age, a tenth part of whom, would outnumber the tenth of the men of that age in England and France, and nearly equal the tenth of the men in England, France, and Austria ( $\mathrm{I}, 480,555$ )

The Increase of the Power of England.
The population of England has increased threefold since 1751, and at such a rate that to every million men in 1751 , there were $I \frac{1}{2}$ millions in 1801 , and 3 millions in 185 I . In mere numbers the nation of 1851 is equivalent to three of the Englands of 175 I .
The power of England has as of
The power of England has advanced more rapidly within the last century than the power of any other State in Europe ; and the greatness of her power at the present time is concealed, rather than displayed,
the histories of past wars.
But it may be useful to show what the forces of England would now be if they bore the same proportion to the men of the military age $(20-40)$, as the forces in the last war bore to the men of the corresponding
age in I8 II. age in i8 ri.

[^16]The power of England, it may be assumed, was tasked to the utmost in me mend the expenditure
 the force in that year may be taken to represent the military power which England wielded in that war
The number of men in the army, navy, and merchant service was 640,500 ; and it is found from other returns that the military force was 501,488 men, leaving of the above 139,012 men in the merchant service.* In the military returns to Parliament the officers and the foreign force in the army are separately returned, but the foreign and colonial force in the navy has been estimated at 17,382 ; $\dagger$ and the officers of the army ( 15,424 in 1814, and about the same in 1811), have been distributed proportionally over the several corps.
The volunteers of infantry, artillery, and cavalry in 1803 amounted to 474,627 , but the volunteers of 18 II (yeomanry, \&c.) are not included in the forces of 18 II as above given. The army in India also included 30,253 Europeans, which, added to 471,235 , make the regular English 30,253 frops in the service of the East India Company to 182,838 regular troops, and 24,579 irregular Company, amoun of invalids and pensioners ( 5875 ). The military forces of England, including the Indian armies, amounted to 709,067 .
and maintained these men on the seas, and At the sarmies, which in certain cases the field, she subs by Enclish gold.
ould only be moved by English gold.
The column 2. in the table III. shows the numbers and the composition of the English forces in I8II. The native forces were 17.2 per cent. of the men of the age 20-40; the Foreign and Colonial forces ose the proportion to $19 \cdot 5$, or nearly I to every 5 men of that age; I to every $36^{\circ} 5$ of the population.
The column 3. shows the forces that have been recently voted, which in the aggregate amount to $45 \mathrm{I}, 893$, or to a number absolutely only one tenth part less than the military force of 18 II.
The column 4. shows, however, how much, as compared with her power, the levy should be greater than it was in 181 I , before it bore the same proportion to the population and military power of the country.
The column 5. shows what an enormous force England will still have in reserve after the levies of column 3. are raised.

Recruits and Losses of the Military Force.
After the numbers of the military force are filled up; they are continually reduced by :-
(i.) Deaths from disease and from wounds.
(2.) The invaliding of men disabled by sickness and wounds.
(3.) The expiration of terms of service, where the service term is limited.
(4.) By desertion and losses, or the capture of prisoners by the enemy.
We have returns of the losses of the regular army in 1803-14, under hree heads ; and find that in the six last years of the war, including the Peninsular campaign, 12,356 died, 3,618 were invalided, and 4579 deserted

* 100,000 of the seamen in the merchant service were, it is said, foreigners. Census Enumeration 1811.
$\dagger$ It is known that there were foreigners in the navy; and it has been assumed, in the absence of data, that the proportions were the same as in the army.
annually, out of a mean force of 173,158 .* So that the annual loss from these causes, which I presume include the four classes of causes above specified, amounts to nearly 12 per cent. (II 188 ) on the mean force.

