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42(R7)

TWENTY-NINTH

ANNUAL REPORT

OF THU

REGISTRAR-GENERAL

BIRTHS, DEATHS, AND MARRIAGES

or

IN ENGLAND.

(ABSTRACTS OF 1866.)

Bresented to both Houses of Parliament by Command of Per Majesty.



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REPORT

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The Right Honourable GATHORNE HARDY, M.P., Her Majesty's Principal Secretary of State for the Home Department, &c. &c. &c.

General Register Office, Somerset House, 31st March 1868.

I HAVE the honour to submit to you my Annual Report for the year 1866.

SIR,

The estimated population for the middle of the year is 21,210,020: and as of this number 10,273,700 are males and 10,936,320 females, there are 662,620 more females than males living in England and Wales.

The natural increase of population by the excess of births over deaths was 253,179, or 694 daily. The number of emigrants who left the ports of the United Kingdom was 204,882 or 561 daily; of these 61,263 were

TABLE 1.—Estimated Population, with the Number of Marriages, Births, and Deaths registered in England, in each Year from 1838 to 1866.

YEARS ended Dec. 31st	Estimated POPULATION in ENGLAND in the Middle of the Years.*	POPULATION in ENGLAND MARRIAGES. DERSONS BIRTHS in the Middle of MARRIAGES. MARRIED. (exclusive of S						
$\begin{array}{r} 1883 \\ 1839 \\ 1840 \\ 1841 \\ 1842 \\ \end{array}$	$\begin{array}{c} 15,312,256\\ 15,515,296\\ 15,721,029\\ 15,920,492\\ 16,123,793\end{array}$	$118,067 \\123,166 \\122,665 \\122,496 \\118,825$	236,134 246,332 245,330 244,992 237,650	463,787 492,574 502,303 512,158 517,739	342,760 338,984 359,687 343,847 349,519	$\begin{array}{c} 121,027\\ 153,590\\ 142,616\\ 168,311\\ 168,220\\ \end{array}$		
1843 1844 1845 1846 1847	$16,320,479 \\ 16,519,565 \\ 16,721,081 \\ 16,925,051 \\ 17,181,512 \\ 20,000000000000000000000000000000000$	$123,818 \\132,249 \\143,743 \\145,664 \\135,845 \\$	247,636 264,498 287,486 291,328 271,690	527,325 540,763 543,521 572,625 539,965 539,965	346,445 356,933 349,366 390,315 423,304	180,880 183,830 194,155 182,310 116,661		
1848 1849 1850 1851 1852 1853	$\begin{array}{r} 17,340,492\\ 17,552,020\\ 17,766,129\\ 17,982,849\\ 18,193,206\\ 18,404,368\end{array}$	$138,230 \\ 141,883 \\ 152,744 \\ 154,206 \\ 158,782 \\ 164,520 \\ 164,520 \\ 180,100 \\ 100,$	276,460 283,766 305,488 308,412 317,564 329,040	563,059578,159593,422 $615,865624,012612,391$	399,833 440,839 368,995 395,396 407,135 421,097	163,226 137,320 224,427 220,469 216,877 191,294		
1855 1855 1855 1856 1857 1858	$10,107,500 \\18,616,310 \\18,829,000 \\19,042,412 \\19,256,516 \\19,471,291$	159,727 159,727 152,113 159,337 159,097 156,070	319,454 304,226 318,674 318,194 312,140	$\begin{array}{c} 634,405\\ 635,043\\ 657,453\\ 663,071\\ 655,481\\ \end{array}$	437,905 425,703 390,506 419,815 449,656	196,500 209,340 266,947 243,256 205,825		
1859 1860 1861 1862 1863	$\begin{array}{c} 19,686,701\\ 19,902,713\\ 20,119,314\\ 20,336,467\\ 20,554,137\\ \end{array}$	167,723 170,156 163,706 164,030 173,510	335,446 340,312 327,412 328,060 347,020	689,881 684,048 696,406 712,684 727,417	$\begin{array}{r} 440,781\\ 422,721\\ 435,114\\ 436,566\\ 473,837\end{array}$	249,100 261,327 261,292 · 276,118 253,580		
1864 1865 1866	20,772,308 20,990,946 21,210,020	180,387 185,474 187,776	360,774 370,948 3 75,552	740,275 748,069 753,870	495,531 490,909 500,689	244,744 257,160 253,181		

* The Population of each of the years since 1851 is deduced from the ascertained rate of increase observed in the twenty years, 1841-61; and an allowance is made for the decrease in the rate during the latter ten years. On another hypothesis the numbers would differ slightly from the estimate here given, but as the rates of births, deaths, and marriages have been calculated on these numbers it is not considered advisable to give any other estimate of Population.

PAGE

of English origin, 12,766 of Scotch, 102,904 of Irish; and 27,949 were Foreigners, chiefly Germans, Norwegians, and Swedes. The 8138 persons, whose birth place was not recorded, are distributed proportionally in this statement. Of the emigrants 161,000 went to the United States, 13,255 to British North American Colonies, 24,097 to the Australian Colonies, and 6530 to various other places. Tables showing the occupation, sex, and ages of these emigrants are given at pages lxvi-lxviii.

The sum of 498,000*l*. was remitted, through banks and mercantile houses, during the year by settlers in North America to their friends in the United Kingdom : this amount, which is the largest since 1860, being in addition to sums sent through private hands.

The number of persons married was 375,552; 753,870 children were born alive, and 500,680 persons died in the year; under each of these heads the number is greater than in any previous year.

One million six hundred and thirty thousand one hundred and eleven inscriptions of names were placed on the registers of this office, raising the total number since the commencement of registration in 1837 to thirty-eight millions eight hundred and thirty-three thousand seven hundred and fifty-two names of persons who have experienced one or more of the three great events of birth, marriage, or death, in $29\frac{1}{2}$ years.

The temperature of the year at the Royal Observatory, Greenwich, was 49.8°, or 0.5° above the average; the rain-fall amounted to 30.7 in., which is 6.8 in. more than the average. The price of wheat rose from 45s. 6d. per quarter in the first three months to 56s. 8d. in the last quarter of the year.

MARRIAGES.

187,776 marriages were solemnized in the year; 146,040 or 78 per cent. according to the rites of the Established Church, and 41,736 or

YEARS	To	0 100 PERSON	S LIVING.		THE	NUMBER OF	PERSONS LI	VING			
ended Dec. 31st	MARRIAGES.	Persons Married.	BIRTHS.	DEATHS.	TO ONE Marriage,	TO ONE PERSON MARRIED.	TO ONE BIRTH.	To one Death.			
1838 1839 1840	•771 •794 •780	3.029 3.175 3.195	2·238 2·185 2·288	130 126 128	65 63 64	83 31 31	45 46 44				
1841 1842 1843 1844 1845	*769 *737 *759 *801 *860	$\begin{array}{c cccc} \cdot 769 & 1 \cdot 538 \\ \cdot 737 & 1 \cdot 474 \\ \cdot 759 & 1 \cdot 518 \\ \cdot 801 & 1 \cdot 602 \end{array}$		1.474 1.518 1.602	1°474 1°518	$3 \cdot 215$ $3 \cdot 211$ $3 \cdot 231$ $3 \cdot 273$ $3 \cdot 251$	2·159 2·168 2·123 2·161 2·089	130 136 132 125 116	65 68 66 62 58	31 31 31 31 31	46 46 47 46 48
1846 1847 1848 1849 1850	*861 •793 •797 •808 •860	1.722 1.586 1.594 1.616 1.720	3*383 3*152 3*247 3*294 3*340	2'306 2'471 2'306 2'512 2'077	116 126 125 124 116	58 63 63 62 58	80 82 81 80 80	43 40 43 40 48			
1851 1852 1853 1854 1855	*858 *873 *894 *858 *808	1.716 1.746 1.788 1.716 1.616	3·425 3·430 3·327 3·408 3·373	2.199 2.238 2.288 2.352 2.261	117 115 112 117 124	58 57 56 58 62	29 29 30 29 30	45 45 44 43 44			
1856 1857 1858 1859 1860	•837 •826 •802 •852 •855	1.674 1.652 1.604 1.704 1.710	3°453 3°443 3°366 3°504 3°437	2.051 2.180 2.309 2.239 2.124	119 121 125 117 117	60 61 62 59 58	29 29 30 29 29	49 46 43 45 47			
1861 1862 1863 1864 1865	*814 *807 *844 *868 *884	1.628 1.614 1.688 1.736 1.768	$ \begin{array}{r} 3:461 \\ 3:504 \\ 3:539 \\ 3:564 \\ 3:564 \end{array} $	2·163 2·147 2·305 2·386 2·339	123 124 118 116 113	61 62 59 58 57	29 29 28 28 28 28	46 47 43 42 43			
1866	* *885	1.770	3.554	2'361	113	57		42			

TABLE 2.—Proportion of Marriages, Births, and Deaths to the Population of England, in each Year from 1838 to 1866.

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

Marriages.

22 per cent. not according to the rites of the Established Church. 20,297 marriages were by licence, 118,274 after banns, 4281 on superintendent registrar's certificate; and in 3171 instances it is not stated under which of these heads the marriages should be placed. In Roman Catholic chapels there were 8,911 marriages, in the registered places of other Christian denominations 17,215 marriages; and in the offices of Superintendent Registrars 15,246. The 63 nuptial celebrations among Quakers

TABLE 3.—M		NOT ACC	CORDI	NG TO	THE I	RITES O								
io-rate amon	n in		ESTA	G TO TH BLISHE	tte.	RCH.	en.	20 13 	THE	ESTAR In Reg	gis-	ED CH	URCH.	
YEARS ended S1st December	TOTAL MARRIAGES.	Special Licence.	Licence.	Banns.'	Superintendent Ke trar's Certificate.	Not stated.	TOTAL IN ESTA- BLISHED CHURCH		- CH	Catholics.	Other Christian Denominations.	Superintendent Regis- trar's Office.	Quakers.	Jews. H
1841 - 1842 - 1843 -	122,496 118,825 123,818		15,792 14,935 14,544	78,015 75,744 79,849	972 944	19,579 18,415 18,014	114,3 110,0 113,0	== = 871 047	8,125 8,778 10,181	588 620 715	20	2064 2357 2817	66 58 61	113 163 151
1844 - 1845 - 1846 - 1847 - 1848 - 1848 - 1849 -	132,249 143,743 145,664 135,845 138,230 141,883	10 10 14 14 13 18	14,930 16,013 17,135 17,052 16,896 16,697 17,413	85,176 92,867 92,995 84,863 86,519 90,644 98,669	1558 1706 1862 1968 2170 2593	$18,335 \\18,919 \\18,503 \\16,979 \\15,871 \\13,230$	$120, \\129, \\130, \\120, \\121, \\123$	009 515 509 876 469	12,240 14,228 15,155 14,969 16,761 18,701	2280 2816 3027 2961 3658 4199 5623	6284 7181 7669 7483 8060 8662 9626	3446 3977 4167 4258 4790 5558 6207	55 74 68 83 67 53 69	175 180 224 184 186 229 260
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		$\begin{array}{cccccc} 8 & 17,781 \\ 8 & 19,461 \\ 8 & 20,624 \\ 15 & 21,048 \\ 14 & 20,386 \\ 9 & 21,336 \\ \end{array}$		3136 3351 3610 3814 3811 3804 4045 9749	$11,733 \\10,412 \\4,306 \\4,430 \\4,185 \\4,001 \\3,949 \\2,062 \\$	130 133 138 134 127 133	,958 ,882 ,042 ,109 ,751 3,619	21,785 23,248 24,900 26,478 25,618 24,362 25,718 28,066	6570 7479 8375 7813 7344 7527	9540 10017 10149 9873 9296 9710	6813 7100 7598 7593 7441 8097	65 57 68 52 57 72	260 247 288 287 224 312 311
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 159,097\\ 156,070\\ 167,723\\ 170,156\\ 163,706\\ 164,030\\ 173,510\\ 100,000\\ 100,0$	$9 \\ 15 \\ 19 \\ 14 \\ 16 \\ 18 \\ 19 \\ 12 \\ 12$	$\begin{array}{c} 21,250\\ 19,858\\ 20,345\\ 20,742\\ 20,090\\ 19,486\\ 19,298\\ 19,874 \end{array}$	102,870 109,572	3748 3787 4204 4243 4048 3966 4312 4257	3,962 3,990 3,905 3,686 3,588 3,393 3,542 3,376	128 136 137 130 129 130	1,031 3,082 3,210 7,370 0,697 9,733 3,743 1,083	28,066 27,988 31,513 32,786 33,009 34,297 36,767 39,304	7360 6643 7756 7800 7782 7345 8095 8659	$10686 \\ 11094 \\ 12519 \\ 13342 \\ 13182 \\ 13870 \\ 14714 \\ 15627 \\ 15627 \\ 1000 $	9952 10844 11257 11725 12725 13589	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	311 220 324 312 262 300 318 349
1864 - 1865 - 1866 -	180,387 185,474 187,776 MARF	1 23 20,7		20,722 116,745 20,297 118,274 DNTRACTED		3,444 3,171 MARRI	14	5,104 6,040	40,370 41,736 ER AGE.	8742 8911	16429 17218 IGNEI) 14792 5 1524 0 THE 1	2 54	353 301 AGE
YEARS, ended ' 31st December	Bachelors and Spinsters.	Bachelors and Widows.	Widowers and Spinsters.	Widowers and Widows.	Widowers.	and Carlos	-swont AA	Men.	Women.	Men.		.E	विचे	Marriages in which one Signed with Marks.
1841 - 1842 - 1843 - 1844 - 1845 - 1846 - 1846 -	119,53			5 6341 2 6131		$\begin{array}{c cccc} 05 & 10 \\ 41 & 11 \\ 76 & 12 \\ 43 & 12 \\ 64 & 11 \end{array}$,579 ,811 ,183 ,369 ,128 ,602	5362 5387 5511 5515 6287 6313 5556		39,9 38,0 40,5 42,9 47,6 47,4 42,4 43,1	$\begin{array}{c cccc} 31 & 5 \\ 520 & 6 \\ 012 & 6 \\ 365 & 7 \\ 488 & 7 \\ \end{array}$	9,680 6,965 0,715 5,073 1,229 0,145 1,877	 	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	14,18	$\begin{array}{c cccc} 5 & 6492 \\ 8 & 7580 \\ 3 & 7250 \\ 4 & 7370 \\ 9 & 7619 \\ 9 & 7571 \end{array}$	$19,0 \\ 19,6 \\ 22,1 \\ 21,5 \\ 21,4 \\ 22,3 \\ 21,7 \\ 21,9 \\ 1,9 \\ 1,9 \\ 19,0 \\ 10,0 \\ 10$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	2,244 2,594 4,155 3,875 4,066 4,758 4,397 4,435	6092 6650 7453 7737 8551 9131 9210 8386	21,105 23,109 24,286 26,978 29,219 28,797	$ \begin{array}{c} 44,0\\ 47,4\\ 47,4\\ 48,4\\ 49,9\\ 47,4 \end{array} $	$\begin{array}{c cccc} 027 & 6 \\ 572 & 7 \\ 439 & 6 \\ 421 & 7 \\ 983 & 7 \\ 843 & 6 \end{array}$	$\begin{array}{c} 2,771\\ 5,135\\ 0,606\\ 9,812\\ 0,772\\ 2,204\\ 8,175\\ 2,672\\ \end{array}$	32,974 	39,989 44,879 45,921 47,497 45,508 43,240
1856 - 1857 - 1858 - 1859 - 1860 - 1861 -	- 129,96 - 130,31 - 127,16 - 137,00 - 139,44 - 133,71	0 7163 7 6908 5 6711 05 7058 40 7098 2 7034	14,40 14,29 14,54 15,49 15,30 15,30	32 7752 93 7579 947 7644 93 8161 58 8260	22,5 21,8 22,7 23,6 23,6 23,6 22,9	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4,915 4,487 4,355 5,219 5,358 4,927	9120 8885 9145 10397 10797 10415 10615	29,218 5 28,798 5 28,664 7 32,041 7 32,927 5 31,927	45, 44, 42, 42, 44, 43, 40,	900 6 013 6 141 5 807 6 401 6 204 4	4,183 51,765 58,733 53,127 51,677 56,770 54,405	32,238 30,518 28,781 30,574 28,904 26,333 25,075	45,557 44,749 43,319 46,786 47,270 44,30 43,05
1863 1864 1865	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	23, 24, 25,	$ \begin{array}{c c c c c c c c c c c c c c c c c c c $	4,737 5,307 6,356 7,142 7,651	$10613 \\ 11473 \\ 11934 \\ 12410 \\ 12569$	5 34,527 4 36,235 6 37,260	41 ,	262 998 664	57,416 58,402 57,828 56,395	25,075 26,626 26,582 26,216 25,169	43,00 45,42 47,23 47,06 46,66

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

are 9 in excess of the previous year, and the 301 marriages of Jews show a diminution of 52.

The marriages were above the average : the increase in the number of persons married which was noticed in 1863, augmented in each following year, and reached the high proportion of 1.770 persons married in 1866 to every 100 persons living, the average rate being 1.652. The excess in the number of marriages was spread over the first nine months of the year; the commercial distress, which began to be severely felt in May, influenced the marriage-rate in the last three months of the year, when it fell below that of the corresponding season of 1865. 832 in 100,000 persons living may be estimated to represent the marriage-rate of the higher and middle classes, and 895 in 100,000 the marriage-rate among the other classes of the community.

TABLE 4.— Proportion of Marriages and comparison of those celebrated by Licence and not by Licence, together with the Price of Wheat per Quarter in England in each Year from 1841 to 1866.

- maintente	MA	RRIAGES.	Proportional Num	aber of Marriages.	PRICE OF
YEARS.	To 100 Persons LIVING.	By Banns to One Marriage by Licence.	BY LICENCE to every 100 Persons living in Houses of Rentals of £20 and upwards.	NOT BY LICENCE to every 100 Persons living in Houses of Rentals under £20.	WHEAT PER QUARTER.
AVERAGE :	a have been a		(Insards)	atsou	s. d.
Of 8 years of highest prices -	} .804*	4.979	.910	• 787	64 11
Of 9 years of intermediate prices	} .836	5•449	·881	•829	52 I
Of 9 years of lowest prices -	} .850	5.204	•877	•846	42 I
1855 1854	•808 •858	4.883 4.991	•916 •958	• 791 • 842	74 8 72 5
1847	• 793	4.977	•909	•774	69 9
1856	•837	4.888	•947	·819	69 2
1841 1842	•769 •737	4·940 5·072	·905 ·847	·747 ·719	64 4 57 3
1857	•826	4.803	•944	•807	56 5
1862	•807	5.279	•853	•799	55 5
1861	•814	5.125	·880	•803	55 4
1846 1853	•861 •894	5·427 5·293	•926 •957	·850 ·884	54 8
1860	·855	5.240	.913	•846	53 3 53 3
1844	.801	5.705	•831	•796	51 3
1845 1848	•860 •797	5·799 5·121	•880 •890	·856 ·782	50 10
1843	.759	5.490	·816	•749	50 6 50 I
1866	·885	5.827	·832	.895	49 11
1863	•844	5.678	·848	·844	44 8
1849	·808	5:429	·859 ·881	·800	44 3
1858 1859	•852	5°058 5°296	· 904	• 789 • 844	44 3 43 IO
1865	·884	5.634	· 856	·889	41 9
1852	•873 •860	5.472	.913	•866	40 9
1850 1864	•868	5.666	·880 ·865	·857 ·869	40 3 40 2
1851	•858	5.201	·884	•853	38 6

* Disregarding the decimal point, this will read : - 804 marriages were celebrated to every 100,000 of the population; 910 in 100,000 represent the marriage-rate of the higher and middle classes, and 787 in 100,000 the marriage-rate among the other classes of the community. There were 23 marriages in which one or other of the contracting parties is stated to have been previously divorced, thus 9 divorced men married spinsters, 5 divorced men married widows, 8 bachelors and one widower married divorced women; these numbers are considerably less than in the previous year, when there were 48 cases of marriage after divorce.

Buildings registered for marriage.—There were 5576 buildings for the solemnization of marriages on the register at the end of the year 1866; of these 1666 belonged to Independents, 1163 to Baptists, 1317 to Wesleyan Methodists (including 673 of the original connection, and 233 Primitive Methodists), 626 belonged to Roman Catholics, 168 to Unitarians, 166 to Scottish Presbyterians, and 272 to Calvinistic Methodists.

15,979 places of meeting for public worship in England and Wales were on the register on 31st December 1866, and the following is a list of the various titles by which the religious denominations have been certified to me.

Apostolics. Free Gospel Church. Ranters. Armenian New Society. Free Church (Episcopal). Reformers. Baptists. Free Church of England. Reformed Presbyterians or Baptized Believers. Free Union Church. Covenanters. Believers in Christ. General Baptist. Recreative Religionists. Bible Christians. General Baptist New Con-Refuge Methodists. Bible Defence Association. nexion. Reform Free Church of Brethren. German Lutheran. Wesleyan Methodists. Calvinists. German Roman Catholic. Revivalists. Calvinistic Baptists. Glassites. Revival Band. Catholic and Apostolic Greek Catholic. Roman Catholics. Church. Hallelujah Band. Salem Society. Christians. Independents. Sandemanians. Christians who object to be Independent Religious Re-Scotch Baptists. otherwise designated. formers. Second Advent Brethren. Christian Believers. Independent Unionists. Separatists (Protestant). Christian Brethren. Inghamite. Seventh Day Baptists. Christian Eliasites. Jews. Strict Baptists. Christian Israelites. Latter Day Saints. Swedenborgians. Christian Teetotallers. Modern Methodists. Testimony Congregational Christian Temperance Men. Mormons. Church. Christian Unionists. New Connexion of Wes-Trinitarians. Church of Scotland. leyans. Union Baptists. Church of Christ. New Jerusalem Church. Unionists. Countess of Huntingdon's New Church. Unitarians. Connexion. Old Baptists. Unitarian Christian. Disciples in Christ. Original Connexion of Wes-United Christian Church. Eastern Orthodox Greek levans. United Free Methodist Church. Plymouth Brethren. Church. Peculiar People. Eclectics. United Brethren or Mora-Episcopalian Dissenters. Presbyterian Church in Engvians. Evangelical Unionists. United Presbyterians. land. Followers of the Lord Jesus Primitive Methodists. Unitarian Baptists. Christ. Progressionists. Welsh Calvinistic Methodists. Free Catholic Christian Protestants adhering to Arti-Welsh Free Presbyterians. Church. cles of Church of England, Wesleyan Methodist Asso-Free Christians. 1. to 18. inclusive, but reciation. Free Church. jecting Order and Ritual. Wesleyan Reformers. Free Grace Gospel Chris-Providence. Wesleyan Reform Glory tians. Quakers. Band.

Re-marriages.—26,128 widowers and 17,651 widows re-entered the marriage state during the year; of the widowers 16,467 married spinsters and 9661 married widows; the remaining 7990 widows were allied to bachelors.

Marriages of Minors.—12,569 men and 37,610 women married under the age of 21 years; of men, the proportion who married under age, was 6.69; of women 20.03 in 100. The prevalence of early marriages differs considerably in the several counties, and is always greatest in those

Marriages.

centres of industry which afford employment for young persons; thus the early marriages of straw plait and lace makers raise the proportion of men to 11.5 and women to 24.2 per cent. in Buckinghamshire, and to 11.7 men and 25.7 women per cent. in Bedfordshire; in Leicestershire the proportions are 11.6 men and 23.5 women; Nottinghamshire, 10.4 men and 23.1 women; in Durham, 7.9 in every 100 men, and 30.2 in every 100 women marry under the age of 21. In London the proportion of early alliances is always small, owing, among other causes, to the cost of house accommodation, and the more exacting requirements of social position; 3.5 in 100 men and 14.3 in 100 women married under age in the metropolis.

Signature of Marriage Registers .- Of the 187,776 men and 187,776 women who married during the year 1866, 40,609, or 21.6 per cent. of men, and 56,395, or 30.0 per cent. of women signed the registers with marks. High as these proportions are it is nevertheless gratifying to observe that a progressive decrease is shown in the returns. Twenty years since one third of the men and half of the women were unable to attach their names to the record of their marriage. Examined by the test of the marriage registers the women in most of the agricultural districts appear to have had a better elementary education than the men, while the reverse is the case in the manufacturing and mining districts, and also in Wales, where little more than half the women write their names. In the following counties the women sign their names in a greater proportion than the men, viz., Surrey, Kent, Sussex, Berkshire, Middlesex, Hertfordshire, Oxfordshire, Huntingdonshire, Essex, Suffolk, Norfolk, Wiltshire, Dorsetshire, Somersetshire, Herefordshire, Rutlandshire, and Lincolnshire.

Scotland compares very favourably with England in elementary education, as represented by marriage signatures, although little or no progress is shown in this respect; for while 11.4 in every 100 men and 22.2 in every 100 women signed the registers with marks in Scotland in 1865, the respective proportions in 1855 were 11.4 and 22.8; in England the

TABLE 5Marriages in England. The Proportion per	Cent. of Minors of each
Sex, of Males and Females who signed the Registe	r with Marks, and of
Persons who were Widowers or Widows, in each Yea	r from 1841 to 1866.

Name of Concession of Concessi									
in the second				To I	100 MARF	RIAGES.		113 - 112 	
YEARS		OPORTION (EARS OF A		THE PROPORTION WHO WERE					
31st December	Males.	Females.	Mean.	Males.	Females.	Mean.	Widowers.	Mean.	
$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c} 4 \cdot 38 \\ 4 \cdot 53 \\ 4 \cdot 53 \\ 4 \cdot 45 \\ 4 \cdot 17 \\ 4 \cdot 37 \\ 5 \cdot 51 \\ 5 \cdot 52 \\ 5 \cdot 55 \\ 5 \cdot 57 \\ 5 \cdot 51 \\ 5 \cdot 55 \\ 5 \cdot 5$	$\begin{array}{r} 13 \cdot 29 \\ 13 \cdot 47 \\ 13 \cdot 25 \\ 13 \cdot 16 \\ 13 \cdot 48 \\ 13 \cdot 73 \\ 13 \cdot 34 \\ 14 \cdot 06 \\ 14 \cdot 88 \\ 15 \cdot 13 \\ 15 \cdot 75 \\ 16 \cdot 99 \\ 17 \cdot 76 \\ 18 \cdot 03 \\ 17 \cdot 78 \\ 18 \cdot 34 \\ 18 \cdot 10 \\ 18 \cdot 37 \\ 19 \cdot 10 \\ 19 \cdot 35 \\ 19 \cdot 50 \\ 19 \cdot 79 \\ 19 \cdot 90 \\ 20 \cdot 09 \\ 20 \cdot 08 \\ 20 \cdot 03 \end{array}$	$\begin{array}{r} 8\cdot83\\9\cdot00\\8\cdot85\\8\cdot67\\8\cdot93\\9\cdot03\\8\cdot72\\9\cdot24\\9\cdot79\\10\cdot01\\10\cdot39\\11\cdot19\\11\cdot66\\11\cdot90\\11\cdot70\\12\cdot03\\11\cdot84\\12\cdot12\\12\cdot65\\12\cdot85\\12\cdot93\\13\cdot13\\13\cdot26\\13\cdot36\\13\cdot39\\13\cdot36\\13\cdot39\\13\cdot36\\13\cdot39\\13\cdot36\\13$	$\begin{array}{c} 32.7\\ 32.0\\ 32.7\\ 32.4\\ 33.2\\ 31.2\\ 31.2\\ 31.2\\ 31.2\\ 31.2\\ 31.2\\ 31.1\\ 30.8\\ 30.5\\ 30.4\\ 30.5\\ 30.4\\ 30.5\\ 30.4\\ 29.5\\ 28.8\\ 27.7\\ 29.5\\ 24.6\\ 23.7\\ 22.5\\ 24.6\\ 23.7\\ 23.8\\ 22.5\\ 22.5\\ 21.6\\ \end{array}$	$\begin{array}{c} 48^{\circ}8\\ 47^{\circ}9\\ 49^{\circ}0\\ 49^{\circ}2\\ 49^{\circ}6\\ 48^{\circ}2\\ 45^{\circ}5\\ 45^{\circ$	$\begin{array}{c} 40^{\circ}8\\ 40^{\circ}0\\ 40^{\circ}9\\ 40^{\circ}8\\ 41^{\circ}4\\ 88^{\circ}4\\ 38^{\circ}3\\ 38^{\circ}5\\ 38^{\circ}7\\ 38^{\circ}1\\ 37^{\circ}6\\ 37^{\circ}2\\ 36^{\circ}4\\ 35^{\circ}4\\ 35^{\circ}5\\ 26^{\circ}5\\ 27^{\circ}9\\ 26^{\circ}9\\ 25^{\circ}8\\ \end{array}$	$\begin{array}{c} *12`90\\ 13`14\\ 13`17\\ 12`81\\ 12`64\\ 12`59\\ 12`59\\ 13`76\\ 13`85\\ 14`49\\ 13`98\\ 13`49\\ 13`98\\ 13`49\\ 13`59\\ 13`62\\ 14`42\\ 13`94\\ 13`75\\ 14`22\\ 14`10\\ 13`88\\ 14`03\\ 13`69\\ 13`54\\ 13`88\\ 14`93\\ 13`91\\ 13`91\\ \end{array}$	*8.99 8.90 8.73 8.46 8.60 8.53 8.54 8.86 8.88 9.27 9.00 8.86 8.97 9.01 9.49 9.36 9.31 9.20 9.07 9.07 9.03 9.12 8.98 8.82 9.07 9.24 9.40	$\begin{array}{c} *10^{\circ}95\\ 11^{\circ}02\\ 10^{\circ}95\\ 10^{\circ}62\\ 10^{\circ}62\\ 10^{\circ}46\\ 10^{\circ}74\\ 11^{\circ}31\\ 11^{\circ}37\\ 11^{\circ}88\\ 11^{\circ}37\\ 11^{\circ}88\\ 11^{\circ}32\\ 11^{\circ}96\\ 11^{\circ}52\\ 11^{\circ}65\\ 11^{\circ}43\\ 11^{\circ}71\\ 11^{\circ}59\\ 11^{\circ}66\\ 11^{\circ}59\\ 11^{\circ}66\\ 11^{\circ}59\\ 11^{\circ}66\\ 11^{\circ}66$

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

Marriages.

proportions, which in 1855 were as high as 29.5 per cent. of men and 41.2 per cent. of women, diminished to 21.6 per cent. of men and 30.0 of women signing with marks in 1866. In Scotland the rate varied in

TABLE 6. - Proportional Number of Marriages in the several Counties of England during the Year 1866; of Persons who signed their Names; of Persons not of full Age; and of the Re-marriages of Widowers and Widows.

	a decay and all to make	TO 100 IVING.		THEIR	PERSON	3 NOT OF	RE-MARI	IAGES.
12:28	REGISTRATION COUNTIES.	GES TONS LIV		MES RITING.		AGE.	Widowers,	WIDOWS.
	14.1 Table 1 and 1	MARRIAGES TO 100 PERSONS LIVING.	Of 100 Men Married.	Of 100 Women Married.	In 100 Men Married.	In 100 Women Married.	In 100 Men Married.	In 100 Women Married.
	ENGLAND	•885	78.4	70.0	6.69	20.03	13.91	9.40
	ILondon	1.106	90.2	84'9	3.49	14.25	13.69	9*46
No. 1 2 3 4 5	II.—SOUTH EASTERN COUNTIES. Surrey (extra-metropolitan) – – Kent (extra-metropolitan) – – Sussex – – – – – – Hampshire – – – – – –	•706 •810 •816 •819 •735	$\begin{array}{c} 81 \cdot 5 \\ 80 \cdot 4 \\ 80 \cdot 7 \\ 84 \cdot 1 \\ 75 \cdot 2 \end{array}$	85°7 81°6 86°1 83°6 80°4	2.884.655.734.395.30	$15.31 \\ 22.71 \\ 18.21 \\ 18.58 \\ 17.59$	$ \begin{array}{c} 11.76\\ 12.14\\ 12.51\\ 12.08\\ 15.24 \end{array} $	$8^{\circ}03$ 9 $\cdot13$ 7 $\cdot98$ 10 $\cdot02$ 10 $\cdot07$
6 7 8 9 10 11 12 13	III.—South MIDLAND COUNTIES. Middlesex (extra-metropolitan) - Hertfordshire Buckinghamshire Oxfordshire Northamptonshire Bedfordshire Cambridgeshire	*606 *660 *693 *752 *731 *680 *818 *696	83:1 66:6 69:1 77:7 77:5 67:8 67:8 67:5 72:9	85°9 72°7 66°1 81°0 75°1 69°8 60°5 71°3	$\begin{array}{c} 4 \cdot 62 \\ 9 \cdot 55 \\ 11 \cdot 48 \\ 6 \cdot 58 \\ 9 \cdot 25 \\ 8 \cdot 54 \\ 11 \cdot 73 \\ 8 \cdot 96 \end{array}$	$\begin{array}{c} 16\cdot 46\\ 19\cdot 61\\ 24\cdot 22\\ 19\cdot 36\\ 22\cdot 64\\ 22\cdot 86\\ 25\cdot 68\\ 23\cdot 29\end{array}$	$11.54 \\ 11.58 \\ 13.81 \\ 13.71 \\ 13.56 \\ 16.08 \\ 15.41 \\ 14.17$	8 [•] 49 8 [•] 28 8 [•] 37 6 [•] 51 8 [•] 34 7 [•] 29 6 [•] 42 8 [•] 06
14 15 16	IV.—EASTERN COUNTIES. Essex – – – – – – Suffolk – – – – – – Norfolk – – – – –	•625 •707 •753	71·0 67·5 67·9	75°6 73°8 73°2	8.01 7.60 8.67	24·12 19·81 20·66	12·18 15·63 15·12	9°28 9°38 9°67
17 18 19 20 21	V.—SOUTH WESTERN COUNTIES. Wiltshire – – – – – – Dorsetshire – – – – – Cornwall – – – – – Somersetshire – – – – –	•713 •721 •835 •676 •723	$75 \cdot 1 \\78 \cdot 4 \\82 \cdot 4 \\74 \cdot 0 \\73 \cdot 8$	77.8 79.1 78.0 65.2 74.4	8·15 7·12 5·31 7·90 9·01	$ \begin{array}{c} 16.18 \\ 15.68 \\ 15.99 \\ 21.60 \\ 16.35 \end{array} $	$ \begin{array}{c} 14^{\circ}86\\ 13^{\circ}18\\ 12^{\circ}46\\ 12^{\circ}26\\ 14^{\circ}86 \end{array} $	8°64 7°50 8°64 6°99 8°86
22 23 24 25 26 27	VI.—WEST MIDLAND COUNTIES. Gloucestershire – – – – – Herefordshire – – – – – Staffordshire – – – – – Worcestershire – – – – – Warwickshire – – – – –	•930 •630 •682 •869 •787 •833	$79.5 \\ 71.0 \\ 69.4 \\ 64.6 \\ 74.9 \\ 76.6$	78.0 78.8 67.4 55.5 69.1 69.1	7.71 4.08 3.98 10.26 7.05 8.13	$ 18 \cdot 11 \\ 14 \cdot 35 \\ 13 \cdot 35 \\ 29 \cdot 43 \\ 21 \cdot 04 \\ 22 \cdot 06 $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8°56 10°83 10°03 10°04 8°86 10°08
28 29 30 31 32	VII.—NORTH MIDLAND COUNTIES. Leicestershire – – – – – Rutlandshire – – – – – Lincolnshire – – – – – Nottinghamshire – – – – Derbyshire – – – – –	*923 *639 *764 *824 *831	78·1 80·0 78·5 76·4 77·1	71·5 84·7 79·4 68·0 72·3	11.64 3.33 4.80 10.38 8.97	23.51 16.67 18.99 23.10 24.36	$12.84 \\ 15.83 \\ 13.19 \\ 14.89 \\ 15.55$	7.70 5.33 7.12 8.74 10.19
33 34	VIII.—North Western Counties. Cheshire – – – – – – Laneashire – – – – –	•829 1•015	76°3 76°5	62·2 54·7	5*99 8*03	17°59 20°97	15·87 15·31	9°37 10°43
35 36 37	IXYORKSHIRE. West Riding East Riding (with York) North Riding	·993 1·008 ·777	77*6 84*7 83*0	60·4 74·1 77·5	8·77 6·10 4·30	26.07 23.66 20.53	14.88 14.14 13.25	10·18 8·99 7·34
38 39 40 41	X.—NORTHERN COUNTIES. Durham Northumberland Cumberland Westmorland	*876 *994 *778 *652	75·0 84·9 82·4 85·5	62'4 73'6 70'2 82'8	7·94 4·73 4·91 3·92	30·17 17·94 16·89 14·71	$13.08 \\ 12.19 \\ 11.43 \\ 12.75$	$ \begin{array}{r} 10 \cdot 94 \\ 9 \cdot 40 \\ 7 \cdot 02 \\ 4 \cdot 90 \end{array} $
42 43 44	XI.—MONMOUTHSHIRE AND WALES. Monmouthshire – – – – South Wales – – – – – North Wales – – – –	·904 ·842 ·734	63°2 68°1 67°1	$54^{\circ}0$ 50^{1}54^{\circ}0	7.00 6.48 4.23	22.63 18.48 12.68	$\begin{array}{c c} 13.35 \\ 13.15 \\ 16.32 \end{array}$	$ \begin{array}{r} 10.80 \\ 9.00 \\ 9.45 \end{array} $

The Table may be read thus by omitting the decimal points :- In England, among every 100,000 persons living 885 marriages took place; of 1,000 men married 784, of 1,000 women 700, signed the marriage register by writing their names; of 10,000 men married 669 were not of full age, of 10,000 women married 2003 were not of full age; of 10,000 men married 1391 were Widowers, of the same number of women married 940 were Widows.

Births.

1865 from 1.2 per cent. of men and 6.3 per cent. of women in Orkney to 33.8 per cent. of men and 47.5 per cent. of women in Ross and Cromarty.

The marriage returns of Ireland show that nearly half the adult population do not write their names. In 1866 42.4 in every 100 men and 52.4 in every 100 women signed the marriage register with marks; in 1865 the proportions were 43.6 in 100 men and 53.7 in 100 women.

In France the registers of 1866 show that, without distinction of sex, 33.42 in every 100 persons failed to attach their names to the marriage records; in England for the same year the mean of the two sexes was 25.8 per cent.; in Ireland 47.4; and in Scotland (in 1865) 16.8 per cent.

The proportion varied in the departments of France from 1.44 per cent. in Bas-Rhine to 74.48 per cent. in Haute-Vienne. There were 20 departments having a lower rate than 15 per cent. signing with marks, 13 departments having a rate of 15 and under 30 per cent., 18 having a rate of between 30 and 40 per cent., 17 having a rate of between 40 and 50 per cent., and 21 with a rate of 50 per cent. and upwards.

BIRTHS.

In 1866 the births of 753,870 children were registered ; 384,955 were boys and 368,915 were girls. These numbers do not include the stillborn, which are not registered. The births exceed those of the previous year by 5801, but the proportion to the population, although high, is somewhat less than in the two previous years. In 1866 there were 3.554 births to 100 persons living, or one birth to every 28 of the population; in each of the two previous years the rate was 3.564 per

		MARRIAGES	REGISTEREI	».	ANNUAL	RATE per (Cent. of MA	BRIAGES.
YEARS.	In the	Quarters end	ding the last	day of	In the	Quarters end	ling the last	day of
	March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.
$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$23,201 \\ 24,679 \\ 26,395$	29,801 31,339 30,786	27,764 29,887 29,221	37,301 37,261 36,263	*618 *649 *677	•783 •812 •787	·719 ·764 ·737	·963 ·949 ·911
1841 - 1842 - 1843 - 1844 - 1845 -	24,447 25,860 25,285 26,387 29,551	32,551 30,048 31,113 34,268 35,300	29,397 27,288 28,847 31,675 35,003	36,101 35,629 38,573 39,919 43,889	*626 *654 *632 *644 *721	*822 *749 *767 *834 *849	·731 ·671 ·701 ·760 ·830	*895 *874 *934 *955 1*038
1846 - 1847 - 1848 - 1849 - 1850 -	31,417 27,480 28,398 28,429 30,567	37,111 35,197 34,721 35,844 39,204	35,070 32,439 32,995 33,874 37,636	42,066 40,729 42,116 43,736 45,337	·757 ·655 ·661 ·661 ·702	*882 *826 *805 *822 *888	*822 *751 *755 *766 *840	·983 ·940 ·961 ·986 1·010
1851 - 1852 - 1853 - 1854 - 1855 -	32,724 32,977 35,149 33,234 29,186	- 38,635 40,092 40,446 40,518 38,549	37,316 38,400 39,899 38,182 37,308	45,531 47,313 49,026 47,793 47,070	·741 ·730 ·778 ·727 ·631	*863 *885 *883 *874 *822	*822 *836 *859 *813 *785	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
$\begin{array}{rrrr} 1856 & - \\ 1857 & - \\ 1858 & - \\ 1859 & - \\ 1860 & - \end{array}$	33,427 33,321 29,918 35,382 35,150	38,820 41,267 39,890 42,042 43,777	39,089 38,669 38,599 39,803 40,541	48,001 45,840 47,663 50,496 50,688	•707 •705 •626 •732 •711	*819 *861 *823 *858 *883	*813 *796 *785 *801 *807	·996 ·940 ·967 1·013 1·006
$\begin{array}{rrrr} 1861 & - \\ 1862 & - \\ 1863 & - \\ 1864 & - \\ 1865 & - \end{array}$	33,274 33,953 35,528 37,988 36,807	42,012 40,853 44,146 44,599 45,827	39,884 40,600 41,932 44,675 45,852	48,536 48,624 51,904 53,125 56,988	•673 •680 •704 •736 •714	*839 *807 *863 *862 *877	*785 *791 *808 *852 *866	·953 ·945 ·998 1·011 1·073
1866 -	87,579	48,577	46,257	55,363	•721	•920	•864	1.032
Mean -	30,955	38,184	36,486	45,272	•689	•840	•791	•980

TABLE 7.-Number and Annual Rate per Cent. of Marriages in England in each Quarter of the Years 1838-66.

and on the Register on 31st December 1866 .																						
	BAR Sy MAR HILL			ESBY		Ort.		-0W	0.1		WE	SLE	YAN	ME	тно	DIST	s.	CALVIN METHO	DISTS.	р.		
RJ	ENGLAND : DIVISIONS AND EGISTRATION COUNTIES.	TOTAL.	Church of Scotland.	United Presbyterians.	Presbyterian Church in England.	Independents.	Baptists.	5	Roman Catholics.	Unitarians.	Original Connexion.	New Connexion.	Primitive Methodists.	Bible Christians.	Wesleyan Methodist Association.	Wesleyan Reformers.	Uther Westeyan under thodists.	CalvinisticMethodists.	Countess of Hunting- don's Connexion.	New Jerusalem Church.	Catholic and Apostonic Church.	All others.
	ENGLAND	5576	18	74	74	1666	1163	14	626	168	673	81	233	40	77	31	182	234	38	23	18	143
1 2 3 4 5 6 7 8 9 10 11	DIVISIONS. LONDON SOUTH EASTERN COUNTIES - SOUTH MIDLAND COUNTIES - SOUTH WESTERN COUNTIES - WEST MIDLAND COUNTIES - NORTH MIDLAND COUNTIES - NORTH WESTERN COUNTIES - YORKSHIRE NORTHEEN COUNTIES - MORTHEEN COUNTIES - MONTHEEN COUNTIES - MONMOUTHSHIRE AND WALES	382 447 422 314 586 572 346 761 542 321 883	8 1 5 - 9 -	8 1 - 1 13 3 48 -	- 1 8 - 18 3 31	142 117 177 158 85 181 149 48	77 102 164 91 118 116 87 84 69 17 238	$ \begin{array}{c} 1 \\ - \\ 2 \\ - \\ 2 \\ 3 \\ - \\ 3 \\ 2 \\ 1 \\ - \\ - \\ \end{array} $	53 29 24 36 90 30 166 57 58	18 11 44	34 55 47 31 100 77 53 91 101 44 40	$ \begin{array}{c} 2 \\ - \\ 1 \\ 2 \\ 15 \\ 8 \\ 22 \\ 22 \\ 8 \\ 1 \end{array} $	4 9 11 16 21 32 30 30 46 26 8	-6 32 1 -1 	5 5 1 - 16 9 5 15 12 7 2	$-\frac{1}{2}$ 1 5 4 -7 1 7 3 1 1	7 5 9 6 18 12 23 42 44 13 3	3 - - 3 - 9 - 219	2 11 2 14 14 1 4 - 1		6 3 2 - 1 3 1 1 1 - -	35 11 8 14 28 11 4 20 7 3 2
	I.—LONDON. Middlesex (part of) Surrey (part of) Kent (part of)	265 82 35	3 -	7 1 -	6 1 2	82 28 12	44 23 10	1 - -	38 9 4	8 2 -	23 8 3	-2	3 1 -	111	5 - -	1-1-1	4 1 2	3 _ _	2 - -	8 - -	5 1 -	28 5 2
12345	II.—SOUTH EASTERN COUNTIES. Surrey (extra-metropolitan) - Kent (extra-metropolitan) - Sussex Hampshire Berkshire	35 35 87 118 54			- 1 - 3 -	27 41 33 45 16	7 36 20 27 12	1.1.1.1.1	$ \begin{array}{c} 10 \\ 16 \\ 8 \\ 11 \\ 8 \end{array} $	1 4 5 4 2	$\begin{array}{c}2\\26\\8\\13\\6\end{array}$	TITT	- 2 - 4 3	-114-	1 1 1 1 1	- - - 1	2 - - 1 2	1.1.1.1	$1\\ 4\\ 3\\ 1\\ 2$	- - 1 -	- 1 1 1 -	2 1 6 1 1
6 7 8 9 10 11 12 13	IIISOUTH MIDLAND COUNT ⁸ . Middlesex (<i>extra-metropol.</i>) - Hertfordshire Buckinghamshire Oxfordshire Northamptonshire Huntingdonshire Bedfordshire Cambridgeshire	$51 \\ 56 \\ 48 \\ 47 \\ 77 \\ 26 \\ 51 \\ 66$	TIT FLET	1111111	TITLE R	$\begin{array}{ c c c } 21 \\ 30 \\ 19 \\ 12 \\ 27 \\ 4 \\ 10 \\ 19 \end{array}$	$ \begin{array}{c} 12\\17\\21\\14\\30\\16\\25\\29\end{array} $		9 3 2 9 3 - 1 2	- 1 1 1 - 1	4 3 5 7 8 4 10 6		- - 1 2 1 - 3 4	11111111		111111111	$\frac{1}{1}$ $\frac{1}{4}$ $\frac{1}{3}$		1	1111111	1 - - - 1	8 - - 1 2 1 -
14 15 16	IV.—EASTERN COUNTIES. Essex Suffolk Norfolk	109 94 111		1 1 1	1 1 1	54 38 25	21 36 34		11 5 8	- 3 4	$ \begin{array}{c} 13 \\ 5 \\ 13 \end{array} $	- - 1	- 6 10	1 1 1		5	2 - 4	 3 - <u>-</u>	- - 1	1		7 1 6
17 18 19 20 21	V.—SOUTH WESTERN COUNTIES. Wiltshire – – – – – Dorsetshire – – – – Devonshire – – – – Cornwall – – – – – Somersetshire – – – –	94 54 189 92 157	1111	1111	- - 1 -	$ \begin{array}{c} 33 \\ 22 \\ 61 \\ 10 \\ 51 \end{array} $	$ \begin{array}{r} 34 \\ 4 \\ 40 \\ 7 \\ 33 \end{array} $	- - - 2	4 8 9 6 9	$2 \\ 4 \\ 14 \\ - \\ 7$	9 10 25 29 27	- - 2 -	75135	- 15 13 4	- - 3 11 2	1 - 1 1 1	- 1 6 8 3	1 1 1 1	- - - 1 1	- - - 1	- - - 1	4 - 13 1 10
22 23 24 25 26 27	VIWEST MIDLAND COUNTIES. Gloucestershire Herefordshire Shropshire Staffordshire Worcestershire Warwickshire	147 26 71 152 59 117		1 - - - -	2 - - 3 1 2	50 5 26 33 12 32	46 6 10 17 10 27	1 1 1 - -	$ \begin{array}{c} 10 \\ 2 \\ 9 \\ 37 \\ 10 \\ 22 \end{array} $	3 - 1 4 5 5	$ \begin{array}{c} 13 \\ 2 \\ 4 \\ 32 \\ 11 \\ 15 \end{array} $	1 - 2 9 2 1	3 8 10 8 1 2	1	2 - 1 4 2 -	11111	4 - 3 2 - 3	- - 2 - - 1	7 1 1 3 1	- - - - 1	- 1 1 1	3 1 - 1 2 4
28 29 30 31 32	VII.—NORTH MIDLAND COUNT ⁸ , Leicestershire – – – – Rutlandshire – – – – Lincolnshire – – – – Nottinghamshire – – – Derbyshire – – – –	78 9 101 66 92		1111	1111	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	31 3 23 20 10		8 - 6 5 11	3 - 3 2 3	8 	1 - 2 3 2		11111	- - 1 2 2	1 - 1 1 4	- 3 10 2 8	1 1 1 1			- - 1 -	1 - - 1 2
33 34	VIII.—NORTH WESTERN CO ⁸ . Cheshire	127 634	- 5	49	3 15	36 145	10 74	- 3	18 148	12 32	18 73	4 18	6 24	ī	4 11	ī	6 36	3 6	-4	lū	ī	8 17
35 36 37	IX.—YORKSHIRE. West Riding — — — — — East Riding (with York) — North Riding — — — —	409 76 57		2 1	2 - 1	118 18 13	58 8 3	2	35 10 12	13 2 1	71 16 14	20 2 -	11	-	11 1 -	7	34 5 5		111	3	1	4 3 -
38 39 40 41	XNORTHERN COUNTIES. Durham Northumberland Cumberland Westmorland	135 114 55 17	8	15 27 5 1	5 22 4 -		81		9		25 6 11 2	71			-	21	7 4 1 1		11.11	1		1 1 1
42 43 44	XI.—MONMOUTHSH.ANDWALES Monmouthshire – – – South Wales – – – – North Wales – – – –	, 118 478 287	-			36 206 83	153	-	13	10	7 17 16		3	-	1	1 - -	- 3 -	4 71 144	- 1 -			1 ī

* These are chiefly chapels of the "Wesleyan Methodist Free Church."

