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HOLRI

THIRTY-FIRST ANNUAL REPORT

REGISTRAR-GENERAL

OF THE

BIRTHS, DEATHS, AND MARRIAGES

OF

IN ENGLAND.

(ABSTRACTS OF 1868.)

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



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1870.

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REPORT

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

General Register Office, Somerset House, SIR, 31st March 1870.

I HAVE the honour to submit to you my Annual Report for the year 1868.

The population is estimated at 21,649,377 in the middle of the year 1868, being an increase of 219,869 over that of the previous year; 10,456,743 of the total number living are males and 11,192,634 are females.

The natural increase of population as represented by the excess of births over deaths was 306,236 or 839 per day, a number much above

TABLE 1.-Estimated Population, with the Number of Marriages, Births, and Deaths registered in England, in each Year from 1838 to 1868.

	CONTRACTOR OF THE OWNER		AND REAL PROPERTY AND	CONTRACTOR CONTRACTOR	PERSONAL PROPERTY OF THE PERSON OF THE	
Marth 1. 2	Estimated	Castor and State	Lott Provident	1 490219121		1 Coles month ?
VEADO	Destimated	Collins and Street		Departura	DEAMIN	EXCESS OF
ILARS	POPULATION		PERSONS	BIRTHS	DEATHS	BIRTHS
ended	IN ENGLAND	MARRIAGES.			(CU11 1	OVER
The Cont of	in the Middle of	the same and the same	MARRIED.	(exclusive of	Still-porn).	DEATHS.
Dec. 31st	the Years.*		The source	1 - 5 - 5	1 1 2 2	H. Langer
						1 483.000
and the second second		1 Alter algerates		100 505	949.700	191 097
1838	15,312,256	118,067	236,134	403,787	000,004	152 500
1839	15,515,296	123,166	246,332	492,574	338,984	149 616
1840	15,721,029	122,665	245,330	502,303	359,687	142,010
	14 000 100	100 400	944 009	512 158	343.847	168,311
1841	15,929,492	122,490	007 050	517 720	349,519	168,220
1842	16,123,793	118,825	201,000	507 005	346 445	180,880
1843	16,320,479	123,818	247,030	540,540	256 022	183,830
1844	16,519,565	132,249	264,498	040,703	040,000	104 155
1845	16,721,081	143,743	287,486	543,521	010,000	101,100
1010	10 005 051	145 664	201 328	572.625	390,315	182,310
1846	16,925,051	195045	271 600	539,965	423,304	116,661
1847	17,131,512	100,010	070 400	562 059	399,833	163,226
1848	17,340,492	138,230	210,400	579 150	440,839	137,320
1849	17,552,020	141,880	200,100	502 499	368 995	224.427
1850	17,766,129	102,144	000,400	000,144	000,000	000,100
1051	17 982 849	154.206	308,412	615,865	395,396	220,469
1001	19 102 906	158,782	317,564	624,012	407,135	216,877
1802	10,100,200	164 520	829,040	612,391	421,097	191,294
1853	10,404,000	150 797	319,454	634,405	437,905	196,500
1854	18,010,010	159 112	304.226	635.043	425,703	209,340
1855	15,829,000	102,110	001,220	000,010	000 100	000 047
1856	19.042.412	159,337	318,674	657,453	390,506	200,947
1000	10,256,516	159.097	318,194	663,071	419,815	243,200
1007	10 471 901	156 070	312,140	655,481	449,656	205,825
1808	10,999,701	167 793	335,446	689,881	440,781	249,100
1859	19,000,701	170 156	340.312	684,048	422,721	261,327
1860	19,902,715	110,100	010,010	1 000 100	405 114	961 902
1861	20.119.314	163,706	327,412	695,406	400,114	976 118
1969	20,336,467	164,030	328,060	712,684	436,000	2/0,110
1002	20,554 137	173,510	347,020	727,417	473,887	200,000
1005	00 779 909	180 387	360.774	740,275	495,531	244,744
1804	20,112,000	185 474	370.948	748,069	490,909	257,100
1865	20,990,940	100,111		FF0 070	500 689	253,181
1866	21.210.020	187,776	375,552	753,870	471 079	297.276
1867	21,429,508	179,154	358,308	768,349	4/1,0/0	206 226
1969	21 649 377	176,962	353,924	786,858	480,622	000,200
1000	21,010,011	and the second second second second	a state of the sta	1 Contraction of the		No. of Concession, Name

* 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.

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the average. 196,325 emigrants left the shores of the United Kingdom at the rate of 538 daily; of these 60,265 were of English origin, 15,395 of Scotch, 67,075 of Irish; 53,590 were foreigners : 6,182 persons whose birth-places were not distinguished are proportionally distributed in this statement.

The United States attracted 155,532 of the emigrants, while 21,062 went to the British North American colonies, the unusually small number of 12,809 to the Australian colonies, and 6,922 to various other places. The total emigration was 372 in excess of that in 1867, but shows a large reduction on the numbers emigrating in the four preceding years 1863-6. Details showing the occupations, sex, and ages of the emigrants are given in tables at pages lxx-lxxii.

Emigration to North America is promoted by the sums annually remitted by settlers, either in the form of prepaid passage orders or in cash, to their friends in the United Kingdom. In the year 1868 the amount thus remitted was at the least 530,564l., for this return is necessarily imperfect. and was obtained by the Emigration Commissioners through the courtesy of bankers, merchants, and shipowners, through whom the remittances are made.

The number of persons married in England and Wales was 353,924; 786,858 children were born alive and registered; 480,622 persons died during the year; and the national registers have thus received an addition of one million six hundred and twenty-one thousand four hundred and four names, raising the aggregate number since the commencement of civil registration in 1837 to forty-two millions and fifty-two thousand eight hundred and eighty-six.

The meteorology of the year presents some remarkable features which are described in the summary of the quarterly reports, pp. xlv-lix;* the mean temperature of the air at the Royal Observatory, Greenwich, was

TABLE 2.—Proportion of Marria	iges, Births,	and Deaths	to the Populat	ion
of England, in ea	ch Year from	1838 to 18	368.	

and the second s		and the second				and the second		and the state of the second of the second
YEARS	То	1000 PERSON	S LIVING.		THE]	NUMBER OF	PERSONS LI	IVING
ended Dec. 31st	MARRIAGES.	Persons Married.	BIRTHS.	DEATHS.	TO ONE Marriage,	TO ONE PERSON MARRIED.	TO ONE BIRTH.	TO ONE DEATH.
1838 1839 1840 1841	7.71 7.94 7.80 7.69	15·42 15·88 15·60 15·38	30·29 31·75 31·95 32·15	22:38 21:85 22:88 21:59	130 126 128 130		33 31 31 31	45 46 44 46
1842 1843 1844 1845	7`37 7`59 8`01 8`60	14°74 15°18 16°02 17°20	32.11 32.31 32.73 32.51	21.68 21.23 21.61 20.89	136 132 125 116	68 66 62 58	31 31 31 31 31 31	46 47 46 48
1846 1847 1848 1849 1850	8*61 7*93 7*97 8*08 8*60	$ \begin{array}{r} 17 \cdot 22 \\ 15 \cdot 86 \\ 15 \cdot 94 \\ 16 \cdot 16 \\ 17 \cdot 20 \end{array} $	33 • 83 31 • 52 32 • 47 32 • 94 33 • 40	$\begin{array}{r} 23^{\circ}06\\ 24^{\circ}71\\ 23^{\circ}06\\ 25^{\circ}12\\ 20^{\circ}77\end{array}$	$116 \\ 126 \\ 125 \\ 124 \\ 116$	58 63 63 62 58	80 82 81 80 30	$ \begin{array}{r} 43 \\ 40 \\ 43 \\ 40 \\ 48 \end{array} $
1851 1852 1853 1854 1855	8*58 8*73 8*94 8*58 8*08	17.16 17.46 17.88 17.16 16.16	34·25 34·30 33·27 34·08 33·73	21 · 99 22 · 38 22 · 88 23 · 52 22 · 61	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	8*37 8*26 8*02 8*52 8*55	16*74 16*52 16*04 17*04 17*10	34*53 34*43 33*66 35*04 34*37	20.51 21.80 23.09 22.39 21.24	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	8*14 8*07 8*44 8*68 8*84	16·28 16·14 16·88 17·36 17·68	34.61 35.04 35.39 35.64 35.64	21.63 21.47 23.05 23.86 23.39	123 124 118 115 113	61 62 59 58 57	29 29 28 28 28 28	46 47 43 42 43
1866 1867 1868	8*85 8*36 8*17	17·70 16·72 16·34	35°54 35°85 36°35	23*61 21*98 22*20	113 120 122	56 60 61	28 28 28	42 45 45
Mean	8.26	16.52	33.73	22.40	121	61	30	45

Note. - The Table may be read thus :- In the year 1838 to every 100,000 persons living there were 771 marriages or 1542 persons married, 3029 births, 2238 deaths; the number of persons living to every marriage, persons 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; no correction, however, has been made for leap years.

* See also Remarks on the Meteorology of 1868 by James Glaisher, Esq., F.R.S., &c., pp. lx-lxiii.

51°.5, or 2°.3 above the average ; 25.2 inches of rain fell, being 1.0 inch above the average.

The price of wheat continued high; it averaged 72s. 2d. per quarter in the first three months, 71s. 10d. in the next three months, 59s. 1d. in the

TABLE 3.__Marriages registered in England in each Year from 1841 to 1868.

Ī	epane and		Ac	CORDIN ESTA	G TO TH BLISHE	HE RIT	ES OF	THE		NOT AC THE	CCORD ESTA	ING '	TO THI SHED C	E RITES HURCH.	OF
	YEARS ended 81st December	TOTAL MARRIAGES.	Special Licence.	Licence.	Banns.	Superintendent Regis- trar's Certificate.	Not stated.	TOTAL IN ESTA- BLISHED CHURCH.		TOTAL NOT IN ESTA- BLISHED CHURCH.	* RomanCatholics.	Other Christian Beg	Superintendent Regis- trar's Office.	Quakers.	Jews.
	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	13 9 8	$\begin{array}{c} 15,\!792 \\ 14,\!935 \\ 14,\!544 \end{array}$	78,015 75,744 79,849	972 944 1222	19,579 18,415 18,014	$ \begin{array}{c} 114,3\\ 110,0\\ 113,6 \end{array} $	71 947 337	8,125 8,778 10,181	588 620 71	32 00 52	206- 235' 281	$\begin{array}{c ccc} 4 & 66 \\ 7 & 58 \\ 7 & 61 \\ \end{array}$	113 163 151
	1844 – 1845 – 1846 – 1847 – 1848 –	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	85,176 92,867 92,995 84,863 86,519 90,644	1558 1706 1862 1968 2170 2593	18,335 18,919 18,503 16,979 15,871 13,230	120,0 129,5 130,5 120,5 121,5 123,5	009 515 509 376 469 182	$\begin{array}{c} 12,240\\ 14,228\\ 15,155\\ 14,969\\ 16,761\\ 18,701\\ \end{array}$	2280 2816 3027 2961 3658 4199	628 718 766 748 806 866	$\begin{array}{c cccc} 344 \\ 397 \\ 39 \\ 416 \\ 33 \\ 425 \\ 30 \\ 479 \\ 32 \\ 555 \\ 500 \\ 479 \\ 52 \\ 555 \\ 500 \\ 479 \\ 555 \\$	6 55 7 74 8 83 90 67 68 53 97 68	175 180 224 184 186 229 260
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	152,744 154,206 158,782 164,520 159,727 152,113	8 8 8 8 15 14	17,413 17,781 19,461 20,624 21,048 20,386	98,669 99,406 106,497 109,166 105,050 99,546	3136 3351 3610 3814 3811 3804	$11,733 \\10,412 \\4,306 \\4,430 \\4,185 \\4,001$	130, 130, 133, 138, 138, 134, 127,	959 958 882 042 109 751	21,785 23,248 24,900 26,478 25,618 24,362	5623 6570 7479 8375 7813 7344	962 954 1001 1014 987 929	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccc} 07 & 69 \\ .3 & 65 \\ 00 & 57 \\ 08 & 68 \\ 03 & 52 \\ 41 & 57 \\ 07 & 79 \\ \end{array}$	260 247 288 287 224 812
	1856 - 1857 - 1858 - 1859 - 1860 - 1861 -	159,337 159,097 156,070 167,723 170,156 163,706	$9 \\ 9 \\ 15 \\ 19 \\ 14 \\ 16$	21,336 21,250 19,858 20,345 20,742 20,090	104,280 102,062 100,432 107,737 108,685 102,955	4045 3748 3787 4204 4243 4048	3,949 3,962 3,990 3,905 3,686 3,588	133, 131, 128, 136, 137, 130, 130,		25,718 28,066 27,988 31,513 32,786 33,009 34 297	7527 7360 6643 7756 7800 7782 7345	971 1068 1109 1251 1334 1318 138	$\begin{array}{c ccccc} 10 & 800 \\ 86 & 964 \\ 994 & 990 \\ 19 & 1084 \\ 42 & 1123 \\ 82 & 1173 \\ 70 & 127 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c} 311\\ 220\\ 324\\ 312\\ 262\\ 300 \end{array} $
	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	164,030 173,510 180,387 185,474 187,776 179,154 176,962	18 19 12 23 17 17 26	$ \begin{array}{r} 19,486 \\ 19,298 \\ 19,874 \\ 20,722 \\ 20,297 \\ 19,395 \\ 18,186 \\ \end{array} $	102,870 109,572 118,564 116,745 118,274 112,533 110,824	$\begin{array}{r} 3966\\ 4312\\ 4257\\ 4170\\ 4281\\ 3981\\ 4125 \end{array}$	3,542 3,542 3,376 3,444 3,171 3,004 2,877	$ \begin{array}{c} 123, \\ 136, \\ 141, \\ 145, \\ 146, \\ 138, \\ 136, \\ 1$,743 ,083 ,104 ,040 ,930 ,038	36,767 39,304 40,370 41,736 40,224 40,924	8095 8659 8742 8911 7918 7517	147 156 164 172 168 171	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	89 51 11 58 92 54 246 63 058 68 678 73	318 349 353 301 315 306
-	1000 -	MARR	IAGES	CONTRA	CTED	RE-I	MARRI	 ED.	UND	ER AGE.	R	IGNI	ED THE STER W	MARRI VITH MA	AGE RKS.
	YEARS ended 81st December	Bachelors and Spinsters.	Bachelors and Widows.	Widowers and Spinsters.	Widowers and Widows.	Widowers.		W IQUWS.	Men.	Women.	Mon	·IIam	Women.	Marriages in which both Signed with Marks.	Marriages in which one Signed with
	1841 - 1842 - 1843 - 1844 - 1845 -	119,539	6028	11,835	6341	15,61 16,30 16,94 18,17	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$,579 ,811 ,183 ,369	5362 5387 5511 5515 6287 6313	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	39,9 38,0 40,, 42,9 47,0 47,0	954 031 520 912 665 488	59,680 56,965 60,715 65,073 71,229 70,145	1111	
	$ \begin{array}{r} 1846 \\ - \\ 1847 \\ - \\ 1848 \\ - \\ 1849 \\ - \\ 1850 \\ - \\ \end{array} $	$\begin{array}{c} 121,324\\ 112,576\\ 113,284\\ 116,134\\ 124,031 \end{array}$	5705 5920 6102 6575	$\begin{array}{c c} 11,667\\ 12,702\\ 13,155\\ 14,558\end{array}$	5897 6324 6492 7580	17,50 19,02 19,60 22,10	$\begin{array}{c c c c c c c c c c c c c c c c c c c $,602 ,244 ,594 ,155	$5556 \\ 6092 \\ 6650 \\ 7453 $	18,118 19,436 21,105 23,109	42, 43, 44, 47,	429 166 027 572	61,877 62,771 65,135 70,606	32,622 32,974 	39,06
	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{r} 126,018\\ 130,672\\ 135,023\\ 131,141\\ 123,398\end{array}$	6625 6696 7139 6826 6775	14,313 14,044 14,739 14,189 14,280	7250 7370 7619 7571 7660	21,5 21,4 22,3 21,7 21,9	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$,875 ,066 ,758 ,397 ,435	7737 8551 9131 9210 8386	24,286 26,978 29,219 28,797 27,207	47, 48, 49, 49, 47, 44, 44,	439 421 983 843 846 900	69,812 70,772 72,204 68,175 62,672 64,122	36,186 36,636 37,345 35,255 32,139 32,239	44,87 45,92 47,49 45,50 43,24 45,50
	1856 - 1857 - 1858 - 1859 - 1860 -	$\begin{array}{r} 129,960\\ 130,317\\ 127,165\\ 137,005\\ 139,440\end{array}$	7163 6908 6711 7058 7098	$\begin{array}{c cccc} 14,462 \\ 14,293 \\ 14,547 \\ 15,493 \\ 15,358 \end{array}$	2 7752 3 7579 7 7644 3 8161 3 8260	$\begin{array}{c} 22,2\\ 21,8\\ 22,1\\ 23,6\\ 23,6\end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$,915 ,487 ,355 ,219 ,358	9120 8885 9145 10397 10797	29,218 28,798 28,664 32,04 32,927	45, 44, 44, 42, 1 44, 7 43,	,013 ,141 ,807 ,401	61,765 58,733 63,127 61,677	30,518 28,781 30,574 28,904	44,74 43,31 46,78 47,27
-	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	133,712 134,727 142,934 147,914 151,742	2 7034 6846 7082 7511 2 7887	15,067 14,560 15,269 16,117 16,590	7 7893 7 7891 9 8225 7 8845 9 9255	$\begin{array}{c} 22,9\\ 22,4\\ 23,4\\ 24,9\\ 25,8\end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	4,927 4,737 5,307 3,356 7,142	$10415 \\ 10615 \\ 11475 \\ 11934 \\ 1241($	31,92 32,46 34,52 36,23 37,26	$\begin{array}{c} 40, \\ 4 & 38, \\ 7 & 41, \\ 5 & 41, \\ 0 & 41, \\ 0 & 41, \\ 0 & 40, \\ \end{array}$	204 ,801 ,262 ,998 ,664	56,770 54,405 57,416 58,402 57,828	26,333 25,075 26,626 26,582 26,216	44,30 43,00 45,49 47,29 47,00 46,6
	1866 - 1867 - 1868 - 1868 -	153,658 145,570 144,578	8 7990 7917 8 7521	16,467 16,30 15,765	7 9661 4 9363 2 9101	26,1 25,6 24,8	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$,651 7,280 5,622	$12569 \\ 12299 \\ 12658 \\$	$\begin{array}{c c} 37,61 \\ 36,14 \\ 3 \\ 37,24 \end{array}$	$ \begin{array}{c cc} $,609 ,879 ,628	56,395 51,606 49,244	25,169 22,664 21,009	44,1 42,8

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

Marriages.

Marriages.

three following months, and 518. 11*d.* in the last quarter, the average priceduring the year being 63s. 9d. per quarter, compared with 64s. 5d.during the previous year. The wholesale price of potatoes which was 89s. per ton in 1866 rose to 138s. per ton in 1867, and 137s. 6d. per ton in 1868. The returns of pauperism show a considerable increase, and the average numbers on the last day of each week amounted to 148,511 in-door and 809,336 out-door recipients of relief against 139,565 in-door and 782,390 out-door poor in the previous year.

MARRIAGES.

353,924 persons married during the year 1868, a number less by 4384 than in the previous year, and 21,628 below that in 1866. As the fluctuations in the marriages express pretty accurately the condition and prospects of the people, it may be inferred from these numbers that the commercial depression of the country has not been dispelled. The circumstances which have caused so remarkable a decrease, and which are traceable to the prostration of trade and national industry, began in 1866-7, and, notwithstanding the bountiful yield of the wheat harvest of 1868, continued throughout the year. Money was cheap during the first three quarters of the year, the average minimum rate per cent. of discount charged by the Bank of England being 2 per cent.; but commerce and manufactures were in a state of stagnation. The marriage-rate (persons married to 1000 of population) for the year 1868, when the average price of wheat was 63s. 9d. per quarter, was 16.34, against an average for the last 31 years of 16.52. In 1866, when the price of wheat was as low as 49s. 11d. per quarter, the rate rose to 17 '70 per 1000. Of the 176,962 marriages, the numbers solemnized according to the

Of the 176,962 marriages, the numbers solemnized according to the rites of the Established Church were 136,038, or 77 per cent.; the numbers performed not according to the rites of the Establishment were 40,924, or 23 per cent. The proportions are nearly as 10 to 3. Of 100 couples who married in 1868 according to the rites of the Church, 02 were married by special licence, 13.4 by licence, 81.5 after banns, and

TABLE 4.—Marriages in England to every 1,000 unmarried Males living, and every 1,000 unmarried Females living, at each Age in the Year 1868, the proportion who married at each Age.

	at each Age					
AGES.	Number of MALES MARRIED in 1868.	Number of FEMALES MABRIED in 1868.				
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 01\\ 05\\ 54\\ 517\\ 2403\\ 1685\\ 16755\\ 7885\\ 5995\\ 40019\\ 3087\\ 2144\\ 1584\\ 9.89\end{array}$	$\begin{array}{r} 222\\ 2^{\circ}01\\ 11^{\circ}71\\ 42^{\circ}69\\ 78^{\circ}54\\ 33^{\circ}03\\ 87^{\circ}69\\ 87^{\circ}64\\ 40^{\circ}07\\ 29^{\circ}26\\ 20^{\circ}92\\ 12^{\circ}60\\ 7^{\circ}19\\ 8^{\circ}48\\ 1^{\circ}01\\ \end{array}$				
70-75 75-80 80-85	4'94 1'30	·29 ·16 ·04				

NOTE.—The Table may be read thus:—To 1,000 unmarried men living in England and Wales at the age 25 and under 30 years, 145'86 married in the year 1868; and to 1,000 unmarried women living at the same age—25 and under 30 years—97'69 married in the year 1868, and so on for other ages. The persons marrying without stating their ages have been distributed proportionally over all the ages in the Table.

3.0 by Superintendent Registrar's certificate, while in 2.1 instances it was omitted to be stated under which of the foregoing heads the marriages should be classed. Of 100 couples who married not according to the rites of the Church 18.4 were Roman Catholics, 41.9 were members of various Christian denominations, 0.2 were Quakers, 0.7 were Jews, and 38.8 were married at Superintendent Registrars' offices.

The Quakers married in larger numbers than usual, their marriages in the last four years were 54, 63, 68, and 73 respectively.

The marriages among Jews decreased in England and Wales; the numbers in the registers of the last four years were 353, 301, 315, and 306.

Of the 176,962 marriages solemnized in 1868, 144,578 were between bachelors and spinsters, 7521 were between bachelors and widows, 15,762 were between widowers and spinsters, and 9,101 were between widowers and widows.

There were 40 marriages in the year 1868 in which one or other of the contracting parties is stated to have been previously divorced.* The registers of marriage show that 16 divorced men married spinsters, 2 divorced men married widows, 17 bachelors and 4 widowers married divorced women, and 1 divorced man married a divorced woman.

Buildings registered for Marriages.—The number of these buildings on the register at the end of the year 1868 was 5992; 1763 of these belonged to the Independents; 1219 to the Baptists; 1490 to the various sects of Wesleyan Methodists; 313 to the Calvinistic Methodists; 156 to the Unitarians; 180 to the Presbyterians; and 651 to the Roman Catholics. The United Brethren or Moravians have 15 buildings registered for their marriages, the New Jerusalem Church has 26, and the Catholic and Apostolic Church has 19. The number of places of meeting certified for public worship on the register on 31st December 1868, including the

TABLE 5.-Marriages in England. The Proportion per Cent. of Minors of each Sex, of Males and Females who signed the Register with Marks, and of Persons who were Widowers or Widows, in each Year from 1841 to 1868.

	2			To :	100 MARE	IAGES.	i an an the	nan Tim T	
YEARS ended	THE PI 21	ROPORTION YEARS OF A	UNDER IGE.	THE I SIGNED REGIST	ROPORTIO D THE MAI TER WITH I	N WHO RRIAGE MARKS.	THE PROP	ORTION WI	10 WERE
31st December	Males.	Females.	Mean.	Males.	Females.	Mean.	Widowers.	Widows.	Mean.
$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{r} 4^{\cdot}38 \\ 4^{\cdot}58 \\ 4^{\cdot}45 \\ 4^{\cdot}17 \\ 4^{\cdot}37 \end{array} $	$ \begin{array}{c} 13 \cdot 29 \\ 13 \cdot 47 \\ 13 \cdot 25 \\ 13 \cdot 16 \\ 13 \cdot 48 \end{array} $	8.83 9.00 8.85 8.67 8.93	32.7 32.0 32.7 32.4 33.2	48.8 47.9 49.0 49.2 49.6	40.8 40.0 40.9 40.8 41.4	$\begin{array}{c} \dagger 12^{\circ}90 \\ 13^{\circ}14 \\ 13^{\circ}17 \\ 12^{\circ}81 \\ 12^{\circ}64 \end{array}$	† 8*99 8*90 8*73 8*46 8*60	$\substack{\substack{\substack{\textbf{10.95}\\11.02\\10.95\\10.63\\10.62}}$
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$ \begin{array}{r} 4 \cdot 33 \\ 4 \cdot 09 \\ 4 \cdot 41 \\ 4 \cdot 69 \\ 4 \cdot 88 \\ \end{array} $	$13.73 \\ 13.34 \\ 14.06 \\ 14.88 \\ 15.13 $	$9.03 \\ 8.72 \\ 9.24 \\ 9.79 \\ 10.01$	$32^{\circ}6$ $31^{\circ}2$ $31^{\circ}2$ $31^{\circ}0$ $31^{\circ}1$	48°2 45°5 45°4 45°9 46°2	40°4 38°4 38°3 38°5 38°7	$\begin{array}{r} 12^{\circ}59\\ 12^{\circ}93\\ 13^{\circ}76\\ 13^{\circ}85\\ 14^{\circ}49\end{array}$	8*83 8*54 8*86 8*88 9*27	10°46 10°74 11°31 11°37 11°88
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	5.02 5.39 5.55 5.77 5.51	$ \begin{array}{r} 15.75\\ 16.99\\ 17.76\\ 18.03\\ 17.89 \end{array} $	$10.39 \\ 11.19 \\ 11.66 \\ 11.90 \\ 11.70$	$30^{\circ}8$ $30^{\circ}5$ $30^{\circ}4$ $30^{\circ}0$ $29^{\circ}5$	$\begin{array}{r} 45^{\circ}3\\ 44^{\circ}6\\ 43^{\circ}9\\ 42^{\circ}7\\ 41^{\circ}2\end{array}$	$ \begin{array}{r} 38^{\circ}1 \\ 37^{\circ}6 \\ 87^{\circ}2 \\ 36^{\circ}4 \\ 35^{\circ}4 \end{array} $	$13^{\circ}93 \\ 13^{\circ}49 \\ 13^{\circ}59 \\ 13^{\circ}62 \\ 14^{\circ}42$	9*00 8*86 8*97 9*01 9*49	11'49 11'18 11'28 11'32 11'96
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	5.72 5.58 5.86 6.20 6.35	18.34 18.10 18.37 19.10 19.85	$12.03 \\ 11.84 \\ 12.12 \\ 12.65 \\ 12.85$	$\begin{array}{r} 28.8\\ 27.7\\ 27.0\\ 26.7\\ 25.5\end{array}$	40 * 2 38 * 8 37 * 6 37 * 6 36 * 2	34*5 33*3 82*3 32*2 30*9	$13.94 \\ 13.75 \\ 14.22 \\ 14.10 \\ 13.88$	9·36 9·11 9·20 9·07 9·03	$ \begin{array}{c} 11.65\\ 11.43\\ 11.71\\ 11.59\\ 11.46 \end{array} $
$\begin{array}{rrrr} 1861 & - \\ 1862 & - \\ 1863 & - \\ 1864 & - \\ 1865 & - \end{array}$	6.36 6.47 6.61 6.62 6.69	19:50 19:79 19:90 20:09 20:08	$\begin{array}{r} 12.93 \\ 13.13 \\ 13.26 \\ 13.36 \\ 13.39 \end{array}$	$\begin{array}{r} 24.6\\ 23.7\\ 23.8\\ 23.3\\ 22.5\end{array}$	$\begin{array}{r} 34.7\\ 33.2\\ 33.1\\ 32.4\\ 31.2\end{array}$	$\begin{array}{c} 29.7 \\ 28.5 \\ 28.5 \\ 27.9 \\ 26.9 \end{array}$	$ \begin{array}{r} 14.03 \\ 18.69 \\ 18.54 \\ 13.84 \\ 13.98 \end{array} $	9.12 8.98 8.82 9.07 9.24	$ \begin{array}{c} 11.58\\ 11.34\\ 11.18\\ 11.46\\ 11.59\\ \end{array} $
1866 - 1867 - 1868 -	6.69 6.87 7.15	$\begin{array}{c} 20{}^{\circ}03 \\ 20{}^{\circ}17 \\ 21{}^{\circ}05 \end{array}$	$13.36 \\ 13.52 \\ 14.10$	$\begin{array}{c} 21^{\circ}6\\ 21^{\circ}1\\ 20^{\circ}1 \end{array}$	30°0 28°8 27°8	25.8 25.0 23.9	$ \begin{array}{r} 13.91 \\ 14.33 \\ 14.05 \end{array} $	9·40 9·65 9·39	$ \begin{array}{c c} 11.66\\ 11.99\\ 11.72 \end{array} $

* The number of decrees of divorce pronounced by Her Majesty's Court for Divorce and Matrimonial Causes, in the year 1868, was 160.

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

Marriages.

5992 registered for marriages, was 17,067. The list embraces nearly 100 different religious titles.

Re-marriages.—The number of widowers and widows who married was 24,863 and 16,622 respectively. The mean age of the widowers who

TABLE 6.—Proportional Number of Persons Married in the several Counties of England during the Year 1368; of Persons who signed their Names; of Persons not of full Age; and of the Re-marriages of Widowers and Widows.

-	stand - Account as D. S. 10.4	RIED	SIGNEI	THEIR	PERSON	NOT OF	RE-MARI	RIAGES.
	PECISTRATION COUNTIES	MAR. PERS	IN WR	LITING.	FULL	AGE.	WIDOWERS,	WIDOWS.
	MAGISTRATION COUNTILS.	PERSONS TO 1,000 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	16.34	79.9	72.2	7.15	21.05	14.05	9.39
253.5	ILondon	19.28	90.9	- 85*8	3.63	15.26	13.92	9.63
No.	IISouth EASTERN COUNTIES.	18.54	82.4	88.1	3.36	17.91	10.85	7.54
12345	Kent (extra-metropolitan) – – Kent (extra-metropolitan) – – Sussex – – – – – – Hampshire – – – – – Berkshire – – – – –	$ \begin{array}{r} 13 \ 34 \\ 14 \cdot 72 \\ 16 \cdot 02 \\ 15 \cdot 42 \\ 14 \cdot 12 \end{array} $	81·4 81·8 83·7 79·8	83.0 86.6 84.6 80.7	$ \begin{array}{r} 5.53 \\ 7.45 \\ 4.90 \\ 5.43 \end{array} $	$ \begin{array}{c} 24.64 \\ 20.71 \\ 20.90 \\ 17.04 \end{array} $	$ \begin{array}{c} 11 \cdot 34 \\ 12 \cdot 33 \\ 12 \cdot 64 \\ 16 \cdot 09 \end{array} $	$\begin{array}{c} 9.34 \\ 9.06 \\ 10.47 \\ 10.12 \end{array}$
	IIISouth Midland Counties.		101 125 F		107.43	an an	urnages	
6 7 8 9 10 11 12 13	Middlesex (extra-metropolitan)-HertfordshireBuckinghamshireOxfordshireHuntingdonshireBedfordshireCambridgeshire	$\begin{array}{c} 10\cdot 46\\ 12\cdot 42\\ 13\cdot 42\\ 13\cdot 82\\ 14\cdot 80\\ 15\cdot 34\\ 14\cdot 84\\ 16\cdot 36\end{array}$	$\begin{array}{c} 86 \cdot 6 \\ 68 \cdot 4 \\ 75 \cdot 7 \\ 77 \cdot 9 \\ 78 \cdot 7 \\ 70 \cdot 5 \\ 67 \cdot 8 \\ 73 \cdot 2 \end{array}$	88.0 74.9 71.9 82.1 77.1 77.6 63.6 71.5	$5.12 \\9.04 \\10.14 \\7.49 \\10.76 \\8.50 \\14.33 \\10.72$	$\begin{array}{c} 17 \cdot 60 \\ 21 \cdot 49 \\ 24 \cdot 40 \\ 18 \cdot 69 \\ 25 \cdot 77 \\ 23 \cdot 71 \\ 26 \cdot 67 \\ 24 \cdot 53 \end{array}$	$\begin{array}{c} 12 \cdot 40 \\ 11 \cdot 37 \\ 13 \cdot 25 \\ 13 \cdot 22 \\ 11 \cdot 81 \\ 12 \cdot 75 \\ 16 \cdot 12 \\ 12 \cdot 33 \end{array}$	$\begin{array}{c} 6.80 \\ 6.71 \\ 7.23 \\ 9.43 \\ 7.06 \\ 7.16 \\ 6.31 \\ 8.27 \end{array}$
	IV EASTERN COUNTIES.							Territoria.
14 15 16	Essex	$ \begin{array}{r} 11.96\\ 13.72\\ 15.14 \end{array} $	$73.6 \\ 66.1 \\ 69.2$	80°0 74°2 75°3	6.87 8.54 8.62	$24 \cdot 20 \\ 22 \cdot 40 \\ 21 \cdot 43$	12.61 14.86 15.71	8.00 8.45 9.06
	VSouth Western Counties.	-		and the second second		a and an other state		a president degrader og
17 18 19 20 21	WiltshireDorsetshireDevonshireCornwallSomersetshire	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	75.6 78.8 83.5 73.6 77.1	78·3 79·4 80·4 67·3 77·0	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8*99 7*36 9*28 7*11 7*97
	VIWEST MIDLAND COUNTIES.		1.28 million 1	in the second	1		04.4	
22 23 24 25 26 27	Gloucestershire – – – – Herefordshire – – – – – Shropshire – – – – – – Staffordshire – – – – – Worcestershire – – – – – Warwickshire – – – – –	$17.54 \\ 11.48 \\ 12.44 \\ 14.84 \\ 14.70 \\ 15.00 $	81.8 69.8 72.5 66.5 76.6 78.7	79.5 77.1 73.1 57.6 72.5 71.8	$9.46 \\ 4.06 \\ 4.76 \\ 11.08 \\ 7.58 \\ 8.80$	$ \begin{array}{r} 19.44 \\ 14.14 \\ 14.24 \\ 29.88 \\ 22.24 \\ 22.99 \\ \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	9·33 9·32 8·35 10·30 8·41 9·87
	VIINORTH MIDLAND COUNTIES.				- Start		Sec. Sec.	aber inte
28 29 30 31 32	Leicestershire – – – – – Rutlandshire – – – – – Lincolnshire – – – – – Nottinghamshire – – – – Derbyshire – – – – –	$ \begin{array}{c} 17.76\\ 14.06\\ 15.78\\ 16.40\\ 14.76 \end{array} $	78.0 86.1 80.0 77.4 80.0	71.8 87.3 80.0 68.8 73.8	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 26 \cdot 31 \\ 15 \cdot 76 \\ 19 \cdot 59 \\ 24 \cdot 32 \\ 23 \cdot 41 \end{array}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	8·33 3·64 7·66 8·33 8·37
1	VIIINORTH WESTERN COUNTIES.	and the second	Surger Street Street		1			
33 34	Cheshire – – – – – – – – – – – – – – – – – – –	15·74 18·76	78·7 78·5	67 ·2 58 · 1	6·19 8·90	17°27 22°53	16·25 15·26	9°22 10'81
35 36 37	IXYORKSHIRE. West Riding East Riding (with York) North Riding	17°94 18°98 13°84	80°0 84°6 83°9	63:3 75:1 80:0	9·14 5·81 5·27	26:31 23:27 20:53	$15.10 \\ 14.30 \\ 14.31$	9•75 10•42 8•72
	XNorthern Counties.			1.409				
38 39 40 41	Durham – – – – – – – Northumberland – – – – Cumberland – – – – – Westmorland – – – – –	$ \begin{array}{r} 15.80 \\ 18.68 \\ 15.22 \\ 12.90 \end{array} $	77.585.482.988.7	65.5 74.8 72.9 87.2	$ \begin{array}{c} 7 \cdot 57 \\ 4 \cdot 67 \\ 5 \cdot 20 \\ 4 \cdot 17 \end{array} $	$ \begin{array}{r} 32 \cdot 24 \\ 19 \cdot 42 \\ 18 \cdot 08 \\ 15 \cdot 44 \end{array} $	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{r} 10.08 \\ 8.50 \\ 7.04 \\ 7.11 \end{array} $
	XIMONMOUTHSHIRE AND WALES.			State of	1. 18-18-			
42 43 44	Monmouthshire – – – – South Wales – – – – – North Wales – – – – –	$15.02 \\ 15.34 \\ 13.26$	65°1 69°9 68°5	57°9 53°2 56°2	7.64 7.62 4.05	24·72 18·61 12·43	14·17 13:81 15·28	11·59 9·36 9·34

The Table may be read thus by omitting the decimal points :- In England, among every 100,000 person living 1,634 persons were married; of 1,000 men married 799, of 1,000 women 722, signed the marriage register by writing their names; of 10,000 men married 715 were not of full age, of 10,000 women married 2105 were not of full age; of 10,000 men married 1405 were Widowers, of the same number of women married 939 were Widows.

married in 1868 was 42'4 years, while the mean age of the widows was 39'2 years.

Marriages of Minors .- 12,658 men and 37,245 women married under 21 years of age, so that of 100 men who married, 7.15, and of 100 women who married, 21.05 were under age. The marriages of minors have been increasing for many years. The proportion of young women under age was 17.1 in 100 for the ten years 1849-58, while it was 19.9 in 100 for the ten years 1859-68. The proportion of men under age increased in the same years, but not to the same extent; in the first decade the ratio was 5.4 per cent.; in the second decade it was 6.6 per cent.; but the age at marriage depends very much upon the age at which the parties attain what they consider a fair income to enable them to maintain a family. In order to determine the counties in which the proportion of early marriages is greatest, it would be necessary first to ascertain the proportion which the population under age bears to the persons living at all ages. The counties which supplied the greatest proportion of females who married under 21 years of age in 1868 are Durham, 32 per cent.; Stafford, 30; Bedford, 27; West Riding of York, 26; Leicester, 26; and Northampton, 26 per cent.

Ages of Persons married.-Of 176,962 marriages in the year 1868 the precise ages of both parties were specified in 118,634 instances. In every 100 marriages the ages were omitted to be recorded in 33 cases ; the cause of this regrettable defect was explained in my last annual report (page v). Great disparities of age in the persons who married are observable in the returns, among which may be mentioned that of a bachelor aged 21 married to a spinster aged 50-55; also three cases in which men aged 80 and under 85 were united to brides of the respective ages of 30-35, 35-40, and 40-45.

TABLE 7.- Number and Annual Rate per 1000 living of Marriages in England in each Quarter of the Years 1838-68.

143 1 T 12	I	MARRIAGES	REGISTEREI).	An	NUAL MAR	RIAGE RATI	E.
YEARS.	In the	Quarters end	ling the last	day of	In the (Quarters end	ling the last	day of
	March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.
1838 - 1839 - 1840 -	$23,201 \\ 24,679 \\ 26,395$	29,801 31,339 30,786	27,764 29,887 29,221	37,301 37,261 36,263	6·18 6·49 6·77	7.83 8.12 7.87	7·19 7·64 7·37	9.63 9.49 9.11
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	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	$\begin{array}{c} 6.26 \\ 6.54 \\ 6.32 \\ 6.44 \\ 7.21 \end{array}$	8·22 7·49 7·67 8·34 8·49	7·31 6·71 7·01 7·60 8·30	8.95 8.74 9.34 9.55 10.38
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	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	42,086 40,729 42,116 43,736 45,337	7 * 57 6 * 55 6 * 61 6 * 61 7 * 02	8.82 8.26 8.05 8.22 8.88	$\begin{array}{c} 8 \cdot 22 \\ 7 \cdot 51 \\ 7 \cdot 55 \\ 7 \cdot 66 \\ 8 \cdot 40 \end{array}$	9.83 9.40 9.61 9.86 10.10
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	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	7 · 41 7 · 30 7 · 78 7 · 27 6 · 31	8.63 8.85 8.83 8.74 8.22	8*22 8*36 8*59 8*13 7*85	$ \begin{array}{r} 10.00\\ 10.27\\ 10.52\\ 10.14\\ 9.88 \end{array} $
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	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	7.07 7.05 6.26 7.32 7.11	8 • 19 8 • 61 8 • 23 8 • 58 8 • 58 8 • 83	8 • 13 7 • 96 7 • 85 8 • 01 8 • 07	9.96 9.40 9.67 10.13 10.06
$\begin{array}{rrrr} 1861 & - \\ 1862 & - \\ 1863 & - \\ 1864 & - \\ 1865 & - \end{array}$	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	6*73 6*80 7*04 7*36 7*14	8*39 8*07 8*63 8*62 8*77	7.85 7.91 8.03 8.52 8.66	9.53 9.45 9.98 10.11 10.73
1836 - 1867 - 1868 - 1868 -	37,579 36,441 36,696	48,577 45,589 45,364	46,257 44,086 43,509	55,363 53,038 51,393	7 • 21 6 • 92 6 • 82	9·20 8·54 8·42	8.64 8.15 7.96	10·32 9·78 9·38
Mean	Annual Rate	per 1000 in e	ach quarter		6.89	8.41	7*92	9.78

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Marriages.

Marriages.

TABLE 3.—Showing the Number of Buildings registered for the Solemnization of Marriages, and on the Register on 31st December 1868.