And the regular army of 230,620 men now voted, if the losses were the above ratio, would require 27,674 recruits annually. To sustain a regular army of $435,56 \mathrm{I}$ men and officers, 52,267 recruits would be required annually.
The loss of the navy by disease and wounds was at the rate of 4 me annually out of 100 living in the three years $1810-12$; of whom 3.30 annually out of 100 living in the three years $1810-12$; of whom 3.30
died on board, one half by disease, and one half by wounds; and about died on board, one half by disease, and one half by wounds ; and about
0.7 died in hospitals. Of 70,000 seamen at the above rates, 2,800 0.7 died in hospita
rould die annually.
If a force is kept stationary in numbers, the number of recruits depends upon the magnitude of the force, and on the rate of its losses.
The mortality of the whole British army was at the rate of $7 \cdot 16$ per cent. in the six years 1808-14; and the annual mortality of the troops in the Peninsular campaigns was 16 per cent. among privates, io per cent among officers. Of the above, about 12 in 100 privates, 4 in 100 officers, died annually of disease ; leaving 4 privates, 6 officers out of the same numbers, killed in battle, or dying of wounds. Of the men $22 \frac{1}{2}$ in a 100 were constantly on the sick list.
The mortality in the general population of England, at the military age, notwithstanding the innumerable and evident defects in the sanatory arrangements of the towns, and the low living of considerable numbers, is less than I per cent. per annum.
The causes of the high mortality of the army can be exactly ascertained by investigation ; and arrangements could be made for supplying all that is necessary to preserve their health, except in times of disastrous defeat. The amount of desertion and invaliding would at the same time be diminished $\dagger$.

Under the system of limited terms of service, the number of men who leave every year will be increased $\ddagger$; but this result may be greatly counteracted by increasing the good-service pay after 7 years; and again after i4 years service, thus retaining the services of the best men until they are 45 years of age.

## Expense of the Military Force.

The sums expended in I 8 II were:-


The military and naval forces, exclusive of the force of 30,253 in the East Indies, were $47 \mathrm{I}, 235$; so that each man was kept in the service at the rate of nearly II2l. a year in the currency of that year.

* The numbers are given in detail in the "Force Militaire," vol. r. p. 240. By Baron C. Dupin. See also Sir Giblers. Mr. Hodge is preparing a valuable paper on the mortality of the army, in which he has revised all numbers.
保 cent., so that luxuries are not necessary in the sanatory sense.
$\pm$ These numbers can be calculated if the necessary data are supplied.
§ Porter`s Progress of the Nation. Ed. 1851, pp. 505-7.

The number of men in the navy was 136,778 ; the supply for the navy was $10,202,679 l$.; or the sum expended per man was $140 \cdot 39 l^{\circ}$.
Including the whole of the ordnance supply and force, the vote on the army of 334,457 men (exclusive of India) was at the rate of 100.63 l. per man.
er man.
To obtain the true proportions, the army expenditure should be decreased, the navy expenditure increased, by a certain portion of the ordnance supply.
Thance supply. $46,558,462 l$. voted in 181 I was inadequate; for the
The suply of expenditure on the army, navy, and ordnance was stated in the subseexpenditure on the accounts to be $52,859,025 \%$., and on the average of the three years quent accounts to be $52,059,02$, . 12 , it was $52,447,779$. Using sum, and reducing the value in 1810-12, it was $52,447,7,7$. depreciated currency to its value army and navy was 96.3 rrl . ; and the penditure on each man in man was, to that in the army, in the proporexpenditure of about 3 to 2 .
The accounts were involved in technical obscurity, ; the checks and
The then
The accounts were involved in technical obscurity, ; the checks and counter-checks grew also so numerous that enere was absent; but if we audit, and the check of statistical arrangement was absent, mechanical consider the additional expenses of steam power and of mechanical agencies, and of necessary improvements in the treatment a large proporand of the sailor, it will not be safe to assume, that when a large proportion of the military force of the country is engaged in actual warare, the actual annual expenditure will be less than rool. per man. $\dagger$ The army and navy in war will require an expenditure at the rate proportion only pounds a year on every 100,000
of this sum is expended in pay.
The true policy in the conduct of the war is then to engage the best officers and men that can be obtained, at any rate of pay that may be necessary; and to employ no more of these efficient men than the circum stances require.
The glory as well as the interests of England will thus be most effectually sustained.

## Debts of the Seven Great Powers

The annual produce of the United Kingdom is about four hundred million pounds, and the value of the property by which it is produced is about tent housand million pounds. $\ddagger$
The property of the country has since the last war increased more rapidly than the population, and while the debts of several of the other great states have increased the debt of England has been reduced.
Austria has nearly doubled her debt within the last 5 years; and is financially disabled. With half the income she has an army equal in numbers to the army of France.