TABLE 8.-Showing the Number of Buildings registered for the Solemnization of Marriages, nd on the Register on 31st December 1866.

ix

cent.; the average rate since the commencement of registration is 3:357 per cent. In each of the last eight years the birth-rate has been considerably above the average.

As in previous years, Durham exhibits the highest birth-rate (4.337 per cent.), while, as hertofore, Herefordshire has the minimum rate (2.878 per cent.); in London the rate (3.577 per cent.) is somewhat in excess of that of England generally.

Sex.-Males were born to females in the proportion of 104.3* to 100; this proportion is remarkably uniform in each year in England, the average of 10 years being 104.5, and it is never less than 104 males to every 100 females. The proportion of the sexes varies somewhat in different counties, thus, on an average, it is highest, 106.2 males, in North Wales; Huntingdon next follows, with a proportion of 106.1 males; then follow Norfolk, 105.8; Cornwall, 105.8; Leicestershire, 105.8; Northumberland, 105.8; Monmouthshire, 105.8; and Suffolk, 105.7. The lowest average proportions are in Buckinghamshire, 102.8; Hertfordshire, 102'0; Berkshire, 103'2; North Riding of Yorkshire. 103.6; and London, 103.7.

Taken by groups, the average proportion of males born to females is highest in the northern counties, 105'3; then follow the eastern counties, 105.2; Monmouthshire and Wales, 105.1; north-western counties, 104.7; south-western and north-midland groups each show an average of 104.6; south-eastern counties, 104.5; south-midland counties, 104.5; Yorkshire 104.2; and the west-midland counties 104.1 males to every 100 females born. Examined year by year the proportion in each county varies, by a law well known to those versed in the doctrine of chances, in proportion to the extent of the facts; thus, in Rutlandshire, where the annual number of births is only about 700, the proportion of the sexes born varied from 114.6 males to every 100 females in 1864 to 97 males to 100 females in 1862. Of ten consecutive years the males born in this county exceeded

TABLE 9.-Births in the Years 1845-66 in England, distinguishing the Legitimate and Illegitimate, and the Proportion of Males born to every 100 Females born.

-	B	IRTHS REGISTER	ED.	Males born	Males born in Wedlock	Males born out of Wedlock	Children born out of Wedlock
YEARS.	TOTAL BIRTHS.	LEGITIMATE.	ILLE- GITIMATE.	to every 100 Females born.;	to every 100 Females so born.	to every 100 Females so born.	to every 100 Births.
1845	543,521	505,280	38,241	A CLARE &			
1846 1847 1848 1849 1850	572,625 539,965 563,059 578,159	534,096 503,840 526,312 538,825 553,116	38,529 36,125 36,747 39,334 40,306				
1851 1852 1853 1854 1855	598,422 615,865 624,012 612,391 634,405 635,043	573,865 581,530 572,628 593,664 594,260	42,000 42,482 39,763 40,741 40,783	$ 104.7 \\ 104.6 \\ 105.1 \\ 104.4 \\ 104.1 $	104.7 104.6 105.1 104.3 104.1	$ 103.9 \\ 104.8 \\ 104.6 \\ 106.1 \\ 104.8 $	6'8 6'8 6'5 6'4 6'4
1856 1857 1858 1859 1860	657,453 663,071 655,481 689,881 684,048	614,802 620,069 612,176 645,130 640,355	42,651 43,002 43,305 44,751 43,693	$ \begin{array}{r} -104^{\circ}2\\ 105^{\circ}2\\ 104^{\circ}5\\ 104^{\circ}6\\ 104^{\circ}7\end{array} $	104·3 105·3 104·4 104·5 104·8	103·1 104·1 106·2 105·7 102·9	6·5 6·5 6·6 6·5 6·4
1861 1862 1863 1864 1865	696,406 712,684 727,417 740,275 748,069	652,249 667,462 680,276 692,827 701,484	44,157 45,222 47,141 47,448 46,585	$104.6 \\ 104.1 \\ 104.7 \\ 104.2 \\ 104.0$	$ \begin{array}{r} 104 \cdot 5 \\ 104 \cdot 1 \\ 104 \cdot 6 \\ 104 \cdot 2 \\ 104 \cdot 0 \end{array} $	$ \begin{array}{r} 106.1 \\ 103.4 \\ 106.3 \\ 104.4 \\ 103.9 \end{array} $	6·3 6·3 6·5 6·4 6·2
1866	753,870	708,369	45,501	104.3	104.3	104.8	6.0

* The proportion of sexes born is a subject of interest, and authentic information on the law prevailing among different animals would furnish a valuable contribution to physiology.

Births.

the females in five years, and in the remaining five years the females born exceeded the males; the average of the period, however, exactly coincides with that for England, and shows a proportion of 104.5 males born to every 100 females. In Staffordshire, Warwickshire, Lancashire, and Yorkshire, where the number of births is large, the yearly variation in the proportion is less observable.

TABLE 10. - Number and Proportion of Male and Female Children born in and out of Wedlock in the several Counties of England during the Year 1866.

	-					
A State and a second		REGISTRATION COUN	fies.	MALE CHILDREN BORN.	FEMALE CHILDREN BORN.	Bor WED
	1			MA	FEI	Males.
			1-1-12 - 17 - 17 - 17 - 17 - 17 - 17 - 1			
	1	ENGLAND		384,955	368,915	361,670
		I.—London		55,249	53,416	52,9 00
	No.	IISOUTH EASTERN C	OUNTIES.	1 Start	1 11 415	The states
	1	Surrey (extra-metropolitan	e)	5216 10058	4975- 9608	4996 9604
	2 3	Kent (extra-metropolitan) Sussex		6253	6023	5896
	45	Hampshire – – – Berkshire – – –		7995	7615 3293	7577 3215
		A REAL PROPERTY AND A REAL	TOTINTE			
	6	III.—South Midland (Middlesex (extra-metropole		3670	3501	3533
	78	Hertfordshire – –		3037	2882	2853
1	89	Buckinghamshire – Oxfordshire – –		2584 2975	2514 2834	2451 2784
	10	Northamptonshire -		4316 953	4069 923	4056
1	$\begin{array}{c} 11 \\ 12 \end{array}$	Huntingdonshire – Bedfordshire – –		2593	2492	900 2382
	13	Cambridgeshire		3151	2916	2903
NW		IVEASTERN COUR	NTIES.	1 6 50	1. 8-14-1	1 anna
	14	Essex Suffolk		7064 5596	6608 5285	6711
	15 16	Norfolk		6863	6494	$\begin{array}{c}5160\\6168\end{array}$
	1	VSouth Western C	OUNTIES.	den's	I. A.	have
Sec. 1	17	Wiltshire		3820	3672	3566
	18 19	Dorsetshire – – Devonshire – – –	- 202 - 200-	2986 9590	2796 9161	2804 8984
	20	Cornwall		6402	5857	6017
	21	Somersetshire – –		7315	6981	6931
	1	VIWEST MIDLAND C	OUNTIES.	1 Participant	1	1-2-1
	22 23	Gloucestershire – – Herefordshire – –		7521 1671	7217 1579	$7131 \\ 1534$
	24	Shropshire		4456	4326	4069
	25 26	Staffordshire – – Worcestershire – –		17423 5702	17028 5497	$16432 \\ 5360$
	27	Warwickshire	1946 - 1961	11213	10858	10658
		VIINORTH MIDLAND	COUNTIES.			
	28	Leicestershire		4732	4596	4358
	29 30	Rutlandshire – – Lincolnshire – –		353 6788	357 6649	$330 \\ 6254$
	31	Nottinghamshire -	-200-200-	5642	5566	5121
	32	Derbyshire	- 64 - 6-67	5673	5529	5290
		VIIINORTH WESTERN	COUNTIES	States and States		
	33 34	Cheshire – – – – Lancashire – – –	In Inda	8984 51190	8619 48769	8387 48095
	OT	and and the state of the state of the	COL G. DO	01100	10100	10000
	05	IXYORKSHIRI	C.	20704	31492	90004
	35 36	West Riding East Riding (with York)		32784 5012	4976	30694 4635
	. 37	North Riding	- 21 - 22 -	3816	3769	3471
1		XNorthern Coul	NTIES.			
	38	Durham		14181	13328	13491
	39 40	Northumberland – Cumberland – –		7065 3626	6732 3500	6533 3218
	41	Westmorland		957	900	843
	Al and a	XIMONMOUTHSHIRE AN	D WALES.		-	
	42	Monmouthshire		3956	3772	3747
	43 44	South Wales	I. I. I	13864 7215	$\begin{array}{c c}13224\\6717\end{array}$	12988 6640
-	1 1		and the second second			C. C. S.

BORN OUT NIN OF WEDLOCK. LOCK. 346,699 23,285 22,216 104.3 104.3 104.8 6. 51,257 2349 2159 103.4 103.2 108.8 4.1 4772 9170 5646 7218 3084 220 454 357 418 230 203 438 377 397 209 $4 \cdot 2$ $4 \cdot 5$ $6 \cdot 0$ $5 \cdot 2$ $6 \cdot 5$ $\begin{array}{c} 104\cdot 8\\ 105\cdot 4\\ 102\cdot 8\\ 105\cdot 0\\ 106\cdot 1\\ 103\cdot 3\\ 104\cdot 1\\ 108\cdot 1\end{array}$ $\begin{array}{c} 105 \cdot 0 \\ 105 \cdot 7 \\ 103 \cdot 8 \\ 104 \cdot 3 \\ 106 \cdot 5 \\ 102 \cdot 2 \\ 104 \cdot 2 \\ 107 \cdot 4 \end{array}$ $\begin{array}{c} 101.5\\ 100.0\\ 87.5\\ 115.1\\ 100.4\\ 126.2\\ 102.9\\ 117.0\end{array}$ $137 \\ 184 \\ 133 \\ 191 \\ 260 \\ 53 \\ 211 \\ 248$ 135 184 152 166 259 42 205 212 $3.8 \\ 6.2 \\ 5.6 \\ 6.1 \\ 6.2 \\ 5.1 \\ 8.2 \\ 7.6$ 3366 2698 2362 2668 3810 881 2287 2704 $353 \\ 436 \\ 695$ 359 381 686 $106.9 \\ 105.9 \\ 105.7$ $107 \cdot 4$ $105 \cdot 2$ $106 \cdot 2$ 98.3114.4 101.3 5·2 7·5 10·3 6249 4904 5808

104.0 106.8 104.7 109.3 104.8 $104 \cdot 0 \\ 106 \cdot 2 \\ 104 \cdot 0 \\ 109 \cdot 1 \\ 105 \cdot 4$ 104 • 1 116 • 7 116 • 5 112 • 6 95 • 0 $6.6 \\ 5.8 \\ 6.0 \\ 5.9 \\ 5.5$ $\begin{array}{c} 254 \\ 182 \\ 606 \\ 385 \\ 384 \end{array}$ 244 156 520 342 404 3428 2640 8641 5515 6577 $\begin{array}{c} 104 \cdot 5 \\ 108 \cdot 0 \\ 103 \cdot 5 \\ 102 \cdot 6 \\ 103 \cdot 8 \\ 103 \cdot 5 \end{array}$ 6825 1420 3932 16016 5165 10299 390 137 387 991 342 555 $\begin{array}{c} 104 \cdot 2 \\ 105 \cdot 8 \\ 103 \cdot 0 \\ 102 \cdot 3 \\ 103 \cdot 7 \\ 103 \cdot 3 \end{array}$ 99.5 86.2 98.2 97.9 103.0 99.3 392 159 394 1012 332 559 5·3 9·1 8·9 5·8 6·0 5·0 $103 \cdot 0 \\98 \cdot 9 \\102 \cdot 1 \\101 \cdot 4 \\102 \cdot 6$ 374 23 534 521 383 **311** 22 561 501 399 $\begin{array}{c} 101 \cdot 7 \\ 98 \cdot 5 \\ 102 \cdot 7 \\ 101 \cdot 1 \\ 103 \cdot 1 \end{array}$ $\begin{array}{c} 120 \cdot 3 \\ 104 \cdot 5 \\ 95 \cdot 2 \\ 104 \cdot 0 \\ 96 \cdot 0 \end{array}$ 4285 335 6088 5065 5130 7·3 6·3 8·1 9·1 7·0 597 619 104·2 104·8 96·4 3095 2875 105·0 104·8 107·7 6·9 6·0 8000 45894 20901958104 · 1103 · 9377339100 · 7100 · 0345331101 · 2101 · 0 $\begin{array}{c|c}
106.7 \\
111.2 \\
104.2
\end{array}$ 4637 3438 $106.4 \\ 104.9 \\ 103.6$ 102.8 106.2 99.8 170.1 690 532 408 114 $671 \\ 501 \\ 409 \\ 67$ $106.6 \\ 104.8 \\ 104.1$ 12657 6231 3091 833 175 865 534 104·9 104·8 107·4 $104 \cdot 2$ 105 \cdot 1 107 \cdot 4 209 876 575

Births.

In Scotland and in Ireland the proportion of males born is higher than in England, thus, in the year 1866 there were 104.3 males to every 100 females born in England, 105.9 in Ireland, and 105.7 in Scotland. In France the returns during the 44 years, 1817-60, show that there were 106 males born to 100 females.

-	REGISTRATION	AVER ANN NUMB CHILDRI	UAL ER of EN born			MALE	S BOR	N TO E'	VERY 10	0 FEM.	ALES	BORN.		
	COUNTIES.	in the 10 1857 Males.		1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	Mean of the 10Years 1857-66.
-	ENGLAND	361,309	345,811	105.2	104.5	104.6	104.7	104.6	104.1	104.7	104.2	104.0	104.3	104.5
	ILondon.	49,887	48,114	105.0	103.9	103.8	104.1	103.4	101.9	104.9	104.3	102.5	103.4	103.7
No. 1 2 3 4 5	II.—South Eastern Counties. Surrey (extra-metropolitan)- Sussex Hampshire Berkshire	4,377 9,402 5,828 7,514 3,329	4,217 8,902 5,576 7,211 3,226	10 3 ·5 106·4 103·6 104·4 106·9	$100^{\circ}6 \\ 109^{\circ}2 \\ 105^{\circ}4 \\ 104^{\circ}5 \\ 100^{\circ}4 \\ $	103·9 104·2 103·8 104·8 103·6	$106.5 \\ 106.6 \\ 103.6 \\ 104.3 \\ 104.7 \\ 104.7 \\$	$102 \cdot 2 \\ 107 \cdot 8 \\ 106 \cdot 8 \\ 104 \cdot 7 \\ 100 \cdot 5$	$104.8 \\ 103.6 \\ 105.2 \\ 103.1 \\ 103.3 \\ $	103·3 102·0 104·0 102·1 99·7	104.6 105.5 104.3 105.1 101.8	$103.5 \\ 106.9 \\ 104.7 \\ 104.1 \\ 106.7$	104.8 104.7 103.8 105.0 104.6	$103.8 \\ 105.7 \\ 104.5 \\ 104.2 \\ 103.2$
6 7 8 9 10 11 12 13	IIISOUTH MIDLAND COUNTIES. Middlesex'(<i>extra-metropol.</i>) Hertfordshire Buckinghamshire Oxfordshire Huntingdonshire Bedfordshire Cambridgeshire	3,054 2,896 2,585 2,927 4,252 1,033 2,535 3,107	2,934 2,817 2,465 2,775 4,027 974 2,412 2,966	$107 \cdot 9 \\ 100 \cdot 8 \\ 103 \cdot 1 \\ 104 \cdot 0 \\ 103 \cdot 7 \\ 108 \cdot 4 \\ 104 \cdot 5 \\ 102 \cdot 6 \\ 102 \cdot 6 \\ 107 + 100 \\ 100 + 100 \\ 100 $	$\begin{array}{c} 99^{\circ}5\\ 104^{\circ}0\\ 97^{\circ}0\\ 108^{\circ}9\\ 101^{\circ}6\\ 105^{\circ}3\\ 106^{\circ}6\\ 105^{\circ}5\end{array}$	$\begin{array}{c} 97 \cdot 5 \\ 101 \cdot 0 \\ 107 \cdot 4 \\ 106 \cdot 3 \\ 106 \cdot 5 \\ 110 \cdot 1 \\ 104 \cdot 7 \\ 108 \cdot 8 \end{array}$	$\begin{array}{c} 108 \cdot 1 \\ 107 \cdot 2 \\ 105 \cdot 2 \\ 109 \cdot 9 \\ 107 \cdot 6 \\ 105 \cdot 3 \\ 105 \cdot 6 \\ 102 \cdot 5 \end{array}$	$\begin{array}{c} 106^{\circ}2\\ 105^{\circ}5\\ 104^{\circ}4\\ 101^{\circ}1\\ 104^{\circ}9\\ 102^{\circ}3\\ 104^{\circ}5\\ 107^{\circ}4 \end{array}$	$\begin{array}{c} 101^{\circ}6\\ 105^{\circ}5\\ 100^{\circ}6\\ 108^{\circ}5\\ 111^{\circ}1\\ 113^{\circ}8\\ 103^{\circ}3\\ 102^{\circ}7 \end{array}$	108.3 101.2 103.8 102.7 103.3 109.8 106.6 100.7	102'9 98'4 101'8 105'2 103'3 98'7 103'8 105'4	$\begin{array}{c} 104 \cdot 6\\ 99 \cdot 8\\ 102 \cdot 1\\ 103 \cdot 8\\ 107 \cdot 9\\ 104 \cdot 1\\ 107 \cdot 5\\ 103 \cdot 7\end{array}$	104.8 105.4 102.8 105.0 106.1 103.3 104.1 108.1	$\begin{array}{c} 104 \cdot 1 \\ 102 \cdot 9 \\ 102 \cdot 8 \\ 105 \cdot 5 \\ 105 \cdot 6 \\ 106 \cdot 1 \\ 105 \cdot 1 \\ 105 \cdot 1 \\ 104 \cdot 7 \end{array}$
14 15 16	IVEASTERN COUNTIES. Essex	6.458 5,682 7,114	6,192 5,379 6,723	105.7 108.8 104.8	104.9 109.6 106.1	$103.4 \\ 107.5 \\ 108.5$	$102 \cdot 3$ $105 \cdot 4$ $105 \cdot 3$	101.8 103.6 107.3	$ \begin{array}{r} 103.7 \\ 103.7 \\ 107.3 \end{array} $	$107.5 \\ 107.7 \\ 105.6$	103.7 102.2 103.6	$ \begin{array}{c} 103.1 \\ 102.3 \\ 104.0 \end{array} $	$106.9 \\ 105.9 \\ 105.7$	104·3 105·7 105·8
17 18 19 20 21	VSOUTH WESTERN COUNTIES. Wiltshire Dorsetshire Devonshire Cornwall Somersetshire	3,859 2,988 9,325 6,502 7,261	3,720 2,864 8,883 6,144 6,998	$106^{\circ}5 \\ 107^{\circ}5 \\ 105^{\circ}5 \\ 103^{\circ}7 \\ 104^{\circ}2$	$105.5 \\ 106.8 \\ 106.2 \\ 105.3 \\ 100.7$	101·4 103·4 106·1 107·0 107·2	104.6 105.0 104.7 105.1 102.4	105.0 101.4 106.6 105.7 99.9	104.0 99.9 106.4 106.3 103.4	$102.2 \\ 102.8 \\ 104.2 \\ 106.9 \\ 104.7$	$ \begin{array}{r} 101 \cdot 5 \\ 103 \cdot 5 \\ 102 \cdot 7 \\ 102 \cdot 9 \\ 107 \cdot 3 \end{array} $	$ \begin{array}{r} 103.0 \\ 106.7 \\ 103.1 \\ 106.2 \\ 103.1 \end{array} $	$ \begin{array}{r} 104 \cdot 0 \\ 106 \cdot 8 \\ 104 \cdot 7 \\ 109 \cdot 3 \\ 104 \cdot 8 \end{array} $	103.8 104.4 105.0 105.8 103.8
22 23 24 25 26 27	VIWEST MIDLAND COUNTIES. Gloucestershire Herefordshire Shropshire Worcestershire Worcestershire Warwickshire	1,628 4,293	6,973 1,566 4,098 15,665 5,053 10,236	$106^{\cdot}4 \\ 104^{\cdot}1 \\ 103^{\cdot}0 \\ 106^{\cdot}3 \\ 106^{\cdot}3 \\ 104^{\cdot}1$	102.0 106.1 105.6 103.7 101.0 105.2	102.8 100.6 107.7 104.4 106.3 103.4	103·3 105·9 107·4 104·9 105·1 103·8	$\begin{array}{c} 104.9\\ 104.5\\ 106.2\\ 102.3\\ 104.8\\ 103.2 \end{array}$	102.8 103.9	104·4 108·1 102·3 105·0 105·3 101·1	$ \begin{array}{r} 105.5 \\ 93.6 \\ 104.1 \\ 104.3 \\ 103.8 \\ 105.0 \\ \end{array} $	$\begin{array}{c} 104.7\\ 103.2\\ 105.9\\ 103.8\\ 105.4\\ 104.1 \end{array}$	104 [•] 2 105 [•] 8 103 [•] 0 102 [•] 3 103 [•] 7 103 [•] 3	$\begin{array}{c} 104\cdot 2\\ 104\cdot 0\\ 104\cdot 8\\ 104\cdot 1\\ 104\cdot 5\\ 103\cdot 8\end{array}$
28 29 30 31 32	VII.—NORTH MIDLAND COUNTIES. Leicestershire – – – Rutlandshire – – – Lincolnshire – – – Nottinghamshire – – Derbyshire – – –	6,891	362 6,601	$106.9 \\ 114.4 \\ 104.7 \\ 106.1 \\ 104.3$	$ \begin{array}{c} 105^{\circ}6\\98^{\circ}7\\104^{\circ}6\\105^{\circ}2\\105^{\circ}0\end{array} $	109 [•] 2 111 [•] 3 105 [•] 1 104 [•] 6 101 [•] 3	104.0 99.5 102.1 105.6 105.9	$ \begin{array}{c} 107.7\\ 109.8\\ 106.7\\ 103.3\\ 104.3 \end{array} $	97.0 106.0 103.7	102:8 99:5 103:9 103:3 106:0	106°0 114°6 104°8 106°1 101°9		103.0 98.9 102.1 101.4 102.6	105.8 104.5 104.4 104.2 104.5
33 34		8,640 47,596	8,207 45,514	107·7 105·3	108·6 104·9	104·6 104·1	101·2 105·0			108°6 103°9	104·3 104·0			105°3 104°6
35 36 3 7	East Riding (with York) -	- 30,086 - 4,908 - 3,668	4,686		101.0	103·9 104·4 104·0		106.7	106.3			105.3	100.7	
38 39 4(4]	XNORTHERN COUNTIES. Durham Northumberland Cumberland	- 12,046	6,083 3,417	108.2	105.5 102.5	105.1 104.7	104.3	108°2 102°2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	106.6	106.8	5 104 · 1 3 109 · 4	104·9 103·6	105·8 104·6
4:	XIMONMOUTHSHIRE AND WALES. Monmouthshire	- 3,777 - 12,829 - 6,630	$2 \mid 12,291$	104.5	106.7	104.4	103.8	9 103:	3 102.7	105.8	105.9	9 101.2	104.8	104.4

 TABLE 11.—Number and Proportion of Male and Female Children born in the several Counties of England in each of the TEN YEARS 1857-66.

Seasons.—In the first quarter of the year 196,753 births were registered, in the second quarter 192,427, in the third quarter 179,096, and in the last quarter 185,594. If the average number of births in a quarter be represented by 1000, then there were in the first quarter 1058, in the second 1023, in the third 942, and in the last quarter 977: these proportions are higher than usual in the first and last quarters, and lower in the second and third quarters of the year. *Children born out of Wedlock.*—The number of illegitimate births registered was 45,501, of which 23,285 were births of males and 22,216

		eacl	ı of tl	ne Ye	ars 1	856-	66.		der.			a the second	
					BIRT	тн з то 1	100 PER	SONS L	IVING.				
R	EGISTRATION COUNTIES.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	Average Annual Rate, 1856-65.	1866.
	ENGLAND	3.453	3.443	3.366	3.504	3.437	3.461	3.504	3.239	3.564	3.564	3.484	3.554
	ILondon	3.372	3.397	3.320	3.408	3.372	3.448	3.422	3.216	3.480	3.568	3.430	3.577
No. 1 2 3 4 5	II.—SOUTH EASTERN COUNTIES. Surrey (extra-metropolitan) – – Kent (extra-metropolitan) – – Sussex – – – – – – Hampshire – – – – – – Berkshire – – – – – –	2·924 3·231 3·092 3·188 3·068	2.907 3.356 3.043 3.222 3.081	$\begin{array}{c} 2.925 \\ 3.133 \\ 2.961 \\ 3.119 \\ 3.010 \end{array}$	3.097 3.327 3.111 3.186 3.272	3.031 3.139 2.965 3.138 3.016	3.054 3.296 3.053 3.162 3.124	3.043 3.279 3.054 3.171 3.253	3·103 3·390 3·127 3·278 3·326	$3^{\circ}112$ $3^{\circ}426$ $3^{\circ}197$ $3^{\circ}216$ $3^{\circ}297$	$3^{\cdot}131$ $3^{\cdot}461$ $3^{\cdot}206$ $3^{\cdot}237$ $3^{\cdot}209$	3.033 3.304 3.081 3.192 3.166	3.190 3.352 3.264 3.209 3.241
6 7 8 9 10 11 12 13	III.—South MIDLAND COUNTIES. Middlesex (extra-metropolitan) - Hertfordshire Buckinghamshire Oxfordshire Northamptonshire Huntingdonshire Bedfordshire Cambridgeshire	3.042 3.161 3.203 3.247 3.529 3.410 3.431 3.350	3.003 3.245 3.350 3.259 3.563 3.459 3.541 3.304	2.996 3.074 3.198 3.180 3.502 3.363 3.315 3.298	3.166 3.265 3.490 3.434 3.625 3.491 3.634 3.486	3.017 3.134 3.324 3.307 3.613 3.377 3.380 3.308	3.060 3.095 3.408 3.330 3.506 3.214 3.423 3.269	$\begin{array}{r} 3:021\\ 3:237\\ 3:408\\ 3:332\\ 3:517\\ 3:404\\ 3:469\\ 3:251\end{array}$	8:094 3:226 3:420 3:380 3:691 3:550 3:593 3:378	3·130 3·322 3·445 3·389 3·497 3·520 3·586 3·407	$3 \cdot 256$ $3 \cdot 247$ $3 \cdot 459$ $3 \cdot 293$ $3 \cdot 613$ $3 \cdot 411$ $3 \cdot 659$ $3 \cdot 433$	3.079 3.201 3.371 3.315 3.566 3.420 3.503 3.348	$3 \cdot 235$ $3 \cdot 302$ $3 \cdot 439$ $3 \cdot 383$ $3 \cdot 479$ $3 \cdot 206$ $3 \cdot 562$ $3 \cdot 439$
	IVEASTERN COUNTIES.	0.004	0:0/0	01740	0.001	3.238	3.236	3.258	3.378	3.362	3.351	3.283	3.388
14 15 16	Essex	3·234 3·264 3·219	3·268 3·302 3·186	3·146 3·234 3·187	3·361 3·474 3·427	3·208 3·162	3·256 3·230	3·266 3·249	3·284 3·251	3·398 3·329	3·313 3·239	3·300 3·248	3·248 3·149
17 18 19 20 21	V.—South WESTERN COUNTIES. Wiltshire – – – – – – – Dorsetshire – – – – – – Devonshire – – – – – – Cornwall – – – – – – Somersetshire – – – – –	3·189 3·034 2·922 3·453 2·996	3°149 3°075 2°905 3°395 2°934	3·140 3·137 2·959 3·379 2·997	3·256 3·296 3·027 3·525 3·139	3·126 3·183 3·013 3·374 3·052	8'170 3'167 3'102 3'462 3'088	3·335 3·215 3·174 3·466 3·120	3:335 3:351 3:217 3:589 3:135	3·281 3·305 3·171 3·548 3·112	3·173 3·226 3·146 3·539 3·115	3·215 3·199 3·064 3·473 3·069	$3 \cdot 224$ $3 \cdot 158$ $3 \cdot 164$ $3 \cdot 309$ $3 \cdot 083$
	VIWEST MIDLAND COUNTIES.		1.2			0.700	0.010	0.000	3.293	3.311	3.204	3.183	3.234
22 23 24 25 26 27	Gloucestershire – – – – – Herefordshire – – – – – Shropshire – – – – – Staffordshire – – – – – Worcestershire – – – – – Warwickshire – – – – –	3.072	$ \begin{array}{r} 3.077 \\ 4.143 \\ 3.359 \end{array} $	$\begin{array}{c} 3.139 \\ 2.901 \\ 3.068 \\ 4.152 \\ 3.384 \\ 3.647 \end{array}$	$\begin{array}{c} 3 \cdot 134 \\ 3 \cdot 006 \\ 3 \cdot 214 \\ 4 \cdot 165 \\ 3 \cdot 519 \\ 3 \cdot 698 \end{array}$	3.123 2.975 3.143 4.165 3.430 3.707	$\begin{array}{c} 3 \cdot 212 \\ 3 \cdot 084 \\ 3 \cdot 213 \\ 4 \cdot 024 \\ 3 \cdot 457 \\ 3 \cdot 694 \end{array}$	3·286 3·013 3·273 3·917 3·495 3·690	3 293 2 981 3 239 4 060 3 503 3 696	3 '084 3 '343 4 '093 3 '573 3 '677	2.801 3.211 4.114 3.375 3.585	2*972 3*186 4*106 3*453 3*684	2.878 3.263 4.007 3.531 3.628
28 29 30 31 32	VII.—NORTH MIDLAND COUNTIES Leicestershire – – – – – Rutlandshire – – – – Lincolnshire – – – – – Nottinghamshire – – – – Derbyshire – – – – –	- 3·442 - 3·055 - 3·363 - 3·575	3·108 3·336 3·701	3·279 3·134 3·251 3·480 3·390	3·466 3·075 3·375 3·699 3·642	3°477 3°293 3°301 3°709 3°522	3·447 3·022 3·347 3·563 3·496		3.647 3.137 3.413 3.475 3.543	3.762 3.248 3.369 3.365 3.365 3.596	3·193 3·374 3·369	3.517 3.131 3.342 3.547 3.538	3.812 3.026 3.309 3.283 3.537
33 34	VIII.—NORTH WESTERN COUNTIES Cheshire – – – – – – – Lancashire – – – – – –	- 3.451 - 3.768		3·332 3·580		3·444 3·676			3.653 3.725	3.660 3.768		3·546 3·733	3·579 3·732
35 36 37	IX.—YORKSHIRE. West Riding — — — — — — East Riding (with York) — — — North Riding — — — — —	- 3.809 - 3.486 - 3.370	3 3.420		3'453	3.422	3.476	3.239	3.525	3.966 3.532 3.883	3.550	3.476	3·932 3·549 3·381
38 39 40 41	1 of the state of	- 4'363 - 3:556 - 3:199 - 2:905	$3 3.416 \\ 3.267$	3·454 3·231	3·510 3·422	3·509 3·277	3·552 3·444	3·718 3·436	4·207 3·686 3·497 2·953	3.521	4 3·763 3·495	3·590 3·379	
42 43 44	South Wales	s. - 3.81 - 3.50 - 3.00	2 3.559	3.203	3.714	3.585	3'419	3.201	3.476	3.565	2 3.578	3 3.540	3.296

XXIX.

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Births.

TABLE 12.—Births to 100	Persons living in the several	Counties of England during
	each of the Years 1856-	56.

b

Births.

those of females. Of every 100 births in England six were those of children born out of wedlock; this proportion is somewhat less than in recent years, it was $6 \cdot 2$ in 1865, $6 \cdot 4$ in 1864, and $6 \cdot 5$ in 1863. Cumber-

TABLE 13.—Proportional Number of Births in each	Quarter to 1000 Births
in the Average Quarter of each Year,	1838-66.

11		olist poin	NUMBER	CILC CLOTPR	OPORTIONAL	NUMBER C	F BIRTHS.	sen bo	register
	EN A	YEARS.	OF BIRTHS IN THE AVERAGE QUARTER.	In the AVERAGE QUARTER (assumed to be 1000).	FIRST QUABTER ending March 31.	SECOND QUARTER ending June 30.	THIRD QUARTER ending Sept. 30.	FOURTH QUARTER ending Dec. 31.	TABLE IL
	-	1838 1839 1840	115,947 123,144 125,576	1000 1000 1000	995 1017 1059	1053 1049 1033	981 967 949	971 967 959	
1		1841 1842 1843 1844 1844 1845	128,040 129,435 131,831 135,191 135,880	1000 1000 1000 1000 1000	1059 1062 1052 1068 1068	1017 1039 999 1018 1009	959 944 964 957 966	965 955 985 957 957	REGISTERATION.
100	24 20	1846 1847 1848 1849 1850	143,156 134,991 140,765 144,540 148,356	1000 1000 1000 1000 1000	1027 1099 998 1078 974	1047 1032 1070 1066 1051	961 934 991 927 990	965 935 941 929 985	1225
and a second	40103 8%	1851 1852 1853 1854 1855	153,966 156,003 153,098 158,601 158,761	1000 1000 1000 1000 1000	1022 1037 1056 1026 1060	1033 1019 1037 1090 1044	978 969 964 968 966	967 974 943 916 930	IIBORTH
でない	ALL THE REAL	1856 1857 1858 1859 1860	164,363 165,790 163,870 172,470 171,012	1000 1000 1000 1000 1000	1035 1042 1057 1032 1077	$\begin{array}{c} 1060 \\ 1031 \\ 1034 \\ 1022 \\ 1023 \end{array}$	952 964 953 968 954	953 963 956 978 946	- valdagansi - valda ni sirwo2-111 Sa boaltsi
		1861 1862 1863 1864 1865	174,102 178,171 181,855 185,069 187,017	1000 1000 1000 1000 1000	1007 1035 1039 1047 1051	1064 1044 1043 1026 1035	980 961 946 973 965	949 960 972 954 949	eman cation formation and employed and employed and employed and formation
		1866	188,468	1000	1058	1023	942	977	Cembra Statistic

TABLE 14.—Births and Deaths registered in England in each Quarter of the Years 1838 to 1866.

		В	IRTHS.	100/18 848-1 2010/19 828/2 160/19 700/1	· 授利1名 (11) (20)81合 (21)年 (11)(12) (11)(12)	DEA	THS.	- trailer - Birs - Birs
YEARS.	In th	e Quarters e	ending the last	day of	In the (Quarters en	ding the last	day of
a las	March.	June.	September.	December.	March.	June.	September.	December.
1838 1839 1840 1841 1842 1843 1844 1845 1846 1847 1846 1847 1848 1849 1850 1851 1852 1853 1854 1855	$\begin{array}{r} 113,815\\ 123,543\\ 132,305\\ 133,720\\ 135,615\\ 136,837\\ 143,578\\ 143,578\\ 143,578\\ 143,080\\ 145,108\\ 146,453\\ 139,736\\ 153,772\\ 144,551\\ 157,286\\ 161,803\\ 161,729\\ 160,785\\ 169,7$	$\begin{array}{c} 121,781\\ 128,806\\ 129,059\\ 129,059\\ 129,884\\ 134,096\\ 131,279\\ 186,941\\ 136,853\\ 149,450\\ 189,072\\ 149,760\\ 153,693\\ 155,865\\ 159,073\\ 155,965\\ 159,073\\ 158,697\\ 172,457\\ 172,4$	$\begin{array}{c} 114,734\\ 120,115\\ 119,822\\ 123,868\\ 123,296\\ 128,161\\ 130,978\\ 132,369\\ 138,718\\ 127,173\\ 140,359\\ 135,223\\ 146,911\\ 150,594\\ 151,222\\ 147,602\\ 154,724\\ 154,720\\ \end{array}$	$\begin{array}{c} 113,457\\ 120,110\\ 121,117\\ 124,686\\ 124,732\\ 131,048\\ 130,166\\ 131,219\\ 139,349\\ 127,267\\ 133,204\\ 135,471\\ 146,095\\ 148,912\\ 151,956\\ 144,363\\ 146,439\\ 148,841\\ \end{array}$	98,152 89,740 98,896 99,069 96,314 94,926 101,024 104,664 89,484 119,672 120,032 105,870 98,430 105,359 106,358 118,119 111,843 134,542	$\begin{array}{c} 90,877\\ 87,969\\ 90,339\\ 86,134\\ 86,538\\ 87,234\\ 85,337\\ 89,149\\ 90,230\\ 106,718\\ 99,727\\ 102,153\\ 92,871\\ 99,458\\ 100,625\\ 107,647\\ 102,586\\ 106,493\end{array}$	$\begin{array}{c} 72,877\\ 76,280\\ 80,822\\ 75,440\\ 82,339\\ 76,792\\ 79,708\\ 74,872\\ 101,664\\ 93,435\\ 87,638\\ 135,227\\ 85,349\\ 91,499\\ 100,382\\ 92,201\\ 113,843\\ 87,646\\ \end{array}$	$\begin{array}{c} 80,854\\ 84,995\\ 89,630\\ 83,204\\ 84,328\\ 87,493\\ 90,864\\ 80,681\\ 108,987\\ 103,479\\ 92,436\\ 97,589\\ 91,845\\ 99,980\\ 99,770\\ 103,130\\ 109,633\\ 97,022\\ \end{array}$
1855 1856 1857 1858 1859 1860 1861 1862 1863 1864 1865 1866	$\begin{array}{c} 166,225\\ 169,250\\ 170,430\\ 170,959\\ 175,532\\ 183,180\\ 172,933\\ 181,990\\ 186,341\\ 192,947\\ 194,130\\ 196,753\\ \end{array}$	$\begin{array}{r} 165,\!277\\ 173,\!263\\ 170,\!444\\ 169,\!115\\ 175,\!864\\ 174,\!028\\ 184,\!820\\ 185,\!554\\ 189,\!340\\ 188,\!385\\ 192,\!988\\ 192,\!427\\ \end{array}$	$\begin{array}{c} 154,700\\ 157,462\\ 161,181\\ 167,445\\ 163,394\\ 164,121\\ 172,033\\ 172,709\\ 173,439\\ 181,015\\ 181,941\\ 179,096 \end{array}$	133,341 167,478 161,016 157,962 170,091 162,719 166,620 172,431 178,297 177,478 178,9010 185,594	$\begin{array}{c} 103,014\\ 108,665\\ 125,819\\ 121,580\\ 122,617\\ 121,215\\ 122,019\\ 128,096\\ 142,977\\ 140,410\\ 138,136\\ \end{array}$	$\begin{array}{c} 100,\!430\\ 100,\!099\\ 100,\!046\\ 107,\!142\\ 105,\!631\\ 110,\!869\\ 107,\!558\\ 107,\!558\\ 107,\!392\\ 118,\!121\\ 116,\!880\\ 115,\!892\\ 128,\!551\\ \end{array}$	$\begin{array}{c} 91,155\\ 91,155\\ 100,528\\ 98,142\\ 104,216\\ 86,312\\ 101,232\\ 92,381\\ 112,504\\ 112,223\\ 113,362\\ 116,650\\ \end{array}$	$\begin{array}{c} 96,238\\110,576\\118,553\\100,354\\102,923\\105,109\\114,774\\115,116\\122,451\\121,245\\117,352\end{array}$

Births.

land shows the high illegitimate birth-rate of 11.5 out of every 100 children born, in Norfolk it was 10.3, Westmorland 9.7, Herefordshire and Nottinghamshire 9.1, Shropshire and the North Riding of Yorkshire 8.9, and in Bedfordshire 8.2. The lowest rates were in London and counties immediately surrounding, thus it was in Middlesex 3.8, London 4.1, Surrey 4.2, Kent 4.5. In Durham there were 4.9 illegitimate births in every 100, in Warwickshire and Monmouthshire there were in each 5.0, in Huntingdonshire 5.1, Essex 5.2, and in Gloucestershire 5.3.

In Scotland in the year 1866 the illegitimate birth-rate was $10\cdot1$ in every 100 births; it was higher ($10\cdot5$) in the rural than in town districts ($9\cdot9$); the rate varied from $16\cdot1$ per cent. in Banff and Aberdeenshire to $4\cdot5$ in Sutherland and Shetland.

The proportion of males to females born is higher amongst illegitimate births than amongst the legitimate, although from being fewer in number they exhibit in different years greater variation in the proportion of the sexes than is shown in the case of legitimate children; there were thus $106\cdot3$ males to every 100 females in England born out of wedlock in 1863, while in 1860 the proportion was $102\cdot9$. On an average of the 10 years, 1857-66, there were of illegitimate children $104\cdot8$ males to 100 females born, while during the same period there was an annual average of $104\cdot5$ males to every 100 females born *in* wedlock. In the year 1866 there were $104\cdot8$ males to 100 females born *out of* wedlock, and $104\cdot3$ males to 100 females to 100 females born *in* wedlock.

TABLE 15.—Annual Rate of Mortality of Males and of Females in England, 1838-66.

-					THS.	NALL AND ALL AND	
					THS.	DEATHS OF MALES	OF EQUAL NUMBERS LIVING,
Sector 1	YEARS.		10.1	OF MALES TO 100 MALES LIVING.	OF FEMALES TO 100 FEMALES LIVING.	TO 100 DEATHS OF FEMALES.	THE NUMBER OF MALE DEATHS TO EVERY 100 DEATHS OF FEMALES.
1 L CARAGO	1838 1839 1840	TT T	111	2·342 2·277 2·372	2·146 2·097 2·204	105 104 103	109 109 108
14	1841 1842 1843 1844 1845		1111	$2 \cdot 238 \\ 2 \cdot 239 \\ 2 \cdot 199 \\ 2 \cdot 238 \\ 2 \cdot 166$	2.083 2.098 2.047 2.083 2.011	103 102 103 103 103	107 107 107 107 108
12 2 2 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1846 1847 1848 1849 1850	11111	1111	2·390 2·541 2·387 2·578 2·142	2·221 2·380 2·224 2·445 2·013	$103 \\ 103 \\ 103 \\ 101 \\ 102$	108 107 107 105 106
0.5 m 4.0	1851 1852 1853 1854 1855	1111	TTTT -	$2 \cdot 276$ $2 \cdot 324$ $2 \cdot 383$ $2 \cdot 441$ $2 \cdot 351$	$\begin{array}{r} 2 \cdot 124 \\ 2 \cdot 155 \\ 2 \cdot 197 \\ 2 \cdot 267 \\ 2 \cdot 174 \end{array}$	$103 \\ 108 \\ 104 \\ 103 \\ 104 \\ 103 \\ 104 \\ . $	107 108 108 108 108 108
das	1856 1857 1858 1859 1860	1 - 12	LI LI	$\begin{array}{r} 2 \cdot 136 \\ 2 \cdot 257 \\ 2 \cdot 390 \\ 2 \cdot 327 \\ 2 \cdot 218 \end{array}$	1.969 2.107 2.233 2.155 2.034	$ 104 \\ 102 \\ 102 \\ 103 \\ 104 $	108 107 107 108 109
1 21 450	1860 1861 1862 1863 1864 1864	1 1 1 1 1 1 1 1 1 1 1 1 1		2*268 2*249 2*424 2*514 2*477	$2^{\circ}063$ $2^{\circ}049$ $2^{\circ}193$ $2^{\circ}264$ $2^{\circ}208$	104 104 105 105 105	110 110 111 111 112
1	1866	114	بر ا	2.496	2.234	105	112
A	verage 0: 1838-66	f 29 ye	ars, }	2.332	2.154	103	108

The Table may be read thus:—In the year 1838 to every 100 males living there were 2.342 deaths of males; to every 100 females living there were 2.146 deaths of females; and to every 100 females who died there were 105 deaths of males. The last column shows the *relative* mortality of *males* and *females*; and that out of equal *numbers living* the deaths of males were 109 to every 100 deaths of females in 1888.