			P T	RESI	BY-			-0		-10	W	est:	EYAI	۹ Mi	ETHODIS	TS.	CALVI METH	NISTIC ODISTS.	h.	0	
R	ENGLAND : DIVISIONS AND EGISTRATION COUNTIES.	TOTAL.	Church of Scotland.	United Presbyterians.	Presbyterian Church in England.	Independents.	Baptists.	United Brethren or M ravians.	Roman Catholics.	Unitarians.	Original Connexion.	New Connexion.	Primitive Methodists.	Bible Christians.	Wesl. Meth. Asso. andWesl.Reformers, generally forming the UnitedMeth.FreeCh.	Other Wesleyan Me- thodists.	Calvinistic Methodists.	Countess of Hunting- don's Connexion.	New Jerusalem Chure	Catholic and Apostoli Church.	All others.
	ENGLAND	5992	20	69	91	1763	1219	15	651	156	875	88	271	47	188	21	279	34	26	19	160
$ \begin{array}{r} 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 11 \end{array} $	DIVISIONS. LONDON SOUTH EASTERN COUNTIES - EASTERN COUNTIES - EASTERN COUNTIES - WEST MIDLAND COUNTIES - WEST MIDLAND COUNTIES - NORTH MESTERN COUNTIES - YORKSHIRE NORTHERN COUNTIES MONTHERN COUNTIES	406 475 443 339 628 628 365 838 596 330 944	5 1 - 1 - 4 - 9 -	$ \begin{array}{c} 6 \\ 1 \\ - \\ - \\ 1 \\ 12 \\ 3 \\ 46 \\ - \\ \end{array} $	$ \begin{array}{c} 14 \\ 4 \\ - \\ 3 \\ 5 \\ - \\ 23 \\ 2 \\ 38 \\ 2 \end{array} $	129 171 148 129 194 166 87 194 158 49 338	83 111 166 96 128 125 88 88 71 18 245	$ \begin{array}{c} 1 \\ - \\ 4 \\ - \\ 3 \\ 1 \\ - \\ 3 \\ 3 \\ - \\ $	$53 \\ 54 \\ 32 \\ 23 \\ 36 \\ 96 \\ 29 \\ 178 \\ 63 \\ 55 \\ 32 \\ 178 \\ 63 \\ 55 \\ 32 \\ 178 \\ 178 \\ 178 \\ 100 \\$	$7 \\ 12 \\ 4 \\ 7 \\ 22 \\ 19 \\ 11 \\ 42 \\ 19 \\ 2 \\ 11 \\ -$	$\begin{array}{r} 42\\ 68\\ 59\\ 36\\ 122\\ 109\\ 70\\ 126\\ 140\\ 50\\ 53\\ \end{array}$	2 - 1 2 16 8 26 25 7 1	$5 \\ 12 \\ 9 \\ 21 \\ 22 \\ 38 \\ 35 \\ 39 \\ 53 \\ 31 \\ 6$		$9 \\ 4 \\ 5 \\ 8 \\ 25 \\ 10 \\ 22 \\ 41 \\ 45 \\ 17 \\ 2$	- $ 1$ 1 $ 1$ 4 11 3 $ -$	5 3 - 1 7 - 18 - - 250	1 9 4 12 12 1 3 -	$ \begin{array}{r} 3 \\ -1 \\ 2 \\ 1 \\ 2 \\ 2 \\ 1 \\ 3 \\ 1 \\ - \end{array} $		35 13. 9 14 29 15 6 22 7 7 7 3
	I.—LONDON. Middlesex (part of) Surrey (part of) Kent (part of)	288 84 34	1 1 64	5 1 -	$\begin{array}{c}11\\1\\2\end{array}$	86 31 12		1 - -	42 7 4	5 2 -	30 7 5	1 1 -	4 1 -	1.1.1	7 2 -	1	5 - -	1	3 - -	6 - -	28 6 1
12345	II.—SOUTH EASTERN COUNTIES. SUITEY (extra-metropolitan) - Kent (extra-metropolitan) - Sussex Hampshire Berkshire	$\begin{array}{r} 60\\ 142\\ 94\\ 127\\ 52 \end{array}$	- - -	- - 1 -	- 13-	31 44 35 47 14	11 36 24 27 13	11111	$ \begin{array}{c} 10 \\ 18 \\ 8 \\ 11 \\ 7 \end{array} $	- 4 3 4 1	4 27 10 18 9	TIT IS A	- 2 - 5 5	- 126 -	1 - 1 1		- - - - -	1 4 3 1 -	1111	- 1 1 1 1	2 3 4 2 2
6 7 8 9 10 11 12 13	IIISOUTH MIDLAND COUNT ³ . Middlesex (<i>extra-metropol.</i>) - Hertfordshire Buckinghamshire Northamptonshire Huntingdonshire Bedfordshire Cambridgeshire	$51 \\ 55 \\ 54 \\ 47 \\ 85 \\ 24 \\ 56 \\ 71$	1111111	11111111	11111111	$ \begin{array}{r} 19 \\ 26 \\ 20 \\ 13 \\ 30 \\ 3 \\ 13 \\ 24 \end{array} $	$12 \\ 16 \\ 25 \\ 11 \\ 33 \\ 14 \\ 25 \\ 30$		$ \begin{array}{c} 10 \\ 3 \\ 2 \\ 9 \\ 4 \\ - \\ 1 \\ 3 \end{array} $	- 1 1 1 - 1	$5 \\ 6 \\ 5 \\ 7 \\ 12 \\ 4 \\ 11 \\ 9$	1111111	$-\frac{1}{12}$ $-\frac{1}{21}$ $-\frac{3}{22}$	1.1.1.1.1.1	- - 2 2 1 - 1		1111111	-2 -1 		1	41-111
14 15 16	IVEASTERN COUNTIES. Essex -/ Suffolk Norfolk	120 102 117	111	1 1 1	4 - -	$ \begin{array}{r} 64 \\ 40 \\ 25 \end{array} $	$\begin{array}{c} 24\\ 36\\ 36\\ 36 \end{array}$	1 1 1	$\begin{array}{c}10\\6\\7\end{array}$	- 3 4	$13 \\ 8 \\ 15$	- - 1	$-\frac{6}{15}$	1 1 1	- 1 7	- 1 -			2		7 1 6
17 18 19 20 21	V.—SOUTH WESTERN COUNTIES. Wiltshire – – – – – Dorsetshire – – – Devonshire – – – Cornwall – – – – Somersetshire – – –	$104 \\ 64 \\ 202 \\ 96 \\ 162$	11111	11111	- - 3 -	$39 \\ 26 \\ 64 \\ 10 \\ 55$	37 6 43 8 34	- - 1 - 2	4 9 8 6 9	$ \begin{array}{c} 1\\ 4\\ 10\\ -\\ 7 \end{array} $	9 13 82 39 29	- - 2 -	8 6 1 3 4	- 17 14 5	$ \begin{array}{c} 1 \\ - \\ 6 \\ 13 \\ 5 \end{array} $	11111	- - 1 -	- - 1 1		- 1 1	5 - 15 - 9
22 23 24 25 26 27	VI.—WESTMIDLAND COUNTIES. Gloucestershire – – – Herefordshire – – – Shropshire – – – Staffordshire – – – Worcestershire – – – Warwickshire – – –	$160 \\ 33 \\ 81 \\ 161 \\ 71 \\ 122$		1 - - - -] - 2 1 1	$54 \\ 7 \\ 28 \\ 34 \\ 9 \\ 34 \\ 34$	46 9 11 17 17 25	1 - - -	$10 \\ 2 \\ 11 \\ 37 \\ 12 \\ 24$	3 - 1 4 5	$22 \\ 4 \\ 9 \\ 43 \\ 14 \\ 17$	1 	$5 \\ 8 \\ 11 \\ 11 \\ 1 \\ 2$	1	$4 \\ - \\ 1 \\ 2 \\ 1 \\ 2$		3 - 4 - -	4 1 - 1 4 2		- 1 1 - 1	4 2 1 - 3 5
28 29 30 31 32	VII.—NORTH MIDLAND COUNT ^{\$} . Leicestershire Rutlandshire Lincolnshire Nottinghamshire Derbyshire	76 8 120 59 102	1111	11111	11111	$21 \\ 3 \\ 20 \\ 15 \\ 28$	28 3 29 15 13	11111	7 - 6 5 11	3 - 3 2 3	$10 \\ 1 \\ 30 \\ 11 \\ 18$	$ \frac{2}{2} \frac{3}{1} $	$2 \\ -21 \\ 3 \\ 9$	1111	$\begin{array}{c}1\\-\\6\\-\\15\end{array}$	- 2 2 -	1111	- - - 1		- - 2 -	2 1 1 1 1
33 34	VIIINORTH WESTERN CO ⁸ . Cheshire	147 691	- 4	4 8	6 17	36 158	$ 13 \\ 75 $	$\frac{1}{2}$	21 157	13 29	$\begin{array}{c} 23\\ 103 \end{array}$	7 19	8 31	ī	8 33	1 10	5 8	3	- 11	ī	1 21
35 36 37	IX.—YORKSHIRE. West Riding East Riding (with York) - North Riding	440 78 78	111	$\frac{1}{2}$	2 - -	$123 \\ 19 \\ 16$	59 7 5	8	37 10 16	15 2 2	96 19 25	23 2 ~	$31 \\ 13 \\ 9$	111	40 2 3	2 1 -			- 1 00	1 - -	4 3 -
38 39 40 41	X NORTHERN COUNTIES. Durham Northumberland Uumberland Westmorland	132 118 59 21	1 8 - -	$ \begin{array}{c} 15 \\ 25 \\ 5 \\ 1 \end{array} $	5 26 7 -	18 11 15 5	8 8 1 1	1111	27 18 9 1	1 - 1	$\begin{array}{c} 25\\7\\14\\4\end{array}$	7 - -	$\begin{array}{c} 15\\ 6\\ 6\\ 4\end{array}$	1111	9 5 1 2	1111		1 1 1	- - -	1111	1 3 1 2
42 43 44	XI.—Monmouthsh.AndWales. Monmouthshire – – – South Wales – – – – North Wales – – – –	119 521 304	111	1 1 1	-2-	36 216 86	57 157 31	1 14	10 12 10	- 10 1	8 24 21		2 4 -	1 1	1 1 -	1.1.1	5 92 153	- 1 -	111	111	-21

The mean age of the persons who married in 1868, including those who re-married, was 27'9 years for the men and 25'7 years for the women. Excluding the widowers and widows the mean age of those contracting marriage for the first time was 25'8 years for the bachelors and 24'4 for the spinsters who married in the year.

ix

Signature of Marriage Registers. — 35,628 men and 49,244 women made marks in signing the marriage register in the year 1868. Of 100 men married 80 wrote their names and 20 made marks. In 100 women married 72 wrote their names and 28 made marks. The returns afford clear proofs of a slow improvement in the elementary education of the people; in the year under review, out of every 100 marriages 17 persons were able to write their names in excess of the number in 1841, 27 years previously.

The details showing the proportion of men and women in different parts of the country who did not write their names in the marriage register may assist in determining the localities where educational effort should be more particularly directed, for although the signature may not be an absolute test of the state of elementary education in England, it is nevertheless an excellent statistical measure of the degree of education in the different counties. Thus in some parts of England and Wales only about one half of the women who married were able to sign their names in writing; viz., in South Wales, where the proportion per cent. was $53^{\cdot 2}$; North Wales, $56^{\cdot 2}$; Stafford, $57^{\cdot 6}$; Monmouth, $57^{\cdot 9}$; and Lancashire, $58^{\cdot 1}$. The proportions were also low in the West Riding of York, $63^{\cdot 3}$; Bedford, $63^{\cdot 6}$; Durham, $65^{\cdot 5}$; Cheshire, $67^{\cdot 2}$; Cornwall, $67^{\cdot 3}$; and Nottingham, $68^{\cdot 8}$. Among men the per-centages who wrote their names were lowest in the counties of Monmouth, $65^{\cdot 1}$; Suffolk, $66^{\cdot 1}$; Stafford, $66^{\cdot 5}$; Bedford, $67^{\cdot 8}$; North Wales, $68^{\cdot 5}$; Norfolk, $69^{\cdot 2}$; Hereford, $69^{\cdot 8}$; South Wales, $69^{\cdot 9}$.

The counties and extra-metropolitan parts of counties, &c. in which the highest proportions of women who wrote their names are found are Surrey, $88 \cdot 1$; Middlesex, $88 \cdot 0$; Rutland, $87 \cdot 3$; Westmorland, $87 \cdot 2$; Sussex, $86 \cdot 6$; London, $85 \cdot 8$; Hants, $84 \cdot 6$; Kent, $83 \cdot 0$; and Oxford, $82 \cdot 1$. Among men the per-centages were highest in London, $90 \cdot 9$; Westmorland, $88 \cdot 7$; Middlesex (extra-metropolitan), $86 \cdot 6$; Rutland, $86 \cdot 1$; and Northumberland, $85 \cdot 4$. The degree of elementary education differs in every county; but these results prove that the uneducated are to be found in greater numbers among mining and manufacturing populations than in the agricultural portions of the community.

Any signs of progress in the education of the people of this country are encouraging, but a comparison of the English marriage registers with those of Scotland shows that there is room in England and Wales for great improvement. In 1867, the most recent year for which the Scotch returns are published, the results show that 89.4 per cent. of the men, and 79.3 per cent. of the women, wrote their names in the marriage register, leaving the relatively smaller, but still regrettable, proportion of 10.6 per cent. of men and 20.7 per cent. of women who were unable to write. In England in the same year the proportions who were unable to affix their names to the register were 20'1 per cent. for men and 27'8 per cent. for women ! The counties in Scotland where educational efforts claim most attention are Ross and Cromarty, Inverness, and Sutherland; the proportion per cent. of men in these counties who were able to write their names was 60.6, 71.5, and 78.9 respectively; while among women the proportion was 45.8, 53.5, and 68.4 respectively. In the county of Kinross all the men and women who married in 1867 were able to write their names, and in the county of Selkirk all the men and 98 per cent. of the women wrote their names. For a sketch of the progress of the people in the art of writing see pp. xxxvi-xliv.

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X

BIRTHS.

The births of 786,858 children born alive were registered in 1868, being an increase of 18,509 over the number in the previous year. The annual birth-rate per 1000 of population is the highest recorded in the English returns, and affords a ratio of $36\cdot35$, against an average in the thirty-one years 1838-68 of $33\cdot73$.

The highest birth-rates are recorded in the counties of Durham, 42.90 per 1000; West Riding of York, 40.53; Leicester, 39.97; Lancashire, 39.24; Stafford, 38.57; Northumberland, 38.27; Bedford, 37.71; Monmouthshire, 37.62; and Cheshire, 37.27. The lowest are recorded in Rutland, 29.07; Hereford, 29.28; Westmorland, 30.48; Cornwall, 31.25; Dorset, 31.66; Somerset, 31.68; and Devon, 31.90. Taking an average of years, Durham is conspicuous as having the highest birth-rate, and next in order is Stafford. In counties containing the great manufacturing districts, especially the coal and iron industries, the men are greatly in excess of the women, but the true cause of the high birth-rate prevailing in these two counties is to be found in the excessively high proportion of married women at the child-bearing ages. Thus the Census returns of 1861 show that in England to every 100 women living at the ages 15-45 there were 49.1 married. In the county of Devon the proportion was 45.4 per cent., while in the counties of Durham and Stafford the proportions per cent. were 57.3 and 57.0 respectively. The birth-rate in the mineral and manufacturing counties is generally high, while in the agricultural districts the reverse obtains. If the ratio of legitimate births to married women be compared, and also the ratio of illegitimate births to spinsters and widows, the results are strikingly confirmatory of the above statement. Thus in the seven years 1858-64 the average annual number of legitimate births to every 100 married women of the ages 15 and under 45 in the counties of Durham and Stafford was 33.6 and 32.5 respectively, while in the agricultural county of Devon the proportion was only 29.5; in England the rate per cent. was 28.3. The average annual number of illegitimate births in the seven years to every 100 spinsters and widows of the ages 15 and under 45 was 2.4 in Durham and 2.6 in Stafford, while in Devon the proportion was only 1.4; in England the ratio was 1.9 per cent.

TABLE 9.—Births in the Years 1845-68 in England, distinguishing the Legitimate and Illegitimate, and the Proportion of Males born to every 100 Females born.

al an	В	IRTHS REGISTED	RED.	Males born	Males born in Wedlock	Males born out of Wedlock	Children born
YEARS.	TOTAL BIRTHS.	LEGITIMATE.	ILLE- GITIMATE.	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	-			-
1846 1847 1848 1849 1850	572,625 539,965 563,059 578,159 593,422	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	$\begin{array}{r} 615,865\\ 624,012\\ 612,391\\ 634,405\\ 635,043\end{array}$	573,865 581,530 572,628 593,664 594,260	42,000 42,482 39,763 40,741 40,783	$104.7 \\ 104.6 \\ 105.1 \\ 104.4 \\ 104.1$	$104.7 \\ 104.6 \\ 105.1 \\ 104.3 \\ 104.1$	$ \begin{array}{r} 103.9 \\ 104.8 \\ 104.6 \\ 106.1 \\ 104.8 \end{array} $	6.8 6.8 6.5 6.4 6.4 6.4
1856 1857 1858 1859 1860	$\begin{array}{c} 657,453\\ 663,071\\ 655,481\\ 689,881\\ 684,048\end{array}$	$\begin{array}{c} 614,\!802\\ 620,\!069\\ 612,\!176\\ 645,\!130\\ 640,\!355\end{array}$	42,651 43,002 43,305 44,751 43,693	$104^{\cdot}2 \\ 105^{\cdot}2 \\ 104^{\cdot}5 \\ 104^{\cdot}6 \\ 104^{\cdot}7 $	$104.3 \\ 105.3 \\ 104.4 \\ 104.5 \\ 104.8$	$\begin{array}{c} 103 \cdot 1 \\ 104 \cdot 1 \\ 106 \cdot 2 \\ 105 \cdot 7 \\ 102 \cdot 9 \end{array}$	6·5 6·5 6·6 6·5 6·4
1861 1862 1863 1864 1865	$\begin{array}{r} 696,406\\712,684\\727,417\\740,275\\748,069\end{array}$	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} 104.5 \\ 104.1 \\ 104.6 \\ 104.2 \\ 104.0 \end{array} $	$106.1 \\ 103.4 \\ 106.3 \\ 104.4 \\ 103.9$	$\begin{array}{c} 6^{\cdot 3} \\ 6^{\cdot 3} \\ 6^{\cdot 5} \\ 6^{\cdot 4} \\ 6^{\cdot 2} \end{array}$
1866 1867 1868	753,870 768,349 786,858	708,369 723,163 740,520	$\begin{array}{r} 45,501 \\ 45,186 \\ 46,338 \end{array}$	$104.3 \\ 104.3 \\ 103.6$	$104.3 \\ 104.2 \\ 103.5$	104.8 105.7 104.7	6°0 5°9 5°9

Sex.—Of the 786,858 children born 400,383 were boys and 386,475 were girls, so to every 100 girls 103.6 boys were born. The proportions differ in the several counties. Thus, in Huntingdon, and in Surrey (extrametropolitan) the boys were less in number than the girls, the proportion of males born to every 100 females born being 94.3 and 99.7 respectively; in two counties, viz., Hampshire and Berkshire, the proportions were nearly equal. The counties in which the greatest disparity in sex is

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 1868.

	a la constante a constante	DREN	ILDREN	Born Wedi	N IN LOCK.	Born O WEDI	OUT F LOCK.	n to every LES born.	n <i>in Wed-</i> every 100 so born.	n out of every 100 so born.	orn out of every 100
	REGISTRATION COUNTIES.	MALE CHIL BORN.	FEMALE CH BORN.	Males.	Females.	Males.	Females.	MALES borr 100 FEMAL	MALES born lock to (FEMALES	MALES bor Wedlock to FEMALES	CHILDREN I Wedlock to Births.
	ENGLAND	400,383	386,475	376,686	363,834	23,697	22,641	103.6	103.5	104.7	5.9
-91	I.—London	57,810	56,127	55,371	53,828	2439	2299	103.0	102.9	106.1	4.2
No. 1 2 3 4 5	II.—SOUTH EASTERN COUNTIES. Surrey (extra-metropolitan) – – Kent (extra-metropolitan) – – Sussex – – – – – Hampshire – – – – – Berkshire – – – – –	$5761 \\ 10686 \\ 6619 \\ 8046 \\ 3661$	$5779 \\ 10440 \\ 6302 \\ 8041 \\ 3662$	$5517 \\10168 \\6241 \\7654 \\3419$	5554 9964 5946 7644 3 422	$\begin{array}{r} 244 \\ 518 \\ 378 \\ 392 \\ 242 \end{array}$	$225 \\ 476 \\ 356 \\ 397 \\ 240$	99.7 102.4 105.0 100.1 100.0	99:3102:0105:0100:199:9	$108.4 \\ 108.8 \\ 106.2 \\ 93.7 \\ 100.8$	$\begin{array}{c} 4 \cdot 1 \\ 4 \cdot 7 \\ 5 \cdot 7 \\ 4 \cdot 9 \\ 6 \cdot 6 \end{array}$
6 7 8 9 10 11 12 13	III.—SOUTH MIDLAND COUNTIES. Middlesex (extra-metropolitan) – Hertfordshire – – – – Buckinghamshire – – – – Oxfordshire – – – – Northamptonshire – – – – Huntingdonshire – – – – Bedfordshire – – – – Cambridgeshire – – – –	4165 3117 2624 3010 4383 963 2709 3228	4038 3057 2568 2873 4245 1021 2680 3070	4016 2908 2469 2807 4122 909 2507 3017	3884 2847 2416 2686 4011 951 2464 2864	$ \begin{array}{c c} 149\\209\\155\\203\\261\\54\\202\\211\end{array} $	$154 \\ 210 \\ 152 \\ 187 \\ 234 \\ 70 \\ 216 \\ 206$	$\begin{array}{c} 103 \cdot 1 \\ 102 \cdot 0 \\ 102 \cdot 2 \\ 104 \cdot 8 \\ 103 \cdot 3 \\ 94 \cdot 3 \\ 101 \cdot 1 \\ 105 \cdot 1 \end{array}$	$\begin{array}{c} 103 \cdot 4 \\ 102 \cdot 1 \\ 102 \cdot 2 \\ 104 \cdot 5 \\ 102 \cdot 8 \\ 95 \cdot 6 \\ 101 \cdot 7 \\ 105 \cdot 3 \end{array}$	$\begin{array}{c} - \\ 96^{\circ}8 \\ 99^{\circ}5 \\ 102^{\circ}0 \\ 108^{\circ}6 \\ 111^{\circ}5 \\ 77^{\circ}1 \\ 93^{\circ}5 \\ 102^{\circ}4 \end{array}$	3.7 6.8 5.9 6.6 5.7 6.3 7.8 6.6
$\begin{array}{c}14\\15\\16\end{array}$	IVEASTERN COUNTIES. Essex	7131 5560 7072	6931 5415 6715	$6747 \\ 5154 \\ 6379$	6606 5038 6044	384 406 693	325 377 671	102.9 102.7 105.3	$ \begin{array}{c c} 102 \cdot 1 \\ 102 \cdot 3 \\ 105 \cdot 5 \end{array} $	$118.2 \\ 107.7 \\ 103.3$	5·0 7·1 9·9
17 18 19 20 21	V.—SOUTH WESTERN COUNTIES. Wiltshire – – – – – – Dorsetshire – – – – – Devonshire – – – – – – Cornwall – – – – – – Somersetshire – – – – –	3843 2973 9703 6045 7503	8701 2825 9218 5589 7194	$3637 \\ 2802 \\ 9141 \\ 5625 \\ 7108$	3516 2668 8685 5237 6824	206 171 562 420 395	185 157 533 352 370	$ \begin{array}{r} 103 \cdot 8 \\ 105 \cdot 2 \\ 105 \cdot 3 \\ 108 \cdot 2 \\ 104 \cdot 3 \end{array} $	$ \begin{array}{c} 103.4 \\ 105.0 \\ 105.3 \\ 107.4 \\ 104.2 \end{array} $	111·4 108·9 105·4 119·3 106·8	5·2 5·7 5·8 6·6 5·2
22 23 24 25 26 27	VIWEST MIDLAND COUNTIES. Glouestershire Herefordshire Shropshire Staffordshire Worcestershire Warwickshire	7945 1715 4576 17630 5751 11032	7483 1675 4208 17022 5620 10934	$7508 \\ 1561 \\ 4149 \\ 16574 \\ 5377 \\ 10494$	7075 1545 3792 16012 5321 10377	437 154 427 1056 374 538	408 130 416 1010 299 557	$ \begin{array}{c} 106 \cdot 2 \\ 102 \cdot 4 \\ 108 \cdot 7 \\ 103 \cdot 6 \\ 102 \cdot 3 \\ 100 \cdot 9 \end{array} $	$ \begin{array}{c} 106 \cdot 1 \\ 101 \cdot 0 \\ 109 \cdot 4 \\ 103 \cdot 5 \\ 101 \cdot 1 \\ 101 \cdot 1 \end{array} $	$ \begin{array}{c} 107 \cdot 1 \\ 118 \cdot 5 \\ 102 \cdot 6 \\ 104 \cdot 6 \\ 125 \cdot 1 \\ 96 \cdot 6 \end{array} $	5·5 8·4 9·6 6·0 5·9 5·0
28 29 30 31 32	VII.—NORTH MIDLAND COUNTIES. Leicestershire – – – – – Rutlandshire – – – – – Lineolnshire – – – – – Nottinghamshire – – – – Derbyshire – – – – –	4963 - 331 - 7369 - 5979 - 5849	4819 351 7048 5650 35720	4633 313 6782 5488 5450	4474 336 6490 5211 5339	330 18 587 491 387	345 15 558 439 381	$ \begin{array}{c} 103 \cdot 0 \\ 94 \cdot 3 \\ 104 \cdot 6 \\ 105 \cdot 8 \\ 102 \cdot 2 \end{array} $	$\begin{array}{c cccc} 103.6\\ 93.2\\ 104.5\\ 105.3\\ 102.2\\ \end{array}$	$\begin{array}{c} 95.7\\ 120.0\\ 105.2\\ 111.8\\ 101.6\end{array}$	6·9 4·8 7·9 8·0 6·6
33 34	VIIINORTH WESTERN COUNTIES Cheshire	- 9419 - 55079	9 9186 9 53193	8813 51922	8 8614 50197	606	572 2996	102.1	5 102·3 103·4	105·9 105·4	6·3 5·7
35 36 37	IXYORKSHIRE. West Riding East Riding (with York) North Riding	- 3465 - 531 - 401	1 33298 8 5051 1 3788	3 32570 L 4913 3 3668	3 31248 5 4673 3 3440	3 207 3 40 3 34	5 2045 3 378 3 343	104 · 105 · 106 ·	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	101·5 106·6 100·0	6·1 7·5 8·8
38 39 40 41	X.—NORTHERN COUNTIES. Durham – – – – – Northumberland – – – Cumberland – – – – Westmorland – – – –	$ \begin{array}{c} - & 1477 \\ - & 734 \\ - & 376 \\ - & 98 \end{array} $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c cccc} 4 & 1402 \\ 5 & 678 \\ 1 & 335 \\ 4 & 89 \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	9 75 7 56 8 41 8 8	$\begin{array}{c cccc} 0 & 755 \\ 5 & 488 \\ 0 & 393 \\ 7 & 106 \end{array}$	104· 106· 101· 104·	$\begin{array}{c cccc} 0 & 104 \cdot 8 \\ 7 & 106 \cdot 0 \\ 3 & 100 \cdot 9 \\ 2 & 107 \cdot 0 \end{array}$	$\begin{array}{c c} 99:3\\ 115:8\\ 104:3\\ 82:1 \end{array}$	5·2 7·4 10·7 10·0
42 43 44	XI.—MONMOUTHSHIRE AND WALE Monmouthshire – – – – South Wales – – – – North Wales – – – –	s. - 393 - 1413 - 721	4 380 6 1341 9 697	$egin{array}{ccc} 6 & 375 \ 1326 \ 4 & 666 \ \end{array}$	$\begin{array}{c c}8 & 360\\0 & 1256\\3 & 640\end{array}$	$\begin{array}{c c c} 8 & 17 \\ 6 & 87 \\ 5 & 55 \\ \end{array}$	6 198 6 848 6 569	103 105 103	$\begin{array}{c ccccc} 4 & 104 & 2 \\ 4 & 105 & 2 \\ 5 & 104 & 0 \end{array}$	2 88·9 5 103·8 97·7	4·8 6·3 7 7·9

observed are Shropshire, Cornwall, Northumberland, and the North Riding of York, where the proportion of boys born to every 100 girls was 108.7, 108.2, 106.7, and 106.0 respectively.

Seasons.—The births are usually most numerous in the second quarter of the year, and least numerous in the third quarter of the year. On an average of 31 years 25.77 per cent. of the annual births occurred in the first quarter of the year, 25.89 in the second, 24.24 in the third, and

	REGISTRATION	AVEL ANN NUME CHILDR in the 1	RAGE UAL SER of EN born 0 Years	1 26 P	ALP IN	MAL	ES BOI	RN TO P	VERY J	.00 FEI	MALES	BORN.		
	COUNTIES.	Males.	Fe- males.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	Mean of the 10 Years 1859-68.
and a set	ENGLAND	373,071	357,715	104.6	104.7	104.6	104.1	104.7	104.2	104.0	104.3	104.3	103.6	104.3
	ILONDON.	52,307	50,501	103.8	104.1	103.4	101.9	104.9	104'3	102.5	103.4	104.6	103.0	103.6
No. 1 2 2	II.—SOUTH EASTERN COUNTIES. Surrey (extra-metropolitan) Kent (extra-metropolitan) –	4,747 9,766 6 015	4,609 9,335 5 757	103.9 104.2 102.9	106.5	102·2 107·8	104·8 103·6	103·3 102·0	104.6 105.5	103·5 106·9	104·8 104·7	98.8 103.2	99°7 102°4	108 ·2 104·7
°45	Hampshire – – – – – Berkshire – – – –	7,722 3,420	7,422 3,314	103.8 104.8 103.6	$ \begin{array}{c} 103.6 \\ 104.3 \\ 104.7 \end{array} $	106.8 104.7 100.5	105.2 103.1 103.3	104.0 102.1 99.7	$ \begin{array}{c c} 104^{\circ}3 \\ 105^{\circ}1 \\ 101^{\circ}8 \end{array} $	$ \begin{array}{c c} 104.7 \\ 104.1 \\ 106.7 \end{array} $	103.8 105.0 104.6	103.6 107.5 107.5	$ \begin{array}{c} 105.0 \\ 100.1 \\ 100.0 \end{array} $	$ \begin{array}{r} 104.5 \\ 104.1 \\ 103.2 \end{array} $
	IIISOUTH MIDLAND COUNTIES.		0.000	07.7		700-0	707-0	12.51	1000	704.0	a ur	12.J-1.J		
0 7 8 9 10 11 12 12	Hertfordshire – – – Buckinghamshire – – Oxfordshire – – – Northamptonshire – – Huntingdonshire – – Bedfordshire – – –	3,341 2,951 2,591 2,946 4,318 1,014 2,595 2,107	3,228 2,880 2,491 2,802 4,069 970 2,484	97 5 101 0 107 4 106 3 106 5 110 1 104 7 108 8	108°1 107°2 105°2 109°9 107°6 105°3 105°6	$ \begin{array}{r} 106'2 \\ 105'5 \\ 104'4 \\ 101'1 \\ 104'9 \\ 102'3 \\ 104'5 \\ 107'4 \end{array} $	$ \begin{array}{r} 101.6 \\ 105.5 \\ 100.6 \\ 108.5 \\ 111.1 \\ 113.8 \\ 103.3 \\ 102.7 \\ \end{array} $	$ \begin{array}{r} 108'3 \\ 101'2 \\ 103'8 \\ 102'7 \\ 103'3 \\ 109'8 \\ 106'6 \\ 100'7 \end{array} $	102.9 98.4 101.8 105.2 103.3 98.7 103.8	$ \begin{array}{r} 104.6 \\ 99.8 \\ 102.1 \\ 103.8 \\ 107.9 \\ 104.1 \\ 107.5 \\ 102.7 \end{array} $	$ \begin{array}{r} 104.8 \\ 105.4 \\ 102.8 \\ 105.0 \\ 106.1 \\ 103.3 \\ 104.1 \\ 109.1 \end{array} $	99 ⁵ 99 ⁶ 110 ³ 104 ² 107 ⁹ 103 ⁷ 104 ⁰	$ \begin{array}{c} 103^{\circ}1\\ 101^{\circ}9\\ 102^{\circ}2\\ 104^{\circ}8\\ 103^{\circ}3\\ 94^{\circ}3\\ 101^{\circ}1\\ 105^{\circ}1 \end{array} $	$ \begin{array}{c} 103.7 \\ 102.6 \\ 104.1 \\ 105.2 \\ 106.2 \\ 104.5 \\ 104.5 \\ 104.5 \end{array} $
10	IVEASTERN COUNTIES.	0,057	2,011	100.4	102 5	107 4	102 7	1007	100 4	100 7	100 1	99 5	105 1	104 4
14 15 16	Suffolk – – – – – – – – – – – – – – – – – – –	6,657 5,656 7,108	5,423 6,734	$103 \ 4$ $107 \ 5$ $108 \ 5$	$102^{\cdot 3}$ $105^{\cdot 4}$ $105^{\cdot 3}$	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	$103^{1}1$ $102^{1}3$ $104^{1}0$	$ \begin{array}{r} 106.9 \\ 105.9 \\ 105.7 \end{array} $	102.5 102.2 102.8	102.9 102.7 105.3	$ \begin{array}{r} 103^{\circ}8 \\ 104^{\circ}3 \\ 105^{\circ}5 \end{array} $
The second	VSouth Western Counties.	-										1		
17 18 19 20 21	Witshire – – – – Dorsetshire – – – – Devonshire – – – Cornwall – – – – Somersetshire – – –	3,853 3,000 9,491 6,449 7,367	3,721 2,900 9,060 6,071 7,075	$ \begin{array}{r} 101'4 \\ 103'4 \\ 106'1 \\ 107'0 \\ 107'2 \end{array} $	$ \begin{array}{r} 104.6 \\ 105.0 \\ 104.7 \\ 105.1 \\ 102.4 \end{array} $	$ \begin{array}{r} 105.0 \\ 101.4 \\ 106.6 \\ 105.7 \\ 99.9 \end{array} $	$ \begin{array}{r} 104.0 \\ 99.9 \\ 106.4 \\ 106.3 \\ 103.4 \end{array} $	$ \begin{array}{r} 102.2 \\ 102.8 \\ 104.2 \\ 106.9 \\ 104.7 \end{array} $	$ \begin{array}{r} 101.5 \\ 103.5 \\ 102.7 \\ 102.9 \\ 107.8 \end{array} $	$ \begin{array}{r} 103.0 \\ 106.7 \\ 103.1 \\ 106.2 \\ 103.1 \\ 103.1 \end{array} $	$ \begin{array}{r} 104.0 \\ 106.8 \\ 104.7 \\ 109.3 \\ 104.8 \end{array} $	$ \begin{array}{r} 106'0 \\ 99'9 \\ 104'1 \\ 105'1 \\ 104'3 \end{array} $	$ \begin{array}{r} 103.8 \\ 105.2 \\ 105.3 \\ 108.2 \\ 104.3 \end{array} $	$ \begin{array}{r} 103.6 \\ 103.5 \\ 104.8 \\ 106.3 \\ 104.1 \end{array} $
	VIWEST MIDLAND COUNTIES.			100.0	700.0	704-0	700.0			101.5		20510		
22 23 24 25 26 27	Gloucestershire – – – Herefordshire – – – Shropshire – – – Staffordshire – – – Worcestershire – – – Warwickshire – – –	$7,481 \\ 1,654 \\ 4,379 \\ 16,789 \\ 5,457 \\ 10,835$	$7,144 \\ 1,599 \\ 4,167 \\ 16,168 \\ 5,221 \\ 10,503$	$ \begin{array}{r} 102'8 \\ 100'6 \\ 107'7 \\ 104'4 \\ 106'3 \\ 103'4 \end{array} $	103·3 105·9 107·4 104·9 105·1 103·8	$ \begin{array}{r} 104.9 \\ 104.5 \\ 106.2 \\ 102.3 \\ 104.8 \\ 103.2 \end{array} $	$ \begin{array}{r} 103.9 \\ 103.3 \\ 102.8 \\ 103.9 \\ 102.8 \\ 102.8 \\ 104.3 \\ \end{array} $	$ \begin{array}{r} 104.4 \\ 108.1 \\ 102.3 \\ 105.0 \\ 105.3 \\ 101.1 \end{array} $	$ \begin{array}{r} 105.5 \\ 98.6 \\ 104.1 \\ 104.3 \\ 103.8 \\ 105.0 \\ \end{array} $	$ \begin{array}{r} 104.7 \\ 103.2 \\ 105.9 \\ 103.8 \\ 105.4 \\ 104.1 \end{array} $	$ \begin{array}{r} 104 \cdot 2 \\ 105 \cdot 8 \\ 103 \cdot 0 \\ 102 \cdot 3 \\ 103 \cdot 7 \\ 103 \cdot 3 \end{array} $	$ \begin{array}{r} 107 \cdot 0 \\ 102 \cdot 7 \\ 103 \cdot 2 \\ 104 \cdot 0 \\ 106 \cdot 0 \\ 102 \cdot 7 \end{array} $	$ \begin{array}{r} 106^{\circ}2 \\ 102^{\circ}4 \\ 108^{\circ}7 \\ 103^{\circ}6 \\ 102^{\circ}3 \\ 100^{\circ}9 \\ \end{array} $	$ \begin{array}{c} 104.7 \\ 103.5 \\ 105.1 \\ 103.9 \\ 104.6 \\ 103.2 \end{array} $
	VIINORTH MIDLAND COUNTIES.					Constant of	Contract of					in the second		
28 29 30 31 32	Leicestershire – – – Rutlandshire – – – Lincolnshire – – – Nottinghamshire – – Derbyshire – – –	4,608 870 6,961 5,885 5,544	4,378 360 6,668 5,651 5,330	$\begin{array}{c} 109^{\circ}2\\111^{\circ}3\\105^{\circ}1\\104^{\circ}6\\101^{\circ}3\end{array}$	$\begin{array}{c} 104 \cdot 0 \\ 99 \cdot 5 \\ 102 \cdot 1 \\ 105 \cdot 6 \\ 105 \cdot 9 \end{array}$	$\begin{array}{c} 107.7 \\ 109.8 \\ 106.7 \\ 103.3 \\ 104.3 \end{array}$	107 · 9 97 · 0 106 · 0 103 · 7 109 · 6	$ \begin{array}{r} 102.8 \\ 99.5 \\ 103.9 \\ 103.3 \\ 106.0 \end{array} $	$ \begin{array}{r} 106 \cdot 0 \\ 114 \cdot 6 \\ 104 \cdot 8 \\ 106 \cdot 1 \\ 101 \cdot 9 \end{array} $	$ \begin{array}{r} 104.7 \\ 101.3 \\ 104.0 \\ 102.8 \\ 104.0 \end{array} $	$ \begin{array}{r} 103 \cdot 0 \\ 98 \cdot 9 \\ 102 \cdot 1 \\ 101 \cdot 4 \\ 102 \cdot 6 \end{array} $	105.0 103.3 104.7 105.0 102.9	$\begin{array}{c} 103 \cdot 0 \\ 94 \cdot 3 \\ 104 \cdot 6 \\ 105 \cdot 8 \\ 102 \cdot 2 \end{array}$	$ \begin{array}{r} 105 \cdot 3 \\ 101 \cdot 0 \\ 104 \cdot 4 \\ 104 \cdot 2 \\ 104 \cdot 1 \end{array} $
	VIIINorth Western Counties.	e i					1000				1			
33 34	Cheshire – – – – Lancashire – – – –	8,871 49,647	8,506 47,573	$104.6 \\ 104.1$	$101.2 \\ 105.0$	$104.4 \\ 105.3$	105·4 103·7	108.6 103.9	$104.3 \\ 104.0$	$104.2 \\ 104.7$	$104.2 \\ 105.0$	$103.6 \\ 104.5$	102'5 103'5	104·3 104·4
35 36 3 7	IX.—YORKSHIRE. West Riding - East Riding (with York) North Riding -	31,429 5,014 3,769	30,164 4,781 3,622	103·9 104·4 104·0	$104.8 \\ 105.8 \\ 105.4$	104 [•] 4 106 [•] 7 106 [•] 3	$104.1 \\ 106.3 \\ 105.8$	$105.1 \\ 107.6 \\ 99.6$	$103^{\circ}6 \\ 102^{\circ}1 \\ 106^{\circ}1$	$104.5 \\ 105.3 \\ 101.7$	$104.1 \\ 100.7 \\ 101.2$	$103.5 \\ 104.8 \\ 104.6$	104·1 105·3 106·0	104·2 104·9 104·1
38 39 40 41	X.—NORTHERN COUNTIES. Durham – – – – Northumberland – – Cumberland – – – Westmorland – – –	12,805 6,684 3,666 964	12,169 6,333 3,494 925	104.8 105.1 104.7 104.4	$106.7 \\ 104.3 \\ 99.4 \\ 102.4$	$107.0 \\ 108.2 \\ 102.5 \\ 105.4$	104.8 104.4 103.8 102.8	103.6 106.6 111.8 109.1	$105.3 \\ 106.5 \\ 103.8 \\ 95.9$	103·7 104·1 109·4 106·3	$106.4 \\ 104.9 \\ 103.6 \\ 106.3$	$106.7 \\ 104.7 \\ 109.1 \\ 107.4$	$104.0 \\ 106.7 \\ 101.3 \\ 104.2$	105°3 105°6 104°9 104°4
42 43 44	XI. – MONMOUTHSHIRE AND WALES. Monmouthshire – – – South Wales – – North Wales – – –	3,818 13,191 6,832	3,635 12,645 6,443	107·4 104·4 104·9	$105^{\circ}2$ $103^{\circ}9$ $105^{\circ}1$	103 [,] 2 103 [,] 3 106 [,] 7	105·4 102·7 106·6	111·0 105·8 109·2	104.5 105.9 105.8	$104.7 \\ 101.7 \\ 105.9$	104·9 104·8 107·4	101·2 105·2 105·6	103·4 105·4 103·5	105°1 104°3 106°1

 TABLE 11.—Number and Proportion of Male and Female Children born in the several Counties of England in each of the TEN YEARS 1859-68.

24.10 in the fourth quarter. In the year 1868 the numbers registered in each quarter were 198,584, 202,839, 192,583, and 192,852 respectively. The relative birth-rates in the seasons of 1868, taking 1000 births as the standard, were 1015 and 1036 in the winter and spring quarters, and 974 and 975 in the summer and autumn quarters.