[^17]| States. |  | Year. | Debt towards the close of the last war. | Debt in 1853. |
| :---: | :---: | :---: | :---: | :---: |
| Austria | - | (1816) | $\underset{63,000,000}{\mathcal{E}}$ | $\stackrel{\substack{\mathfrak{E} \\ 21,635,000}}{ }$ |
| France | - | (1814) | 50,000,000 | 233,000,000 |
| Russia | - | (1817) | 30,000,000 | 68,000,000 |
| England | - | (1817) | 864,000,000* | $779,365,204 *$ |

The following is a Table of the Public Debt, of the reported income, and of the expenditure of the Seven Great Powers before the war. Russia furnishes no returns of her income and expenditure, but they may no doubt be ascertained. Turkey, Austria, and Russia have also large ontstanding liabilities in the form of depreciated paper money; the most dangerous and ruinous of all forms of forced loans.

| States. |  |  |  | Debt. | Income. | Expenditure. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| England | (1853) | - | - | 779,365,204 | 56,834,711 | 54,002,995 |
| France | (1853) | - | - | 233,000,000 | 56,980,776 | 58,117,192 |
| Turkey | (1841) | - | - | 5,000,000 | 6,645,450 | 6,667,269 |
| Austria | (1854) | - | - | 211,635,000 | 27,100,000 | 36,600,000 |
| Prussia | (1853) | - | - | 31,205,836 | 14,105,576 | 14,595,870 |
| Russia | (1854) | - | - | 68,000,000 | ? | ? |
| United States of America (1854) |  |  |  | 10,000,000 | 8,000,000 | 8,450,257 |

The degrees of credit of the different states are represented by the value of the public securities; thus a perpetual annuity of $1 l$. a year is more or less valuable in proportion to the chance there is of its being or of its not being punctually paid.


Since these calculations were made, the value of the several securities have undergone many changes, and vary from day to day, wiohout diminishing the relative superiority of the credit of England.
W. Farr.

[^18]Table I. - Population of Seven great States, distinguishing the Ages of Males of the Military Age ( $20-40$ ).

| States. | Persons. | $\begin{aligned} & \text { Total } \\ & \text { Females. } \end{aligned}$ | Total Males. | Men of the Military Age Military $20-40$. | $\begin{aligned} & \text { Amount } \\ & \text { of a Levy of } \\ & \text { One in Tren } \\ & \text { Men of the } \\ & \text { Age } 20-40 \text {. } \end{aligned}$ |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Total | 239,230,607 | 120,375,043 | 118,855,564 | 31,503,377 | 3,450.337 |
| England - - - - 1851 | 27,885,274 | 14,137,729 | 13,687,545 | 4,111,481 | 411,148 |
| France - - - - - 1851 | 35,783,170 | 17,988,206 | 17,794,964 | 5,541,462 | 554, 146 |
| turkey | 35,350,000 | 17,816,876 | 17,533,124 | 4,784,490 | 478, |
| Austaia - - - - 1840 | 36,950,401 | 18,747.770 | 18,202,631 | 5,422,611 | 524,221 |
| Prussta - - - - 1849 | 16,331,187 | 8,168,382 | 8,162,805 | 2,535,891 | 253,589 |
| Russia - - - - 1855 | 67,487,507 | 33,989,414 | 33,48,093 | 9,127,414 | 912,741 |
| United States of America - 1850 | 19,553,068 | 9,526,666 | 10,026,402 | 3,160,028 | 316,033 |

The actual health and vigour of the respective races are represented by the mean mortality and the mean lifetime ; in both these respects England and France stand the first, Russia last, of the States from which data can be obtained :

|  | Annual Mortality. |
| :---: | :---: |
| France | 1 in 42 |
| Prussia | 1 in 38 |
| Austria | 1 in 33 |
| Russia | 1 in 28 |

Table II. - Numbers of the British Army and Navy (1851) at the four ages compared with the Numbers in the Prussian Army (1849).