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Deaths.

cor vieve to the still to all thing contained in the state of the bas

In 1866 the population of England had grown to twenty-one millions; and with it had grown to proportionably great dimensions that conscription in the registers of mortality to which each individual life, by a supreme law, makes its inevitable contribution. The number of deaths

TABLE 16.—Annual Rate of Mortality per Cent. in the several Counties of England during each of the Years 1856–66.

	Othinedebiological	in the second	L. MIL	1312.0	D	EATHS	то 100	PERS	ONS L	IVING.	ier en Ionia	ni : (0	· (9)
RI	EGISTRATION COUNTIES.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	Ave- rage Annual Rate, 1856-65.	1866.
	ENGLAND	2.051	2.180	2.309	2.239	2.124	2.163	2.147	2.305	2:386	2.339	2.224	2.361
	I.—London	2.209	2.241	2.390	2.269	2.249	2.318	2.356	2.447	2.653	2.456	2.359	2.648
No. 1 2 3 4 5	II.—SOUTH EASTERN COUNTIES. Surrey (extra-metropolitan) – Kent (extra-metropolitan) – Sussex – – – – Hampshire – – – Berkshire – – –	1.768 1.947 1.734 1.921 1.856	1.648 1.983 1.743 1.989 1.869	2·129 2·070 2·067	1.813 2.049 2.058 2.036 2.043	1.767 1.863 1.881 1.902 1.972	1.743 1.992 1.819 1.796 1.892	1.790 1.828 1.875		1.902 2.098 2.051 2.042 2.086	1.839 2.046 2.078 2.073 2.114	1·790 1·997 1·920 1·967 1·988	1.822 1.932 1.924 1.974 2.041
6 7 8 9 10 11 12 13	III.—SOUTH MIDLAND COUNTIES. Middlesex(extra-metropolitan) Hertfordshire – – – Buckinghamshire – – – Oxfordshire – – – Huntingdonshire – – – Bedfordshire – – – Cambridgeshire – – –	$1.930 \\ 1.818 \\ 1.915 \\ 1.775 \\ 1.950 \\ 1.856 \\ 1.968 \\ 1.916 \\ 1.91$	$\begin{array}{c} 2\cdot009\\ 1\cdot955\\ 2\cdot034\\ 2\cdot031\\ 2\cdot043\\ 2\cdot108\\ 2\cdot101\\ 2\cdot065\end{array}$	1.9382.1212.2492.0912.0501.971	2.047 1.927 2.163 2.090 2.308 1.978 2.065 2.021	1.998 1.947 1.981 1.986 2.137 1.867 2.017 1.950	1.981 1.820 2.097 1.866 2.103 2.033 1.902 2.117	1.798 1.933 1.879 1.897 1.992 1.876	2.062 2.142 2.227 2.332	2°244 2°252 2°240 2°235 2°309 2°233 2°454 2°256	2.036 2.019 2.084 2.058 2.295 2.173 2.235 2.206	$\begin{array}{c} 2.033\\ 1.952\\ 2.063\\ 2.029\\ 2.136\\ 2.062\\ 2.071\\ 2.082 \end{array}$	$\begin{array}{c} 2\cdot086\\ 1\cdot874\\ 1\cdot963\\ 1\cdot937\\ 1\cdot941\\ 1\cdot859\\ 2\cdot174\\ 2\cdot031 \end{array}$
14 15 16	IV.—EASTERN COUNTIES. Essex – – – – – – Suffolk – – – – – Norfolk – – – – –	1.897 1.949 1.906	2:011 2:003 2:110	2:087 2:121 2:392	2·081 2·036 2·095	1.864 1.971 2.102	1·901 2·073 2·231	1.830	2·125 2·288 2·187	2.100 2.093 2.220	1.986 2.025 2.242	1·996 2·039 2·149	2.006 1.897 2.070
17 18 19 20 21	V.—SOUTH WESTEBN COUNTIES. Wiltshire – – – – Dorsetshire – – – Cornwall – – – Somersetshire – – –	1.825 1.641 1.745 1.909 1.735	1·909 1·901 1·948 1·970 1·848	2.081 2.185 2.067 2.074 2.153	2·112 2·072 2·092 2·019 2·083	2.001 1.868 1.971 2.040 1.963	1.787 1.692 1.891 1.991 1.921	1.764 1.924	2.083 1.981 2.026 2.532 2.114	2·170 2·023 2·130 2·147 2·233	2:081 2:094 2:066 1:943 2:060	1.990 1.922 1.986 2.063 1.987	$ \begin{array}{r} 1 \cdot 901 \\ 1 \cdot 889 \\ 2 \cdot 260 \\ 1 \cdot 905 \\ 2 \cdot 016 \end{array} $
22 23 24 25 26 27	VIWEST MIDLAND COUNTIES. Gloucestershire Herefordshire Stropshire Staffordshire Worcestershire Warwickshire	1.866 1.923 1.796 2.268 1.816 2.075	1.983 1.949 2.003 2.619 2.043 2.405	$2 \cdot 245$ $2 \cdot 085$ $2 \cdot 084$ $2 \cdot 464$ $2 \cdot 061$ $2 \cdot 423$	2:122 2:212 2:087 2:605 2:262 2:370	1.951 1.912 2.112 2.194 1.878 2.043	2.058 1.909 2.092 2.110 1.891 2.112	$1.911 \\ 2.343$	$2.371 \\ 2.095$	2°268 2°235 2°110 2°518 2°290 2°460	2·119 2·134 2·143 2·302 1·998 2·280	$2.088 \\ 2.002 \\ 2.040 \\ 2.379 \\ 2.020 \\ 2.266$	2·111 1·745 1·967 2·399 1·981 2·212
28 29 30 31 32	VII.—NORTH MIDLAND COUNTIES. Leicestershire – – – Rutlandshire – – – Lincolnshire – – – Nottinghamshire – – – Derbyshire – – –	1·951 1·785 1·675 2·124 1·953	2:241 1:533 1:826 2:196 2:104	2:450 2:046 2:116 2:466 2:356	2·292 1·956 2·168 2·548 2·264	1.962 1.909 1.936 2.054 2.103	2·169 1·769 1·926 2·136 2·171	$1.645 \\ 1.802$		2:330 2:046 2:052 2:263 2:167	2·311 1·952 2·155 2·167 2·111	2:227 1:889 1:966 2:218 2:130	2·195 1·782 1·901 2·131 2·135
	VIIINORTH WESTERN COUNTIES.	9:040	0.000	0.007	01700	0:170	2.164	2.246	2:200	2.300	2.328	2.236	2.538
33 34	Cheshire – – – – – Lancashire – – – –	2·048 2·464	2·269 2·628	2·267 2·719	2·169 2·454	2·173 2·371	2.164 2.592	2.246		2 300 2.718	2.832	2.597	3.016
35 36 37	IX.—YORKSHIRE. West Riding East Riding (with York) - North Riding	1.902		2·491 2·349 1·939	2·396 2·271 2·178	2·360 2·185 2·027	2·321 2·333 2·001	2·364 2·251 2·052	2.529	2*656 2*253 2*071	2.667 2.415 2.066	2*441 2*283 2*011	2.684 2.240 2.033
38 39 40 41	X.—NORTHERN COUNTIES. Durham – – – – Northumberland – – – Cumberland – – – Westmorland – – –	2.031 1.945	2·167 1·986	2·404 2·189 2·064 1·770	2·313 2·161 2·199 1·974	2.098 2.218 2.242 1.975	2.146	2.285	2·355 2·317 2·383 1·735	2°284 2°273 2°339 1°820	2·400 2·372 2·381 1·716	2·305 2·240 2·194 1·809	2·368 2·577 2·233 1·741
42 43 44	XI.—MONMOUTHSHIRE AND WALES. Monmouthshire – – – South Wales – – – North Wales – – –	2.004	2.004	2·465 2·412 2·026	2·412 2·289 2·047	$2.026 \\ 2.116 \\ 2.225$	2·100 2·052 2·098	2:106 1:997 2:189	2.050	2°656 2°310 2°214	2:387 2:389 2:207	2·248 2·162 2·101	2·257 2·243 2·365

registered in 1866 was about half a million. It is sufficiently near the truth, as a general statement, to observe that in the series of years, 1838-66, population, marriages, births, and deaths have attained numerical values each greater by half than that which had been attained at the beginning of that period. The number of deaths of males in 1866 was 256,402, of females 244,287; the total 500,689.

The rate of mortality in 1866 was 2.361 per cent. of population against an average of 2.224. The year 1860 was healthy, and its death-rate was but little above 2.1. In the two subsequent years it was still below 2.2. In the four succeeding years the death-rate rose above 2.3. Although cholera prevailed in London, Liverpool, Swansea, Neath, and other places in 1866, the mortality from all causes exceeded in no remarkable degree the average in the third quarter, and was hardly above it in the fourth. If that epidemic had not been in England, the latter half of the year would have been comparatively healthy in succession to an unhealthy spring.

In the healthiest year of the series, 1838-66, which was 1856, there was one death to 49 persons living; in the two healthy years 1845 and 1850 there was one to 48; in the three years 1843, 1860, and 1862 there was one to 47; the last four years were unhealthy, and one death has occurred out of every 42 or 43 persons living. The deaths registered do not include those of still-born children.

Seasons.—In the winter quarter (ended 31st March) the deaths were 138,136. In the spring quarter (ended 30th June) 128,551. In the summer quarter (ended 30th September) 116,650. In the autumn quarter (ended 31st December) 117,352.

If the deaths in the year had been 1000, and the same proportions maintained as above, the numbers would have been in the successive quarters 276, 257, 233, and 234.

				(4) (G)	and the	1.140	2 61A						-
140-22 (e)		1942 - 2003 1944 - 423 2014 - 423				AG	ES.—M	ALES			5 (R)I		
YEARS.	ALL AGES.	0-	5-	10-	15-	25-	35-	45-	55 —	65-	75-	85-	95 and upwds.
0 41.010	五140° 4月 時1後20日	ні (сля 1-11) акі		32 92 (1) (2) (2)	М	EAN	OF S	29 YEA	ARS.	10 - 1 - 1000 10	7 - 344 7 - 636 7 - 636		
1838-66	2.332	7.257	·887	•498	•792	·989	1.298	1.818	3.123	6.818	14.741	30.763	44.430
1000414 T		0.941 1960 9-24 099	1 D 1 1	191.2 60.2	м	EAN	SOF	10 Y E	ARS.	(g), dez (g), dez		2	1001 10552
1841-50	2.312	7.153	·920	• 513	·822	·991	1.275	1.843	3.188	6.711	14.832	30.612	44.051
1851-60	2.310	7.304	• 856	•490	.772	•953	1.261	1.785	3.023	6.623	14.677	30.311	43.710
2 : 36:701 2 : 20:304 2 : 21:726	11-12 11 11-12 11		1-2 1-2	349 %E (2018	м	EAN	IS OF	5 YE	ARS.	2013 C38	1 75 191		881 1881
(3 Years.) 1838-40	2.330	7.231	•961	•524	•835	1.024	1.298	1.845	3.250	6.756	14.407	29.381	43.380
(5 Years.) 1841-45	2.216	6.898	·885	•486	•781	.935	1.206	1.742	3.042	6.530	14.376	29.905	43.177
1846-50	2.408	7.407	.956	• 540	.862	1.048	1.343	1.943	3.335	6.892	15.288	31.319	44.925
1851-55	2.355	7.418	•878	•516	•806	•991	1.286	1.861	3.120	6.684	15.083	30.202	44.963
1856-60	2.266	7.189	•833	•464	•737	•915	1.236	1.708	2·997 3·157	6.621 7.198	14·271 14·742	30·120 32·099	42.456
1861-65	2.386	7.366	•857	•473	•749	1.004	1.371	1.794	3.121	1 198	14 /42	02 000	10 102

* For mode of reading this Table, see Note to Table 18. NOTE.—The Population used in the above calculations is now deduced from the ascertained rate of increase observed in the 20 Years 1841-61.

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TABLE 17 .- ENGLAND. Mortality per Cent. at different Ages .- Males.*

The annual rate of mortality in the March quarter was 2.652 per cent. against an average of 2.510; that of the June quarter 2.434 (average 2.229); of the September quarter 2.179 (average 2.052); and of the December quarter 2.187, almost identical with the average 2.182.

Violent gales and a severe but transient snowstorm attended the first days of the year; thaw quickly came, and was followed by heavy rains and high winds, with a temperature unusually high, which continued till the middle of February. The average excess of temperature was 6° daily up to the 12th of that month. A period of cold followed, which lasted 30 days. Again four days of warm weather in the middle of March were succeeded by four days of very cold weather; and finally there were eight days of high temperature, 6° above the average, and closing a winter which, with its sudden and severe alternations, could hardly fail, it might be supposed, to affect the public health unfavourably. But the mortality rose in the Lancashire and Yorkshire towns, not in the open southern counties, from scarlatina, measles, whooping-cough, and other complaints of the zymotic character. Fever raged in Liverpool and raised

TABLE 18.—ENGLAND. Annual Rates of Mortality per Cent. of Males at different Ages, 1838-66.

1970' di	dent	onte (a	loua.	Na dela	DE	ATE	IS TO	100 L	IVIN	G. e.l.	al-	sons.	- 560
YEARS.	maint	nic edi	t del		,6,8,	A	G E S.—	MALE	s.	en den en den	arter 1		rantipa Matarana
inthici zteropo	ALL Ages.	0-	5-	10-	15-	25-	35-	45-	55-	65-	75-	85-	95 and upwds.
1838	2.342	7.012	•899	•519	·853	1.078	1.358	1.945	3.413	7.053	14.810	29.870	45.695
1839	2.277	7.149	•903	•512	•820	•994	1.265	1.795	3.194	6.499	13.908	27.995	39.694
1840	2.372	7.533	1.085	•542	•832	.999	1.270	1.795	3.143	6.715	14.504	30.278	44.752
1841	2.238	6.843	•956	•510	•811	•978	1.217	1.785	3.137	6.482	14.266	29.650	43.164
1842	2.239	7.055	•901	•501	.782	•926	1.193	1.734	3.041	6.266	14.565	29.410	43.142
1843	2.199	6.910	•845	•478	.772	•919	1.212	1.723	3.002	6.525	14.067	28.708	42.651
1844	2.238	7.000	•898	•473	.762	•933	1.217	1.752	3.020	6.665	14.619	31.644	40.589
1845	2.166	6.683	•823	•466	•780	.919	1.193	1.718	2.973	6.413	14.365	30.114	46.340
1846	2.390	7.781	•826	• 507	.858	1.016	1.262	1.802	3.128	6.673	15.032	32.127	49.169
1847	2.541	7.608	•971	.550	•927	1.091	1.425	2.067	3.648	7.603	17.284	35.462	54.329
1848	2.387	7.418	1.044	• 530	•857	1.018	1.295	1.866	3.265	6.722	14.954	30.552	41.095
1849	2.578	7.526	1.125	•646	.950	1.236	1.573	2.264	3.623	7.186	15.162	29.925	41.916
1850	2.142	6.701	.815	•467	.716	.877	1.162	1.717	2.979	6.278	-14.006	28.527	38.117
Mean of 29 Years (1838-66).	2.332	7.257	•887	•498	•792	•989	1.298	1.818	3.123	6.818	14.741	30.763	44.430
1851	2.276	7.298	.869	•491	.776	•948	1.236	1.787	3.031	6.396	14.055	28.245	41.937
1852	2.324	7.500	.908	• 522	.802	.972	1.232	1.807	3.056	6.289	14.203	28.659	44.539
1853	2.383	7.332	.850	.508	.833	1.021	1.318	1.935	3.236	6.919	15.968	32.097	49.732
1854	2.441	7.770	.940	• 555	.842	1.039	1.355	1.928	3.165	6.684	14.913	29.093	41.426
1855	2.351	7.189	•822	• 503	.778	·974	1.288	1.848	3.260	7.132	16.276	34.415	47 181
1856	2.136	6.753	.722	•456	.736	.904	1.189	1.644	2.879	6.163	13.099		
1857	2.257	7.254	.783	•470	.737	·918	1.215	1.702	2.952	6.461	13.099-	28.092 30.229	36.701
1858	2.390	7.683	1.052	.503	.766	.928	1.213	1.734	2 952	6.796	14.696	30.229	40.374
1859	2.327	7.499	.926	•478	.736	.920	1.255	1.735	3.018	6.644	14.019	29.376	47.726 43.747
1860	2.218	6.758	.683	•414	.712	.905	1.270	1.725	3.091	7.042	15.159	31.133	43 747
1861	2.268	7.176		•433	.728	.923		14 Gaa		196-1-12			L GUOL
1861	2.268	6.963	·674 ·770	•433	.728	·923	1.265	1.690	3.008	6-890	14.654	31.092	44.835
1863	2 249	6'963 7'743	1.031	• 503	•739	·936	1.283	1.729	3.031	6.757	14.060	29.846	36.579
1864	2 424	7.585	· 993	·503	139	968	1.330	1.729	3.055	6.924	14.084	81.245	48.848
1865	2 314	7.413	•993	•481	.781	1.116	1.493	1.010	3.385	7.756	15.413	34.340	53.246
100 100 1 Va	1995 1 A.T.	101 [10]	0	190-11		1022	1.482	1.919	3.308	7.665	15.499	33.973	48.203
1866	2*496	7.381	•794	•468	•789	1.168	1.545	1.947	3.282	7.838	15.455	34•264	48'710

The Table may be read thus :--Of 100 males living of the age 35 and under 45, 1.358 died in 1838, 1.265 in 1839, and 1.162 in 1850; the average annual rate in the 29 years, 1838-66, among the aggregate of males in this decennial period of age was 1.298.

the mortality to 4.6 per cent. The mortality of England, as has been shown, was above the average in the first quarter.

After the warm weather came a period of cold, which lasted nine days, when the thermometer was frequently below freezing point. Nineteen days of great heat succeeded, and produced an almost instantaneous effect on vegetation, leaves and blossom shooting as if by magic. On 20th April another cold and ungenial period set in, when the thermometer often fell below freezing point; it lasted throughout May, destroying blossom and retarding the crops. Again the weather changed, and was much warmer for 10 days in the beginning of June; then for the next 10 days another cold period, followed by warmth till the close of the quarter. Such vicissitudes were fatal everywhere, but chiefly in towns. The mortality of spring was much above the average.

All the three months of summer, but particularly August, were cold. The first week in July was cold ; from the 9th to the 17th July there was heat ; and from the latter date to the 27th September the temperature was almost constantly low. Rain was frequent in July and August, excessive in September. There were great floods in the midland counties. Such weather occurring in the hot season was probably salutary ; it may have checked the progress of cholera, and thus restrained within narrow limits the excess of mortality shown above.

The meteorological conditions of the last quarter were very favourable to health. All the three months were warm; December was unusually mild; and the mortality fell to its autumnal average.

Sex.—It has been stated that the absolute number of deaths was rather more than 500,000. Of those thousands, omitting the odd figures, 256 were males, 244 females; the deaths of males being, as usual, in preponderance. For every hundred females there were 105 males. This exceeds the average proportion which may be stated as 103. But in the population as constituted the female element predominates. If it had been otherwise; if the two constituent elements had possessed the same numerical strength, the rate of mortality in males is so much higher than

The second secon

TABLE	19.—	ENGLAND). IV	lorta	ality	per C	ent. at	, uniter	ent m	ges.	Fema.	
1.0.25	12 24 U	5.076 137-B	2742 2742	11(3~)	AGE	SFE	MALE	es.		17 E 1 31	202	1963
YEARS.	ALL AGES.	0- 5-7	10- 28*2	15-	25-	35-	45-	55-	65-	75-	85-	95 and upwds.
42*886	64-12 B	61181 14010 10121 10176	8*923 94919	M	EAN	OF :	29 YEA	ARS.	010- 14 016- 14	1.9 1 10 1.9		ASSET .
1838-66	2.154	6.260 .876	.514	•825	1.018	1.232	1.265	2.847	5.774	13.491	28.252	43.170
100-04	3 26-85 4 27-63	18-01 946-0	2/960 2/968	M	EAN	SOF	10 YE	ARS.	1991 - 199 1992 - 199		17.18 17.18	1999 1999 1999
1841-50 1851-60	2·161 2·142	6·135 ·910 6·831 ·844	• 5 33 •509	·853 ·814	·1063 ·996	1·279 1·198	1·589 1·514	2·822 2·747	6·134 5·693	13·506 13·355	28·376 28·125	44·448 42·810
6 88°032 45°430	1 23°14	11/21 186/2	218-2	N	IEAI	IS OF	5 YE	ARS.	619-1 S	12-10. T 13-78 T	2012	1865 (8581
(3 Years.) 1838–40	2.149	6.180 .983	•547	12.350	1.027	1.280	1.601	2.882	5.764	13.260	26.785	38.68
(5 Years.) 1841–45 1846–50	2.064 2.257	5.878 .886 6.891 .933	•500 •566	·817 ·890	·995 1·130	1·211 1·347	1.504 1.674	2·704 2·941	5.943 6.324	13·123 13·890	28:019 28:732	42.04 46.84 44.00
1851-55 1856-60 1861-65	2·183 2·100 2·155	6:405 :854 6:257 :834 6:380 :833	·534 ·484 ·479	·844 ·784 ·776	•951	1.237 1.159 1.172	1.558 1.469 1.567	2.785 2.708 2.992	5.897 5.489 5.308	13.623 13.088 13.632	28·359 27·891 28:665	44.00 41.65 44.2

that of females, that 112 males would have died for 100 females; the average proportion under the assumed condition being 108.

Death-rates in counties, and in town and country.-In none of the counties was the mortality so high as in Lancashire, where, taking the better with the worse parts, it was 3.016 per cent. against an average of 2.597. In all other counties it was under 2.70 per cent., having ranged in these from 1.74 in Westmorland and Herefordshire, and 1.78 in Rutlandshire to 2.68 in the West Riding of Yorkshire. In Northumberland the death-rate was 2.577 against an average of 2.240; in Cheshire 2.538 against 2.236. In the following counties and extra-metropolitan portions of counties it was 1.82 per cent., and under 2.00, Surrey, Huntingdonshire, Hertfordshire, Dorsetshire, Suffolk, Wiltshire, Lincolnshire, Cornwall, Sussex, Kent, Oxfordshire, Northamptonshire, Buckinghamshire, Shropshire, Hampshire, and Worcestershire. The rate of mortality in the metropolis was 2.648 against an average of 2.350 per cent. London, within whose bounds are grimy districts covered with dense populations, and parks or suburban fields adorned with terraces and villas, produces an annual rate of mortality, which on the average corresponds very closely with that which is attained in the West Riding of Yorkshire, with its busy manufacturing towns, and its tracts of clear, open country.

TABLE 20.—ENGLAND.	Annual	Rates	of Mortality	per Cent. of Females	
a	t different	Ages,	1838-66.	content and pres t hun	

	might				DE	ATH	IS TO	100 L	IVIN	G.			0.048
YEARS.	et la	AGESFEMALES.											
odi af fisil ti	ALL AGES.	0-	5-	10-	15-	25-	35-	45-	55-	65-	75 -	85-	95 and upwds
1838	2.146	6.007	•899	·540	·851	1.044	1.319	1.675	3.037	5.875	13.516	26.599	37.08
1839	2.097	6.113	•937	•533	•847	1.006	1.251	1.558	2.764	5.529	12.655	25.322	36.401
1840	2.204	6.420	1.114	• 569	•868	1.032	1.271	1.571	2.845	5.887	13.608	28.435	42.562
1841	2.083	5.861	.963	.520	•842	1.007	1.227	1.542	2.740	5.841	13.375	28.255	42.706
1842	2.098	6.032	.924	.513	•831	1.005	1.219	1.523	2.731	6.023	13.031	28.405	40.216
1843	2.047	5.913	.847	•486	•785	•977	1.225	1.479	2.670	5.894	12.944	27.597	44.217
1844	2.083	5.906	.900	•504	·811	1.007	1.197	1.518	2.743	6.076	13.367	28.356	42.61
1845	2.011	5.680	.798	•478	.816	•981	1.185	1.459	2.635	5.883	12.896	27.482	40.47
1846	2.221	6.704	·811	• 535	.871	1.049	1.238	1.550	2.747	6.185	13.640	30.250	50.63
1847	2.380	6.580	.948	.579	.920	1.175	1.418	1.779	3.186	6.996	15.773	32.003	51.99
1848	2.224	6.419	.995	.568	.879	1.091	1.298	1.281	2.823	6.096	13.476	27.547	46.030
1849	2.445	6.206	1.100	*655	1.001	1.348	1.614	1.990	3.328	6.616	13.927	27.969	42.850
1850	2.013	5.747	·810	•492	.778	·988	1.168	1.470	2.613	5.726	12.633	25.892	42.70
Mean of 29 Years (1838-66).	2.154	6.260	.876	•514	•825	1.018	1.232	1.565	2.847	5.774	13•491	28.252	43.17
1851	2.124	6.299	·860	• 527	·818	1.005	1.193	1.519	2.679	5.854	12.818	26.357	45.017
1852	2.155	6.441	.877	.539	•837	1.032	1.209	1.208	2.653	5.658	13.164	27.623	41.34
1853	2.197	6.342	·810	.543	•867	1.064	1.239	1.582	2.830	6.017	14.072	29.350	47.200
1854	2.267	6.780	.920	•564	•868	1.102	1.309	1.643	2.834	5.807	13.297	26.950	42.150
1855	2.174	6.163	·801	•497	•828	.998	1.235	1.537	2.931	6.120	14.763	31.517	44.303
1856	1.969	5.885	.732	•455	.759	·933	1.133	1.403	2.512	5.119	11.977	24.266	36.692
1857	2.107	6.377	.769	•466	.792	·942	1.152	1.462	2.711	5.281	13.116	21 200	45.45(
1858	2.233	6.752	1.043	•535	.824	.977	1.185	1.479	2.759	5.726	13.775	29.697	45.84
1859	2.155	6.523	.937	•526	.794	.966	1.174	1.207	2.701	5.389	12.920	27.635	40.45
1860	2.034	5.746	.691	•439	.750	.939	1.153	1.496	2.856	5.628	13.651	29.714	39.690
1861	2.063		•678	•436	•776	.933	1.117	1.472	2.817	5.246	13.123	26.613	44.478
1861	2.049	6.198	•745	•436	•751	·928	1.137	1 4/2	2.817	5 246	13 123	20 013	44 478
1862	2.049	6.016	·998	·458	•766	·928	1.101	1 491	2.845	5.091	12 980	28.922	43.26
1864	2 193	6·715 6·537	998 •953	·513	·795	955	1.224	1.677	2 891 3:235	5.652	13 137	20 922 30·578	43 500
1865	2 204	6.435	•791	•465	.792	.999	1.219	1.689	3.165	5.317	14.380	30.038	48.64
											COLUMN		
1866	2.234	6.456	•739	•456	•797	1.034	1.272	1.731	3.271	5.336	14.693	30.614	42.00

If ten English towns are selected for comparison, it will be seen that the borough of Liverpool was the most unhealthy in 1866; for by a malignant fever in winter, and cholera in summer, the mortality of the year was raised to 4.185, while that of Manchester was 3.195. In the summer quarter cholera raised the death-rate of that borough to 5 per cent.

Ages.—Of 256,402 deaths of males at all ages, 108,424 occurred under 5 years of age, of which 66,851 were those of children who had not completed their first year of existence. In the period of life 5-15 years the deaths of males were 15,117; at 15-25 they were 15,010; at 25-35 they were 16,328; at 35-45 they were 17,463; at 45-55 they were 18,940; at 55-65 they were 20,894; at 65-75 they were 22,711; at 75-85 they were 17,068; at 85-95 they were 4249; while 198 men died at the age of 95years and upwards. Starting from the age of five years, it appears that the absolute numbers in the first two decennia were almost equal; in the next and following decennia they constantly increased up to 75 years, at which age the males living had become so few, rari nantes in gurgite, that the deaths, notwithstanding an increased rate of mortality, became less numerous absolutely than in the three previous stages.

Of 244,287 deaths of females, 94,595 occurred under 5 years of age, of which 53,448 were those of infants less than one year old. In the decennium 5-15 years 14,200 girls died; in the next 15-25 years, 15,805 women died; at 25-35 years, 17,454; at 35-45 years, 16,940; at 45-55 years, 16,258; at 55-65 years, 19,176; at 65-75 years, 23,426; at 75-85 years, 19,958; at 85-95 years, 6059; and at 95 years and upwards, 416 nonagenarians and centenarians died. Thus, after the age 5-15 there was an increase up to the period 35-45; then in two decennia a decrease; then in the two following decennia an increase; at 75-85 a decrease, which continued with increasing rapidity towards that extreme point of age where all human life, that is mortal, is extinguished.

TABLE 21.—Proportional Number of Deaths in each Quarter to 1000 Deaths in the Average Quarter of each Year, 1838-66.

	NUMBER	PR	PROPORTIONAL NUMBER OF DEATHS								
YEARS.	OF DEATHS IN THE AVERAGE QUARTER.	In the AVERAGE QUARTER (assumed to be 1000).	FIRST QUARTER ending March 31.	SECOND QUARTER ending June 30.	THIRD QUARTER ending Sept. 30.	FOURTH QUARTEN ending Dec. 31.					
1838 1839 1840	85,690 84,746 89,922	1000 1000 1000	$1145 \\ 1059 \\ 1100$	$ 1061 \\ 1038 \\ 1005 $	850 900 899	944 1003 997					
1841 1842 1843 1844 1844	85,962 87,380 86,611 89,233 87,342	$1000 \\ $	$1152 \\ 1102 \\ 1096 \\ 1132 \\ 1198$	1002 990 1007 956 1021	878 942 887 893 857	968 965 1010 1018 924					
1846 1847 1848 1849 1850	$\begin{array}{c} 97,579\\ 105,826\\ 99,958\\ 110,210\\ 92,249\end{array}$	1000 1000 1000 1000 1000	$917 \\1131 \\1201 \\961 \\1067$	925 1008 998 927 1007	1042 883 877 1227 931	1116 978 925 885 996					
1851 1852 1853 1854 1855	93,849 101,784 105,274 109,476 106,426	$1000 \\ 1000 \\ 1000 \\ 1000 \\ 1000 \\ 1000$	$ \begin{array}{r} 1066 \\ 1045 \\ 1122 \\ 1036 \\ 1280 \end{array} $	1006 989 1022 940 1001	926 986 876 1031 816	1002 980 980 993 903					
1856 1857 1858 1859 1860	97,627 104,954 - 112,414 110,195 105,680	$ 1000 \\ 1000 \\ 1000 \\ 1000 \\ 1000 $	$ \begin{array}{r} 1061 \\ 1050 \\ 1134 \\ 1118 \\ 1166 \end{array} $	$ \begin{array}{r} 1031 \\ 955 \\ 955 \\ 961 \\ 1054 \end{array} $	928 950 865 938 812	980 1045 1046 983 968					
$1861 \\ 1862 \\ 1863 \\ 1864 \\ 1865$	108,778 109,142 118,460 123,883 122,727	1000 1000 1000 1000 1000	1129 1133 1095 1159 1159	990 986 999 949 946	923 839 942 901 916	958 1042 964 991 979					
1866	125,172	1000	1118	1029	924	929					

United Kingdom—Foreign States.

Deaths.

The death-rate of males at all ages was 2.496 per cent. in the year 1866; the mean of twenty-nine years being 2.332. The mortality of boys under 5 years (7.381 per cent.) was above the average; in the two quinquennia 5-10 and 10-15 years, and in the decennium 15-25, the mortality was below the average; in the next period 25-35, it was 1.168 per cent., the mean being '989; and it continued to increase, and also to be above the average, in each successive decennium. In the period 65-75 the death-rate was 7.838 per cent., the mean being 6.818; at 85-95 it was 34.264 against 30.763, and at 95 and upwards, 48.710, while the mean was 44.430 per cent.

The death-rate of females was 2.234 per cent., the mean of twenty-nine years being 2.154. In the first quinquennium the mortality of girls was, like of that boys, above the mean rate. Between 5 and 25 years the mortality was, as also in the males, below the mean. In the subsequent ages up to 65 years it was above the mean ; but thereafter did not, like the mortality of males, discover a decided tendency to maintain itself above the average.

In all the successive stages of life, as fixed in the Tables, the rate of mortality in males was above that of females, except the age 15-25, when the mortality of females was slightly higher. In the stage 55-65 the male and female death-rates made a close approximation.

TABLE	22,-Annual	Rate per	Cent. of	Births,	and Deaths,	in England,
	during	each Oua	rter of	the Year	s 1838-66.	

APORTSO .	1 (3) . T.	ra stran	Birth	RATE.	3.5-4.5 s	e perioa	DEATH	RATE.	<u>ai nel</u>		
YEARS.	101	In the	Quarters en	ding the last	day of	In the Quarters ending the last day of					
		March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.		
1838	_+	3.032	3.198	2.970	2.928	2.615 .	2.387	1.887	2.086		
1839 1840	-	3·248 3·395	3·338 3·301	3.069 3.021	$3.059 \\ 3.044$	2:359 2:538	$2^{\circ}280 \\ 2^{\circ}310$	1.949 2.038	$2.164 \\ 2.252$		
1841	_	3.424	3.278	3.082	3.095	2.537	2.174	1.877	2.063 2.067		
1842		3.431	3.344	3.032	3.028	2.436	2.158	2.025	2.119		
1843	-	3-420	3.234	3.114	3.1174	2.373	$2.149 \\ 2.077$	1.913	2 119 2.175		
1844	-	3.207	3.334	3.123	3.112	2.467	2.144	1.776	1.908		
1845	_	3.491	3.291	3.140	3.103	2.554	2 144	1 110	1 000		
1010		mana i	TENETTEN E	the mark	0.010	2.157	2.144	2:382	2.545		
1846	-	3.498	3.221	3.221	3.256	2.850	2.506	2.163	2.389		
1847	-	3.488	3.265	2.945	2.938	2.794	2.313	2.005	2.108		
1848	-	3.2252	3.474	3:211	3.038	2.462	2.341	3.057	2.199		
1849	-	3.575	3.223	3.056	3.022	2.261	2.107	1.917	2.045		
1850	-	3.321	3.230	3.281	3 200	2 201	2 101	1 011			
		a here and a second	-	3.318	3.271	2.387	2.222	2.016	2.176		
1851	-	3.263	3.223		3.299	2.355	2.222	2.186	2.166		
1852	-	3.283	3.211	3.293	3.099	2.614	2.349	1.985	2.214		
1853	-	3.223	3.464	3·177 3·293	3.108	2.447	2.213	2.423	2.326		
1854	-	3.218	3.721	3.255	3.123	2.910	2.272	1.844	2.036		
1855	-	3.296	3.526	5 200	0 120	2 010	C CRASS	LANE I			
		0.00	DACEE	3.276	3.267	2.179	2.111	1.896	1.997		
1856	-	3.580 .	3.655 -	3.316	3.304	2.298	2:087	2.068	2.269		
1857	-	3.604	3.555	3.204	3.202	2.631	2.210	1.997	2.406		
1858	-	3.576	3.488	3.389	3.414	2.515	2.155	2.097	2.192		
1859	-	3.631	3.280	3.267	3.230	2.481	2.237	1.718	2.043		
1860	-	3.707	3 512	(++) 0 201	100	42772	a antital	Otress -	4		
		0.00	3.690	3.388	3.272	2.453	2.147	1.994	2.064		
1861	-	3.500	3.690	3.365	3.350	2.443	2.121	1.800	2.230		
1862	-	3.644	3.000	3.343	3.428	2.538	2:308	2.169	2.213		
1863	-	3.691	3.651	3.423	3.376	2.772	2.260	2.141	2.349		
1864	-	3.740	3.692	3.434	3.370	2.723	2.217	2.140	2.283		
1865	-	3.765	0 004	ALC LOL	105.05	00015	JUSANG N	1 12.36	1		
1866	-	3.777	3.644	3.346	3.458	2.652	2.434	2.179	2.187		
Mean	-	3.525	3:492	3.221	3.196	2.510	2:229	2.052	2.182		

The Table may be read thus, without reference to the decimal points :- In the March quarter of the year 1838, to 100,000 of the population of England there were 3,032 births, and 2,615 deaths registered. The three months January, February, March, contain 90, in Leap year 91 days; the three months April, May, June, 91 days; each of the two last quarters of the year 92 days. For this inequality a correction has been made in the calculation.

noising of bus addid to THE UNITED KINGDOM.

The POPULATION of Great Britain and Ireland was (as estimated for the middle of 1866) 29,946,058, who lived on an area consisting of 77,286,901 acres. The marriages amongst these thirty millions in that year were 251,606; the births 1,062,492; the deaths 688,960. People were married at the rate of 1.680 per cent. of population ; children were born at the rate of 3.548; persons died at the rate of 2.301 per cent.

In the United Kingdom there were about two acres and a half to every individual. In England and Wales the proportion is one person to 1.76 acres; in Ireland one to 3.64; in Scotland the density is little more than half as much as it is in Ireland, the proportion being one person to 6.23 acres.

The marriage-rate in Scotland (persons married, to population) was 1.498 per cent.; in Ireland 1.440. The marriage-rate in England was considerably higher than in either, namely 1.770 per cent.

The birth-rate of Scotland was higher than that of England; and its death-rate was lower (2.260 against 2.361). The returns of Ireland for this year are evidently defective.

FOREIGN STATES.

The populations of France and of Austria (under which are included Hungary, Croatia, Slavonia, and Transylvania) do not differ greatly in amount. The former contained in 1866 thirty-eight millions of people; the latter thirty-five millions. The per-centage of the married was 1.584 in France, 1.458 in Austria; both decidedly lower than that of England.

TABLE 23.-Estimated Population, Marriages, Births, and Deaths in the United Kingdom, in the Year 1866. Estimated AREA POPULATION IN in MARRIAGES, PERSONS MARRIED the Year ACRES. UNITED KINGDOM 77,286,901 29,946,058 251,606 Great Britain -56,964,260 24.363.433 211,405 422.81 England and Wales -37,324,883 21,210,020 187,776 375.55 Scotland - -19.639.377 3.153.413 23.629 47,25 Ireland - -20.322.641 5.582.625 40,201 80,40

Note .- The registered Marriages, Births, and Deaths for Ireland were 30,151, 146,237, and 93,598 respectively. These numbers have been corrected in the above table for defective registration. As regards the marriages and births, one third has been added to the registered numbers and a fourth part has been added to the registered number of deaths.

TABLE 24.-Proportion per Cent. of Marriages, Births, and Deaths to the Population of the United Kingdom, in the Year 1866.

	235,280,920 235,280,920	-	Acres	94,120 9,514	To 100 PERS	SONS LIVING	•
-	33,719,333 1 34,47 5,397 34,42 5,399		TO A PERSON.	MARRIAGES,	PERSONS MARRIED.	BIRTHS.	DEATHS.
UNITEI	KINGDOM		2.58	•840	1.680	3 •548	2•301
Great Brita	in – –	- 1-	2.34	*868	1.736	3.561	2.348
England an	d Wales	5020570	1.76	885	1.770	3.554	2.361
Scotland -	and range and		6.23	•749	1.498	3.604	2.260
Ireland -	of he mediat	- 00.0	3.64	•720	1.440	8.493	2.096

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

BIRTHS. DEATHS. 503,212 1,062,492 688,960

the second		CONTRACTOR OF THE CASE OF THE
0	867,509	571,962
2	753,870	500,689
8	113,639	71,273
2	194,983	116,998
	THAR	

Foreign States.

To whatever cause it is to be referred, the returns of births and population of Austria show a very high birth-rate; in 1866 it was 4.034 per cent.,

YEARS.	ISLANDS BRITIS	IN THE H SEAS.	Isle O	F MAN.	ISLAND O	F JERSEY.	<	SEY AND ISLANDS.
	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{r} 4,114\\ 4,301\\ 4,010\\ 4,239\\ 3,871\end{array}$	3,681 2,906 2,741 3,118 2,873	$1,494 \\ 1,530 \\ 1,439 \\ 1,552 \\ 1,397$	$1,440 \\ 837 \\ 1,008 \\ 1,249 \\ 965$	$1,696 \\ 1,768 \\ 1,676 \\ 1,639 \\ 1,524$	$\begin{array}{c c} 1,258\\ 1,423\\ 1,091\\ 1,201\\ 1,241\end{array}$	924 1,003 895 1,048 960	983 646 642 668 667
$\begin{array}{rrrr} 1856 & - \\ 1857 & - \\ 1858 & - \\ 1859 & - \\ 1860 & - \end{array}$	3,949 3,810 4,004 3,953 3,812	$2,534 \\ 2,716 \\ 2,671 \\ 2,947 \\ 2,667$	$1,431 \\ 1,431 \\ 1,442 \\ 1,575 \\ 1,409$	849 931 965 949 948	$1,582 \\ 1,424 \\ 1,566 \\ 1,451 \\ 1,557$	$\begin{array}{c} 1,112\\ 1,154\\ 1,110\\ 1,273\\ 985 \end{array}$	936 955 996 927 846	573 631 596 725 734
$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	3,962 3,857 4,128 3,975 4,006	2,662 2,552 2,681 3,094 3,426	$1,541 \\ 1,492 \\ 1,647 \\ 1,629 \\ 1,644$	904 850 944 1,356* 1,466*	$1,562 \\ 1,542 \\ 1,676 \\ 1,543 \\ 1,604$	$\begin{array}{c} 1,132\\ 1,114\\ 1,135\\ 1,166\\ 1,240\end{array}$	859 823 805 803 769	626 588 602 572 720
1866 -	3,897	3,341	1,559	1,203*	1,611	1,486	727	652
			Р	OPULATION	<u>10102-</u> -			
Enumerated 1851 –	10 - 10 A.	3,126 3,447		,387 ,469		,020 ,613		3,719 5,365
1861 – Estimated 1867 –		,811	Carlow in	,000,*	57	,721	8	35,090†
<u>n ann a</u>	·		AREA I	n Statute	ACRES.			. Stanisu
_	22	26,684	180	0,000	2	8,717		17,967

TABLE 25.-Population, Births, and Deaths in the Islands in the British Seas.

Note.—The above numbers have been compiled from returns furnished to the Registrar-General by Lieutenant-Colonel J. F. Murray, Government Secretary of Jersey, Lieutenant-Colonel W. Bell, Government Secretary of Guernsey, &c., and by Mr. J. T. Clucas, Clerk to Council and Secretary to Lieutenant-Governor of the Isle of Man. The returns for Guernsey and adjacent islands are imperfect owing to certain denominations neglecting to register the births and deaths. * The increase in the number of deaths in each of the years 1864-66 is attributable to the prevalence of fever and small-pox. The Island is visited by a considerable number of persons, and it is estimated that on 1st August 1867 there were 64,000 persons on it. † The decrease of population in 1867 is confined to Alderney, and is attributed to the discharge of men from the Government works.

TABLE	26.—Estimated	Population	1 01	Englanu,	France,	and or
		stria, 1853				

In a Transa and of

9 632,000	Austria, 10	33 10 2000.	NAME OF TAXABLE PARTY.
YEARS	ENGLAND and WALES.	FRANCE.*	AUSTRIA.‡
1853	18,404,368	36,225,000	31,328,874
1854	18,616,310	35,910,496	31,493,583
1855	18,829,000	35,974,930	31,200,576
1856	19,042,412	36,039,364	31,425,385
1857	19,256,516	36,154,398	32,053,235
1858	19,471,291	36,236,322	32,361,905
1859	19,686,701	36,331,642	32,750,697
1860	19,902,713	36,522,404	33,108,529
1861	20,119,314	37,386,313†	33,399,945
1862	20,336,467	37,521,486†	33,719,823
1863	20,554,137	37,657,134†	34,070,577
1864	20,772,308	37,793,278†	34,442,890
1865	20,990,946	37,929,918†	34,753,272
1866	21,210,020	38,067,064†	35,065,949

* M. Legoyt, director of the Statistical Department of France, has favoured the Registrar General with the returns of France for the years 1853-61 and for the year 1866. The population in the four years 1862-65 has been estimated by means of the average annual rate observed between the two enumerations of 1861 and 1866. † Including the three newly annexed departments.

¹ Dr. Ficker, chief of the Statistical Department of Austria, has favoured the Registrar General with the returns of Austria. The population returned above includes Hungary, Croatia, Slavonia, and Transylvania. The population of the States of Italy are excluded throughout.