Children born out of Wedlock.—The true number of children born out of wedlock is unknown. Of the total children born in England in the year 1868, 46,338, or 5 9 per cent., were registered as illegitimate. In the six years 1851-56 the number of children thus born to every 1000 births

TABLE 12.-Births to 1000 Persons

		eac		ne x	ears	1828	-68.				e i a a sis E a constante		
					Bi	RTHS 1	o 1000]	Person	S LIVIN	īG.	-		
	REGISTRATION COUNTIES.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	Average Annual Rate, 1858-67.	1868.
	ENGLAND	33.66	35.04	34.37	34.61	35.04	35:39	35.64	35.64	35.54	35.85	35.03	36.35
	ILONDON	33.20	34.08	33.72	34.48	34.22	35.16	34.80	35.68	35.77	36.56	34.77	36.44
No. 1 2 3 4 5	11.—SOUTH EASTERN COUNTIES. Surrey (extra-metropolitan) – – Kent (extra-metropolitan) – – Sussex – – – – – – Hampshire – – – – – – – Berkshire – – – – – –	29°25 31°33 29°61 31°19 30°10	30.97 33.27 31.11 31.86 32.72	30·31 31·39 29·65 31·38 30·16	$30^{\circ}54$ $32^{\circ}96$ $30^{\circ}53$ $31^{\circ}62$ $31^{\circ}24$	30°43 32°79 30°54 31°71 32°53	31.03 33.90 31.27 32.78 33.26	$\begin{array}{c} 31 \cdot 12 \\ 34 \cdot 26 \\ 31 \cdot 97 \\ 32 \cdot 16 \\ 32 \cdot 97 \end{array}$	$\begin{array}{c} 31 \cdot 31 \\ 34 \cdot 61 \\ 32 \cdot 06 \\ 32 \cdot 37 \\ 32 \cdot 09 \end{array}$	31·90 33·52 32·64 32·09 32·41	32.01 34.89 32.71 32.30 33.06	30.89 33.29 31.21 31.95 32.05	34.03 34.92 34.13 32.30 35.12
6 7 8 9 10 11 12 13	III.—SOUTH MIDLAND COUNTIES. Middlesex (extra-metropolitan) - Hertfordshire Buckinghamshire Oxfordshire Northamptonshire Huntingdonshire Bedfordshire Cambridgeshire	29:96 30:74 31:98 31:80 35:02 33:63 33:15 32:98	$\begin{array}{c} 31 \cdot 66 \\ 32 \cdot 65 \\ 34 \cdot 90 \\ 34 \cdot 34 \\ 36 \cdot 25 \\ 54 \cdot 91 \\ 36 \cdot 34 \\ 34 \cdot 86 \end{array}$	30°17 31°34 33°24 33°07 36°13 33°77 33°80 33°08	$\begin{array}{c} 30 \cdot 60 \\ 30 \cdot 95 \\ 34 \cdot 08 \\ 33 \cdot 30 \\ 35 \cdot 06 \\ 32 \cdot 14 \\ 34 \cdot 23 \\ 32 \cdot 69 \end{array}$	$\begin{array}{c} 30 \cdot 21 \\ 32 \cdot 37 \\ 34 \cdot 08 \\ 33 \cdot 32 \\ 35 \cdot 17 \\ 34 \cdot 04 \\ 34 \cdot 69 \\ 32 \cdot 51 \end{array}$	30·94 32·26 34·20 33·80 36·91 35·50 35·93 33·78	31·30 33·22 34·45 33·89 34·97 35·20 35·86 34·07	$\begin{array}{c} 32 \cdot 56 \\ 32 \cdot 47 \\ 34 \cdot 59 \\ 32 \cdot 93 \\ 36 \cdot 13 \\ 34 \cdot 11 \\ 36 \cdot 59 \\ 34 \cdot 33 \end{array}$	32·35 33·02 34·39 33·83 34·79 32·06 35·62 34·39	$\begin{array}{c} 34 \cdot 40 \\ 34 \cdot 24 \\ 35 \cdot 07 \\ 32 \cdot 48 \\ 34 \cdot 42 \\ 31 \cdot 49 \\ 37 \cdot 68 \\ 34 \cdot 30 \end{array}$	31·42 32·33 34·10 33·28 35·49 33·69 33·69 33·69 33·70	34·32 34·31 34·96 34·22 35·22 34·04 37·71 36·10
14 15 16	IV.—EASTERN COUNTIES. Essex	31.46 32.34 31.87	33.61 34.74 34.27	32·38 32·08 31·62	32·36 32·56 32·30	32.58 32.66 32.49	33·78 32·84 32·51	33.62 33.98 33.29	33·51 33·13 32·39	33.88 32'48 31.49	33·43 33·28 32·18	33.06 33.01 32.44	33·98 32·78 32·60
17 18 19 20 21	V.—SOUTH WESTERN COUNTIES. Wiltshire – – – – – – – Dorsetshire – – – – – Devonshire – – – – – – Cornwall – – – – – – – Somersetshire – – – – –	31.40 31.37 29.59 33.79 29.97	32.56 32.96 30.27 35.25 31.39	$31 \cdot 26$ $31 \cdot 83$ $30 \cdot 13$ $33 \cdot 74$ $30 \cdot 52$	$31^{\circ}70$ $31^{\circ}67$ $31^{\circ}02$ $34^{\circ}62$ $30^{\circ}88$	33.35 32.15 31.74 34.66 31.20	$ \begin{array}{r} 33.35 \\ 33.51 \\ 32.17 \\ 35.89 \\ 31.35 \end{array} $	32.81 33.05 31.71 35.43 31.12	31.73 32.26 31.46 35.39 31.15	32·24 31·58 31·64 33·09 30·83	31.84 32.35 31.75 31.17 31.46	$\begin{array}{c} 32^{\circ}22\\ 32^{\circ}27\\ 31^{\circ}15\\ 34^{\circ}31\\ 30^{\circ}99 \end{array}$	32.70 31.66 31.90 31.22 -31.68
22 23 24 25 26 27	VIWEST MIDLAND COUNTIES. Gloucestershire	$31^{\cdot}39$ 29.01 $30^{\cdot}68$ $41^{\cdot}52$ $33^{\cdot}84$ $36^{\cdot}47$	$\begin{array}{c} 31 \cdot 34 \\ 30 \cdot 06 \\ 32 \cdot 14 \\ 41 \cdot 65 \\ 35 \cdot 19 \\ 36 \cdot 98 \end{array}$	$31 \cdot 23$ $29 \cdot 75$ $31 \cdot 43$ $41 \cdot 65$ $34 \cdot 30$ $37 \cdot 07$	$\begin{array}{r} 32.12\\ 30.84\\ 32.13\\ 40.24\\ 34.57\\ 36.94 \end{array}$	32.86 30.13 32.73 39.17 34.95 36.90	$32 \cdot 93$ $29 \cdot 81$ $32 \cdot 39$ $40 \cdot 60$ $35 \cdot 03$ $36 \cdot 96$	33°11 30°84 33°43 40°93 35°73 36°77	32.04 28.01 32.11 41.14 33.75 35.85	32.34 28.78 32.63 40.07 35.31 36.28	33.47 28.29 31.33 39.78 34.59 25.64	32·28 29·55 32·10 40·68 34·73 36·59	33.51 29.28 32.16 38.57 34.83 25.02
28 29 30 31 32	VII.—NORTH MIDLAND COUNTIES. Leicestershire – – – – – Rutlandshire – – – – – Lincolnshire – – – – – Nottinghamshire – – – – Derbyshire – – – – –	32.79 31.34 32.51 34.80 33.90	34.66 30.75 33.75 36.99 36.42	34°77 32°93 33°01 37°09 35°22	34·47 30·22 33·47 35·63 34·96	35.96 30.48 32.86 35.35 35.98	36·47 31·37 34·13 34·75 35·43	37.62 32.48 33.69 33.65 35.96	37.02 31.93 33.74 33.69 35.33	38·12 30·26 33·09 32·83 35·37	38.88 31.29 33.19 33.47 35.51	36.08 31.31 33.34 34.83 35.41	39*97 29:07 35:43 33:35 35:39
33 34	VIII.—North Western Counties. Cheshire – – – – – – – Lancashire – – – – – –	33·32 35·80	35.63 37.13	34·44 36·76	35·28 37·70	36·73 38·58	36•53 37•25	36°60 37°68	36·79 37·26	35·79 37·32	35·72 38·19	35°68 37°37	37·27 39·24
35 36 37	IX.—YORKSHIRE. West Riding - - East Riding (with York) - - North Riding - -	36:02 33:60 33:27	37 • 45 34 • 53 34 • 21	$37.59 \\ 34.22 \\ 34.29$	37·07 34·76 33·23	87·95 35·39 33·55	38.63 35.25 33.74	39.66 35.32 33.83	$39.85 \\ 35.50 \\ 34.58$	39·32 35·49 33·81	40°18 35°06 33°86	38·37 34·91 33·84	40.53 36.64 33.84
38 39 40 41	X.—NORTHERN COUNTIES. Durham – – – – – – Northumberland – – – – Cumberland – – – – – Westmorland – – – –	41·27 34·54 32·31 28·26	42·25 35·10 34·22 29·93	41·10 35·09 32·77 32·53	$\begin{array}{c} 40^{\circ}29\\ 35^{\circ}52\\ 34^{\circ}44\\ 31^{\circ}59\end{array}$	41.97 37.18 34.36 30.67	42.07 36.86 34.97 29.53	42.98 37.34 35.21 31.24	43 · 58 37 · 63 34 · 95 30 · 06	43·37 37·92 34·43 29·68	41.81 36.59 35.74 30.03	42.07 36.38 34.34 30.35	42.90 38.27 36.15 30.48
42 43 44	XI.—MONMOUTHSHIRE AND WALES. Monmouthshire – – – – – South Wales – – – – – North Wales – – – – –	37.07 35.03 28.79	38·42 37·14 30·60	36•76 35•85 29•96	35·41 34·19 29·53	35·39 35·01 31·03	36·81 34·76 31·69	37·28 35·62 32·72	38·23 35·78 31·81	37·90 35·96 32·98	37·72 35·15 32·68	37·10 35·45 31·18	37 ° 62 35 ° 55 33 ° 43

XXXI.

Births.

5	living	in	the	several	Counties	of	England	during
of	the T	rea	rs 1	858-6	8.			

xiii

b

Births.

averaged 66 annually; in the six years 1857-62 the proportion averaged 64 annually; while in the six years 1863-68 it was 62. The rate of

TABLE 13 .- Proportional Number of Births in each Quarter to 1000 Births in the Average Quarter of each Year, 1838-68.

	NUMBER	PR	OPORTIONAL	NUMBER O	F BIRTHS.	
YEARS.	OF BIRTHS	In the AVERAGE	FIRST	SECOND	THIRD	FOURTH
	IN THE	QUARTER	QUARTER	QUARTER	QUARTER	QUARTER
	AVERAGE	(assumed to be	ending	ending	ending	ending
	QUARTER.	1000).	March 31.	June 30.	Sept. 30.	Dec. 31.
1838	115,947	1000	995	$1053 \\ 1049 \\ 1033$	981	971
1839	123,144	1000	1017		967	967
1840	125,576	1000	1059		949	959
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	$ \begin{array}{r} 1017 \\ 1039 \\ 999 \\ 1018 \\ 1009 \end{array} $	959 944 964 957 966	965 955 985 957 957 957
1846	$\begin{array}{r} 143,\!156\\ 134,\!991\\ 140,\!765\\ 144,\!540\\ 148,\!356\end{array}$	1000	1027	1047	961	965
1847		1000	1099	1032	934	935
1848		1000	998	1070	991	941
1849		1000	1078	1066	927	929
1850		1000	974	1051	990	985
1851 1852 1853 1854 1855	$153,966 \\ 156,003 \\ 153,098 \\ 158,601 \\ 158,761$	$1000 \\ 1000 \\ 1000 \\ 1000 \\ 1000 \\ 1000$	1022 1037 1056 1026 1060	1033 1019 1037 1090 1044	978 969 964 968 966	967 974 943 916 930
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	$1060 \\ 1031 \\ 1034 \\ 1022 \\ 1023$	952 964 953 968 954	953 963 956 978 946
1861	174,102	1000	1007	$1064 \\ 1044 \\ 1043 \\ 1026 \\ 1035$	980	949
1862	178,171	1000	1035		961	960
1863	181,855	1000	1039		946	972
1864	185,069	1000	1047		973	954
1865	187,017	1000	1051		965	949
1866	188,468	1000	1058	$1023 \\ 1041 \\ 1036$	942	977
1867	192,087	1000	1028		985	946
1868	196,714	1000	1015		974	975

TABLE 14.-Number and Annual Rate per 1000 living of Births in England during each Quarter of the Years 1838-68.

		I	BIRTHS.		it the set	ANNUAL BI	RTH RATE.	
YEARS.	In the	n the Quarters ending the last day of In		In the	Quarters en	ding the last	day of	
	. March.	June.	September.	December.	March.	June.	Sept.	Dec.
1838 1839 1840	-113,815 123,543 132,305	$121,781 \\ 128,806 \\ 129.059$	$ \begin{array}{r} 114,734 \\ 120,115 \\ 119.822 \end{array} $	$113,457 \\120,110 \\121,117$	30·32 32·48 33·95	31 [.] 98 33 [.] 38 33 [.] 01	29'70 30'69 30'21	29·28 30·59 30·44
1841 1842 1843 1844	133,720 135,615 136,837 143,578	129,884 134,096 131,279 136,941	123,868 123,296 128,161 130,078 132,369	$124,686 \\ 124,732 \\ 131,048 \\ 130,166 \\ 131,219$	$34 \cdot 24$ $34 \cdot 31$ $34 \cdot 20$ $35 \cdot 07$ $34 \cdot 91$	32°78 33°44 32°34 33°34 32°91	$30^{\circ}82$ $30^{\circ}32$ $31^{\circ}14$ $31^{\circ}23$ $31^{\circ}40$	30.92 30.58 31.74 31.15 3 1.03
1846 1847 1848 1849	145,108 146,453 139,736 153,772 144,551	149,450 139,072 149,760 153,693 155,865	138,718 127,173 140,359 135,223 146,911	$\begin{array}{r} 139,349\\ 127,267\\ 133,204\\ 135,471\\ 146,095 \end{array}$	34.98 34.88 32.52 35.75 33.21	35:51 32.65 34.74 35.23 35.30	$\begin{array}{c} 32 \cdot 51 \\ 29 \cdot 45 \\ 32 \cdot 11 \\ 30 \cdot 56 \\ 32 \cdot 81 \end{array}$	32·56 29·38 30·38 30·53 32·53
1851 1852 1853 1854 1855	$\begin{array}{c} 157,286\\ 161,803\\ 161,729\\ 160,785\\ 166,225\end{array}$	159,073 159,031 158,697 172,457 165,277	$150,594 \\ 151,222 \\ 147,602 \\ 154,724 \\ 154,700$	148,912 151,956 144,363 146,439 148,841	$35 \cdot 63$ $35 \cdot 83$ $35 \cdot 79$ $35 \cdot 18$ $35 \cdot 96$	$35^{\circ}53$ $35^{\circ}11$ $34^{\circ}64$ $37^{\circ}21$ $35^{\circ}26$	83°18 32°93 31°77 32°93 32°55	$\begin{array}{r} 32^{\circ}71\\ 32^{\circ}99\\ 30^{\circ}99\\ 31^{\circ}08\\ 31^{\circ}23\end{array}$
1856 1857 1858 1859 1860	169,250 170,430 170,959 175,532 183,180	$173,263 \\ 170,444 \\ 169,115 \\ 175,864 \\ 174,028$	157,462 161,181 157,445 168,394 164,121	$157,478 \\ 161,016 \\ 157,962 \\ 170,091 \\ 162,719$	35.80 36.04 35.76 36.31 37.07	86°55 35°55 34°88 35°88 35°12	32.76 33.16 32.04 33.89 32.67	$32 \cdot 67$ $33 \cdot 04$ $32 \cdot 05$ $34 \cdot 14$ $32 \cdot 30$
1861 1862 1863 1864 1865	172,933 181,990 186,341 192,947 194,130	184,820 185,554 189,340 188,835 192,988	172,033 172,709 173,439 181,015 181,941	166,620 172,431 178,297 177,478 179,010	$35 \cdot 00$ $36 \cdot 44$ $36 \cdot 91$ $37 \cdot 40$ $37 \cdot 65$	36°90 36°65 37°00 36°51 36°92	33`88 33`65 33`43 34`53 34`34	32.72 33.50 34.28 33.76 33.70
1866 1867 1868	196,753 194,763 198,584	192,437 199,660 202,839	179,086 190,782 192,583	185,594 183,144 192,852	37·77 37·00 36·93	36:44 37:42 37:63	33·46 35·28 35·25	34.58 33.78 35.21
Mea	an Annual Ra	ate per 1,000	in each Quart	er (35.33	35.09	32.41	32.12

illegitimacy therefore in this country is declining. In some countries the ratio is considerably higher than in England, but many circumstances have to be taken into consideration in making any comparisons in this direction. In France the rates are comparatively low. In Austria the rate is high, while in Würtemburg and Bavaria it is excessively high. In some of the European States marriage is prohibited until the parties can show that they have the means of maintaining their offspring, and concubinage is often the result. The proportions in Table 10 apparently indicate that the rate of illegitimacy is not generally great in the English counties containing the large manufacturing centres of industry, but this may, to some extent, be due to omissions of illegitimate births. In the North Riding of York and in Nottingham the rates are high, the proportions per cent. being 8.8 and 8.0 respectively. The highest rates are observed as usual in the counties of Cumberland, 10.7; Westmorland, 10.0; Norfolk, 9.9; and Salop, 9.6. The lowest rates are in the following counties and extra-metropolitan parts of counties, &c.; Middlesex, 3.7 per cent.; Surrey, 4.1; London, 4.2; Kent, 4.7; Monmouth, 4.8; Rutland, 4.8; Hampshire, 4.9; and Essex, 5.0. A truer method of measuring the degrees of immorality existing in the different counties consists in a comparison of the illegitimate births with the number of unmarried women at childbearing ages; a test which can only be made by means of the results of the enumeration of the number of spinsters and widows living at different ages obtained at the census.

A remarkable instance of early fecundity occurred at Rochford in Essex. The daughter of an agricultural labourer gave birth to a boy before she

TABLE 15.—Annual Rate of Mortality of Males and of Females in England, 1838-68.

- ANN			Dea	THS.	1	
いいのない、「「「	Years.		OF MALES TO 1000 MALES LIVING.	OF FEMALES TO 1000 FEMALES LIVING.	DEATHS OF MALES TO 100 DEATHS OF FEMALES.	OF EQUAL NUMBERS LIVING, THE NUMBER OF MALE DEATHS TO EVERY 100 DEATHS OF FEMALES.
AND STATISTICS	$\begin{array}{rrrr} 1838 & - \\ 1839 & - \\ 1840 & - \end{array}$	1 1 1	23·42 22·77 23·72	21.46 20.97 22.04	105 104 103	109 109 108
	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$		$\begin{array}{r} 22 \cdot 38 \\ 22 \cdot 39 \\ 21 \cdot 99 \\ 22 \cdot 38 \\ 21 \cdot 66 \end{array}$	$20.83 \\ 20.98 \\ 20.47 \\ 20.83 \\ 20.11$	103 102 103 103 103	107 107 107 107 107 108
	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	11111	$\begin{array}{c} 23 \cdot 90 \\ 25 \cdot 41 \\ 23 \cdot 87 \\ 25 \cdot 78 \\ 21 \cdot 42 \end{array}$	$\begin{array}{c} 22 \cdot 21 \\ 23 \cdot 80 \\ 22 \cdot 24 \\ 24 \cdot 45 \\ 20 \cdot 13 \end{array}$	103 103 103 101 101 102	108 107 107 105 106
the second state of the	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	1111	$\begin{array}{c} 22 \cdot 76 \\ 23 \cdot 24 \\ 23 \cdot 83 \\ 24 \cdot 41 \\ 23 \cdot 51 \end{array}$	$21 \cdot 24 \\ 21 \cdot 55 \\ 21 \cdot 97 \\ 22 \cdot 67 \\ 21 \cdot 74$	103 103 104 103 104	107 108 108 108 108 108
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	11111	$\begin{array}{c} 21:36\\ 22:57\\ 23:90\\ 23:27\\ 22:18\end{array}$	19.69 21.07 22.33 21.55 20.34	104 102 102 103 104	108 107 107 108 109
the state of the s	$\begin{array}{rrrr} 1861 & - \\ 1862 & - \\ 1863 & - \\ 1864 & - \\ 1865 & - \end{array}$	1111	22.68 22.49 24.24 25.14 24.77	20.63 90.49 21.93 22.64 22.08	104 104 105 105 106	110 110 111 111 111 112
11 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1866 - 1867 - 1868 -		24 • 96 23 • 40 23 • 63	22·34 20·65 20·86	105 106 106	112 113 113
NR. NO	Average of 31 yea 1838-68 -	rs, }	23.34	21.49	104	108

The Table may be read thus :- In the year 1838 to every 1000 males living there were 23.42 deaths of males; to every 1000 females living there were 21.46 deaths of females; and to every 100 females who died there were 105 deaths of males. The last column shows the relative mortality of males and females; and that out of equal numbers living the deaths of males were 109 to every 100 deaths of females in 1838.

XY

had attained the age of 11 years. It is satisfactory to know that the father of the child was prosecuted and sentenced to imprisonment.

DEATHS.

480,622 deaths were registered in England in the year 1868, or more by 9,549 than in the previous year; but as the population has grown proportionally greater, being now estimated at 21,649,377, or 219,869 in

TABLE 16 .- Annual Rate of Mortality per 1000 in the several Counties of England during each of the Years 1858-68.

			1 491		De	ATHS ?	co 100	0 PERS	ONS LIV	VING.				
RE	GISTRATION COUNTIES.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	Ave- rage Annual Rate, 1858-67.	1868.	
	ENGLAND	23.09	22.39	21.24	21.63	21.47	23.05	23.86	23.39	23.61	21.98	22.57	22.20	
	to be derived from	ISORE	91-33	gre	odt	81	<u>(11)</u>	-				24:00	92.60	-
	ILONDON	23.90	22.69	22*49	23.18	23.56	24.47	26.23	24-00	20 40	25 01	21 00	20 00	
No.	Counties.	18.77	18.13	17.67	17.43	16.62	18.82	19.02	18.39	18.22	16.83	17.99	18.44	
12345	Kent (extra-metropolitan) - Sussex Hampshire Berkshire	21·29 20·70 20·67 21·32	20·49 20·58 20·36 20·43	18.63 18.81 19.02 19.72	19·92 18·19 17·96 18·92	17·90 18·28 18·75 18·76	20.69 19.37 19.65 20.44	20°98 20°51 20°42 20°86	20·46 20·78 20·73 21·14	19·32 19·24 19·74 20·41	19·38 19·57 18·52 19·71	$ \begin{array}{c} 19.91 \\ 19.60 \\ 19.58 \\ 20.17 \end{array} $	$ \begin{array}{r} 19 \cdot 02 \\ 18 \cdot 71 \\ 19 \cdot 12 \\ 19 \cdot 19 \end{array} $	1.181
1	IIISOUTH MIDLAND COUNTIES.				and the second				1.000					and a feature
6 7 8 9 10 11 12 13	Middlesex(extra-metropolitan) Hertfordshire – – – Buckinghamshire – – – Oxfordshire – – – Northamptonshire – – Huntingdonshire – – – Bedfordshire – – – Cambridgeshire – – –	$\begin{array}{c} 20{}^{\circ}01\\ 19{}^{\circ}38\\ 21{}^{\circ}21\\ 22{}^{\circ}49\\ 20{}^{\circ}91\\ 20{}^{\circ}50\\ 19{}^{\circ}71\\ 20{}^{\circ}07\end{array}$	$\begin{array}{c} 20.47\\ 19.27\\ 21.63\\ 20.90\\ 23.08\\ 19.78\\ 20.65\\ 20.21\\ \end{array}$	$\begin{array}{c} 19 \cdot 98 \\ 19 \cdot 47 \\ 19 \cdot 81 \\ 19 \cdot 66 \\ 21 \cdot 37 \\ 18 \cdot 67 \\ 20 \cdot 17 \\ 19 \cdot 50 \end{array}$	19.81 18.20 20.97 18.66 21.03 20.33 19.02 21.17	$\begin{array}{c} 19 \cdot 26 \\ 17 \cdot 98 \\ 19 \cdot 33 \\ 18 \cdot 79 \\ 18 \cdot 97 \\ 19 \cdot 92 \\ 18 \cdot 76 \\ 20 \cdot 23 \end{array}$	21.62 20.49 20.62 21.42 22.27 23.32 21.18 22.56	22.44 22.52 22.40 22.35 23.09 22.33 24.54 22.56	$\begin{array}{c} 20 \cdot 36 \\ 20 \cdot 19 \\ 20 \cdot 84 \\ 20 \cdot 58 \\ 22 \cdot 95 \\ 21 \cdot 73 \\ 22 \cdot 35 \\ 22 \cdot 06 \end{array}$	$\begin{array}{c} 20 \cdot 86 \\ 18 \cdot 74 \\ 19 \cdot 63 \\ 19 \cdot 37 \\ 19 \cdot 41 \\ 18 \cdot 59 \\ 21 \cdot 74 \\ 20 \cdot 31 \end{array}$	$\begin{array}{c} 20 \cdot 06 \\ 19 \cdot 42 \\ 20 \cdot 28 \\ 19 \cdot 87 \\ 20 \cdot 35 \\ 17 \cdot 81 \\ 21 \cdot 13 \\ 20 \cdot 22 \end{array}$	$\begin{array}{c} 20^{\circ}49\\ 19^{\circ}57\\ 20^{\circ}67\\ 20^{\circ}41\\ 21^{\circ}34\\ 20^{\circ}30\\ 20^{\circ}93\\ 20^{\circ}89\\ \end{array}$	$ \begin{array}{r} 19.73 \\ 19.03 \\ 19.06 \\ 18.36 \\ 19.19 \\ 19.71 \\ 21.36 \\ 20.63 \end{array} $	0.8
it was	IVEASTERN COUNTIES.			an a	.6.131	1.2.25		- Aller	038,2	19(3)	10,5	10.01	14 146	
14 15 16	Essex	20.87 21.21 23.92	$\begin{array}{ c c c c } 20.81 \\ 20.36 \\ 20.95 \end{array}$	$ \begin{array}{r} 18.64 \\ 19.71 \\ 21.02 \end{array} $	$ \begin{array}{c} 19.01 \\ 20.73 \\ 22.31 \end{array} $	19.03 18.30 20.03	21·25 22·88 21·87	21°00 20°93 22°20	19.86 20.25 22.42	20.06 18.97 20.70	$ \begin{array}{c} 18 \cdot 58 \\ 19 \cdot 40 \\ 19 \cdot 62 \end{array} $	19.91 20.27 21.50	18.77 18.57 20.79	
14:5	VSOUTH WESTERN COUNTIES.	0011	1.15	6.5 × 10		1. 19		12.5		10.01	10.14	20.02	10.40	A.S.
17 18 19 20 21	Wiltshire Dorsetshire Devonshire Cornwall Somersetshire	20.81 21.85 20.67 20.74 21.53	21·12 20·72 20·92 20·19 20·83	20°01 18°68 19°71 20°40 19°63	17.87 16.92 18.91 19.91 19.21	$ \begin{array}{c} 18 \cdot 55 \\ 17 \cdot 64 \\ 19 \cdot 24 \\ 20 \cdot 04 \\ 17 \cdot 57 \end{array} $	$\begin{array}{c} 20.83 \\ 19.81 \\ 20.26 \\ 25.32 \\ 21.14 \end{array}$	21.70 20.23 21.30 21.47 22.33	20.81 20.94 20.66 19.43 20.60	$ \begin{array}{r} 19.01 \\ 18.89 \\ 22.60 \\ 19.05 \\ 20.16 \end{array} $	19·54 17·83 19·72 19·31 18·91	19·35 20·40 20·59 20·19	18 40 17 13 18 60 18 78 18 06	
	VIWEST MIDLAND													
22 23 24 25 26 27	Gloucestershire – – – Herefordshire – – – Shropshire – – – – Staffordshire – – – Worcestershire – – – Warwickshire – – –	$\begin{array}{c} 22.45 \\ 20.85 \\ 20.84 \\ 24.64 \\ 20.61 \\ 24.23 \end{array}$	21·22 22·12 20·87 26·05 22·62 23·70	$\begin{array}{c} 19.51 \\ 19.12 \\ 21.12 \\ 21.94 \\ 18.78 \\ 20.43 \end{array}$	20.58 19.09 20.92 21.10 18.91 21.12	$ \begin{array}{c} 19.47\\17.90\\19.11\\23.43\\18.63\\21.85\end{array} $	23·20 18·70 20·62 23·71 20·95 23·07	22*68 22*35 21*10 25*18 22*90 24*60	21 • 19 21 • 34 21 • 43 23 • 02 19 • 98 22 • 80	$\begin{array}{c} 21 \cdot 11 \\ 17 \cdot 45 \\ 19 \cdot 67 \\ 23 \cdot 99 \\ 19 \cdot 81 \\ 22 \cdot 12 \end{array}$	20.03 16.50 18.41 21.38 18.71 22.41	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	20·11 17·83 18·96 21·78 19·78 22·22	
	VIINORTH MIDLAND													
28 29 30 31 32	Leicestershire – – – Rutlandshire – – – – Lincolnshire – – – – Nottinghamshire – – – Derbyshire – – –	$\begin{array}{c} 24.50 \\ 20.46 \\ 21.16 \\ 24.66 \\ 23.56 \end{array}$	22.92 19.56 21.68 25.48 22.64	$\begin{array}{c c} 19 \cdot 62 \\ 19 \cdot 09 \\ 19 \cdot 36 \\ 20 \cdot 54 \\ 21 \cdot 03 \end{array}$	21.69 17.69 19.26 21.36 21.71	$\begin{array}{c} 20 \cdot 49 \\ 16 \cdot 45 \\ 18 \cdot 02 \\ 20 \cdot 49 \\ 19 \cdot 84 \end{array}$	25·14 22·51 20·03 21·77 20·82	23°30 20°46 20°52 22°63 21°67	23 · 11 19 · 52 21 · 55 21 · 67 21 · 11	21.95 17.82 19.01 21.31 21.35	23.04 17.65 19.01 19.47 20.40	22·58 19·12 19·96 21·94 21·41	24:96 17:77 18:68 21:64 21:36	
	VIIINORTH WESTERN									12.25				
33 34	Cheshire – – – – – – – – – – – – – – – – – – –	22.67 27.19	21.69 24.54	21·73 23·71	21.64 25.92	22.46	23.96	23.00 27.18	23·28 28·32	25·38 30·16	22·52 26·83	22·83 26·57	23.53 27.11	200
35 36	IXYORKSHIRE. West Riding	24·91 23·49	23·96 22·71	23.60 21.85 20.97	23·21 23·33 20·01	23.64 22.51 20.55	25.73	3 26°56 22°53 4 20°71	26.67 24.15 20.66	26·84 22·40 20·33	24·43 22·07 20·05	24·96 23·03 20·48	25·74 23·85 19·17	
37	X-NORTHERN COUNTIES.	10 08	21 10	20 21	10 01									
38 39 40 41	Durham – – – – Northumberland – – – Cumberland – – – Westmorland – – –	24.04 21.89 20.64 17.70	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	20.98 22.18 22.42 19.75	22·56 23·88 21·46 17·77	22·20 22·88 22·56 20·86	23·58 23·17 23·88 17·38	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24·00 23·72 23·81 17·10	$\begin{array}{c c} 23.68\\ 25.77\\ 22.33\\ 17.41\end{array}$	24·41 25·50 24·78 18·77	23°14 23°33 22°72 18°47	$\begin{array}{c} 24.75 \\ 23.85 \\ 23.34 \\ 16.54 \end{array}$	
42 43 44	XI.—MONMOUTHSHIRE AND WALES. Monmouthshire South Wales North Wales	24.63 24.15 20.26	5 24·12 2 22 ⁻⁸⁹ 3 20·47	20·26 21·16 22·25	21.00 20.52 20.98	21.00 2 19.97 3 21.89	3 21·22 20·50 21·71	5 26°56 23°10 1 22°14	23·87 23·87 23·89 22·07	22:57 22:43 23:65	21·34 19·78 22·02	22.67 21.84 21.74	20·84 18·89 21·02	

excess of the previous year, the rate of mortality was but slightly in excess of the remarkably low rate observed in 1867. Thus the deathrate per 1,000 of population in 1868 was 22.20 while in 1867 it was 21.98. In the 31 years 1838-68 the average annual rate was 22.40 per 1000.

The history of health and disease has now been recorded in England for thirty-one years, and the rates of mortality experienced during this lengthened period have been successively reviewed year by year, as have also the fluctuations in the causes of death. It is to be regretted that much of our knowledge of the laws of sickness and of health has only been acquired at the price of dearly bought experience; one advantage, however, that has accrued from noting the rise and fall of epidemic diseases, together with the circumstances which produce and foster them, is that no great outbreak of disease has been allowed to pass away without giving a new impulse to sanitary measures.

The grand end that has ever been kept in view in digesting these facts has been to discover the relation which certain results bear to causes under control, for this, after all, is the great lesson to be derived from such statistics. The prevailing epidemics of the year 1868 were diarrhea

TABLE 17.-ENGLAND.-Deaths at different Ages REGISTERED in the 31 Years 1838-68.-Males.

			AGES AT DEATH MALES.																	
YEARS.	ALL AGES.	Under 1 Year.	1	2	3	4	Under 5 Years.	5-	10-	15-	20-	25-	35 —	45—	55-	65-	75-	85-	95 and upwards.	\$
1838	175,160	41.081	13,712	7,649	4,938	3.610	70,990	8,306	4,431	5,542	6,891	12,021	11,200	11,378	12,827	14,656	12,331	3,736	265	586
1839	172,766	41.725	14,836	7,668	5,169	8,765	73,163	8,425	4,410	5,466	6,633	11,278	10,640	10,685	12,244	13,859	11,734	3,512	230	487
1840	182,421	43,504	15,267	8,691	5,990	4,536	77,988	10,199	4,722	5,761	6,663	11,532	10,902	10,872	12,294	14,688	12,404	3,811	259	326
1841	174,198	41,444	13,987	7,516	5,028	3,620	71,595	9,093	4,478	5,604	6,633	11,467	10,636	10,995	12,508	14,511	12,350	3,739	249	340
1842	176,594	44,046	14,748	7,580	4,852	3,421	74,647	8,657	4,444	5,450	6,483	11,019	10,624	10,867	12,362	15,037	12,767	3,717	248	272
1843	175,721	44,480	14,292	7,100	4,708	3,345	73,925	8,197	4,282	5,349	6,543	11,100	10,978	10,982	12,462	15,265	12,478	3,634	244	282
1844	181,126	45,183	14,060	7,629	5,151	3,757	75,780	8,804	4,278	.5,233	6,645	11,425	11,205	11,366	12,887	15,921	13,126	4,013	231	212
1845	177,529	43,520	14,364	7,097	4,669	3,524	73,174	8,150	4,251	5,416	6,864	11,397	11,166	11,333	12,803	15,616	13,045	3,823	262	229
1940	100 005	50 900	17 544	0.050	1 797	2 111	96 910	9.956	4 674	6 064	7 574	12 762	11 992	12102	13 797	16 551	13 807	4 083	976	928
1040	190,020	02,000	16 649	0,000	5 850	4 119	84 800	0,250	5.088	6 601	8,220	13,789	13.673	14.057	16,234	19.092	15 974	4 488	301	200
1848	212,120	48 373	15,666	9,050	6144	4.695	83 928	10.618	4.957	6.129	7.719	13.037	12.616	12,932	14.831	17.184	13,994	3.875	226	219
1849	221,801	51 417	15,981	8 673	5.826	4.594	86.491	11,592	6.119	6.891	8.666	16.044	15.589	16.019	16,966	18.714	14.388	3,809	229	284
1850	186,491	48.387	14.389	6,994	4.600	3.612	77.982	8.482	4.470	5,392	6,450	11.484	11,655	12,366	14,096	16,582	13,429	3.631	206	266
		10,001		0,001	-,000	0,011	,		-,					- State	-		Section 1		A.	
1851	200,500	53,137	16,268	8,105	4,932	3,571	86,013	9,145	4,736	5,914	7,029	12,531	12,547	13,104	14,609	17,116	13,612	3,594	224	326
1852	207,042	55,299	17,013	8,120	5,371	3,756	89,559	9,652	5,084	6,130	7,377	12,957	12,657	13,493	15,009	17,040	13,897	3,646	235	306
1853	214,720	54,847	16,757	8,295	5,093	3,750	88,742	9,132	5,003	6,414	7,749	13,716	13,692	14,715	16,196	18,962	15,782	4,082	259	276
1854	222,422	55,380	19,367	10,111	6,305	4,279	95,442	10,222	5,520	6,567	7,907	14,074	14,234	14,947	16,160	18,533	14,901	3,702	213	
1855	216,587	54,798	16,282	8,495	5,760	4,192	89,527	9,040	5,054	6,129	7,362	13,278	13,657	14,593	16,958	19,957	16,418	4,375	239	-
1856	198,875	52,598	16,068	7,759	5,152	3,703	85,280	8,031	4,619	5,854	7,028	12,387	12,721	13,223	15,258	17,388	13,336	3,567	183	
1857	212,356	57,285	18,198	8,353	5,306	3,773	92,915	8,797	4,813	5,949	7,072	12,645	13,115	13,946	15,937	18,361	14,775	3,833	198	
1858	227,220	57,816	19,204	10,471	7,231	5,105	99,827	11,962	5,192	6,350	7,300	12,833	13,625	14,471	16,743	19,433	15,232	4,022	230	-
1859	223,576	58,932	19,045	9,691	6,508	4,698	98,874	10,646	4,988	6,070	7,158	12,766	13,743	14,754	16,904	19,097	14,657	3,712	207	-
1860	215,238	56,892	17,297	7,890)	4,942	3,407	90,428	7,935	4,353	5,826	7,070	12,605	13,999	14,949	17,634	20,327	15,983	3,926	203	-
			00.001	0.510	1000	0.105	07.457	7 000	1.000	e 101	7 117	19 887	14 099	14 021	17 491	10.040	15 579	2010	004	
1861	222,281	59,673	20,621	8,749	4,969	3,405	97,477	0.154	4,000	6.037	7 170	13.078	14 200	15 571	17 920	19 609	15.067	3,912	162	-
1862	222,622	56,960	19,492	9,611	0,976	5,990	108 4 54	9,104	5.450	6 264	7 454	13.550	14.887	15 860	18 416	20,116	15 219	3 011	103	2
1863	242,203	60,707	22,040	10,407	7 990	5,148	100,404	12,40/	5,400	6.518	8.086	15,041	16,780	17,787	20,770	22,536	16,774	4 986	997	T
1804	253,619	66 507	21,020	0.514	6.017	4 180	107,212	10.050	5 300	6.477	8,249	15.615	16,704	18,303	20,681	22,252	16,993	4.227	202	1
1905	252,218	00,007	20,929	5,514	0,017	1,109	107,100	10,000	0,000	0,111	0,210	10,010	10,101	10,000	20,001		20,000	1,221	202	1.1.1
1866	256,402	66,851	21,532	10,115	5,921	4,005	108,424	9,903	5,214	6,626	8,384	16,328	17,463	18,940	20,894	22,711	17,068	4,249	198	-
1867	242,588	65,464	19,278	8,297	5,013	3,450	101,502	8,327	4,578	6,229	7,678	15,088	16,236	17,474	20,483	22,865	17,509	4,407	212	-
1868	247,107	67,290	20,844	9,610	6,122	4,459	108,325	10,131	4,888	6,164	7,413	14,921	15,945	17,592	19,782	21,745	16,224	3,799	178	-

xvii

xix

Deaths.

and scarlet fever, diseases which have never ceased to carry off a large though varying number of victims. It is to be hoped that the retribution which follows the violation of sanitary laws will be as reformatory in its action with reference to this latter highly contagious disease as it was in the recent visitations of cholera. It is still as necessary as it ever was to urge the adoption of sanitary arrangements, so that epidemic diseases like scarlet fever may no longer be diffused by the effluvia of cesspools and open drains, by impure air, by overcrowded dwellings, and by unwholesome water.

The returns of recent years afford proofs that some diseases have been brought under control, and it is encouraging to reflect that any sanitary measures adopted to check the ravages of any one epidemic are operating at the same time more or less towards the reduction of the virulence of others.

The Seasons.—The principal meteorological characteristics of the year 1868 were excessive heat in summer and a long continuance of high temperature. In the first three months the mean temperature of the air at Greenwich was 41° ·4, or 1° ·6 above the average; and the rain-fall measured 6.6 inches, or 1.6 inches above the average. The weather was

TABLE 18ENGLAND.	Deaths at d	ifferent Ages	REGISTERED	in t	he 31	Years	1838-68
		Females.		1			

	and the second						A	JES	AT	DEA	TH.	-FE	MAI	EES.						
YEARS.	ALL AGES.	Under 1 Year.	1	2	3	4	Under 5 Years.	5-	10-	15-	20-	25-	35-	45-	55-	65-	75-	85-	95 and upwards.	?
7000	107.000	20 505	12 240	7 692	4.980	3 510	61.947	7,832	4.744	6.302	7.345	12,902	11.240	10,250	12,130	14,504	13,043	4,646	416	299
1838	167,500	32,323	13 846	7.762	5.354	3.766	63.534	8.291	4.704	6.422	7.224	12.556	10,863	9,742	11,346	13,859	12,512	4,458	404	303
1839	177 966	33,907	14,776	8.301	5,890	4.458	67,332	10,008	5,044	6,803	7,277	13,027	11,251	10,040	12,004	15,005	13,785	5,049	468	173
1040	111,200	00,001		-1			1.5				1.			1.5.5	1.6.6	1 all				
1841	169,649	32,766	13,281	7,511	4,886	3,544	61,988	8,775	4,638	6,452	7,289	12,836	11,069	10,060	11,857	15,129	13,856	5,054	465	181
1842	172,925	34,658	13,959	7,504	4,795	3,472	64,388	8,551	4,596	6,382	7,263	12,945	11,201	10,141	12,116	15,866	13,799	5,119	434	124
1843	170,724	34,773	13,600	7,151	4,815	3,359	63,698	7,945	4,382	5,980	6,995	12,710	11,460	10,043	12,125	15,792	13,994	5,008	473	119
1844	175,807	34,903	13,124	7,562	5,094	3,541	64,224	8,563	4,569	6,234	7,262	13,234	11,397	10,503	12,737	16,559	14,738	5,179	452	156
1845	171,837	33,906	13,350	7,069	4,718	3,360	62,403	7,702	4,356	6,364	7,300	13,031	11,487	10,293	12,503	16,323	14,495	5,053	420	98
	100	Partie and	1		1000	0.004	-1 101	7.004	1 000	0.750	7 094	14.000	10 010	11 194	19 904	17 474	15 600	5 506	529	112
1846	191,990	41,256	16,739	8,114	4,898	3,394	74,401	7,934	4,909	0,100	9 400	14,088	14,215	12,104	15,504	20.042	18,279	5.928	537	113
1847	207,240	39,093	15,982	8,490	0,101	4,120	79 577	9,004	5 967	6 893	8 087	14 916	13,209	11,730	14,181	17.822	15.896	5.139	473	108
1848	196,266	38,034	14,917	9 544	6.077	4,338	74 609	11,202	6.138	7.797	9.426	18.686	16.747	15.060	17.021	19,775	16,730	5,261	439	147
1849	219,038	40,794	13,669	6.804	4.678	3,613	66.679	8.350	4.644	6.294	7.182	13.848	12,318	11,306	13,584	17,454	15,396	4,895	435	119
1990	102,004	01,010	10,000	0,001	-)010	0,010	00,010							15						2
1951	194 896	41,616	15.725	8,037	4,923	3,631	73,932	8,977	5,014	6,626	7,647	14,231	12,779	11,868	14,135	18,195	15,828	5,005	456	203
1852	200.093	43.361	16,103	8,091	5,297	3,703	76,555	9,280	5,167	6,996	7,729	14,778	13,167	11,972	14,202	17,954	16,467	5,271	417	138
1853	206,377	43,084	16,170	8,266	5,178	3,638	76,336	8,675	5,249	7,298	8,061	15,403	13,708	12,745	15,347	19,488	17,808	5,624	474	161
1854	215,483	43,919	18,384	9,765	6,363	4,312	82,743	9,980	5,513	7,216	8,291	16,144	14,725	13,443	15,568	19,226	17,023	5,189	422	-
1855	209,116	42,705	15,725	8,345	5,610	3,831	76,216	8,792	4,898	6,940	7,969	14,783	14,107	12,751	16,238	20,801	19,088	6,091	442	1
1 de la		1.2.2	1000			0		0.704	1 201	0.100	7.044	10.004	19140	11 001	14.005	17 607	15 696	1 700	365	1
1856	191,631	41,809	15,335	7,737	5,191	3,715	73,787	8,134	4,524	6,428	7,344	13,984	13,140	12,001	15 348	19797	17,251	5.475	451	10000
1857	207,459	45,942	17,339	8,618	5,400	5,790	87 102	11 851	5 4 30	7 018	8 199	14.978	14,151	12,100	15,747	20,702	18.248	5.795	454	-
1858	222,436	46,021	10,200	0 504	6,597	4 885	85,390	10771	5 392	6.866	7.914	14.996	14.219	13,166	15.526	19.934	17,224	5,407	400	-
1859	217,205	40,697	16 134	7.630	4.985	3,515	76.356	8.032	4.550	6.520	7.554	14.745	14.165	13,223	16,513	21,309	18,296	5,828	392	100
1860	207,400	44,002	10,101	.,	-je o-	0,020		-,	-,											
1961	212,833	46.755	19,412	8,787	5,181	3,517	83,652	7,964	4,574	6,857	7,838	14,830	13,915	13,159	16,366	20,341	17,667	5,231	439	1
1862	212,000	44.413	18,167	9,763	5,972	4,169	82,484	8,838	4,859	6,740	7,612	14,914	14,364	13,473	16,593	20,787	17,537	5,351	392	-
1863	231,634	47,382	21,427	11,363	7,814	5,570	93,556	11,973	5,591	6,803	7,965	15,544	14,870	13,735	16,944	20,720	17,798	5,705	430	-
1864	241,912	50,117	19,540	10,353	7,324	5,257	92,591	11,541	5,566	7,063	8,398	16,656	15,878	15,465	18,954	23,584	19,733	6,040	443	-
1865	238,691	53,303	19,807	9,415	5,979	4,183	92,687	9,683	5,111	7,007	8,542	16,661	16,026	15,714	18,556	22,750	19,533	5,940	481	-
			1-27			1			1				- Share-	1000		00.100	10.010	0.050	410	
1866	244,287	53,448	20,805	10,197	6,034	4,111	94,595	9,126	5,074	7,123	8,682	17,454	16,940	16,258	19,176	23,426	19,958	6,059	416	
1867	228,487	51,797	18,354	8,332	5,145	3,468	87,096	7,850	4,401	6,7,38	7,926	15,915	15,488	15,247	18,256	23,064	20,142	5.404	382	
1868	233,515	54,785	19,992	9,624	6,092	4,311	94,804	9,619	4,804	6,663	7,978	15,967	15,050	14,836	17,780	21,689	10,440	0,494	005	
		11.			-		N-RIDO SHOW		THE OWNER WATER		and the second s			CHERCE CALLER AND	-		Colde of Coldenses		UNIVERSITY.	1990

apparently favourable to the public health, the mortality of the quarter being at the annual rate of 22.26 per 1,000 of population, or 2.76 per 1000 below the average. In the second quarter of the year the mortality was at the rate of 20.41 per 1000, or 1.78 per 1000 below the average; the mean temperature of the season was $55^{\circ} \cdot 8$, or $3^{\circ} \cdot 0$ above the average; and the rain-fall measured 4.3 inches, or 1.6 inches in defect. In the third quarter the extraordinary high temperature, combined with a great defect in the amount of rain which fell, greatly affected the public health ; the rain-fall was deficient to the amount of 2.5 inches, only 5.1 inches fell instead of 7.6 inches, while the mean temperature was $63^{\circ}.9$, or $3^{\circ}.6$ in excess of the average. The mortality of the quarter was 23.88 per 1000, or 3:27 per 1000 above the average. In the last quarter of the year the death-rate was near the average, 21.99 per 1000; the mean temperature was 45°. 1, or 0°. 5 above the average, and the rain-fall measured 9.2 inches, or 2'1 inches in excess. Out of 100 deaths in the year the proportional number registered in each quarter was 24.90, 22.89, 27.15, and 25.06 respectively, while the average proportional number for each quarter during a period of 31 years was 27.49, 24.62, 23.24, and 24.65. If 1000 deaths are taken to represent the number in an average quarter, then the deaths in each quarter will be represented by the following proportions, 1001, 921, 1081, and 997 respectively.