| Ages. | British |  |  | Prussian Army. |
| :---: | :---: | :---: | :---: | :---: |
|  | Army. | Navr. | $\underset{\text { AND NAVY. }}{\text { Andy }}$ |  |
| $\begin{aligned} & \text { All Ages } \\ & \text { Under } 20 \\ & 20-40 \\ & 40-60 \\ & 60-80 \end{aligned}$ | 142,870 | 24,903 | 187,773 | 200,242 |
|  | 12,325 | 5,225 | 17,550 | 18,916 |
|  | 125,720 | 17,124 | 142,844 | 173,190 |
|  | 4,634 | 2,466 | 7,100 | 6,883 |
|  | 191 | 88 | 279 | 1,243 |
| Proportion per Cent. |  |  |  |  |
| All Ages. | 100. | 100. | 100. | 100. |
| Under $20-$ |  |  |  | 10 |
| $20-40$ <br> $40-60$ <br> 0 | 88 3 | 69 10 | 85 | 87 3 |
| $60-80$ - |  |  | - |  |

Table III.-England, or the United Kingdom of Great Britain and Irelakd.

|  | Proportion in 1811 to 100 Males living aged 20-40. |  | $1855-6$. Military and Naval Forces voted in $1855-6$. |  | Excess of Numbers in Col. 4. over those in Col. 3. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1. | 2. | 3. | 4. | 5. |
| Sea and Land Forces <br> Navy-Seamen and Marines Armx-Cavalry, Infantry, and Artilery | (1) 19.3 | 501,48 | 451,893 | 790,867 | 388,974 |
|  | (2) $5 \cdot 3$ | 136,778 | 70,000 | 215,705 | 145,705 |
|  | (3) $14 \cdot 2$ | 364,710 | 381,893 | 575,10 | 193,20 |
|  | (4) 17.2 | 441,603 | 436,943 | 696,426 | 259,483 |
|  | (5) $2 \cdot 3$ | 59,885 | 14,950 | 91,441 | 79, |
| $\begin{aligned} & \text { ABMY-Regular Force, Native and } \\ & \text { Fereion } \\ & \text { Regular Entlish Force -- } \end{aligned}$ | (6) $10 \cdot 7$ | 276,189 | 245,570 | 435,561 | 189,991 |
|  | (7) 9.1 | 23,686 | 230,620 | 368,53 | 137,912 |
| Royal Troops in India - <br> At home and abroad (exclu- <br> sive of Forces in India) | (8) $1 \cdot 2$ | 30,253 | 29,62 | 47,711 | 18,081 |
|  | (9) $7 \cdot 9$ | 203,433 | 200,991 | 320,8 | 119,83 |
| Embodied Militis - | (10) 3.5 | 88,521 | 136,323 | 139,601 | 3,278 |
| Foretgn and Colonial Troops | (11) 1.6 | 42,503 | 14,950 | 67,029 | 52,079 |
| Seamen | (12) | 17,382 ? |  | 27,412 ? | 27,412? |


| $(\mathrm{I})=(2)+(3)$ | $(4)=(2)+(1)+(\mathrm{IO})-(12)$ |
| :--- | :--- |
| $(1)=(4)+(5)$ | $(5)=(\mathrm{II})+(12)$ |
| $(1)=(1)+(2)+(10)$ | $(6)=(7)+(11)$ |
| $(3)=(7)+(10)+(\mathrm{II})$ | $(7)=(8)+(9)$ |

Table IV.-Male Pofulation of Seven great States, distinguishing the Numbers living at Five Ages.

| $\left\lvert\, \begin{gathered} \text { Years } \\ \text { for which } \\ \text { Pophlech } \\ \text { Popthtion } \\ \text { Tathe is } \\ \text { Tgiven. } \end{gathered}\right.$ | STATES. | Males. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Totas. | 0-20. |  | 40-60. | 60-80. | $\begin{gathered} \text { 80 } \\ \text { apwards. } \\ \text { up } \end{gathered}$ |
| 1851 | (a) England | 13,687,545 | 6,47, 101 | 4,11,481 | 2,245,358 | 842,624 | 70,981 |
| 1851 | (b) France - | 17,79, 964 | 6,562,179 | 5,541,462 | 4,020,275 | 1,566,864 | 104,184 |
| 1844 | (c) Turkex - - - | 17,533,124 | 9,361,323 | 4,784,490 | 2,448,275 | 857,013 | 82,023 |
| 1840 | (d) Austria - - - | 18,202,631 | 8,465,132 | 5,422,611 | 3,271,212 | 1,150,356 | 71,320 |
| 1849 | (e) Prussia - | 8,162,805 | 3,821,608 | 2,555,891 | 1,342,320 |  | ,986 |
| 1855 | (f) Russia - - - | 33,48,093 | 17,888,678 | 9,127,414 | 4,670,594 | 1,634,931 | 156,476 |
| 1850 |  | 10,026,402 | 5,114,881 | 3,160,028 | 1,339,838 | 376,427 | 35,278 |
|  | Total - | 118,855,564 | 57,600,852 | $34,503,377$ | 19,337,872 |  | 3,463 |