YEARS.	NUMBER of	MARRIAGES, B DEATHS.	IRTHS, and	MARRIAG	ORTIONS per Ce ES, BIRTHS, and the POPULATIO	DEATHS
i onn-i	England.	France.*	Austria.†	England.	France.*	Austria.†
ausena	a contraction	office and	MARE	IAGES.		Contraction of the second
1853 1854 1855 1856 1857	164,520 159,727 152,113 159,337 159,097	280,609 270,896 283,335 284,401 295,510	263,627 241,799 228,515 295,970 281,643	*894 *858 *808 *837 *826	•775 •754 •788 •789 •817	*841 *768 *732 *942 *879
1858 1859 1860 1861 1862	156,070 167,723 170,156 163,706 164,030	307,056 298,417 288,936 305,203 303,514	280,558 242,371 289,119 286,244 304,188	*802 *852 *855 *814 *807	*847 *821 *791 *816 *809	*867 *740 *873 *857 *902
1863 1864 1865 1866	173,510 180,387 185,474 187,776	301,376 299,579 298,838 301,390	296,951 285,628 296,454 255,492	*844 *868 *884 *885	*800 *793 *788 *792	*872 *829 *853 *729
			PERSONS	MARRIED.	· ·	
1853 1854 1855 1856 1857	$\begin{array}{c} 329,040\\ 319,454\\ 304,226\\ 318,674\\ 318,194\end{array}$	561,218 541,792 566,670 568,802 591,020	527,254 483,598 457,030 591,940 563,286	$ \begin{array}{r} 1.788 \\ 1.716 \\ 1.616 \\ 1.674 \\ 1.652 \end{array} $	1.550 1.508 1.576 1.578 1.634	$ \begin{array}{r} 1.682 \\ 1.536 \\ 1.464 \\ 1.884 \\ 1.758 \end{array} $
1858 1859 1860 1861 1862	$\begin{array}{c} 312,140\\ 335,446\\ 340,312\\ 327,412\\ 328,060\\ \end{array}$	$\begin{array}{r} 614,112\\ 596,834\\ 577,872\\ 610,406\\ 607,028\end{array}$	561,116 484,742 578,238 572,488 608,376	$ \begin{array}{c} 1 \cdot 604 \\ 1 \cdot 704 \\ 1 \cdot 710 \\ 1 \cdot 628 \\ 1 \cdot 614 \end{array} $	$1^{\cdot}694 \\ 1^{\cdot}642 \\ 1^{\cdot}582 \\ 1^{\cdot}632 \\ 1^{\cdot}618$	$\begin{array}{c} 1.734 \\ 1.480 \\ 1.746 \\ 1.714 \\ 1.804 \end{array}$
1863 1864 1865 1866	347,020 360,774 370,948 375,552	602,752 599,158 597,676 602,780	593,902 571,256 592,908 510,984	1.688 1.736 1.768 1.770	$1^{\circ}600 \\ 1^{\circ}586 \\ 1^{\circ}576 \\ 1^{\circ}584$	$ \begin{array}{c} 1.744 \\ 1.658 \\ 1.706 \\ 1.458 \end{array} $
	n Linges Line of Frid	1.5 Sector	Bn	RTHS.		
1853 1854 1855 1856 -1857	$\begin{array}{c} 612,391 \\ 634,405 \\ 635,043 \\ 657,453 \\ 663,071 \end{array}$	936,967 923,461 902,336 952,116 940,709	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	3:327 3:408 3:373 3:453 3:443	2 · 587 2 · 572 2 · 508 2 · 642 2 · 602	$\begin{array}{c} 4.075\\ 3.838\\ 3.689\\ 3.963\\ 4.287\end{array}$
1858 1859 1860 1861 1862	$\begin{array}{r} 655,481\\ 689,881\\ 684,048\\ 696,406\\ 712,684\end{array}$	969,343 1,017,896 956,875 1,005,078 995,167	$\begin{array}{c} 1,364,\!905\\ 1,413,\!983\\ 1,342,\!992\\ 1.334,\!727\\ 1,358,\!116\end{array}$	$\begin{array}{r} 3 \cdot 366 \\ 3 \cdot 504 \\ 3 \cdot 437 \\ 3 \cdot 461 \\ 3 \cdot 504 \end{array}$	$\begin{array}{r} 2^{\circ}675\\ 2^{\circ}802\\ 2^{\circ}620\\ 2^{\circ}688\\ 2^{\circ}652\end{array}$	$\begin{array}{c} 4^{\circ}218\\ 4^{\circ}317\\ 4^{\circ}056\\ 3^{\circ}996\\ 4^{\circ}028\end{array}$
1863 1864 1865 1866	727,417740,275748,069753,870	1,012,794 1,005,880 , 1,006,753 994,288	$\begin{array}{c} 1,417,927\\ 1,426,906\\ 1,395,347\\ 1,414,671 \end{array}$	3.539 3.564 3.564 3.554	$\begin{array}{r} 2.690 \\ 2.662 \\ 2.654 \\ 2.612 \end{array}$	$\begin{array}{c} 4.162 \\ 4.143 \\ 4.015 \\ 4.034 \end{array}$
			De.	ATHS.		
1853 1854 1855 1856 1857	$\begin{array}{r} 421,097\\ 437,905\\ 425,703\\ 390,506\\ 419,815\end{array}$	795,607 992,779 937,942 837,082 858,785	$\begin{array}{c} 1,096,119\\ 1,177,888\\ 1,435,949\\ 1,002,068\\ 947,817\end{array}$	2·288 2·352 2·261 2·051 2·180	2.196 2.765 2.607 2.323 2.375	$\begin{array}{c} 3 \cdot 499 \\ 3 \cdot 740 \\ 4 \cdot 602 \\ 3 \cdot 189 \\ 2 \cdot 957 \end{array}$
1858 1859 1860 1861 1862	$\begin{array}{r} 449,656\\ 440,781\\ 422,721\\ 435,114\\ 436,566\end{array}$	874,186 979,333 781,635 866,597 812,978	$1,036,148 \\ 1,004,295 \\ 986,928 \\ 1,048,016 \\ 1,043,403$	$ \begin{array}{r} 2 \cdot 309 \\ 2 \cdot 239 \\ 2 \cdot 124 \\ 2 \cdot 163 \\ 2 \cdot 147 \end{array} $	$\begin{array}{r} 2^{\circ}412\\ 2^{\circ}696\\ 2^{\circ}140\\ 2^{\circ}318\\ -2^{\circ}167\end{array}$	$\begin{array}{c} 3 \cdot 202 \\ 3 \cdot 066 \\ 2 \cdot 981 \\ 3 \cdot 138 \\ 3 \cdot 094 \end{array}$
1862 1863 1864 1865	473,837 495,531 490,909	846,917 860,330 921,887‡	$1,065,374 \\1,101,266 \\1,053,106$	2·305 2·386 2·339	2°249 2°276 2°431‡	3·127 3·197 3·030

* The returns for France in the years 1861 to 1866 include the three newly annexed departments. The deaths of Frenchmen abroad—civil or military—are registered in the books of the commune in which was their last domicile. M. Legoyt has revised the population and the numbers of marriages, births, and deaths for the years 1853-65.

† The returns for Austria include Hungary, Croatia, Slavonia, and Transylvania, and exclude the States of Italy. For the years 1860-63, and 1866, the numbers for Hungary and its annexed territories have been estimated. ‡ In France in 1865 and 1866 cholera was prevalent."

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which is much higher than the English rate, 3.554, and conspicuously higher than the French, which is 2.612 per cent.

The birth-rates of Italy and Spain were respectively 3.862 and 3.703 per cent., both higher than the English rate, and show a superiority only too striking over that of France.

Austria which is low in its marriage-rate, and high in its birth-rate, showed a death-rate higher considerably than the rates of England and France; it was 3.232 per cent. against 2.326 the French death-rate in 1866, which latter was rather lower than the English. The death-rate of the Italian kingdom was 2.896; that of Spain 2.805, both contrasting unfavourably with those of England and France.

TABLE 28.-Italy. Population, Numbers, and Proportions per Cent. of Marriages, Births, and Deaths, exclusive of still-born, in each of the Years 1862 to 1866. (Supplied by DR. MAESTRI, Chief of the Statistical Department of Italy.)

]	NUMBERS.	Proportions per Cent. to Population.					
YEARS.	ESTIMATED POPULATION on 31st Dec.	MAR- RIAGES.	PERSONS MARRIED.	BIRTHS. Exclusive o	DEATHS. f Still-born.	MAR- RIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.
1862	21,880,745	176,897	353,794	814,102	662,260	*808	1.616	3.721	3.022
1863	22,047,034	179,136	358,272	862,390	686,777	•813	1.626	3.912	3.112
1864	22,291,180	177,382	354,764	845,454	659,063	•796	1.292	3.793	2.952
1865	22,483,663	205,651	411,302	865,387	672,897	•915	1.830	3.849	2.993
1866 (exclusive of Venetia.)	22,703,135	120,752*	241,504*	876,917	657,452	•532*	1.064*	3.862	2.896

NOTE.-The Returns of Births and Deaths in the year 1862 included the still-born, and as no separate return of them was made in that year the numbers returned as still-born in 1863 have been deducted from the Births and Deaths for the year 1862. * The new law which in 1866 removed civil registration from the parochial authorities to the communes, 'caused a marked decrease in the number of Marriages. Although the decrease is generally attributable to this cause it should be stated that a large number of Marriages were contracted in the previous year, in order to evade the law which was about to come into operation. On the other hand it should not be forgotten that in 1866 many of the Marriages continued to be celebrated at church without being registered, and are consequently not taken into account in the statistical department.

TABLE 29.-Spain. Population, Numbers and Proportions per Cent. of Births and Deaths in each of the Years 1861 to 1866.

(Supplied by SIGNOR DON JOSÉ EMILIO DE SANTOS, Director de Trabajos de Oficina y Secretario General, Madrid.)

edara	10175	NUMBERS.	PROPORTIONS PER CENT. TO POPULATION.				
YEARS.	ESTIMATED POPULATION.	BIRTHS.	DEATHS.	BIRTHS.	DEATHS.		
1861	15,857,359	601,609	417,786	8'794	2.635		
1862	16,033,758	607,062	430,663	3.786	2.686		
1863	16,170,238	598,141	461,661	3.699	2.855		
1864	16,292,203	621,451	499,486	3.814	3.066		
1865	16,368,536	614,913	538,580	3*757	3.290		
1866	16,516,949	611,697	463,284	3.703	2.805		

NOTE.-The Population enumerated at the Census of 1860 was 15,673,536. The estimated Population for the Years 1861-6 has been deduced from the Excess of Births over Deaths in each Year. This method of estimating the population is sanctioned by the Junta General de Estadistica.

British Army.

4470 officers, 79,644 men, of whom there were in England and the Chennel Jelands 2001 office TMRA HEITIRE BHT De remaining part of the

By returns with which I have been favoured by His Royal Highness the General Commanding-in-Chief, it is shown that the strength of the Army at home and abroad in 1866, was 201,641 officers and men. At home there were, on an average, in cavalry, infantry, artillery, engineers

TABLE 30 .- Annual Rate of Mortality per Cent. in Great Britain, England. France, Austria, and in Italy, including the Deaths of Soldiers at Home and Abroad, 1857 to 1866.

test	YEARS.	GREAT BRITAIN.	ENGLAND and WALES.	FRANCE.	AUSTRIA.	ITALY.
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1857	2.169	2.184	2.375	2.949	
128	1858	2.297	2.323	2.412	3.194	
172	1859	2:218	2.244	2.696	3.068	
1	1860	2.142	2.127	2.140	2.982	100 000000
	1861	2.147	2.164	2.318	3.151	
in the	1862	2.120	2.146	2.167	3.028	3.027
Lean	1863	2.303	2:303	2.249	3.101	3.112
	1864	2.383	2.384	2.276	3.166	2.952
	1865	2*327	2.338	2.431	2*998	2*993
Star and	1866	2.345	2.358	2.326	3.207	2.896

TABLE 31.-Average Strength of the Army at Home, in the Year 1866. (Furnished to the Registrar General by direction of H.R.H. the General Commanding in Chief.)

-	TAIN PRO	all.	100	UNITED	KINGDOM.	A	D, WALES, ; ND L ISLANDS.		FLAND.	IRF	LAND.
Contant ability	the states		A pas suc	Officers.	Non-com- missioned Officers and Men.	Officers.	Non-com- missioned Officers and Men.	Officers.	Non-com- missioned Officers and Men,	Officers.	Non-com- missioned Officers and Men.
1 11/10/11	Cavalry	10/1	1.08	776	12,165	489	7,492	34	553	253	4,120
	Infantry	-	-	2,766	51,179	1,711	32,018	127	2,199	- 928	16,962
	Artillery	1	600,1	617	13,788	543	11,699	10	352	64	1,737
	Engineers	1	887	311	2,522	278	2,247	9	125	24	150
	Total	-	13_	4,470	79,654	3,021	53,456	180	3,229	1,269	22,969
	ar 855		1.85.1	Bri	tish Army a	hund	1866 -	-	ers and Men. 84,124 117,517		1 117

Total

Cent. of the Army in the United Kingdom in 1866.

	1 (CB	AVERAGE		Dr	ATHS.		L RATE OF Y PER CENT.
		Officers.	Non- commissioned Officers and Men.	Officers.'	Non- commissioned Officers and Men.	Officers.	Non- commissioned Officers and Men.
UNITED KINGDOM -	-	4,470	79,654	49	1,007	1.096	1.264
Great Britain - Ireland		3,201 1,269	56,685 22,969	34 15	768 239	1.062 1.182	1·355 1·041

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TABLE 32 .- Average Strength, Deaths, and Annual Rate of Mortality per

- 201,641

British Army.

4470 officers, 79,654 men, of whom there were in England and the Channel Islands 3021 officers, 53,456 men. The remaining part of the home strength consisted of 27,647 officers and men in Scotland and

TABLE 33. - Return showing the Average Strength of the British Army Abroad in each of the Years 1863-1866. (Furnished to the Registrar General by the Adjutant-General by direction of H.R.H. the General Commanding in Chief.)

	1	863	5. 55 J	864	1	.865	1866			
	Officers.	Non- commissioned Officers and Men.								
Cavalry	366	6,127	386	6,207	. 393	6,083	413	6,283		
Infantry	4,383	97,597	4,572	98,865	4,409	92,672	4,192	85,882		
Artillery	1,165	19,739	818	19,143	965	17,519	1,216	17,347		
Engineers -	329	2,010	391	1,825	388	1,775	431	1,753		
Total -	6,243	125,473	6,167	126,040	6,155	118,049	6,252	111,265		

TABLE 34. - Number of Deaths in the British Army during each of the Years 1863-1866. (Furnished to the Registrar General by the Adjutant-General by direction of H.R.H. the General Commanding in Chief.)

		in an	18	863	05/14	d L q1	2.0	Mist	1	864	993	11-205		(fr) [7]	18	365	1 24	र लो	boil	giarda	18	66		
		REAT	IRE	LAND.	Ав	ROAD.		REAT TAIN.	IRE	LAND.	Ав	ROAD.	GF BRI	EAT TAIN.	IRE	LAND.	Аві	ROAD.	Gr Bri	EAT TAIN.	IREI	LAND.	ABR	CAD.
CORPS.	Officers.	Non-commissioned Officers and Men.																						
Cavalry and Infantry -	}17	556	4	199	83	1,688	17	613	3	192	92	1,920	21	529	2	191	75	1,990	17	576	13	218	67	1,381
Artillery-	4	147	1	9	14	402	9	157	-	11	12	416	12	162	1	18	17	468	13	181	2	20	9	316
Engineers	6	11	-	1	2	20	1	13	-	1	3	50	1	22	-	17.5	5	23	4	11	-	1	3	26
Total -	27	714	5	209	99	2,110	27	783	3	204	107	2,386	34	713	3	209	97	2,481	34	768	15	239	79	1,723

TABLE 35. - Annual Rate of Mortality per Cent. amongst the Officers and NON-COMMISSIONED OFFICERS and MEN in the Army Abroad, in each of the Years 1858-66. (Deduced from the Strength and Deaths as given in the two preceding Tables.)

YEARS.	Officers.	Non- commissioned Officers and Men.
1858	3.213	6.701
1859	2.111	3.396
1860	1.639	2.603
1861	1.574	2.567
1862	1.346	1.981
1863	1.286	1.682
1864	1.735	1.893
1865	1.226	2.102
1866	1.264	1.249

British Army.

Ireland, of whom the large proportion of 24,238 was stationed in the latter country. Within the term "men" are also classed non-commissioned officers.

The proportions of military force in the three Kingdoms, to civil population were: England and the Channel Islands 26; Scotland 11; Ireland 43 to 10,000.

In the United Kingdom 49 officers and 1007 men died in 1866. The mortality of officers was 1.096 per cent.; that of men 1.264. The mortality of officers was less in Great Britain than in Ireland; but amongst the men it was higher in Great Britain than in the sister island.

Abroad there were 6252 officers and 111,265 men. The number of soldiers was less by about 15,000 than the number abroad in 1864, and less by about 7000 than the number in 1865.

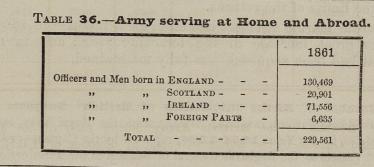


TABLE 37 .- Deaths of Officers and Men in the Army Abroad, and Estimated Numbers belonging to Great Britain and to England and Wales, in each of the Years 1858-1866.

1	YEARS.	DEATHS OF OFFICERS AND	Estimated Nur belong	
	T DIARD.	MEN in the ARMY ABROAD.	GREAT BRITAIN.	ENGLAND AND WALES.
	1	2	3	4
	1858	7,363	4,275	3,486
	1859	4,150	2,409	1,965
	1860	3,293	1,912	1,559
	1861	3,097	2,042	1,760
	1862	2,544	1,677	1,445
	1863	2,209	1,457	1,255
	1864	2,493	1,644	1,417
and a second	1865	2,578	1,700	1,465
	1866	1,802	1,188	1,024

The number of Deaths in the cols. 3 and 4 were estimated on the assumption that the soldiers abroad belonged to the different parts of the British Empire in the proportions indicated in the Table 36.

TABLE 38.-Austria. Annual Rate of in each of the Years

YEARS.	ESTIMATED STRENGTH.	DEATHS.	ANNUAL RAT of MORTALIT per Cent.
1857	379,374	8,646	2:279
1858	347,696	8,577	2.467
1859	527,772	16,638	3.162
1860	384,302	11,903	3.097
1861	459,300	8,763	1.908
1862	400,895	6,800	1.696
1863	467,154	5,811	1.244
1864	559,599	6,928	1.238
1865	552,148	5,261	.953
1866	646,636	11,942	1.846

XXIX.

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		1861
	-	130,469
	-	- 20,901
	-	71,556
ARTS	-	6,635
-	-	229,561

Mortality	per	Cent.	in	the	Army	
s 1857-66.						

C

Births and Deaths of British Subjects at Sea. XXX

Seventy-nine officers and 1723 men died abroad in 1866. The mortality was remarkably low; that of officers was 1.264 per cent. against 1.576 in the previous year; of men 1.549 against 2.102 in 1865. This satis-factory improvement in the health of the army abroad is apparent, also, when the comparison is made with earlier years; and it furnishes interesting matter of inquiry in regard to the circumstances from which it sprung. The mortality of the Austrian army was 1.846 per cent. in 1866, the year when disaster befell the arms of that powerful empire.

BIRTHS AND DEATHS OF BRITISH SUBJECTS AT SEA.

The number of seamen at sea in merchant ships in 1866 was 196,371; and of that number 4866 died in the same year. These figures represent a mortality of 2.58 per cent., which is higher than that of any previous year within the limits of the returns.

The mercantile marine strength had an evident increase in 1863; there was a further great increase in the following year; and in 1866 the accession, that had been acquired, was fully maintained.

TABLE 39.-Number of Births and Deaths of British* Subjects at Sea. exclusive of Soldiers, Marines, invalided Seamen from the Royal Navy, and Seamen on Ships' Articles, in the Years 1856-1866, reported by the Captains or Commanding Officers of Vessels to the Registrar General of Seamen at the Termination of their respective Voyages in Ports of the United Kingdom. - (Furnished to the Registrar General by the Registrar General of Seamen.)

-			MALES.	FEMALES.	TOTAL.
	(1856 (imperfect)	-	71	66	137
	1857	-	168	142	310
	1858	-	132	117	249
	1859	17 - 17 A	135	132	267
	1860		136	114	250
BIRTHS at Sea	- { 1861	-	110	108	218
	1862	-	146	148	294
	1863	-	159	185	344
	1864		203	177	380
	1865	-	210	202	412
	1866	-	213	202	415
	Total	-	1,683	1,593	3,276
	[1856 (imperfect)	-	121	78	199
	1857		238	140	378
and the second second	1858		253	182	435
	1859		524	303	827
	1860	-	241	156	397
†DEATHS at Sea	- { 1861	-	213	121	334
The set in the man	1862	ANCH I	221	148	369
	1863		347	231	578
	1864	-	379	210	589
	1865	-	483	315	798
	1866	-	690	363	1,053
	Total – –	-	3,710	2,247	5,957

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

+ The deaths of soldiers, marines, and seamen from the Royal Navy, who were passengers in British Merchant Ships, were 33 in 1856, 59 in 1857, 156 in 1858, 196 in 1859, 196 in 1860, 69 in 1861, 122 in 1862, 116 in 1863, 96 in 1864, 140 in 1865, and 184 in 1866. The number is 1367 in eleven years, which, if added to the 5,957 above, makes 7,324, the total number of deaths of British subjects at sea in 1856-65, exclusive of those of merchant seamen.

Births and Deaths of British Subjects at Sea.

The number of births at sea was 415 of which 213 were of boys, 202 of girls. The deaths at sea of British subjects, exclusive of soldiers and sailors, were 1053, of which 690 were those of males, 363 those of females.

ABSTRACT of a RETURN, which was ordered by the HOUSE OF COMMONS, 2d April 1867, of the Number, Ages, Ratings, and Causes of Death of SEAMEN, reported to the REGISTRAR GENERAL of Seamen as having died in the BRITISH MERCHANT SERVICE in the year 1866.

$\begin{array}{c ccccccccccccccccccccccccccccccccccc$			(CAUSES.				
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	HERE.	Deaths	. COMA RAID		I	Deaths	. Deaths.	
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	Smallpox	17	Apoplexy -	and the second	-	57		
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		352	Heart disea	nse -	-	.70		
Diarrhea - 43 Pneumonia - 15 Fall from aloft - 131 Cholera 433 Asthma 9 Tetanus 7 Ague 5 Lung disease - 10 Drowning by accident 1219 Yellow fever - 146 Enteritis 12 Drowning by wreck - 1171 Rheumatism - 10 Liver disease - 21 Sunstroke - 15 Syphilis 18 Debility 54 Murder 8 Scurvy 25 Delirium Tremens - 9 Intemperance - 7 Cold - $\begin{cases} Exposure - 6\\ Frost - 5\\ Vaguely re- Urned as Sudden 5\\ Sudden 5\\ Sudden 5\\ Causes not specified causes 94 Sudden 5 Midshipmen - 4 Stewards - 92 Lascars - 2 Quartermasters - 3 Cooks 108 Stowaways - 9 Boatswains - 103 Carpenters - 134 Unknown - 1493 Able seamen - 1652 Sailmakers - 30 Ordinary seamen - 427 Minor capacities - 118 Apprentices and boys 311 Engineers - 31 Ages.Mates 20 years - 74120 - 30 years - 64041 - 50 years - 64041 - 50 years - 59Mates - 59Mates - 64041 - 50 years - 59Mates - 64041 - 50 years - 59Mates - 7 - 125Mates - 7 - 125Mates - 640Mates - 7 - 125Mates - 7 - 134Mates - 7 - 1205Mates - 105 -$			Bronchitis		-	10		
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$			Pneumonia		-	15		
Yellow fever 146 Enteritis 12 Drowning by wreck - 1171 Rheumatism - 10 Liver disease 21 Sunstroke 15 Syphilis 18 Debility 54 Murder 8 Scurvy 25 Delirium Tremens - 9 Delirium Tremens - 9 Dropsy 21 Phthisis 163 $Frost - 5$ Waguely re- turned as "cold" - 7 Causes not specified causes 94 Sudden 5 Mates 249 Surgeons 12 Firemen 88 Midshipmen - 4 Stewards 92 Lascars 2 Quartermasters - 3 Cooks 108 Stowaways - 9 Boatswains - 103 Carpenters - 134 Unknown - 1493 Able seamen - 1652 Sailmakers - 30 Ordinary seamen - 427 Minor capacities - 118 TotaL - 4866 Apprentices and boys 311 Engineers - 31 Ages. Under 20 years - 640 41-50 years - 255 TotaL - 4866 51-60 years - 59 $TotaL - 4866$	Cholera	433		att de s alente	-	9		
Rheumatism-10Liver disease-21Sunstroke-15Syphilis18Debility54Murder8Scurvy25 $\begin{bmatrix} Exposure - 6 \\ Frost - 5 \end{bmatrix}$ Suicide $\begin{cases} Drowning - 7 \\ Otherwise - 5 \end{bmatrix}$ Intemperance-7Cold- $\begin{bmatrix} Frost - 5 \\ Vaguely re - 5 \end{bmatrix}$ Other specified causes94Dropsy21 $\begin{bmatrix} Wreed as \\ Waden 5 \end{bmatrix}$ Sudden 55Phthisis163 $\begin{bmatrix} Wreed as \\ Waden 5 \end{bmatrix}$ Sudden 5Mates249Surgeons 12Firemen 88Midshipmen-4Stewards 92Lascars 222Quartermasters -3Cooks 108Stowaways 99Boatswains-1052Sailmakers - 3070Able seamen-1652Sailmakers - 3070Ordinary seamen-427Minor capacities118TorAL - 4866Apprentices and boys311Engineers-31Imknown 120531-40 years640120531-40 years-255TorAL - 4866Imagen51-60 years-59Imagen1205	Ague	5	Lung disea	ise -	-	10		
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Yellow fever	146			-	12		
Symms 25 Scurvy 25 Delirium Tremens - 9 Intemperance 7 Dropsy 21 Phthisis 163 Mates 249 Surgeons 12 Mates 249 Surgeons 12 Mates 249 Surgeons 12 Firemen 88 Midshipmen 4 Stewards 92 Lascars 2 Quartermasters - 3 Cooks 108 Stowaways - 9 Boatswains - 103 Carpenters - 134 Unknown - 1493 Able seamen - 1652 Sailmakers 31 Mates 255 Suicide $\begin{cases} Drowning - 7 Other specified causes 94 Sudden 5 Yaguely re- turned as "cold" - 7 Causes not specified - 399 RATING. Mates 249 Surgeons 12 Firemen 88 Stowaways - 9 Boatswains - 103 Carpenters - 134 Unknown - 1493 Able seamen - 1652 Sailmakers 31 Mates 4866 Si - 60 years 59 Mates 255 Total - 4866 Si - 60 years - 59 Mates 255 Total - 4866 Suicide \begin{cases} Drowning - 7 Other specified causes 94 Suicide \begin{cases} Drowning - 7 Other specified causes 94 Suiden 5 Suicide \begin{cases} Drowning - 7 Other specified causes 94 Suiden 5 Suide - 59 Mates 5 Suicide \begin{cases} Drowning - 7 Other specified causes 94 Suiden 5 Suicide \begin{cases} Drowning - 7 Other specified causes 94 Suiden 5 Suide \begin{cases} Drowning - 7 Other specified causes 94 Suiden 88 Suide 88 Suiden 88 Suide 28 Suide 88 Suide$				se -	-	21		į
Delirium Tremens - 9 Intemperance - 7 Dropsy 21 Phthisis 163 Mates 249 Mates 249 Mates 249 Mates 249 Surgeons 12 Mates 249 Mates 22 Quartermasters 3 Cooks 108 Stowaways 9 Boatswains - 103 Carpenters 134 Unknown 1493 Able seamen - 1652 Sailmakers 30 Ordinary seamen - 427 Minor capacities - 118 Total - 4866 Mates 255 Total - 4866 51-60 years - 59 Mates 255 Total - 4866 Mates 4866 Mates	Syphilis	18			-		and the second	•
Defirition Tremens - 9 Intemperance - 7 Cold - Vaguely re- Dropsy 21 Phthisis 163 Mates 249 Mates 249 Surgeons 12 Mates 249 Surgeons 12 Firemen 88 Midshipmen - 4 Stewards 92 Lascars 2 Quartermasters - 3 Cooks 108 Stowaways - 9 Boatswains - 103 Carpenters - 134 Unknown - 1493 Able seamen - 1652 Sailmakers - 30 Ordinary seamen - 427 Minor capacities - 118 Total - 4866 Apprentices and boys 311 Engineers - 31 Mates 255 31-40 years - 640 41-50 years - 59 Minor capacity - 134 Unknown 1205 Total - 4866 51-60 years - 59 Minor capacity 10 Mates 249 Surgeons 12 Sudden 5 Other specified causes 94 Sudden 5 Other specified - 399 Other specified - 399 Nates 229 Lascars 2 Quartermasters 30 Stowaways - 9 Lascars 2 Stowaways - 9 Mates 1652 Sailmakers 30 Mates 1205 Total - 4866 Stowaways 9 Mates 255 Total - 4866 Stowaways 9 Mates 255 Total - 4866 Stowaways 9 Mates 255 Total - 4866 Stowaways 9 Mates 255 Total 4866 Stowaways 9 Mates 255 Total 4866 Stowaways 9 Mates 255 Total 4866 Stowaways 9 Mates 255 Total 4866 Stowaways 12 Mates 20 Mates - 20 Mates 20 Ma		25			-			1
$\begin{array}{cccccccccccccccccccccccccccccccccccc$		• 9			-	5	Utiter wise -	1000
Dropsy - - 163 ("cold" - 7 Causes not specified - 399 RATING. Mates - - 249 Surgeons - 12 Firemen - 88 Midshipmen - - 4 Stewards - 92 Lascars 2 Quartermasters 3 Cooks - - 108 Stowaways - 9 Boatswains - 103 Carpenters - - 134 Unknown - 1493 Able seamen - 1652 Sailmakers - - 30 Ordinary seamen - 427 Minor capacities - 118 TotAL - 4866 Apprentices and boys 311 Engineers - 31 - - 4866 Mates - - 1955 Unknown - - 1205 - - 4866 120-30 years - 255 TotAL - 4866 - - 4866 - - <td< td=""><td></td><td>. 7</td><td>Cold -</td><td>0 .</td><td></td><td></td><td>C 11</td><td></td></td<>		. 7	Cold -	0 .			C 11	
RATING. Mates - - 249 Surgeons - - 12 Firemen - - 88 Midshipmen - - 4 Stewards - - 92 Lascars - - 2 Quartermasters - 3 Cooks - - 108 Stowaways - 9 Boatswains - 103 Carpenters - - 134 Unknown - 1493 Able seamen - 1652 Sailmakers - - 30 Ordinary seamen - 427 Minor capacities - 118 TotAL - 4866 Apprentices and boys 311 Engineers - 31 - - 4866 Mates - - 1955 Unknown - 1205 - 12 31-40 years - 640 - - 4866 - - 4866 51-60 years - 59 - - <t< td=""><td>Dropsy</td><td>21</td><td>Section 1</td><td></td><td></td><td></td><td></td><td></td></t<>	Dropsy	21	Section 1					
Mates - - 249 Surgeons - - 12 Firemen - - 88 Midshipmen - - 4 Stewards - 92 Lascars - 2 Quartermasters - 3 Cooks - - 108 Stowaways - 9 Boatswains - 103 Carpenters - 134 Unknown - 1493 Able seamen - 1652 Sailmakers - - 30 Ordinary seamen - 427 Minor capacities - 118 TotAL - 4866 Apprentices and boys 311 Engineers - 31 - - 4866 20-30 years - 1955 Unknown - - 1205 31-40 years - 640 - - 4866 51-60 years - 59 - - - 4866	Phthisis	163	L	" cold "	' -	7	Causes not specified - 399)
Mates $ 249$ Surgeons $ 92$ Lascars $ 22$ Midshipmen $ 4$ Stewards $ 92$ Lascars $ 22$ Quartermasters $ 3$ Cooks $ 108$ Stowaways $ 99$ Boatswains $ 103$ Carpenters $ 134$ Unknown $ 1493$ Able seamen $ 1652$ Sailmakers $ 30$ $ 4866$ Ordinary seamen $ 427$ Minor capacities $ 118$ ToTAL $ 4866$ Apprentices and boys 311 Engineers $ 31$ $ -$ Mdess $ 31$ $ -$			it in observe	RATING.				
Midshipmen - - 4 Stewards - - 92 Lascars - - 2 Quartermasters - 3 Cooks - - 108 Stowaways - - 2 Boatswains - 103 Carpenters - - 108 Stowaways - 9 Boatswains - 103 Carpenters - - 134 Unknown - - 1493 Able seamen - 1652 Sailmakers - - 30 - - 1493 Able seamen - 1652 Sailmakers - - 30 - - 1493 Ordinary seamen - 427 Minor capacities - 118 TotAL - 4866 Apprentices and boys 311 Engineers - 31 - - 4866 20 - 30 years - 1955 Unknown - 1205 - 11 20 - 30 years - 255 TotA	Mates	240	Surgeons	Line Like	-	12	Firemen 88	3
Quartermasters - 3 Cooks - - 108 Stowaways - 9 Boatswains - 103 Carpenters - 134 Unknown - - 1493 Able seamen - 1652 Sailmakers - - 30 - - 1493 Able seamen - 1652 Sailmakers - - 30 - - 1493 Ordinary seamen - 427 Minor capacities - 118 TotAL - 4866 Apprentices and boys 311 Engineers - - 31 - - 4866 Moder 20 years - 741 Over 60 years - - 1205 31-40 years - 640 - - 1205 - - 4866 51-60 years - 255 TotAL - 4866 - - - -			0		-	92	Lascars	2
Boatswains - 103 Carpenters - 134 Unknown - - 1493 Able seamen - 1652 Sailmakers - - 30 - - 1493 Ordinary seamen - 427 Minor capacities - 118 TOTAL - 4866 Apprentices and boys 311 Engineers - - 31 - - 4866 Marco - 1955 Unknown - - 1205 31-40 years - 640 - - 4866 41-50 years - 255 TOTAL - 4866	Quartermasters -				-		Stowaways	9
Able seamen - 1652 Sailmakers - 30 Ordinary seamen - 427 Minor capacities - 118 TOTAL - 4866 Apprentices and boys 311 Engineers - - 31 AGES. Under 20 years - 741 Over 60 years - 11 $20 - 30$ years - 1955 Unknown - - 1205 $31 - 40$ years - 640 - - 4866 $41 - 50$ years - 255 TOTAL - 4866		A CARL AND AND A CARL	Carpenter	5 -	-	134	Unknown 149	3
Ordinary seamen - 427 Minor capacities - 118 TOTAL - 4866 Apprentices and boys 311 Engineers - 31 - - 4866 Mages. AGES. Over 60 years - 11 - - 11 $20-30$ years - 1955 Unknown - - 1205 $31-40$ years - 640 - - 4866 $41-50$ years - 255 TOTAL - 4866 $51-60$ years - 59 - - -			Sailmaker	s –	-	30	and the second of the second	-
Apprentices and boys 311 Engineers - 31			Minor cap	acities	-	118	TOTAL 486	6
AGES. Under 20 years - 741 Over 60 years - 11 $20 - 30$ years - 1955 Unknown - - 1205 $31 - 40$ years - 640 - - 1866 $41 - 50$ years - 255 TOTAL - 4866 $51 - 60$ years - 59 - - -					3	31	a and a mandal first and a straining the	=
Under 20 years - 741 Over 60 years - 11 20-30 years - - 1955 Unknown - - 1205 31-40 years - - 640 - - 1205 41-50 years - - 255 TOTAL - - 4866 51-60 years - - 59 -		nobilite	a ofplat	a pointa				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$								
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	Under 20) years	- 74.					
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	20-30 y	ears	195	,	Unk	nown	1205	
$\frac{41 - 50 \text{ years}}{51 - 60 \text{ years}} = -59$			640	Dia Germani (m	-966	
51-60 years 59	41 - 50 y	ears	25	5 of soder		To	OTAL 4800	
	51-60 y	rears	59)			and the second	
			THE REAL OF	A Line Color and	1	-		-

TABLE 40 .- Mortality of Merchant Seamen at Sea, in the 15 Years 1852-66.*

YEARS.	STRENGTH.	DEATHS.	ANNUAL RATE OF MORTALITY.		
And Andrews	ALL AND A	handler (To 100 living.		
1852 1853 1854 1855 1856 1857 1856 1857 1868 1869 1860 1861 1862 1863 1864 1864 1865	$\begin{array}{c} 159,563\\ 172,525\\ 162,416\\ 168,537\\ 173,918\\ 176,387\\ 177,892\\ 177,892\\ 171,592\\ 171,592\\ 171,957\\ 173,863\\ 184,727\\ 195,756\\ 197,643\\ 196,371\\ \end{array}$	$\begin{array}{c} 2,205\\ 3,276\\ 2,772\\ 3,318\\ 3,549\\ 3,444\\ 3,486\\ 3,486\\ 3,760\\ 3,760\\ 3,580\\ 3,580\\ 3,580\\ 3,580\\ 3,893\\ 4,600\\ 4,866\end{array}$	$\begin{array}{c c} 1^{\cdot}38 \\ 1^{\cdot}90 \\ 1^{\cdot}71 \\ 1^{\cdot}97 \\ 2^{\cdot}04 \\ 1^{\cdot}95 \\ 1^{\cdot}96 \\ 1^{\cdot}99 \\ 2^{\cdot}19 \\ 2^{\cdot}08 \\ 2^{\cdot}08 \\ 2^{\cdot}08 \\ 1^{\cdot}83 \\ 1^{\cdot}99 \\ 2^{\cdot}33 \\ 2^{\cdot}58 \end{array}$		
In the 15 years 1852-66	2,655,593	53,179	2.00		

* Deduced from a return of the number of accounts of wages and effects of seamen (exclusive of masters) dying before the termination of the voyage, received by the Registrar General of Seamen. This return does not include seamen dying ashore in foreign parts, whose wages and effects are delivered to the consuls or officers of the hospitals to which such men are sent; accounts of their effects are sent direct to the Board of Trade. The seamen dying ashore in foreign parts, whose wages and effects are sent direct to the Board at a seaman dies on the passage from Sunderland to Calcutta, his death is reported at Calcutta, and his wages. And effects are accounted for and transmitted home, if the vessel is not to return direct to the United Kingdom. But if a passenger dies on board a ship which does not return to a British port immediately, but trades for a but if a passenger dies on board a ship which does not return to a British port immediately. But trades for a discut if a passenger dies on board a ship which does not return to a British port immediately. But trades for a but if a passenger dies on board a ship which does not return to a British port immediately. But trades for a discut is included in the companying tables the births and deaths are classed according to the years in which they avoyage, it is included in the column of Deaths. When a ship is lost with all persons on board. When a ship is lost with all persons on board. C 2

MARINE REGISTER BOOK.

It is required by the Registration Act that captains or commanding officers of British vessels should transmit to me the particulars of all births and deaths of English subjects that occur at sea. In 1866 only 74 births and 184 deaths were reported for entry in the Marine Register Book, which is kept at this office.

NAMES ON THE REGISTERS, AND SEARCHES.

At the end of 1866 the number of names inscribed in the registers kept under the Registration Act, 6 & 7 Will. 4. c. 86. had reached 38,833,752, the addition for the year having been 1,630,111 names. An alphabetical Index referring to the names entered in the registers is prepared for each of the four quarters of the year as soon as practicable after the certified copies are received at this central office and subjected to a strict examination, with a view of detecting errors and informalities admitting of correction or explanation. By means of the general Indexes the entry of any birth, death, or marriage which has been registered since 1st July 1837, can generally, on a mere mention of the name, without a precise statement of the date or locality, be very soon discovered, and a certificate given.

The rapidly increasing bulk of the Indexes, to which more than 1,600,000 names are annually added, the limited space in the present Public Search Room of this office, and other considerations connected with the convenience of the public in making searches, have led to the adoption of an important change in the manner in which part of this great national work is carried out. It appeared to me highly desirable that the Indexes, instead of being prepared and exhibited to the public in manuscript, should be printed. Printing is more accurate than copying by hand; printed Indexes too occupy much less space; while additional copies can be

TABLE 41.—Aggregate Number of Names on the Registers at the End of each Year 1837-66; also the Number of Searches for Registers at the Central Office (exclusive of Searches in Non-parochial Registers).

		- Aggrega	TE NUMBER	and the second second	NUMBER OF SEARCHES
YEARS.	OF Persons MARRIED.	OF BIRTHS.	OF DEATHS.	OF NAMES REGISTERED.	for REGISTERS at the CENTRAL OFFICE.
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	116,958 353,092 599,424	164,116 627,903 1,120,477	$ \begin{array}{r} 148,701 \\ 491,461 \\ 830,445 \end{array} $	429,775 1,472,456 2,550,346	Not
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	844,754 1,089,746 1,327,396 1,575,032 1,839,530	$\begin{array}{c} 1,622,780\\ 2,134,938\\ 2,652,677\\ 3,180,002\\ 3,720,765\end{array}$	$1,190,132 \\ 1,533,979 \\ 1,883,498 \\ 2.229,943 \\ 2,586,876$	3,657,666 4,758,663 5,863,571 6,984,977 8,147,171	620 705
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2,127,016 2,418,344 2,690,034 2,966,494 3,250,260	$\begin{array}{c} 4,264,286\\ 4,836,911\\ 5,376,876\\ 5,939,935\\ 6,518,094\end{array}$	$\begin{array}{c} 2,936,242\\ 3,326,557\\ 3,749,861\\ 4,149,694\\ 4,590,533\end{array}$	9,327,544 10,581,812 11,816,771 13,056,123 14,358,887	744 881 941 1,030 1,162
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	3,555,748 3,864,160 4,181,724 4,510,764 4,830,218	$\begin{array}{c} 7,111,516\\ 7,727,381\\ 8,351,393\\ 8,963,784\\ 9,598,189\end{array}$	$\begin{array}{r} 4,959,528\\ 5,354,924\\ 5,762,059\\ 6,183,156\\ 6,621,061\end{array}$	$\begin{array}{c} 15,626,792\\ 16,946,465\\ 18,295,176\\ 19,657,704\\ 21,049,468 \end{array}$	$1,228 \\ 1,442 \\ 1,658 \\ 1,676 \\ 2,340$
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	5,134,444 5,453,118 5,771,312 6,083,452 6,418,898	$\begin{array}{c c} 10,233,232\\ 10,890,685\\ 11,553,756\\ 12,209,237\\ 12,899,118\\ \end{array}$	7,046,764 7,437,270 7,857,085 8,306,741 8,747,522	$\begin{array}{c} 22,414,440\\ 23,781,073\\ 25,182,153\\ 26,599,430\\ 28,065,538\end{array}$	2,492 2,853 2,965 4,063 5,052
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	6,759,210 7,086,622 7,414,682 7,761,702 8,122,476	$\begin{array}{c} 13,\!583,\!166\\ 14,\!279,\!572\\ 14,\!992,\!256\\ 15,\!719,\!673\\ 16,\!459,\!948 \end{array}$	$\begin{array}{r} 9,170,243\\ 9,605,357\\ 10,041,923\\ 10,515,760\\ 11,011,291 \end{array}$	$\begin{array}{c} 29,512,619\\ 30,971,551\\ 32,448,861\\ 33,997,135\\ 35,593,715\end{array}$	5,636 6,133 7,297 7,715 8,346
1865 1866	8,493,424 8,868,976	17,208,017 17,961,887	11,502,200 12,002,889	37,203,641 38,833,752	9,016 10,970

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

obtained at a trifling cost; moreover, printed columns of names can be referred to with greater ease than manuscript. With the assistance of the Comptroller of Her Majesty's Stationery Office, I have been enabled to carry out the arrangements for effecting this change; and the quarterly Indexes from the commencement of 1866 have been printed, with the utmost regard to accuracy and punctuality, by Messrs. Eyre and Spottiswoode, six copies being now produced at little more than the former cost of one. I may add, that the persons who make use of the volumes for searches, constantly express their satisfaction with the new printed Indexes.

The number of searches for registers at the CENTRAL OFFICE continued to increase during 1866. In the indexes prepared under the Registration Act 10,970 searches were made, and 9145 certificates were given; the searches for non-parochial registers were 1153, and the certificates granted 862. The total amount received in fees for searches and certificates, and paid into the Exchequer was 1,860*l*. 15*s*. 6*d*. The numerous searches for registers of births for purposes connected with the Factory Acts being made without charge are not included in the above.

The following are the registers and records deposited in my custody at this office, now exhibited to the public on payment of the statutory fees, viz., 1s. for search, and 2s. 6d. for certificate or certified extract :--

- 1. REGISTERS OF BIRTHS AND DEATHS registered in England and Wales on and after 1st July 1837.
- 2. REGISTERS OF MARRIAGES registered in England and Wales on and after 1st July 1837, after solemnization in Churches of the Established Church, in registered Roman Catholic and Dissenting Places of Worship, and in District Register Offices; also of Quakers and of Jews.
- 3. REGISTERS OF BIRTHS AND DEATHS AT SEA registered since 1st July 1837.
- 4. NON-PAROCHIAL REGISTERS OF BAPTISMS OF Births, BURIALS OF Deaths, and (in a few instances) of MARRIAGES, being the Registers or Records kept by various bodies and congregations of Nonconformists prior to the general system of registration commenced in 1837; —comprising amongst others the Registers kept at Dr. Williams' Library from 1742; Bunhill Fields Burial Ground from 1713; the registers of French Protestant and other Foreign Churches in England; the registers of the Society of Friends, &c.
- 5. REGISTERS OF MARRIAGES OF British Subjects in FOREIGN COUNTRIES, pursuant to the Act 12 & 13 Vict. c. 68. [The Marriages under this Act are those solemnized since July 1849, at British Consulates abroad.]
- 6. REGISTERS OF MARRIAGES IN INDIA, pursuant to 14 & 15 Vict. c. 40. [The Marriages under this Act are those solemnized since 1st January 1852, in the presence of Registrars in India; the Marriages by Clergymen of the Church of England are not included.]
- 7. REGISTER OF BUILDINGS CERTIFIED to the Registrar General AS PLACES OF RELIGIOUS WORSHIP (18 & 19 Vict. c. 81.)
- 8. RETURNS OF PLACES OF WORSHIP certified to Diocesan Registrars, Clerks of the Peace, &c. prior to 1st July 1852 (19 & 20 Vict. c. 119. s. 24.)

9. FLEET and MAY FAIR REGISTERS OF MARRIAGES.

10. RECISTERS OF BIRTHS AND DEATHS of British Subjects received from Her Majesty's Consuls and from other authorities in Foreign Countries.

For Certificates required for purposes connected with Government Insurances and Annuities, or for production to the Civil Service Commissioners, personal application is dispensed with.

The Report on the Causes of Death in England, addressed to me by Dr. Farr, will be found in the Appendix.

I have the honour to be,

Sir,

Your faithful servant, GEORGE GRAHAM, *Registrar-General.*

Summary of the Quarterly Reports, 1866.

the utmost regard to socuracy and inasola differ, by Mesore,

First Quarter.-January, February, March.

The United Kingdom. — The Registers of the United Kingdom show that 110,440 persons married in the quarter that ended 31st March; and that the births of 265,717 children, and the deaths of 185,035 persons of both sexes, were registered in the same three months.

The death-rate of the United Kingdom differs little from that prevailing in England and Wales to be here discussed. The several facts concerning the other divisions of the Kingdom are fully set forth in the reports of the Registrar General of Scotland and the Registrar General of Ireland.

The estimated population in 1866 of England, Scotland, and Ireland is about 29,946,058. The corrected death-rate of the quarter is 2.600 per cent.

England.—The marriage-rate, which was low in 1861–62, but revived subsequently, and was remarkably high in 1865, continued to be well maintained in the first quarter of the present year. The natural growth of the population, as shown by the birth-registers, has been active for a considerable time; and it was well maintained in the first three months of the present year. Against this latter fact must be set the high mortality which prevailed during the same period, partly in consequence of meteorological conditions and changes, unfavourable to health.

Marriages.—In the March quarter 75,158 persons were married in England. The marriages were 37,579 against 33,427 in the same quarter of 1856. The number of marriages advances with the increase of population, but not without fluctuations that are attendant on the changing condition of the people, of which condition industrial success or adversity is perhaps the most appreciable, but not the only, element. At the beginning of the last decade the annual number of marriages was about 160,000; at the end of it the number returned in a year was more than 185,000.

The annual marriage-rate in the first quarter of the present year was 1.442 (viz. of persons married) to a hundred persons living. The average rate of ten March quarters was 1.40.

Births.—Of children born in the March quarter of the present year the number was 196,753, against the high number 194,130 in the corresponding period of 1865. The annual birth-rate for the same period was 3.776 per cent.; the average being 3.644. The birth-rate is always higher in the first six months of the year than in the last; but the tables for the last ten years furnish no instance of a rate so high as that which prevailed last quarter. London yielded its fair contribution to the increase; the births were under 30,000 in the metropolis, and about that number in Cheshire and Lancashire. In some counties, as Oxfordshire, Buckinghamshire, and Norfolk, there was a decrease, for which others, chiefly in the northern parts of the Kingdom and in Wales, more than compensated by their increase. The births were very numerous in Surrey, Devonshire, Lancashire, Durham, Northumberland, Cumberland, and Wales.

Increase of Population.—Whilst the births were 196,753, the deaths were in the same time 138,136, and the excess of the former over the latter was 58,617. The natural increase was 651 daily; but this was disturbed by migratory tendencies, always in active operation.