Sex.—Of the 480,622 deaths registered in 1868, 247,107, or 51.4 per cent., were those of males, and 233,515, or 48.6 per cent., were those of females. In other words the deaths of males were to the deaths of females as 106 to 100.

Owing chiefly to the excess of emigration of males over females, the female population exceeds the male; but of equal numbers living the number of male deaths to every 100 deaths of females was 113. On an average of 31 years the proportion was 108. The number of deaths to

TABLE 19.-ENGLAND. Mortality per 1000 at different Ages.-Males.* AGES.-MALES. YEARS. 95 and 85-ALL AGES. 65-75-5-15-25-35-45-55-10-0upwds MEAN OF 30 YEARS. 72.42 8.79 4.95 7.90 9.93 13.03 18.16 31.53 68.54 147.74 309.22 446.87 1838-67 23.33 MEANS OF 10 YEARS. 71.53 9.20 5.13 8.22 9.91 12.75 18.43 31.88 67.11 148.32 306.12 440.51 23.12 1841-50 66.23 146.77 303.11 437.10 73.04 8.56 4.90 7.72 9.53 12.61 17.85 30.73 23.10 1851-60 MEANS OF 5 YEARS. 8 Years.) 67.56 144.07 293.81 433.80 72.31 9.61 5.24 8.35 10.24 12.98 18.45 32.50 23.30 1838-40 5 Years.) 65.30 143.76 299.05 431.77 17.42 68.98 8.85 4.86 7.81 9.35 12.06 30.42 1841-45 22.16 68.92 152.88 313.19 449.25 8.62 10.48 13.43 19.43 33.35 74.07 9.56 5.40 1846-50 24.08 74.18 8.78 5.16 8.06 9.91 12.86 18.61 31.50 66.84 150.83 305.02 449.63 1851-55 23.55 12.36 17.08 29.97 66.21 142.71 301.20 424.56 71.89 8.33 4.64 7.37 9.15 1856-60 22.66 17.94 31.57 71.98 147.42 320.99 464.02 73.66 8.57 4.73 7.49 10.04 13.71 1861-65 23.86

* For mode of reading this Table, see Note to Table 20,

NOTE.-The Population used in the above calculations is now deduced from the ascertained rate of increase observed in the 20 Years 1841-61.

1000 living in the year 1868 was 23.63 among males, while it was only 20.86 among females; but a higher rate of mortality among males is a result which indicates nothing unusual, as the average proportions observed during 31 years were 23.34 and 21.49 per 1000 respectively; females suffering less than males in England from insalubrious and other unfavourable influences.

Locality.—The mortality in 1868 was above their own average of ten years in the following counties or extra-metropolitan parts of counties, &c. : Surrey, Bedford, Leicester, Cheshire, Lancashire, West Riding and East Riding of York, Durham, Northumberland, Cumberland, and North Wales. In the remaining counties the mortality was below their own average. The annual rate of mortality to 1000 living in 1868 was highest in

TABLE 20.—ENGLAND. Annual Rates of Mortality per 1000 of Males at different Ages, 1838-67.[†]

ui su		l-lang Labor	1 31 m 10	.80	DE	ATH	S ТО	1000 L	IVIN	G. 1000		adaili . A and	20120
YEARS.	pution	nose i		one Sau	Jaci vlin	A	G E S.—	MALE	s.eda	t 18d. edn w	or. ar tilktu	te ha smisi	nemen fr ren
	ALL AGES.	0-	5-	10-	15-	25-	35-	45-	55-	65-	75-	85—	95 and upwds.
1838	23.42	70.12	8.99	5.19	8.53	10.78	13.58	19.45	34.13	70.53	148.10	298.70	456.95
1839	22.77	71.49	9.03	5.12	8.20	9.94	12.65	17.95	31.94	64.99	139.08	279.95	396.94
1840	23.72	75.33	10.82	5.42	8.32	9.99	12.70	17.95	31.43	67.15	145.04	302.78	447.52
1841	22.38	68.43	9.56	5.10	8.11	9.78	12.17	17.85	31.37	64.82	142.66	296.50	431.64
1842	22.39	70.55	9.01	5.01	7.82	9.26	11.93	17.34	30.41	65.66	145.65	294.10	431.42
1843	21.99	69.10	8.45	4.78	7.72	9.19	12.12	17.23	30.02	65.25	140.67	287.08	426.51
1844	22.38	70.00	8.98	4.73	7.62	9.33	12.17	17.52	30.20	66.65	1.46.19	316.44	405.89
1845	21.66	66.83	8.23	4.66	7.80	9.19	11.93	17.18	29.73	64.13	143.65	301.14	463.40
1846	23.90	77.81	8.26	5.07	8.58	10.16	12.62	18.02	31.28	66.73	150.32	321.27	491.69
1847	25.41	76.08	9.71	5.50	9.27	10.91	14.25	20.67	36.48	76.03	172.84	354.62	543.29
1848	23.87	74.18	10.44	5.30	8.57	10.18	12.95	18.66	32.65	67.22	149.54	305.52	410.95
1849	25.78	75.26	11.25	6.46	9.20	12.36	15.73	22.64	36.23	71.86	151.62	299.25	419.16
1850	21.42	67.01	8.15	4.67	7.16	8.77	11.62	17.17	29.79	62.78	140.06	285.27	381.17
Mean of 30 Years (1838-67).	23.33	72.42	8.79	4.95	7.90	9.93	13.03	18.16	31.53	68.54	147.74	309.22	446.87
1851	22.76	72.98	8.69	4.91	7.76	9.48	12.36	17.87	30.31	63.96	140.55	282.45	419.37
1852	23.24	75.00	9.08	5.22	8.02	9.72	12.32	18.07	30.56	62.89	142.03	286.59	445.39
1853	23.83	73.32	8.50	5.08	8.33	10.21	13.18	19.35	32:36	69.19	159.68	320.97	497.32
1854	24.41	77.70	9.40	5.55	8.42	10.39	13.55	19.28	31.65	66.84	149.13	290.93	414.26
1855	23.51	71.89	8.22	5.03	7.78	9.74	12.88	18.48	32.60	71.32	162.76	344.15	471.81
1856	21.36	67:53	7.22	4.56	7.36	9.04	11.89	16.44	28.79	61.63	130.99	280.92	367.01
1857	22:57	72.54	7.83	4.70	7.37	9.18	12.15	17.02	29.52	64.61	143.82	302.29	403.74
1858	23.90	76.83	10.52	5.03	7.66	9.28	12.53	17.34	30.45	67.96	146.96	317.71	477.26
1859	23.27	74.99	9.26	4.78	7.36	9.20	12.55	17.35	30.18	66.44	140.19	293.76	437.47
1860	22.18	67.58	6.83	4.14	7.12	9.05	12.70	17.25	3).91	70.42	151.59	311.33	437.32
1861	22:68	71.76	6.74	4.33	7.28	9.23	12.65	16.90	30.08	63.90	146.54	310.92	448:35
1862	22.49	69.63	7.70	4.44	7.17	9.36	12.83	17.29	30.31	67.57	140.60	298.46	365.79
1863	24.24	77.43	10.31	5.03	7.39	9.68	13.30	17.29	30.55	69.24	140.84	312.45	488.48
1864	25.14	75.35	9.93	5.03	7.80	10.75	14.93	19.01	33.85	77.56	154.13	343.40	532.46
1865	24.77	74.13	8.16	4.81	7.81	11.16	14.82	19.19	33.08	76.65	154.99	339.73	485.03
1000	04100	79.01	7.04	1.00	7.80	11-69	15.45	19.47	39.89	78.39	154.55	349.64	487.10
1856	24.90	67.00	6.60	4.07	7.00	10.80	14.34	17:61	31.20	78.91	157.44	355.39	521.54
1861	23.40	01 98	0 00	± 01	1 20	10 00	11 01	1, 01	01 00	10 01	10/ 11	000 00	021 04

The Table may be read thus :- Of 1000 males living of the age 35 and under 45, 13.58 died in 1838, 12.65 in 1839, and 11.62 in 1850; the average annual rate in the 30 years, 1838-67, among the aggregate of males in this decennial period of age was 18.03.

[†] A period of seven years has elapsed since the ages of the people were ascertained at the Census. There are no means, therefore, of determining, with any degree of accuracy, the relation which the deaths now bear to the population at the several ages in the above Table. Under these circumstances it has been considered expedient to discontinue publishing the rates of mortality at the different ages, until the results of the enumeration of 1871 are ascertained. The rates of mortality at each age for the year 1868 are therefore omitted in Tables 20 and 22. The *deaths registered* at the several ages are given in Tables 17 and 18.

Lancashire, the county containing the great seat of the cotton manufacture, viz., 27.11. In the West Riding of York, containing the large towns of Sheffield, Leeds, and Bradford, the death-rate was 25.74; in Leicestershire it was 24.96; in Durham, where the mortality is usually high, it was 24.75; in the East Riding of York the rate was 23.85 per 1000. In Northumberland and Cumberland the mortality has been gradually increasing; eleven years ago it was 21.89 and 20.64 per 1000 respectively, while in 1868 it had increased to 23.85 and 23.34. In London the annual mortality was 23.60; in Chester 23.53; then follow Warwick, with a mortality of 22.22 per 1000; North Wales, 21.02; and Stafford, 21.78. Even in the counties of England and Wales, where the lowest death-rates are observed, the sanitary condition of the people is still in many respects defective. In some of these counties and extrametropolitan parts of counties the mortality was unusually low in 1868. Thus the death-rate per 1000 of population was less than 17 in Westmorland; less than 18 in Dorset, Rutland, Kent, and Hereford; and less than 19 in Somerset, Oxford, Wilts, Surrey, Suffolk, Devon, Lincoln, Sussex, Essex, Cornwall, Salop, and South Wales. It must be borne in mind, however, that in thus reviewing the general mortality, various elements have to be taken into consideration, such as occupations and age; the mortality at all ages depends greatly upon the relative deathrates among children under five years of age in each county. The above results indicate that the highest rates occur in the counties where the great manufacturing and mining industries of the country are carried on.

In the year 1868, 928 lives were returned to the Inspectors as lost by accidents in and about the 2,776 collieries of England and Wales.^{*} 237 of these occurred in the fields of South-west Lancashire and North Wales. The inspector of this district, in his report for the year 1868, states that a great number of men are employed in the mines who are ignorant of their business, and who, if not actually reckless, are negligent and unthoughtful; the majority of the men can neither read nor write, and many of the casualties can be traced to incapacity and neglect arising from

TABLE	21	-ENGI	LAN	D. 1	Mort	tality	y per	1000 a	at diffe	erent 1	Ages.—	-Fem	ales.
	NA CA		tin Tin al	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1		AG	ES.—FI	EMAL	ES.		africa and	12.	
YEARS.	ALL AGES.	0-	5-	10-	15-	25-	35-	45-	55 —	65 —	75-	85-	95 and upwds.
	ana Ny 1 Vanisha	14.01.1.1 03.1%		1-101-1 1-01-1	Ľ.	IEA	N OF	30 YE.	ARS.	(B)	17 1 S		441 ³ 100
1838-67	21.51	62.46	8.62	5.10	8*22	10.12	12.30	15.62	28.56	57.52	135.36	283.07	432.05
	177745 40.24%	ne opt Alfonde		1-84-7	м	EAN	SOF	10 YE	ARS.			Sec. 1	and the second
1841-50	21.61	61.35	9.10	5.33	8.53	10.63	12.79	15.89	28.22	61.34	135.06	283.76	444.45
1851-60	21.42	63.31	8.44	5.09	8.14	9.96	11.98	15.14	27.47	56.93	133.55	281.25	428.16
- 1943 - 1943	- 343,449 -	104112	16 75 13 18	- 50 P	N	IEAI	NS OF	5 Y E	ARS.	1.00 B		1. 14	PAGE PAGE
(3 Years.) 1838–40	21.49	61.80	9.83	5.47	8.55	10.27	12.80	16.01	28.82	57.64	132.60	267.85	386.82
(5 Years.)	90.24	20.70	0.00	F:00	0.17	0.05	10.11	15.04	97.04	50.49	191.09	00.10	490.45
1841 - 45 1846 - 50	20.64 22.57	63.91	9.33	5.00	8.90	9.95	12 11	15 04	29.41	63·24	131 23	280 19	420 45
1851-55	21.83	64.05	8.54	5.34	8.44	10.40	12.37	15.28	27.85	58.97	136.23	283.59	440.06
1856-60 1861-65	21.00 21.55	62·57 63·80	8·34 8·33	4·84 4·79	7·84 7·76	9·51 9·65	11·59 11·72	14.69 15.67	27.08 29.92	54·89 53·08	130.88 136.32	278.91 286.65	416·26 442·52

* These returns are incomplete, see causes of violent deaths, p. 174. The total number of deaths in 1868 by violence in the mines of England and Wales was 1215, viz., 1117 connected with coal mines, and 98 connected with other mines.

intemperance. A great number of excellent schools have been established in the district for boys, but a more competent class of men are required to act as overlookers and firemen; good firemen are scarce, and, it appears, will continue to be so until some arrangements are made to educate and train them for the discharge of their important duties. At present no such provisions exist in the South-west Lancashire and North Wales district. The inspector further states that "the work-people are rough, and in many " instances disobedient: they do not properly observe the provisions of " the special rules. They neglect to prop and spray the roof and sides " of the mine. They descend and ascend the pit contrary to published " instructions. They discharge shots defectively, which frequently blow " out in a vitiated atmosphere, and cause an explosion. They " open or interfere with their safety-lamps, so as to enable them to " smoke below ground, which is strictly prohibited. It is " seldom, however, that accidents have been caused by old and expe-" rienced colliers or mining men, but chiefly by strangers to the mine, " or those who began late in life to follow the employment, or by the " young and inexperienced."

The reports received from the inspectors of the different coal-fields of the country are all more or less confirmatory of the above statement, viz. : that much of the lamentable loss of life in collieries may be traced to the

TABLE 22.—ENGLAND. Annual Rates of Mortality per 1000 of Females at different Ages, 1838-67.*

	DEATHS TO 1000 LIVING.														
Statt!	101070	1.0.4			DE.			1000 11.			to the second		18 2 N		
YEARS.						AGE	S.—FI	EMAL	ES.	2010	6.963	al market	Constants.		
e descri en han	ALL AGES.	0-	5-	10-	15-	25 -	35-	45-	55-	65-	75 -	85-	95 and upwds.		
1838	21.46	60.02	8.99	5.40	8.51	10.44	13.19	16.75	30.37	58.75	135.16	265.99	370.84		
1839	20.97	61.13	9.37	5.33	8.47	10.06	12.51	15.28	27.64	55.29	126.55	253.22	364.01		
1840	22.04	64.20	11.14	5.69	8.68	10.32	12.71	15.71	28.45	58.87	136.08	284.35	425.62		
1841	20.83	58.61	9.63	5.20	8.42	10.07	12.27	15.42	27.40	58.41	133.75	282.55	427.06		
1842	20.98	60.32	9.24	5.13	8.31	10.02	12.19	15.23	27.31	60.23	130.31	284.05	402.16		
1843	20.47	59.13	8.47	4.86	7.85	9.77	12.25	14.79	26.70	58.94	129.44	275.97	442.17		
1844	20.83	59.06	9.00	5.04	8.11	10.07	11.97	15.18	27.43	60.76	133.67	283.56	426.17		
1845	20.11	56.80	7.98	4.78	8.16	9.81	11.85	14.59	26.35	58.83	128.96	274.82	404.71		
1940	99.91	67:04	8.11	K.9K	8.71	10.40	12:38	15.50	27.47	61.85	136:40	302.50	506.33		
1847	22 21	65.80	9.48	5.79	9.20	11.75	14.18	17.79	31186	69.96	157.73	320.03	519.95		
1848	1848 22:24 64:19 9:95 5:68 8:79 10:91 12:98 15:81 28:29 60:96 134:76 275:47 460:3 1848 22:24 64:19 9:95 5:68 8:79 10:91 12:98 15:81 28:29 60:96 134:76 275:47 460:3 1849 24:45 65:16 139:97 970:60 498:5 498:5														
1849	24.45	65.06	11.00	6.55	10.01	13.48	16.14	19.90	33.28	66.16	139.27	279'69	428.56		
1850	20.13	57.47	8.10	4.92	7.78	9.88	11.68	14.70	26.13	57 . 26	126.33	258.92	427.05		
Mean of 30 Years (1838-67).	21.51	62.46	8.67	5.10	8.22	10.15	12.30	15.67	28.56	57.52	135.36	283.07	432.05		
1851	21.24	62.99	8.60	5.27	8.18	10.05	11.93	15.19	26.79	58.54	128.18	263.57	450.17		
1852	21.55	64.41	8.77	5.39	8.37	10.32	12.09	15.08	26.23	56.28	131.64	276.23	413.48		
1853	21.97	63-42	8.10	5.43	8.67	10.64	12.39	15.82	28.30	60.17	140.72	293.50	472.06		
1854	22.67	67.80	9.20	5.64	8.68	11.02	13.09	16.43	28.34	58.07	132.97	269.50	421.56		
1855	21.74	61.63	8.01	4.97	8.28	9.98	12.35	15.37	29.31	61.20	147.63	315.17	443.03		
1856	19.69	58.85	7.32	4.55	7.59	9.33	11.33	14.03	25.12	51.19	119.77	242.66	366.92		
1857	21.07	63.77	7.69	4.66	7.92	9.42	11.52	14.62	27.11	55.81	131.16	281.41	454.50		
1858	22.33	67.52	10.43	5.35	8.24	9.77	11.85	14.79	27.59	57.26	137:75	296.97	458.45		
1859	21.55	65.23	9.37	5.26	7.94	9.66	11.74	15.07	27.01	53.89	129.20	276.35	404.55		
1860	20.34	57.46	6.91	4.39	7.50	9.39	11.23	14.96	28.56	56.28	136.51	297.14	396.90		
1981	20.63	61.98	6.78	4.36	7.76	9.33	11.17	14.72	28.17	52.46	131.23	266.13	444.78		
1862	20.49	60.16	7.45	4.28	7.51	9.28	11.37	14.91	28.45	52.34	129.80	271.72	397.25		
1863	21.93	67.15	9.98	5.21	7.66	9.55	11.61	15.05	28.97	50.91	131.37	289*22	435.65		
1864	22.64	65.37	9.53	5.13	7.95	10.11	12.24	16.77	32.35	56.52	145.40	305.78	448.51		
1865	22.08	64.35	7.91	4.65	7.92	9.99	12.19	16.89	31.65	53.17	143.80	300.38	486.42		
1000	00:04	04.50	7:20	1.26	7.07	10.34	12.79	17:81	32.71	53:36	146.93	303.14	420.01		
1866	22 34	58.11	6.20	2.01	7.33	0.31	11.49	16.10	31.14	51.19	148.42	299.25	442.22		
1867	20 65	00 41	0 29	0 91	1 00	9 01	11 10	10 10	01 11	01 10	1 - 10 14	100 20	I State State		
					* 0	Teo DTe	to to The	blo 00	1/ X1.2020 -	Finally	1200 4	12 1013	132.273		

employment of unskilled officials and untrained workmen. The importance of the question, as to whether the loss of life by explosions of fire-damp and by other accidents can be prevented by the education and training of the miner, demands the serious attention of the colliery proprietors. The notice of the Legislature is already drawn to the subject, and it is to be hoped that the Bill to consolidate and amend the Acts relating to the regulation and inspection of mines, now before Parliament, will tend greatly to reduce the number of casualties and the serious loss of life among the operatives of our collieries. Mr. Robert Hunt, the keeper of mining records, has recently stated that an association in Cornwall and Devonshire has successfully carried on the work of educating the working miners in those branches of knowledge which have a direct bearing on practical mining. He attributes the success of the association to the system of taking the school to the miner, instead of requiring the working miner to come to the school.

Towns.—A comparison of the death-rates of eleven great English towns shows that Manchester had the highest mortality in 1868, and Bristol the lowest. The Metropolis enjoyed a favourable position on the scale. While the mean death-rates to 1000 persons living in the eleven towns in each of the years 1867 and 1868 were nearly the same, viz., 26.49 and 26.62 respectively, they were 23.08 and 22.79 in Bristol, 22.98 and 23.59 in London, 24.27 and 23.89 in Birmingham, 24.96 and 24.41 in Hull, 30.79 and 25.57 in Newcastle-on-Tyne, 24.17 and 26.49 in Bradford, 24.67 and 26.59 in Sheffield, 26.96 and 27.52 in Leeds, 29.57 and 29.22in Liverpool, 28.50 and 30.76 in Salford, and 31.40 and 32.00 in Manchester.

Death-rates at different ages. — So long a period has now elapsed since the population living at different ages was enumerated, that any reasoning on the ratio which the deaths bear to the numbers living at the respective ages must be made with caution. It may be observed, however, that the exceptional character of the meteorological results of the year are

TABLE 23.—Proportional Number of Deaths in each Quarter to 1000 Deaths in the Average Quarter of each Year, 1838-68.

ſ	- and	NUMBER	PR	OPORTIONAL	L NUMBER O	F 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 QUARTER 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 1845	85,962 87,380 86,611 89,233 87,342	$ \begin{array}{r} 1000 \\ 1000 \\ 1000 \\ 1000 \\ 1000 \end{array} $	$1152 \\ 1102 \\ 1096 \\ 1132 \\ 1198$	1002 990 1007 956 1021	878 942 887 893 857	968 965 1010 1018 924
	1846 1847 1848 1849	97,579 105,826 99,958 110,210 92,249	1000 1000 1000 1000	917 1131 1201 961 1067	925 1008 998 927 1007	1042 883 877 1227 931	1116 978 925 885 996
	1850 1851 1852 1853 1854 1855	93,849 101,784 105,274 109,476 106,426	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
ななな	1856 1857 1858 1859 1860	97,627 104,954 112,414 110,195 105,680	1000 1000 1000 1000 1000	1061 1050 1134 1118 1166	$ \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	$ \begin{array}{r} 108,778\\ 109,142\\ 118,460\\ 123,883\\ 192,727 \end{array} $	1000 1000 1000 1000	$1129 \\ 1133 \\ 1095 \\ 1159 \\ 1159$	990 986 999 949 946	923 839 942 901 916	958 1042 964 991 979
などに	1865 1866 1867 1868	125,172 117,768 120,156	1000 1000 1000	1118 1153 1001	1029 956 921	924 914 1081	929 978 997

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most strikingly reflected in the death-rate of children. A comparison of the mortality of males in 1868 with that of the previous year, when no such unusual climatic conditions prevailed, exhibits an increase at each quinquennium under 15 years of age, while the rate was in defect of the previous year at ages 15-25 and following decennia. Among females the excess in the mortality of children at the same ages is still more remarkable, while in all the successive stages of life above 15 years of age the rate of mortality in 1868 was below that of the previous year.

These results show that children under 15 years of age were the chief sufferers from the unhealthy influences of the year, but still not to so great an extent as to bring the mortality above the average rates observed in 31 years.

Among males the period of age at which the greatest excess is observed in the death-rate of the whole of England, as compared with the healthy districts, is—under 5 years. The mortality per 1000 living at this period was 71.36 in 1868, while in the healthy districts of England it was only 43.48. Among girls under 5 years of age the rate per 1000 in 1868 was 62.46, while the healthy district rate was 37.20 per 1000 living.

Children then, were the chief sufferers from the insalubrity which prevailed in 1868; and to discover the means whereby the heavy annual tribute of infant life can be reduced from 203,129—the number who died in England in 1868—to the number that would have died at the healthy district rate, viz., 122,524, and thus effect a saving of 80,605 or more lives, is one of the great sanitary *desiderata* of the age. Our knowledge in this direction can only be acquired by instalments, but it is to be hoped that the practical inquiries of sanitary science will tend towards the

TABLE 24Number and Annual Rate	per 1000 living of Deaths in England
during each Quarter of	the' Years 1838-68.

	about 1	DEA	THS.		a Milliona	ANNUAL DE	ATH RATE.	*
YEARS.	In the	Quarters end	ling the last	day of	In the	Quarters end	ling the last	day of
	March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.
1838 - 1839 - 1840 -	98,152 89,740 98,896	90,877 87,969 90,339	72,877 76,280 80,822	80,854 84,995 89,630	26.15 23.59 25.38	23.87 22.80 23.10	18.87 19.49 20.38	20.86 21.64 22.52
$\begin{array}{rrrr} 1841 & - \\ 1842 & - \\ 1843 & - \\ 1844 & - \\ 1845 & - \end{array}$	99,069 96,314 94,926 101,024 104,664	86,134 86,538 87,234 85,337 89,149	75,440 82,339 76,792 79,708 74,872	83,204 84,328 87,493 90,864 80,681	$\begin{array}{r} 25\cdot37\\ 24\cdot36\\ 23\cdot73\\ 24\cdot67\\ 25\cdot54\end{array}$	$21^{\cdot}74 \\ 21^{\cdot}58 \\ 21^{\cdot}49 \\ 20^{\cdot}77 \\ 21^{\cdot}44$	$ \begin{array}{r} 18.77 \\ 20.25 \\ 18.66 \\ 19.13 \\ 17.76 \end{array} $	$\begin{array}{c} 20^{\circ}63\\ 20^{\circ}67\\ 21^{\circ}19\\ 21^{\circ}75\\ 19^{\circ}08 \end{array}$
$\begin{array}{rrrr} 1846 & - \\ 1847 & - \\ 1848 & - \\ 1849 & - \\ 1850 & - \end{array}$	89,484 119,672 120,032 105,870 98,430	90,230 106,718 99,727 102,153 92,871	101,664 93,435 87,638 135,227 85,849	108,937 103,479 92,436 97,589 91,845	$\begin{array}{c} 21{}^{\circ}57\\ 28{}^{\circ}50\\ 27{}^{\circ}94\\ 24{}^{\circ}62\\ 22{}^{\circ}61\end{array}$	$21^{\cdot}44 \\ 25^{\cdot}06 \\ 23^{\cdot}13 \\ 23^{\cdot}41 \\ 21^{\cdot}07 $	$\begin{array}{r} 23^{\circ}82\\ 21^{\circ}63\\ 20^{\circ}05\\ 30^{\circ}57\\ 19^{\circ}17\end{array}$	$\begin{array}{r} 25^{\circ}45\\ 23^{\circ}89\\ 21^{\circ}08\\ 21^{\circ}99\\ 20^{\circ}45\end{array}$
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	105,359 106,358 118,119 111,843 134,542	99,458 100,625 107,647 102,586 106,493	91,499 100,382 92,201 113,843 87,646	99,080 99,770 103,130 109,633 97,022	$\begin{array}{r} 23^{\circ}87\\ 23^{\circ}55\\ 26^{\circ}14\\ 24^{\circ}47\\ 29^{\circ}10\end{array}$	22`22 22`22 23`49 22`13 22`72	$\begin{array}{r} 20^{\circ}16\\ 21^{\circ}86\\ 19^{\circ}85\\ 24^{\circ}23\\ 18^{\circ}44 \end{array}$	$\begin{array}{c} 21.76\\ 21.66\\ 22.14\\ 23.26\\ 20.36\end{array}$
$\begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	$\begin{array}{r} 103,014\\ 108,665\\ 125,819\\ 121,580\\ 122,617\end{array}$	- 100,099 100,046 107,142 105,631 110,869	91,155 100,528 98,142 104,216 86,312	96,238 110,576 118,553 109,354 102,923	$\begin{array}{r} 21.79 \\ 22.98 \\ 26.31 \\ 25.15 \\ 24.81 \end{array}$	$\begin{array}{c} 21 \cdot 11 \\ 20 \cdot 87 \\ 22 \cdot 10 \\ 21 \cdot 55 \\ 22 \cdot 37 \end{array}$	18.96 20.68 19.97 20.97 17.18	19·97 22·69 24·06 21·95 20·43
$\begin{array}{rrrr} 1861 & - \\ 1862 & - \\ 1863 & - \\ 1864 & - \\ 1865 & - \end{array}$	121,215 122,019 128,096 142,977 140,410	107,558 107,392 118,121 116,880 115,892	$\begin{array}{r} 101,232\\92,381\\112,504\\112,223\\113,362\end{array}$	105,109 114,774 115,116 123,451 121,245	$\begin{array}{r} 24 \cdot 53 \\ 24 \cdot 43 \\ 25 \cdot 38 \\ 27 \cdot 72 \\ 27 \cdot 23 \end{array}$	21·47 21·21 23·08 22·60 22·17	19·94 18·00 21·69 21·41 21·40	20.64 22.30 22.13 23.49 22.83
$\begin{array}{rrrr} 1866 & - \\ 1867 & - \\ 1868 & - \end{array}$	138,136 134,008 119,676	128,551 112,355 110,010	116,650 108,513 130,482	$\begin{array}{c} 117,352 \\ 116,197 \\ 120,454 \end{array}$	$26 \cdot 52$ $25 \cdot 46$ $22 \cdot 26$	24·34 21·06 20·41	21.79 20.06 23.88	21.87 21.43 21.99
Mean	Annual Rate	e per 1000 in	each Quar	ter –	25.02	22.19	20.61	21.81

* These rates 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 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.

solution of the problem—how to reduce the death-rate of children under 5 years of age in the large town populations of England ?

Of the 247,107 deaths of males registered in 1868, 108,325, or 43.84per cent. occurred at ages under 5 years. At ages 5-10 the proportion was 4.10 per cent., and at 10-15 it was 1.98 per cent., so that to every 100 deaths of males at all ages 50 per cent. occurred at ages under 15 years. Among females the proportional number was rather less. Thus of the 233,515 deaths at all ages in 1868, 94,804, or 40.60 per cent., were those of children under 5 years of age. At ages 5-10 the proportion was 4.12 per cent., and at 10-15 it was 2.06 per cent. The ratio at ages under 15 years was 47 per cent.

Further details relating to the marriages, births, and deaths in the year 1868, with remarks on the sanitary condition of districts, and other matters, will be found in the reports which were published within a month after the expiration of each quarter. (See pp. xlv.-lix.)

THE UNITED KINGDOM.

The population of the United Kingdom at the middle of the year 1868 is estimated at 30,380,787. After correction for defective registration in Ireland, the number of persons married in the year was 488,252, the number of births was 1,104,026, and the number of deaths was 673,070. The natural increase of population by the excess of births over deaths was 430,956. After deducting 142,735 emigrants of home origin, this number is reduced to 288,221.

TABLE 25.—Estimated Population, Marriages, Births, and Deaths in the United Kingdom, in the Year 1868.

ara Rarra	AREA IN STATUTE ACRES.	AREA IN HECTARES.	Estimated POPULATION in the middle of the Year 1868.	Marriages,	PERSONS MARRIED.	BIRTHS.	DEATHS.
UNITED KINGDOM	77,286,901	31,275,782	30,380,787	244,126	488 ,252	1,104,006	673,070
Great Britain England and Wales - Scotland Ireland	56,964,260 37,324,883 19,639,377 20,322,641	23,051,796 15,104,307 7,947,489 8,223,986	24,837,502 21,649,377 3,188,125 5,543,285	198,815 176,962 21,853 ? 45,311	397,630 353,924 43,706 ? 90,622	902,531 786,858 115,673 ? 201,475	550,008 480,622 69,386 ? 123,062

Note.—The registered Marriages, Births, and Deaths for Ireland were 27,753, 146,108, and 86,803 respectively. By the authority of the Registrar-General of Ireland these numbers have been corrected in the above table for defective registration. It has been assumed that the marriages, births, and deaths in Ireland in the year 1868 were in the same proportion to population as the marriages, births, and deaths in England.

TABLE 25.—Proportion per 1000 of Marriages, Births, and Deaths to the Population of the United Kingdom, in the Year 1868.

20 87 20 65 28 60	ACRES	HECTARES	Т	o 1000 Pers	ONS LIVING	· · · · · · · · · · · · · · · · · · ·
	TO A PERSON.	TO A PERSON.	MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.
UNITED KINGDOM	2.24	1.029	8.04	16.08	36:34	22.15
Great Britain England and Wales Scotland	2·29 1·72 6·16 3·67	·928 ·698 2·493 1·484	8.00 8.17 6.85 ? 8.17	16.00 16.34 13.70 ? 16.34	36·34 36·35 36·28 ? 36·35	22·14 22·20 21·76 ? 22·20

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.

The marriage-rate for the United Kingdom in the year 1868 was 16.08, the birth-rate was 36.34, and the death-rate was 22.15, per 1000 of population.

The marriage rate in England is higher than that of Scotland; the respective rates of the two divisions per 1000 in 1868 were 16.34 and 13.70.

The English birth-rate was 36.35 per 1000 of population, the Scottish 36.28; and the respective death-rates were 22.20 and 21.76 per 1000.

The rates of marriage, birth, and death in Ireland were probably but little different from those in England.

FOREIGN STATES.

In France, out of an estimated population in 1868 of 38,342,818, the number of persons who married in that year was 301,197 or 1,676 more than in the previous year. The marriage-rate in 1868 (persons married to 1,000 of population) was 15'72 against 16'34 in England.

The number of births registered in France, exclusive of still born, was 984,020, the number in the previous year was 1,002,621. The

TABLE 27.-Population, Births, and Deaths in the Islands in the British Seas.

YEARS.	ISLANDS BRITIS	IN THE H SEAS.	Isle o	F MAN.	Island o	F JERSEY.	GUERNS ADJÁCENT	SEY AND S Islands.		
	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.	Births.	Deaths.		
1851 - 1852 - 1853 - 1854 - 1854 - 1855 -	4,114 4,301 4,010 4,239 3,871	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	$\begin{vmatrix} 1,258\\ 1,423\\ 1,091\\ 1,201\\ 1,241 \end{vmatrix}$	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	$1,582 \\ 1,424 \\ 1,566 \\ 1,451 \\ 1,557$	$1,112 \\ 1,154 \\ 1,110 \\ 1,273 \\ 985$	936 955 996 927 846	573 631 596 725 734		
1861 - 1862 - 1863 - 1864 - 1865 -	3,962 3,857 4,128 3,975 4,006	$\begin{array}{c} 2,662 \\ 2,552 \\ 2,681 \\ 3,094 \\ 3,426 \end{array}$	$\begin{array}{c} 1,541 \\ 1,492 \\ 1,647 \\ 1,629 \\ 1,644 \end{array}$	904 850 944 1,356* 1,466*	1,562 1,542 1,676 1,543 1,604	$1,132 \\ 1,114 \\ 1,135 \\ 1,166 \\ 1,240$	859 823 805 803 769	626 588 602 572 720		
1866 - 1867 - 1868 -	3,897 3,780 3,941	3,341 3,168 2,962	1,559 1,573 1,557	1,203* 921 1,007	1,611 1,477 1,603	1,486 1,486 1,265	727 730 781	652 761 690		
tan Angenderster	inter see	ANT ANT ANT	P	OPULATION.	t i cas stati		an a faile an an	i - marine -		
Enumerated 1851 –	143,	126	52,	387	57,0)20	88	,719		
1861 -	, 143,	447	52,	469	55,6	313	35	,365		
Estimated 1867 -	147,	811	55,	000 *	57,7	/21	85	,090†		
- 1868 -	148,	028	55,	600	58,	178	34,250			

1869 -	148,687	55,600	- 58,407	34,680
	and primary little of	AREA IN STATUTE A	CRES.	
and the second second	226,684	180,000	28,717	17,967

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

French and English birth-rates per 1000 of population were 25.66, and • 36.35 respectively.

The population of France increases less rapidly than that of England; a result attributable to several causes. The proportion of children to a marriage, and consequently the population of a country, are regulated to a considerable extent by the age at which marriage is contracted. This latter element, however, does not materially affect the increase of population in France, where the mean age of marriage is 30^{11} years for males and 25^{8} years for females; in England, as previously stated, it is 27^{9} years and 25^{7} years respectively, so that while the men in France marry 2^{2} years later than in England, marriage among women is not postponed much longer in France than in England.

The difference in the fecundity of the two countries is remarkable. The relative proportion of registered births to a marriage in the year 1868, was 4.4 in England, while in France it was only 3.3. Ten marriages produce 44 children in England and only 33 in France.

The death-rates of the two countries do not differ greatly. In 1868, the mortality per 1000 of population was 23.96 in France, and 22.20 in England. In the 16 years 1853-68, the average annual rate was 23.72 in the former, and 22.45 in the latter.

In Austria the marriage-rate, on an average of 16 years, 1853-68, was about the same as that in England, but higher than the rate in France. In 1868 the number of persons married in Austria per 1000 of population was 18.52, against 17.82 in the previous year.

The Austrian birth and death rates were 39.30 and 29.34 respectively; they are both considerably higher than the English rates.

Italy with an estimated population of 25,527,915 shows a marriage-rate in 1868 of 14.32; a birth-rate of 35.27; and a death-rate of 30.45.

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	\$6,522,404	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†	23,078,057‡		
1864	20,772,308	37,793,278†	23,317,5441		
1865	20,990,946	37,929,918†	20,876,643		
1866	21,210,020	38,067,064†	20,835,008		
1867	21,429,508	38,204,696†	20,986,536		
1868	21,649,377	38,342,818†	21,185,021		

TABLE 28.—Estimated Population of England, France, and of Austria, 1853 to 1868.

* 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, and in the years 1867-68 has been estimated by means of the average annual rate observed between the two enumerations of 1861 and 1866.

† Including the three last annexed departments, viz., Savoie, Savoie (Haute), and Alpes-Maritimes. ‡ DB. 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 from 1853 to 1862 inclusive. From 1863-68 inclusive the population of Hungary, Croatia, Slavonia, and Transylvania is excluded. From 1853 to 1864 the States of Italy are included; from 1865 to 1868 they are excluded. It is to be hoped that the Hungarians will no longer neglect the statistics of their country.

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TABLE 29.-Number and Proportion per 1000 to Population of Marriages, Births, and Deaths in England, France, and in Austria, 1853-68.

(The returns relating to France are supplied by M. LEGOYT, Director of the Statistical Depart-ment of France. Those relating to Austria are supplied by DR. FICKER, Chief of the Statistical Department of Austria.)

YEARS.	NUMBER O	f Marriages, B Deaths.	IRTHS, and	PRO MARRIAG to	PORTIONS per 10 ES, BIRTHS, and the POPULATIO	00 of 1 DEATHS DN.
	England.	France.*	Austria.†	England.	France.*	Austria.†
	-	all all	MARE	IAGES.		
1853 1854 1855	164,520 159,727 152,113	280,609 270,896 283,335	263,627 241,799 228,515 205,020	8*94 8*58 8*08	7·75 7·54 7·88	8:41 7:68 7:32
1856 1857	159,337 159,097	284,401 295,510 307.056	295,970 281,643 280,558	8·37 8·26 8·02	8°17 8°47	9'42 8'79 8'67
1858 1859 1860 1861	156,070 167,723 170,156 163,706	298,417 288,936 305,203	$\begin{array}{r} 230,330\\ 242,371\\ 289,119\\ 286,244\end{array}$	8·52 8·55 8·14	8·21 7·91 8·16	7·40 8·73 8·57
1862 1863	164,030 173,510	303,514 301,376	304,188 199,833†	8·07 8·44	8·09 8·00	9·02 8·67†
1864 1865	180,387 185,474 187,776	299,579 298,838 301,390	194,837 167,004 141.072	8.68 8.84 8.85	7.93 7.88 7.92	8°36 8°00 6°77
1867	179,154 176,962	299,521 301,197	187,079 196,274	8·36 8·17	7.84 7.86	8·91 9·26
	- Campang	MES. M. OH	PERSONS	MARRIED.	-AAM TOT	AMINGS,
1853 1854	329,040 310,454	561,218	527,254	17:88	15:50	16.82
1855 1856 1857	319,454 304,226 318,674 318,194	566,670 568,802 591,020	457,030 591,940 563,286	16.16 16.74 16.52	15.76 15.78 16.34	14.64 18.84 17.58
1858 1859	312,140 335,446	614,112 596,834	561,116 484,742	16.04 17.04	16:94 16:42	17:34 14:80
1860 1861 1862	$\begin{array}{c c} 340,312\\ 327,412\\ 328,060 \end{array}$	577,872 610,406 607,028	578,238 572,488 608,376	17'10 16'28 16'14	15'82 16'32 16'18	17'46 17'14 18'04
1863 1864 1865	347,020 360,774 370,948	602,752 599,158 597,676	399,666†; 389,674 334,008	16.88 17.36 17.68	16.00 15.86 15.76	17:34† 16:72 16:00
1866 1867	375,552 358,308	602,780 599,042	282,144 374,158	17·70 16·72	15.84 15.68	13·54 17·82
1868	353,924	602,394	392,548	16:34	15.72	18.52
10-0		000.007	BI	RTHS.	95.87	40.75
1853 1854 1855 1856 1857	612,391 634,405 635,043 657,453 663.071	930,967 923,461 902,336 952,116 940,709	$\begin{array}{c} 1,279,226\\ 1,208,853\\ 1,151,039\\ 1,245,330\\ 1,373,988 \end{array}$	34.08 33.73 34.53 34.43	$ \begin{array}{r} 25.72 \\ 25.08 \\ 26.42 \\ 26.02 \end{array} $	38·38 36·89 39·63 42·87
1858 1859 1860 1861	655,481 689,881 684,048 696,406	969,343 1,017,896 956,875 1,005,078	$1,364,905 \\1,413,983 \\1,342,992 \\1,334,727$	33.66 35.04 34.37 34.61	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	42°18 43°17 40°56 39°96
1862 1863 1864	712,684 727,417 740,275	995,167 1,012,794 1,005,880	1,358,116 920,439† 942,826	35.04 35.39 35.64	26·52 26·90 26·62	40°28 39°88† 40°43
1865 1866 1867	748,069 753,870 768,349	$\begin{array}{c c} 1,006,753 \\ 994,288 \\ 1,002,621 \end{array}$	816,753 817,346 729,037	35.64 35.54 35.85	26.54 26.12 26.24	39°12 44°18 34°74
1868	786,858	984,020	832,684	36.32	25.66	39*30
			DE.	ATHS.		1 94-00
1853 - 1854 1855 1856 1857	421,097 437,905 425,703 390,506 419,815	795,607 992,779 937,942 837,082 858,785	$1,096,119 \\1,177,888 \\1,435,949 \\1,002,068 \\947,817$	22.88 23.52 22.61 20.51 21.80	21'96 27'65 26'07 23'23 23'75	$ \begin{array}{r} 34.99\\ 37.40\\ 46.02\\ 31.89\\ 29.57 \end{array} $
1858 1859 1860 1861	$\begin{array}{c} 449,656\\ 440,781\\ 422,721\\ 435,114\\ 465\end{array}$	874,186 979,333 781,635 866,597	$1,036,148 \\ 1,004,295 \\ 986,928 \\ 1,048,016 \\ 1,049,0100 \\ 1,049,0100 \\ 1,049,0100 \\ 1,049,0100 \\ 1,049,0100 \\ 1,049,0100 \\ 1,049,0100 \\ 1,040,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\ 1,000,000 \\$	23.09 22.39 21.24 21.63 01.47	24.12 26.96 21.40 23.18 21.67	$\begin{array}{c} 32.02 \\ 30.66 \\ 29.81 \\ 31.38 \\ 30.04 \end{array}$
1862 1863 1864 1865 1866	$\begin{array}{r} 436,\!566\\ 473,\!837\\ 495,\!531\\ 490,\!909\\ 500,\!689\end{array}$	812,978 846,917 860,330 921,887‡ 885,559‡	1,043,403 693,016† 703,339 646,980 846,991\$	23.05 23.86 23.39 23.61	22.49 22.76 24.31 23.26	31·10† 30·16 30·99 33·32§
1867	471,073 480,622	866,366	590,3 ₅₂ 621,588	21.98	22'68	28.13

* 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. for the years 1853-65. † The returns for Austria include Hungary, Croatia, Slavonia, and Transylvania from 1853 to 1862 inclusive. From 1863-68 inclusive the returns are exclusive of Hungary, Croatia, Slavonia, and Transylvania. From 1853 to 1864 the States of Italy are included; from 1865 to 1868 they are excluded. For the years 1860-62 the numbers for Hungary and its annexed territories have been estimated. ‡ In France in 1865 and 1866 cholera was prevalent.-(*M. Legoyt.*) § Dr. Ficker attributes the excessive mortality in the year 1866 to cholera and war.