(a) England (exclusive of Ireland). The population for the middle of the year 1851, was taken from the Census Report, page cliv.
reland. The population for Ireland is that enumerated in 1851 , and the males whose ages were not returned have been distributed proportionally over the several ages. The army stationed in Ireland ( 26272 ) was not enumerated
with the general population, but it has been included in the above table; as also has (49704), the proportion of the army, navy, and merchant seamen
also belonging to Ireland, who were abroad in 1851 : their ages have been estimated from the army and navy returns for Great Britain. 3596 boys, belonging to the army, have been added to the enumerated population, and army as in 1841.
(b) France. The number of males given in the above table is that returned in 1851 . $1795^{2}$ males, whose ages were not returned, have been distributed propor$1795^{2}$ males, whose ages were not returned,
tionally over each of the ages given in this table.
(c) Turiey. This is the population in 1844 nearly as given by Ubicini and in the Almanach de Gotha of 1855 ; no details as to age or sex are given, but for the present statement it has been assumed that the numbers of males at
different ages are in the same relative proportions as are here given for Russia.
(d) Austria. This population is taken from the official returns furnished to the Registrar General, and published in his sixth annual Report (pp. 329-44), for the year 1840 . The ages were not stated; but for the year 1837 the proportional numbers under and above 20 were recorded, and these proportions have here been applied to the population of 1840 , and in addition, the males living at each respective vicennial period over the age of 20 have been derived by assuming that they were in the same proportions as are found in the returns for Sweden in 1835 (see Registrar General's sixth Report,
page 270 ). The total population in $1850-51$ given in the Almanach de Gotha page 270 ). The total population in $1850-51$ given in the Almanach de Gotha
of 1855 , is $36,514,466$, while the official number given for 1840 is $36,950,401$. of 1855 , is $36,514,466$, while the official number given for 1840 is $36,950,401$.
In the official returns of 1855 (Mittheilungen aus dem Gebicte der Statistik: $4^{\text {er }}$ Jahrgang. 2 Heft.) pp. 8-9, it is stated, that the population as last enumerated in 1850 was $35,750,621$; comprising $17,437,068$ males, and $18,313,553$ females. It is estimated from the rates of increase in $1840-6$, that the population at the end of 1854 amounted to $37,356,699$. But this number is also said to be defective, and it is inferred tion the estimated population of the empire is set down at $39,411,309$; the males being $19,272,610$, and the females $20,138,699$.
Until a more accurate census is taken by the new Statistical Board I think the numbers in the above table most suitable for the purposes of comparison with the similar returns of other states.
(e) Prussia. The above population of Prussia is taken from the official returns published for the year 1849 ; the numbers are therein grouped in periods of age which do not in one or two instances exactly correspond with the ages in the present Table ; but in such cases by adding or deducting proportional numbers the result obtained cannot differ materially from the true numbers.
( $f$ ) Russia. The population is derived from the official returns received by the Registrar General, and published in his sixth annual Report (pp. 315-28), where the population is stated for the year 1842, and comprises European and Asiatic Russia. The sex of $15,334,210$ persons $\binom{25,461,077$ males }{$25,873,133$ females } out of $59,254,77 \mathrm{I}$ living in 1842, is recorded, and the males and females of the remainder are assumed to be in the same relative proportions. For the the remainder are assumed to be in the same relative proportions. For the
present statement the population has been estimated for 1855 on the assumppresent statement the population has been estimated for 1855 on the assump-
tion of Tegoborski that the annual rate of increase since 1842 has been one per cent. The ages of the living are not recorded, and they have been here obtained from the deaths at different ages given in the 1834, official returns for the two years 1832 and 1834 ; for on taking the rate of mortality to be the same as in Manchester (to which rate it approximates in the aggregate), the numbers thus obtained were found to be a little in ex
have accordingly been proportionally reduced.
(g) United States. The population has been derived from the Census of the United States in 1850 . The number is exclusive of the free and slave coloured population, which amounted to $3,634,830\left(\begin{array}{c}1,809,238 \\ 1,825,592\end{array}\right.$ males 7,153 males, whose ages were not stated, have been distributed proportionally over the several ages given in the table. The number of coloured males at the above ages were :-