The total number of emigrants from ports in England, Scotland, and Ireland was 39,672, of whom about 11,000 were of English origin. Irish emigration from the same ports was nearly double that amount. Of the total number 33,000 emigrants had chosen the United States for their destination, 6000 the Australian Colonies. Of the 21,000 Irish emigrants, 10,000 went to the United States.

Emigration declined greatly in the first quarter of 1865; but it has again increased, and was as active as in the two previous years 1863-64.

Prices, Pauperism, and the Weather.—The price of wheat continues to rise, and in the first three months of this year it was 45s. 6d. per quarter, which is five shillings more than it was in the same period of 1864, and seven shillings more than in that of 1865. During the four quarterly periods that have elapsed since the 31st March 1865, it has been slowly but constantly rising; it was 40s. 6d., 43s. 3d., 44s. 10d., and 45s. 6d. Beef at Leadenhall and Newgate Markets, sold by the carcase, averaged $5\frac{5}{8}d$. per lb., a price which differed but little from those of the March quarter in 1864 and 1865, which were $5\frac{1}{2}d$. and $5\frac{3}{4}d$. The price for inferior quality of beef was in all these three periods the same, viz. $4\frac{1}{2}d$.; for superior it was $6\frac{1}{3}d$. in 1864, 7d. in 1865, $6\frac{3}{4}d$. last quarter. The highest price of beef scarcely varied during the last eighteen months. The mean price of mutton was $6\frac{5}{3}d$, and was rather higher than in the two previous corresponding quarters. Best potatoes at the Waterside Market, Southwark, ranged from 55s. to 90s. per ton.

The average number of paupers relieved on the last day of each week in the quarter was 139,541 in-door, 759,400 out-door. The amount of indoor relief was the same as in the March quarter of 1864, but rather less than that of 1865. The number of out-door paupers was less than it had been in either of those periods.

According to the Greenwich Observations the month of January was warmer than that month has been in any year since 1851. In ordinary course, January is almost 3° colder than December ; but last January was as warm as the remarkably warm month that closed the year 1865. At the beginning of the month the weather was stormy, and the wind blew in gales; and on the 11th there was in London a fall of unusually heavy snow, which seriously impeded traffic and broke down the telegraphic poles and wires. Soon the snow disappeared under a rapid thaw, which was followed by the inundation of all the low-lying lands in the valley of the Thames. Heavy rains and high winds, with frequent changes, attended the month to its close ; but its most striking feature was the high temperature, which continued till near the middle of February, and showed an average excess of 6° daily. From this date till the middle of March the air was almost continuously cold, and the average daily defect of temperature was about 3°. Four days of heat followed; then four days of cold; and finally a warm period of eight days, in which the mean temperature rose 6° above the average. The extreme mildness of the first six weeks quickened vegetation; hedges and fruit-trees budded, and in some places almost burst into blossom. The change in the atmosphere from mild and damp to cold and dry was favourable to agricultural operations, which had been in a backward state owing to the soddened state of the ground; and was besides a salutary check on the too rapid advance of vegetation ; and at the end of the quarter the growing crops were sufficiently forward and at the end of the quarter the growing crops were parameterized by sudden frosts. The mean temperature of the air in the quarter was $41^{\circ}2^{\circ}$, which is $1^{\circ}7^{\circ}$ above the average of the same period in the previous twenty-five years. The fall of rain was $9^{\circ}3$ in., which amount is 4.5 in. above the average. Less than two inches of that quantity fell in March; the rest in nearly equal portions in the two previous months. The atmospheric pressure was low throughout the quarter. The reporter at Guernsey states that in January the island was visited by a succession of storms, evidently recurrent cyclones; the most violent of which occurred on the 11th, raged with extraordinary fury, and inflicted extensive injury on trees and houses. The barometer fell to 28.444 in.,

xxxvi Summary of the Quarterly Reports, 1866.

the greatest depression known there for 23 years. At Aldershot on the 11th, snow covered the ground to a depth of 9 in.; and about the middle of the month snowdrops, crocuses, and primroses were in flower. On the 4th February a hurricane of unprecedented violence blew at Belfast and for many miles around it, accompanied with thunder and lightning, and with hail and rain which swept along in masses. "Large trees were "torn up; chimneys thrown down, and slates whirled through the air "like feathers." This storm visited Manchester and some other places in the north of England.

Deaths; and the State of the Public Health.—The weather in the quarter, as it was observed in the metropolis, has been described in its main points; and the description of it is for the most part applicable to that which was experienced over the country. It was unfavourable to health; and by exciting or aggravating pulmonary diseases carried off many persons of advanced age. The total number of deaths in England and Wales was 138,136, which implies a rate of mortality above the average of ten previous winters, though not so high as it had been in the winters of 1864 and 1865. In these two periods 142,977 and 140,646 deaths were registered.

It deserves to be noticed, that while the mortality in London and eight other divisions was lower last quarter than in the corresponding period of 1865, it was higher in the two remaining divisions, viz., the North-western Counties (Cheshire and Lancashire) and Yorkshire. It would appear that in the large and always unhealthy manufacturing towns in these parts, the people suffered more than they did in others from conditions and sudden changes of the atmosphere which were not confined to them; and also, as shown in the Registrars' reports, that scarlatina, measles, whooping-cough, and other zymotic diseases prevailed there, and co-operated with the weather in producing a high mortality.

The population of London is not very different in amount from that of Cheshire and Lancashire; the births were as 28 in the former to 30 in the latter; but the deaths were as 20 to 26.

The annual rate of mortality last quarter in England was 2.652 per cent.; the average of ten previous winters being 2.50. But it is a remarkable circumstance that this excess above the average was contributed entirely by the large towns; for in the country districts the death-rate, 2.252, was actually lower than the average, 2.295. The annual rate of mortality in the 142 town districts was 2.967 against the average, 2.68. These results confirm the conclusion that there were other destructive causes at work besides unfavourable states of the weather — that the diseases above mentioned, which commit so much havoc in towns, were still more extensively fatal, and only acquired additional vigour from influences peculiar to the season.

The death-rate was higher in Cheshire and Lancashire than in any other of the eleven divisions; it was $3 \cdot 384$ per cent. In Yorkshire it was $2 \cdot 960$; in London $2 \cdot 666$; in the West Midland Counties $2 \cdot 654$; in the Northern Counties (Durham, Northumberland, &c.) $2 \cdot 443$. It was lowest in the South-eastern Counties, where it was $2 \cdot 185$.

If the map of England were shaded to represent the rates of mortality of last quarter in the registration districts, the eye, travelling from the lighter south to the darker north would be instantly drawn to a spot of portentous darkness on the Mersey; and the question would be asked whether cholera, the black death, or other plague, imported with bales of merchandise, had been lately introduced into its busy and populous seaport. Happily this has not been the case; but fever, probably developed or aided by the mild and damp atmosphere of the season, and by overcrowding in an increasing population, has been busy and fatal in Liverpool, and in other towns of the same county, and of Yorkshire. The annual mortality of the borough of Liverpool in the three months was excessive, and demands immediate and earnest consideration; it rose to 4.593 per cent. This implies that if this death-rate were maintained for a year, forty-six persons out of a thousand in the population would die in that time, or fifteen more than died in Glasgow, its northern rival, nine-teen more than in London. The mortality of the city of Manchester, though far less than that of Liverpool, was higher than in any other of the thirteen selected towns of the United Kingdom; it was 3.742 per cent., and that of Leeds was hardly less. The following numbers of deaths registered in a few DISTRICTS in three corresponding quarters, make the recent increase sufficiently apparent :—

			Ma	rch quarter 1864.	March quarter 1865.	March quarter 1866.
Li	verpool	-	-	3013	30.53	3.52 1
W	est Derby	-	-	2136	2047	2626
Ch	orlton	1. - 1	- 11	1393	1196	1504
M	anchester	6 6 - 2 - 61	-	2255	2313	2498
	shton	-	-	779	836	1006
	dham	-	-	673	853	1108
	ackburn	- **	-	892	941	1148
Le	eds	-008.000	-0	1088	961	1234

The Registrar of the Howard-street sub-district of Liverpool reports 33 deaths from typhus out of 330 from all causes; and many occurred from bronchitis and whooping-cough. In the St. Thomas sub-district of the same town 28 were from typhus out of 311; and pulmonary diseases were fatal. In the Mount Pleasant sub-district, in which the workhouse is situated, out of a total number of 1046 deaths, 215 were caused by typhus; 112 by bronchitis, 143 by phthisis, 26 by whooping-cough, 23 by measles, 19 by scarlatina. The Registrar of the Islington sub-district of Liverpool believes that overcrowding is amongst the causes of a high. mortality. At Warrington there were 287 deaths, and no less than 94 of these were from measles. Typhus has been for some time very fatal in Manchester : it is stated by the Registrar of Deansgate that in the quarter ending 31st December 1865, not less than 1530 persons were attacked by continued fever in Manchester and its suburbs, and of these 155 died ; and the disease has continued to prevail during the last quarter. In the sub-district of North Leeds, in a total mortality of 570 deaths, 79 were returned as caused by fever. It prevailed also fatally in Newcastle-on-Tyne.

Some further observations by Mr.Leigh, the Registrar of Deansgate, Manchester, on the smoke of that city, and its effects on health, will be read with interest.

On the CAUSES of the VITIATION of the ATMOSPHERE of MANCHESER, by JOHN LEIGH, Esq., M.R.C.S., Registrar of the Sub-district of Deansgate, Manchester. (Continued from Twenty-eighth Annual Report, page lvi.)

In some comments on the last Quarterly Return of Deaths in this district I endeavoured to show that the deterioration of health and the excessive mortality in Manchester were mainly due to the vitiation of its atmosphere. I showed that Manchester was amply supplied with good and pure water ; that its artisans were in receipt of higher wages than agricultural labourers, and were better clothed and fed; that its streets were admirably paved, sewered, drained, and swept, so in this respect it may challenge comparison with any town in the kingdom. Other improvements on an extensive scale have been carried out, and its thoroughfares are now tolerably wide and spacious. Its hospitals, some of which are magnificent in structure and arrangements, as well as munificently supported. are dotted over the town; and the amount of its charities must be deemed honourable to its citizens. When to all this it is added, that the working men associate themselves in various benefit societies, under the names of Odd Fellows, Druids, Foresters, Gardeners, besides Packers and other trade societies, and that not less than from 20,000 to 30,000 of the adult males of the town are so associated, and receive assistance, pecuniary and medical, during sickness or when out of work, Manchester must be regarded in many respects as a model town; and yet it is one of the least healthy in the kingdom.

Children under five years of age contribute half of the total mortality, whilst in the agricultural districts one third of the deaths is their proportion. The artisan's wife dies in middle age; and his own career is cut short long before he has reached the seventy years' term allotted to man. In the Reports of the Registrar General through a succession of years, these facts have been fully established. Whilst the annual death-rate of England is 22 for a thousand of the population on an average of ten years, and that of favourably situated localities is very much less, falling in some to 15, it has been on an average of the same period for Manchester not less than 31, and for the year 1865 it amounted to $35^{\circ} 6$.

The impurities of a town atmosphere may be distinguished into solid, vaporous perhaps vesicular, and gaseous; and the distinction is necessary, for whilst the solid impurities tend by their gravity to occupy the lower stratum of the atmosphere, and the vaporous or vesicular are subject only to the wafting of aërial currents, the gaseous tend by their own repulsive powers to general atmospheric diffusion. Their action on the human system is distinct. The solid impurities act as irritants to the respiratory organs; the vaporous or vesicular are the direct excitants of many types of disease; whilst the purely gaseous so depress and enervate the system as to render it an easier prey of disease.

Of solid impurities the principal one is coal smoke, which forms a continual dark and dense canopy over the town, and causes a murkiness in the streets from which they are never free. On the finest day the air is darkened by haze, through whose wide extent the prospect seems as it were bounded by an impenetrable wall. From a distance of four or five miles in the country, particularly on the approach of evening, the slanting rays of the sun give remarkable definition to the cloudy pall, and indicate very distinctly the site and limits of Manchester.

A rough analysis divides coal smoke into three parts. If the smoke is passed through a column of water in a suitable apparatus, a quantity of black fuliginous matter is separated from it, and some salts of ammonia are dissolved out of it by the water. If it be passed through a similar apparatus containing alcohol, a portion of bituminous matter is dissolved out, though this is still better accomplished by the substitution of highly rectified coal naphtha. There remains a quantity of purely gaseous matters, the composition of which is well known. The black matter separated by the water is found constantly floating in a smoky atmosphere in distinct particles, sometimes of considerable size, known popularly as "blacks." They settle in time on the streets and footpaths, find their way into the houses, cover all articles of furniture, soil and damage drapery, curtains, carpets, table covers, similarly affect wearing apparel and other surfaces, till it is generally recognized that light coloured clothes cannot be worn in Manchester, nor the hands remain clean if ungloved.

But these black particles always in the atmosphere are of necessity constantly inhaled by the inhabitants, constantly received into the lungs, whether those lungs are healthy or not. The best analysis of them with which I am acquainted is that of Braconnot (Annal de Chim. et de Phys. tom. 33), who found as the constituents :--

Carbon -	-	-	79.1		
Water	54 - 9999	- 19 - 19	8.0		
Resin		1 2-30	5.3		
Bitumen -		and -then	1.2		
Sulphate of ammonia	-		3.3		
Sulphate of lime	-		•8		
Quartzy sand -	102-10	-	•6		
Ulmin	2.180	1 12	• 5		
Sulphate of potash	-	-	•4		
1				· ···	
seinninense, ant			99.7		

That a considerable portion of this soot is arrested in the upper air-passages there can be no doubt; but that a quantity also finds its way into the lungs, that is into the smaller ramifications of the bronchial tubes, and perhaps into the air cells, is proved by the black expectoration common among the residents of smoky towns, and by the carbonaceous matter found not only in the bronchial glands but occasionally also in the substance of the lungs when previous lesion has existed. It is possible indeed that in many cases the foreign body introduced into the lungs has caused the lesion. "It is necessary to be aware," says Dr. C. J. B. Williams (on Diseases of the Chest), "of confounding with " melanosis the accumulations of black pulmonary matter which take place to a great " extent in the lungs of old people, especially amongst the inhabitants of large towns. " These are probably, as Dr. Pearson observes, derived from the soot inhaled with the " air, which may find access to the texture of the lungs from such lesions of the bronchial " membrane as often result from a common cold or cough. Some curious cases are on " record in which carbonaceous accumulations have taken place so rapidly and extensively " as to cause chronic inflammation and consolidation of a perfectly black colour, which " tends to ulceration and the formation of cavities, as in other cases of chronic consoli-" dation." Drs. Gregory, Thompson, and others describe such cases as occurring in persons labouring under bronchial disease, whilst continually employed by the light of smoky lamps.

. There can be no doubt that the constant inhalation of particles constituted as Braconnot has shown these to be, compounds mainly of carbon, bitumen, and sulphate of ammonia, must be highly irritating to the lungs, and productive in many instances of an amount of inflammation sufficient to induce incipient phthisis or bronchitis, or to determine the recurrence of these where a predisposition exists.

It is no answer to say that many people living in large smoky towns continue healthy, and attain to a considerable age. There are strong healthy people, with great powers of resistance, who form exceptions in all circumstances; but the general condition of old people, and of those approaching old age, in the working classes of Manchester, is bronchitic in a greater or less degree ; and at all ages men, women, and children of delicate organization or scrofulous diathesis, or whose state of health has been reduced by other causes, are very much disposed to take on phthisical or bronchitic disease, under the irritating effects of a Manchester atmosphere. "Among the local causes of consumption," again to quote Dr. Williams, "is to be reckoned the habitual inhalation of fine solid particles which is contingent on certain occupations. The dependence of the lesions in " these cases on the mechanical irritation of the inhaled particles is sufficiently proved " by the presence of these particles in the indurated lung, which in the case of colliers is " completely blackened with them." From a long and somewhat extensive experience I can fully confirm these observations. In estimating the effects of coal smoke in the production or excitement of phthisis, it is a question whether this disease should be regarded as the result of a low type or degree of inflammation. The essential condition of incipient phthisis is the formation of tubercle, miliary or diffused. Andral supposes the miliary and diffused indurations to be the result of chronic inflammation affecting the vesicles of the lungs or the general texture ; and in this he is supported by Chomel and Louis. Dr. Williams, after showing that tubercular induration contains a greatly increased quantity of matter, and that it is not the result of diminished absorption, asserts it to be the result of increased secretion, implying an increased determination of blood to the part, and he inquires if this may not amount to inflammation. In acute pleurisy we have a secretion of coagulable lymph, soon becoming organised into a soft cellular membrane; but in a more chronic form of inflammation, a texture of lower vitality is produced, a kind of fibrous or cartilaginous structure. In acute pneumonia we have an effusion of lymph causing red granular hepatization; but in lower prolonged inflammation of pulmonary tissue we have a dark consolidation differing little from phthisical induration; whilst in long continued irritation, unattended by the more sthenic degree of vascular action, the texture is grey, dense, and semi-transparent, indeed exactly like miliary tubercle.

It may be shown that the mean annual mortality from diseases of the respiratory organs is greater in Lancashire and Cheshire than in other divisions of England, with the exception of London.

DEATHS of MALES to a hundred Males living (1851-60).

From DISEASES of Lungs (exclusive of Phthisis).	From Phthisis.	
and a state of the second s	the success the sector	
Lancashire and Cheshire 0.412 -	- 0.299	
Metropolis 0.448 -	- 0.329	
Yorkshire 0'321 -	- 0°247	
Durham, Northumberland, Cumberland, and		
Westmorland $ 0.203$ $-$	- 0'221	
Leicestershire, Rutlandshire, Lincolnshire, Not-		
tinghamshire, and Derbyshire 0.264 -	- 0'214	
Gloucestershire, Herefordshire, Shropshire,		
Staffordshire, Worcestershire, and Warwick-		
shire 0.373 -	- 0°223	
Middlesex (part of), Hertfordshire, Bucks,		
Oxfordshire, Northamptonshire, Huntingdon-		
shire, Bedfordshire, and Cambridgeshire - 0.273 -	- 0.220	
Monmouthshire and Wales 0.253 -	- 0.208	
Essex, Suffolk, and Norfolk 0.269 -	- 0.236	
Surrey (part of), Kent (part of), Sussex,		
Hampshire, and Berkshire 0.269 -	- 0.242	
Wiltshire, Dorsetshire, Devonshire, Cornwall,	invinding out movie.	
and Somersetshire 0.202	- 0.232	

The above Table shows a higher mortality in London from this class of diseases than in other divisions; but even in London the mortality of females from phthisis is considerably less than it is in Lancashire and Cheshire, the rates being 0.249 and 0.334 respectively. But the contrast is more striking if the district of Manchester is compared with another, say Scarborough, where the total mortality is near that of England. Scarborough.—Deaths of males from diseases of lungs (ex. phth.), 0.287 per cent.; from phthisis, 0.145 per cent.

Manchester. - Deaths of males from diseases of lungs (ex. phth.), 0.578 per cent.; from phthisis, 0.384 per cent.

Also the results for Manchester are less favourable than those for London.

Besides the palpable and offensive black particles of which the clouds that issue from our factory chimneys are composed, there is a more finely precipitated matter which in the country curls among the trees from the roof of a cottage, and in Manchester forms the constant haze of our streets. I do not think any scientific investigation has yet been made of it. It is not gaseous, for it does not diffuse; it is not simply vaporous. When it saturates or charges a November fog it is sticky, and excessively irritating to the eyes and throat. It proceeds from the imperfect combustion of bituminous matter, and partially from the distillation of the least volatile products of coal. Since it is so irritating to the eyes and lungs when made more dense by a fog, it must in a less degree be a constant source of irritation under the ordinary conditions of a smoky atmosphere. From experiments I have made on it, I am satisfied that it is in some degree bituminous.

From the way in which coal is ordinarily burned in the furnaces of manufactories, there are given off, in addition to the visible smoke, a number of invisible true gases, some of them resulting from the imperfect combustion of the coal; these are carbonic oxide, light carburetted hydrogen, sulphuretted hydrogen, and possibly a little cyanogen, and heavier carburets of hydrogen. The gases necessarily evolved are carbonic acid and sulphurous acid, with aqueous vapour. The natural tendency of all these gases is to diffuse themselves into the general body of the atmosphere; but the diffusion is, as regards some of them, to a considerable degree impeded by their extreme solubility, and by the quantity of moisture generally present in the atmosphere of Manchester. The carbonic oxide and light carburetted hydrogen have so little solubility that their diffusion would scarcely be diminished, and probably they may, with any small quantity of cyanogen or heavy hydrocarbons, be put out of consideration. Sulphuretted hydrogen, however, is at the least soluble in its own volume of water at ordinary temperatures. According to Thomson, one volume of water absorbs three volumes of the gas at 52° Fahrenheit, whilst of sulphurous acid gas thirty-three volumes are absorbed by one volume of water at ordinary temperature, according to the same authority. Carbonic acid is absorbed at the ordinary temperature by about its own volume of water. It is certain then that the presence of much moisture in the atmosphere, and even the vapour carried up the chimneys from the combustion of the coal, must materially interfere with the diffusion of these gases, and that a smoky town atmosphere must contain an abnormal amount of carbonic acid, and a distinct amount of sulphuretted hydrogen and of sulphurous acid. By a series of very careful experiments, Dr. Angus Smith has proved the existence of an excess of carbonic acid in the air of crowded rooms, and in the atmosphere of dense cities, and is disposed to attribute a considerable amount of injurious influence to this excess. That the air of Manchester contains sulphuretted hydrogen in considerable abundance is made evident by the rapid tarnishing of silver plate, and by the darkening of white paint. Now this gas is the most deleterious of them all. It is a direct and powerful poison, destroying life in a few minutes when in a concentrated state, and gradually lowering the vital powers, and reducing the tone of the system, when inhaled in a diluted form; and I know of no circumstance more likely to predispose a population for the reception of fever or cholera than the constant inhalation of an atmosphere vitiated by the presence of sulphuretted hydrogen. I do not believe there is sufficient ammonia in the atmosphere to take up all the sulphurous acid evolved from our chimneys, and the excess must act slightly as an irritant to the lungs. Sulphurous acid, however, except when very concentrated, seems to be breathed with impunity. It has no directly poisonous properties. It is assumed that sulphurous acid and sulphuretted hydrogen could not co-exist in the atmosphere, as they decompose each other; but whether this would be the case in the very dilute state in which they exist in the atmosphere has not been very accurately determined. At all events sulphuretted hydrogen does exist in the atmosphere of Manchester; and to it I should be disposed to attribute much more serious injury to health than to any of the other gases.

From the chimney of a perfect furnace nothing ought to be evolved but invisible carbonic acid, sulphurous acid, and watery vapour. All else, besides the ordinary atmospheric gases, oxygen and nitrogen, are the results of imperfect combustion. All smoke is the result of *distillation* with partial combustion of the product; and distillation of coal in an ordinary furnace means waste of the coal, and injury to the health of the people from poisonous sulphuretted hydrogen and irritant smoke, the consequences of that waste.

Even the sulphurous acid from coal might be considerably diminished by the careful washing out of the iron pyrites, as is already done to a large extent for some purposes; and when it is considered that these pyrites generally or always contain arsenic, which must pass into the atmosphere on combustion of the coal, the advantage of removing the pyrites as much as possible is most important.

In treating the smoke question it has been too much overlooked that in ordinary furnaces coal is subjected to a process partly of combustion and partly of distillation. Were sufficient heat applied, and a sufficient quantity of air of high temperature supplied at the proper parts of the furnace, combustion would be complete, and no other products than carbonic acid, sulphurous acid, aqueous vapour, and a few salts of ammonia would be possible. There would be no visible smoke. But when coal is burned with air of limited amount or low temperature, then it is partly in the condition of that substance when in a gas retort. It is subjected to partial distillation. In an ordinary furnace this must ever be so. The coal instantly it is placed on the incadescent coke or cinders previously in the furnace begins to distil, and to give off gases and tarry matters. These meeting a certain quantity of hot air are partly decomposed; the hydrogen of the carburetted compounds is first burned and liberates free carbon, which is carried mechanically with other matters and undecomposed gases by the draught into the chimney. When the supply of air of high temperature is not sufficient to do more than this, the matters carried into the chimney will necessarily be such as would be given off by coal in a gas retort mixed with the unburnt carbon, &c., from such portions of the gases and tar as have been acted upon and decomposed by the air supplied. Now one of the most constant products of the distillation of coal in retorts is sulphuretted hydrogen. It is also a very abundant product ; and it is quite clear that with a limited supply of air this gas must be formed in common furnaces, and that a portion must escape combustion, and be found in the atmosphere of smoky towns.

Mr. Wye Williams had a very clear conception of the cause of smoke, and proposed to meet the undecomposed gases and the liberated carbon at the back of the furnace by a fresh supply of air, believing that the gases could be sufficiently heated to enable the cold air to effect the combustion ; and that the heat of combustion, or in other words the latent heat liberated by the gases on combustion, would be sufficient to maintain a proper heat under the boiler or other apparatus to be heated. This opinion was not justified in practice. It was found that cold air so applied was not sufficient to effect the entire combustion of the distilled matters, and that the latent heat did not compensate for the reduction of temperature caused by the cold air admitted. The experiment was a step in the right direction, but it was seen that for the economical consumption of the distilled gases air must be supplied which had already acquired considerable elevation of temperature before it came in contact with the gases. Many plans have been tried, but none so successfully as that of the Messrs. Siemens, in whose furnace air at a very exalted temperature meets and mixes with the gases at a like heat, in a special chamber. It differs from most others in being a process almost entirely of distillation; and it is a question whether, seeing the impossibility of combustion of large quantities of coal without partial distillation, some such process must not ultimately be adopted. But, while the principle is maintained, it may be necessary to modify the application of it, to meet special requirements. (For continuation see page xlv.)

Second Quarter.- April, May, June.

The United Kingdom.—The Registers of the United Kingdom show that 121,282 persons married in the quarter that ended 30th June; and that the births of 261,044 children, and the deaths of 171,869 persons of both sexes, were registered in the three months.

The corrected death-rate of the United Kingdom—2'385 per cent.—is slightly below that which prevailed in England and Wales. The several facts concerning the other divisions of the Kingdom are fully set forth in the quarterly reports of the Registrars General of Scotland and Ireland.

England.—The marriage-rate of the spring quarter was higher than it ever was before in that season since registration began. The birth-rate was also very high, and though it declined afterwards, it was still a little above the average in the three months that ended on June 30th. But a decidedly unfavourable feature of the present Return is the high deathrate that prevailed. The mortality was much higher than it had been in any June quarter of the ten years 1856-65. The coldness of the season, and epidemics of measles and whooping-cough, appear to have exercised a very wide and fatal influence on the public health.

Marriages.—In the quarter that ended 30th June 97,154 persons were married in England. The marriages were 48,577 against 45,827 in the same quarter of the previous year. They were more numerous by 10,000 than in the corresponding period of 1856. A marked increase in the marriages of last spring over the numbers of 1864-5 occurs in London, the South-Eastern Counties, Lancashire, the West Riding of Yorkshire, Durham, and Northumberland, and generally in the Midland Counties. The marriages in London were 8764, in Liverpool and West Derby 1795, in Manchester 1250.

The annual marriage-rate in the quarter was 1.840 per cent. against an average of 1.70, or out of 1000 persons living rather more than 18 would have entered wedlock (while previously, taking one spring quarter with another, the number had been 17,) if the same rate that prevailed in the quarter had been maintained for a year.

Births.—The number of children born in the spring quarter (ended 30th June) was 192,427 against 173,263 in the same period of 1856. The annual birth-rate of the quarter was 3.644 per cent. of the population, the average of ten previous springs being 3.620.

The births returned in thirteen weeks ending 30th June numbered 26,776 in London, 1429 in the city of Bristol, 3236 in the borough of Birmingham, 4802 in that of Liverpool, 2591 in that of Leeds, 3353 in the city of Manchester. There were 4893 in Glasgow, a number which slightly exceeds that of Liverpool, though the population of the latter town is greater.

Taking twelve large towns in Great Britain it appears that the birthrate was highest in Leeds, in which town it was 4.557 per cent.; the next highest was 4.543 in Glasgow; in Newcastle-on-Tyne it was 4.205; in Sheffield 4.009; in Liverpool 3.979. In London and Bristol it was as low as 3.50. But the population of Leeds, there is reason to believe, has been under estimated.

Increase of Population.—Whilst the births were 192,427, the deaths were 128,550. The natural increase of population was, therefore, 63,877. The movements of the population modify this result.

The total number of emigrants from ports in the United Kingdom, in the three months ended 30th June, was 80,303, of whom about 19,000 were of English origin; while the Scotch were nearly 5000, and the Irish 45,000. About 65,000 were destined to the United States, a number which exceeds the emigration to the same part in any June quarter in the last twelve years, with the exception of 1864.

Prices, Pauperism, and the Weather.—The price of wheat continues to rise; it was 46s. 6d. per quarter in the three months ending 30th June. Omitting the odd pence, the average prices of the six quarters subsequent to 1st January 1865 have been successively 38s., 40s., 43s., 44s., 45s., and 46s. The mean of the highest and lowest prices of beef at Leadenhall and Newgate Markets was $5\frac{7}{8}d$. per lb. last spring quarter. In the same period of 1864 it was $5\frac{1}{4}d$.; and in that of 1865, $5\frac{3}{4}d$. The mean price of mutton was 7d. against $6\frac{1}{8}d$ and $7\frac{3}{8}d$. in the spring quarter of the two previous years. Best potatoes at the Waterside Market, Southwark, were 77s. 6d. per ton. The average number of paupers in the quarter were : relieved in-door 125,044; relieved out-door 734,748. Indoor paupers were nearly equal as regards number to those of corresponding periods in the last two years. Out-door relief exhibits a decrease.

Mr. Glaisher writes :—" At the beginning of the quarter the weather was cold, the temperature being below the average to the mean amount of 2° : 4 during the first nine days. The nights were also very cold, the thermometer frequently registering below freezing point, and rain fell copiously throughout the first two weeks. On the 10th of April a sudden change to heat set in, continuing till the 28th day, during which time the weather was unusually fine, and very hot for the season, and but little rain descended. This sudden drying weather caused large tracts of land in all parts of the country to be in such a heavy state that spring operations, particularly sowing, were much impeded, and in fact agricultural operations generally were in a backward state. The budding of trees was in general late, but at places where they had not already shot forth their leaves, the effect of this weather was extraordinary, the leaves appearing and fruit trees blossoming so suddenly, that the whole aspect was changed in a few hours. On the 29th of April a cold ungenial period set in, continuing through May to the 1st of June, with only an occasional day of somewhat warmer character. The mean daily deficiency of temperature during this time amounted to $3^{\circ \cdot 1}$, and at night the thermometer frequently fell to below $32^{\circ \cdot 2}$."

"On June 2d, the weather again changed, and became much warmer, and a mean daily excess over the average temperature occurred to the amount of $4^{\circ} \cdot 2$, till the 11th day. A cold period followed, but on the 21st day the temperature again increased considerably, and fine weather followed till the end of the quarter, the mean daily excess of temperature amounting to nearly 5° ."

The mean temperature of the air in the quarter was 53° , which is near the average. The rainfall was $7 \cdot 9$ inches, which is also near the average at Greenwich ; at Carlisle it was $3 \cdot 6$, Truro $9 \cdot 7$ inches.

Deaths; and the State of the Public Health.—The deaths in the quarter that ended on June 30th exceed the average of the season. Their number is 128,550, and the mortality, after taking increase of population into account, exceeds the customary rate; for instead of 22 the mortality was at the rate of more than 24 in 1000. The spring quarter is usually not only healthier than the quarter of winter or autumn, but healthier than the whole round of the year; but 24 is 2 in excess of the average of the last ten years.

The country districts, containing about 9,279,270 people, died at the rate of 22 in 1000 in the last spring quarter; a rate exceeding the average (20) of those districts by 2. The town districts, of about 11,903,049 inhabitants, suffered still more, for in them the rate was over 26 in 1000, whereas their average is 23. The increase of the town rate is not only greater absolutely, but greater relatively than the increase of the mortality of the country rate.

Taking the thirteen great cities, as they may be called with regard to their magnitude and standing in the United Kingdom, the mortality, we find, was at the rate of 28 in 1000; in Birmingham, Hull, London, and Bristol 25, in Dublin 26, in Edinburgh 27, Newcastle-on-Tyne 29, Manchester and Salford 30, Sheffield 31, Glasgow 33, Leeds 34, Liverpool 38. In Liverpool the deaths nearly equal the births in number.

When we find that, exposed to nearly the same temperature and not very dissimilar atmospheric conditions, the mortality of the healthy districts, which have been so often cited in the reports, was 20, it is difficult to come to any other conclusion than that there is still something radically wrong in the sanitary administration of the towns of the kingdom. The root of the evil has not been reached. Vast numbers of the population, increasing every year, are blighted by causes which science has discovered, and which hygienic regulations might control. Condensation has an extraordinary tendency to impair the health of the people, and should be met by extraordinary measures.

LONDON is one of the eleven great divisions of the kingdom, and has suffered to about the average extent. The mortality, which was 23 in the previous spring quarter, rose to 25. Not only small-pox, measles, and whooping-cough, but bronchitis and pneumonia grew more fatal. It is to be regretted that the Vaccination Act, which was originally ill-conceived, works badly. The measure requires amendment ; and the useless, impracticable registration clauses should be struck out. The deaths in London from diarrhœa were 280, from cholera 24; and a few of the cases of cholera were of an epidemic type; but the deaths both from cholera and diarrhœa were much below the average. In the corresponding quarter of the previous year 706 deaths from diarrhœa, 32 from cholera, were registered.

The SOUTH EASTERN DIVISION comprising Kent, Surrey, Sussex, Hants, and Berks, experienced only a slight increase of mortality. The rate of

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the spring quarter was 20; in the previous spring it was 19. Measles and whooping-cough were fatal at Kingston in Surrey; Worthing in Sussex. The deaths in the latter district were 118 against 65 in the corresponding quarter of the previous year. At Alverstoke one case, Southampton 3 cases, of choleraic diarrhea or infantile cholera are recorded. Measles has been very fatal in Southampton, where the deaths from all causes were 262.

The mortality in the SOUTH MIDLAND COUNTIES was at the rate of 21; that is one above the spring rate of 1865. Measles and whooping-cough were epidemic in some districts.

The EASTERN COUNTIES suffered from the same epidemics; and the mortality was at the rate of 22. One death from summer cholera was noticed at Cromer, and one from typhus.

The SOUTH WESTERN COUNTIES, usually among the healthiest, were also visited by measles and whooping-cough ; the mortality was at the rate of 22, one higher than the previous spring rate. Small-pox prevailed fatally, and showed how much vaccination had been neglected by the people of Plymouth.

In proceeding to the WEST MIDLAND COUNTIES we enter a region where the mortality rose to 24, no less than 4 above the previous spring rate. Measles and whooping-cough prevailed extensively; the registrars notice one death from cholera in Madeley, 2 in Wolverhampton, one in Sedgley (Dudley).

In the NORTH MIDLAND COUNTIES the mortality at the rate of 23 was also above the average, owing apparently to the same causes. At Mansfield (Nottinghamshire) the deaths have been much above the average. The whole sewage of the town is poured into a rivulet, from which the water is diverted to work a water-wheel. Scarlatina was fatal in Bakewell, and 2 deaths from cholera are noted at Long Sutton (Holbeach).

The NORTH WESTERN DIVISION, comprising Cheshire and Lancashire, sustains its unhappy pre-eminence; the mortality was at the rate of 29, against 25 in the previous spring quarter. Typhus, scarlatina, measles, whooping-cough, and diarrhœa were fatal in several towns, at the head of which Liverpool stands. Ten deaths of Germans from epidemic cholera occurred in the emigrant depôt at Birkenhead. The Registrar of Preston conceives that the resumption of work in the cotton mills, and greater "indulgence in the use of intoxicating liquors," have contributed to the increase of deaths.

Yorkshire has grown more prosperous but less healthy than it was; the mortality was as high as 28. Leeds has suffered severely from fever. One death from cholera is noted at Pudsey (Bradford); 2 deaths of a mother and child were registered at Goole. They were attacked on the voyage from Antwerp. The steamers from Holland and Belgium should be under strict hygienic control; they have no doubt often been the channel for conveying epidemic disease to England. Passengers and cattle were at one time strangely huddled on these vessels.

The mortality in the northern counties was at the rate of 24; or one over the previous spring rate. Measles and whooping-cough killed 40 children in Berwick; they have thus reigned epidemically from south to north.

Wales has not escaped; the mortality was 24; somewhat less than it was last year. Newport and Swansea demand especial care. 49 fatal cases of fever are noted in Newport: 26 of whooping-cough in Lower Merthyr Tydfil. 11 deaths from cholera are recorded at Llangafelach in the Swansea Union. In Gower, near Swansea, 4 cases of "English cholera" occurred in one family; 3 were fatal. The Registrar did not attend them professionally, and he makes the following singular remark: "in fact being " poor people they received no medical attention !" Is there no Board of Guardians, no medical officer, in this deplorable district, where in one family three people "being poor" received no medical attention ? xlv

On the CAUSES of the VITIATION of the ATMOSPHERE of MANCHESTER, and other LARGE TOWNS, by JOHN LEIGH, Esq., M.R.C.S., Registrar of the Sub-district of Deansgate, Manchester. (*Continued from page* xli.)

In some comments which the Registrar General had the kindness to insert in his last two quarterly reports I showed that the unhealthiness of Manchester and many other large towns was due mainly to the vitiation of the atmosphere by matters which might be classed under three heads, solid, vaporous (perhaps vesicular or even cellular), and gaseous. I showed that in Manchester and similar manufacturing towns the chief solid impurity of the air is coal smoke, and that its mode of action on the human body is of two kinds, (1) as an irritant to the lungs producing bronchitis or assisting in the production and maintenance of this disease, as well as of some diseases of the substance of the lungs where any previous lesion existed, and (2) by its sulphuretted hydrogen reducing the tone of the system and rendering it easily susceptible of zymotic diseases.

Besides coal smoke there are in such an atmosphere as that of Manchester various solid impurities to which persons who live in the country are less exposed. The houses stand close to the roads or streets, form in fact their boundaries, and from these streets, especially when macadamized, a fine impalpable dust is continually thrown up by the great and incessant traffic of drays and carriages of all kinds, grinding down the material of the road, and loading the air with fine particles, which, when collected on a glass and viewed through a microscope, are seen to consist of sharp and angular fragments. The houses, from their position, are scarcely less free from these particles than the streets; and to the residents they must be a constant source of bronchial irritation. The dust of manufactories must be chiefly confined within their walls, though a certain quantity will also find its way into the streets. It is well known that persons who work in flour mills for any length of time acquire a condition of lungs, from inhalation of flour dust, which gives rise to what is called "miller's asthma," a disease distressing, permanent, and ultimately fatal. Still more rapidly productive of a similar condition, and far more speedily fatal, is the inhalation of metallic particles, as in the case of fork-grinders and others engaged in occupations where metallic dust pervades the atmosphere. In the cleaning of cotton or of woollen rags, a vast amount of dust is given off, and unless carried off by suitable contrivances, as much injury must be produced by it on the lungs of workpeople as by employment in a flour-mill. In fustian-cutting rooms there is a constant fine filamentous dust, which must more or less be present in most departments of the cotton manufacture. Dust, of whatever kind, if long continued is injurious to the lungs, and though it is inevitable in many manufactures, and the ordinary condition of streets and houses in large towns must be more or less dusty, yet all practicable means should be adopted to remedy the nuisance in rooms or workshops, and to keep the streets as free as possible from it. In this respect both the asphalted and the ordinary stone or boulder paved streets are far superior to the macadamized.

The vaporous impurities of the atmosphere arise either from decomposing dead organic matters, are results in fact of the processes of putrefaction or fermentation, or they proceed from changes taking place in living animal bodies. They exist either more or less dissolved in the ordinary atmospheric moisture, or in the moisture evaporated with them, or in a distinctly corpuscular form, perhaps vesicular or cellular. They are not simply gaseous, for they do not obey the laws of gaseous diffusion, and they do not condense into a solid form under circumstances in which condensation would be obvious. They are, I believe, vaporous or vesicular, and subject only to atmospheric currents. They will saturate or remain suspended in the stagnant atmosphere of a chamber or court. Some of these, proceeding from living animal bodies, will attach themselves to clothing, and will be carried from place to place. They will pass with the breath from a living animal, or escape with the perspiration from the skin; they are capable of solution by different menstrua, or perhaps of suspension only, and may be made evident by concentrated sulphuric acid and by permanganate of potass. They are able, under favourable circumstances, to reproduce themselves from other organisms, and to excite diseased actions, the same as those from which they themselves originated. They are of many kinds; distinct from each other; unlike in composition, organization, and action. The poisonous emanations of small-pox will not excite scarlatina, nor those of the latter whooping-cough, nor those of whooping cough measles. The emanations of measles will not produce typhus, nor those of the latter cholera. Each kind has its peculiar properties and functions, and produces its particular effect, as distinctly as does nitric, sulphuric, or carbonic acid. The physiologist in this department of physics is in advance of the chemist. The chemist, by passing air charged with any of these matters through strong sulphuric acid, or through a solution of permanganate of potass, obtains a colouring of his test, and announces the presence of organic matter; but the physiologist says: " True, there is organic matter; but there is one poison of cholera, another of typhus, " and a third of small-pox ; and each of its own kind ;" and organic chemistry should make a step forward, and definitively pronounce what they are. They are matters prone to change, able to set up actions in some organic or organized bodies that will produce others similar to themselves. An infinitesimal globule of small-pox matter received into the living body will cover it with pustules, filled with the like matter, and having the XXIX.

same powers; or the smallest quantity passing out with the breath of one person, and inhaled by another, will excite the same actions and produce the same results. The action of these poisons is nearer to fermentation or putrefaction than to any chemical processes with which we are acquainted. They are matters in a state of change, of complex composition, ready to be acted upon by any energetic surrounding medium, and to be converted into simpler organisms; and the simpler their form the more innocuous do they become. The oxygen of the atmosphere is their strongest antagonist; it disrupts, breaks them up, and never leaves them till it has converted them into carbonic acid, water, and ammonia, or its nitrate. Like all complex organized matters containing much nitrogen, and void of vitality, they are exceedingly liable to disturbance of their affinities, and by oxidation they are rendered harmless.

But not only do certain diseased animal bodies give off into the atmosphere subtle, powerful, and most active poisons,-living bodies, also in a state of health, evolve matters which, when concentrated or long retained in a confined portion of air, become exceedingly offensive; and if they do not actually produce any specific form of disease, yet have a deteriorating effect on the general health, and give increased facility for the action of those more powerful emanations which produce specific disease. It is a matter of common observation that they lower the tone of the system. There is perhaps nothing by which the sense of smell can be assailed more nauseating to those unaccustomed to it than the odour of a close chamber, in which a large number of unclean persons have slept or have been long confined. This offensive smell may arise either from the concentration of evolved matters, or from changed condition, the result of partial oxidation or putrefaction, just as sulphur in many organic compounds will remain insensible till decomposition commences, when it becomes offensively evident as sulphuretted hydrogen or other sulphur compound.

TABLE 42 .- Annual Rate of Mortality per Cent. in Town and Country Districts of England in each Quarter of the Years 1856-1866.

e la	AREA		ATION erated.	her tra	А	NNUAI	, RATE	of M	ORTAL	ату рег	Cent.	in eac	h Quar	ter of t	he Yea	rs
	in Statute Acres.	1851.	1861.	Quarters ending	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	Mean 1856-65	1866.
In 142 Districts and 56 Sub- districts com- prising the CHIEF TOWNS	3,287,151	9,155,964	10,930,841	{ March June Sept. Dec.	$2 \cdot 391$ $2 \cdot 294$ $2 \cdot 160$ $2 \cdot 256$	2.374	2.757 2.356 2.245 2.724	2.651 2.249 2.284 2.358	2.617 2.316 1.843 2.285	2.193	$2^{\circ}655$ $2^{\circ}267$ $1^{\circ}984$ $2^{\circ}525$	2·410 2·422	2·412 2·386 2·615	$2.388 \\ 2.565$	2.680 2.322 2.227 2.460	2·966 2·639 2·513 2·439
Lere	of RAL	02 50	seenta y	YEAR	2.275	2.420	2.521	2.386	2.265	2.323	2.358	2.202	2.298	2.546	2.422	2.639
In the remaining	e de Lor	i sida	ere and	YEAR	1.797	1.916	2.077	2.077	1.951	1.938	1.890	2.057	2.107	2.081	1.989	2.008
Districts and Sub-districts of England and Wales com-} prising chiefly SMALL TOWNS and COUNTRY PARISHES -	34,037,732	8,771,645	9,135,383	(March June Sept. Dec.	1.915	2.072 1.918 1.727 1.948	2·497 2·049 1·717 2·044	1.884	2·326 2·148 1·573 1·757	1.999	2·184 1·940 1·572 1·864	2.100	2.512 2.070 1.833 2.014	2.522 2.055 1.824 1.923	$2 \cdot 296$ $2 \cdot 025$ $1 \cdot 735$ $1 \cdot 901$	$2^{\circ}250$ $2^{\circ}171$ $1^{\circ}749$ $1^{\circ}860$

The following are the names of the 139 Districts and 56 Sub-districts comprising the CHIEF TOWNS :-- All the 37 Districts of London; Croydon, Kingston, Richmond, Gravesend, Medway, Tunbridge; West and East Maidstone Sub-districts (Maidstone); Canterbury; Minster Sub-district (Sheppey); Thanet, Dover, Hastings, Brighton; Shoreham Sub-district (Steyning); Portsea Island, Alverstoke, Southampton; Winchester Sub-district (Winchester); Reading, Brentford, Edmonton; St. Clement Sub-district (Headington); Oxford, Northampton; Peterborough Sub-district (Peterborough); Bedford and Kempston, and Bedford and Cardington Sub-districts (Bedford); Luton Sub-district (Luton); Cambridge, West Ham, Colchester, Bury St. Edmunds, Ipswich, Yarmouth, Norwich, King's Lynn, Melksham, Salisbury; Weymouth Sub-district (Weymouth); Exeter; Torquay Sub-district (Newton Abbott); Ply-mouth, East Stonehouse, Stoke Damerel, Truro, Redruth; St. Mary Magdalen and St. James Sub-districts (Taunton); Bridgwater Sub-district (Bridgwater); Bath; Bedminster Sub-district (Bedminster); Bristol, Clifton; St. Nicholas and St. John Baptist Subdistricts (Gloucester); Cheltenham; Hereford City Sub-district (Hereford); Madeley, Shrewsbury; Stafford Sub-district (Stafford); Newcastle-under-Lyme Sub-district (Newcastle-under-Lyme); Wolstanton, Stoke-upon-Trent; Burton-on-Trent Sub-district (Burton-on-Trent); Wolverhampton, Walsall, West Bromwich, Dudley, Stourbridge; Kidderminster and Lower Mitton Sub-districts (Kidderminster); Worcester, Birmingham, Aston, Coventry, Warwick; Loughborough Sub-district (Loughborough); Leicester; Boston Sub-district (Boston) : Lincoln Home Sub-district (Lincoln) : Great Grimsby Sub-district (Caistor) ; Radford, Nottingham ; Newark Sub-district (Newark); Derby, Hayfield, Stockport; East and West Macclesfield and Sutton Sub-districts (Macclesfield); Runcorn Sub-district (Runcorn); Congleton Sub-district (Congleton); Chester Castle and Chester Cathedral Sub-districts (Great Boughton); Birkenhead, Liverpool, West Derby, Prescot, Wigan, Warrington, Leigh, Bolton, Bury, Barton-upon-Irwell, Chorlton, Salford, Manchester, Ashton, Oldham, Rochdale, Haslingden, Burnley, Blackburn; Chorley Sub-district (Chorley); Preston; Lancaster Sub-district (Lancaster); Keighley, Todmorden, Huddersfield, Halifax, Bradford, Kirkstall, Hunslet, Holbeck, Bramley, Leeds, Dewsbury, Wakefield, Barnsley, Ecclesall Bierlow, Sheffield; Doncaster Sub-district (Doncaster); Bootham, Micklegate, and Walmgate Sub-districts (York), Sculcoates, Hull; Scarborough Sub-district (Scarborough); Darlington Sub-district (Darlington); Stockton, Hartlepool; St. Oswald and St. Nicholas Sub-districts (Durham); Houghton-le-Spring, Sunderland, South Shields, Gateshead, Newcastle-upon-Tyne, Tynemouth; St. Cuthbert and St. Mary Sub-districts (Carlisle); Whitehaven Sub-district (Whitehaven); Kendal Sub-district (Kendal); Newport Sub-district (Newport); Cardiff Sub-district (Cardiff); Merthyr Tydfil; Llangafelach and Swansea Sub districts (Swansea); Llanelly Sub-district (Llanelly); Pembroke Sub-district (Pembroke).