During the year 1868 the average strength of the British army at home and abroad, as shown by the returns with which I have been favoured by His Royal Highness the General Commanding-in-Chief, was 196,900. At home the average strength was 89,633 officers and men; and the deaths from all causes were 1088, of which, 44 occurred among officers and 1044 among non-commissioned officers and men. The ratio of deaths per 1000 of mean strength at home, was 9.45 in the former, and 12.29 in the latter.

1863 to 1868.

-		1	NUMBERS.		Pr	PROPORTIONS PER 1000 TO POPULATION.						
YEARS.	ESTIMATED POPULATION, 31st Dec.	MAR- RIAGES.	Persons Married.	BIRTHS. Exclusive of	DEATHS.	MAR- BIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.			
1863	24,680,974	201,225	402,450	964,137	760,164	8.17	16.34	39*06	30.78			
1864	24,882,633	189,759	379,518	938,795	737,136	8.02	16.04	87.78	29.62			
1865	25,097,182	226,458	452,916	961,234	746,685	9.53	18.46	38.30	29.75			
1866	25,344,192	142,024*	284,048	980,200	733,190	5.37	10.74	38.67	28.93			
1867	25,404,723	170,456	340,912	927,396	866,865	6.72	13.44	36.21	34.12			
1868	25,527,915	182,743	365,486	900,416	777,223	7.16	14.32	35.27	30.45			

* 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. NOTE.-Dr. Maestri, writing on the 7th December 1868, adds: "Two facts are to be observed in the Tables of 1867-"The decrease of births and the remarkable increase of deaths. The cause of the former may possibly be found in the

" dearness of provisions, produced by the failure of the harvest in many states of Europe, from the effects of which Italy "also suffered by rebound of the disaster. In respect to the increase of deaths, we perceive in that fact the influence of " cholera, from which about 117,000 persons died in 1867."

TABLE 31.—Spain. Population, Numbers and Proportions per 1000 of Births and Deaths in each of the Years 1861 to 1867.

(Supplied by His Excellency José EMILIO DE SANTOS, Vice-President of the Junta General de Estadística, Madrid.)

1	-		istrony intuition,	a sector and the sector of the sector	
YEARS.		NUMBERS.		PROPORTIO TO POPU	NS PER 1000 JLATION.
an Artifertati	ESTIMATED POPULATION.	BIRTHS.	DEATHS.	BIRTHS.	DEATHS.
1861	15,879,868	624,096	417,764	39.30	26.30
1862	16,065,124	615,919	430,663	38.33	26.80
1863	16,210,263	606,800	461,661	37.43	28.47
1864	16,340,323	629,546	499,486	38.52	30.26
1865	16,423,793	622,050	538,580	37.87	87.29
1866	16,579,090	618,981	463,684	37.33	27 . 96
1867*	16,716,151	624,212	487,151	87.34	29.14

* The return of the estimated population, and the number of births and deaths in Spain in the year 1868, was not received in time for publication. NOTE.-The Population enumerated at the Census of 1860 was 15,673,536. The estimated Population for the Years 1861-7 has been deduced from the Excess of Births over Deaths in each Year. This method of estimating the population is sanctioned by the Junta General de Estadistica,

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THE BRITISH ARMY.

TABLE 30.-Italy (inclusive of VENETIA). Population, Numbers, and Proportions per 1000 of Marriages, Births, and Deaths, and still-born, in each of the Years

(Supplied by DR. MAESTRI, Chief of the Statistical Department of Italy.)

1 10

British Army.

In Great Britain the death-rate of officers was 11.52, of non-commissioned officers and men 13.28 per 1000 of mean strength. In Ireland the respective rates were 2.74 and 9.14 per 1000. Compared with the results for the previous year the ratios show a reduction in the mortality

TABLE 32.— Annual Rate of Mortality per 1000 in Great Britain, England, France, Austria, and in Italy, *including* the Deaths of Soldiers at Home and Abroad, 1857 to 1868.

YEARS.	GREAT BRITAIN.	ENGLAND and WALES.	FRANCE.	AUSTRIA.	ITALY.
1857	21.69	21.84	23.75	29.49	······································
1858	22.97	23.23	24.12	31.94	
1859 1022	22.18	22.44	26.96	30.68	16276 <u>10</u> 0001
1860	21.42	21.27	21.40	29.82	182 40 2863
1861	21.47	21.64	23.18	31.21	n. n.
1862	21.20	21.46	21.67	30.78	rddug T
1863	23.03	23.03	22.49	31.01	30.78
1864	23.83	23.84	22.76	31.66	29.62
1865	23.27	23*38	24.31	29 '98	29*75
1866	23.45	23.28	23.26	32.07	28.93
1867	21.95	21.98	22.68	27.53	34.12
1868	22'13	22.18	23.96	28*72	30'45

TABLE 33.—Average Strength of the Army at Home, in the Year 1868. (Furnished to the Registrar General by direction of H.R.H. the General Commanding in Chief.)

	UNITED	KINGDOM.	Englan A Channe	D, WALES, ND L ISLANDS.	Scor	TLAND.	Ire	erstaa T 4	
nente di comp i i i cas i trav tablisi godi Boli i Desmittano seputitari montano i solati tabli	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.	acti tto dai lebu
Cavalry	805	13,011	541	8,773	35	553	229	3,685	972 1913
Infantry	2,883	54,742	1,964	37,402	161	2,890	758	14,450	a su Tali
Royal Artillery -	624	14,403	535	11,926	10	369	79	2,108	ade
Royal Engineers -	342	-2,823	305	2,494	8	110	29	219	
Total – –	4,654	84,979	3,345	60,595	214	3,922	1,095	20,462	

and the shall	and a second a state of	the all start	F Sherit a	Offi	icers and .	Me
British Ar	ny at Home	in 1868 -	Alt Taman	-	89,633	
.,	Abroad	., -	ALLE ALLER ALLER	ter	107,267	
		Matal		(38)	106 000	

TABLE 34.—Average Strength, Deaths, and Annual Rate of Mortality per 1000 of the Army in the United Kingdom in 1868.

12 42 ····	18 84 54 74	Average	STRENGTH.	De	ATHS.	Annuai Mortali	Z RATE OF TY PER 1000.
68-194 12174 944.2	125-763 125-763 125-763 125-763	Officers.	Non- commissioned Officers and Men.	Officers.	Non- commissioned Officers and Men.	Officers.	Non- còmmissioned Officers and Men.
UNITED KINGDOM		4,654	84,979	44	1,044	9.45	12*29
Great Britain Ireland – –		3,559 1,095	64,517 20,462	41 3	857 187	11·52 2·74	13·28 9·14

Sil

British Army.

of the British army at home among officers, but an increase among noncommissioned officers and men.

TABLE 35. — Return showing the Average Strength of the British Army Abroad in each of the Years 1865–1868. (Furnished to the Registrar General by the Adjutant-General by direction of H.R.H. the General Commanding in Chief.)

	1	865	1	866	1	867	1	868
	Officers.	Difficers. Non- commissioned Officers and Men.		Non- commissioned Officers and Men.	Officers.	Non- commissioned Officers and Men.	Officers.	Non- commissioned Officers and Men.
Cavalry	393	6,083	413	6,283	400	5,653	365	5,171
Infantry – –	4,409	92,672	4,192	85,882	4,112	82,976	3,820	77,925
Royal Artillery -	965	17,519	1,216	17,347	1,177	16,444	1,169	16,949
Royal Engineers	388	1,775	431	1,753	389	1,577	384	1,484
Total –	6,155	118,049	6,252	111,265	6,078	106,650	5,738	101,529

TABLE 36. — Number of Deaths in the British Army during each of the Years 1865-1868. (Furnished to the Registrar General by the Adjutant-General by direction of H.R.H. the General Commanding in Chief.)

		1865							18	366			1867						1868					
•	GI BRI	TAIN.	IRE	LAND.	Ав	ROAD.	GI BRI	REAT TAIN.	IREI	LAND.	Ав	ROAD.	GR BRI	EAT TAIN.	IREI	LAND.	Аві	ROAD.	GR BRI	TAIN.	IREI	LAND.	ABR	OAD.
CORPS.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.																
Cavalry and Infantry –	21	529	2	191	75	1,990	17	576	13	218	67	1,381	27	598	8	149	69	1,828	2 5	686	3	156	53	1275
Royal Artillery –	}12	162	1	18	17	468	13	181	2	20	9	316	10	120	-	18	10	353	12	159	-	30	16	344
Royal Engineers	} 1	22	-	-	5	23	4	11	-	1.1	3	26	4	13	-	3	2	22	4	12	-	1	6	22
Total -	34	713	3	209	97	2,481	34	768	15	239	79	1,723	41	731	8	170	81	2,203	41	857	3	187	75	1,641

TABLE 37. — Annual Rate of Mortality per 1000 amongst the OFFICERS and Non-commissioned OFFICERS and MEN in the Army Abroad, in each of the Years 1858-68. (Deduced from the Strength and Deaths as given in the two preceding Tables.)

.009, 20	YEARS.	0)FFICERS
		41.00	
10 12	1858	12 2	35.13
E.S.	1859	1 23	21.11
	1860	a the	16.39
And St.	1861	and the second	15.74
121 62	1862	1-1-5-	13.46
San Salar	1863	C.A.F.	15.86
18 63	1864	in the	17.35
and the second	1865	103	15.76
in the second	1866	40.13	12.64
100	1867	The second	13.33
in the second	1868	in a	13.07

xxx

Non- commissioned Officers and Men.									
123	07	•01							
	07	10.	1						
	33	.96							
	26	.03	1 200						
	25	•67	No.						
	19	.81	1						
	16	.82							
	18	.03	-						
	01	• 0.0							
	21	02	a state						
	15	•49							
	20	.66	13-32						
	16	.16	1. 200						

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Births and Deaths of British Subjects at Sea. xxxiii

British Army.

The average strength of the army abroad in 1868 was 107,267; the deaths were 1716, viz., 75 among officers, and 1641 among non-commissioned officers and men, yielding a death-rate per 1000 mean strength of 13.07 in the former and 16.16 in the latter.

Compared with the results for 1867 there is a slight decrease in the mortality of officers, and a considerable decrease in that of non-commissioned officers and men of the British army abroad.

TABLE 38.-Army serving at Home and Abroad.

				1801	
Offic	ers and M	fen born i	n ENGLAND	130,469	1.1.1.
	,,	,,	SCOTLAND	20,901	10-00
	,,	. ,,	IRELAND	71,556	
	.,,	,,	FOREIGN PARTS -	6,635	-
		TOTAL	autraci -hon- autra	229.561	25 233

TABLE 39.—Deaths of Officers and Men in the Army Abroad, and Estimated Numbers belonging to Great Britain and to England and Wales, in each of the Years 1858–1868.

	DEATHS OF OFFICERS AND	Estimated Nur belong	nbers in Col. 2. ing to
I EARS.	MEN in the ARMY ABROAD.	GBEAT BRITAIN.	ENGLAND AND WALES.
1	2	3	4
1858	7,363	4,275	3,486
1859	4,150	2,409	1,965
1860	3,293	1,912	1,559
1861	3,097	2,042	1,760
1862	2,544	1,677	1,445
1863	2,209	1,457	1,255
1864	2,493	1,644	1,417
1865	2,578	1,700	1,465
1866	1,802	1,188	1,024
1867	2,284	1,506	1,298
1868	1,716	1,132	975

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 38.

TABLE	40.—Austria.	Annual	Rate of	f Mort	ality	per	1,000	in the	Army
	in each	of the Y	ears 185	7-68.	(Dr.	Fick	er.)		

		-	
YEARS.	ESTIMATED STRENGTH.	DEATHS.	ANNUAL RATE of MORTALITY per 1,000.
1857	379,374	8,646	22.79
1858	347,696	8,577	24.67
1859	527,772	16,638	31.52
1860	384,302	11,903	30.97
1861	459,300	8,763	19.08
1862	400,895	6,800	16.96
1863	467,154	5,811	12.44
1864	559,599	6,928	12.38
1865	552,148	5,261	9.23
1866	646,636	11,942	18.46
1867	615,409	4,432	7.22
1868	614,826	3,422	5.57

BIRTHS AND DEATHS OF BRITISH SUBJECTS AT SEA.

The strength of the mercantile marine increased from 196,340 in 1867 to 197,502 in the year 1868. The number of deaths reported to the Registrar General of Seamen during the year was 5,237 or 26.6 per 1000 of strength. The deaths from different causes compiled from a return furnished by the Registrar General of Seamen, are given in page lxxiii.

Of the 5,237 deaths, more than three-fourths occurred from the following causes: drowned by wreck, 1785; drowned by accident other than wreck, 1141; fever, 340; dysentery, 216; cholera, 175; consumption, 171; and yellow fever, 155. Twenty-six deaths are referred to scurvy against 52 in the previous year. There were 16 deaths from murder and homicide, and 23 deaths from suicide. Of the total deaths, 1,056 occurred at ages under 20 years, 2,877 at ages 20 and under 40, 433 at ages 40 years and upwards, and 871 at unknown ages.

TABLE 41.—Number of Births and Deaths of British* Subjects at Sea, exclusive of Soldiers, Marines, invalided Seamen from the Royal Navy, and Seamen on Ships' Articles, in the Years 1856–1868, 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.)

1	it good gifter		MALES.	FEMALES.	TOTAL.
2 30 J II E	(1956 (important)		71	60	127
	1957		169	149	210
10100000000000000000000000000000000000	1959	4-1733	100	112	949
(2 0) have the	1859	Can I Loka	135	132	967
stantes action	1860		136	114	250
	1861		110	108	218
BIRTHS at Sea	- 1862		146	148	294
1 9 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1863	_	159	185	344
1,539	1864	- 1-	203	177	380
and the second statement	1865		210	202	412
12121 24	1866		213	202	415
	1867		162	177	339
	L1868		147	125	272
and a second	Total -		1,992	1,895	3,887
	(1856 (imperfect) -	121	78	199
En and the second second	1857		238	140	378
ENGLIT ON AT SAME	1858		253	182	435
,	1859		524	303	827
	1860		241	156	397
	1861		213	121	334
†DEATHS at Sea	- { 1862	T 19.74	221	148	369
1	1863		347	231	578
	1864		379	210	589
	1865		483	315	798
ANGAL RATE	1866		690	363	1,053
1000,1 toes	1867	3	441	214	655
	1868		389	196	585
ELSE ELSE	Tratal.	and a local	4 540	9.017	F 107

* 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, 184 in 1866, 97 in 1867, and 81 in 1868. The number is 1,545 in thirteen years, which, if added to the 7,197 above, makes 8,742, the total number of deaths of British subjects at sea in 1856-68, exclusive of those of merchant seamen.

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xxxiv. Marine Register Book.—Names on the Registers, &c.

The number of births and deaths among British subjects at sea reported to the Registrar General of seamen in 1868, exclusive of seamen, soldiers, and marines, amounted to 272 and 585 respectively.

MARINE REGISTER BOOK.

It is required by the Registration Act and the Passengers' Act that captains or commanding officers of British vessels should transmit to me the particulars of all births and deaths that occur at sea amongst English subjects. The entries for 1868 in the Marine Register Book which is kept by me are 115 births and 251 deaths; but the returns are far from complete.

NAMES on the REGISTERS, AND SEARCHES.

The names of all persons whose marriages, births, and deaths in the $31\frac{1}{2}$ years (from the middle of 1837 to the end of 1868) have been recorded in the registers amounted at the end of that period to the number of 42,052,886, of which 1,621,404 were entered in the last year of the series. Respecting facts recorded of this accumulating list of persons inquiries are daily made at this office with the view to procure evidence of birth, death, or marriage.

The number of searches for registers at the CENTRAL OFFICE continued to increase during 1868. In the indexes prepared under the Registration Act 11,926 searches were made, and 10,257 certificates were given; the searches for non-parochial registers were 980, and the certificates granted 810. The total amount received in fees for searches and certificates, and paid into the Exchequer was 2,031*l*. 118. 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 Return of the Chief Registrar of the Court of Probate shows that the number of probates and letters of administration granted at the

TABLE	42Mortality	of	Merchant	Seame	n at	sea,	in	the	17	Year
	ITT I SAN		1852-	68.*						*

YEARS.	STRENGTH.	DEATHS.	ANNUAL RATE OF MORTALITY.
385	152		To 1000 living.
State 1	2065		
1852	159,563	2,205	13.8
1853	172,525	3,276	19.0
1854	162,416	2,772	17.1
1855	168,537	3,318	19.7
1856	173,918	3,549	20.4
1857	176,387	3,444	19.5
1858	177,832	3,486	19.6
1859	172,506	3,430	19-9
1860	171,592	3,760	21.9
1861	171,957	3,580	20.8
1862	173,863	3,620	20.8
1863	184,727	8,380	18.3
1864	195,756	3,893	19.9
1865	197,643	4,600	23.3
1866	196,371	4,866	25.8
1867	196,340	5,283	26.9
1868	197,502	5,237	26.6
In the 17 years (3 049 435	63,699	20.9

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

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

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

principal Registry in the year 1868 was 14,387. The value of the effects was sworn under 54,797,015l. The returns furnished by the district registrars show that the number of probates and letters of administration granted in the 40 district registries in the same year was 21,905. The value of the property under which these probates and administrations were sworn was 39,243,246l, making with the amount in the principal Registry 94,040,261l.

A full Report on the Causes of Death in England, addressed to me by Dr. Farr, will be found in Appendix A., p. 197, and accompanying the usual abstracts are detailed tables of considerable interest relating to the violent deaths registered during the year 1868. His Report to the International Statistical Congress held at the Hague will be found in Appendix B., p. 235.

I append some remarks which in July 1869 I submitted to the consideration of the Royal Sanitary Commission. (See Appendix C., p. 285.)

Strong representations having been made to Her Majesty's Government that I should not register any death until the fatal disease had been inquired into and certified in writing by a legally qualified medical practitioner, that I should register all still-born children, and that I should establish a system for recording and publishing all cases of diseases not fatal, I have there stated my objections to these proposals.

I have the honour to be,

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

TABLE 43.—Aggregate Number of Names on the Registers at the End of each Year 1837-68; also the Number of Searches for Registers at the Central Office (exclusive of Searches in Non-parochial Registers).

inge fil Danse	ese, The at Seventh An	"(122 CI)	AGGREGAT	E NUMBER	ite percents	NUMBER OF SEARCHES	
	YEARS.	OF Persons MARRIED.	OF BIRTHS.	OF DEATHS.	OF NAMES REGISTERED.	REGISTERS at the CENTRAL OFFICE.	10
0 - 11 80 [13 80 W	1837 1838 1839	116,958 353,092 599,424	164,116 627,903 1,120,477	148,701 491,461 830,445	429,775 1,472,456 2,550,846	Not 91	and the second
tios anos anos	1840 1841 1842 1843	844,754 1,089,746 1,327,396 1,575,032	1,622,780 2,134,938 2,652,677 3,180,002	1,190,132 1,533,979 1,883,498 2,229,943 9,502,972	3,657,666 4,758,663 5,863,571 6,984,977 8,147,171	known. 620 705	
	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	2,127,016 2,418,344 2,690,034 2,966,494	4,264,286 4,836,911 5,376,876 5,939,985	2,936,242 3,326,557 3,749,861 4,149,694	9,327,544 10,581,812 11,816,771 13,056,123	744 881 941 1,030	
22926	$ \begin{array}{rcrcrcr} 1849 & - & - \\ 1850 & - & - \\ 1851 & - & - \\ 1852 & - & - \\ 1852 & - & - \\ \end{array} $	3,250,260 3,555,748 3,864,160 4,181,724 4,510,764	6,518,094 7,111,516 7,727,381 8,351,393 8,963,784	4,590,533 4,959,528 5,354,924 5,762,059 6,183,156	14,358,887 15,626,792 16,946,465 18,295,176 19,657,704	1,162 1,228 1,442 1,658 1,676	and the second
s by	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	4,510,764 4,830,218 5,134,444 5,453,118 5,771,312	9,598,189 10,233,232 10,890,685 11,553,756	6,621,061 7,046,764 7,437,270 7,857,085	21,049,468 22,414,440 23,781,073 25,182,153	2,340 2,492 2,853 2,965	
ras rotst szai	1858 1859 1860 1861	6,083,452 6,418,898 6,759,210 7,086,622	12,209,237 12,899,118 13,583,166 14,279,572	8,306,741 8,747,522 9,170,243 9,605,357	26,599,430 28,065,538 29,512,619 30,971,551	5,636 6,133	12 10 U.S.
-eib moi: ann	$ \begin{array}{rrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrrr$	7,414,682 7,761,702 8,122,476 8,493,424	14,992,256 15,719,673 16,459,948 17,208,017	10,041,923 10,515,760 11,011,291 11,502,200	32,448,861 33,997,135 35,593,715 37,203,641	7,297 7,715 8,346 9,016	The sale was
i the	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	8,868,976 9,227,284 9,581,208	17,961,887 18,730,236 19,517,094	12,002,889 12,473,962 12,954,584	40,431,482 42,052,886	11,306 11,926	18/1-183

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

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PROGRESS OF EDUCATION AS INDICATED BY SIGNATURES OF THE MARRIAGE REGISTER.

Now that so much attention is being directed to the subject of education, and a comprehensive measure has been submitted to Parliament by Her Majesty's Government, I have thought it desirable to publish the following extracts from my annual reports, relating to the state of elementary education of the people, as indicated by the proportional number of males and females who signed the marriage register in writing.

(1839.)

" In 15 English counties and in North and South Wales, in the year 1838-39, more than 40 per cent. of the men were unable to write their names; and in 19 English counties, in the West Riding of Yorkshire and in Wales, more than half the women were similarly deficient . . . in the whole of England and Wales, out of 121,083 couples married, there were 40,587 men, and 58,959 women who could not write." Second Annual Report, p.ix.

(1844.)

"The slow progress of instructions in the six years 1839-44, is evinced by the facts that $66 \cdot 3$ per cent. of the men wrote their names in the first, and $67 \cdot 6$ per cent. (only $1 \cdot 3$ more) in the last year (1844); while $50 \cdot 5$ per cent. of the women wrote their names in the first, and only $50 \cdot 8$ per cent. in the last year. I fear that the records of future years, in exhibiting the results of the inadequate means employed to educate the present generation of youth, will be as little flattering to our age as the actual returns are to our predecessors. The insufficiency of the national education is the more to be regretted, as the means of education exist, and the funds left for educational purposes, if properly applied, in the charities and public institutions, would, with some assistance from Parliament, supply the children of the poor with the sound knowledge which the scanty earnings of the parents do not enable them to purchase. The annual income of endowments for education is 312,544l." Seventh Annual Report, p. xvi.

(1845.)

" It has recently been shown, in an analysis of the criminal returns, compared with the facts published in previous reports, that crime is most prevalent in the districts where in proportion to the whole the fewest numbers can write. It is found, that out of 22 different combinations formed of the various districts of England and Wales, in every instance there is an excess of crime where there is the least education or instraction; and, comparing the respective sections of each group of counties, it will be seen that there is an average excess of 25 per cent. of crime in the sections of inferior education over that of higher education; and in some districts the excess is as much as 44 per cent." *Eighth Annual Report, p.* xxxiii.

(1853.)

"It may be here useful to inquire, of what value is this test? as by some it has been misunderstood, and by others mis-stated.

" 164,520 men, of whom about *five-sevenths* were of the age 20-30, and the same number of women, of whom *five-sevenths* were also of the same age, and the rest younger or older, went through the various marriage ceremonies in the established churches, in the chapels of protestant dissenters, in the Roman catholic chapels, in the meeting houses of various kinds, and in the register offices. At the end of the ceremony the young husband and wife are invited in all cases to sign the register book, in the presence of the officiating minister or the registrar; they having the option, if they cannot write, to sign by making a *mark* against their names. "The parties are not asked whether in their own opinion they can or can not write, but are asked to write their names on an important occasion, when on many accounts it is desirable that they should append their names, in their own handwriting, to a public register. The abstracts which have appeared in my reports, show how many men and how many women under these circumstances do sign with marks.

"Two questions are raised on these signatures : Is the man or the woman who signs with a mark unable to write ? Are the men or the women who write their names, able to write anything else ? Some men and women who can write imperfectly, do undoubtedly sign with marks. Upon the other hand, some persons can write their names, who cannot write a letter or keep an account in writing. The former class is perhaps the most numerous. Some of the 30 men, some of the 44 women, who sign with marks *can* write their names. Some of the 70 men and the 56 women who write their names, write little else ; and are evidently unpractised writers, as their signatures are often almost illegible ; not the flourishes of penmanship in which some men conceal the letters of their name, nor the undecipherable scrawl in which others write, but the uncouth, ill-formed letters of men and women who have never advanced at school beyond the first rudiments.

"Looking at both sides of the question, the obvious inference is, I believe, correct; and we have practically 49,983 young men, and 72,204 young women unable to write, out of 164,520 of each sex who married, and will be the fathers and mothers of the next generation of English men and English women.

" Of these persons unable to write, it is known that large numbers are unable to read.

"On the hypothesis that the numbers who can write in the ordinary sense of the word are understated or are overstated, the test is still available for purposes of comparison; as the timidity which prevents some men and women from writing their names, or the vanity which prompts others to try who can scarcely put letters together, must be almost equally powerful in the several counties of England. These disturbing causes leave the important fact unexplained, that in *ten* counties from 15 to 28 men, and in ten other counties from 30 to 50 men, in 100, sign with marks when they are required to write their names.

"The value of this test is also questioned upon the ground that it is, in itself, no proof of education; and it must be at once admitted that at the utmost it shows only how many out of a given number can or cannot write. Many of the men and women who cannot now write, as in the days of old when barons and knights signed with marks, possess great intelligence and have acquired many useful arts; so thousands, on the other hand, who read and write, are ill educated, and know nothing of those liberal arts and sciences which enlarge, refresh, and invigorate the mind as the sunshine and showers fertilize and adorn the soil of England.

"Yet reading and writing are no unimportant acquirements. They are the gates of the temple of learning, and open at once access to many of its most delightful courts, where the mind can range freely among the creations of man and the inspirations of God. They are useful to a man in his business, and they facilitate in a wonderful and new way his communications with his fellow men. What a striking difference would there be between two nations, the one consisting of people who could all when they married read and write, the other of people who could not read and write ! The men of the latter nation would derive no advantage from the great discovery of printing, nor from the earlier and still greater discovery of the art of writing; that is, of transmitting the ideas of man to man through the sense of sight as well as through the sense of hearing by the voice. They could only converse with their equals in ignorance and capacity in their immediate neighbourhood; while the men of the favoured nation, who could read and write, could call into their chamber at will some of the loftiest spirits of the present and of past ages; they could converse with the apostles and the prophets, with the poets and the historians of their own country, in health and in sickness, in the hours of joy and of sadness—in the 'valley of the shadow of death' itself.

"One of these nations we have still amongst us; we see them in the unobtrusive figures of the marriage muster interspersed all over the land, in every county and parish, still in the dark, or receiving only feeble rays of the reflected light that irradiates our path. In the same year 612,391children were born. Under the present system a large proportion of these children, and of the children born year after year, will evidently grow up in some counties without receiving adequate instruction, unless efforts are made at once to extend education in the most benighted counties. Why should 61 in 100 children in Lancashire and Staffordshire, 56 in Bedfördshire, grow up into womanhood unable to write, when only 25 in 100 marry ignorant of this art in Surrey (extra Metropolitan) and in Westmorland?

"This question can be easily, but very unsatisfactorily, answered by referring to the occupations of the children. The precise circumstances of the nation among us that cannot write should be ascertained, as well as the means we have at our disposal for rendering them the aid which every man would be glad to render, who by the accident of birth or by some other accident of nature is able to write himself. It will probably be found that different agencies may be applicable in the northern, southern, and midland counties; but it is already evident that the great work of the education of the whole people cannot be carried out until a system of schools and colleges, easily accessible to all, becomes virtually one of the great institutions of the country.

"In fine, the arguments that the marriage registers supply in favour of the extension of education cannot be set aside by a few stories about young girls, terrified in the presence of the clergyman, making marks when they are able to write their names. The marks of the men alone are conclusive." (Sixteenth Annual Report, pp. iv-ix).

rs to 28 men, and in ten other counties from 29 to 50 men, in 100, sign with marks when they are requir ((+4681) to their names.

"The proportion of men who signed with marks fell from 32.7 in 1841, to 30.0 in 1854; so that the numbers of men left in this benighted state fell by 2.7 per cent. in 14 years. The women who made their marks were 48.8 per cent. of the whole number in 1841, and 42.7 per cent. in 1854. The decrease is 6.1; or 1 in every 8 of the original number. This shows that the education of the people made some progress in the years 1828-1841; but it is still deplorable to find that in the present day 30 in every 100 of the fathers, and 43 in every 100 of the mothers, of the next generation of Englishmen have been so imperfectly educated, that they do not write their names, but sign the marriage registers with marks; while many of those who write their names write very imperfectly.

"One of the most acute thinkers that this country has ever produced, pointed out in 1745 the necessity of instituting a settled system of education in England." In ancient times all classes of the lay population were unable to write; but in the present age all the middle as well as the higher classes can write, and the poor children consequently who grow up deprived of this art are placed at much greater disadvantage relatively to the other classes than the children of the lower classes in the middle ages; which, moreover, threw open the hospitable doors of the colleges to poor scholars. Now also elementary learning is more useful

Shilleanni riedt ni vilesnes it Bishop Butler. ni claspe niedt dire ersvies

than it was formerly: no business can be carried on successfully without it; it facilitates and lightens as well as sweetens labour; it cements the ties of blood and friendship; and, finally, it gives good men some additional power in controlling the dark passions of our nature; for learning is the atmosphere in which the words of the wise reverberate over the souls of nations, drawing them from error and injustice to truth and righteousness.

"The provision under the Poor Law against starvation is undoubtedly made at great cost to this nation; but it is a cost well incurred, for not only are many lives saved from death by accidental destitution, but the heart of the whole labouring population is sustained amidst the conflicts of life, and the property of the country enjoys a degree of security which is possessed by the property of no people where the destitute poor have no legal claim to relief.

"By paying in the form of poor rate a portion of the profits of property, the property is enhanced in value, and the rest of the profit is enjoyed by its owners in security. That discovery was made in England some centuries ago; and it has been carried out more effectually during the present century.

"The utility of a system of education, to secure the whole population against the dangers of ignorance, is as evident as the utility of a system of poor laws. This is ably argued in a discourse by the author of the 'Analogy;' and no argument in his great work deserves more attention, for none is more conclusive. If the preservation of the lives of poor children is wisely provided for by a regulated legal provision, so ought also a certain provision to be similarly made for the cultivation of their intelligence: 'For the public is as much interested in the education of poor children as in the preservation of their lives.'

"How many children have for a century, notwithstanding Butler's reasoning, been left out of the pale of education under the voluntary, or what may more appropriately be named the casual system is evident ; and the wisdom of educating the whole of the rising generation, whether they live in Cornwall or in Northumberland, in Staffordshire or in Bedfordshire, in the most benighted county or in the county of greatest comparative light, is now self evident. But to carry out this vast purpose the casual system is unequal. It would require a century probably for the development of its resources, which even then would never reach large sections of the population; and in that time nearly every child and man now living would be dead. The voluntary system would not be superseded, but would be the necessary supplement to the established schools; as all our institutions that work most satisfactorily have a mixed character,-so the zeal of individuals and of classes in supporting their own private schools would stimulate the local parish. boards of education.

"If there is anything in which the holders of rated property are especially interested it is the education of the people; and to the national system, in which all are interested, all should contribute in the equitable proportion of their means.

"It will be a happy circumstance when the men and women of England and Wales are educated, and can not only write their names and read their Bible, but are familiar with the great works of the English classical writers, know something of common things, and are acquainted with many of the productions, the phenomena, and the laws of nature. It will be as a new revelation; for then, indeed, to them that sit in darkness light will come. Might not the produce of the intelligence which would burst forth from the people, who, down to the lowest classes, have in them the elements of all knowledge, as experience has shown, justify the expenditure? What more profitable investment can the nation make of a few farthings in the pound of its annual produce?" (Seventeenth Annual Report, pp. vi-xii.)

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(1862.)

" It is gratifying to observe that although the number of persons who are unable to affix their names to the marriage register is greater than could be wished, yet it is year by year decreasing, for while in the year 1845 no fewer than 41'4 in every 100 persons married signed the register with marks, the proportion has been gradually reduced until in 1862 not more than 28.5 exhibited inability to sign their names. Of every 100 males who married, 23.7 signed with marks, while 33.2 in every 100 females who married signed in the same manner in 1862. It will be observed that as regards this test of education the Northern Counties contrast favourably with the rest, Westmorland occupying the most creditable position, and in no other county do the females write so well. At the opposite end of the scale is Monmouthshire, in which county nearly half the people who marry exhibit an inability to sign their names. There is great need of the schoolmaster here, as well as in South and North Wales generally, and it is to be hoped that future years will show that the beautiful principality, which gives the heir to the British throne his renowned title, will not, as now, be conspicuous among the least educated portions of our island. The education of the children of the principality will be retarded so long as they speak the Welsh language in childhood. At the Census of 1851, when the last educational enumeration took place, it was found that the number of scholars attending day schools was 2,144,378, or one in every 8.36 of the population, while 318,000 teachers were engaged in educating 2,407,642 scholars in Sunday schools. Since that time the attention of the government and of the public has in a greater degree been directed to educational requirements. and the examination ordeal which the candidates for even the most subordinate public appointments have now to undergo has also stimulated scholastic progress, so that at the present time we are prepared for the information that the proportion of scholars to population is much greater than in 1851.

"The Occupation Abstracts of the Census of 1861 disclose that while the population increased since 1851 12 per cent., the scholars of all ages increased 37 per cent. in the same period, the male scholars increasing 33 per cent., and the females 42 per cent. The number of scholars, including those receiving private tuition at home, but exclusive of Sunday school children, in 1851, was 2,297,232, and in 1861 3,150,048; the number of scholars under 5 years of age was doubled in the ten years. This increasing stream passing through the various schools of the country is asserting its presence in the marriage registers, and has reduced the proportion of those who signed with marks, which 18 years since was as high as 41 per cent., to little more than 28 per cent. of those who married in 1862.

"The efforts to extend the benefits of elementary education are bearing every year a more abundant harvest of good results, and should encourage us to increase our exertions until every man and every woman shall be able to attach their names to their marriage register.

" It is impossible to calculate how much the value of the work of the population is increased by the increase of its intelligence." Twenty-fifth Annual Report, pp. vi. vii.

(1864.)

"The bridegroom and the bride invariably sign the marriage register. In the year 1864, of 180,387 *couples* married, it is found that :

"The bridegroom and the bride wrote their names in 106,569 instances.

"The bridegroom or the bride made a mark instead of writing the name in 47,236 instances. [15,416 men and 31,820 women.]

"The bridegroom and the bride both signed with marks in 26,582 instances.

" 41,998 bridegrooms and 58,402 brides made their marks instead of writing their names.

"What are we to infer from these facts? Not, say some clergymen, that all the women who make marks are unable to write their names, for they are sometimes so 'nervous' that they decline to write, and make crosses. This may be true; but against any women deducted from the ranks of ignorance on this ground must be set a large number of women who write their names so badly, as to prove that they have no command over writing for any useful purpose. Indeed it may be safely affirmed that 58,402, or 32 in 100, is an under-statement rather than an overstatement of the number and proportion of young women in England incapable of writing for any practical purpose.

"Although nothing has been said by the clergy of the timidity of men, it is probable that in this matter, and on this occasion, the women are as brave as the men, to whom similar remarks are therefore applicable.

" In the absence of an educational examination of the whole adult population this test may be employed, and may lead to some practical results.

" The annexed Tables display the various shades of ignorance in which large masses of the adult population are still plunged.

ENGLAND, 1864. Proportion of Men and Women who signed the Marriage Register in Writing in the several Counties.

MALES.		FEMALE	s.
Counties, &c.	Of 100 Men Married.	Counties, &c.	Of 100 Women Married.
Monmouth	58.1	South Wales	- 44.1
Stafford	61.6	Monmouth	- 48.2
South Wales	62.8	Stafford	- 51.5
Bedford	63.1	North Wales	- 51.3
Hertford	63.2	Lancaster	- 53.1
Suffolk	64.0	Bedford	- 55.1
North Wales	65.1	West Riding	- 57.4
Salop	67.1	Cornwall	- 59.9
Norfolk	67.7	Chester	- 61.8
Cambridge	68.5	Wanagatan	- 61.9
Cornwall	68.9	Notte	65.0
Hunts · ·	09 1	Selon -	
Essex	69.0	Traland	6000
Worcestor	70.5	Ducks	- 07.0
Horoford	70.5	Derby	- 67.6
Borks	72.1	Herts	- 68.9
Wilts	72.1	Worwick	- 69.1
Bucks	72.3	Cambridge	- 69.0
Dorset	73'3	Cumberland	- 70.0
Somerset	74.1	Suffolk	- 70.7
Notts	75.1	Bucks	- 70.8
Lancaster	75.5	Hunts	- 71.7
Northampton	75.7	Norfolk	- 72.0
Durham	75.8	Northumberland -	- 72.5
Oxford	75.9	East Riding	- 72.8
England	76.7	Northampton	- 72.9
Warwick	76.7	Somerset	- 73.1
Chester	76.7	Gloucester	- 74.8
West Riding	76.9	Hereford	- 74.9
Derby	77.2	Essex	- 75.0
Lincoln	78.2	Lincoln	75.6
Middlesex	78.4	North Biding	70.8
Gloucester	18 0	Devon	- 75 9
Leicester	101	Dorset	- 700
Kent	790	Berks	- 70.0
Deven	80.0	Oxford	- 78.3
Cumberland	80.3	Kent	- 78.7
Sugger	80.7	Westmorland	- 79.4
North Riding	81.0	Middlesex	- 80.9
Hants	81.1	Hants	- 82.2
East Riding	82.5	Rutland	- 82.5
Northumberland	83.2	LONDON	- 82.6
TONDON	89.1	Surrey	- 83.2
Westmorland	89.7	Sussex	- 83.8
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". It should be recollected that the marriageable women of a country are a selected class, and include very few of the infirm, deformed, idiotic, or others incapable of learning. They can nearly all learn to write if they have the opportunity. And upon turning to the Report of Dr. Stark. addressed to the Registrar General of Scotland.* I find that all the women of the county of Kinross who married wrote their names in the registers : the proportions per cent. were also 98 in Peebles, 98 in Kincardine, o6 in Roxburgh. o6 in Kircudbright, 04 in Perth. 02 in Fife, 91 in Edinburgh, and 03 in the far off Orkneys. Under these circumstances he must be an extreme optimist who can contend that the state of education of the women of England is the best possible, when it is found that by the same test in 100 of the marrying women of the county of Bedford only 55 write their names, in Cornwall only 60, in Stafford only 52, in Lancashire 53, in the West Riding only 57, in Durham only 62, in Monmouthshire only 48, in North Wales only 51, and in South Wales only 44.

"The women of London come as immigrants in large proportions from every county; 83 in 100 of the brides wrote their names. Middlesex, Surrey, Sussex, Hants, Rutland deserve to be mentioned as counties in which 80 or more of 100 brides wrote their names in the registers. In Westmorland 70 women wrote their names; but it is in the education of the men that the Northern Counties approach and even excel, several of the Scotch counties.

" Of 100 men marrying, 90 could write their names in Westmorland, 80 in London, 83 in Northumberland, 83 in the East Riding, 81 in the North Riding, 81 in Hants, 81 in Sussex, 80 in Cumberland, 80 in Devon. The proportion then goes on descending deplorably from county to county until it falls to 63 in Bedford, Hertford, and South Wales, 62 in Stafford, and 58 in Monmouth. The excessive ignorance of the colliers of Staffordshire and Wales is a cause of incalculable evils, among others, of explosions, and probably of strikes.

SCOTLAND. Proportion of Men and Women who signed the Marriage

6	Register in Writing in 18	162 and 1	1867.	+ C. Caller	agolait a
	18 meetinel a meetinel - tataona W	- managard - managard (189 - 189 - 1			
Divisions	COUNTIES.	Of 100 Men Married.	Of 100 Women Married.	Of 100 Men Married.	Of 100 Women Married.
6. 	SCOTLAND	90.0	79.7	89.4	79.3
III.	Nairn, Elgin, Banff, Aberdeen, Kincardine -	96.5	90.6	96.7	90.2
VIII.	Roxburgh, Dumfries, Kircudbright, Wigtown	95.3	92.1	95.3	91.3
VII.	Linlithgow, Edinburgh, Haddington, Ber-}	94.6	90.3	93•9	89.9
IV.	Forfar, Perth, Fife, Kinross, Clackmannan -	93.6	85.4	93.8	84.5
I.	Shetland, Orkney, Caithness, Sutherland -	92.2	81.3	93.2	83.1
VI.	Renfrew, Ayr, Lanark	86.2	71.0	84.7	70.4
v.	Stirling, Dumbarton, Argyll, Bute	86.4	75.7	89.23	78.5
II.	Ross and Cromarty, Inverness	67.5	50.2	66.3	49.8

Thus in all the counties around Aberdeen 97 in every 100 marrying men and 91 in every 100 women wrote their names in each of the years 1862 and 1867. It is only in the highland counties of Inverness, Ross, and Cromarty that the men and women approach or surpass the degree of English ignorance. The old tongue is the same hindrance to the education of the people as it is in Wales.

+ The results for the year 1867 are here inserted for comparison.

* Eighth Detailed Annual Report of the Registrar General of Scotland-Abstracts of 1862, p. xxiii.

"In Scotland we discover a state of things highly creditable to the people of that part of the United Kingdom : and it is difficult to explain the difference in any other way than that in the general struggle for the church property at the Reformation the people had the good sense to endow the schoolmasters with small stipends, and not to give the whole revenue of the land either to the clergy or to the nobility. Between the minister and the lord stood the schoolmaster in the presence of the people. The advantages of the Scotch system of education became so apparent that it was expanded in the period of the civil wars (1646). and firmly established after the Revolution by the celebrated statute of William and Mary in 1606. The endowment was small, and stimulated instead of slackening the exertions of the schoolmaster, who had to depend largely on his own industry, zeal, and popularity for support. M'Culloch estimated the average fixed stipend at 251, 10s., exclusive of house and garden; the school fees at 22l. 10s.; the income from all sources at about 631.*

" It is impossible to say how much Scotland owes to this system of schools, and to the universities, which are accessible to the youth of the kingdom. There was probably as much revenue proportionally devoted to education in England as in Scotland, but the money was in various ways misappropriated, so that before the Reform Bill passed, and even in 1837 when the registration of marriages commenced, the working classes. entirely ousted from the educational charities and universities, were in the most deplorable state of ignorance. One in three of the young men, and one in two of the young women, of England could not write their names in the marriage register even in 1841, after some efforts had been made in the cause of popular education.