| $\begin{aligned} & \text { Ages. } \\ & -2-20 \end{aligned}$ |  | $\begin{aligned} & \text { Males. } \\ & \mathbf{1 , 0 0 9 , 4 8 \mathbf { x }} \end{aligned}$ |
| :---: | :---: | :---: |
| 20-40 | = | 526,330 |
| 40-60 | = | 204,376 |
| 60-80 | = | o,817 |
| 80 and up | wards | 7,7 |

[The following Index furnishes a reference to the Number of each District in the topographical arrangement adopted in the Tables of Abstracts contained in the Report, the numbers running consecutively from 1 to 623.* In forming the alphabetical arrangement the principle is adopted of placing compound names in the order in which they are pronounced : thus, East Ashford will be found under the letter E, and not under A, as Ashford, East.]

Aberayron, 596.
Abergavenny, 578
Abingdon, 123
Abingdon, 123
Alcester, 405.
Alderbury, 263.
Alnwick, 559
Alresford, 113
Alresford, 11
Alston, 564.
Alton, 114.
Altrinchan, 454.
Alverstoke, 97.
Amersham, 148.
Amesbury, 262
Ampthill, 181
Andover, 118
Andover, 118.
Ashborne, 447.
Ashby-de-la-Zouch, 414.
Ashton under-Lyne, 474.
Askrigg, 537
Aston, 395.
Atcham, 35
Atherstone, 397.
Auckland, 542.
Axbridge, 324
Axminster, 279.
Aylesbury, 151
Aylsham,

Bakewell, 449.
Bala, 616 .
Banbury, 163.
Bangor, 621
Barnet, 1
Barnstey, 505.
Barrow-upon-Soar, 416
Basford, 438.
Basingstoke, 116.
Bath, 326
Battle, 77.
Beaminster,
Beaminster, 27
Bedale, 253.
Bedford, 179 .
Bedminster, 32
Belford, 560
Bellingham, 55
Belper, 446.
Berkhampstead, 147.
Bermondsey, 28
Berwick, 561.
Bethnal Green, 2

Beverley, 518
Beverley, 518
Bicester, 159. Bideford, 297 Biggleswade, 180. Billericay, 199. Billesdon, 410 Bingham, 443. Birmongham, 394. Blaby, 411. Blackburn, 480 Blackburn, 480
Blandford, 270. Blean, 66 . Blofield, 237. Blything, 225
Bodmin, 304. Bodmin, 30 Boiton, 468
Bootle, 572 Bootle, 572.
Bosmere, 220 Boston, 425 Bourn, 422. Brackley, 164 Bradfield, 126
Bradford (Wil Bradford (York), 499 Braintree, 208. Brampton, 566 Brecknock, 600. Brentford,
Bridge
64 Bridge, 64.
Bridgend, 5 Bridgnorth, 356 . Bridgwater, 316. Bridlington, 524. Bridport, 278 Brighton, 8 Bristol, 329. Brixworth, 170
Bromley, 49. Bromsgrove, 392. Bromyard, 350. Buckingham, 154. Builth, 599.
Burnley, 478.
Burton-upon-Trent, 375.
Burton-upon-Trent, 375
Bury, 469 .
Bury St. Edmunds, 215

Caistor, 432
Calne, 254.
Camberwell, 33.
Cambridge, 187
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[^0]:    $\dagger$ The Table may be read thus, without reference to the decimal points: In the year 1848 , to 100000 of the population
    
    

[^1]:    * Seamen and others on board vessels in the various ports are included in the population given for 1851 ; the numbers for 1841 are in general confined to persons enumerated on shore.

[^2]:    * The numbers up to 1850 have appeared in the Annual Reports.

[^3]:    
     91 days; the 3 months April, May, June, 91 days

[^4]:    * Seamen and others on board vessels in the various ports are included in the population given for 1851 ; the numbers for 1841 are in general confined to persons enumerated on shore.