Note.-The three months January, February, March, contain 90, in leap year 91 days; the three months April, May, June, 91 days; each of the last two quarters of the year, 92 days. For this inequality a correction has been made in the calculations, also for the difference between 365 and 365°25 days, and 366 and 365°25 days in leap year.

In our ignorance as to how the poisons productive of zymotic diseases originated, it may not be unreasonable to ascribe them to the concentration, under special circumstances, of the ordinary emanations of the animal body, when the latter had been reduced in tone and strength by suffering and privation, or had been placed under conditions of excessive foulness. In the present day the poison of typhus seems frequently to be

TABLE 43 .- The Average Prices of Consols, of Wheat, of Meat, and of 1857-1866.

delateA on	t 10 202	Average Price	PAU	PERISM.	1200 100	i Vi Liik Geografii ,	Average	PRICES	OF	- 4 4 -
y vomination whereas of e, the dis- hat I have	Average Price of Consols (for	of WHEAT per Quarter in England	of PAUPE on the l	e Number RS RELIEVED ast day of WEEK.	at Le Mark BEI	tets (by	per lb. l and New the Carca	se).	BEST POTAT per Tor Watersidel Southw	oes 1 at Market
Base Joosta <u>Stratte Si</u> o	Money).	and Wales.	In-door.	Out-door.	Range of Prices.	Mean.	Range of Prices.	Mean.	Range of Prices.	Mean
YEARS.	£	s. d.	iosoania.	C those of	d.	d.	<i>d</i> .	<i>d</i> .	<i>s</i> .	s. a
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$91\frac{7}{8} \\ 97 \\ 95 \\ 94 \\ 92 \\ 93\frac{1}{2} \\ 92\frac{7}{8} \\ 92\frac{7}{8$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{r} 121,669\\ 120,140\\ 110,703\\ 110,603\\ 122,600\\ 130,974\\ 129,934 \end{array}$	$\begin{array}{c} 737,287\\ 751,031\\ 705,590\\ 687,763\\ 720,366\\ 820,953\\ 859,751\end{array}$	$\begin{array}{c} 4\frac{1}{4} - 6\frac{1}{2} \\ 4\frac{1}{4} - 6\frac{1}{4} \\ 4\frac{1}{2} - 6\frac{1}{2} \\ 4 - 6\frac{1}{2} \\ 4 - 6\frac{1}{2} \\ 4 - 6\frac{1}{2} \\ 4 - 6\frac{1}{4} \\ 4 - 61$	2 12 12 12 12 12 13 12 12 12 12 14 12 12 12 12 12	$\begin{array}{c} 4\frac{3}{4} - 7 \\ 4\frac{1}{2} - 6\frac{3}{4} \\ 4\frac{3}{4} - 7 \\ 5 - 7\frac{1}{8} \\ 5 - 7\frac{1}{4} \\ 5 - 6\frac{3}{4} \end{array}$	55556 18787	$\begin{array}{c} 108 - 134 \\ 104 - 136 \\ 79 - 109 \\ 120 - 145 \\ 114 - 134 \\ 125 - 149 \\ 0 \end{array}$	$120 \\ 120 \\ 94 \\ 132 \\ 124 \\ 137 \\$
1864 - 1865 - 1866 -	90 89 89 87 87 87 87	$\begin{array}{ccc} 40 & 2 \\ 41 & 9 \\ 49 & 11 \end{array}$	$\begin{array}{c} 126,554\\ 126,753\\ 127,589\\ 129,914 \end{array}$	788,689 758,199 736,839	$ \begin{array}{c} 4\frac{1}{4} - 6\frac{1}{4} \\ 4\frac{1}{2} - 6\frac{1}{2} \\ 4\frac{1}{2} - 7 \\ 4\frac{3}{4} - 7 \end{array} $	Cr Cr Cr Cr Phaneteria	$\begin{array}{c} 4\frac{3}{4} - 7 \\ 5\frac{3}{8} - 7 \\ 5\frac{3}{4} - 8\frac{1}{4} \\ 5\frac{1}{2} - 8 \end{array}$	$ \begin{array}{c} 5_{8} \\ 6_{16} \\ 7 \\ 6_{4}^{3} \end{array} $	$\begin{array}{c} 90 - 110 \\ 64 - 86 \\ 75 - 101 \\ 69 - 109 \end{array}$	100 75 88 89
QUARTERS ending 1857 :—	111.60.8	put polo	Terror	Constants.		-			CIMAR	
March - June - Sept Dec 1858 :—	93½ 9338 90% 89½	$56 10 \\ 56 9 \\ 59 11 \\ 52 0$	$\begin{array}{c} 135,121 \\ 119,241 \\ 109,371 \\ 122,942 \end{array}$	777,426 732,284 702,644 736,794	$\begin{array}{c} 4\frac{1}{2} - 6\frac{3}{4} \\ 4\frac{1}{4} - 6\frac{1}{2} \\ 4\frac{1}{4} - 6\frac{1}{2} \\ 4\frac{1}{4} - 6\frac{1}{2} \end{array}$	55 55 55 55 55 55 55	$\begin{vmatrix} 5\frac{1}{4} & -7\frac{1}{4} \\ 4\frac{3}{4} & -6\frac{3}{4} \\ 4\frac{1}{2} & -7 \\ 4\frac{1}{2} & -7 \end{vmatrix}$	6434343 55454	$\begin{array}{r} 100 - 120 \\ 105 - 150 \\ 95 - 115 \\ 130 - 150 \end{array}$	$ \begin{array}{r} 110 \\ 127 \\ 105 \\ 140 \end{array} $
March - June - Sept Dec 1859:—	$\begin{array}{c} 96\frac{1}{8} \\ 97\frac{1}{8} \\ 96\frac{1}{2} \\ 98\frac{1}{4} \\ \end{array}$	$\begin{array}{ccc} 46 & 5 \\ 44 & 1 \\ 44 & 7 \\ 41 & 9 \end{array}$	$\begin{array}{c} 138,376 \\ 119,234 \\ 107,197 \\ 115,751 \end{array}$	835,641 752,278 705,301 710,904	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	55555555555555555555555555555555555555	$\begin{vmatrix} 4\frac{3}{4} - 7 \\ 4\frac{1}{2} - 6\frac{1}{2} \\ 4\frac{1}{2} - 6\frac{1}{2} \\ 4\frac{1}{4} - 6\frac{3}{4} \end{vmatrix}$	555101010 555101010	$130-175 \\ 140-185 \\ 65-90 \\ 80-95$	152 162 77 87
March - June - Sept Dec 1860 :	$\begin{array}{c} 95\frac{5}{8}\\ 92\frac{7}{8}\\ 95\frac{3}{8}\\ 96\frac{1}{8} \end{array}$	$\begin{array}{ccc} 40 & 8 \\ 47 & 3 \\ 444 & 0 \\ 43 & 4 \end{array}$	$\begin{array}{c} 123,071\\ 109,350\\ 100,770\\ 109,623 \end{array}$	743,517710,968683,423684,454	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	5 5 5 5 5 5 5 5 5	$\begin{array}{c} 4\frac{3}{4} - 7 \\ 5 - 7 \\ 4\frac{3}{4} - 6\frac{3}{4} \\ 4\frac{3}{4} - 6\frac{3}{4} \end{array}$	578 65434 5434	$\begin{array}{c} 80 - 100 \\ 85 - 110 \\ 65 - 105 \\ 85 - 120 \end{array}$	90 97 85 102
March - June - Sept Dec 1861 :	$\begin{array}{c} 94\frac{5}{8} \\ 94\frac{7}{8} \\ 93\frac{1}{4} \\ 93\frac{1}{4} \\ 93\frac{1}{4} \end{array}$	$\begin{array}{rrrr} 44 & 5 \\ 52 & 8 \\ 59 & 1 \\ 56 & 9 \end{array}$	118,523 107,050 101,680 115,161	$717,269 \\ 692,384 \\ 667,680 \\ 673,721$	$\begin{array}{c c} 3\frac{3}{4} & -6\frac{1}{2} \\ 4\frac{3}{4} & -6\frac{3}{4} \\ 4\frac{1}{4} & -7 \\ 3\frac{1}{2} & -6\frac{1}{4} \end{array}$	5 ¹ 88 5 ³⁴ 58 5 ⁵⁸ 78 4 ⁷ 8	$\begin{array}{c} 4\frac{3}{4} - 6\frac{3}{4} \\ 5\frac{1}{2} - 7\frac{1}{2} \\ 5\frac{1}{4} - 7\frac{1}{2} \\ 4\frac{3}{4} - 6\frac{3}{4} \end{array}$	541223 6383 541223 5383 54	$115 - 145 \\ 125 - 160 \\ 125 - 145 \\ 115 - 130$	$130 \\ 142 \\ 135 \\ 122$
March - June - Sept Dec 1862 :	$\begin{array}{c} 91\frac{3}{4} \\ 91\frac{3}{4} \\ 91\frac{3}{8} \\ 91\frac{3}{8} \\ 93\frac{1}{4} \end{array}$	$\begin{array}{cccc} 55 & 1 \\ 54 & 9 \\ 52 & 1 \\ 59 & 3 \end{array}$	131,138 117,801 112,930 128,533	757,950 713,786 693,631 716,096	$\begin{array}{c} 4 & -6\frac{1}{4} \\ 4\frac{1}{4} & -6\frac{1}{2} \\ 4\frac{1}{4} & -6\frac{1}{2} \\ 4 & -6\frac{1}{4} \\ 4 & -6\frac{1}{4} \end{array}$	5 ¹⁸³⁰⁰⁰ 5500 550000 55000000000000000000000	$\begin{array}{c} 5\frac{1}{2} - 7\frac{3}{4} \\ 5\frac{1}{4} - 7\frac{1}{4} \\ 4\frac{7}{8} - 7 \\ 4\frac{3}{4} - 6\frac{3}{4} \end{array}$	6 6 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5 5	$140-155 \\ 120-140 \\ 85-110 \\ 110-130$	$ \begin{array}{r} 147 \\ 130 \\ 97 \\ 120 \end{array} $
March - June - Sept Dec 1863 :—	93 ¹ / ₈ 93 ³ / ₄ 93 ¹ / ₄ 93 ⁵ / ₈	$\begin{array}{ccc} 60 & 1 \\ 56 & 8 \\ 56 & 10 \\ 48 & 2 \end{array}$	$\begin{array}{r} 143,772\\ 127,861\\ 119,600\\ 132,663\end{array}$	804,268 782,113 789,917 907,514	$\begin{array}{c} 4 & -6\frac{1}{4} \\ 4 & -6 \\ 4\frac{1}{4} & -6\frac{1}{4} \\ 4 & -6\frac{1}{4} \end{array}$	5 ¹⁸ 5 ¹⁴¹ 5 ¹⁴¹	$\begin{array}{c} 4\frac{3}{4} - 6\frac{1}{2} \\ 5 - 7 \\ 5\frac{1}{4} - 7 \\ 5\frac{1}{4} - 6\frac{3}{4} \end{array}$	$5\frac{5}{8}$ 6 $6\frac{1}{8}$ 6	$130-155 \\180-200 \\100-130 \\90-110$	$142 \\ 190 \\ 115 \\ 100$
March - June - Sept Dec 1864:—	$\begin{array}{c} 92\frac{1}{2} \\ 93\frac{1}{8} \\ 93 \\ 92\frac{7}{8} \end{array}$	$\begin{array}{ccc} 46 & 7 \\ 46 & 2 \\ 45 & 7 \\ 40 & 6 \end{array}$	$\begin{array}{c} 142,257\\ 127,063\\ 120,343\\ 130,072 \end{array}$	943,324 873,503 817,238 804,940	$\begin{array}{c} 4 & -6\frac{1}{4} \\ 4\frac{1}{4} & -6\frac{1}{4} \\ 4\frac{1}{2} & -6\frac{1}{4} \\ 4 & -6\frac{1}{4} \end{array}$	55555555	$\begin{array}{c} 5 \ -7 \\ 4\frac{3}{4} \ -6\frac{3}{4} \\ 4\frac{3}{4} \ -6\frac{3}{4} \\ 5 \ -7 \end{array}$	6 5 ³ 4 5 ³ 4 6	$\begin{array}{c} 120 - 130 \\ 110 - 130 \\ 70 - 105 \\ 60 - 80 \end{array}$	125 120 87 70
March - June - Sept Dec 1865 :	$\begin{array}{c} 91 \\ 91\frac{1}{2} \\ 89\frac{1}{3} \\ 89\frac{5}{8} \end{array}$	$\begin{array}{ccc} 40 & 4 \\ 39 & 7 \\ 42 & 3 \\ 38 & 5 \end{array}$	$\begin{array}{c} 139,606\\ 122,883\\ 116,198\\ 128,326 \end{array}$	855,776 786,863 740,210 771,908	$\begin{array}{c} 4\frac{1}{2} - 6\frac{1}{2} \\ 4\frac{1}{4} - 6\frac{1}{4} \\ 4\frac{1}{2} - 6\frac{1}{2} \\ 4\frac{1}{2} - 7 \end{array}$	55555555	$\begin{array}{c} 5\frac{1}{2} & -7 \\ 5\frac{1}{4} & -7 \end{array}$	$\begin{array}{c} 6\frac{1}{4} \\ 6\frac{1}{8} \\ 6\frac{1}{4} \\ 6\frac{1}{4} \\ 6\frac{1}{4} \end{array}$	$55 - 70 \\ 40 - 60 \\ 80 - 120 \\ 80 - 95$	$\begin{array}{r} 62 \\ 50 \\ 100 \\ 87 \end{array}$
March - June - Sept Dec 1866 :—	89 <u>3</u> 90 <u>8</u> 89 <u>6</u> 89 <u>6</u> 88 <u>4</u>	$\begin{array}{cccc} 38 & 4 \\ 40 & 6 \\ 43 & 3 \\ 44 & 10 \end{array}$	$\begin{array}{c} 140,517\\ 123,760\\ 117,221\\ 128,858 \end{array}$	819,898 768,496 719,611 724,792	$\begin{array}{c} 4\frac{1}{2} - 7 \\ 4\frac{3}{4} - 6\frac{3}{4} \\ 4\frac{1}{2} - 7 \\ 4\frac{1}{4} - 7 \end{array}$	5 5 5 5 8489489458	$5\frac{1}{4}-7\frac{1}{4}\\6\frac{1}{4}-8\frac{1}{2}\\6\frac{1}{4}-8\frac{3}{4}\\5\frac{1}{2}-8\frac{1}{4}$	61 738 71 27 8	$\begin{array}{c} 85 - 97 \\ 90 - 115 \\ 65 - 100 \\ 60 - 90 \end{array}$	91 102 85 75
March - June - Sept Dec		$\begin{array}{ccc} 45 & 6 \\ 46 & 6 \\ 51 & 0 \\ 56 & 8 \end{array}$	$\begin{array}{c} 139,541 \\ 125,044 \\ 120,985 \\ 134,086 \end{array}$	759,400 734,748 717,555 735,654	$\begin{array}{c} 4\frac{1}{2} - 6\frac{3}{4} \\ 4\frac{3}{4} - 7 \\ 5\frac{1}{4} - 7\frac{1}{4} \\ 4\frac{3}{4} - 7 \end{array}$	5557 556 55	$\begin{array}{c} 5\frac{1}{2} - 7\frac{3}{4} \\ 5\frac{1}{2} - 8\frac{1}{2} \\ 5\frac{1}{2} - 8\frac{1}{4} \\ 5\frac{1}{4} - 7\frac{1}{2} \end{array}$	$6\frac{5}{8}$ 7 $6\frac{3}{4}$ $6\frac{3}{8}$	55 - 90 60 - 95 75 - 120 85 - 130	72 77 97 107

Second Quarter.- April, May, June.

Potatoes, and also the Average Number of Paupers relieved on the last day of each Week, in each of the Years and in each Quarter of the Years

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developed where human beings are crowded in cellars or other places in which ventilation and cleanliness are neglected. The poison of cholera, so far as we know, is of comparatively modern origin. It had its birth in the warmer regions of Asia, amongst the miserable devotees who arrived travel-worn at the banks of the Ganges and Jumna. Whatever doubts may have existed hitherto as to the mode of its propagation must be nearly dissipated by observation of recent outbreaks on the shores of this country or in neighbouring waters. Brought in a crowded vessel by unclean immigrants, from a district already infected, it confined its ravages to them and their immediate attendants. During an invasion of cholera in Manchester I traced every case, and ascertained in every instance that there had been communication with infected persons, or infected localities; and have already published the results of these inquiries. I believe there is no instance of the spontaneous outbreak of true cholera in this country. It is a specific disease, altogether distinct from what is called "English cholera," which is attended by or results from an excessive secretion of bile during the autumn; whereas in true Asiatic cholera there is a suppression of the biliary secretion. Purging and generally vomiting are the most marked characteristics of English cholera, there is excessive discharge of biliary fluid; but in Asiatic cholera where vomiting and purging supervene, the discharges are colourless and free from bile; and in the most rapidly fatal cases that I have seen there was no purging or vomiting at all. The system was simply poisoned, and death took place in three or four hours from the first effects. The most rapid effects of the cholera poison remind me more of those of cyanogen compounds than of any other.

These various emanations from the human body, the poisonous emanations of smallpox, typhus, scarlatina, &c., and certain natural secretions from the skin and lungs,

	the	5.0 Mar	Baron	neter.		Т	hermo	meter.			Tempe	an rature
NAMES of STATIONS.	Elevation in feet above Sea Level.	Latitude.	Mean.	Mean Monthly Range.	Mean of the highest Monthly Readings.	Mean of the lowest Monthly Readings.	Mean Monthly Range of Readings.	"Mean of all the highest Daily Readings.	Mean of all the lowest Daily Readings.	Mean Daily Range.	Of the Air.	Of the Dew-point.
uernsey	feet. 204	0 / // 49 27 30 N.	in. 29•580	in. 1.067	0 64 ` 3	0 40°3	0 24·0	0 56•4	0 48`0	0 8•4	0 50•9	•0 47•8
elston – – – – ruro – – – – – dimouth – – – – sborne – – – ournemouth – – – Torthing – – –	$ \begin{array}{c c} 106 \\ 43 \\ 30 \\ 172 \\ 30 \\ 25 \end{array} $	50 7 0 50 17 0 50 41 0 50 45 20 $50 47 0$	$\begin{array}{r} 29.605\\ 29.590\\ 29.586\\ 29.567\\ 29.555\\ 29.552\end{array}$	1.088 1.104 1.075 1.071 1.073	$\begin{array}{c} 67 \cdot 3 \\ 67 \cdot 0 \\ 66 \cdot 0 \\ 68 \cdot 9 \\ 65 \cdot 7 \\ 65 \cdot 7 \end{array}$	$36 \cdot 7$ $33 \cdot 2$ $35 \cdot 2$ $34 \cdot 8$ $35 \cdot 5$ $36 \cdot 6$	30.6 33.8 30.8 34.1 30.2 29.1	$59^{\circ}5$ $58^{\circ}8$ $58^{\circ}3$ $59^{\circ}3$ $58^{\circ}1$ $57^{\circ}5$	$\begin{array}{r} 47 \cdot 1 \\ 46 \cdot 1 \\ 44 \cdot 6 \\ 44 \cdot 5 \\ 45 \cdot 0 \\ 44 \cdot 3 \end{array}$	$\begin{array}{c} 12 \cdot 4 \\ 12 \cdot 7 \\ 13 \cdot 7 \\ 14 \cdot 8 \\ 13 \cdot 1 \\ 13 \cdot 2 \end{array}$	$52 \cdot 1 \\ 51 \cdot 0 \\ 50 \cdot 3 \\ 50 \cdot 9 \\ 50 \cdot 6 \\ 50 \cdot 8 $	$\begin{array}{r} 48 \cdot 1 \\ 46 \cdot 3 \\ 45 \cdot 3 \\ 46 \cdot 3 \\ 44 \cdot 5 \\ 47 \cdot 6 \end{array}$
7ilton House – – – farnstaple – – – farborough College – – – itton (Bristol) – – – itton (Bristol) – – – oyal Observ., Greenwich – oyal Observ., Greenwich – ittor – – – attersea – – – attersea – – – attersea – – – attersea – – – – attersea – – – – attersea – – – –	$ \begin{vmatrix} 150 \\ 43 \\ 456 \\ 50 \\ 228 \\ 159 \\ 47 \\ 13 \\ 118 \\ 210 \end{vmatrix} $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	29.567 29.622 29.623 29.566 29.605 29.598 29.537 29.593 29.565 29.525	1.098 1.116 1.097 1.085 1.128 1.125 1.099 1.096 	$\begin{array}{c} 71 \cdot 0 \\ 69 \cdot 3 \\ 67 \cdot 8 \\ 67 \cdot 0 \\ 67 \cdot 6 \\ 69 \cdot 5 \\ 66 \cdot 6 \\ 68 \cdot 3 \\ 70 \cdot 7 \\ 67 \cdot 5 \end{array}$	$\begin{array}{c} 29 \cdot 0 \\ 35 \cdot 6 \\ 28 \cdot 6 \\ 32 \cdot 4 \\ 33 \cdot 3 \\ 33 \cdot 1 \\ 38 \cdot 7 \\ 31 \cdot 0 \\ 32 \cdot 9 \\ 31 \cdot 5 \end{array}$	$\begin{array}{c} 42 \cdot 0 \\ 33 \cdot 7 \\ 39 \cdot 2 \\ 34 \cdot 6 \\ 34 \cdot 3 \\ 36 \cdot 4 \\ 27 \cdot 9 \\ 37 \cdot 3 \\ 37 \cdot 8 \\ 36 \cdot 0 \end{array}$	$59^{\circ}9 \\ 58^{\circ}9 \\ 56^{\circ}2 \\ 57^{\circ}3 \\ 57^{\circ}3 \\ 58^{\circ}3 \\ 57^{\circ}5 \\ 57^{\circ}9 \\ 58^{\circ}9 \\ 57^{\circ}3 \\ 57^{$	$\begin{array}{c} 41^{\cdot}3\\ 46^{\cdot}2\\ 41^{\cdot}1\\ 43^{\cdot}9\\ 44^{\cdot}1\\ 43^{\cdot}0\\ 46^{\cdot}7\\ 41^{\cdot}6\\ 43^{\cdot}5\\ 43^{\cdot}2\end{array}$	$\begin{array}{c} 18.6\\ 12.7\\ 15.1\\ 13.4\\ 13.2\\ 15.3\\ 10.8\\ 16.3\\ 15.4\\ 14.1\\ \end{array}$	$\begin{array}{c} 49 \cdot 5 \\ 51 \cdot 6 \\ 48 \cdot 1 \\ 50 \cdot 1 \\ 49 \cdot 8 \\ 49 \cdot 8 \\ 51 \cdot 1 \\ 49 \cdot 3 \\ 50 \cdot 7 \\ 50 \cdot 1 \end{array}$	$\begin{array}{c} 45 \cdot 0 \\ 46 \cdot 3 \\ 44 \cdot 0 \\ 44 \cdot 7 \\ 44 \cdot 2 \\ 44 \cdot 2 \\ 45 \cdot 1 \\ 44 \cdot 0 \\ 44 \cdot 1 \\ 44 \cdot 8 \end{array}$
kovston – – – – – – – – – – – – – – – – – – –	$ \begin{array}{c} 420 \\ 106 \\ 50 \\ 14 \\ 174 \end{array} $	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	29.594 29.573 29.583 29.582 29.571 29.536 29.565 29.568	$1 \cdot 133 \\ 1 \cdot 124 \\ 1 \cdot 076 \\ 1 \cdot 104 \\ 1 \cdot 152 \\ 1 \cdot 146 \\ 1 \cdot 132 \\ 1 \cdot 122 \\$	$\begin{array}{c} 70.6\\ 69.2\\ 69.2\\ 70.6\\ 66.9\\ 68.9\\ 66.9\\ 66.9\\ 66.6\end{array}$	$\begin{array}{c} 31 \cdot 2 \\ 29 \cdot 9 \\ 30 \cdot 7 \\ 29 \cdot 6 \\ 33 \cdot 7 \\ 32 \cdot 3 \\ 31 \cdot 9 \\ 33 \cdot 4 \end{array}$	$\begin{array}{c} 39 \cdot 4 \\ 39 \cdot 3 \\ 38 \cdot 5 \\ 41 \cdot 0 \\ 33 \cdot 2 \\ 36 \cdot 6 \\ 35 \cdot 0 \\ 33 \cdot 2 \end{array}$	58.6 58.1 58.3 58.8 55.9 57.5 56.5 55.6	$\begin{array}{r} 42^{\circ}4\\ 41^{\circ}9\\ 42^{\circ}4\\ 42^{\circ}2\\ 44^{\circ}2\\ 42^{\circ}9\\ 42^{\circ}3\\ 43^{\circ}0\end{array}$	$\begin{array}{c} 16 \cdot 2 \\ 16 \cdot 2 \\ 15 \cdot 9 \\ 16 \cdot 6 \\ 11 \cdot 7 \\ 14 \cdot 6 \\ 14 \cdot 2 \\ 12 \cdot 6 \end{array}$	49.2 49.4 49.3 49.8 49.3 49.3 49.3 47.8 49.4	43.8 43.9 44.6 43.2 44.2 45.3 42.4 43.7
Iawarden – – – – Iingsley – – – – danchester – – – čecles – – – – Wakefield – – – Halifax – – – Stonyhurst – – – Vitey – – – – York – – – –	$\begin{array}{c c} & 194 \\ 123 \\ 127 \\ 115 \\ 660 \\ 381 \\ 205 \end{array}$	$\begin{array}{c} 53 \ 11 \ 0 \\ 53 \ 16 \ 0 \\ 53 \ 29 \ 0 \\ 53 \ 29 \ 0 \\ 53 \ 40 \ 50 \\ \hline \\ 53 \ 54 \ 22 \\ 53 \ 54 \ 22 \\ 53 \ 58 \ 0 \end{array}$	$\begin{array}{c} 29\cdot524\\ 29\cdot545\\ 29\cdot569\\ 29\cdot545\\ 29\cdot583\\ 29\cdot518\\ 29\cdot518\\ 29\cdot515\\ 29\cdot487\\ 29\cdot487\\ 29\cdot485\end{array}$	$\begin{array}{c} 1\cdot 175 \\ 1\cdot 175 \\ 1\cdot 139 \\ 1\cdot 175 \\ 1\cdot 221 \\ 1\cdot 195 \\ 1\cdot 190 \\ 1\cdot 199 \\ 1\cdot 233 \end{array}$	$\begin{array}{c} 66^{\circ}5\\ 68^{\circ}1\\ 69^{\circ}6\\ 68^{\circ}1\\ 68^{\circ}3\\ 62^{\circ}9\\ 65^{\circ}4\\ 63^{\circ}6\\ 66^{\circ}3\\ \end{array}$	$\begin{array}{c} 36^{\circ}0\\ 29^{\circ}2\\ 30^{\circ}9\\ 30^{\circ}4\\ 27^{\circ}6\\ 31^{\circ}6\\ 29^{\circ}1\\ 33^{\circ}6\\ 32^{\circ}1\end{array}$	$\begin{array}{c} 30^{\circ}5\\ 38^{\circ}9\\ 38^{\circ}7\\ 37^{\circ}7\\ 40^{\circ}7\\ 31^{\circ}3\\ 36^{\circ}3\\ 30^{\circ}0\\ 34^{\circ}2 \end{array}$	$55 \cdot 5 \\ 56 \cdot 8 \\ 55 \cdot 8 \\ 55 \cdot 8 \\ 55 \cdot 8 \\ 56 \cdot 1 \\ 51 \cdot 5 \\ 54 \cdot 9 \\ 53 \cdot 3 \\ 55 \cdot 0 \\$	$\begin{array}{c} 45^{\circ}1\\ 42^{\circ}0\\ 41^{\circ}9\\ 42^{\circ}0\\ 40^{\circ}4\\ 41^{\circ}3\\ 41^{\circ}4\\ 43^{\circ}1\\ 42^{\circ}5\end{array}$	$\begin{array}{c} 10^{\circ}4\\ 14^{\circ}8\\ 14^{\circ}9\\ 13^{\circ}8\\ 15^{\circ}7\\ 10^{\circ}2\\ 13^{\circ}5\\ 10^{\circ}2\\ 12^{\circ}5 \end{array}$	$\begin{array}{r} 48.7\\ 48.5\\ 50.0\\ 48.3\\ 48.5\\ 45.4\\ 49.5\\ 46.8\\ 47.8\end{array}$	$\begin{array}{r} 44 \cdot 0 \\ 43 \cdot 4 \\ 42 \cdot 8 \\ 42 \cdot 3 \\ 42 \cdot 9 \\ 41 \cdot 8 \\ 42 \cdot 5 \\ 41 \cdot 5 \\ 45 \cdot 0 \end{array}$
Cockermouth – – – Allenheads – – – – Silloth – – – –	$ \begin{array}{c c} 150\\ 1360\\ 28\\ 114 \end{array} $	$\begin{array}{c} 54 \ 39 \ 16 \\ 54 \ 48 \ 44 \\ 54 \ 51 \ 51 \\ 54 \ 52 \ 56 \end{array}$	29·508 29·478 29·486 29·525	1·252 1·175 1·270 1·323	$\begin{array}{c} 66.3 \\ 60.9 \\ 66.2 \\ 65.7 \end{array}$	30°1 26°3 30°2 28°1	36·2 34·6 35·9 37·6	$55.7 \\ 50.6 \\ 56.2 \\ 55.1$	$\begin{array}{c} 43 \cdot 0 \\ 37 \cdot 9 \\ 42 \cdot 4 \\ 41 \cdot 0 \end{array}$	$\begin{array}{c} 12 \cdot 7 \\ 12 \cdot 7 \\ 13 \cdot 8 \\ 14 \cdot 1 \end{array}$	48.6 42.7 48.4 47.7	42·3 38·7 42·6 43·7
	124	55 0 7	29.582	1.215	61.5	32.8	28.7	51.8	41.9	9·9 13·2	45·8 47·1	41·3 41·6

Second Quarter.- April, May, June.

mainly affect the atmosphere of confined spaces which the sick occupy, or in which many persons are assembled. Wafted into the external atmosphere they probably become so diluted, or suffer such chemical changes, as render them incapable of reproducing their original types. The more general vitiation of the atmosphere, by impurities which I have classed as vaporous, is due to matters given off during the decomposition of dead organic substances. These matters vary according as the substance is animal or vegetable, and accompanied by the presence of more or less moisture. It has been usual to treat of these matters as simply gaseous; but though true gases are given off at certain stages of the decomposition, as sulphuretted hydrogen, carburetted hydrogen, phosphoretted hydrogen, and some compounds of nitrogen, yet, undoubtedly, some matters are also evolved, either preceding or accompanying these, quite distinct from them, and probably of much more complicated organization, in fact in a less advanced stage of decomposition, matters intermediate between true gases, the ultimate results of complete decomposition, and the bodies from which they have been evolved. No chemist accustomed to the smell of true gases, or of any compounds or admixtures of these, would ever confound it with the peculiar and often most offensive smells attending the decomposition of dead organized bodies. The smell of a dead and putrid animal, of a dissecting room, of a tallow-melting work, of an animal size manufactory, of the Thames, of the Irwell, Medlock, and Irk rivers at Manchester, is totally unlike that of any known gas, or of any known combination of gases. The common tests, sulphuric acid and permanganate of potass, will indicate the presence of organic matter in an atmosphere infected by such smell, but will throw no further light on its nature. That the chemical composition of the substance causing the smell will vary with the character of the latter is probable, and, possibly, with its physiological effect on the human system; but we have at present so little

of	ır in	ght of Satu-	ty of 00).	Cubie			Wind.				Rai	in.	
Force	Vapour Air.	Weigh I for S	umidi ion=1	B		Rela	tive Pr	oporti	on of	Cloud	t fell.		a in a second a los weg and gare an inclusion and as
Mean Elastic F Vapour.	Mean Weight of a Cubic Foot of	Mean additional Weight Vapour required for Sat ration.	Mean degree of Humidity of the Air (Saturation=100).	Mean Weight of Foot of Air.	Mean estimated Strength.	N.	E.	s.	w .	Mean Amount of Cloud (0-10).	Number of Days it fell.	Amount collected.	NAMES of STATIONS.
in. •383	grs. 3'8	gr. 0'5	89	grs. 538	2.2	7	- 6	7	10	4.9	days. 192	in. 44.5	Guernsey.
•343 •318 •308 •320 •295 •336	3·9 3·7 3·5 3·6 3·4 3·8	0'7 0'8 0'7 0'7 0'9 0'5	87 84 83 85 81 90	$539 \\ 540 \\ 543 \\ 539 \\ 540 \\ 541$	$2.3 \\ 2.4 \\ 1.4 \\ 0.5 \\ 0.9$	6 7 8 4 8 7	7 5 5 6 2 4		$11 \\ 12 \\ 11 \\ 9 \\ 13 \\ 11$	5.9 6.8 4.3 6.0 3.2	202 217 203 183 147 172	$\begin{array}{r} 43 \cdot 2 \\ 50 \cdot 9 \\ 37 \cdot 9 \\ 34 \cdot 3 \\ 31 \cdot 3 \\ 31 \cdot 0 \end{array}$	Helston. Truro. Sidmouth. Osborne. Bournemouth. Worthing.
•305 •320 •283 •301 •295 •296 •306 •292 •296 •303	3*5 3*2 3*5 3*4 3*4 3*4 3*4 3*4 3*4 3*5	1.3 1.1 0.7 0.7 0.8 0.8 0.9 0.8 0.9 0.8 0.9 0.7	85 83 82 82 82 82 81 83 80 83	540 540 536 541 538 540 540 540 543 540 538	1.4 1.2 0.5 1.7 0.6 0.5 1.6 1.3	757575 .3.6	6 6 4 6 5 5 4 4	8 7 7 7 8 8 8 11 .9	$9 \\ 12 \\ 12 \\ 12 \\ 10 \\ 12 \\ \\ 12 \\ \\ 11$	6.0 3.8 7.0 6.6 6.1 7.1 5.7 7.5	222 215 236 219 221 184 171 162 192 187	$\begin{array}{c} 40.7\\ 44.1\\ 41.0\\ 36.9\\ 40.1\\ 30.7\\ 30.2\\ 28.9\\ 31.6\\ 30.0\\ \end{array}$	Wilton House. Barnstaple. Marlborough College. Bath. Clifton (Bristol). Royal Observ., Greenwich. Guildhall. Battersea. Camden Town. Oxford.
·292 ·294 ·303 ·285 ·297 ·311 ·276 ·296	3·4 3·5 3·5 3·5 3·5 3·5 3·5 3·5 3·5 3·5 3·5	0°8 0°8 0°6 0°9 0°8 0°6 0°7 0°6	83 83 85 79 83 86 82 84	539 541 536 541 542 542 542 542 541 543	0.9 0.8 1.2 0.4 1.8	6 7 4 5 6 6 5 7	3 4 6 5 5 6 6 4	9 8 10 11 9 6 5 10	$ \begin{array}{r} 12 \\ 11 \\ 10 \\ 9 \\ 10 \\ 12 \\ 14 \\ 9 \end{array} $	6·3 6·3 7·0 6·3 6·5 6·6	203 185 223 166 172 214 152	$26.4 \\ 26.7 \\ 51.1 \\ \\ 26.3 \\ 26.3 \\ 34.5 \\ 25.4 \\$	Royston. Cardington. Lampeter. Diss (Norfolk). Norwich. Wisbeach. Derby. Holkham.
*292 *287 *278 *284 *282 *268 *278 *266 *309	3.4 3.3 3.3 3.2 3.2 3.1 3.1 3.0 3.5	0°6 0°7 0°8 0°8 0°8 0°8 0°4 0°6 0°7 0°4	85 83 82 80 82 88 84 82 90	538 539 541 541 542 533 537 540 543	$ \begin{array}{c} 2.0 \\ 0.6 \\ \\ 0.4 \\ 1.7 \\ 0.7 \\ 0.7 \\ 1.4 \\ \\ \end{array} $	6 4 3 7 6 7 7 5 6	5 6 7 6 5 6 6 6 6 7	7 10 13 7 8 7 7 3 6	$ \begin{array}{c} 12\\ 10\\ 7\\ 10\\ 11\\ 10\\ 10\\ 16\\ 11\\ \end{array} $	6.7 6.8 6.9 7.2 6.8 6.7 7.5 6.3 	207 211 215 230 221 240 186	29.8 34.2 43.2 43.3 33.7 64.8 36.3 25.9	Hawarden. Kingsley. Manchester. Eccles. Wakefield. Halifax. Stonyhurst. Otley. York.
*275 *239 *278 *290	3·1 2·7 3·2 3·3	0°8 0°5 0°8 0°5	79 85 81 86	537 522 541 542	$\begin{array}{c} 0.6 \\ 2.2 \\ 1.3 \\ 0.2 \end{array}$	4 5 4 4	6 4 8 7	9 8 6 9	11 13 12 10	6·4 6·3 5·6 8·1	206 287 187 181	50°7 57°4 35°8 27°6	Cockermouth. Allenheads. Silloth. Carlisle.
•265	2.9	0.6	85	545	1.6	7	5	7	11	5.6	208 213	27.4	North Shields. Miltown, Banbridge.

scientific knowledge relating to it, that even its physical condition is open to discussion. I have endeavoured, on what I believe to be good grounds, to show that it is not a true gas; but whether it be minutely cellular, or simply vaporous, I do not know. The study of the chemistry of the atmosphere beyond its oxygen, nitrogen, carbonic acid, and ammonia, is yet to be begun. We do not even know whether it contains ozone, as the phenomena attributed to the latter are otherwise explicable. The physiological effects of the east wind are often quite independent of its coldness. A north wind will often cause common colds or catarrhs; but the east wind, which is less cold, frequently produces distinct influenza. I was much struck with this last spring, which was very dry, and during which east winds were prevalent. On one occasion I was several miles from Manchester; quite in the country, and far away from the smoke; the atmosphere was unusually dry, the wind blew from the east, and there was a peculiar haziness in the air, like a fog, so that objects at a moderate distance could not be distinctly seen. In a few hours many people were complaining of influenza. Now this was no common fog; the air was very dry, and the wind not very cold, much less so than a north wind which succeeded it.

It is probable that every heap of decomposing organic matter, every foul ditch or collection of stagnant water, and every polluted stream, that crowded graveyards and manufactories of animal substances, transmit to the atmosphere matters injurious to the human system. The close and festering jungles and estuaries of rivers in tropical regions produce their characteristic fevers; undrained fens, ague and enlarged spleen; and the filth of close, thickly-peopled, and ill-ventilated localities breeds typhus; and even when such grave results are not experienced the general health suffers deterioration.

In country places in England the chief sources of these injurious emanations are the heaps of manure constantly found in close proximity to farmhouses, and to their owners the objects of fond contemplation and delight. So powerful a disinfectant is porous soil, in which, probably, oxygen exists considerably condensed, as it is known to be in charcoal and most porous bodies, that once mixed with it, or well covered by it, the fetid matters of the dungheap become rapidly oxidized, and converted into carbonic acid, water, ammonia, and probably alkaline nitrates. They are decomposed, and rendered harmless. This powerful action of the soil as an oxidizer and decomposer of effete matters should not be overlooked in any arrangements for the removal or utilization of sewage. Oxygen is also much more soluble in water than in nitrogen, so that rain and spring water contain a considerable quantity of the former in solution, ready to act with energy and rapidity on partially decomposed matters. By such benign arrangements a well-drained soil is always sweet and grateful. The perfect chemistry of nature finds a use for all effete matters; and in return for these she gives the tender herb, sweet scented flowers, and fruits.

In large towns we find the sources of atmospheric vitiation of the class under review in undrained and unsewered streets, courts, and houses, in cesspools, foul drains, and streams, graveyards, unsluiced sewers, and wherever animal and vegetable matters are undergoing spontaneous decomposition.

It is probable that no town in England has a sufficient supply of water for all sanitary purposes. The frequent sluicing of sewers is most important to the healthy condition of a town, and the street openings or grids should be closed during the operation. The occasional partial sluicing of sewers by rain, at long intervals, is of doubtful benefit to a town. The foul matters in the sewers become stirred up without being fully carried away; much sulphuretted hydrogen and other gases become liberated, besides decomposing

Feet. Barometer. Thermometer. Mean Temperature Mean Elevation in above the Sea Le of Monthly ige. all the Daily all the Daily PARALLELS Mean Monthly Range of Reading Mean of the high Monthly Readir Mean of the low Monthly Readir Mean Daily Rar of Mean of all lowest Readings. Mean of al highest Readings. Dev Of the Air. LATITUDE. Of the point. Mean Me Between the latitudes, 49° and 50° - 50° and 51° - 51° and 52° - 52° and 53° - 54° and 55° -Allenheads -North Shields -Miltown, Banbridge (Ireland). Between the latitudes, 49° and 58° -0 0 50.9 50.9 50.0 49.2 48.2 48.2 48.2 42.7 45.8 47.1 0 feet. 204 68 147 147 235 97 1360 124 200 0 8·4 13:3 14·5 14·7 12·9 13·6 12·7 9·9 13·2 111. 29.580 29.576 29.580 29.571 29.530 29.506 29.478 29.582 29.481 $\begin{array}{c} \text{in.} \\ 1 \cdot 067 \\ 1 \cdot 082 \\ 1 \cdot 105 \\ 1 \cdot 124 \\ 1 \cdot 189 \\ 1 \cdot 281 \\ 1 \cdot 175 \\ 1 \cdot 215 \\ 1 \cdot 256 \end{array}$ 0 56·4 58·6 57·9 57·4 55·1 55·7 50·6 51·8 54·2 48.0 45.3 43.4 42.7 42.2 42.1 37.9 41.9 41.0 $\begin{array}{c} 24.0\\ 31.5\\ 35.9\\ 37.0\\ 35.3\\ 36.6\\ 34.6\\ 28.7\\ 34.9\end{array}$ 47.8 46.3 45.6 43.9 42.9 42.9 38.7 41.3 41.6 $\begin{array}{c} 64 \cdot 3 \\ 66 \cdot 8 \\ 68 \cdot 5 \\ 68 \cdot 6 \\ 66 \cdot 5 \\ 66 \cdot 1 \\ 60 \cdot 9 \\ 61 \cdot 5 \\ 64 \cdot 2 \end{array}$ 40·3 35·3 32·6 31·6 31·2 29·5 26·3 32·8 29·3 49° and 58° 287 29.543 1.166 65.3 32.1 33.2 12.6. 55.3 42.7 48.1 43.4

TABLE 45.—Mean Annual Value of Meteorological Elements

substances or vapours; a current of air opposed to that of the stream in the sewers is originated, and escapes at the grids or street-outlets; for the gas in the sewers is lighter than atmospheric air, and ascends to the street openings, instead of following the stream of liquid to the outlet of the sewer.

It may seem to be of little consequence whether we regard these emanations as purely gaseous, vaporous, or existing in some other subtle form. But the more accurate the conception we form of their physical conditions the more likely are we to arrive at their distinctive characters and properties. Some attempts have been made in this direction already. Dr. Calvert has made a chemical examination of the odorous matter infecting the atmosphere from an unhealthy ulcer, and has shown it to possess basic properties; and other investigators have endeavoured to establish a relation between certain cryptogamic sporules and marsh fever.

The question has also a practical bearing in relation to general sanitary arrangements; for whilst the true gases are obedient to a law of rapid diffusion, from mutually repulsive property of their particles, and pass into the general body of the surrounding air, the law being that the diffusive power varies inversely as the square root of the density of the gas itself, the gases retaining under all atmospheric temperatures and pressures their gaseous condition; yet vapours of highly complex constitution are generally of low tension, and speedily attain their condition of maximum density. It is probable that the vaporous matters exist in the condition of cloud, if clouds may be defined as "masses of " air which contain innumerable minute particles of suspended matter condensed from " a state of vapour." Whether this condition is intermediate between fully formed vapour and liquid, and is constituted of minute vesicles, as maintained by Saussure and other observers, is at the present time undetermined. There is a good deal to be said both for and against the theory; but in any case, whether vesicular or in a finely divided liquid form, or even approaching the solid form, it is evident that they are not, like true gases, capable of diffusion, but can be acted upon only by atmospheric currents ;- they can be wafted and blown away, but not diffused. The practical bearing of this then is, that wherever a confined district is in a bad sanitary condition, where zymotic or infectious diseases prevail, where bad smells are evident, and there are indications that matters not properly belonging to a pure atmosphere are floating or suspended in it, after removal, as far as practicable, of the causes producing the emanations, effectual currents of air should be drawn through the courts, alleys, houses, &c. that are the seats of contamination.

Very difficult is the task in a large town where abominations have grown to a magnitude commensurate with the town itself. Private munificence, of which a splendid example has lately been given to the world, should be directed into this channel in every English town. Unfortunately, in many districts, the very habits of the people are fatal to all efforts at improvement. With water at their doors, their houses and persons are inconceivably dirty. With the windows constantly closed, particularly of their sleeping rooms, the atmosphere of their apartments is reeking and noisome to an extent incompatible with health ; and it is in such districts that when an epidemic breaks out it finds its greatest number of victims. In cholera maps, shaded in the ratio of mortality, the blackest tints cover these localities. But pestilence, once established, is not confined to these places, it spreads to better districts, and involves rich and poor in like disaster. All ranks of persons are vitally interested in the sanitary condition of their towns or villages ; and upon all it rests as a sacred duty to assist in promoting so great and noble an enterprise.