" Happily a considerable improvement is visible in the registers; one in four of the men, and one in three of the women, now sign with marks. In twenty-three years the marks-men have fallen from 33 to 23; the marks-women from 40 to 32 in 100.

" Still in common education the great body of the people of England are many degrees below the people of Scotland, and it is impossible to calculate the advantage this superiority gives the Scotchman over the Englishman at home and abroad. The education of the common people of Scotland is a benefit to the world; without it Watt could not have invented. Burns could not have written. The brightest boy in a village without a school has no chance of distinction, except by accident.

" The success of common education in Scotland speaks well for the working of a rate, mixed with a paying system for children. But before the education of the children of to-day can produce any results on the minds of the marrying fathers and mothers of England, 10 or 15 years may elapse. Cannot nearly all these adults be taught at once to read and write by some simple method? Is there no machinery for grinding reading and writing into the heads of the young agricultural labourers of England who are about to marry within the next five years ?" Twenty-seventh Annual Report, pp. xvi-xix.

(1867.)

" As marriage is contracted on an average at the age of 27, the returns show the state of education among the marrying men and women of the country; and it is evident that the schools now existing will produce no effect whatever on the great mass of the youthful population above the school age, who will in the next 12 years become the fathers and mothers of the following generations. We shall endure all the evil

* Statistics of British Empire, vol. ii. p. 373.

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consequences of their ignorance. They form an immense mass of the existing population. The number of men and women of the ages 15 and under 27, amounts to about 4,731,388; and allowing for their possible superiority over those who married in the last year, at least *a million* of them are not able to write their names. The number who do not write, estimated by the standard of 1867, is 1,182,849. When we consider that many who write their names can scarcely read, and know little of the elements of arithmetic, to say nothing of any other learning, it becomes a question whether the country ought not to make a strenuous effort to educate this great mass of the youthful *adult population*. A generation would thus be partially saved.

"No existing school system provides for the instruction of adults; and they could not be taught as children; but many plans have been partially tried, and by careful adjustment might no doubt be rendered successful. The soldiers and sailors might all be taught to read and write; so may the artisans of the country. The agricultural labourer too might in some way be taught." Thirtieth Annual Report, p. ix.

Summary of the Quarterly Reports, 1868.

First Quarter.—January, February, March.

The United Kingdom.—The Registers of the United Kingdom show that the births of 265,502 children, and the deaths of 162,986 persons of both sexes, were registered in the three months ending on March 31st. The recorded natural increase was 102,516; the native emigrants were 21,975.

The number of persons married in the quarter ending March 31st, 1868, was 107, 180.

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

The resident population of the United Kingdom in the middle of 1868 is estimated at 30,369,845; that of England and Wales amounting to 21,649,377, of Scotland to 3,188,125, and of Ireland to 5,532,343. The corrected death-rate of the quarter is $2^{\circ}23$ per cent.; the birth-rate $3^{\circ}68$; the marriage-rate for the previous quarter $1^{\circ}83$.

England.—The marriage-rate, which had been high in three previous years, suffered a depression in 1867, continued low through the year, and was still lower in the first quarter of 1868. In the first three months of 1868 the birth-rate was lower than it had been in four previous winters, but it did not fall below the average of the winter quarters of ten years. The most notable feature is furnished by the returns of mortality, which exhibit a very striking decrease. An improvement of the public health was apparent in 1867, and the facts now under review again indicate such a condition of health as, considering that it prevailed in the winter months. must be regarded with much satisfaction.

Marriages.—The number of marriages in England in the winter quarter (ending 31st March) was 36,696. Although absolutely the number was a little higher than it had been in the corresponding quarter of 1867, when the low number 36,441 was registered, it was less in reference to an increased population. The marriage-rate (viz., proportion of persons married in the quarter to persons living) was $1^{*}364$ per cent., the average being $1^{*}398$. The formation of new family connexions is invariably less active in the winter quarter than in any other season. The ability to marry had in some degree spent itself in the more convenient autumn, immediately preceding, of the past year.

By comparing the numbers of marriages in the winter quarter in the three years 1866-67-68, there is seen a manifest decrease in the celebrations in London; a decided decrease also in Staffordshire, and in Monmouthshire; and on the other hand a clear increase in Lancashire.

Births.—Of children born in the first three months of 1868, the number was 198,584; the numbers in the corresponding period of 1866-67 having been 196,753 and 194,763. In some parts there was a decrease, as in the Eastern Counties, where the births declined from 10,109 and 10,061 to 9959. There was a decrease also in the South Western and West Midland Counties. In Cornwall, which belongs to the South Western Division, and where 3013 births were registered, the decrease is very marked, and the returns of that county both of marriages and births are significant of the removal of families dependent on mining, and perhaps other branches **XXXI.** d

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of labour, to the colonies and foreign parts. The births in London in the quarter were 29,857; in Cheshire and Lancashire they were 31,961.

The annual birth-rate of England in the quarter was 3.693 per cent. against an average of 3.674. In the four preceding winters it ranged above 3.700; and in those of 1865-66 was about 3.770.

The birth-rate in Edinburgh was 3.655 per cent.; in Hull 3.679; in the borough of Birmingham 3.724; in the city of Bristol 3.822; in London 3.837; in Manchester 3.863; in Newcastle-on-Tyne 3.929; in Bradford 3.966; in Sheffield 4.019; in Salford 4.025; in Glasgow 4.086; in Liverpool almost the same; in Leeds 4.591.

Increase of Population.—The births in the quarter were in excess of deaths registered in the same time by 78,908. This excess constituted that natural increase of population, the effect of which is impaired by emigration.

From ports in the United Kingdom there went in the quarter 25,986 emigrants, of whom 7926 were persons of English origin, 1917 were Scotch, 12,132 were Irish, and 4011 foreigners. Of the total emigration 23,528 persons, half of whom were of Irish birth, embarked for the United States. The Australian Colonies attracted 1319; British North America 57.

The amount of emigration was nearly the same as in the winter quarters of 1865 and 1867, but considerably less than in 1864 and 1866.

Prices, Pauperism, and the Weather.—In the first three months of 1868 the average price of consols was 93. The price of wheat rose to 72s. 2d. a quarter; in the same period of 1867 it had been 60s. 7d., and in that of 1866, 45s. 6d. In the last eight quarters it has mounted steadily from 45s. to 72s. At Leadenhall and Newgate markets the same prices ruled for beef and mutton sold by the carcase; inferior qualities $4\frac{1}{4}d$. per lb., superior $6\frac{1}{2}d$. per lb., mean price $5\frac{3}{8}d$. Both beef and mutton were cheaper last quarter. The best potatoes were sold in the Southwark market at 147s. 6d. per ton, as the average price. In the corresponding periods of the two previous years the prices were 72s. 6d. and 137s. 6d.

The returns of pauperism, which exhibited last quarter a serious increase, continue to be very heavy. In the following figures they may be compared with those of two previous winters :--

In three r

the off of Bauls off of apartment	10 Today off	Out-door raupers.	
nonths ending 31st March 1866	- 139,546	- 759,402	
", 1867	- 147,620	- 832,364	
	- 159,720	- 861,044	

", 1868 - 159,720 - 861,044 These numbers represent the quarterly average of persons relieved on the last day of each week.

For eleven days at the beginning of the year the weather was cold ; but on the twelfth the wind which had been blowing from the north east changed to south-west; the temperature rose and continued high till the end of the quarter, with exceptions that were few and unimportant. During these eighty days the excess of temperature above the average was $3\frac{1}{2}$ daily. February was unusually warm. The weather in that month was vernal in its character ; vegetation made rapid progress, and at the end of it trees and shrubs were budding, and reports of winter-sown wheat were favourable. Easterly winds were of less frequent occurrence both in February and March than is usual in those months. The latter month, though less settled than February, was also favourable to agricultural operations, and at the end of the quarter vegetation was for the period in a very advanced state. There were violent gales on the 20th January ; and afterwards on the 31st and the next day there were other gales of extraordinary violence. The mean temperature at Greenwich was above the average of 97 years in each of the three months; the excess in February was $4^{\circ} \cdot 6$. The rainfall was 6.6 inches, which is 1.6 above the average. Two-thirds of the rain fell in January ; in the two other months the quantity was deficient, but there was the greatest diversity of amounts collected in different localities. Five or six inches were measured at Newcastle-on-Tyne, Liverpool, Hull, Dublin, Leeds, and London ; amounts from 7 inches to 10 inches at Sheffield, Birmingham, Edinburgh, Manchester, Salford, Bristol ; while at Glasgow the fall far transcended these measurements, and was as great as 24 inches. At Cockermouth and Allenheads it was 19 inches.

Deaths; and the State of the Public Health.—In the quarter that ended March 31st the fine weather that has been described, when February, was more like a spring than a winter month, exercised its beneficent influence on the public health; fever and diseases that attack the juvenile population were less prevalent, or, where they prevailed, were probably less fatal than usual in many districts that in other seasons had suffered from their ravages; and the result was a singularly low mortality. There are only two instances in which the winter death-rate was so low as it was in the period for which the returns have just been received. In the winter of 1846 it was $2\cdot157$ per cent.; in 1856 it was $2\cdot179$; in 1850 and 1857 it was respectively $2\cdot261$ and $2\cdot298$. In the remaining twenty-six seasons it ranged from $2\cdot350$ per cent. to $2\cdot910$. The deathrate of last winter was $2\cdot226$ per cent. against an average (derived from the corresponding periods in the ten years 1858-67) of $2\cdot576$ per cent.

The returns both of town and country testify to the higher condition of health enjoyed by their inhabitants. In the large town districts the rate of mortality was $2 \cdot 40$ per cent, the average being $2 \cdot 76$. In districts that comprise small towns, villages, and open country it was $2 \cdot 01$, the average being $2 \cdot 35$. It is a subject for congratulation that at a time when provisions were dear, and the resources on which the working classes depend for food and warmth were in many parts straitened or destroyed, the rigours of an inclement winter were not added to the privations which they suffered.

The total number of deaths registered in England was 119,676, which is less by about 14,000 than in the March quarter of the previous year, and less by 18,000 than in the same period of 1866. The reduction is apparent, by inspection of the tables, in almost every county. Leicestershire must be mentioned as an exception, a circumstance which seems to be due to measles which was there prevalent and fatal in an unusual degree. The county of Westmorland is another instance in which the rule, almost universal, did not hold.

The deaths in London were 17,967, which in the estimated population of the present year represents a death-rate of $2 \cdot 33$ per cent. Within the metropolitan area are wide-spread suburban districts that have much of the country's purity and freshness; but the general sanitary condition of London has been much improved, and to this fact may be reasonably attributed in no small degree the position as regards health which it holds among large towns. Its rate of mortality was lower than that of any other of twelve large towns in the United Kingdom. In Sheffield, Leeds, Birmingham, it was above $2 \cdot 30$ and under $2 \cdot 50$; in Bristol and Newcastle-on-Tyne it was $2 \cdot 50$ and under $2 \cdot 60$; in Edinburgh it was above the latter point and under $2 \cdot 80$; in Salford it was $2 \cdot 82$; in Dublin and Liverpool it was nearly $3 \cdot 00$; in Glasgow the death-rate of the quarter was $3 \cdot 02$, and in Manchester the summit of insalubrity was attained at $3 \cdot 13$.

In London the deaths from small-pox in the last quarter were 280 against 526 in the same period of 1867; those from measles 452 against 239; from scarlatina 368 against 339; from diphtheria 119 against 102; from whooping-cough 734 against 966; from typhus 514 against 565; from phthisis 2,184 against 2,369; from bronchitis 2,282 against 3,144; from pneumonia 1,035 against 1,150.

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Intermittent fever prevailed at Wendover in Buckinghamshire ; typhoid fever at Southminster in Essex, where "drains and cesspools are very bad ;" also at Terling where, as is well known, it had spread with violence. Typhus and gastric fever were fatal at Trowbridge, and 10 deaths from typhoid fever occurred in East Stonehouse, 4 of which were in the Royal Marine Barracks, where an outbreak reported in the previous quarter was supposed to have been traced to a contaminated well. Fever broke out in Shackerstone (Market Bosworth), and continued to prevail in Winterton, and at Rainford in Lancashire. The Registrar of Aldbrough, in the East Riding of Yorkshire, states that there were 30 cases of typhus in his subdistrict, but only one fatal. A malignant form of diphtheria appeared at the railway station at Rillington in the North Riding, and was readily traced to a well, the water of which was used for household purposes, and into which the matter from cesspools and from other accumulations of impurity had been allowed to penetrate.

Measles visited many districts, and some with fatal effect. In the parish of Corston in Somersetshire more than a hundred children caught the complaint, but only one died of it. The disease was very fatal in Leicestershire; in Hinckley 39 out of 96 deaths were from measles; in Whitwick it caused a fourth part of the 81 deaths, and in the east sub-district of Leicester 95 out of 401. It also prevailed in Stockport, Liverpool, and Bradford. Scarlatina prevailed extensively and fatally in the county of Durham, at Manchester and other parts of Lancashire. It prevailed at Tynemouth; and from Bedlington in the district of Morpeth the Registrar reports that the "220 deaths are about 100 above the average owing to the prevalence of scarlatina, of which there have been 121 cases."

Second Quarter.- April, May, June.

The United Kingdom.—The Registers of the United Kingdom show that the births of 274,386 children, and the deaths of 149,339 persons of both sexes were registered in the three months ending on June 30th. The recorded natural increase was 125,047; the native emigrants were 53,136.

The number of persons married in the quarter ending June 30th, 1868, was 112,342.

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

The resident population of the United Kingdom in the middle of 1868 is estimated at 30,369,845; that of England and Wales amounting to 21,649,377, of Scotland to 3,188,125, and of Ireland to 5,532,343. The corrected death-rate of the quarter is 2.05 per cent.; the birth-rate 3.78; the marriage-rate for the previous quarter 1.63.

England.—Marriages were less frequent than usual in the spring quarter of 1868; the matrimonial depression having continued for the eighteen months that ended 30th June of that year. But while marriages were few, births were many; and in fact the birth-rate of the second or June quarter attained a point high beyond example in that period of the year. It must be added that the returns exhibit their most satisfactory feature in a reduction of the mortality unprecedentedly great for the spring quarter.

Marriages.—90,728 persons were married in the quarter that ended on June 30th; and the marriage rate was 1.684 per cent. per annum, against an average of 1.717. The rate has declined since the spring of the year 1866, when it was 1.840. The decline was very striking in London, where the weddings were 8764, 8246, and 8012 in the last three spring quarters. Little falling off is noted in the Eastern, South-eastern, or

South Midland Counties; but in many of the mining districts, and in the manufacturing districts of Cornwall, Staffordshire, Lancashire, and Yorkshire, it was well marked. Even in Bath the marriages, so high in 1866, fell to two thirds of the number in 1868; but Cheltenham, to some extent, restored the balance. Liverpool felt the depression more than Manchester.

Births.—In the three months ending 30th June, the births registered were 202,859. This is the first instance in which the births in England and Wales in a quarter have completed their second hundred-thousand. In the June quarter of 1867 the number returned was 199,660. The births in Lancashire were 28,519, exhibiting a very marked increase on corresponding quarters; this fact is probably the consequence of the return to their homes of factory operatives, who with their families had left the county in the late period of adversity.

The annual birth-rate in the quarter was 3.763 per cent. against an average of 3.637. Though this rate has been equalled or exceeded in the winter quarter, it is singularly high as having occurred in spring, which next to winter is the most prolific of the four seasons.

Amongst the birth-rates in fourteen British towns in last quarter those of Leeds and Glasgow are worthy of remark, for they were 4.48 and 4.56 per cent. respectively. In London, Bristol, Birmingham, and Bradford the birth-rate was about 3.70. In Liverpool and Manchester about 3.90; in Sheffield and Newcastle-on-Tyne nearly 4.00. In Edinburgh it was 4.12 per cent.

Increase of Population.—The births exceeded the deaths of the spring quarter by 92,849. The excess represents the natural growth of population; but the daily flow of people to and from the English shores materially interferes with the result.

The total number of emigrants in the quarter (ended 30th June) was 82,068. Of these, 18,759 were of English origin, who, with the exception of about 5,000, went to the United States. Of the 28,829 Irish who emigrated, a still larger proportion, namely 26,262, were bound to the same destination. Of the total emigration about 67,000 persons went to the United States, about 11,000 to British North America, 3,000 to the Australian colonies. About a third part of the emigrants were foreigners.

Prices, Pauperism, and the Weather.—In the spring months the average price of wheat per quarter was 71s. 10d., which has been about the prevailing price during the first half of the present year. In the spring of 1866 the price of wheat was 46s. 6d.; in that of 1867 it was 63s. 11d.Of beef by the carcase, at Leadenhall and Newgate Markets, the price per lb. was $4\frac{1}{2}d$. for inferior, and $6\frac{3}{4}d$. for superior qualities; of mutton the respective prices were $4\frac{3}{4}d$. and 7d. per lb. The mean price of best potatoes at the Waterside Market, Southwark, was 150s. per ton. In the June quarter of 1866 it was 77s. 6d.

The following figures exhibit an increase of pauperism ; they represent the average number of paupers relieved on the last day of each week in the June quarter of three years :---

			In-door.		Out door.	
			a t aron a pr		alle there bear	
1866,	Quarter ending 30th June	ing an T h	123,657		734,139	
1867,		-	134,678		779,629	
1868,	,, ,, -	-	142,782	-	801,500	

Mr. Glaisher states that the weather has been remarkably fine and warm during the whole quarter, the temperature having almost invariably exceeded the average. April was warm, but not in a remarkable degree, for since 1771 twenty-four Aprils have occurred of higher temperature. The mean temperature of the air in last April was $48^{\cdot}1^{\circ}$. That of May was $57^{\cdot}3^{\circ}$, and was higher than in the same month of any year since 1848. That year and 1833 supply the only instances—if the inquiry is carried as far back as 1771—in which the mean temperature of the late May has been exceeded. The mean temperature of June, $62 \cdot 0^\circ$, was also high; and since 1771 there have been only six examples of a June when it was higher. The mean temperature of June 1846 rose to the unusual height of $65\cdot 3^\circ$. But taking April, May, and June together, the mean temperature of these months in the present year has been so high, that no instance of a similar spring occurs within the records of 98 years, with the exception of 1865.

The five months from 1st February to 30th June have been distinguished by having an almost constant atmospheric pressure above the average; the mean monthly excess of pressure was more than 0.1 inch. They have also been distinguished by a deficiency of rain in each month, with the exception of April; the amount below the average in the five months ending June was 2.5 inches; but reckoning from 1st January the fall of rain is very nearly the true fall for the period, the deficiency being only 0.1 inch. The period from 1st January has been distinguished by an unusual distribution of rain; in January it fell to the depth of 4.2 inches, being an excess for that month of 2.4 inches. The drought which was experienced towards the end of the quarter is not attributable, therefore, to a deficiency of rain since the beginning of the year, but to its unequal distribution over these months, there having been a great excess in January and a great deficiency in June, together with unusual evaporation caused by continued high temperatures, extending over a period of five months.

The highest temperature in the shade at Greenwich occurred on 19th June, when it was 87°, and on 13th and 14th June, when it was 85°. These temperatures were exceeded at some places in the Midland Counties.

Notwithstanding the continuance of high temperatures but one thunderstorm occurred at Greenwich during the quarter, that on the 29th of May, on which day the greater part of the rain for that month fell; and generally over the country there have been much less than the usual number of thunderstorms.

For agricultural pursuits the month of April was favourable, and at its end there was every prospect of an early and plentiful harvest.

The month of May was remarkable for brilliant sunshine, high temperature, the general forwardness of the season, and the promising appearance of the cereal crops.

The month of June was favourable to the ripening of the wheat crops, but injurious to grass lands, and to all spring and root crops.

Deaths; and the State of the Public Health.—During 1867 the health of England was good; it was remarkably good last winter, viz., in the first three months of 1868, under the genial influence of weather which has been described as vernal in its character; in the spring months (ending June 30th) which followed, the same beneficent cause was in operation, and again a remarkably low rate of mortality is the satisfactory result. The total number of deaths registered in the spring quarter was 110,010. This is the lowest number that has occurred in any spring quarter since the years 1861–62, when the deaths returned were under 108,000, but when the anount of population was not equal to what it has become since that time.

If last spring is compared with the same season of last year, which was also a period of low mortality, it is found that the deaths in England decreased from 112,355 in 1867 to 110,010 in the present year. But decrease was not the universal rule; for in those periods the deaths in London increased from 15,619 to 17,167; those in Cheshire and Lancashire rose from 19,479 to 19,671; and in the West and North Midland Counties and in Yorkshire the returns discover little fluctuation. On the other hand, if the late spring is compared with a season of much sickness in 1866, when, in the same three months, the deaths rose to 128,551, it will be seen that with the exception of Leicestershire and Durham, the decrease is traceable in distinct unmistakable characters in the returns of every county in the kingdom.

The following Table exhibits the deaths in LONDON, in the June quarter of the five years 1864-68, from a few special causes :

quarter clist on 1-1 on	1864.	1865.	1866.	1867.	1868.
Small-pox	116	149	396	387	187
Measles	844	208	823	202	741
Scarlatina	593	385	397	248	352
Whooping-coug? -	639	842	1146	536	780
Typhus	783	700	666	518	485
Bronchitis	1471	1512	1816	1310	1366
Pneumonia	913	843	1121	691	878

It appears from this Table that fever declined, while there was increased prevalence of measles and whooping-cough. In his Report for June on the health of Glasgow, Dr. Gairdner notifies the same facts in reference to these diseases in that city.

The registrars report the fatal prevalence of measles at Croydon, Ampthill, Bristol and Clifton, Coventry, Leicester, Retford, Carlton, Nottingham, Derby, Stockport, West Derby, Preston, Bradford, Sheffield, and other parts. Scarlatina abounded and produced fatal effects in Birmingham, Stockton, Sunderland, Tynemouth, and other towns in the northern counties.

The rate of mortality in England in the last quarter was $2 \cdot 041$ per cent. against an average of $2 \cdot 220$. This is the lowest death-rate that has occurred in the spring season within the 30 years experience of national registration. The influence of the fine weather on health appears to have been more decidedly favourable in country than in town; for the death-rate in the chief towns was $2 \cdot 22$ per cent. against an average of $2 \cdot 35$; while in the small towns and rural districts it was $1 \cdot 80$, the average being $2 \cdot 06$. The mortality of Manchester was $2 \cdot 77$; that of Sheffield $2 \cdot 63$; and of Liverpool $2 \cdot 58$ per cent. In Birmingham the rate was $2 \cdot 07$, and was rather lower than that of London.

Third Quarter.-July, August, September.

The United Kingdom.—The Registers of the United Kingdom show that the births of 255,338 children and the deaths of 165,744 persons of both sexes, were registered in the three months ending on September 30th. The recorded natural increase was 89,594; the native emigrants were 40,672.

The number of persons married in the quarter ending September 30th, 1868, was 106,758.

The death-rate of the United Kingdom differs little from that prevailing in England and Wales.

The several facts concerning the other parts of the Kingdom are set forth in the quarterly reports of the Registrar General of Scotland and the Registrar General of Ireland.

The resident population of the United Kingdom in the middle of 1868 is estimated at 30,369,845; that of England and Wales amounting to 21,649,377, of Scotland to 3,188,125, and of Ireland to 5,532,343. The corrected death-rate of the quarter is $2\cdot36$ per cent.; the birth-rate is $3\cdot53$; the marriage-rate for the previous quarter $1\cdot56$.

England.—Marriages were less frequent than usual in the summer quarter of the year. The summer births have been above the average number. The deaths in the summer quarter too were in excess ; and this may be primarily referred to the heat of the season, or to the dearth of water. The heat was for several days tropical, and the sun struck a few, and injured many people. The high temperature gave activity in air and water to the lower forms of life, and consequently to the zymotic elements of diarrhœa, summer cholera, and scarlatina.

Marriages.—87,120 persons were married in the quarter that ended on September 30th; and the marriage rate was 1,502 per cent. on the population, slightly, therefore, below the average. The depression is considerable in London, but in several of the agricultural counties the marriages have increased. In Cornwall, Stafford, Warwick, Lancashire, the West Riding of Yorkshire, and in Monmouthshire, that is, in some of the mineral and manufacturing districts of the kingdom, the marriages have declined. In Brighton, Southampton, Bath, and Clifton, marriages declined; in Cheltenham they increased.

Births.—192,583 births were registered in the three months that ended on September 30th; and the birth-rate, 3.525, is the highest on record in this country. The augmentation is general, and throughout the summer, children have everywhere been born in unusual numbers.

The birth-rate in the great towns was lowest in Bristol 3.35, and Hull 3.340; highest in Sheffield 3.84, and Leeds 3.82.

Increase of Population.—The births exceeded the deaths by 62,101, which represent the natural increase of the population.

52,625 persons emigrated from the Ports of the United Kingdom at which there are Government emigration officers. 19,998 were of English, 4990 of Scotch, and 15,684 of Irish origin ; while 11,953 were foreigners. What deserves remark is the diminished Irish emigration. Of the English emigrants, 14,189 sailed to the United States of America, 2691 to British North America, 2275 to the Australian Colonies, and 843 to other places.

The increase of the population of England proper was at the rate of 675, reduced by 217 emigrants to 458 daily.

Prices, Pauperism, and the Weather.—The average price of wheat was 59s. 1d. a quarter, to which it fell from 71s. 1od. in the quarter that ended in June. Beef by the carcase was $5\frac{5}{8}d$. a pound; the lower quality being $4\frac{1}{2}d$, the higher quality $6\frac{3}{4}d$. a pound. The price has fallen a halfpenny a pound since the summer of 1866. The fall in the price of mutton in the same period was a penny, and for the higher qualities three halfpence a pound. The average price was $5\frac{3}{4}d$. a pound, or for the higher qualities of mutton $6\frac{3}{4}d$. a pound.

The best potatoes were 147s. 6d. a ton at the Waterside Market, Southwark. The price of this necessary of life was more than 50 per cent. higher than the price in the summer of 1866.

The mean temperature of the air at Greenwich for the three months was $63^{\circ}9$; the mean temperature of the water in the Thames was $64^{\circ}9$. Air, water, and earth, as well as their living inhabitants were exposed to heat several degrees above the average. On the 22d day of July the thermometer in the shade rose to $96^{\circ}6$, the highest temperature of the air ever recorded at Greenwich. The whole year through the temperature fluctuated round a line, sustained 3° above the average, by some law which meteorology has not yet brought to light. The winds blew at the rate of ten miles an hour; fogs prevailed on parts of 47 days; several thunderstorks broke over the face of the country in July and August; and remarkable falls of rain occurred on twenty days, but the fall in the aggregate was only $5^{\circ}1$ inches, whereas the average summer fall at Greenwich is $7^{\circ}6$ inches. The mean summer fall of rain is 767 tons to an acre of land, so in the last summer the deficiency was 252 tons an acre.

The year opened with a deluge of 4.2 inches of rain in January; in February and March there was a deficiency; in April the deficiency was made up to some extent; and on the four months taken together there was an excess of 2 inches; then the usual showers fell scantily in May, in June especially, and in July. August saw its usual rain, but in September the supply fell to half the normal amount. The mean rainfall of nine months is 18.5 inches, in the nine months of this year it was 16° o inches, and a deficiency of water was the result.

Water is required by the population of the country for drink and for domestic purposes every day; now as rain falls at intervals it is evident that the constant supply can only be secured by natural, or by artificial storage of the water in rivers, lakes, ponds, under or above ground. At present many of these water reservoirs fall off, or fail altogether, after a certain number of days of drought; and the water supplied is limited in quantity, and often deteriorated in quality, for the constant undiluted impurities become more and more noxious every day to man and beast.

The first lesson of the season is the urgency of providing ample storage for the flood waters about the river heads, and for the rain-fall on houses, so as to equalize the distribution over the days of the year. The second lesson is the necessity of measures for the removal and interment of every kind of fermenting impurity. The diarrheas, choleras, and analogous diseases, which spoil the enjoyment of the finest summers, will then be as rare in those days as the early migrating birds; for, finding nothing to feed upon, they will infest our cities and villages no longer.

The average number of paupers during the summer quarter was 917,833; of whom 138,794 were relieved in the workhouse, 779,039 out of doors. The number exceeded by 44,018 the previous summer average.

Deaths; and the State of the Public Health.—130,482 persons died in England during the quarter, and the annual rate of mortality for that term was 2.388 per cent. This exceeds the summer average of 2.024 by .364 per cent. The average deaths would have numbered 109,544, and the actual deaths were 130,482, or 20,038 in excess.

Fortunately the previous half year had been so favourable to life, that the average mortality of the year to the end of September, with this excess, was below the average of the three seasons; but the gains of winter and spring were sacrificed by the fatality of summer.

Town and country always suffer in very different proportions, for the annual summer average of the country parishes is 17, of the chief town districts 22 to 1000 living. In the last summer these proportions rose to 20 and 26 respectively.

The mortality of some of the great towns was excessively high; in Manchester 38, Salford 36, Leeds 33, Sheffield 33, Liverpool 32, Bradford 31, Hull 30, Birmingham 30, Newcastle-upon-Tyne 27, London 25, Bristol 22. Thus if the country rate put at 20, allowing 3 for the excess due to the intense heat operating on the fermenting impurities of farms and cottages, be taken as the standard, and applied to the great towns, the human sacrifices of life were at the extraordinary annual rates of 2 in Bristol, 5 in London, 7 in Newcastle-upon-Tyne, 10 in Birmingham, 10 in Hull, 11 in Bradford, 12 in Liverpool, 13 in Sheffield, 13 in Leeds, 16 in Salford, and 18 in Manchester. It may be some years before these towns can be recovered from the fatal condition in which their populations are plunged; but no time should be lost; the works that have been commenced by the authorities should everywhere be accelerated, and then in a few years the good effects of improvements would be visible.

Among the districts including towns of smaller magnitude, the following are conspicuous for their summer insalubrity; Portsmouth (annual rate of summer mortality per 1000) 27, Southampton 26, Northampton 28, Yarmouth 34, Norwich 27, Stoke-upon-Trent 29, Wolverhampton 33, Walsall 39, Leicester 35, Nottingham 37, Derby 33, Stockport 34, Macelesfield 30, Wigan 39, Bolton 29, Bury 25, Ashton-under-Lyne 27, Rochdale 27, Preston 33, Halifax 31, Sunderland 27, South Shields 31, Gateshead 31, and Tynemouth 26.

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Cardiff, Merthyr Tydfil, and Swansea deserve to be signalized for their low rates of mortality. They have Health Officers.

Summer cholera prevailed with considerable severity in London, where 267 deaths were ascribed in 13 weeks to this cause. The cases were published in the Weekly Tables in the terms employed by the medical attendants ; such as cholera, cholera infantum, choleraic diarrhœa, English cholera, and in a few cases Asiatic cholera. A few individual cases were of short duration in adults, and were probably undistinguishable in their symptoms from many cases in the epidemic of Asiatic cholera, as it prevailed in the year 1866 ; but the character of the cases as they generally occurred, the diarrhœa, the coincidence of an excessively high temperature, and the general course of the epidemic, left no room to doubt that it was the common summer cholera of Europe. The late Spanish Government, however, chose under this pretext to subject vessels from the United Kingdom to quarantine on and after July 22d, and it does not appear that the restrictions were taken off before the Spanish Government itself had been removed.*

3145 deaths from diarrhœa occurred this summer in London, while the deaths from diarrhœa in the two preceding summers were 2186 in 1867, and 2298 in 1866, when cholera was epidemic. It is probable, as formerly several types of disease were confounded under the name of fever, so it may be now with diarrhœas; some of which may be the result of cholera matter bearing the same relation to the Asiatic matter as cowpock bears to varioloid lymph.

Fatal as diarrheea was in London, it was much more fatal in all the other large towns. Thus 821 deaths from diarrheea were returned in the borough of Birmingham with a population of 352,296; at the high London rate the deaths would not exceed 350. In Liverpool the deaths from diarrheea were 859, Manchester 869, Salford 279, Sheffield 407, Leeds 566, Bristol 157, Bradford 205, Hull 226, Newcastle-upon-Tyne 122, Leicester district 330, Nottingham district 165.

The deaths from diarrhea in Leicester at the high London rate would have been but 90; so that in that district there must exist conditions exceptionably favourable to the diffusion of diarrhea.

Liverpool, Birkenhead, Manchester, Salford, Leeds, and Bristol have now Health Officers, and they, with the Health Officers of London, will, we may hope, have all the assistance they require, to enable them to investigate the course, and remove the flagrant causes of a malady which is so fatal to the population.

Fourth Quarter.—October, November, December.

The United Kingdom.—In the United Kingdom the births of 253,433 children, and the deaths of 158,742 persons of both sexes, were registered in the three months ending on December 31st. The recorded natural increase was 94,691; the native emigrants were 23,872.

The number of persons married in the quarter ending December 31st, 1868, was 127,058.

The death-rate of the Kingdom differs little from that prevailing in England and Wales.

The resident population of the Kingdom in the middle of 1868 is estimated at 30,369,845; that of England and Wales amounting to 21,649,377, of Scotland to 3,188,125, and of Ireland to 5,532,343. The corrected

*A decree inserted on September 1st in the Madrid Gazette contained this passage :--

"Vessels coming from the ports of England will for the present be subjected to three " days quarantine of observation, provided that their bills of health and the occurrences

" on board during the voyage do not excite suspicion." London Gazette, September 11th. Queen Isabella left Spain on September 30th ; on October 14th the Junta of Malaga ordered all quarantines to be taken off. London Gazette, October 16th. death-rate of the quarter is 2.20 per cent.; the birth-rate is 3.51; the marriage-rate for the previous quarter 1.48.

The several facts concerning Scotland and Ireland are recorded in the quarterly reports of the Registrars General of those parts of the Kingdom.

England.—This Return comprises the Births and Deaths registered by 2202 Registrars in all the districts of England during the quarter that ended on December 31st, 1868; and the Marriages in 13,094 churches or chapels, about 5944 registered places of worship unconnected with the Established Church, and 640 Superintendent Registrars' offices.

The weather of the last quarter of the year was in many respects exceptional; no severe frost cut off the aged; and the prices of the necessaries of life fell to their usual standard. The birth-rate increased, and was much above the average, while the mortality was near, but below the average of the season. The English race is multiplying at an unabated velocity, and peopling the world.

Scarlet fever has been epidemical in many parts of the country, where it has proved a fatal scourge.

Marriages.—Marriages are always more numerous in the three months of October, November, and December, than in any of the three preceding quarters of the year. In the last quarter of 1868, 102,786 persons were married, against 106,076 in the corresponding period of 1867. The marriage-rate in the quarter under review was in the very low proportion of 18.76 per 1000 of population per annum, against an average rate of 19.89. It must be inferred, therefore, that the prospects of the working classes, according to their own view, were less bright.

Each of the eleven great divisions of England contributed more or less to the deficiency in the number of marriages in the quarter as compared with the corresponding quarters of 1866 and 1867, except the Northern, where the causes which operated to depress marriage did not prevail. In most of the manufacturing districts the depression of trade sensibly affected the marriage returns.

London exhibits a marked decrease, the number of marriages in the last three autumn quarters having been 9103, 8527, and 8168. In Lancashire the respective numbers were 7464, 6968, and 6721; in Liverpool 1029, 910, and 879; and in the capital of the manufacturing industries of England the numbers were 1295, 1201, and 1180 respectively. Among other districts of Lancashire, in which a considerable decrease is observed, are West Derby, Ashton, Oldham, and Preston.

In York district the marriages in the three autumn quarters of 1866-8 were 208, 196, and 142.

In South Wales the marriages successively declined from 2012 and 1935 to 1824.

Births.—The births of 192,852 children were registered in the last quarter of the year 1868; it is the greatest number that has ever been recorded in England in any autumn quarter. It exceeds by 9708 the births in the autumn quarter of the previous year. The birth rate on the population was 3.521 per cent.; the decennial average of the quarter being 3.347. Thus the registered births increased much more rapidly than the population. In the East and the North the increase was most conspicuous.

Increase of Population.—The natural increase of population is 71,398; this is the excess of births over deaths in 92 days; the daily increase is therefore 776.

Emigration carried off in the 92 days 11,302 emigrants of English origin; or on an average 123 daily. After deducting this number from the natural increase, the daily increase becomes 653. The emigrants of Scottish origin were 2902, of Irish origin 9668; thus the emigration in proportion to population is still greatest in Ireland, least in England; while Scotland, ahead of England, approximates to Ireland. The English emigrants go to the United States, to British North America, and to the Australian Colonies. They constitute more than half of the Australian contingent.

Prices, Pauperism, and the Weather.—The average price of wheat fell from 67s. 11d. in the autumn of 1867 to 51s. 11d. in the last 13 weeks of 1868, and had the price of bread fallen in the same proportion, it would have fallen in the proportion of 8d. to 6d. The best beef, 7d. a lb., was a farthing a lb. dearer than it was at the end of 1867, while the price of inferior beef was stationary at $4\frac{1}{2}d$. a lb. Inferior mutton remained at $4\frac{1}{2}d$.; superior mutton was $6\frac{3}{4}d$. a lb., as well as beef also, a farthing a lb. dearer than it was at the close of 1867. Potatoes, which were dear in the summer, fell to 70s. and 140s. a ton, according to their quality. The wholesale price at Waterside Market, Southwark, was 3s. 6d. and 7s. a hundred weight.

The average number of paupers in the receipt of in-door and out-door relief, respectively, on the last day of each week in the quarter, according to returns furnished by the Poor Law Board, was 152,747 and 795,761.

The weather presented many peculiarities. In the ordinary run of years the temperature after summer declines rapidly through the three last months of the year, at the mean rate of about a degree every six days. In the last three months of the year 1868 the mean temperature of the air fell, it is true, from 47.9° in October, to 41.5° in November; but in December this was reversed, and the mean temperature of the Christmas month was $46.\circ^{\circ}$. The October and November months were colder than their departed brethren of past years, the December was warmer both by day and night. The barometer was low in December; the air contained more vapor, was less stable, and was lighter than usual; the rain-fall was excessive; the wind blew with unusual velocity at the rate of 17 miles an hour; violent gales were experienced towards the close of the month, and pressures of wind were recorded of 30 lbs. on the square foot.

The swallows departed from Eastbourne, on the south coast, on October 6th, and lingered at Osborne, in the Isle of Wight, until November 12th, at Holkham, on the east coast, until November 11th. Woodcocks continued to arrive between October 6th and November 5th.

Deaths; and the State of the Public Health.—120,454 deaths were registered in the last 92 days of the year 1868. The number is less by 10,028 than the numbers in the 92 days of the summer preceding, but exceeds the deaths in the corresponding days of the two previous years.

The annual rate of mortality was 2.199 per cent. per annum, which is a little below the average of the corresponding dates of the ten previous years.

The rate of mortality in the large town districts was 2.42, in the country districts 1.90; in both cases, but chiefly in the towns, below the average.

The number of persons to *ten* acres in town districts was 37.70, in the country districts 2.74; thus the town districts were nearly 14 times as densely peopled as the country districts; the mortality ranging from 2.42 for the towns to 1.90. The mortality rose with the density, but not in the same ratio; without the sanitary arrangements existing in towns it is probable that the mortality would increase with the density in a much greater ratio; and evidently if proper precautions were taken the effects of crowding would be still less remarkable. The 14 great cities and towns of the kingdom, peopled by 6,441,525 inhabitants, experienced a rate of mortality equal to 2.62; and this we know exceeds the rate in the least unhealthy districts of the kingdom by one half, as there the mortality does not exceed 1.70 per cent.

While the average mortality in the 14 great towns was at the annual rate of 26 deaths in 1000 living, it was 21 in Bristol, 21 in Birmingham. 25 in London, 29 in Liverpool, 31 in Manchester, 33 in Salford, 28 in Bradford, 32 in Leeds, 29 in Edinburgh, 33 in Glasgow. When will the north undertake the noble work of saving the lives of the people? Why should industrious, prosperous, and wealthy communities see their people perish year after year at these appalling rates, without trying some radical and effectual measures of reform ? This is not a question of mere opinion, but of life and death ; it is not a question of the day only, but of all time. Shall the town breeds of the north degenerate and die out, or improve and live? There appear to be disputes as to the particular measures to be adopted ; why should not experiments be at once made in various blocks of houses? The water supply is an excellent preliminary, but the sewers must follow. The refuse must be day by day removed from the dwellings, and this the householder cannot himself accomplish in large towns. It is municipal work.

Many places in the south of England have suffered severely from scarlet fever. At Polstead, in Suffolk, 5 children out of a family of 6 died of diphtheria within 18 days. Scarlet fever was particularly fatal in Oswestry, Burslem, Wolverhampton, Sedgeley (Dudley), Carlton (Worksop), Mans-

TABLE 44.—Annual Rate of Mortality per 1000 in Town and Country Districts of England in each Quarter of the Years 1858-1868.

6.87	AREA	Popul	ATION	e toqu	ot 1	NNUA	L RAT	e of M	ORTAI	LITY pe	er 1000	in eacl	Quar	ter of t	he Year	:s '
	in Statute Acres.	1851.	1861.	Quarters ending	1858.	1859.	1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	Mean 1858-67	1868.
In 142 Districts and 56 Sub- districts com- prising the	3,287,151	9,155,964	10,930,841	March June Sept. Dec.	27.57 23.56 22.45 27.24	26.51 22.49 22.84 23.58	26·17 23·16 18·43 22·85	26.58 22.71 21.93 22.91	26°55 22°67 19°84 25°25	27.06 24.70 24.10 24.22	29.80 24.12 23.86 26.15	28*83 23*46 23*88 25*65	29.66 26.39 25.13 24.39	27·23 21·99 22·47 23·92	27 • 60 23 • 53 22 • 49 24 • 62	23.9122.2226.8424.25
CHIEF TOWNSJ	an agus an	1001 99	and the	YEAR	25.21	23.86	22.65	23.53	23.58	25.02	25.98	25.46	26.39	23.90	24*56	24.31
In the remaining	OCO		100 - 1173) 100 - 1183	YEAR	20.77	20.77	19.51	19.38	18.90	20.57	21.07	20.81	20.08	19.54	20.14	19.27
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.	24*97 20*49 17*17 20*44	23.63 20.51 18.84 20.08	23·26 21·48 15·73 17·57	22·10 19·99 17·53 17·90	21.84 19.40 15.72 18.64	23·23 21·00 18·62 19·44	25·12 20·70 18·33 20·14	25°22 20°55 18°24 19°23	22°50 21°71 17°49 18°60	23:16 19:84 16:93 18:21	23*50 20*57 17*46 19*03	20°09 18°03 19°97 19°00

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-district (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-district (Bedford); Luton Sub-district (Luton); Cambridge, West Ham, Colehester, Bury St. Edmunds, Ipswich, Yarmouth, Norwich, King's Lynn, Melksham, Salisbury; Weymouth Sub-district (Weymouth); Exter; Torquay Sub-district (Newton Abbott); Plymouth, East Stonehouse, Stoke Damerel, Truro, Redruth; St. Mary Magdalen and St. James Sub-district (Newton Abbott); Plymouth, East Stonehouse, Stoke Damerel, Turro, Redruth; St. Mary Magdalen, Sherwsbury; Stafford Sub-district (Stafford); districts (Gloucester); Cheltenham; Hereford City Sub-district (Hereford); Madeley, Sherwsbury; Stafford Sub-district (Stafford); Avewcastle-under-Lyme Sub-district (Neweastle-under-Lyme); Wolstanton, Stoke-upon-Trent; Burton-on-Trent Sub-district (Burton-on-Trent); Wolverhampton, Walsall, West Bronwich, Dulley, Stourbridge; Kidderminster and Lower Mitton Sub-districts (Kidderminster); Woreester, Birmingham, Aston, Coventry, Warwick; Loughborough Sub-district (Loughborough); Leieester; Boston Sub-district (Runeorn); Congleton Sub-district (Conceltor); Castle and Meet Macclesfield and Sutton Sub-districts (Maeelesfield); NewarK Sub-district (Runeorn); Congleton Sub-district (Conceltor); Chester Castle and Chester Cathedral Sub-district (Chorley); Preston; Lancaster Sub-district (Lancaster); Keighley, Todomorden, Huddersfield, Halifax, Bradford, Kirkstall, Hunslet, Hobbeek, Bramley, Leeds, Dewsbury, Wakefield, Barnsley, Ecelesall

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.