[^5]:    * The numbers up to 1851 have appeared in the Annual Reports.

[^6]:    * The Newcastle water taken from the River Tyne has been analysed by Dr. Robert Dundas Thomson. He found it to contain a quantity of organized matter mechanically diffused through it (loaded with living vibrios) to the amount of 4.502 grs. per galion. Of this 0.545 grs. was destructitle matter ; the remaining 3.957 grs. consisted of silicious forms resembling the shields of infusorial animals or diatomaceous plants. Dissolved or finely diffused in the water, he further found 2.68 grs. per gallon of organic matter. The water likewise contained 1.18 gr . per gallon of chalk and $7^{\circ} 3$ grs. of muriate and sulphate of soda and sulphate of magnesia. The total solid contents were 15.662 grs. per gallon. This water was, it is said, filtered, but the process is not described by the Water Company.

[^7]:    * Seamen and others on board vessels in the various ports are included in the population given for 1851 ; the numbers for 1841 are in general confined to persons enumerated on shore.

[^8]:    Hartwell Rectory :- - 15 th July, 6h. P.M. The reading of the barometer was altered from $29^{\circ} 768 \mathrm{in}$. to $299^{\circ} 268$ in. Aylesbury :-The readings of the barometer are not good, and no subsequent use has been made of
    the results. Royston:-The readings of the dry and wet bulb thermometers on 25 th September, at $6 \mathrm{~h}, \mathrm{P}, \mathrm{M}$., are giren as $58^{\circ} 2^{\circ}$ and $39^{\circ} 2^{\circ}$ respectively, both these must be wrong, and have been omitted in deducing

[^9]:    * The numbers up to 1851 have appeared in the Annual Reports.

[^10]:    * Seamen and others on board vessels in the various ports are included in the population given for 1851 ; the numbers for 1841 are in general confined to persons enumerated on shore.

[^11]:    Helston:-The range of the barometer readings in October is too small, and in November it is too large. Exeter:-The lowest reading of the barometer in November has been altered conjecturally from
    $29^{\circ} \cdot 3^{\circ}$ in. to $29^{\circ} 53{ }^{\circ}$ in

[^12]:    * I have been supplied with the Italian names by a learned colleague at the congress, I postpone the publication of these names until I obtain the Spanish and Russian names.

[^13]:    * Includes the epidemic pleurisy and pneumonia.

[^14]:    * Including duel, and any other way of fighting than is included in No. 2 " Murder," to be noted.

[^15]:    * Gold coin is displacing silver in France; and the Frenchman who would have carriec five-franc pieces in his purse thirty years ago now carries Louis-Napoleons. In the reign of Charles X. gold of the value of rather more that $2,000,0001$. and silver of the value of $25,000,000$. were coined. The Emperor Louis Napoleon has coined already nearly ar le Bureau des Longitudester more than 3,300,000. of silver.-Annuaire 1855, pub The exchange at par is $25^{\circ} .225$.
    $\ddagger$ In nominal value the old farthing, halfpenny, and penny are 1-24th part more aluable than the mil.
    The intrinsic value of the old coins differs now to a much greater extent ; and no article in retail trade with which the poorer classes have to do is ever valued to thi nicety. For them the mil would be the exact equivalent of the farthing; the two-mil of rules of arithmetic to the simple cannot be obtained without some plan here sketehed all the gold and silver coinage would remain in circulation, and no new

[^16]:    These calculations were made, before Sardinia joined the Western Powers.

[^17]:    * The price of an ounce of gold was 4.5007 . in the inconvertible bank note currency of * The price of an ounce of gold was 4.500 . in our convertible currency.
    $\dagger$ The expenditure in 1851, under the head of army, navy, and ordnance supplies, was The expenditure in 185 I , under the head of army, navy, and ordnance Indies, 149,677 men ; or $99^{\circ} 378 l$. per man. Our ordnance supplies mix up the expendiIndies, 149,677 men ; or $99^{\circ} 378 l$. per man.
    ture on the army and navy stores, so that it is difficult to allot to the sea and land forces their exact share of the aggregate ordnance supply.
    $\ddagger$ See some of the details of this estimate in "Income Tax Inquiry," evidence of w. Farr.

[^18]:    * This sum is exciusive of the various terminable annuities