Force of	Weight of Vapour Cubic Foot of Air.	J Weight required n.	of e Air. 100.	a Cubie		W	Vind.		alest 22	Cloud	anior A	uin.	YEARS, MARK
E O.	of V	radditional W Vapour req Saturation.	Degree dity of the ration=10	ofa	p		Rela			Amount of (10).	Days	Amount collected.	PARALLELS
Elastic ur.	hto	ur atio	ean Degree Humidity of th Saturation =	Mean Weight of Foot of Air.	Mean estimated Strength.	Pr	oport	tion o	f	unt		llec	of
Ias r.	eig	diti	Delity	f A	tim.	1	1		0.00.550	.(of	col	LATITUDE.
	₽õ	Va	tap:	t o	es		3		1970	10.	umber it fell.	ant	LATITUDE.
Mean Vap	Mean in a	Mean of for	Mean Hun Sa	Poc	san	N.	E.	S.	w.	Mean. (0-)	tf	lou	
X	M.	M	M	Ä	N N	1	64		10-95	N	Ĩ.	Aı	1818
814 A		1°16	1 211 4		1.>	18 - 81	St man		1.12		1-	1.42	
in. •333	grs. 3.8	gr. 0.5	89 -	grs. 538	2.2	7	6	7	10	4.9	days. 192	in. 44.5	Between the latitu 49° and 50°
.320 -	3.6	0.7	85	540	1.5	7	5	7	11	5.2	187	38.1	50° and 51°
.300	3.4	0.9	82	539	1.1	6	55	8	11	7.0	201	35.4	51° and 52°
•294 -	3.3	0.7	83 -	541	1.0	6	5	8	11	6.2	188	30.9	52° and 53°
*283	3.2	0.7	84	539	1.1	6	6	7	11	6.9	216	38.9 38.0	53° and 54° 54° and 55°
*281 *239	3·2 2·7	0.5	82 85	540 522	0.7	4 5	7	8	11 13	6·7 6·3	191 287	57.4	Allenheads.
265	2.9	0.6	85	545	1.6	07	4 5	87	11	5.6	208	27.4	North Shields.
*266	3.0	0.7	81	540	2.5	5	4	12	9	5.0	213	27.3	Miltown, Banbi
\$*0 -f		104	1212 -			1 15	in the	1	1.49	1	124	1. 147	(Ireland).
•287	3.2	0.7	84	538	1.2	6	5	8	11	6.0	209	37.5	Between the latitu 49° and 58°

in the Year 1866 for different Parallels of Latitude.

Third Quarter.-July, August, September.

The United Kingdom.—The Registers of the United Kingdom show that the births of 239,873 children, and the deaths of 150,855 persons of both sexes, were registered in the three months ending on September 30th.

The marriages of the United Kingdom in the quarter ending September 30th were 56,924.

The corrected death-rate of the United Kingdom—2°061 per cent.—is less than that prevailing in England and Wales. The several facts concerning the other divisions of the Kingdom are set forth in the reports of the Registrar General of Scotland and the Registrar General of Ireland.

England.—The marriage-rate of the summer quarter was above the average. The birth-rate of the quarter was near the average. The country was visited by cholera, and the mortality was raised much above the summer average by the epidemic in some districts, while the rest of the kingdom was unusually healthy.

Marriages.—There were married in the summer quarter (ended 30th September) 92,514 persons; against 89,350 and 91,704 in the two corresponding periods of 1864-65. Of marriages in London the number was 9038. Lancashire exhibited a marked increase, the marriages in the last three summer quarters in the seat of cotton manufacture having been successively 6534, 6628, and 7075. But while the marriage-rate prospered in the Manchester district, where the numbers in the three periods were 1105, 1200, and 1277, it declined in Liverpool as the returns show; in the two previous summers 1210 and 1112 couples married, and last summer only 1082.

If the marriage-rate in England that prevailed last summer were maintained for a year, the proportion, to the population, of persons who entered wedlock would be 1.726 per cent. against an average of 1.621. Seventeen marrying persons in a thousand of the population is a high annual rate for the first nine months; but it would be low if it occurred in the autumnal quarter, namely, the last three months of the year.

Births.—In the quarter ending 30th September 179,096 children were born. The number was about 2000 less than in either of the two previous summer quarters. The annual birth-rate for the quarter was 3°344 per cent., the average of 10 corresponding quarters (1856-65) being almost identical, namely, 3°343 per cent.

YEARS.	Mean Weekly Movement of the Air in Miles.*	Departure from Average.	Fall of Rain in Inches.	Departure from Average.	Mean Dryness of Atmo- sphere.	Departure from Average.	Mean TEMPERA- TURE of the AIR.	Departure from Average.	*
1849 - - 1850 - - 1851 - - 1852 - - 1853 - 1 1856 - - 1856 - 1 1857 - 1 1858 - - 1858 - - 1860 - - 1861 - 1 1862 - - 1862 - - 1864 - - 1866 - -	Miles. 1808 1841 1730 1731 1659 1731 1659 1775 1622 1626 1666 1666 1676 1666 1676 1666 1597 1553 1917 1698	Miles. +110 +143 + 32 + 83 -101 + 33 - 39 + 77 -136 - 72 - 100 - 122 - 32 - 18 + 77 -101 -145 + 4219	Inches. 23'9 19'7 21'6 34'2 29'0 18'7 21'1 22'2 21'4 17'8 25'9 32'0 20'0 20'8 26'2 20'0 16'7 29'0 30'7 23'9	Inches. 0 00 - 422 - 223 + 10 3 + 10 3 + 5 1 - 5 2 - 2 28 - 177 - 6 1 + 8 21 - 8 275 - 6 2 + 8 21 - 4 29 - 2 28 - 177 - 6 2 - 2 25 - 6 2 - 2 25 - 6 2 - 2 25 - 6 2 - 2 25 - 2 28 - 2 25 -	0 6.6 6.5 7.4 4.7 4.7 5.6 5.2 4.7 4.7 5.6 5.5 6.5 6.5 6.5 6.5 4.6 5.5 4.7 7.0 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6	$\begin{array}{c} \circ \\ + \ 0.8 \\ + \ 0.76 \\ + \ 1.76 \\ + \ 1.76 \\ - \ 1.71 \\ - \ 1.73 \\ - \ 0.76 \\ + \ 0.77 \\ + \ 0.72 \\ - \ 0.8 \\ - \ 0.71 \\ + \ 0.72 \\ + \ 0.72 \\ + \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ - \ 0.72 \\ - \ 0.8 \\ -$	0 50.0 49.3 49.2 50.6 47.7 48.9 47.1 49.0 51.0 49.2 50.7 47.7 49.0 51.0 49.2 50.7 47.7 49.2 50.6 51.0 49.2 50.6 50.6 51.0 49.2 50.6 50.7 49.9 47.7 149.9 50.7 49.9 47.7 149.9 50.7 49.0 50.7 49.2 50.7 49.2 50.7 49.2 50.7 49.2 50.7 49.2 50.7 49.2 50.7 49.2 50.7 49.5 50.7 5	$\begin{array}{c} \circ & \\ + & \circ & ? \\ - & \circ & ? \\ - & \circ & ? \\ + & 1 & 1 & 6 \\ - & 2 & 2 & 2 \\ - & 2 & 2 & 2 \\ - & 1 & 1 & 7 \\ + & 1 & 2 & 3 \\ + & 1 & 2 & 3 \\ + & 1 & 2 & 3 \\ + & 1 & 2 & 3 \\ + & 1 & 2 & 3 \\ + & 1 & 2 & 3 \\ + & 1 & 2 & 3 \\ - & 2 & 2 & 2 \\ \end{array}$	-

TABLE 46.-Meteorology of Greenwich

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

Increase of Population.—The deaths last quarter were 116,653, and if compared with the births there is a difference in favour of the latter of 62,443, which number represents the natural increase of population.

The total number of emigrants in the September quarter from ports in the United Kingdom where Emigration Officers are stationed was 47,153; they were as many as in the same period of 1864, but not so many as in that of 1863, and few as compared with emigrants who left in the summer of 1865. Taking round numbers, 36,000 (of whom half were natives of Ireland) out of the 47,000 went to the United States, nearly 7000 to the Australasian and nearly 4000 to the North American colonies.

Prices, Pauperism, and the Weather.—The price of wheat, which had been gradually rising from 38s. per quarter in the March quarter of 1865 to 46s. in the spring of the present year, suddenly rose last quarter to 51s. Beef was also dear last quarter, the mean price having been $6\frac{1}{8}d$. per lb., as sold by the carcase at Leadenhall and Newgate Markets, against $5\frac{1}{2}d$. and $5\frac{3}{4}d$. in the corresponding period of 1864 and 1865. Mutton did not rise, the price having been $5\frac{1}{2}d$. for inferior and $8\frac{1}{4}d$. for superior quality; the mean price $6\frac{3}{4}d$. Best potatoes at Southwark rose to 97s. 6d. per ton. Thus the tendency of provision markets was decidedly upward.

The quarterly average number of paupers relieved on the last day of each week was, in-door 120,985, out-door 717,555. The former number is rather high for the season, but the latter number shows a decrease, probably owing to the lateness of the harvest, by which labourers would be engaged longer than usual in field work.

The mean temperature of the air in the quarter at Greenwich was $58^{\circ} \cdot 9$, which is $1^{\circ} \cdot 1$ below the average of the season in twenty-five years. Each of the three months, but particularly August, was cold. The rain-fall measured $7 \cdot 9$ in., half of which was in September, when the amount was an inch and a half in excess of the average. Mr. Glaisher writes that the weather, which had been warm and fine at the close of the previous quarter, changed to cold at the beginning of July, and in every part of the country rain fell almost daily. From the 9th to the 17th was a period of heat, but from the 18th July to the 27th September the temperature was almost constantly low. Rain fell frequently all over the country in July; and in August seriously interrupted harvest work. In September the atmospheric pressure was always low, and in Guernsey and the west of England eight or nine inches of rain fell; near the east coast three inches; about London four inches. In the midland counties there were floods :

March.	Departure from Average.	June.	Departure from Average.	Sept.	Departure from Average.	Dec.	Departure from Average.	YEARS.
0	0	0	0	0	0	0	0	
41.9	+ 2.1	51.7	- 0.9	61.0	+ 0.8	44.8	+ 0.1	1849
39·4 41·9	-0.4 + 2.1	$53.5 \\ 51.5$	+0.9 -1.1	59°6 59°8	-0.6 -0.4	44·7 43·7	0.0	1850
41.4	+ 1.6	51.2	- 1.4	61.8	+ 1.6	48.1	+ 3.4	$ 1851 \\ 1852 $
38·1 40·8	- 1.7	51.8	- 0.8	58.5	- 1.7	42.3	- 2.4	1853
40 8 34.1	+1.0 -5.7	51·7 50·5	-0.9 -2.1	59°8 60°4	-0.4 +0.2	43.7 42.7	-1.0 -2.0	$ 1854 \\ 1855 $
40.0	+ 0.2	52.3	- 0.3	59.9	- 0.3	44.2	- 0.2	1856
39·2 37·8	-0.6 -2.0	53·8 54·3	+1.2 + 1.7	63°3 61°0	+3.1 + 0.8	47'9 43'8	+3.2 -0.9	1857
43.3	+ 3.2	58.7	+ 1'1	62.8	+ 2.6	43.3	- 1.4	1858 1859
38.8	- 1.0	50.5	- 2.1	56.2	- 4.0	42.6	- 2.1	1860
39'9 41'0	+ 0.1 + 1.2	51.8 53.3	-0.8 + 0.7	60·4 58·8	+0.2 -1.4	45.5 45.0	+0.8 +0.3	1861 1862
42.6	+ 2.8	53.1	+ 0.2	58.8	- 1.4	46'8	+ 2.1	1863
87°9 86°5	-1.9 -3.3	53°1 56°2	+0.5 +3.6	59°4 62°5	-0.8 + 2.3	43.7 46.0	-1.0 +1.3	1864
41.2	+ 1.4	58.0	+ 0.4	62 5 58·9	+ 2 0	46 2	+1'5	1865 1866
39.8		52.6		60.2		44.7		Average.

in the Eighteen Years 1849-1866.

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thousands of acres were under water, and much damage was done. In the three visitations of cholera in past years there was great atmospheric pressure, high temperature, narrow diurnal range owing chiefly to high night temperature, defect of rain, wind, and electricity; and in the last of those (1854) a remarkable blue mist was observed which prevailed night and day. In nearly all these particulars the meteorological character of the present epidemic season is different from that of previous periods when cholera prevailed; but the blue mist has been again visible; it was first seen by Mr. Glaisher on 30th July, and by other observers in the preceding week. Since that time it has been generally present; on some days no trace of it visible, and on other days seen for parts of a day only. It has extended from Aberdeen to the Isle of Wight, and was of the same tint of blue everywhere. This mist increased in intensity when viewed through a telescope; usually no mist can be seen when thus viewed; it increased in density during the fall of rain, though usually mist rises from rain. Its density did not decrease when the wind was blowing moderately strong; it decreased when a gale was blowing, but increased again on its subsidence. Whatever may be its nature, he adds, the fact is very remarkable, that since the cholera period of 1854 this phenomenon has not been observed till the present time.

Deaths; and the State of the Public Health.—116,653 deaths were registered in the 92 days ending September 30th; and the annual rate of mortality was $2 \cdot 179$ per cent. This exceeds the average mortality of the last ten summer quarters by $\cdot 177$, or one twelfth part; and the excess on the population is equivalent to 9475 deaths. The deaths returned from cholera amounted to 10,365; the deaths from diarrhœa, also due in great part to the same cause, to 9570.

The mortality was at the rate of 25 per 1000 in the large town districts, and 18 in the village and small town districts; the excess in the large town districts was 7. The mortality in the town districts was considerably above its usual summer average; while in the rest of the country the increase was slight.

The three months of July, August, and September are now usually the healthiest of the year in England; and their average annual rate of mortality per 1000 is 20, but their mortality during these months in the present year was at the rate of 22.

The mortality of London was at the rate of 29 in 1000; of the North Western Division 27; in the two Northern Divisions and in Wales, the mortality was at the rate of 22. In the other divisions the mortality was low, and indeed lower than their average : in the South Eastern Division

TABLE 47. — Average Annual Rate of Mortality to 1000 of the Population in the 11 Divisions of England in the 10 Years 1851-60, and in the Year 1866.

ana	AVERAGE ANNUAL RATE of MORTALITY to 1000 LIVING in									
DIVISIONS.	10 Years 1851–60.	Year.	Winter Quarter 1866.	Spring Quarter 1866.	Summer Quarter 1866.	Autumn Quarter 1866.				
I. LONDON	23.63	26.30	26.66	25.29	28.86	24.38				
II. SOUTH EASTERN COUNTIES -	19.55	19.42	21.85	19.81	18.11	17.90				
III. South Midland Counties -	20.44	20.14	22.85	21.03	17:62	19.07				
IV. EASTERN COUNTIES	20.58	20.13	23.19	21.61	18-10	17.62				
V. SOUTH WESTERN COUTTIES -	20.01	20.38	23.85	21.86	17:30	18.52				
VI. WEST MIDLAND COUNTIES -	22.35	22.01	26.54	24.16	17.48	19.84				
VII. NORTH MIDLAND COUNTIES -	21.16	20.77	24.01	22.28	17.58	18.89				
VIII. NORTH WESTERN COUNTIES -	25.51	29.21	33.84	28.74	27.31	26.96				
IX. YORKSHIRE	23.09	25.63	29.60	27.59	22.03	23.28				
X. NORTHERN COUNTIES	21.99	23.90	24.43	23.95	21.95	25.27				
XI. MONMOUTHSHIRE AND WALES	21.28	22.79	23.92	23.45	22.31	21.49				

Note.-The above mortality for the year 1866 is the mean of the quarterly rates.

it was 18, in the South Midland it was 18, in the Eastern 18, the South Western 17, the West Midland 17, and in the North Midland Division 18. Upon turning to the large cities of the United Kingdom, still greater divergences are observed; the mortality was at the rate of 19 in Birmingham, 21 in Bristol, 22 in Hull, 24 in Sheffield, 26 in Salford, 31 in Manchester, 32 in Newcastle-upon-Tyne, 50 in Liverpool. In Edinburgh the rate of mortality was 23, in Glasgow 25, in Dublin 24. The excessively high rates of mortality are generally due to the invasion of cholera.

It is well known that this epidemic raged around us in France, Belgium, and Holland earlier in the year, and during July it established itself in England, where it put the sanitary defences of nearly every district on the coasts to the test. Indeed the cholera matter (*Cholrine*) has evidently been diffused all over the kingdom; for in every county, except Herefordshire and Rutlandshire, deaths from cholera have been registered, and diarrhœa has prevailed to such an unusual extent as to imply the existence of some specific zymotic element. It was only, however, when that element was diffused by water, and by the wilful neglect of hygienic precautions, that the mortality became appalling.

Thus, although the waters are yet by no means free from impurities, the people of London are no longer supplied as they were in 1849 with unfiltered waters contaminated by their own sewers; and the deaths in the districts of the West, North, Centre, and South of London were 1023 by cholera and 1558 by diarrheea, among 2,430,046 people. Whereas 3691 deaths by cholera and 740 by diarrhea, that is, 4,431 together, occurred in the East London districts, among 607,945 people supplied with water chiefly from the Old Ford reservoir of one company. Deduct these deaths, and the deaths by cholera in London are reduced to 1023, while the deaths by cholera in England are reduced from 10,365 to 6674. Again, of the 2022 deaths from cholera in Lancashire and Cheshire no less than 1603 were registered in the Liverpool and West Derby Districts alone. Deduct these deaths, with 2447 more in West Ham (adjoining East London, and supplied with the same water), in Portsea Island, in the Isle of Wight, Southampton, Exeter, with three adjacent districts of South Devon and Swansea, as well as in certain districts of South Wales, and the deaths from cholera in the rest of England are brought down to 2624.

This proves that although the freest intercourse has been kept up between the various parts of the country the epidemic has only assumed an aggravated form where the defences have been weak and circumstances have been in its favour.

By some fatality, Dr. Trench, the able medical officer of health for Liverpool, "ceased to have any direct voice in the cholera arrangements so "soon as the Orders in Council were issued." Energetic measures were, however, adopted by the vestry with his approval.

On the other side of the Mersey is Birkenhead, exposed to the same epidemic influences as Liverpool; and in that district the deaths from cholera only amounted to 30 out of a population of more than 61,420.

Dr. Baylis, the Medical Health Officer, thus describes the successful precautions taken at Birkenhead :---

In addition to ordinary measures, we commenced a system, before its appearance, of deodorizing all the worst middens in the town, on the principle that, if we could destroy the gases of decomposition in the worst parts of the town, we should remove one of the greatest depressents of the vital force ; this system was carried out more effectually after the disease appeared.

I saw the first patient that died, and my friendly connexion with all the medical men of the place enabled me to reach nearly every succeeding fatal case. To the friends of each I gave the most urgent instructions, furnished the poor with disinfectants, sprinkled their floors with carbolic acid, had chloride of lime regularly thrown in their and neighbouring ashpits, used carbolic acid in their waterclosets and drains; took, in the first instance, and until the guardians moved, the responsibility of burning the soiled bedding; had all the soiled clothes steeped in chlorine water, and saw that the houses were perfectly cleansed down. Finally the body was partially covered with charcoal, and buried in a few hours. By these means the disease, I think, was in most instances stamped out; and I feel sanguine, if there was a proper staff for the purpose, with the necessary power, together with the means of getting at every case attacked, a medical officer, accustomed to his duties, and otherwise competent, would have a good chance of keeping down the malady, where the conditions were not so very bad as to preclude all chance of success.

I confess, however, with every wish to do our duty, for want of more power, the careless, the drunken, and the stolid poor defeat one occasionally, and then we had, in some instances, a second and a third case in the same house. These, however, were the exceptions.

The mortality of Birkenhead on the south side of the Mersey, was at the rate of 24 in 1000, while the mortality in the borough of Liverpool on the north bank of the river was 50. The deaths in Liverpool at the Birkenhead rate would have been about 2906; the actual deaths were 6091.

The cholera has prevailed, as on former occasions, in particular fields. The London cholera field, by extension down the Thames, reached Ramsgate. The second considerable field lies round the Solent along the coast from Portsmouth and Southampton to Newport in the Isle of Wight. The Exeter field extended beyond Torbay to Totnes and Brixham. The Liverpool field extended to Chester, Wigan, and Bolton, but scarcely touched Manchester. The Swansea field was visited with extreme severity; and although the mortality was concentrated mainly on Swansea, Neath, and Llanelly, it was felt all over Glamorgan, Carmarthen, and Pembroke, as far as Haverfordwest.

The epidemic has been most fatal on the sea coast, in the chief ports of the kingdom. It is by no means capricious, but obeys definite laws. It never destroys the people to any extent where the water supply is pure, or where the hygienic conditions are good, when the authorities adopt judicious and well organized measures of early treatment and systematic disinfection.

Those districts which are supplied with bad water, have no effective system of sewage, have no Health Officer, and have no precautions in force, should immediately set their houses in order, as they are still in imminent danger.

Fourth Quarter. - October, November, December.

The United Kingdom.—The Registers of the United Kingdom show that the births of 247,112 children, and the deaths of 157,803 persons of both sexes, were registered in the three months ending on December 31st.

The marriages of the United Kingdom in the quarter ending December 31st were 68,771.

The corrected death-rate of the United Kingdom—2.164 per cent.—is less than that prevailing in England and Wales. The several facts concerning the other divisions of the Kingdom are set forth in the Reports of the Registrar General of Scotland and the Registrar General of Ireland.

England.—The birth-rate was unusually high, the death-rate below the average, the marriage-rate above the average. The aspect of these returns is favourable in every respect. Marriages have abounded, births have followed in unusual numbers, and deaths, in spite of an imminent epidemic, have been less frequent than in the corresponding seasons of former years. Hygienic measures have been prosecuted with unusual activity, and apparently with good results.

Marriages.—In the last three months of 1866 the number of persons married was 110,726. The marriages were 55,363, and were less by 1625 than in the corresponding period of the previous year. In London the number of marriages was 9103 against 9738 in the December quarter of 1865; in the West Midland counties 6386 against 6981; in Yorkshire 6129 against 6285; in the Northern counties 3013 against 3284. In the counties of the cotton manufacture the marriages maintained their activity better, the number there having been 8653 against 8583. During the last three years the marriage-rate has been unusually and persistently high; and this statement holds equally good in respect to the last quarter of 1866, though in it the marriage rate (2.064) was not so high as in the same period of 1865, when it was 2.146, which proportion represents *persons married* to a hundred of the whole population. The average rate of the December quarter in the ten years 1857-66 is 1.09.

Births.—The number of children born last quarter (ended 31st December) was 185,594; it exceeded by 6000 the number of births in the autumn of 1865. To this increase nearly the whole kingdom appears to have made more or less contribution; but in Cornwall there was a very striking decrease of births, for the number fell in that county from 3051 to 2652, a fact hardly to be accounted for except by active emigration.

The annual birth-rate in the quarter was high; it was 3.458 per cent. against an average of 3.32.

In thirteen large towns in the United Kingdom the births in the last quarter were relatively to population most numerous in Leeds, where the birth-rate per annum was as high as $4^{\cdot}3^{\cdot}18$ per cent. In Sheffield the rate was not much lower, having been $4^{\cdot}198$; in Glasgow it was $4^{\cdot}024$; it did not touch 4 per cent. in Hull, but was $3^{\cdot}963$; in Liverpool it was $3^{\cdot}873$; in Salford $3^{\cdot}854$; in Birmingham $3^{\cdot}739$; in Newcastle-on-Tyne $3^{\cdot}624$; in London $3^{\cdot}571$; in Manchester and Edinburgh it slightly exceeded $3^{\cdot}5$, and in Bristol did not attain that point.

Increase of Population.—The deaths last quarter were 117,352; and as the births were 185,594, the balance was in favour of population, and the natural increase 71,242.

The emigration of the December quarter from ports in the United Kingdom, where emigration officers are stationed, comprised 32,909 persons; these being nearly as many as in the same period of 1864, but much fewer than in that of 1863 or 1865. Of that number about 11,351 were of English, 2676 of Scotch, 14,666 of Irish origin. Giving round numbers, 26,000 out of the 33,000 were destined to the United States, of whom 7000 were English, and 13,000 Irish. The main current of emigration being westward, Liverpool was the chosen port of embarkation to 21,000. Only 2954 persons left the Thames. From London and Liverpool, emigrants for Australia went in nearly equal numbers.

Prices, Pauperism, and the Weather.—The price of wheat has been constantly rising for two years; and in the last three months of 1866, when it was on an average 56s. 8d. per quarter, it was much higher than it had been since the September quarter of 1862. The average prices of beef by the carcase at Leadenhall and Newgate Markets were $4\frac{3}{4}d$. per lb. for inferior, and 7d. for superior qualities. They showed a slight tendency to decline from the high prices that had ruled in the summer. The prices of mutton fell; the lowest and highest averages were respectively $5\frac{1}{4}d$. and $7\frac{1}{2}d$; they were lower than they had been previously since the early part of 1865. Potatoes were dear. The mean price of the best at the Waterside Market, Southwark, was 107s. 6d. per ton. Prices ranged from 85s. to 130s., and were higher than they had been for three years.

The average number of in-door paupers relieved on the last day of each week was 134,086, a number which is more by five or six thousand than it had been in the corresponding period of either of the two previous years. Out-door paupers were 735,654 against 724,792 in the autumn of 1865.

The close of the September quarter was distinguished by much rain and the want of sunshine, and by south-west winds which had long prevailed. In the first week of October the barometer rose, the wind changed to north-east, and the mean temperature for eleven days was 3° above the average. This was followed by a week of cold weather. From 19th October to the end of the quarter the temperature was in excess without any considerable interruption, except from 28th November to 2d December, in which period the weather was cold.

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October closed with variable weather, sometimes with fog, at others with rain, and occasionally white frosts at night. In the beginning of November barometric pressure exhibited great fluctuations; snow fell in Scotland; and throughout the month the weather was changeable. In December there was frequent rain, and there were very heavy gales from the south-west; but the month was unusually mild for the season. The last two months were favourable for agricultural operations. In November ploughing and sowing made great progress, except in Yorkshire and Lancashire, where about the month were of a fresh green, and food for cattle was abundant.

At Greenwich in each month the mean temperature was above the average. It was $51\cdot3^{\circ}$ in October, $44\cdot3^{\circ}$ in November, $42\cdot9^{\circ}$ in December ; the mean of the quarter was $46\cdot2^{\circ}$. Rain fell to the amount of $5\cdot4$ in. in the quarter, which is $1\cdot7$ in. below the average.

Deaths; and the State of the Public Health. — 117,352 deaths were registered in the 92 days ending on the last day of the old year, and the mortality was at the annual rate of $2 \cdot 187$. The mortality is thus lower than the average by $\cdot 018$, and not higher than the mortality of the last summer quarter, when it was raised by cholera in East London, in Liverpool, and in some other towns.

The chief characteristic of the season is the diffusion of cholera over the remotest parts of the kingdom, and its restricted ravages everywhere except where the people are living in the open violation of the laws of health. In London 834 deaths by cholera were returned, and in the districts around a small number: in Godstone 5, Dartford 1, Rochester 2, Lewes 6, Brighton 3, Southampton 2. In the Eastern and South-Midland counties the disease is scarcely noticed; in Devonshire, Exeter and its environs suffered to some extent; thus, 8 persons died of the disease in St. Leonard ; 30 in Kenton, including 26 in the county lunatic asylum. The 8 deaths in St. Leonard occurred close to the river Exe, which receives all the sewage of Exeter, and is dammed up by a weir at the fatal point. The deaths in the lunatic asylum demand explanation. Teignmouth on the coast had 7 deaths from cholera; Brixham, the fishing town at the entrance of Torbay, supplied with bad water, 30; a small parish in the Crediton district called Zeal-Monachorum, on a tributary of the Tay, 15; St. George in Bedminster 12. These isolated outbreaks were rendered fatal by local causes. In the midland counties of the north and west a few deaths are noticed. In Chester (Great Boughton) 83 deaths from cholera, 42 from diarrhœa occurred; the water with singular irrationality having been for some time taken at a point in the river immediately below the inflow of several of the town sewers. Cholera, which had been so fatal in Liverpool, subsided after having caused many deaths, and the epidemic caused 30 deaths in the township of Ince, where the water was bad, but scarcely touched Manchester or Salford. In Doncaster, with sewage in the waters, it raised the mortality above the average. Three fatal cases of cholera occurred at Beverley; the first case, that of a man, was imported; the others were respectively the wife who had attended the man, and the wife's sister by whom the wife had been attended. Due precautions should be inculcated in such cases. Hull and Sculcoates, which in former epidemics suffered so severely, now escaped with comparative impunity. In many towns and colliery villages of Durham and Northumberland cases of cholera occurred in considerable numbers; 107 persons died of cholera in Tynemouth and 27 of diarrhea. The hygienic conditions are of the worst description, and the authorities often appear to slumber in the presence of danger. While the industry of Wales is making rapid strides, its sanitary condition is rapidly deteriorating, as due arrangements are not made for the accommodation or instruction of an increasing population; and thus in a country every way by nature favourable to health, both as regards air and water, epidemics find footing and prove destructive. In Tredegar subdistrict 82 persons died of cholera; in Ystradyfodwg 24; in Aberdare 29; in Ystradgunlais $5\circ$; in Llangafelach 31; in Swansea 55; in Holywell, where a well was polluted with sewage, 39; in Carnarvon, $7\circ$; in Holyhead, 25. Following fevers and other zymotic diseases there can be no question of the evil, which may well attract the attention of Welsh patriotism.

The returns contain many examples of the efficacy of hygienic measures, and afford strong proofs of the doctrine that if England has suffered less from cholera in the present year than the Continent, or less than England herself in former years, it is mainly due to changes which all Europe can appreciate and adopt.

Among other instances the Black country, as it is called, about Wolverhampton, may be cited. The epidemics of 1849 and 1854 destroyed in five districts more than three thousand lives, while in the year 1866 the mortality has been inconsiderable. The water was formerly impure, and could only be obtained with difficulty in a country covered with pits and works. But the people with commendable energy have brought good waters from a distance, and are reaping the advantages of the change in Wolverhampton, Bilston, and the other towns.

The mortality in all the country districts of England was at the rate of 19; in the town districts at the rate of 24, in 1000; but in both town and country below the average in nearly an equal degree. In the divisions the mortality of the quarter was lowest (18) in the eastern and south-eastern counties; highest in the northern counties (25), and in Lancashire and Cheshire (27), where the rate exceeded that of London (24).

The thirteen great towns of the United Kingdom stand thus arranged in the order of mortality for the quarter: Bristol 21, Birmingham 22, Hull 23, London 24, Sheffield 24, Salford 26, Leeds 28, Glasgow 29, Manchester 30, Edinburgh 30, Liverpool 33, Dublin 34, Newcastle-on-Tyne 37.

THE UNITED KINGDOM IN THE YEAR 1866.

In the United Kingdom 1,013,746 births and 665,562 deaths were *registered* in the twelve months, thus making the natural increase 348,184, or at the rate of 953 daily. The recorded number of emigrants was 204,882, or 561 daily. The difference between the emigrants and the registered natural increase was 392 daily.

The birth-rate per 1000 of the year was 35.48, the death-rate 23.01, for the United Kingdom, after a correction for the defective registration of Ireland.*

The birth-rate per 1000 of England proper was 35.54, the death-rate 23.61; the numbers for the previous year, 1865, are 35.63 and 23.41; the shade of excess in the death-rate of 1866 being due to cholera, for the mortality is lower in all the divisions except those in which cholera prevailed.

The eleven divisions may thus be arranged in the order of annual mortality: the deaths per 1000 were in the South-Eastern Counties 19, Eastern counties 20, South-Midland counties 20, South-Western counties 20, North-Midland counties 21, West-Midland counties 22, Monmouthshire and Wales 23, Northern counties 24, Yorkshire 26, London 26, North-Western counties (Lancashire and Cheshire) 29.

* In calculating the birth-rate and death-rate, 1-third has been added to the births, 1-fourth to the deaths registered in Ireland; so that, while the registered births and deaths are 1,013,746 and 665,562, the estimated numbers corrected for defective registration in Ireland become 1,062,492 and 688,960. The natural increase on the corrected numbers was 1,023 daily, and the difference between the emigrants and the natural increase on the corrected numbers was 462 daily.

Health of London in 1866.

LONDON is growing greater every day, and within its present bounds, extending over 122 square miles of territory, the population amounted by computation to 3,037,991 souls. In its midst is the ancient city of London within and without the walls, inhabited at night by about 100,000 people, while around it, as far as a radius of 15 miles stretches from Charing Cross, an ever thickening ring of people extends within the area which the Metropolitan Police watches over, making the whole number on an area of 687 square miles around St. Paul's and Westminster Abbey 3,521,267 souls.

This population has many interests in common as regards water, air, sewage, lighting, streets, railways, poor, government, as well as police; and many of its members, residing in the outer zones at night, transact business by day in offices, shops, markets, courts, clustered in the centre of the metropolis. Thus there are daily currents inwards and outwards, and the people are blended together in a thousand ways, so as to form a natural community.

The national census is taken in England to show in each place the numbers found during the census night, as they represent the population with which the deaths and other important statistical elements can be compared. The corporation of the city of London, however, very naturally struck by the significance of the fact that the population returned at the census within the ancient limits under the jurisdiction of the Lord Mayor was only 113,387, and was constantly declining, so that in a few years he might appear to be left, by night, the lord of an empty realm (inania regna)*, determined to take a census to catch the throng of people in the city during the day. This has been done with considerable labour, and the results are published in an interesting report by Mr. Lawley and by Mr. Scott, the Chamberlain. † They show by their day census in April 1866 that 283,520 persons reside during the active hours of the day in the city of London where only 113,387 persons were found by the national census on 8th April 1861, and where, at the rate of decrease observed between 1851 and 1861, there could have been no more than about 102,887 in the middle of 1866. The classes that come and go, they say, "com-" prise some of the most influential, wealthy, and enterprising of our fellow " countrymen ; bankers, merchant-princes, brokers, and wholesale traders, " carrying on business which has no parallel in the world, and contributing " in the aggregate a larger share of the public revenues than any, and even

* Ibant obscuri sola sub nocte per umbram, Perque domos Ditis vacuas, et inania regna.—Virgil, Æneid, Book vI.
† Report on Day Census of City of London, 1866.

YEARS		1853	1854	1855	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866
BIRTHS	_	82254	84885	85532	87430	89577	89012	92909	93414	97064	97850	102119	102625	106803	108665
DEATHS	_	60069	73697	61942	57274	59103	64093	61860	62309	65251	67371	71060	78238	73531	80453
Excess of BIRT over DEATHS	HS }	22185	11188	23590	30156	30474	24919	31049	31105	31813	30479	31059	24387	33272	28212
(Males	-	42132	42988	43501	44410	45885	45347	47330	47645	49335	49382	52277	52383	54051	55249
BIRTHS - { Females	s –	40122	41897	42031	43020	43692	43665	45579	45769	47729	48468	49842	50242	52752	53416
(Males	-	30852	37151	31354	29076	29769	32579	81577	31657	33105	34288	36354	39551	37578	41092
DEATHS - Female	s	29217	36546	30588	28198	29334	31514	30283	30652	32146	33083	34706	38687	35953	39361
ANNUAL MORTALI per 1000 -	TY }	24.41	29.43	24.31	22.09	22.41	23.90	22.69	22:49	23.18	23.56	24.47	26.23	24.56	26.48

TABLE 28.-LONDON .- Births and Deaths in the Fourteen Years 1853 to 1866.

" than all similar classes in other parts of the empire."* This is true enough, but the reporters probably underrate the residents when they go on to say that "the night population of the city consists to a great extent " of the caretakers of city premises and their families, and of tradesmen " and others too inconsiderable to possess a suburban or other residence." for the census shows among the night population a number of clergymen, lawyers, physicians, surgeons, merchants, and respectable tradesmen, who, it is to be presumed, form a chief part of the constituency of the wards by which the 232 common councilmen and aldermen are elected. The reporters enumerate 679,744 passengers into the city in the 16 hours between 5 a.m. and 9 p.m., a number necessarily greater than the number of persons entering, as the same person often enters and is counted more than once. A similar but a less extensive movement of the people to and from Westminster and the other central districts of the metropolis is going on : in Manchester, Liverpool, and all the large cities of the kingdom, the same thing is met with. The great boroughs overflow on all sides.

While the other towns of the kingdom are mainly governed under the Municipal Act by councils elected by open voting (5 & 6 Wm. IV. c. 76.), the city of London is left in the enjoyment of its ancient privileges, and the rest of the metropolis is governed by 38 parish vestries or boards under the provisions of the Metropolitan Management Act (18 & 19 Vict. c. 120.) The government in the 38 bodies consists of 2279 vestrymen elected by ballot. The city of London has a common council of 232 members, including the Lord Mayor and 25 aldermen. The metropolis has thus, in the aggregate, 2511 members in its 39 Parliaments. Each district, as well as the City, sends one or two members to the Metropolitan Board of Works, consisting of a chairman and 45 representatives. Every district is bound under the Act of Parliament to appoint one or more health officers; and St. George, Hanover-square, has appointed 2, Poplar 2, Wandsworth 5, Plumstead 4, and each of 34 districts 1, making in the aggregate 47 medical officers, who have rendered the people of London excellent service during the year. Woolwich has some pretence for not appointing a medical health officer, and has availed itself of the privilege.

The jurisdiction of the Metropolitan Board of Works extends over the whole area of the London registration division, except Mottingham; it also takes in the hamlet of *Penge*, which is in the Croydon registration

* Mr. Haywood, Engineer to the City Commission of Sewers, says, in an extract quoted by the reporters,—"There are 68 members of Parliament who have offices within the city, and are to be found there daily throughout a large portion of the year."—Report, p. 14.

1275 3 4 5 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2	1855	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866
TOTAL DEATHS IN PUBLIC INSTITU-	11310	10381	(53 weeks) 10079	10004	9633	9550	10276	11313	(53 weeks) 11112	12731	12116	13054
IN WORKHOUSES	6552	5797	5714	5535	5228	5161	5757	6401	6187	7055	6715	7088
PRISONS	71	81	71	57	40	41	46	53	64	125	99	95
MILITARY AND NAVAL ASYLUMS -	299	304	285	317	307	272	251	307	289	315	278	198
GENERAL HOSPITALS	2956	2859	3008	3094	2927	3039	3234	3167	3169	3558	3354	3818
HOSPITALS FOR SPECIAL DISEASES -	441	612	332	272	431	413	335	690	827	982	1002	1167
LYING-IN HOSPITALS - Women -	27	14	11	11	35	34	38	35	11	24	26	2
(Children –	40	31	23	32	51	57	58	40	37	48	42	50
MILITARY AND NAVAL HOSPITALS -	404	282	180	211	187	173	223	236	203	215	176	146
HOSPITALS AND ASYLUMS FOR FOREIGNERS	64	61	63	53	46	47	58	74	61	82	71	96
LUNATIC ASYLUMS	456	340	392	422	381	313	276	810	264	327	353	382

TABLE 49.-LONDON.-Deaths in Public Institutions, 1855-66.

† This Table is compiled from the Weekly Returns made by the Registrars of London, and relates to the 52 or 53 weeks of each year XXIX. district, and contained around the Crystal Palace 5015 people in 1861, on an area of 840 acres. The rateable annual value of property by the county rate assessment for 1867 is 15,261,999l; the amount required by the Metropolitan Board for that year from the several parishes is 222,167l., including 26,380l from the city of London, which enjoys an annual income from all sources of about 200,000l.*

The main drainage sewers, with the exception of the northern low level, are now in active operation. They were commenced in January 1859, and formally opened on April 4th, 1865. The length of these main sewers is 82 miles; and with the pumping stations and other works cost about 4,200,000l. They carry off the drainage of about 117 square miles, having a population estimated by the Board at 2,800,000. The sewage intercepted daily amounts to 14,000,000 cubic feet, equivalent to 396,406 cubic metres, or to about as many tons by weight ;† the quantity discharged at Barking from the sewers north of the Thames being to the quantity discharged from the southern sewers at Crossness in the proportion of 10 to 4. The report of the Board justly refers to the necessity of a constant and abundant water supply for London, both for domestic use and for the purification of the sewers; but it does not refer to the defect in that part of the present drainage system which is under the control of the vestry-boards, and still deprives the people of the full advantages that the main drainage is destined to bestow.

The mortality of London was above the average in nearly all, except the west and the south districts; but the excess in the east districts was exceptionally great, for it was 34 instead of 26 per 1000, owing to a violent explosion of cholera in the field of the East London Water Company.

* Municipal Corporation Directory, 1866, p. 465. † Report of Metropolitan Board of Works, 1865–6, pp. 16–17.

TABLE 50.-LONDON.-Deaths and Meteorology, 1849-66.

by W

Andu

Miles.

1808

1841

1730

1781

1597 1731

1659

1775 1562

1626

1598

1676

1666

1680

1775

1597

1553

1917

Rede

Fall

of Rain

in

23.9

19.7

21.6

34.2

29.0

18.7

21.1

22.2

21.4

17.8 25.9

32.0

20.8

26.2

20'0

16.7

29.0

30'7

sphere. Inches.

WEEKLY AVERAGE OF 1866.

Average

daily

Range

of

Tem-

0

12.2

19.7

17.2

11.7

perature

of Hori-

zontal Move-

ment of the Air in each Week.

2140

1804

1725

2001

Fall

of Rain

in

Inches.

9.3

8.0

8.0

5.4

Dryness

of

Atmo-

sphere.

0

4'8

7.7

6'3

3.8

Mean

Tem-

pera-

ture

of Air.

0

41.2

53.0

58.9

46.2

Number

of

Deaths

weekly.

1557

1494

1702

1429

1866

First Quarter

Second Quarter

Third

Juarter

Fourth Quarter

‡ For the years 1849-59 the results are only approximative, having been reduced to Robinson's Anemometer from	m observatio	ns
made with Whewell's.		
§ By Robinson's Anemometer.		

13,054 of the 80,453 deaths in London took place in public institutions; 7,088 of them in the 46 workhouses under the control of the vestries and boards of guardians; 4980 in the London general and special hospitals; 95 in prisons.

The meteorology of the year presented some peculiarities. The mean temperature was half a degree above the average of 25 years; but it was not so cold in the winter and autumn, nor so warm in the spring and summer months as usual. The mean temperature of June was above the average of that month; the mean day temperature at Greenwich having been $73 \cdot 2^{\circ}$, the mean night temperature $52 \cdot 0^{\circ}$. The wind blew 142 days from the West; 60 from the East; 101 from the South, and 62 from the North. The daily amount of horizontal movement was 274 miles; while in the previous year it was 222 miles. The rainfall was $30 \cdot 5$ in., which is $6 \cdot 8$ in. above the average.

TABLE 51.—Population; Births and Deaths; Annual Birth and Death Rates; Mean Temperature and Rainfall, in the Year 1866, in LONDON and TWELVE other LARGE Towns.

CITIES, &c.	ESTIMATED POPULATION in the Middle of the Year	BIRTHS in 52 Weeks ending 29th Dec.	DEATHS in 52 Weeks ending 29th Dec.	ANNUAL to 1000 livi the 52 Wea 29th De	ng during ks ending	MEAN TEMPERA- TURE in 52 Weeks ending	RAINFAL in inches in 52 Weeks ending
	1866.	1866.	1866.	Births.	Deaths.	29th Dec. 1866.	29th De 1866.
TOTAL	6,093,349	223,752	173,687	36.85	28.60	49.6	33.7
LONDON - (Metropolis) -	3,037,991	107,992	80,129	35.67	26.47	49.9	30.2
BRISTOL (City) -	163,680	5,656	4,064	34.67	24.91	49.9	40.2
BIRMINGHAM - (Borough) -	335,798	12,877	8,042	38.48	24.03	49.3	31.1
LIVERPOOL - (Borough) -	484,337	19,080	20,202	39.23	41.85	50.7	26'1
MANCHESTER - (City) -	358,855	12,966	11,426	36.25	31.95	48.6	42.9
SALFORD (Borough) -	112,904	4,307	3,268	38.28	29.04	48.4	42.9
SHEFFIELD - (Borough) -	218,257	8,806	6,121	40.48	28'14	47.6	34'3
LEEDS (Borough) -	228,187	9,962	7,401	43.81	32.54	48.5	30.6
HULL (Borough) -	105,233	4,150	2,564	39.57	24.45		
NEWCASTLE-ON-TYNE (Borough)	122,277	4,868	3,914	39.95	32.12	47.2	22.2
EDINBURGH - (City) -	175,128	6,221	4,777	35.64	27.37	47.1	28.3
GLASGOW - (City) -	432,265	18,170	12,745	42.18	29.58	47.1	47.6
DUBLIN (City and some suburbs)	318,437	8,697	9,034	27.40	28.47	49.1	26.8

Total

Number

of

Deaths

68756

48950

55488

54638

60069

73697

61942

57274

59103

64093

61860

62309

65251

67371

71060

78238

73531

80453

YEARS

1849

1850

1851

1852

1853

1854

1855

1856

1857

1858

1859

1860

1861

1862

1863

1864

1865

1866

Mean

Tem-

perature

of Air.

50.0

49.3

49.2

50.6

47.7

48.9

47.1

49.0

51.0

49.2

50.7

47.0

49'4

49.5

50'3

48.5

50'3

49.8

Dryness

of

6.6

6.1

6.5

7.4

6.2

4.7

4.2

5.6

5.2

6.2

6.0

4.6

5.0

4.7

6.0

7.0

6.2

5.6

Atmo-

TABLE 52.-LONDON. Annual Rate of Mortality, 1840-1866, in Five GROUPS of

DISTRICTS.