TABLE 25.—The Average Prices of Consols, of Wheat, of Meat, and of Potatoes, and also the Average Number of Paupers relieved on the *last day* of each Week, in each of the Years and in each Quarter of the Years 1857–1868.

Elimatica	17719	Average	PAU	PERISM.		113 Jul	Average	PRICES	OF	teonia.
radian 199 <u>1)</u> ar 1991)	Average Price of Consols	of WHEAT per Quarter in	Average of PAUPEI on the <i>l</i> each	e Number RS RELIEVED ast day of WEEK.	at Lea Mark BEE	MEAT adenhall ets (by	per lb. and New the Carcas	gate se).	BEST POTAT per Tor Watersidel Southw	oES 1 at Market, ark.
ali timo. Dvorqui	Money).	England and Wales.	In-door.	Out-door.	Range of Prices.	Mean.	Range of Prices.	Mean.	Range of Prices.	Mean.
YEARS. 1857 - 1858 - 1859 - 1860 - 1861 - 1862 - 1863 - 1864 - 1865 - 1866 - 1867 - 1868 -	£ 91 ⁵ / ₈ 97 95 94 92 93 ⁴ / ₂ 93 ⁴ / ₂ 90 ³ / ₂ 90 ³ / ₂ 90 ³ / ₂ 93 ⁴ / ₂ 93 ⁴ / ₂	$\begin{array}{c} s. \ d.\\ 56 \ 5\\ 444 \ 3\\ 43 \ 10\\ 53 \ 3\\ 55 \ 44\\ 40 \ 2\\ 41 \ 9\\ 49 \ 11\\ 64 \ 5\\ 63 \ 9\end{array}$	$\begin{array}{c} 121,669\\ 120,140\\ 110,703\\ 120,603\\ 122,600\\ 130,974\\ 129,934\\ 126,753\\ 127,589\\ 129,914\\ 139,565\\ 148,511 \end{array}$	737,287 751,031 705,590 687,763 720,366 820,953 859,751 788,689 758,199 758,199 736,839 782,390 809,336	$\begin{array}{c} d. \\ 4\frac{1}{4} \\ 4\frac{1}{4} \\ -6\frac{1}{6} \\ 4\frac{1}{4} \\ -6\frac{1}{6} \\ -7\frac{1}{6} \\ -7\frac{1}{6}$	כן כ	d. 7 sta 444-7 sta 444-7 sta 555577764 5555577764 5555577776 84-5555557 84-5555557 84-5555555 94-7 954 95-12 95-10	0. 1849 18 18 18 18 18 18 18 18 18 18 18 18 18	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c} s. d. \\ 121 & 0 \\ 120 & 0 \\ 94 & 0 \\ 132 & 6 \\ 124 & 0 \\ 137 & 0 \\ 100 & 0 \\ 75 & 0 \\ 88 & 0 \\ 89 & 0 \\ 138 & 0 \\ 137 & 6 \\ 137 & 6 \\ \end{array}$
QUARTERS ending	1004.870 1 910	147 20 to 100	y to 10	velanti) Merenali	telayba lo alta		on gurano	14641	177, 1000 174 - 1	annd M
March - June - Sept Dec	931 933 938 907 897 891	$\begin{array}{ccc} 56 & 10 \\ 56 & 9 \\ 59 & 11 \\ 52 & 0 \end{array}$	$\begin{array}{r} 135,121 \\ 119,241 \\ 109,371 \\ 122,942 \end{array}$	777,426 732,284 702,644 736,794	$\begin{array}{c} 4\frac{1}{2}-6\frac{3}{4}\\ 4\frac{1}{4}-6\frac{1}{2}\\ 4\frac{1}{4}-6\frac{1}{2}\\ 4\frac{1}{4}-6\frac{1}{2}\\ 4\frac{1}{4}-6\frac{1}{2} \end{array}$	555555 55555	$\begin{array}{c} 5\frac{1}{4}-7\frac{1}{4}\\ 4\frac{3}{4}-6\frac{3}{4}\\ 4\frac{1}{2}-7\\ 4\frac{1}{2}-7\\ 4\frac{1}{2}-7\end{array}$	64348484 5555	$\begin{array}{r} 100 - 120 \\ 105 - 150 \\ 95 - 115 \\ 130 - 150 \end{array}$	110 0 127 6 105 0 140 0
March - June - Sept Dec	9618 9718 9613 9814	$\begin{array}{ccc} 46 & 5 \\ 44 & 1 \\ 44 & 7 \\ 41 & 9 \end{array}$	138,376 119,234 107,197 115,751	835,641 752,278 705,301 710,904	$\begin{array}{c} 4\frac{1}{4} - 6\frac{1}{4} \\ 4\frac{1}{4} - 6 \\ 4\frac{1}{4} - 6\frac{1}{4} \\ 4 - 6\frac{1}{2} \end{array}$	555555 55555	$\begin{array}{c} 4\frac{3}{4}-7\\ 4\frac{1}{2}-6\frac{1}{2}\\ 4\frac{1}{2}-6\frac{1}{2}\\ 4\frac{1}{2}-6\frac{3}{4}\\ 4\frac{1}{4}-6\frac{3}{4}\end{array}$	5 5 5 5 5	$\begin{array}{r} 130 - 175 \\ 140 - 185 \\ 65 - 90 \\ 80 - 95 \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$
March - June - Sept Dec	$\begin{array}{c} 95\frac{5}{8} \\ 92\frac{7}{8} \\ 95\frac{3}{8} \\ 96\frac{1}{8} \end{array}$	$\begin{array}{ccc} 40 & 8 \\ 47 & 3 \\ 44 & 0 \\ 43 & 4 \end{array}$	$\begin{array}{r} 123,071 \\ 109,350 \\ 100,770 \\ 109,623 \end{array}$	743,517 710,968 -683,423 684,454	$\begin{array}{c} 4\frac{3}{4} - 6\frac{3}{4} \\ 4\frac{3}{4} - 6\frac{1}{2} \\ 4\frac{1}{4} - 6\frac{1}{4} \\ 4 - 6\frac{1}{2} \end{array}$	CT CT CT Pi-Pi-Sonela	$\begin{array}{c} 4\frac{3}{4}-7\\ 5 -7\\ 4\frac{3}{4}-6\frac{3}{4}\\ 4\frac{3}{4}-6\frac{3}{4} \end{array}$	578 65434 5434	$\begin{array}{c c} 80 - 100 \\ 85 - 110 \\ 65 - 105 \\ 85 - 120 \end{array}$	$\begin{array}{c} 90 & 0 \\ 97 & 6 \\ 85 & 0 \\ 102 & 6 \end{array}$
1860 : June - Sept Dec	$\begin{array}{c} 94\frac{5}{8} \\ 94\frac{7}{8} \\ 93\frac{1}{4} \\ 93\frac{1}{4} \\ 93\frac{1}{4} \end{array}$	$\begin{array}{cccc} 44 & 5 \\ 52 & 8 \\ 59 & 1 \\ 56 & 9 \end{array}$	$\begin{array}{r} 118,523 \\ 107,050 \\ 101,680 \\ 115,161 \end{array}$	717,269 692,384 667,680 673,721	$\begin{array}{c} 3\frac{3}{4} - 6\frac{1}{2} \\ 4\frac{3}{4} - 6\frac{3}{4} \\ 4\frac{1}{4} - 7 \\ 3\frac{1}{2} - 6\frac{1}{4} \end{array}$	1003450010 55555	$\begin{array}{c} 4\frac{3}{4} - 6\frac{3}{4} \\ 5\frac{1}{2} - 7\frac{1}{2} \\ 5\frac{1}{4} - 7\frac{1}{2} \\ 4\frac{3}{4} - 6\frac{3}{4} \end{array}$	54112 Blood	$115 - 145 \\ 125 - 160 \\ 125 - 145 \\ 115 - 130$	$\begin{array}{c} 130 \ 0 \\ 142 \ 6 \\ 135 \ 0 \\ 122 \ 6 \end{array}$
1861 : June - Sept Dec	$\begin{array}{c} 91\frac{3}{4} \\ 91\frac{3}{4} \\ 91\frac{3}{8} \\ 91\frac{3}{8} \\ 93\frac{1}{4} \end{array}$	$\begin{array}{cccc} 55 & 1 \\ 54 & 9 \\ 52 & 1 \\ 59 & 3 \end{array}$	131,138 117,801 112,930 128,533	757,950 713,786 693,631 716,096	$\begin{array}{c} 4 & -6\frac{1}{4} \\ 4\frac{1}{4} & -6\frac{1}{2} \\ 4\frac{1}{4} & -6\frac{1}{2} \\ 4 & -6\frac{1}{4} \\ 4 & -6\frac{1}{4} \end{array}$	CT CT CT CT sirolasicsir	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	500-144 70034	$140-155 \\ 120-140 \\ 85-110 \\ 110-130$	$\begin{array}{c} 147 \ 6 \\ 130 \ 0 \\ 97 \ 6 \\ 120 \ 0 \end{array}$
March - June - Sept Dec	9318 9324 934 934 935	$\begin{array}{ccc} 60 & 1 \\ 56 & 8 \\ 56 & 10 \\ 48 & 2 \end{array}$	$\begin{array}{r} 143,772\\ 127,861\\ 119,600\\ 132,663\end{array}$	804,268 782,113 789,917 907,514	$\begin{array}{c} 4 &6\frac{1}{4} \\ 4 &6 \\ 4\frac{1}{4} &6\frac{1}{4} \\ 4 &6\frac{1}{4} \end{array}$	518 5 1418 5 5	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$5\frac{5}{8}$ 6 $6\frac{1}{8}$ 6	130-155180-200100-13090-110	$\begin{array}{c} 142 \ 6 \\ 190 \ 0 \\ 115 \ 0 \\ 100 \ 0 \end{array}$
March - June - Sept Dec	92 ¹ / ₃ 93 ¹ / ₈ 93 92 ⁷ / ₈	$\begin{array}{cccc} 46 & 7 \\ 46 & 2 \\ 45 & 7 \\ 40 & 6 \end{array}$	$\begin{array}{r} 142,257\\ 127,063\\ 120,343\\ 130,072 \end{array}$	943,324 873,503 817,238 804,940	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	51814818 5518 5518 5518	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6 5434 54 6	$\begin{array}{c} 120 - 130 \\ 110 - 130 \\ 70 - 105 \\ 60 - 80 \end{array}$	$\begin{array}{c} 125 & 0 \\ 120 & 0 \\ 87 & 6 \\ 70 & 0 \end{array}$
March - June - Sept Dec	91 91 ¹ / ₂ 89 ¹ / ₅ 89 ⁵ / ₈	$\begin{array}{cccc} 40 & 4 \\ 39 & 7 \\ 42 & 3 \\ 38 & 5 \end{array}$	139,606 122,883 116,198 128,326	855,776 786,863 740,210 771,908	$\begin{array}{c} 4\frac{1}{2} - 6\frac{1}{2} \\ 4\frac{1}{4} - 6\frac{1}{4} \\ 4\frac{1}{2} - 6\frac{1}{2} \\ 4\frac{1}{2} - 6\frac{1}{2} \\ 4\frac{1}{2} - 7 \end{array}$	CT CT CT CT	$\begin{array}{c} 5\frac{1}{2}-7\\ 5\frac{1}{4}-7\\ 5\frac{1}{4}-7\\ 5\frac{1}{4}-7\\ 5\frac{1}{4}-7\frac{1}{4}\end{array}$	614 618 614 64 64	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 62 & 6 \\ 50 & 0 \\ 100 & 0 \\ 87 & 6 \end{array}$
March - June - Sept Dec	89 <u>\$</u> 90 <u>8</u> 89 <u>8</u> 88 <u>\$</u>	$\begin{array}{cccc} 38 & 4 \\ 40 & 6 \\ 43 & 3 \\ 44 & 10 \end{array}$	$\begin{array}{r} 140,517\\ 123,760\\ 117,221\\ 128,858 \end{array}$	819,898 768,496 719,611 724,792	$\begin{array}{c} 4\frac{1}{2} - 7 \\ 4\frac{3}{4} - 6\frac{3}{4} \\ 4\frac{1}{2} - 7 \\ 4\frac{1}{4} - 7 \end{array}$	201 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1 C1	$\begin{array}{c c} 5\frac{1}{4} & -7\frac{1}{4} \\ 6\frac{1}{4} & -8\frac{1}{2} \\ 6\frac{1}{4} & -8\frac{3}{4} \\ 6\frac{1}{4} & -8\frac{3}{4} \\ 5\frac{1}{2} & -8\frac{1}{4} \end{array}$	614 738 727 8	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{array}{c} 91 & 0 \\ 102 & 6 \\ 85 & 0 \\ 75 & 0 \end{array}$
March - June - Sept Dec	87 86 <u>*</u> 88 <u>*</u> 89*	$\begin{array}{cccc} 45 & 6 \\ 46 & 6 \\ 51 & 0 \\ 56 & 8 \end{array}$	$\begin{array}{r} 139,541 \\ 125,044 \\ 120,985 \\ 134,086 \end{array}$	759,400 734,748 717,555 735,654	$\begin{array}{c} 4\frac{1}{2} - 6\frac{3}{4} \\ 4\frac{3}{4} - 7 \\ 5\frac{1}{4} - 7\frac{1}{4} \\ 4\frac{3}{4} - 7 \end{array}$	5587818718718718 5 5 6 5	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 6\frac{5}{8} \\ 7 \\ 6\frac{3}{4} \\ 6\frac{3}{8} \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccc} 72 & 6 \\ 77 & 6 \\ 97 & 6 \\ 107 & 6 \end{array}$
March - June - Sept Dec	$\begin{array}{c} 90\frac{7}{8} \\ 92\frac{4}{8} \\ 94\frac{4}{8} \\ 94\frac{3}{3} \end{array}$	$\begin{array}{c} 60 & 7 \\ 63 & 11 \\ 65 & 4 \\ 67 & 11 \end{array}$	148,280 134,233 129,860 145,886	834,681 779,158 743,965 771,754	$\begin{array}{c} 4\frac{3}{4} - 7 \\ 4\frac{3}{4} - 6\frac{3}{4} \\ 4\frac{3}{4} - 6\frac{3}{4} \\ 4\frac{3}{4} - 6\frac{3}{4} \\ 4\frac{1}{2} - 6\frac{3}{4} \end{array}$	CT CT CT CT CT CT CT CT CITHICAHICARIA	$\begin{vmatrix} 5 & -7\frac{1}{4} \\ 5\frac{1}{4} & -7\frac{1}{4} \\ 5 & -7 \\ 4\frac{1}{2} & -6\frac{1}{2} \end{vmatrix}$	$\begin{array}{c} 6\frac{1}{8} \\ 6\frac{1}{4} \\ 6 \\ 5\frac{1}{2} \end{array}$	$\begin{array}{c} 115 - 160 \\ 135 - 175 \\ 100 - 155 \\ 110 - 155 \end{array}$	$\begin{array}{c} 137 \cdot 6 \\ 155 \cdot 0 \\ 127 \cdot 6 \\ 132 \cdot 6 \end{array}$
March - June - Sept Dec	$\begin{array}{c} 93 \\ 94\frac{3}{8} \\ 94\frac{2}{8} \\ 94\frac{3}{8} \\ 94\frac{3}{8} \end{array}$	$\begin{array}{c cccc} 72 & 2 \\ 71 & 10 \\ 59 & 1 \\ 51 & 11 \end{array}$	$\begin{array}{r} 159,720\\ 142,782\\ 138,794\\ 152,747\end{array}$	861,044 801,500 779,039 795,761	$\begin{array}{c c} 4\frac{1}{4} - 6\frac{1}{2} \\ 4\frac{1}{2} - 6\frac{3}{4} \\ 4\frac{1}{2} - 6\frac{3}{4} \\ 4\frac{1}{2} - 7 \\ 4\frac{1}{2} - 7 \end{array}$	01 01 01 0 8 28 98 98 8	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	555555555 5555555555555555555555555555	$\begin{array}{r} 125 - 170 \\ 130 - 170 \\ 120 - 175 \\ 70 - 140 \end{array}$	$\begin{array}{c} 147.6 \\ 150.0 \\ 147.6 \\ 105.0 \end{array}$

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field, Basford, and Derby. The mortality in Derby was at the rate of 30 in 1000, in Stockport 29, and chiefly from this cause. The Lancashire districts and the Yorkshire districts suffered severely from scarlet fever. It would be satisfactory to learn that the precautions adopted in Bristol have been carried out in all these great towns. At Dairycoates, near Hull, great complaint is made of an open sewer belonging to the North-eastern Railway Company. In the sub-district of Easington, Durham, 134 deaths from scarlet fever were registered. In Cockermouth 13 deaths from scarlet fever are recorded, in Maryport 35.

scarlet fever are recorded, in Maryport 35. Some general measure for dealing with this and other allied, selfpropagating zymotic diseases is required. Dr. Ballard, Dr. Druitt, and Dr. Budd have suggested measures well worthy of consideration.

In November, a vessel full of German emigrants put into Plymouth much disabled; during her short detention 13 deaths occurred on board, 5 of them from enteric fever. When will Germany adopt measures to secure her emigrants against the evils which have been to some extent corrected by legislation in England?

6.546.6

TABLE 46.— 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 1868.

	Average	ANNUAL RAT	E of MORTAL	TTY to 1000 L	IVING in the Y	ZEAR 1868.
DIVISIONS.	10 Years 1851–60.	Year:	Winter Quarter.	Spring Quarter.	Summer Quarter.	Autumn Quarter.
L LONDON	23.63	23.57	23.29	21.88	24.58	24.52
II. SOUTH EASTERN COUNTIES -	19.55	18.91	19.14	17.01	21.18	18.31
III. SOUTH MIDLAND COUNTIES -	20.44	19.81	20.01	17.13	- 23.08	19.00
IV. EASTERN COUNTIES	20.58	19.57	19.43	18.02	21.48	19.31
V. SOUTH WESTERN COUNTIES -	20.01	18.12	20'21	16.94	17.04	18.29
VI. WEST MIDLAND COUNTIES -	22.35	21.02	21.31	19.19	23.29	20.39
VII. NORTH MIDLAND COUNTIES -	21.10	21.26	20.29	19.89	24.09	20.48
VIII. NORTH WESTERN COUNTIES -	25.51	26.14	26.31	23.92	28.80	25.54
IX. YORKSHIRE	23.09	24.66	22.53	22.51	27.99	25.60
X. NORTHERN COUNTIES	21.99	24.12	24.80	21.95	25.35	24.39
XI. MONMOUTHSHIRE AND WALES	21.28	19.70	22'12	19.89	18.45	18'35

Note.-The above mortality for the year 1868 is the mean of the quarterly rates.

REMARKS on the METEOROLOGY of 1868. By JAMES GLAISHER, Esq., F.R.S., &c., Secretary of the Meteorological Society.

The year 1868 will be recorded in the annals of meteorology, as one of the most remarkable with respect to long continuance of high temperature, to the unusual distribution of rain, and to the early season of vegetation generally. Besides the extraordinary heat, the year was remarkable for the small number of thunder and hail storms, usually the accompaniment of great heat; also for the heavy falls of rain in the months of January and December, and very small amounts in all the other parts of the year, excepting April, as well as for the unusual prevalence of the west wind. The annual means of the several elements, at the several stations between Guernsey and Culloden, are shown in the following Table :--

	e the	.zisti	Baron	neter.	bory	I	hermo	meter.	193	- 11-12	Me Tempe	ean erature	
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.	
Guernsey	feet. 204	0 / // 49 27 30 N.	in. 29·776	in. 1'041	0 65*3	0 41.2	0 23`8	0 57•3	0 48·4	0 8•9	0 51.6	0 47•2	
Helston - - - Truro - - - - Sidmouth - - - - Eastbourne - - - - Osborne - - - - Bournemouth - - - - Worthing - - - -	$ \begin{array}{r} 106 \\ 43 \\ 30 \\ 12 \\ 172 \\ 128 \\ 81 \end{array} $	50 7 0 50 17 0 50 40 40 50 44 0 50 45 20 50 49 0	$\begin{array}{c} 29\cdot903\\ 29\cdot941\\ 29\cdot947\\ 29\cdot947\\ 29\cdot975\\ 29\cdot803\\ 29\cdot850\\ 29\cdot940\\ \end{array}$	1°157 1°148 1°143 1°053 1°110 1°152 	$70.0 \\ 68.7 \\ 66.3 \\ 69.3 \\ 73.5 \\ 67.8 \\ 66.7 \\ $	$\begin{array}{c} 39 \cdot 1 \\ 33 \cdot 8 \\ 36 \cdot 3 \\ 35 \cdot 9 \\ 34 \cdot 6 \\ 35 \cdot 1 \\ 36 \cdot 4 \end{array}$	30 · 9 34 · 9 30 · 0 33 · 4 38 · 9 32 · 7 30 · 3	61°0 60°4 59°3 59°5 62°6 59°1 58°3	$\begin{array}{r} 48 \cdot 7 \\ 46 \cdot 5 \\ 45 \cdot 1 \\ 45 \cdot 5 \\ 43 \cdot 4 \\ 45 \cdot 2 \\ 46 \cdot 3 \end{array}$	$12 \cdot 3 \\ 13 \cdot 9 \\ 14 \cdot 2 \\ 14 \cdot 0 \\ 19 \cdot 2 \\ 13 \cdot 9 \\ 12 \cdot 0$	53.6 52.7 51.2 52.5 52.1 51.4 51.7	$\begin{array}{r} 47 \cdot 9 \\ 48 \cdot 6 \\ 46 \cdot 0 \\ 46 \cdot 4 \\ 48 \cdot 2 \\ 45 \cdot 2 \\ 47 \cdot 3 \end{array}$	
Wilton House Barnstaple Tunbridge Wells Aldershot Camp Strathfield Turgiss Weybridge Heath Bath Marlborough College Marlborough College Streatley Vicarage London (Marylebone) - London (Camden Town) - Oxford Gloucester	$\begin{array}{c} 150\\ 43\\ 410\\ 325\\ 197\\ 150\\ 86\\ 456\\ 159\\ 150\\ 146\\ 100\\ 210\\ 100\\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	29.775 29.917 29.531 29.566 29.769 29.836 29.869 29.488 29.706 29.829 29.821 29.830 29.721 29.866	$\begin{array}{c} 1\cdot 161 \\ 1\cdot 191 \\ 1\cdot 109 \\ 1\cdot 115 \\ 1\cdot 188 \\ 1\cdot 062 \\ 1\cdot 210 \\ 1\cdot 193 \\ 1\cdot 190 \\ 1\cdot 160 \\ 1\cdot 171 \\ 1\cdot 155 \\ 1\cdot 177 \\ 1\cdot 271 \end{array}$	$\begin{array}{c} 73.6\\ 69.7\\ 71.5\\ 72.2\\ 73.5\\ 72.7\\ 70.6\\ 71.4\\ 73.1\\ 70.1\\ 73.3\\ 73.0\\ 70.7\\ 71.7\end{array}$	$\begin{array}{c} 28 \cdot 5 \\ 36 \cdot 5 \\ 32 \cdot 9 \\ 30 \cdot 5 \\ 31 \cdot 4 \\ 33 \cdot 3 \\ 29 \cdot 0 \\ 34 \cdot 3 \\ 31 \cdot 2 \\ 35 \cdot 1 \\ 34 \cdot 6 \\ 32 \cdot 1 \\ 33 \cdot 2 \end{array}$	$\begin{array}{c} 45^{\circ}1\\ 33^{\circ}2\\ 37^{\circ}0\\ 39^{\circ}3\\ 43^{\circ}0\\ 41^{\circ}3\\ 37^{\circ}3\\ 42^{\circ}4\\ 38^{\circ}8\\ 38^{\circ}9\\ 38^{\circ}2\\ 38^{\circ}4\\ 38^{\circ}6\\ 38^{\circ}5\\ \end{array}$	$\begin{array}{c} 62^{\circ}4\\ 60^{\circ}2\\ 59^{\circ}4\\ 60^{\circ}8\\ 61^{\circ}4\\ 60^{\circ}7\\ 59^{\circ}6\\ 58^{\circ}3\\ 61^{\circ}1\\ 59^{\circ}5\\ 61^{\circ}4\\ 61^{\circ}1\\ 59^{\circ}6\\ 60^{\circ}8\\ \end{array}$	$\begin{array}{c} 40^{\circ}0\\ 46^{\circ}3\\ 44^{\circ}1\\ 42^{\circ}7\\ 42^{\circ}5\\ 42^{\circ}6\\ 44^{\circ}3\\ 41^{\circ}1\\ 43^{\circ}5\\ 40^{\circ}5\\ 45^{\circ}8\\ 43^{\circ}9\\ 43^{\circ}5\\ 44^{\circ}6\end{array}$	$\begin{array}{c} 22^{\circ}4\\ 13^{\circ}9\\ 15^{\circ}3\\ 18^{\circ}1\\ 18^{\circ}9\\ 18^{\circ}1\\ 15^{\circ}3\\ 17^{\circ}6\\ 19^{\circ}0\\ 15^{\circ}6\\ 17^{\circ}2\\ 16^{\circ}1\\ 16^{\circ}2\\ \end{array}$	50.5 52.8 51.0 51.2 51.1 50.7 51.8 49.1 51.5 50.6 52.7 52.0 51.5 52.6	$\begin{array}{c} 45 \cdot 4 \\ 45 \cdot 9 \\ 44 \cdot 1 \\ 44 \cdot 8 \\ 45 \cdot 2 \\ 44 \cdot 2 \\ 45 \cdot 1 \\ \cdot \\ \cdot \\ 44 \cdot 8 \\ 44 \cdot 0 \\ 44 \cdot 9 \\ 44 \cdot 8 \\ 45 \cdot 2 \\ 46 \cdot 0 \end{array}$	
Royston - </td <td>269 100 420 42 14 100 181 174 241 39 20</td> <td>$\begin{array}{cccccccccccccccccccccccccccccccccccc$</td> <td>29.683 29.849 29.538 29.916 29.792 29.735 29.708 29.657 29.892 29.882</td> <td>$\begin{array}{c} 1\cdot 202\\ 1\cdot 224\\ 1\cdot 283\\ 1\cdot 184\\ 1\cdot 206\\ 1\cdot 353\\ 1\cdot 243\\ 1\cdot 259\\ 1\cdot 214\\ 1\cdot 216\\ 1\cdot 349\end{array}$</td> <td>73.872.971.570.072.571.170.870.973.270.172.2</td> <td>$\begin{array}{c} 32^{\circ}3\\ 31^{\circ}8\\ 28^{\circ}9\\ 36^{\circ}1\\ 34^{\circ}0\\ 37^{\circ}1\\ 34^{\circ}7\\ 33^{\circ}7\\ 31^{\circ}2\\ 33^{\circ}1\\ 34^{\circ}7\\ \end{array}$</td> <td>$\begin{array}{c} 41 \cdot 5 \\ 41 \cdot 1 \\ 42 \cdot 6 \\ 33 \cdot 9 \\ 38 \cdot 5 \\ 34 \cdot 0 \\ 36 \cdot 1 \\ 37 \cdot 2 \\ 42 \cdot 0 \\ 37 \cdot 0 \\ 37 \cdot 5 \end{array}$</td> <td>$\begin{array}{c} 61 \cdot 1 \\ 60 \cdot 5 \\ 60 \cdot 2 \\ 58 \cdot 3 \\ 60 \cdot 3 \\ 58 \cdot 6 \\ 58 \cdot 1 \\ 59 \cdot 1 \\ 60 \cdot 5 \\ 57 \cdot 9 \\ 59 \cdot 2 \end{array}$</td> <td>$\begin{array}{c} 43 \cdot 1 \\ 42 \cdot 6 \\ 41 \cdot 2 \\ 44 \cdot 3 \\ 43 \cdot 5 \\ 45 \cdot 7 \\ 44 \cdot 8 \\ 48 \cdot 7 \\ 41 \cdot 7 \\ 43 \cdot 9 \\ 44 \cdot 3 \end{array}$</td> <td>$\begin{array}{c} 18 \cdot 0 \\ 17 \cdot 9 \\ 19 \cdot 0 \\ 14 \cdot 0 \\ 16 \cdot 8 \\ 12 \cdot 9 \\ 13 \cdot 3 \\ 15 \cdot 4 \\ 18 \cdot 8 \\ 14 \cdot 0 \\ 14 \cdot 9 \end{array}$</td> <td>$51^{2}2$ $51^{5}49^{9}9$ $50^{9}9$ $51^{5}51^{6}6$ $50^{6}6$ $51^{1}1$ $50^{3}3$ $50^{4}4$ $51^{3}3$</td> <td>$\begin{array}{c} 44 \cdot 0 \\ 43 \cdot 5 \\ 43 \cdot 8 \\ 43 \cdot 7 \\ 45 \cdot 1 \\ 44 \cdot 8 \\ 44 \cdot 0 \\ 42 \cdot 0 \\ 44 \cdot 8 \\ 43 \cdot 2 \\ 44 \cdot 6 \end{array}$</td> <td></td>	269 100 420 42 14 100 181 174 241 39 20	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	29.683 29.849 29.538 29.916 29.792 29.735 29.708 29.657 29.892 29.882	$\begin{array}{c} 1\cdot 202\\ 1\cdot 224\\ 1\cdot 283\\ 1\cdot 184\\ 1\cdot 206\\ 1\cdot 353\\ 1\cdot 243\\ 1\cdot 259\\ 1\cdot 214\\ 1\cdot 216\\ 1\cdot 349\end{array}$	73.872.971.570.072.571.170.870.973.270.172.2	$\begin{array}{c} 32^{\circ}3\\ 31^{\circ}8\\ 28^{\circ}9\\ 36^{\circ}1\\ 34^{\circ}0\\ 37^{\circ}1\\ 34^{\circ}7\\ 33^{\circ}7\\ 31^{\circ}2\\ 33^{\circ}1\\ 34^{\circ}7\\ \end{array}$	$\begin{array}{c} 41 \cdot 5 \\ 41 \cdot 1 \\ 42 \cdot 6 \\ 33 \cdot 9 \\ 38 \cdot 5 \\ 34 \cdot 0 \\ 36 \cdot 1 \\ 37 \cdot 2 \\ 42 \cdot 0 \\ 37 \cdot 0 \\ 37 \cdot 5 \end{array}$	$\begin{array}{c} 61 \cdot 1 \\ 60 \cdot 5 \\ 60 \cdot 2 \\ 58 \cdot 3 \\ 60 \cdot 3 \\ 58 \cdot 6 \\ 58 \cdot 1 \\ 59 \cdot 1 \\ 60 \cdot 5 \\ 57 \cdot 9 \\ 59 \cdot 2 \end{array}$	$\begin{array}{c} 43 \cdot 1 \\ 42 \cdot 6 \\ 41 \cdot 2 \\ 44 \cdot 3 \\ 43 \cdot 5 \\ 45 \cdot 7 \\ 44 \cdot 8 \\ 48 \cdot 7 \\ 41 \cdot 7 \\ 43 \cdot 9 \\ 44 \cdot 3 \end{array}$	$\begin{array}{c} 18 \cdot 0 \\ 17 \cdot 9 \\ 19 \cdot 0 \\ 14 \cdot 0 \\ 16 \cdot 8 \\ 12 \cdot 9 \\ 13 \cdot 3 \\ 15 \cdot 4 \\ 18 \cdot 8 \\ 14 \cdot 0 \\ 14 \cdot 9 \end{array}$	$51^{2}2$ $51^{5}49^{9}9$ $50^{9}9$ $51^{5}51^{6}6$ $50^{6}6$ $51^{1}1$ $50^{3}3$ $50^{4}4$ $51^{3}3$	$\begin{array}{c} 44 \cdot 0 \\ 43 \cdot 5 \\ 43 \cdot 8 \\ 43 \cdot 7 \\ 45 \cdot 1 \\ 44 \cdot 8 \\ 44 \cdot 0 \\ 42 \cdot 0 \\ 44 \cdot 8 \\ 43 \cdot 2 \\ 44 \cdot 6 \end{array}$	
Hawarden - - - Eccles - - - Halifax - - - Hull - - - Stonyhurst - - - Leeds - - - Otley - - - York - - -	$270 \\ 145 \\ 660 \\ 10 \\ 381 \\ \vdots \\ 205 \\ 50 \\ 50$	53 11 0 53 29 12 53 45 0 53 50 40 53 54 22 53 58 0	29°619 29°756 29°186 29°897 29°475 29°603 29°646 29°811	$1^{\cdot}353$ $1^{\cdot}274$ $1^{\cdot}360$ $1^{\cdot}381$ $1^{\cdot}333$ $1^{\cdot}350$ $1^{\cdot}355$ $1^{\cdot}345$	$\begin{array}{c} 68.9\\ 71.5\\ 66.9\\ 69.4\\ 68.9\\ 73.0\\ 66.4\\ 68.8\end{array}$	37 ⁴ 31 ⁸ 31 ⁶ 29 ⁸ 32 ¹ 33 ⁹ 35 ⁶ 32 ⁹	31.5 39.7 35.3 39.6 36.8 39.1 30.8 35.9	$57.8 \\ 58.3 \\ 54.0 \\ 57.2 \\ 57.2 \\ 60.1 \\ 55.7 \\ 56.5 $	46°7 42°8 41°8 40°9 43°0 43°0 43°0 44°8 43°4	$\begin{array}{c} 11 \cdot 1 \\ 15 \cdot 5 \\ 12 \cdot 2 \\ 16 \cdot 3 \\ 14 \cdot 2 \\ 17 \cdot 1 \\ 10 \cdot 9 \\ 13 \cdot 1 \end{array}$	50.8 49.9 47.2 48.8 49.0 51.4 49.3 49.4	$\begin{array}{r} 44.5 \\ 43.1 \\ 43.2 \\ 43.3 \\ 43.8 \\ 45.5 \\ 42.8 \\ 45.1 \end{array}$	
Ripon – – – – – Cockermouth – – – Allenheads – – – – Silloth – – – – Carlisle – – – – Bywell – – – –	146 150 1360 28 114 87	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	29.744 29.713 28.392 29.819 29.755 29.750	$1.396 \\ 1.472 \\ 1.360 \\ 1.442 \\ 1.465 \\ 1.419$	71 ^{.3} 67 ^{.8} 62 ^{.6} 68 ^{.7} 68 ^{.8} 70 ^{.7}	29·9 31·8 28·2 32·1 29·7	$\begin{array}{c} 41 \cdot 4 \\ 36 \cdot 0 \\ 34 \cdot 4 \\ 36 \cdot 6 \\ 39 \cdot 1 \\ \end{array}$	$58 \cdot 7$ $57 \cdot 0$ $52 \cdot 0$ $57 \cdot 5$ $57 \cdot 4$ $58 \cdot 6$	$\begin{array}{c} 41 \cdot 2 \\ 44 \cdot 1 \\ 39 \cdot 6 \\ 43 \cdot 9 \\ 42 \cdot 0 \\ 42 \cdot 8 \end{array}$	$ \begin{array}{r} 17 \cdot 5 \\ 12 \cdot 9 \\ 12 \cdot 4 \\ 13 \cdot 6 \\ 15 \cdot 4 \\ 15 \cdot 8 \end{array} $	49·4 49·7 44·8 49·7 49·1 49·4	41.6 42.9 39.7 44.2 45.1 41.4	
North Shields	124	55 0 7	29.798	1.416	66.9	34*2	32.7	55.2	43.3	11.9	48.3	41.6	
Miltown (Ireland)	200	54 23 0	29.626	1.453	66.7	30.7	36.0	56.2	42.2	14.3	48.6	42.9	
Culloden (Scotland)	104	57 29 51	29.642	1.550	64.0	35.3	28.7	52.9	43.5	9.4	47.8	42.5	1

TABLE 47.-Mean Annual Value of Meteorological Elements

The results as shown in Table 44 are so uniform at all stations, that the discussion of the observations made at any one place bear a value which would not otherwise exist if this uniformity did not prevail. I therefore think it likely that the leading particulars shown from the daily observations at the Royal Observatory, will be applicable generally over the country, so far as excess or deficiency above or below the average, as applied to the character of the year.

Temperature.-At Greenwich the year 1868 was ushered in with cold weather, which lasted till the 11th of January, the wind being generally from the N.E. On the 12th day a change was experienced, the wind veered to the S.W., and the temperature increased and passed above the average, and continued so for the most part till the end of September. From the end of September to the beginning of December (with the exception of the first week in November) the mean daily temperature was

in the Year 1868. By JAMES GLAISHER, Esq., F.R.S.

1	Jo	r in	t of atu-	ty of 00).	ubic	ouried	1	Wind.	1	una la	usit -	Rai	n.	1.12	
	Mean Elastic Force Vapour.	Mean Weight of Vapou a Cubic Foot of Air.	Mean additional Weigh Vapour required for S ration.	Mean degree of Humidi the Air (Saturation=1	Mean Weight of a C Foot of Air.	Mean estimated Strength.	Relat	ive Pr E.	oportio S.	w.	Mean Amount of Cloud (0-10).	Number of Days it fell.	Amount collected.	which are not not seen and	NAMES of STATIONS.
-	in. :331	grs. 3'8	gr. 0'6	86	grs. 539	1.2	94	68	90	114	4.6	days. 177	in. 34 [.] 7	Gue	ernsey.
	*340 *353 *318 *326 *348 *309 *343	3·8 4·0 3·6 3·7 3·9 3·5 3·9	0'9 0'7 0'8 1'0 0'7 0'9 0'7	82 86 83 80 87 80 85	539 541 543 542 538 541 542	$2^{\cdot 4} \\ 2^{\cdot 1} \\ 1^{\cdot 4} \\ 0^{\cdot 7} \\ 1^{\cdot 1} \\ 1^{\cdot 4} \\ 1^{\cdot 4}$	77 110 90 70 83 77	73 68 49 68 71 64	70 66 70 104 92 95	146 122 157 124 120 130	5.8 6.5 3.2 5.5 4.4 4.2	176 193 173 158 139 164 139	$\begin{array}{c} 36.5 \\ 45.0 \\ 31.8 \\ 29.1 \\ 32.8 \\ 35.4 \\ 24.2 \end{array}$	Hel Tru Sidu Eas Osb Bou Wo	ston. ro. nouth. tbourne. orne. urnemouth. rthing.
	*313 *318 *299 *307 *308 *300 *310	3.6 3.6 3.4 3.5 3.5 3.5 3.4 3.5	0.8 1.1 1.1 1.0 1.0 1.0 0.9	83 78 79 82 79 80	$540 \\ 540 \\ 536 \\ 536 \\ 540 \\ 541 \\ 541 \\ 541$	$ \begin{array}{c} 1 \cdot 5 \\ 1 \cdot 2 \\ 1 \cdot 2 \\ 1 \cdot 5 \\ 5 \cdot 1 \\ 1 \cdot 0 \\ 1 \cdot 8 \end{array} $	93 54 80 71 103 71 63	63 60 63 62 56 74 67	$\begin{array}{r} 87\\119\\109\\99\\84\\116\\82\end{array}$	$123 \\ 133 \\ 114 \\ 134 \\ 123 \\ 105 \\ 154$	4.7 3.2 5.5 6.8 5.9 5.1 6.5	168 193 150 147 130 148 154	38·4 39·9 32·8 30·9 31·9 26·0 30·5	Will Ban Tun Ald Stra We Bat	ton House. enstaple. abridge Wells. ershot Camp. athfield Turgiss. ybridge Heath. abreach Collage
	*306 *291 *305 *305 *311 *323	8.5 3.3 3.4 3.4 3.5 3.6	$ \begin{array}{c} $	78 78 76 77 80 79	$ \begin{array}{r} 540 \\ 542 \\ 540 \\ 540 \\ 540 \\ 538 \\ 540 \\ 540 \\ \end{array} $	0.6 2.2 1.3 0.9	92 73 81 73 131 79 77	79 60 61 63 50 49 77	$70 \\ 110 \\ 97 \\ 95 \\ 91 \\ 107 \\ 58$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c} 6.8 \\ 6.2 \\ 5.7 \\ 4.7 \\ 6.1 \\ 6.8 \\ 5.3 \\ \end{array} $	159 144 152 160 143 175 141	35.4 25.3 29.0 22.2 23.4 26.7 26.6	Roy Str Lon Oxf Glo	val Observatory. eafley Vicarage. ndon (Marylebone). ndon (Camden Town). ford.
	·297 ·289 ·292 ·291 ·308 ·304 ·295 ·274 ·307 ·287 ·301	3·4 3·3 3·3 3·5 3·5 3·4 3·2 3·5 3·2 3·4	1.1 1.3 0.9 1.1 1.1 1.0 1.0 1.0 1.3 0.8 1.1 1.1	78 76 80 78 80 79 79 79 73 82 77 79	$\begin{array}{c} 538\\ 541\\ 537\\ 542\\ 542\\ 542\\ 540\\ 540\\ 539\\ 539\\ 539\\ 543\\ 541\end{array}$	$ \begin{array}{c} 1^{\circ}0\\0^{\circ}6\\0^{\circ}4\\0^{\circ}7\\0^{\circ}4\\0^{\circ}4\\1^{\circ}7\\1^{\circ}4\end{array} $	87 80 57 78 75 42 71 71 71 79 108 70	42 64 87 54 70 77 56 62 59 52 68	98 91 107 125 106 25 101 89 90 128 89	$\begin{array}{c} 139\\ 131\\ 115\\ 109\\ 115\\ 222\\ 138\\ 144\\ 138\\ 78\\ 139\\ \end{array}$	6.0 6.0 6.6 5.8 6.1 6.6 6.5 5.8	$\begin{array}{c} 172\\ 124\\ 175\\ 118\\ 123\\ 163\\ 166\\ 178\\ 172\\ 143\\ 165\\ \end{array}$	$\begin{array}{c} 21 \cdot 6 \\ 22 \cdot 0 \\ 48 \cdot 6 \\ 23 \cdot 2 \\ 22 \cdot 9 \\ 29 \cdot 5 \\ 21 \cdot 8 \\ 26 \cdot 1 \\ 25 \cdot 4 \\ 23 \cdot 4 \\ 24 \cdot 1 \end{array}$	Ro: Can Lan No Wi Lla Gra De: No Ho Bo:	yston. dington. mpeter. rwich. sbech. indudno. intham. ty. ttingham. lkham. ston.
	*302 *284 *288 *290 *294 *311 *283 *309	3·4 3·2 3·3 3·3 3·3 3·5 3·5 3·5	0°9 1°0 0°6 0°8 0°8 1°0 0°9 0°7	80 78 86 82 83 82 79 86	537 541 533 545 536 536 536 539 542	2·3 0·4 0·6 1·9 1·6 	95 78 67 56 99 53 40	39 63 80 68 53 83 83 81	97 85 86 86 85 40 138	135 140 133 156 129 190 107	5.9 6.4 6.8 6.8 6.0 7.0	175 208 180 247 170 148 166	27*8 32*9 26*1 47*2 23*1 31*0 25*8	Ha Ec Ha Hu Sto Lee Otl Yo	warden. cles. lifax. ul. nyhurst. eds. ey. rk.
	*268 *282 *252 *297 *309 *266	3·1 3·2 2·9 3·3 3·5 3·1	1·1 1·0 0·6 0·8 0·6 1·1	75 79 83 82 87 75	541 541 521 542 542 542 541	0.9 0.6 1.9 1.3 0.6 1.3	90 45 60 31 57	63 61 55 91 61	56 94 104 83 106 	$ \begin{array}{c} 157\\ 166\\ 147\\ 161\\ 142\\ \dots\end{array} $	5.7 6.5 7.0 5.6 7.2 5.2	163 181 266 164 169 199	30°7 50°0 56°4 37°7 28°8 27°7	Rij Co All Sil Ca By	oon. ckermouth. lenhead3. loth. rlisle. well.
	•268	3.1	0.9	78	543	1.7	90	55	84	137	5.7	188	23.2	No	orth Shields.
-	·280 ·280	3·2 3·2	0.8	81 84	540 541	2·3	56 28	59 42	157 133	94	5·1 6·2	193 185	27.8	Mi Cu	lloden (Scotland).