TABLE 53.-Temperature at the Royal Observatory, Greenwich, and Annual Rate of Mortality

and a track of the	and the part of the	ALTERNA PARTING	al and pi	Same Same	Everen and	The second second
the monn	LONDON.	WEST DISTRICTS.	NORTH DISTRICTS.	CENTRAL DISTRICTS.	EAST DISTRICTS.	SOUTH DISTRICTS.
Area in Square Miles .	121.8	16.8	21.1	3.0	9.7	71.2
Annual Increase of Popu- lation per Cent., 1851-61	1.73	2:10	2:34	-·39 (decrease).	1.63	2.28
Population, 1861	2,803,989	463,388	618,210	378,058	571,158	773,175
YEARS.	nadi svena sv. 19 octve Mala	ANNUAL 1	RATE OF M	ORTALITY I	PER CENT.	into al
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 2^{\cdot}498\\ 2^{\cdot}404\\ 2^{\cdot}352\\ 2^{\cdot}466\\ 2^{\cdot}500\\ \hline\\ 2^{\cdot}319\\ 2^{\cdot}330\\ 2^{\cdot}695\\ 2^{\cdot}582\\ 3^{\cdot}014\\ \hline\\ 2^{\cdot}104\\ 2^{\cdot}338\\ 2^{\cdot}261\\ 2^{\cdot}441\\ 2^{\cdot}943\\ \hline\\ 2^{\cdot}431\\ 2^{\cdot}943\\ \hline\\ 2^{\cdot}431\\ 2^{\cdot}943\\ \hline\\ 2^{\cdot}431\\ 2^{\cdot}943\\ \hline\\ 2^{\cdot}241\\ 2^{\cdot}943\\ \hline\\ 2^{\cdot}241\\ 2^{\cdot}390\\ 2^{\cdot}249\\ 2^{\cdot}249\\ 2^{\cdot}318\\ 2^{\cdot}356\\ 2^{\cdot}447\\ 2^{\cdot}653\\ \hline\\ 2^{\cdot}456\\ 2^{\cdot}648\\ \hline\end{array}$	$\begin{array}{c} 2\cdot 408\\ 2\cdot 236\\ 2\cdot 256\\ 2\cdot 326\\ 2\cdot 387\\ 2\cdot 253\\ 2\cdot 158\\ 2\cdot 450\\ 2\cdot 361\\ 2\cdot 613\\ 1\cdot 964\\ 2\cdot 202\\ 2\cdot 153\\ 2\cdot 202\\ 2\cdot 203\\ 2\cdot 202\\ 2\cdot 203\\ 2\cdot 205\\ 2\cdot 295\\ \end{array}$	$\begin{array}{c} 2\cdot 394\\ 2\cdot 241\\ 2\cdot 255\\ 2\cdot 308\\ 2\cdot 330\\ 2\cdot 101\\ 2\cdot 185\\ 2\cdot 537\\ 2\cdot 338\\ 2\cdot 368\\ 1\cdot 980\\ 2\cdot 216\\ 2\cdot 122\\ 2\cdot 237\\ 2\cdot 436\\ 2\cdot 328\\ 2\cdot 109\\ 2\cdot 150\\ 2\cdot 288\\ 2\cdot 109\\ 2\cdot 150\\ 2\cdot 288\\ 2\cdot 109\\ 2\cdot 150\\ 2\cdot 288\\ 2\cdot 167\\ 2\cdot 117\\ 2\cdot 233\\ 2\cdot 200\\ 2\cdot 377\\ 2\cdot 537\\ 2\cdot 537\\ 2\cdot 453\\ 2\cdot 532\\ \end{array}$	$\begin{array}{c} 2\cdot 447\\ 2\cdot 496\\ 2\cdot 361\\ 2\cdot 528\\ 2\cdot 444\\ 2\cdot 402\\ 2\cdot 292\\ 2\cdot 292\\ 2\cdot 789\\ 2\cdot 533\\ 2\cdot 791\\ 2\cdot 114\\ 2\cdot 407\\ 2\cdot 393\\ 2\cdot 513\\ 2\cdot 744\\ 2\cdot 509\\ 2\cdot 303\\ 2\cdot 513\\ 2\cdot 744\\ 2\cdot 509\\ 2\cdot 303\\ 2\cdot 513\\ 2\cdot 544\\ 2\cdot 414\\ 2\cdot 334\\ 2\cdot 503\\ 2\cdot 583\\ 2\cdot 651\\ 2\cdot 926\\ 2\cdot 679\\ 2\cdot 677\\ \end{array}$	$\begin{array}{c} 2\cdot 571\\ 2\cdot 506\\ 2\cdot 443\\ 2\cdot 639\\ 2\cdot 586\\ \hline\\ 2\cdot 463\\ 2\cdot 414\\ 2\cdot 935\\ 2\cdot 867\\ 3\cdot 176\\ \hline\\ 2\cdot 168\\ 2\cdot 428\\ 2\cdot 332\\ 2\cdot 647\\ 2\cdot 998\\ \hline\\ 2\cdot 546\\ 2\cdot 331\\ 2\cdot 578\\ 2\cdot 395\\ \hline\\ 2\cdot 463\\ 2\cdot 578\\ 2\cdot 395\\ \hline\\ 2\cdot 408\\ 2\cdot 402\\ 2\cdot 598\\ 2\cdot 648\\ 2\cdot 903\\ \hline\\ 2\cdot 640\\ 3\cdot 401\\ \hline\end{array}$	$\begin{array}{c} 2.589\\ 2.440\\ 2.392\\ 2.475\\ 2.560\\ \hline\\ 2.376\\ 2.463\\ 2.771\\ 2.718\\ 3.762\\ \hline\\ 2.192\\ 2.404\\ 2.301\\ 2.533\\ 3.483\\ \hline\\ 2.461\\ 2.184\\ 2.149\\ 2.396\\ 2.260\\ \hline\\ 2.214\\ 2.279\\ 2.268\\ 2.333\\ 2.536\\ \hline\\ 2.316\\ 2.411\\ \hline\end{array}$
Average Number living to One Death annually (1840-66)	41	44		40	38	40

NOTE.—The Annual Rate of Mortality in this Table is deduced from the Population at the Censuses of 1841, 1851, and 1861, and from the Deaths registered in London in each of the several years. The Mortality for LONDON in each year, 1840-66 is calculated on the Deaths for the complete years, instead of for 52 or 53 weeks.

LONDONMean	Mortality	per	Cent.
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1

YEAI	RS.			LONDON.	WEST DISTRICTS.	North Districts.	CENTRAL DISTRICTS.	EAST DISTRICTS.	South Districts.
			15			MEAN OF	27 YEARS	5.	•
1840-1866	• •	•		2:441	2*292	2.279	2.206	2.610	2.491
					I	MEANS OF	T 10 YEAR	S.	
1840-9 1850-9	•	•	•	$2.516 \\ 2.363$	$2^{\cdot}345$ $2^{\cdot}235$	$2:306 \\ 2:203$	$2.508 \\ 2.422$	2.660 2.489	2.655 2.436
						MEANS OF	F 5 YEAR	s.	
1840-4 1845-9 1850-4 1855-9 1860-4	•	• • •	• • • • •	2.4442.5882.4172.3082.405	$\begin{array}{c} 2 \cdot 323 \\ 2 \cdot 367 \\ 2 \cdot 280 \\ 2 \cdot 189 \\ 2 \cdot 300 \end{array}$	$\begin{array}{r} 2 \cdot 306 \\ 2 \cdot 306 \\ 2 \cdot 198 \\ 2 \cdot 208 \\ 2 \cdot 293 \end{array}$	$2^{\cdot}455$ $2^{\cdot}561$ $2^{\cdot}434$ $2^{\cdot}410$ $2^{\cdot}599$	$\begin{array}{c} 2 \cdot 549 \\ 2 \cdot 771 \\ 2 \cdot 515 \\ 2 \cdot 463 \\ 2 \cdot 592 \end{array}$	2*491 2*818 2*583 2*290 2*326

pe.	r 1000	0 in ']	[HIRT]		RGE 'J	OWNS	s of th	e Uni	TED K	INGD	ом, in	each	Week		B66.		
WEEKS -	And have been the	PERAT at the Observ reenwic	and the second second	OF 13 LARGE S.	TRO T	COT IS	нам.	00L.	STER.		IID.	Anati		NEWCASTLE-ON-TYNE	RGH.	ν.	
ENDING.	Mean.	Highest.	Lowest.	TOTAL O TOWNS	LONDON.	BRISTOL.	BIRMINGHAM.	LIVERPOOL.	MANCHESTER.	SALFORD.	SHEFFIELD.	LEEDS.	HULL.	NEWCAS	EDINBURGH.	GLASGOW.	DUBLIN.
YEAR . (of 52 Weeks end- ing 29 Dec. 1866.)	° 49°8	° 87·2	。 22·5	29	26	25	24	42	32	29	28	33	24	32	27	30	28
March Quarter	41.2	64.0	22.5	30	27	32	31	46	37	33	33	37	28	32	30	31	81
June "	53.0	86.2	32.6	28	25	25	25	38	30	30	31	34	25	29	27	33	26
September "	58.9	87.2	41.3	29	29	21	19	50	31	26	24	31	22 -	32	23	25	24
December "	46.2	68.1	26.5	27	24	21	22	33	30	26	24	28		37	30	29	34
January 6 ,, 13	43·2 36·9	51·8 49·6	32·2 23·7	30 29	26 26	32 32	29 31	45 42	35 34	36 31	34 29	33 37	30 29	36 29	25 26	31 33	29 31
", 20 ", 27 February 3	46·9 43·1 45·1	$53 \cdot 2 \\ 54 \cdot 3 \\ 57 \cdot 0$	$39.1 \\ 32.0 \\ 35.6$	$\begin{array}{c} 31\\28\\29\end{array}$	27 23 24	31 33 33	29 26 32	44 42 41	42 33 33	33 34 28	29 31 34	$\begin{array}{c} 34\\ 38\\ 34 \end{array}$	26 26 27	41 33 34	28 28 29	33 29 29	31 27 28
», 10 », 17	45·8 38·9	55·0 48·1	35·9 28·9	27 28	22 23	29 27	34 32	37 44	34 34	31 31	33 31	. 35 38	$\frac{22}{26}$	$\begin{array}{c} 30\\ 31 \end{array}$	21 28	28 30	28 30 29
March 3 10	$36.2 \\ 34.4 \\ 36.8$	51.7 48.0 47.7	$24 \cdot 2$ $22 \cdot 5$ $27 \cdot 5$	$ \begin{array}{c} 31 \\ 31 \\ 35 \end{array} $	28 26 31	31 29 37	34 33 33	40 45 55	35 37 46	36 37 32	37 35 36	38 39 41	27 26 26	$ \begin{array}{r} 26 \\ 36 \\ 30 \end{array} $	38 27 42	32 33 35	29 32 35
$ \begin{array}{c} $	39.3 40.2 49.8	47 7 55·3 52·7 64·0	27 5 25·7 30·1 33·1	$ \begin{array}{r} 35 \\ 34 \\ 32 \\ 31 \end{array} $	30 28 27	40 31 36	30 28 29	55 57 57 48	39 44 42	30 36 38	37 33 35	38 39 36	20 34 24 39	26 31 28	38 30 32	35 30 29	31 32 32
April 7 " 14	42.4	54°6 65°8	34·2 41·3	30 30	$\frac{27}{26}$	32 31	32 27	$\frac{42}{40}$	35 38	44 35	33 30	35 31	26 29	25 36	28 31	33 39	21 35
" 21 " 28	50·8 52·6	66·4 79·0	38·9 38·4	29 29	$\begin{array}{c} 26 \\ 25 \end{array}$	27 26	28 28	36 38	36 32	35 36	30 28	83 33	24	29 30	25 27	36 37	32 26
May 5 ,, 12 ,, 19	42.5 51.7 48.1	$ \begin{array}{c c} 61.5 \\ 66.6 \\ 68.8 \end{array} $	$32.6 \\ 41.2 \\ 34.5$	29 -30 28	26 28 25	24 33 18	29 26 29	36 36 39	$\begin{array}{c} 30\\ 31\\ 26 \end{array}$	24 33 30	33 34 38	39 39 41	27 28 25	30 29 25	31 31 24	38 33 30	26 25 27
" 19 June 26	52·0 56·2	$ \begin{array}{c} 68.9 \\ 75.0 \end{array} $	37·8 38·6	28 28 28	$\begin{array}{c} 20\\ 26\\ 26\end{array}$	27 26	19 26	40 41	23 33	39 23	37 30	35 30	27 15	27 26	27 27	29 34	25 24
", 9 ", 16	61·0 58·5	84·7 83·8	50·7 47·6	26 25	$\begin{array}{c} 24\\ 23 \end{array}$	22 20	$\begin{array}{c} 21\\ 20 \end{array}$	39 34	27 27	30 25	28 28	34 29	19 27	29 27	28 22	34 28	25 27
» 23 » 30	58·1 66·3	79·2 86·5	42·2 48·6	24 25	22 24	17 28	16 18	36 35	26 29	21 22	24 24	29 28	20 27	25 26	29 20	28 28	23 20
July 7 " 14	56·3 68·2	70·3 87·2	46·4 48·7	24 27	22 26	21 27	17 19	38 41	29 32	30 23	25 26	36 33	18 22	23 24	24 25	25 24	20 15
,, 21 ,, 28 August 4	62·2 59·3 58·8	83·3 74·4 72·9	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	29 37 38	31 44 45	22 21 22	$ \begin{array}{c} 16 \\ 19 \\ 22 \end{array} $	43 47 53	31 38 38	$ \begin{array}{r} 30 \\ 27 \\ 30 \end{array} $	27 27 24	33 33 34	$\begin{array}{c} 21\\ 25\\ 24 \end{array}$	27 33 41	20 24 23	30 26 28	17 20 20
August 4 ,, 11 ,, 18	57.7	70.0	48.2	35 30	39 31	20 20 20	23 19	53 56	32 27	28 27	25 25	32 25	22 29	35 32	19 24	26 25	21 22
September 1	61·2 60·2	74.3	45·0 46·9	27 27	25 24	18 18	21 18	54 64	29 29	20 20	26 27	34 30	19 22	32 28	23 22	23 26	20 24
" 8 " 15	58.5 56.7	69·3 70·2	45.8	26 26	23 23	21 18	21 19	53 55	28 28 30	26 26 29	22 22 21	29 29 26	21 20 21	34 31 35	24 19 19	23 26 22	30 30 27
» 22 » 29	53·7 55·5	66·9 71·0	42·4 41·3	26 27	23 24	18 22	18 18	52 47	28	26	18	29	26	36	23	25	44
October 6 ,, 13	57·9 52·4	68·1 66·0	53·4 35·6	25 26	23 23	18 14 25	16 20 20	41 39 35	27 25 29	24 28 24	20 19 20	24 30 26	20- 25 27	38 35 34	25 24 30	28 27 27	38 38 45
", 20 27 November 3	49.6 49.1 49.2	$ \begin{array}{c c} 63.5 \\ 65.1 \\ 59.2 \end{array} $	$ \begin{array}{c c} 33.0 \\ 31.0 \\ 33.7 \end{array} $	27 26 28	25 24 24	$ \begin{array}{c} 25 \\ 20 \\ 21 \end{array} $	20 22 20	30 32 37	30 38	25 26	23 30	26 31	23 20	38 38	29 36	27 28	41 38
10 10 17 10 17	45.4	59.6 58.5	30°6 30°8	26 26	23 24	22 20	23 20	29 29	27 30	24 29	23 25	-28 28	19- 19	37 37	37 28	29 31	35
December 1	39·2 38·7	50.6 49.3	26·5 28·0	26 27	24 25	22 21	24 25	31 31	30 28 20	$ 18 \\ 31 \\ 27 $	22 27 29	29 *33 36	26 26 30	32 39 35	30 30 29	29 33 32	31 31 29
" 8 " 15 " 22	$ \begin{array}{c c} 46.9 \\ 43.4 \\ 41.3 \end{array} $	56·3 55·0 53·5	30°9 28°6 29°8	28 26 25	27 24 23	26 20 22	25 21 21	31 32 33	29 28 32	27 27 31	29 29 23	24 28	19 20	35 41 34	29 33 29	31 29	26 24
» 22 » 29	41 3	51.4		26	24	25	26	33	30	25	28	27	23	37	28	27	24

EMIGRATION FROM THE UNITED KINGDOM.

(From the Twenty-seventh Report of the Emigration Commissioners.)

TABLE 54.—Emigration in each of the Fifty-two Years from 1815 to 1866 inclusive.

YEARS.	North American Colonies.	UNITED STATES.	AUSTRALIAN COLONIES AND NEW ZEALAND.	ALL OTHER PLACES.	TOTAL.
1015	680	1,209	*	192	2,081
1815 1816	3,370	9,022		118	12,510
1817	9,797	10,280		557	20,634
1817	15,136	12,429	*	222	27,787
1819	23,534	10,674	*	579 -	34,787
1820	17,921	6,745	*	1,063	25,729
1821	12,955	4,958		384	18,297
1822	16,013	4,137	*	279	20,429
1823	11,355	. 5,032		163	16,550
1824 • • •	8,774	5,152		99	14,025
1825 • • •	8,741	5,551	485	114	14,891
1826	12,818	7,063	903	116	20,900
1827	12,648	14,526	715	114	28,003
1828	12,084	12,817	1,056	135	26,092
1829	13,307	15,678	2,016 1,242	197 204	31,198 56,907
1830	30,574	24,887	1,242	204 114	56,907 83,160
1831	58,067	23,418 32,872	3,733	114	103,140
1832	66,339	32,872 29,109	4,093	517	62,527
1833 • • •	28,808 40,060	33,074	2,800	288	76,222
1834 • • •	15,573	26,720	1,860	325	44,478
1835 • • •	34,226	37,774	3,124	293	75,417
1836 • • • 1837 • • •	29,884	36,770	5,054	326	72,034
1838	4,577	14,332	14,021	292	33,222
1839	12,658	33,536	15,786	227	62,207
1840	32,293	40,642	15,850	1,958	90,743
1841	38,164	45,017	32,625	2,786	118,592
1842	54,123	63,852	8,534	1,835	128,344
1843	23,518	28,335	3,478	1,881	57,212
1844	22,924	43,660	2,229	1,873	70,686
1845	31,803	58,538	830	2,330	93,501
1846	43,439	82,239	2,347	1,826	129,851
1847	109,680	142,154	4,949	1,487	258,270
1848	31,065	188,233	23,904	4,887	248,089
1849 • • •	41,367	219,450	32,191	6,490	299,498
1850 • • •	32,961	223,078	16,037	8,773	280,849
1851 • • •	42,605	267,357	21,532	4,472	335,966
1852	32,873	244,261	87,881 61,401	3,749 3,129	368,764
1853	34,522	230,885 193,065	83,237	3,129 3,366	329,937 323,429
1854	43,761	193,065	52,309	3,118	323,429 176,807
1855	17,966	105,414	44,584	3,755	176,554
1856	16,378 21,001	126,905	61,248	3,721	212,875
1857	21,001 9,704	59,716	39,295	5,257	113,972
1858	6,689	70,303	31,013	12,427	120,432
1859	9,786	87,500	24,302	6,881	128,469
1860 1861	12,707	49,764	23,738	5,561	91,770
1862	15,522	58,706	41,843	5,143	121,214
1863	18,083	146,813	53,054	5,808	223,758
1864	12,721	147,042	40,942	8,195	208,900
1865	17,211	147,258	37,283	8,049	209,801
1866	13,255	161,000	24,097	6,530	204,882
TOTAL -	1,286,020	3,758,789	929,182	132,401	6,106,392

* The Customs returns do not record any emigration to Australia during these 10 years, but it appears from other sources that there went out in 1821, 320; in 1822, 875; in 1823, 543; in 1824, 780; and in 1825, 458 persons. These numbers have not been included in the totals of this Table.

TABLE 55.—Emigration in 1866.

	1	А	ge, Sex	c, &c. 0	F EMIC	RANTS	EMBA	RKED.				NATIVE COUNTRY OF EMIGRAN			ANTS.	
DESTINATION.	Mar	Adu ried.	ilts. Sin	gle.	Child fro 1 to Yea	12	Infa	ints.	No dist guis as to	in- hed	TOTAL.	lish.	ch.		Foreigners.	Not distin- guished.
	М.	F.	м.	F.	М.	F.	м.	F.	м.	F.		English	Scotch.	Irish	Fore	Not
		1			1 1 2 2			ă -	-		1 4 1 10		Service -			
To the United States -	14,660	17,420	65,660	29,179	11,351	10,227	3,005	2,907	4,169	2,422	161,000	38,421	6,825	86,594	22,372	6,788
To British North America	1,535	1,524	5,793	1,524	1,071	808	295	264	323	118	13,255	3,859	2,208	3,921	2,816	451
To Australasia – –	2,544	3,014	8,574	5,764	1,877	1,692	298	334	- 1	1 - T	24,097	12,944	2,765	7,973	415	-
To all other places	1,038	843	2,421	694	311	296	86	64	585	192	6,530	3,632	509	402	1,088	899
To all places from ports at which there are Go- vernment Emigration Officers	18,795	22,168	80,548	36,497	14,332	12,782	3,605	3,501	5,077	2,732	200,037	56,314	12,186	98,571	24,828	8,138
To all places from other } ports }	982	633	1,900	664	278	241	79	68		-	4,845	2,542	121	319	1,863	-
TOTAL	19,777	22,801	82,448	37,161	14,610	13,023	3,684	3,569	5,077	2,732	204,882	58,856	12,307	98,890	26,691	8,138

TABLE 56.—Occupations, Sex, and general Destination of the Emigrants in 1866.

Occupation.	UNITED STATES.	BRITISH NORTH AMERICA.	AU
ADULT MALES.	E		
Agricultural Labourers, Gardeners, Carters, &c.	738	116	-
Bakers, Confectioners, &c.	197	110	
Blacksmiths and Farriers	197	7	
Bookbinders and Stationers	17		
Boot and Shoe Makers	330	16	
Braziers, Tinsmiths, Whitesmiths,	000	10	1.4
&c.	\$ 15	5	
Brick and Tile Makers, Potters,		A STER	
&c	29	8	-
Bricklayers, Masons, Plasterers, Slaters, &c.	1,099	37	
Builders	55		
Butchers, Poulterers, &c	96	5	
Cabinet Makers and Upholsterers	24	13	
Carpenters and Joiners	1,548	242	1
Carvers and Gilders	4	2	-
Clerks	777	235	
Clock and Watch Makers	56	1	
Coach Makers and Trimmers -	11	4	
Coal Miners	390	7	
Coopers	109	9	
Cutlers	42	100	
Domestic Servants	157	15	
Dyers	24	4	1
Engine Drivers, Stokers, &c	11	4	and the second
Engineers	161	32	
Engravers	21	3	-
Farmers	5,014	962	1.2000
Gentlemen, Professional Men, Mer- chants, &c.	3,107	656	
Jewellers and Silversmiths	27	-	
Labourers, General	42,433	2,229	

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TRAL- SIA.	ALL OTHER PLACES.	TOTAL.
æ	Cardiers -	ana mina ser
	с <u>с</u> и	- 1000 AT
907	86	1,847
27	2	243
60	1	144
2		19
76	2	424
16	1	337
6	-	38
107	1	1,244
3		58
29	2	132
9	1	47
259	- 4	2,053
-1	1	8
118	92	1,222
5	3	65
7	3	25
2	1 	399
- 8		126
-	. • cola	. 43
54	70	296
2	-	30
4	3	22
36	45	274
-	2	. 26
435	106	6,517
,087	899	5,749
81	3	61
,370	97	50,129

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Emigration.

TABLE showing the Occupations, SEX, and general DESTINATION of the EMIGRANTS in 1866—continued.

120225.	OCCUPATION.	UNITED	BRITISH NORTH	AUSTRAL-	ALLOTHER	TOTAL.	
		STATES.	AMERICA.	ASIA.	PLACES.		- i LAMOTEI
	ADULT MALES—continued.	8	-52.00 L	Sievin.	.kidensø		
	The Same Party and the second party in the	E Transport	4.9 4.7	1.17	- Frenching		
	Locksmiths, Gunsmiths, &c Millers, Maltsters, &c	5	-	4		9	
275,00	Millwrights	51	8	13	1	73	
	Miners and Quarrymen -	4,387	1,336	3 224		- 13	i bai ca
342		4,001	1,000	229	83	6,030	Prost de
380.0	Painters, Paperhangers, Plumbers, and Glaziers	225	9	53	A LEGAL HE	288	allalar
000.2	Pensioners	3	2	1 153 1 134	5 2 2 2 2 C	1 - 11 -	ely reb
	Printers	79	5	20	-	104	
583,59	Rope Makers	5	6 6	1 705.00 844	13 8 7 9 00	30 - 11 ma	to deer
	Saddlers and Harness Makers -	26	2	15		43	131 (188)
1,800	Sail Makers	100 100	112 2 2		C (22 2 - (234	3	12 on 12)
132.55	Sawyers	12	3	34		- 49	
oreastle on she	Seamen	261	69	29	4	363	ATOT
	Shipwrights	8	2	12	-	22	
	Shopkeepers, Shopmen, Warehouse- men, &c.	341	46	81	19	487	
	Smiths, General	1,068	31	72	0000030-	1,174	
	Spinners and Weavers	570	52	5	_	627	
	Sugar Bakers, Boilers, &c	29	and the second second second	1	Check with the second second	30	70
	Surveyors	3	2	7	_	12	
	Tailors	1,080	192	24	.ZOFTATOO	1,297	
	Tallow Chandlers and Soap Makers	1		1		2	1
	Tanners and Curriers	21	- 1	5	1	28	
	Turners	28	-	4	ATAM DET	32	
	Wheelwrights	16	-	18	3	anatio 37	
	Wool Combers and Sorters	2		2		4	
-	Trades and Professions not before	daar	THE	1 · · · · · ·	icotanas, a	Inders, Cou	
	specified	2,004	596	285	95	2,980	
	Not distinguished	13,219	338	1,542	1,819	16,918	
	ADULT FEMALES.		1265	- delana	STOLED IN	un anti-autorett	
	Domestic and Farm Servants,	5	1 2.03		a ta gradina da	* .0.5	
	Nurses, &c	4,218	150	3,692	183	8,243	1
	Gentlewomen and Governesses -	220	129	145	75	569	
	Milliners, Dressmakers, and	-10	000 +	Anteriorania -	, amonth,	creations.	1
	Needlewomen	472	5	78	1	556	1
	Married Women	17,420	1,524	3,014	843	22,801	
	Shopwomen	l er	1	1 atoresielori	U Lun and	2	1
	Trades and Professions not before specified	100	6	- 18	and folgers	125	1
	Not distinguished	24,169	1,233	1,830	434	27,666	-
	1 112 E 1 50 1 840	222	737			 a)(0)(0) 	
	CHILDREN.	1	03	0. 0 .	Entrate Marsi	Ling scord	
	Male Children, 1 to 12 years	11,351	1,071	1,877	311	14,610	1
	Female dodo	10,227	808	1,692	- 296 -	13,023	
	Infants, Males	3,005	295	- 298	* 86*	- 3,6840	
	Do. Females	2,907	264	- 334	64	- 3,569	
0	26 20 20	15	1782		· stissing	Domestia S	
	Not distinguished as to age, Males -	4,169	323	· · · ·	_ 585 _	5,077	
	Do. Do. Females	2,422	118		192	2,732	
	232 23	101 000	12 055	24.005	0 100	CIE DI GAL	
1000	TOTAL	161,000	13,255	24,097	6,530	204,882	

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TABLE 57. POPULATION OF THE UNITED KINGDOM,

with Army, Navy, and Merchant Seamen abroad belonging thereto.*

Middle o Years,	f	Persons.	MALES.	Females.
1801	-	16,302,410	8,096,082	8,206,328
1811	8	18,532,522	9,194,348	9,338,174
1821		21,300,573	10,519,256	10,781,317
1831	-	24,423,588	12,004,025	12,419,563
1841	-	27,077,095	13,325,889	13,751,206
1851	-	27,764,034	13,656,998	14,107,036 -
1861	-	29,358,927	14,397,427	14,961,500
(Estimate 1866	ed.)	30,339,861	14,784,947	15,554,914
1867	a	30,551,276	14,864,733	15,686,543
1868	~	30,763,648	14,944,968	15,818,680

* In estimating the number of men in the Army, Navy, and Merchant Service abroad, a certain proportion belonging to foreign countries and the colonies has been excluded. In 1811 the troops and seamen were 640,500, but as this number included natives of colonies and foreign parts, only 502,536 were taken. [The above numbers (1801-61) have been deduced by raising the enumerated population of the United Kingdom, including the islands in the British Seas, (see Table 9. p. 84. of Vol. III. Census of England and Wales, 1861,) up to the middle of the respective Census years. In 1866, 1867, and 1868 the numbers have been estimated by adding the popu-lation enumerated in the islands in the British Seas in 1861, and the number of men in the Army, avy, and Merchant Service abroad, (see Table 3. and 16. pp. 81. and 87. Vol. III. Census 1861,) to the population for 1866, 1867, and 1868, returned in Table 59. pp. lxx-lxxi.]

TABLE 53 .- Logarithms of the above Population of the UNITED KINGDOM.

.

Middle of Years.	Persons.	Males.	FEMALES.
1801	7.2122518	6.9082749	6.9141489
1811	7.2679345	6.9635210	6.9702620
1821	7:3283913	7.0219850	7.0326718
1831	7:3878095	7.0793269	7.0941063
1841	7.4326020	7.1246962	7.1383408
1851	7.4434825	7.1353552	7.1494358
1861	7.4677402	7.1582849	7.1749751
1866	7.4820136	7.1698198	7.1918676
1867	7.4850293	7.1721571	7.1955273
1868	7.4880379	7.1744950	7.1991702

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TABLE 59.-Population of the United Kingdom estimated to the middle of and Merchant

YEARS.	1	UNITED KINGDO	м.	Er	GLAND AND WA	LES.
I EARS.	Persons.	Males.	Females.	Persons.	Males.	Females.
$ 1801 \\ 1802 \\ 1803 \\ 1804 \\ 1805 $	$\begin{array}{c} 15,902,322\\ 16,059,507\\ 16,254,224\\ 16,477,279\\ 16,715,637\end{array}$	7,748,246 7,826,658 7,921,956 8,029,902 8,145,199	8,154,076 8,232,849 8,332,268 8,447,377 8,570,438	9,060,993 9,129,636 9,234,649 9,366,826 9,513,111	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	4,656,503 4,638,505 4,740,522 4,807,596 4,881,974
1806 1807 1808 1809 1810	$\begin{array}{c} 16,951,925\\ 17,184,902\\ 17,410,054\\ 17,639,472\\ 17,866,908 \end{array}$	8,258,482 8,370,728 8,479,565 8,588,409 8,697,020	8,693,443 8,814,174 8,930,489 9,051,063 9,169,888	9,656,119 9,794,594 9,924,001 10,056,421 10,185,578	4,700,476 4,768,221 4,831,985 4,895,182 4,957,55 9	$\begin{array}{r} 4,955,643\\ 5,026,373\\ 5,092,016\\ 5,161,239\\ 5,228,019\end{array}$
1811 1812 1813 1814 1815	18,103,492 18,366,908 18,644,377 18,923,845 19,218,341	8,811,499 8,941,561 9,082,277 9,224,893 9,374,727	9,291,993 9,425,347 9,562,100 9,698,952 9,843,614	$\begin{array}{c} 10,322,592\\ 10,479,871\\ 10,649,743\\ 10,820,112\\ 11,004,012 \end{array}$	5,025,212 5,103,251 5,191,211 5,280,331 5,375,916	5,297,380 5,376,620 5,458,532 5,539,781 5,628,096
1816 1817 1818 1819 1820	$19,520,488\\19,814,027\\20,104,922\\20,388,744\\20,686,389$	9,526,546 9,673,857 9,819,981 9,964,535 10,117,002	$\begin{array}{c} 9,993,942\\ 10,140,170\\ 10,284,941\\ 10,424,209\\ 10,569,387\end{array}$	$\begin{array}{c} 11,196,156\\ 11,377,841\\ 11,555,054\\ 11,723,379\\ 11,903,722\end{array}$	5,474,848 5,568,195 5,659,313 5,747,842 5,843,289	5,721,308 5,809,646 5,895,741 5,975,537 6,060,433
1821 1822 1823 1824 1825	21,007,386 21,338,890 21,666,344 21,977,412 22,281,164	$\begin{array}{c} 10,278,540\\ 10,437,930\\ 10,596,147\\ 10,745,695\\ 10,891,074\end{array}$	10,728,846 10,900,960 11,070,197 11,231,717 11,390,090	$\begin{array}{c} 12,105,614\\ 12,320,360\\ 12,529,518\\ 12,720,736\\ 12,903,059 \end{array}$	5,946,821 6,050,929 6,153,157 6,246,003 6,333,955	$\begin{array}{c} 6,158,793\\ 6,269,431\\ 6,376,361\\ 6,474,733\\ 6,569,104 \end{array}$
1826 1827 1828 1829 1830	$\begin{array}{c} 22,575,495\\ 22,872,049\\ 23,190,529\\ 23,504,943\\ 23,814,667\end{array}$	$\begin{array}{c} 11,032,473\\ 11,173,727\\ 11,325,793\\ 11,475,573\\ 11,622,656\end{array}$	$\begin{array}{c} 11.543,022\\ 11,698,322\\ 11,864,736\\ 12,029,370\\ 12,192,011 \end{array}$	$\begin{array}{c} 13,074,286\\ 13,247,277\\ 13,438,474\\ 13,625,045\\ 13,805,041 \end{array}$	6,417,196 6,500,546 6,591,959 6,681,424 6,767,221	6,657,090 6,746,731 6,846,515 6,943,621 7,037,820
1831 1832 1833 1834 1835	$\begin{array}{c} 24,135,422\\ 24,372,051\\ 24,602,698\\ 24,861,899\\ 25,133,468\end{array}$	$\begin{array}{c} 11,776,491 \\ 11,896,932 \\ 12,012,203 \\ 12,141,056 \\ 12,275,028 \end{array}$	$\begin{array}{c} 12,358.931\\ 12,475,119\\ 12,590,495\\ 12,720,843\\ 12,858,440 \end{array}$	$\begin{array}{c} 13,994,460\\ 14,164,696\\ 14,328,471\\ 14,520,297\\ 14,724,063\end{array}$	6.859,085 6,943,932 7,023,322 7,116,031 7,213,625	$\begin{array}{c} 7.135,375\\7,220,764\\7,305,149\\7,404,266\\7,510,438\end{array}$
1836 1837 1838 1839 1840	25,406.281 25.650,426 25,903.697 26,200,106 26,487,026	$\begin{array}{c} 12,408,238\\ 12,527,350\\ 12,651,465\\ 12,796,609\\ 12,937,181 \end{array}$	$\begin{array}{c} 12,998,043\\ 13,123,076\\ 13,252,232\\ 13,403,497\\ 13,549,845 \end{array}$	$\begin{array}{c} 14,928,477\\ 15,103,778\\ 15,287,699\\ 15,514,255\\ 15,730,813 \end{array}$	7,310,074 7,392,191 7,479,021 7,586,593 7,689,301	7,618,403 7,711,587 7,808,678 7,927,662 8,041,512
1841 1842 1843 1844 1845	26,751,199 27,004,417 27,255,699 27,525,119 27,776,364	$\begin{array}{c} 13,065,536\\ 13,194,189\\ 13,321,297\\ 13,456,832\\ 13,582,614 \end{array}$	13,685,663 13,810,228 13,934,402 14,068,287 14,193,750	$\begin{array}{c} 15,929,492\\ 16,130,326\\ 16,332,228\\ 16,535,174\\ 16,739,136 \end{array}$	7,784,883 7,887,620 7,990,370 8,093,100 8,195,776	8,144,609 8,242,706 8,341,858 8,442,074 8,543,360
1846 1847 1848 1849 1850	28,002,094 27,972,537 27,820,088 27,669,579 27,523,694	$\begin{array}{c} 13,694,941\\ 13,675,994\\ 13,593,648\\ 13,512,837\\ 13,436,128 \end{array}$	$\begin{array}{c} 14,307,153\\ 14,296,543\\ 14,226,440\\ 14,156,742\\ 14,087,566\end{array}$	$\begin{array}{c} 16,944,092\\ 17,150,018\\ 17,356,882\\ 17,564,656\\ 17,773,324 \end{array}$	8,298,360 8,400,820 8,503,116 8,605,212 8,707,074	8,645,732 8,749,198 8,853,766 8,959,444 9,066,250
1851 1852 1853 1854 1855	27,393,337 27,448,257 27,542,588 27,658,704 27,821,730	$\begin{array}{c} 13,369,095\\ 13,394,542\\ 13,441,288\\ 13,496,584\\ 13,574,202\end{array}$	$\begin{array}{c} 14,024,242\\ 14,053,715\\ 14,101,300\\ 14,162,120\\ 14,247,528 \end{array}$	17,982,849 18,193,206 18,404,368 18,616,310 18,829,000	8,808,662 8,909,938 9,010,866 9,111,410 9,211,528	9,174,187 9,283,268 9,393,502 9,504,900 9,617,472
1856 1857 1858 1859 1860	28,011,034 28,188,280 28,389,770 28,590,224 28,778,411	$\begin{array}{c} 13,661,616\\ 13,739,458\\ 13,828,357\\ 13,915,802\\ 13,997,137\end{array}$	$\begin{array}{c} 14,349,418\\ 14,448,822\\ 14,561,413\\ 14,674,422\\ 14,781,274\end{array}$	$\begin{array}{c} 19,042,412\\ 19,256,516\\ 19,471,291\\ 19,686,701\\ 19,902,713 \end{array}$	9,311,182 9,410,334 9,508,949 9,606,982 9,704,394	9,731,230 9,846,182 9,962,342 10,079,719 10,198,319
1861 1862 1863 1864 1865	28,974,362 29,204,983 29,395,051 29,566,316 29,768,089	$\begin{array}{c} 14,084,642\\ 14,184,718\\ 14,261,081\\ 14,326,608\\ 14,408,029\\ \end{array}$	$\begin{array}{c} 14,889,720\\ 15,020,265\\ 15,133,970\\ 15,239,708\\ 15,360,060 \end{array}$	$\begin{array}{c} 20,119,314\\ 20,336,467\\ 20,554,137\\ 20,772,308\\ 20,990,946 \end{array}$	9,801,152 9,897,217 9,992,537 10,087,086 10,180,821	$\begin{array}{c} 10,318,162\\ 10,439,250\\ 10,561,600\\ 10,685,222\\ 10,810,125 \end{array}$
1866 1867 1868	29,946,058 30,157,473 30,369,845	14,468,451 14,548,237 14,628,472	15,477,607 15,609,236 15,741,373	21,210,020 21,429,508 21,649,377	10,273,700 10,365,688 10,456,743	10,936,320 11,063,820 11,192,634

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each Year 1801-68, exclusive of the portions of the Army, Navy, Seamen Abroad.

	SCOTLAND.			IRELAND.	•	YEARS.
Persons.	Males.	Females.	Persons.	Males.	Females.	I EAKS.
1,625,000 1,643,877 1,662,981 1,682,318 1,701,890	751,998 760,616 769,341 778,178 787,126	873,002 883,261 893,640 904,140 914,764	5,216,329 5,285,994 5,356,594 5,428,135 5,500,636	$\begin{array}{c} 2,591,758\\ 2,624,911\\ 2,658,488\\ 2,692,494\\ 2,726,936\end{array}$	2,624,571 2,661,083 2,698,106 2,735,641 2,773,700	$1801 \\ 1802 \\ 1803 \\ 1804 \\ 1805$
1,721,701 1,741,750 1,762,045 1,782,587 1,803,384	796,188 805,361 814,653 824,063 833,596	925,513 936,389 947,392 958,524 969,788	5,574,105 5,648,558 5,724,008 5,800,464 5,877,946	2,761,818 2,797,146 2,832,927 2,869,164 2,905,865	2,812,287 2,851,412 2,891,081 2,931,300 2,972,081	1806 1807 1808 1809 1810
$\begin{array}{r} 1,824,434 \\ 1,851,003 \\ 1,877,966 \\ 1,905,352 \\ 1,933,141 \end{array}$	843,250 857,627 872,255 887,136 902,275	981,184 993,376 1,005,711 1,018,216 1,030,866	5,956,466 6,036,034 6,116,668 6,198,381 6,281,188	2,943,037 2,980,683 3,018,811 3,057,426 3,096,536	3,013,429 3,055,351 3,097,857 3,140,955 3,184,652	$1811 \\ 1812 \\ 1813 \\ 1814 \\ 1815$
1,959,229 1,986,045 2,013,552 2,041,720 2,070,523	915,552 929,399 943,776 958,652 973,996	1,043,677 1,056,646 1,069,776 1,083,068 1,096,527	6,365,103 6,450,141 6,536,316 6,623,645 6,712,144	3,136,146 3,176,263 3,216,892 3,258,041 3,299,717	3,228,957 3,273,878 3,319,424 3,365,604 3,412,427	1816 1817 1818 1819 1820
2,099,945 2,125,822 2,152,017 2,178,536 2,205,383	$\begin{array}{r} 989,793 \\ 1,002,327 \\ 1,015,019 \\ 1,027,872 \\ 1,040,889 \end{array}$	1,110,152 1,123,495 1,136,998 1,150,664 1,164,494	6,801,827 6,892,708 6,984,809 7,078,140 7,172,722	$\begin{array}{c} 3,341,926\\ 3,384,674\\ 3,427,971\\ 3,471,820\\ 3,516,230\end{array}$	3,459,901 3,508,034 3,556,838 3,606,320 3,656,492	$1821 \\ 1822 \\ 1823 \\ 1824 \\ 1825$
2,232,639 2,259,072 2,287,924 2,316,020 2,344,662	$1,054,068 \\ 1,066,418 \\ 1,080,935 \\ 1,094,524 \\ 1,108,485$	$\begin{array}{c} 1,178,571\\ 1,192,654\\ 1,206,989\\ 1,221,496\\ 1,236,177\end{array}$	7,268,570 7,365,700 7,464,131 7,563,878 7,664,964	3,561,209 3,606,763 3,652,899 3,699,625 3,746,950	$\begin{array}{c} 8,707,361\\ 8,758,937\\ 3,811,232\\ 3,864,253\\ 3,918,014 \end{array}$	1826 1827 1828 1829 1830
2,373,561 2,397,777 2,422,239 2,446,968 2,471,889	$\begin{array}{c} 1,122,526\\ 1,134,485\\ 1,146,585\\ 1,158,798\\ 1,171,097 \end{array}$	$\begin{array}{c} 1,251,035\\ 1,263,292\\ 1,275,654\\ 1,288,170\\ 1,300,792 \end{array}$	7,767,401 7,809,578 7,851,988 7,894,634 7,937,516	3,794,880 3,818,515 3,842,296 3,866,227 3,890,306	$\begin{array}{c} 3,972,521\\ 3,991,063\\ 4,009,692\\ 4,028,407\\ 4,047,210\end{array}$	$1831 \\1832 \\1833 \\1834 \\1835$
2,497,167 2,522,653 2,548,402 2,574,413 2,600,692	$\begin{array}{c} 1,183,629\\ 1,196,245\\ 1,208,997\\ 1,221,884\\ 1,234,910 \end{array}$	1,313,538 1,326,408 1,339,405 1,352,529 1,365,782	7,980,637 8,023,995 8,067,596 8,111,438 8,155,521	$\begin{array}{c} 3,914,535\\ 3,938,914\\ 3,963,447\\ 3,988,132\\ 4,012,970\end{array}$	$\begin{array}{r} 4,066,102\\ 4,085,081\\ 4,104,149\\ 4,123,306\\ 4,142,551\end{array}$	1836 1837 1838 1839 1840
2,621,854 2,653,165 2,683,639 2,713,318 2,742,167	$\begin{array}{c} 1,242,689\\ 1,258,690\\ 1,274,223\\ 1,289,265\\ 1,303,795 \end{array}$	$\begin{array}{c} 1,379,165\\ 1,394,475\\ 1,409,416\\ 1,424,053\\ 1,438,372 \end{array}$	$\begin{array}{c} 8,199,853\\ 8,220,926\\ 8,239,832\\ 8,276,627\\ 8,295,061 \end{array}$	$\begin{array}{c ccccc} 4,037,964 \\ 4,047,879 \\ 4,056,704 \\ 4,074,467 \\ 4,083,043 \end{array}$	$\begin{array}{c} 4,161,889\\ 4,173,047\\ 4,183,128\\ 4,202,160\\ 4,212,018\end{array}$	$1841 \\1842 \\1843 \\1844 \\1845$
2,770,154 2,797,245 2,823,406 2,848,609 2,872,821	$\begin{array}{c} 1,317,792\\ 1,331,236\\ 1,344,105\\ 1,356,381\\ 1,368,045\end{array}$	$\begin{array}{c} 1,452,362\\ 1,466,009\\ 1,479,301\\ 1,492,228\\ 1,504,776\end{array}$	8,287,848 8,025,274 7,639,800 7,256,314 6,877,549	$\begin{array}{c c} 4,078,789\\ 3,943,938\\ 3,746,427\\ 3,551,244\\ 3,361,009\end{array}$	$\begin{array}{c c} 4,209,059\\ 4,081,336\\ 3,893,373\\ 3,705,070\\ 3,516,540\end{array}$	1846 1847 1848 1849 1850
2,896,015 2,918,162 2,939,236 2,959,211 2,978,065	1,379,080 1,389,469 1,399,196 1,408,246 1,416,606	$\begin{array}{c} 1,516,935\\ 1,528,693\\ 1,540,040\\ 1,550,965\\ 1,561,459\end{array}$	$\begin{array}{c} 6,514,473\\ 6,336,889\\ 6,198,984\\ 6,083,183\\ 6,014,665\end{array}$	3,181,353 3,095,135 3,031,226 2,976,928 2,946,068	$\begin{array}{c} 3,333,120\\ 3,241,754\\ 3,167,758\\ 3,106,255\\ 3,068,597\end{array}$	$ 1851 \\ 1852 \\ 1853 \\ 1854 \\ 1855 $
2,995,771 3,012,310 3,027,665 3,041,812 3,054,738	$\begin{array}{c} 1,424,261\\ 1,431,200\\ 1,437,414\\ 1,442,890\\ 1,447,622 \end{array}$	$\begin{array}{c} 1,571,510\\ 1,581,110\\ 1,590,251\\ 1,598,922\\ 1,607,116\end{array}$	5,972,851 5,919,454 5,890,814 5,861,711 5,820,960	$\begin{array}{c} 2,926,173\\ 2,897,924\\ 2,881,994\\ 2,865,930\\ 2,845,121\end{array}$	$\begin{array}{c} 3,046,678\\ 3,021,530\\ 3,008,820\\ 2,995,781\\ 2,975,839\end{array}$	1856 1857 1858 1859 1860
3,066,633 3,083,989 3,101,345 3,118,701 3,136,057	$\begin{array}{r} 1,451,707\\ 1,459,144\\ 1,466,581\\ 1,474,018\\ 1,481,455\end{array}$	$\begin{matrix} 1,614,926\\ 1,624,845\\ 1,634,764\\ 1,644,683\\ 1,654,602 \end{matrix}$	5,788,415 5,784,527 5,739,569 5,675,307 5,641,086	$\begin{array}{c} 2,831,783\\ 2,828,357\\ 2,801,963\\ 2,765,504\\ 2,745,753\end{array}$	$\begin{array}{c} 2,956,632\\ 2,956,170\\ 2,937,606\\ 2,909,803\\ 2,895,333\end{array}$	$ 1861 \\ 1862 \\ 1863 \\ 1864 \\ 1865 $
3,153,413 3,170,769 3,188,125	$\begin{array}{c} 1,488,892 \\ 1,496,329 \\ 1,503,766 \end{array}$	$\begin{array}{c} 1,664,521\\ 1,674,440\\ 1,684,359 \end{array}$	5,582,625 5,557,196 5,532,343	2,705,859 2,686,220 2,667,963	2,876,766 2,870,976 2,864,380	1866 1867 1868

NOTE.-The above Table has been constructed by the Registrar-General of England in islands in the British

conjunction with the Registrars-General of Scotland and Ireland. The population of the Seas is not included.