XXXI.

Meteorology.

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almost constantly below the average. From the beginning of December to the end of the year the mean daily temperature greatly exceeded the average.

Atmospheric pressure.—During the month of January the readings of the barometer fluctuated considerably, the falls in the readings being accompanied by violent gales of wind. In February the readings were generally high, but from the 27th of this month to the 12th of March the readings were below the average, on the latter day a change occurred, and the readings were almost constantly above the average till the end of July. From the 1st to the 24th of August the readings were generally in defect of the average. The readings were high from the 25th of August to the 6th of September, and from the 11th of the latter month to the end of November the readings alternated above and below the average. During

	IAD.	.ciefi	ALCULA		.BalW				10	E	
	feet.	Baro	meter.	p neltru	10478-63 ¹ 1	Therm	ometer.		April 1	Me	an
PARALLELS of LATITUDE, &c.	Mean Elevation in] above the Sea Lev	Mean.	Mean of Monthly Range.	Mean of the highest Monthly Readings.	Mean of the lowest Monthly Readings.	Mean Monthly Range of Readings.	Mean of all the highest Daily Readings.	Mean of all the lowest Daily Readings.	Mean Daily Range.	Of the Air.	Of the Dew- point.
Guernsey Between the latitudes, 50° and 51° 51° and 52° - 52° and 53° 54° and 55° - Allenheads North Shields Miltown (Ireland) - Culloden (Scotland) - Between the latitudes, 49° and 58°	feet. 204 75 192 142 246 105 1360 124 200 104 275	in. 29:776 29:908 29:752 29:777 29:627 29:756 28:392 29:798 29:626 29:642 29:605	in. 1.041 1.127 1.168 1.157 1.344 1.344 1.360 1.360 1.416 1.453 1.550 1.306	0 65·3 68·9 71·9 71·7 69·2 69·2 69·2 62·6 66·9 66·7 64·0 67·6	 ○ 41.5 35.9 32.6 33.4 33.1 30.9 28.2 34.2 30.7 35.3 33.6 	0 23.8 33.0 39.3 38.3 36.1 38.3 34.4 82.7 36.0 28.7 34.0	0 57·3 60·0 60·5 59·4 57·1 57·8 52·0 55·2 56·5 52·9 56·9	0 48*4 45*8 43*5 43*5 43*3 42*8 839*6 43*5 43*5 43*5 43*5 43*6	0 8.9 14.2 17.3 15.9 13.8 15.0 12.4 11.9 14.3 9.4 13.3	0 51.6 52.2 51.3 50.9 49.5 49.5 49.5 49.5 48.8 48.8 48.6 47.8 49.5	0 47*2 47*1 44*6 43*9 43*0 39*7 43*0 39*7 41*6 42*9 42*5 43*6

	120120 778	1 222 1.5-2	124 7	「山」信日	11 1 + 1		0'E 0'6	1 A and
YEARS.	Mean Weekly Movement of the Air in Miles.*	eparture from tverage.	Fall of Rain in Inches.	Departure from Average.	Mean Dryness of Atmo- sphere.	Departure from Average.	Mean TEMPERA- TURE of the AIB.	Departure from Average.
1849 - - 1850 - - 1851 - - 1852 - - 1853 - - 1855 - - 1855 - - 1856 - - 1857 - - 1858 - - 1859 - - 1860 - - 1861 - - 1862 - - 1863 - - 1863 - - 1865 - - 1866 - - 1867 - - 1868 - - 1868 - - 1868 - -	Miles. 1808 1841 1730 1781 1597 1731 1659 1775 1562 1626 1626 1626 1698 1676 1666 1680 1775 1597 1553 1917 1981 2029 	$\begin{array}{c} \text{Miles.} \\ + 80 \\ +113 \\ + 53 \\ -131 \\ + 53 \\ -166 \\ -102 \\ -166 \\ -102 \\ -130 \\ - 52 \\ -62 \\ -48 \\ + 47 \\ -131 \\ -175 \\ +189 \\ +253 \\ +301 \\ -\end{array}$	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 20'8 26'2 20'0 16'7 29'0 80'7 28'4 25'2 24'2	Inches. - 0'3 - 4'5 - 2'6 + 10'0 + 4'8 - 3'1 - 2'8 - 6'4 + 7'8 - 3'4 + 7'5 + 4'8 + 6'5 + 4'2 + 1'0 - 4'2 - 7'5 + 4'2 + 1'0 - 7'5 - 4'8 - 7'5 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7 - 7	0 6.6 6.5 7.4 6.2 4.7 4.5 5.2 6.5 6.5 6.5 6.5 4.6 5.0 4.6 5.0 4.6 5.0 4.7 6.2 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6 5.6	$\begin{array}{c} 0 \\ + 0.8 \\ + 0.3 \\ + 0.7 \\ + 1.6 \\ + 0.7 \\ + 1.6 \\ + 0.7 \\ - 1.1 \\ - 1.3 \\ - 0.2 \\ - 0.2 \\ - 0.2 \\ - 1.2 \\ - 0.8 \\ - 1.1 \\ + 0.2 \\ + 1.2 \\ + 0.4 \\ - 0.2 \\ + 1.0 \\ \end{array}$	0 50.0 49.3 49.2 50.6 47.7 48.9 47.1 49.0 51.0 49.2 50.6 47.7 49.2 50.7 47.0 49.5 50.3 49.5 50.3 49.8 51.5 49.8	$\begin{array}{c} \circ \\ + 0.7 \\ - 0.01 \\ + 1.8 \\ - 2.2 \\ - 0.4 \\ - 2.2 \\ - 0.14 \\ + 2.3 \\ + 0.12 \\ + 0.12 \\ + 1.0 \\ - 0.5 \\ + 1.0 \\ - 0.5 \\ + 2.3 \\ + 0.5 \\ - 2.3 \\$

TABLE 49.-Meteorology of Greenwich

alt. T.T.

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

the month of December the readings were with one exception below the average, this depression being accompanied by very violent gales, and continued till the end of the year.

Rainfall.—The months of January and December were distinguished for the great amount of rain which fell in each month, December being also remarkable for the continuance of wet weather. In February and March the falls were below the average. In April it was slightly in excess; in May, June, and July greatly in defect, especially in the two latter months, when the deficiency amounted to 1.5 in, and 1.3 in. respectively. In August it was slightly in excess; but the falls in the three following months were all below the averages. December as mentioned above was very wet, and the rainfall is the largest in amount that has been recorded in that month during the last 54 years.

in the Year 1868 for different Parallels of Latitude.

e of	pour Air.	aight	Air.	Jubic	ior po	- V	Vind.	bite	21	loud	0130R	ain.	it sovif hoitali
stic For	c Foot of	ional W.	y of the tion =10	zht of a C Åir.	nated.	P	Rela roport	tive tion o		ount of (f Days	ollected.	PARALLELS
Mean Elas Vapour.	Mean Weis in a Cubi	Mean addit of Vapo for Satu	Mean De Humidit Satura	Mean Weig	Mean estir Strength	N.	Е.	s.	w.	Mean Amc (0-10).	Number o it fell.	Amount co	LATITUDE, &C.
in. •331	grs. 3.8	gr. 0.6	86	grs. 539	1.2	94	68	90	114	4.6	days. 177	in. 34•7	Guernsey. Between the latitud
1001	3.8	0.8	83 78	541 537	1.5	84 82	66 63	83 94	133 127	4°9 5°7	163 155	$23.5 \\ 29.9$	50° and 51° 51° and 52°
.207	UT	1.1	78	540	0.8	74	63	95	134	4.5	154	26.2	52° and 53°
*307 *295 *295	3.3	0.8	82	539	1'3	70	67	88	141	6.2	185	30.6	53° and 54°
*307 *295 *295 *284 *252	3·3 3·3 3·2 2·9	0.8 0.9 0.6	82 80 83	539 541 521	1.3 0.9 1.9	70 56 60	67 69 55	88 85 104	141 156 147	$ \begin{array}{r} 6.5 \\ 6.0 \\ 7.0 \\ 7.0 \end{array} $	185 175 266	30°6 35°0 56°4	53° and 54° 54° and 55° Allenheads.
·307 ·295 ·295 ·295 ·284 ·252 ·268 ·280 ·280	3.3 3.3 3.2 2.9 3.1 3.2 3.2	0.8 0.9 0.6 0.9 0.8 0.7	82 80 83 78 81 84	539 541 521 543 540 541	$ \begin{array}{c} 1^{\cdot 3} \\ 0^{\cdot 9} \\ 1^{\cdot 9} \\ 1^{\cdot 7} \\ 2^{\cdot 3} \\ 0^{\cdot 4} \end{array} $	70 56 60 90 56 28	67 69 55 55 59 42	88 85 104 84 157 133	$ 141 \\ 156 \\ 147 \\ 137 \\ 94 \\ 163 $	6.5 6.0 7.0 5.7 5.1 6.2	$ 185 \\ 175 \\ 266 \\ 188 \\ 193 \\ 185 $	30.6 35.0 56.4 23.2 27.8 31.5	53° and 54° 54° and 55° Allenheads. North Shields. Miltown (Ireland). Culloden (Scotland)

in the Twenty Years 1849-1868.

	March.	MEAN TEM Departure from Average.	June.	of the AIR in Departure from Average.	the Quarters	Departure from Average.	last day of Dec.	Departure from Average.	YEARS.
A State of the second se	° 41'9 41'9 41'9 41'4 38'1 40'8 34'1 40'8 34'1 40'0 39'2 37'8 43'3 38'8 39'9 41'0 42'6 37'9 36'5 53'9 41'2 38'9 41'4	$\begin{array}{c} \circ \\ + 2 \cdot 1 \\ + 2 \cdot 1 \\ + 2 \cdot 1 \\ + 1 \cdot 6 \\ - 1 \cdot 7 \\ + 1 \cdot 6 \\ - 2 \cdot 0 \\ + 3 \cdot 5 \\ - 1 \cdot 0 \\ + 3 \cdot 5 \\ - 1 \cdot 0 \\ + 1 \cdot 2 \cdot 8 \\ - 1 \cdot 9 \\ - 3 \cdot 3 \\ + 1 \cdot 9 \\ + 1 \cdot 6 \\ - 1 \cdot 9 \\ + 1 \cdot 6 \\ - 1 \cdot 9 \\ + 1 \cdot 6 \\ - 1 \cdot 9 \\ + 1 \cdot 6 \\ - 1 \cdot 9 \\ + 1 \cdot 6 \\ - 1 \cdot 9 \\ -$	0 51:7 53:5 51:5 51:2 51:8 51:7 50:5 52:3 53:8 54:3 53:7 50:5 51:8 53:7 50:5 51:8 53:1 53:1 53:1 53:1 55:2 55:8 55:8	$\begin{array}{c} 0\\ -1.1\\ +0.7\\ -1.8\\ -1.6\\ -1.0\\ -1.1\\ -2.3\\ +0.5\\ +1.0\\ +0.5\\ +0.3\\ +0$	0 61.0 59.6 59.8 61.8 58.5 59.8 60.4 59.9 63.3 61.0 62.8 56.2 60.4 58.8 56.2 60.4 58.8 58.8 58.8 58.8 58.9 58.9 63.9	$ \begin{array}{c} \circ \\ + 0.7 \\ - 0.5 \\ + 1.85 \\ + 0.15 \\ + 0.15 \\ + 0.15 \\ + 0.15 \\ + 0.15 \\ + 0.15 \\ + 0.15 \\ - 1.15 \\ - $	$\begin{array}{c} \circ \\ 44.8 \\ 44.7 \\ 43.7 \\ 48.1 \\ 42.3 \\ 43.7 \\ 42.7 \\ 44.2 \\ 47.9 \\ 43.8 \\ 42.6 \\ 45.5 \\ 45.0 \\ 46.8 \\ 43.7 \\ 46.0 \\ 46.2 \\ 42.5 \\ 45.1 \\$	$\begin{array}{c} \circ \\ + 0.2 \\ + 0.1 \\ - 0.9 \\ + 3.5 \\ - 2.3 \\ - 0.9 \\ - 1.9 \\ - 0.4 \\ + 3.8 \\ - 1.3 \\ - 2.0 \\ + 0.8 \\ - 1.3 \\ - 2.0 \\ + 0.9 \\ + 1.4 \\ + 2.2 \\ - 0.9 \\ + 1.4 \\ + 1.6 \\ - 2.1 \\ + 0.5 \end{array}$	1849 1850 1851 1852 1853 1854 1855 1856 1857 1858 1859 1860 1860 1861 1862 1863 1864 1865 1865
	89.8		52.8		60.3	-	44.6	-	Average.

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Health of London in 1868.

LONDON is still growing greater. Its population has not been counted for seven years, but it is probably 3,126,635. The estimated increase since 1867 is 44,263. The births registered exceeded the deaths by 40,836. The constant flow of strangers into London exceeds the outflow of its children to all the parts of the empire.

The central population varies night and day, as great numbers who transact business in offices, shops, and factories by day sleep outside the metropolitan bounds. The Metropolitan Police district, stretching in every direction about 15 miles round Charing Cross, is inhabited by about

3,637,040 people. The area of London is 122 square miles, equal to a square of a little more than 11 miles, 18 kilometres, to the side. The Thames and the tides unite the great city to the sea. The ground rises to an elevation higher than the hills of ancient Rome, but a considerable part of the population on the south side of the river is living below or at the level of the Trinity high-water mark. The average elevation of the ground at which the population lives is 12 metres (=13 yards). The points below high-water mark on the north side of the Thames are in Fulham, Pimlico, Westminster, and the Isle of Dogs ; on the south side in Battersea, Kennington, Camberwell, Bermondsey, and Rotherhithe. The Plumstead marsh has the lowest surface, from 5 to 11 feet below high-water mark. The highest elevations are at Hampstead (429 feet = 131 metres) in the north, and Shooters Hill (411 feet) and Sydenham Hill (360 feet) in the south. The site of the capital of the empire is an eliptical river basin round the dome of St. Paul's cathedral. The population is unequally distributed, dense

TABLE 50.-LONDON.-Deaths and Meteorology, 1849-68.

8	Total	Mean	Dryness	Fall	Amount J Move- Air, ap- o the re- binson's r by re- m Whe- 9.*	o We	61 73						
YEARS.	Number of Deaths.	Tem- perature of Air.	of Atmo- sphere.	of Rain in Inches.	Mean Weekly of Horizonta ment of the proximated t sults of Ro Anemoreta ductions fro well's to 185	1868	Number of Deaths	Mean Tem- pera-	Average daily Range of	Dryness of Atmo-	Fall of Rain in	Amount of Hori- zontal Move- ment of the	
1849	68756	50.0	0.6 6.6	in. 23 [.] 9	miles. 1808	ALL R	weekly.	of Air.	Tem- perature.	sphere.	Inches.	Air in each Week.†	Support State
1850	48950	49.3	6.1	19.7	1841				1	1. Marine Marine	1 Transatte		
1851	55488	49.2	6.2	21.6	1730	and the second		0	0	0	in.	miles.	1
1852	54638	50.6	7.4	34.2	1781	First)	and the second			Carrier Ch	-	
1853	60069	47.7	6.2	29:0	1597	Quarter	} 1382	41•4	12.6	5.1	6.6	2503	
1854	73697	48.9	4.7	18.7	1731	5762.0	0.02		1 Participation			LEXCOL	
1855	61942	47.1	4.2	21.1	1659	Quarter	} 1321	55.8	22.9	8.7	4.3	1715	
1856	57274	49.0	5.6	22.2	1775	1 can bor	59 TAB	1.0 J-4888	- (1012-54)		glatte)	Carlos Inter	
1857	59103	51.0	5.2	21.4	1562	Third	} 1465	63:9	22.3	10.1	5.2	1712	
1858	64093	49.2	6.5	17.8	1626	Quarter	1	a Change	- Conner			- Section of the sect	
1859	61860	50-7	6.0	25.9	1598	Fourth	2	17.1	10.0	0.4	0.0	and the second	
1860	62309	47.0	4.6	32.0	1676	Quarter	3 14/1	40-1	12.3	3.4	9.2	2246	
1861	65251	49 4	5.0	20-8	1666			1.1.1		1 - inter		and the second	
1802	0/0/1	49 0	41	20.2	1080	1 22 22	Star Otto		100.00		and the second		
1000	71000	00 0 40°E	50	20 0	1//0		and the second se	and the second	12 mainten	O ME HANNING CARLOND	and an and	line and a	
1004	70200	40 0	0.0	10 7	1097	William ist	Ex mary	+ suma	TT PARA		Super el	1919	
1866	80453	49.8	5.6	20 0	1017	and at	MAGIN A	- 214	T-Startes	and the second	en la martina ante	1. 2022	-
1967	70024	48.6	5.6	98.6	1017	-							
1868	79798	51.6	6.8	20 0	2020	a is ha	a maller	Stano	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		1822	i entre	
1000	10100	010	1 00		2020	1. mai	the sector of		and the		Store 1	14 (G	

* For the years 1849-59 the results are only approximative, having been reduced to Robinson's Anemometer from observations made with Whewell's. + By Robinson's Anemometer

in the centre, less dense in the outside districts. The mean density is expressed by nearly 100 people living to a hectare, 40 to an acre ;* the population density of the capital is 100 times the density of the United Kingdom. The people live in 400,778 houses; the streets are irregular and often narrow, but the elevation of the houses is not often so lofty as to cover the streets with unhealthy shadows. The annual value under county rate assessment exceeded 15,000,000l.

Eight companies supplied the population with water, the life blood of cities, from the Thames, and from its tributary the Lea, supplemented by wells. Their supply to London and its environs, according to the returns of the companies, amounted to 453,857 cubic metres daily, making a ton to every house inhabited or uninhabited: correcting for the supplies to factories and to streets, the domestic supply is equivalent to 12 decalitrest (26 gallons) daily to each person. The water drawn from the wells of London is now inconsiderable in quantity. Dr. Frankland's careful analyses show the composition of the waters. The Thames, unlike the yellow Tiber and the turbid Arno rushing down from the Appenines, is justly called "clear" in ordinary seasons, but it overflows, and its basin was heavily flooded during winter all down its lowest levels. Drought followed in summer, hence the composition of its waters varied largely.

The manure of fields, with the sewage of cities, was washed into the waters. On 60 trials, *five* in each month, the water was clear in 35 instances, slightly turbid in 10, turbid in 8, and very turbid in 7 instances, when drawn from the pipes of the five Thames companies. It deserves note, that the waters of the West Middlesex company were in all the 12 trials found clear and transparent; and that the New River water was only twice found slightly turbid. The matters rendering the waters turbid are in suspension. Dr. Frankland's analyses deal with the matter in solution. He found the solid impurity dissolved in the Thames water ranged from 23 to 39 parts in 100,000, in the Lea water from 21 to 36 parts. In the summer months the waters attained an unusual degree of purity. Upon Dr. Frankland's scale the sewage contamination was much less in 1868 than in 1867; the West Middlesex and the East London companies both stood well.

The mean air temperature of the year was 10.9° centigrade, t or 1.7° above the average $(9, 2^{\circ})$. The mean temperature in Fahrenheit degrees

YEARS.	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868
BIRTHS	87430	89577	89012	92909	93414	97064	97850	102119	102625	106803	108665	112691	113937
DEATHS	57274	59103	64093	61860	62309	65251	67371	71060	78238	73531	80453	70924	73798
Excess of BIRTHS }	30156	30474	24919	31049	31105	31813	30479	31059	24387	33272	28212	41767	40139
(Males -	44410	45885	45347	47330	47645	49335	49382	52277	52383	54051	55249	57608	57810
BIRTHS - Females -	43020	43692	43665	45579	45769	47729	48468	49842	50242	52752	53416	55083	56127
(Males -	29076	29769	32579	31577	31657	33105	34288	36354	39551	37578	41092	36378	37753
DEATHS - Females -	28198	29334	31514	30283	30652	32146	33083	34706	38687	35953	39361	34546	36045
ANNUAL MORTALITY) per 1000 }	22.09	22.41	23.90	22.69	22.49	23.18	23.26	24.47	26.23	24.56	26.48	23.01	23.60

TABLE 51 .- LONDON .- Births and Deaths in the Thirteen Years 1856 to 1868.

* A square of 100 metres to the side is the area of the hectare, of which an acre is a little more than four-tenths. A metre is nearly 1-tenth longer than a yard ; and 1 yard - 0.014 metres.

The decalitre is a double gallon and a tenth more.

NOTE .- The Centigrade graduation has many advantages over that of Fahrenheit: (1) Its zero o° is at the freezing point of water; (2) its 100° is the boiling point of water. Degrees below zero are degrees of cold, and are preceded by the minus sign ; thus -3° may be read 3 degrees of cold, or 3 degrees below zero. The zero of Fahrenheit is 32° below the freezing-point of water; 212° mark the temperature of boiling water. was 51.6° ; the highest temperature in the shade 96.6° . The highest temperature, 36° centigrade (nearly blood-heat), at Greenwich was attained in the latter part of July. The air was unusually dry. Yet the great rains at the beginning and the end of the year raised the rain-fall to 64 centimetres (25.28 inches), which is nearly the average for Greenwich. The wind moved at a mean velocity of 20 kilometres (12.2 miles) an hour, the average being 17 kilometres (10.3 miles) an hour.

The sewerage of London is approaching completion. Three great sewers north of the Thames converge at Abbey Mills, near the east loop of the Lea: the northern high level sewer flows from the foot of Hampstead, through Stoke Newington and Hackney; the middle level sewer runs from Notting Hill, down Oxford-street, by Bishopsgate station and Victoria Park to join the high level sewer west of Old Ford ; the western sewer runs from Chiswick by Chelsea Hospital to a point at which its contents will be lifted into the northern low level sewer, to take up all the drainage of Westminster and the City, and Limehouse, Bromley and Poplar, and carry it to the Abbey Mills, where its contents are to be lifted by pumping into the northern outfall sewer, which will carry the three united streams of sewage down to the reservoir at Barking Creek. The most important parts of the low level sewer are not yet constructed; namely, the part from Chelsea Hospital, including the first lift down to Westminster Bridge, and the part extending from the Temple to the Tower of London; so that many of the large sewers still pour their contents into the Thames. The three southern sewers converge at Deptford, and after the lower stream has been lifted, flow down the southern main outfall sewer to Crossness. These sewers, north and south, have already produced excellent effects. They are sufficient to carry off the rain-fall in the common year, except on about 12 days, when the sewage flood is thrown bodily into the Thames through overflow weirs. The river in London is much less offensive than it was, as may be inferred from the fact that about 360,000 cubic metres of sewage are carried down to the reservoirs of Barking and Crossness, where they are pumped into the stream, when the tide is flowing out. For an ample account of this great and important work, see the Report of Mr. Bazalgette on the main drainage, and the reports of the Metropolitan Board of Works.

When the northern lower level sewer is completed, and the branches of all the sewers are in safe communication with the houses, when the sewers are well cleansed and ventilated, and when the sewage is utilized, this system of treatment will be in full operation, and the weekly returns will test its efficacy.

- Minter and and and and	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865	1866	1867	1868
TOTAL DEATHS IN PUBLIC INSTITU-	10381	(53 weeks) 10079	10004	9633	9550	10276	11313	(53 weeks) 11112	12731	12116	18054	12002	12326
N WORKHOUSES	5797	5714	5535	5228	5161	5757	6401	6187	7055	6715	7088	6829	6789
PRISONS	81	71	57	40	41	46	53	64	125	99	95	90	75
MILITARY AND NAVAL ASYLUMS -	304	285	317	307	272	251	307	289	315	278	195	147	176
GENERAL HOSPITALS	2859	3008	3094	2927	3039	3234	3167	3169	3558	3354	3813	3291	8714
HOSPITALS FOR SPECIAL DISEASES -	612	332	272	431	413	335	690	827	982	1002	1167	929	933
Women -	14	11	11	35	34	38	35	11	24	26	22	31	15
LYING-IN HOSPITALS - { Children -	31	23	32	51	57	58	40	37	48	42	50	51	46
MILITARY AND NAVAL HOSPITALS -	282	180	211	187	173	223	236	203	215	176	146	177	163
HOSPITALS AND ASYLUMS FOR FOREIGNERS	61	63	53	46	47	- 58	74	61	82	71	96	100	79
LUNATIC ASYLUMS	340	892	422	381	313	276	310	264	327	353	382	357	336

TABLE 52.-LONDON.-Deaths in Public Institutions, 1856-68.

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.

The houses inhabited, it has been seen, are about 400,778 in number, each occupied by about 8 people, 7.8; by nearly twice an average family (4.4). The water supply is not on every house, it is intermittent, and the water not always pure, is never soft; the air is often charged with smoke; and the sewage is not entirely removed from all the dwellings. The food supply is the other great element affecting the public health : respecting its amount in meat, bread, vegetables, and its distribution,

which is of still more importance, the information is at present defective. The weekly returns are for 53 weeks, when the deaths amounted to 74,908. After correcting for this and other disturbing elements, the mortality is found to be at the annual rate of 23.59, or nearly 24 deaths to 1000 of the population. This is below the average mortality of 24.34. The improvement is most striking in south London, where the sewage stagnated, and the water supply was drawn directly from the Thames, charged with sewage down to the year 1856. The mortality there was at the rate of 38 and 35 per 1000 in the years 1849 and 1854; during the average of five years 1840-44 it was 25, of five years 1845-49 it was 28, and during the five years 1850-54 it was 26; in 1855-59 it fell to 23; in 1860-64 it was 23; and in 1865-68 it ranged from 22 to 24; in the last year it was 23. The mortality is now lower in south London than it is in north London.

Diarrheea was unusually fatal, 4060 deaths in the summer, and 320 deaths by simple cholera were registered. The other fatal zymotic diseases in the 53 weeks were fever 2483 deaths, scarlatina 2921 deaths, whooping-cough 2369, measles 1989.

TABLE 53.—Population; Births and Deaths; Annual Birth and Death Rates; Mean Temperature and Rainfall, in the Year 1868, in London and THIRTEEN other LARGE TOWNS of the UNITED KINGDOM.

	CITIES, &c.	ESTIMATED POPULATION in the Middle of the Year, 1868.	BIRTHS in 53 Weeks ending 2d Jan. 1869.	DEATHS in 53 Weeks ending 2d Jan. 1869.	ANNUA to 1000 livi the 53 Wee 2d Jan Births.	L RATE ing during eks ending 1. 1869.	MEAN TEMPERA- TURE in 53 Weeks ending 2d Jan. 1869.	RAINFALL in inches in 53 Weeks ending 2d Jan. 1869.
24	conversion and the mail and a market and	5 more pousi	ich ai abich	I and pt wi	Calencere 1	- Dunckers 1.8	Legis & section	and the second
1.1.4	TOTAL	6,441,525	241,850	167,686	36.96	25*63	0 49•3	in. 30*72
	LONDON - (Metropolis) -	3,126,635	115,744	74,908	36.44	23.59	51.5	25.28
	BRISTOL (City) -	167,487	6,179	3,878	36.32	22.79	-	-
	BIBMINGHAM - (Borough) -	352,296	12,992	8,548	36.31	28.89	50.2	32.20
	LIVERPOOL - (Borough) -	500,676	19,720	14,858	38.78	29.22	50.1	25*51
	MANCHESTER - (City) -	366,835	14,017	11,924	37.62	32.00	+ transk	-
1	SALFORD (Borough) -	117,162	4,715	3,661	39.62	30*76	49.5	32.29
	SHEFFIELD - (Borough) -	232,362	9,293	6,276	39.37	26.29	49*4	31.66
	BRADFORD - (Borough) -	134,000	5,068	3,606	37 . 23	26.49	-	
	LEEDS - (Borough) -	246,851	10,469	6,900	41.75	27.52	49'6	27.43
	HULL (Borough) -	122,628	4,340	3,041	34.84	24.41	47.9	27.63
	NEWCASTLE-ON-TYNE (Borough)	127,701	5,006	3,317	38.29	25.57	47.5	24*25
	EDINBURGH - (City) -	177,039	6,713	4,842	37.33	26.93	48.8	31.00
	GLASGOW - (City) -	449,868	18,748	13,922	41.03	30.47	48.3	49.68
1	DUBLIN (City and some suburbs)	319,985	8,846	8,005	27.22	24.63	-	auter 1

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Annual Rate of Mortality in London.

TABLE 54.-LONDON. Annual Rate of Mortality, 1840-1868, in Five GROUPS of

AND THE REAL PROPERTY OF	a tota piccari	DISI	RICTS.	YOM STATES	2014 (4) (10)	7						
	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.	ANNUAL RATE OF MORTALITY PER 1000.											
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 24 \cdot 98 \\ 24 \cdot 04 \\ 23 \cdot 52 \\ 24 \cdot 66 \\ 25 \cdot 00 \end{array}$	$\begin{array}{r} 24.08 \\ 22.36 \\ 22.56 \\ 23.26 \\ 23.87 \end{array}$	$\begin{array}{c} 23 \cdot 94 \\ 22 \cdot 41 \\ 22 \cdot 55 \\ 23 \cdot 08 \\ 23 \cdot 30 \end{array}$	$24 \cdot 47 \\ 24 \cdot 96 \\ 23 \cdot 61 \\ 25 \cdot 28 \\ 24 \cdot 44$	$25.71 \\ 25.06 \\ 24.43 \\ 26.39 \\ 25.86$	$\begin{array}{r} 25 \cdot 89 \\ 24 \cdot 40 \\ 23 \cdot 92 \\ 24 \cdot 75 \\ 25 \cdot 60 \end{array}$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 23 \cdot 19 \\ 23 \cdot 30 \\ 26 \cdot 95 \\ 25 \cdot 82 \\ 30 \cdot 14 \end{array}$	$\begin{array}{c} 22^{\circ}53\\ 21^{\circ}58\\ 24^{\circ}50\\ 23^{\circ}61\\ 26^{\circ}13 \end{array}$	$\begin{array}{c} 21 \cdot 01 \\ 21 \cdot 85 \\ 25 \cdot 37 \\ 23 \cdot 38 \\ 23 \cdot 68 \end{array}$	$\begin{array}{r} 24.02 \\ 22.92 \\ 27.89 \\ 25.33 \\ 27.91 \end{array}$	$\begin{array}{c} 24.63 \\ 24.14 \\ 29.35 \\ 28.67 \\ 31.76 \end{array}$	23.7624.6327.7127.1837.62						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 21 \cdot 04 \\ 23 \cdot 38 \\ 22 \cdot 61 \\ 24 \cdot 41 \\ 29 \cdot 43 \end{array}$	$ \begin{array}{r} 19.64 \\ 22.02 \\ 21.53 \\ 22.29 \\ 28.51 \end{array} $	$ \begin{array}{r} 19.80 \\ 22.16 \\ 21.22 \\ 22.37 \\ 24.36 \end{array} $	$21.14 \\ 24.07 \\ 23.93 \\ 25.13 \\ 27.44$	21.6824.2823.3226.4729.98	$\begin{array}{c} 21 \cdot 92 \\ 24 \cdot 04 \\ 23 \cdot 01 \\ 25 \cdot 35 \\ 34 \cdot 83 \end{array}$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 24\cdot31\\ 22\cdot09\\ 22\cdot41\\ 23\cdot90\\ 22\cdot69\end{array}$	$\begin{array}{c} 23{}^{\circ}00\\ 21{}^{\circ}46\\ 21{}^{\circ}19\\ 22{}^{\circ}37\\ 21{}^{\circ}44\end{array}$	$\begin{array}{c} 23 \cdot 28 \\ 21 \cdot 09 \\ 21 \cdot 50 \\ 22 \cdot 88 \\ 21 \cdot 67 \end{array}$	$\begin{array}{c} 25\cdot09\\ 23\cdot03\\ 23\cdot77\\ 24\cdot46\\ 24\cdot14 \end{array}$	$25 \cdot 46$ $23 \cdot 31$ $24 \cdot 63$ $25 \cdot 78$ $23 \cdot 95$	$\begin{array}{r} 24^{\circ}61\\ 21^{\circ}84\\ 21^{\circ}49\\ 23^{\circ}96\\ 22^{\circ}60\end{array}$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{r} 22\cdot49\\ 23\cdot18\\ 23\cdot56\\ 24\cdot47\\ 26\cdot53\end{array}$	$\begin{array}{r} 22 \cdot 17 \\ 22 \cdot 42 \\ 22 \cdot 30 \\ 23 \cdot 24 \\ 24 \cdot 89 \end{array}$	$\begin{array}{c} 21 \cdot 17 \\ 22 \cdot 33 \\ 22 \cdot 00 \\ 23 \cdot 77 \\ 25 \cdot 37 \end{array}$	$\begin{array}{c} 23 \cdot 34 \\ 25 \cdot 03 \\ 25 \cdot 83 \\ 26 \cdot 51 \\ 29 \cdot 26 \end{array}$	$\begin{array}{c} 24.08 \\ 24.02 \\ 25.98 \\ 26.48 \\ 29.03 \end{array}$	$\begin{array}{c} 22 \cdot 14 \\ 22 \cdot 79 \\ 22 \cdot 68 \\ 23 \cdot 33 \\ 25 \cdot 36 \end{array}$						
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 24 \cdot 56 \\ 26 \cdot 48 \\ 23 \cdot 01 \\ 23 \cdot 60 \end{array}$	22.96 22.95 22.12 22.62	24.53 25.32 23.14 22.92	$26^{\circ}79 \\ 26^{\circ}77 \\ 24^{\circ}35 \\ 24^{\circ}77 \\ 24^{\circ}77 \\$	$\begin{array}{c} 26.40 \\ 34.01 \\ 24.24 \\ 25.57 \end{array}$	$\begin{array}{c} 23 \cdot 16 \\ 24 \cdot 11 \\ 22 \cdot 04 \\ 22 \cdot 91 \end{array}$						
Average Number living to One Death annually (1840-68)	41	44	- 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, 1840-68 is calculated on the Deaths for the complete years, instead of for 52 or 53 weeks.

LONDON.-Mean Mortality per 1000.

YEARS.	LONDON.	WEST DISTRICTS.	NORTH DISTRICTS.	CENTRAL DISTRICTS.	EAST DISTRICTS.	SOUTH DISTRICTS.
		では、11年 1月 日本 11年 11年 日本 11年 11年	MEAN OF	29 YEARS	2 61 6 60 0 57°1 60 18 58°2 71	10000000000000000000000000000000000000
1840-1868	24.34	22.88	22.81	25.02	26.02	24.74
			MEANS OF	T 10 YEAR	s.	Topological States
1840-9 1850-9	25·16 23·63	$23.45 \\ 22.35$	23·06 22·03	$25.08 \\ 24.22$	26°60 24°89	26·55 24·36
			MEANS OF	F 5 YEARS	5.	December
1840-4 · · · · · · · · · · · · · · · · · · ·	24·44 25·88	23·23 23·67	23.06 23.06	24·55 25·61	25·49 27·71	24·91 28·18
1855-9 1860-4	23·08 24·05	22'80 21'89 23 00	21.98 22.08 22.93	$\begin{array}{c} 24.34 \\ 24.10 \\ 25.99 \end{array}$	25.15 24.63 25.92	25.83 22.90 23.26

TABLE 55 .- Temperature at the Royal Observatory, Greenwich, and Annual Rate of Mortality

	TEMI	PERATI	RE				Ann	UAL	RATH	E OF	Mort	ALITY	Y PER	1000	1	q		
WEEKS ENDING	Royal (Gr	tsoular tsoular	ttory, 1.	OTAL OF 14 LEGE TOWNS.	NDON.	RISTOL.	IRMINGHAM.	IVERPOOL.	LANCHESTER.	ALFORD.	HEFFIELD. ³	RADFORD.	EEDS.	HULL.	TYNE.	JDINBURGH.	GLASGOW.	DUBLIN.
Vala	o H	• E				я 23	A	A 29		31	27	26	28	24	26	27	30	25
(of 52 Weeks end- ing 2d Jan. 1869.)	51 0	50 0									1-20 21/20 21/20							
March Quarter	41.4	61.7	22.8	25	23	26	24	30	31	28	23	22	23	22	26	28	30	30
June "	55.8	88.0	28.1	23	22	23	21	26	28	26	26	25	21	19	22	24	30 29	20
September "	63.9	96.6	43.6	28	25	22	30	32	38	36	33	31 90	32	26	27	29	33	22
December "	45.1	66.6	26.1		25	21	21 				475				0	15.39		
January 4 " 11 " 18 " 25 February 1 " 25 February 1 " 25 " 22 " 29 March 7 " 14 " 21 " 25	$\begin{array}{c} 30^{\circ}1\\ 30^{\circ}6\\ 44^{\circ}9\\ 37^{\circ}4\\ 42^{\circ}7\\ 41^{\circ}2\\ 40^{\circ}9\\ 42^{\circ}4\\ 46^{\circ}9\\ 45^{\circ}9\\ 44^{\circ}7\\ 44^{\circ}0\\ 42^{\circ}7\\ \end{array}$	$\begin{array}{c} 40^{\circ}7\\ 35^{\circ}9\\ 51^{\circ}9\\ 47^{\circ}7\\ 55^{\circ}0\\ .50^{\circ}9\\ 51^{\circ}9\\ 55^{\circ}2\\ 61^{\circ}7\\ 55^{\circ}6\\ 56^{\circ}8\\ 57^{\circ}8\\ 58^{\circ}5\end{array}$	$\begin{array}{c} 22.8\\ 25.0\\ 33.6\\ 26.3\\ 29.8\\ 31.1\\ 26.7\\ 29.4\\ 35.7\\ 34.6\\ 32.5\\ 32.1\\ 29.9\end{array}$	$28 \\ 28 \\ 28 \\ 27 \\ 26 \\ 25 \\ 24 \\ 24 \\ 25 \\ 24 \\ 24 \\ 24 \\ 24$	27 26 27 23 23 22 22 22 22 22 22 22 22 22	23 24 27 27 28 28 26 24 26 23 27 19 32	30 28 24 24 24 21 24 21 27 24 23 23 23 23	$\begin{array}{c} 32\\ 33\\ 36\\ 32\\ 31\\ 29\\ 31\\ 28\\ 29\\ 26\\ 30\\ 25\\ 27\\ \end{array}$	40 35 32 35 29 29 33 28 32 30 28 30 28 30 27	33 30 28 33 26 22 26 28 32 22 31 27	22 22 26 26 25 24 22 21 20 26 23 21 25	$\begin{array}{c} 26\\ 24\\ 20\\ 25\\ 20\\ 21\\ 21\\ 21\\ 14\\ 23\\ 22\\ 23\\ 26\\ \end{array}$	26 28 23 22 23 20 20 20 22 23 19 26 24 22	$\begin{array}{c} 24\\ 26\\ 23\\ 20\\ 21\\ 18\\ 21\\ 20\\ 24\\ 24\\ 22\\ 23\\ 21\\ \end{array}$	29 25 28 27 25 34 22 20 23 25 24 27 27	23 25 28 31 27 29 26 25 31 30 29 28 31	27 33 32 31 32 29 29 29 29 28 32 29 31 31 29	$\begin{array}{c} 32\\ 32\\ 31\\ 37\\ 34\\ 32\\ 26\\ 33\\ 27\\ 24\\ 24\\ 29\\ \end{array}$
April 4 " 11 " 25 May 2 " 9 " 16 " 23 " 30 June 6 " 13 " 20 " 27	$\begin{array}{c} 45 \cdot 2 \\ 45 \cdot 7 \\ 45 \cdot 7 \\ 50 \cdot 2 \\ 53 \cdot 0 \\ 53 \cdot 3 \\ 57 \cdot 5 \\ 59 \cdot 4 \\ 59 \cdot 2 \\ 58 \cdot 6 \\ 60 \cdot 3 \\ 65 \cdot 4 \\ 63 \cdot 6 \end{array}$	67.8 66.6 62.5 63.8 70.4 82.3 77.2 87.0 76.1 78.4 85.1 88.0 88.0	$\begin{array}{c} 28 \cdot 1 \\ 32 \cdot 9 \\ 28 \cdot 9 \\ 41 \cdot 7 \\ 33 \cdot 9 \\ 42 \cdot 1 \\ 42 \cdot 4 \\ 45 \cdot 1 \\ 44 \cdot 7 \\ 45 \cdot 3 \\ 49 \cdot 2 \\ 48 \cdot 4 \end{array}$	25 23 27 24 24 24 24 23 23 23 22 22 22 22 22 22 22	$\begin{array}{c} 22\\ 21\\ 26\\ 23\\ 23\\ 22\\ 21\\ 21\\ 20\\ 19\\ 20\\ 20\\ 24\\ \end{array}$	$28 \\ 31 \\ 26 \\ 23 \\ 19 \\ 26 \\ 22 \\ 22 \\ 19 \\ 19 \\ 19 \\ 26 \\ 21$	26 21 24 19 25 20 20 19 19 17 20 21 18	$\begin{array}{c} 29\\ 25\\ 29\\ 24\\ 26\\ 25\\ 26\\ 24\\ 25\\ 26\\ 25\\ 26\\ 25\\ 26\\ 25\\ 26\\ 27\end{array}$	29 26 33 26 32 28 27 28 26 23 27 30 27	29 27 30 23 24 25 26 25 29 25 29 25 23 20	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	27 25 27 25 24 25 24 25 24 23 29 29 29 17 20 31	22 20 23 22 24 21 20 23 21 20 23 21 20 21 21 19	$\begin{array}{c} 17\\19\\19\\15\\17\\19\\20\\19\\20\\24\\22\\16\\25\end{array}$	22 23 25 25 25 20 21 20 18 19 21 24 22	26 28 20 29 23 22 25 23 24 19 26 21 24	32 25 33 30 31 28 29 29 29 29 29 28 29	27 22 29 20 26 27 22 21 25 20 17 18
July 4 " 11 " 18 " 25 August 1 " 8 " 15 " 22 " 29 September 5 " 19 " 19 " 19 " 20	$\begin{array}{c} 61 \cdot 6 \\ 65 \cdot 7 \\ 70 \cdot 7 \\ 69 \cdot 2 \\ 67 \cdot 6 \\ 69 \cdot 2 \\ 67 \cdot 6 \\ 69 \cdot 2 \\ 67 \cdot 6 \\ 69 \cdot 2 \\ 64 \cdot 2 \\ 64 \cdot 2 \\ 65 \cdot 2 \\ 64 \cdot 2 \\ 65 \cdot 2 \\ 64 \cdot 2 \\ 65 \cdot $	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 47.8\\ 48.2\\ 52.7\\ 50.9\\ 49.4\\ 52.8\\ 52.0\\ 51.7\\ 47.8\\ 49.7\\ 43.6\\ 46.5\\ 46.7\end{array}$	$\begin{array}{c} 25\\ 26\\ 28\\ 33\\ 31\\ 30\\ 29\\ 29\\ 29\\ 27\\ 27\\ 24\\ 24\\ 24\\ 25\\ \end{array}$	$\begin{array}{c c} 25\\ 25\\ 27\\ 31\\ 28\\ 26\\ 24\\ 23\\ 23\\ 21\\ 20\\ 22\end{array}$	20 23 22 25 25 25 25 24 25 24 19 20 18 19 19	22 26 28 38 39 57 36 35 30 23 23 20	26 27 33 37 36 35 36 34 36 28 29 30 31	$\begin{array}{c} 33\\ 36\\ 39\\ 40\\ 36\\ 40\\ 41\\ 45\\ 39\\ 38\\ 34\\ 36\\ 35\\ \end{array}$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	24 21 30 40 39 33 30 32 30 32 30 32 30 32 30 32 30 32 34 32 34 32 34 32 32 34 32 32 34 32 32 34 32 32 34 32 32 33 32 33 32 33 32 33 32 33 32 33 33	$\begin{array}{c c} 24\\ 28\\ 27\\ 34\\ 37\\ 40\\ 35\\ 35\\ 37\\ 36\\ 37\\ 36\\ 37\\ 32\\ 2\\ 34\\ 32\\ 34\\ 34\\ 32\\ 34\\ 34\\ 34\\ 34\\ 34\\ 34\\ 34\\ 34\\ 34\\ 34$	$\begin{array}{c} 25\\ 24\\ 34\\ 36\\ 38\\ 38\\ 32\\ 34\\ 25\\ 30\\ 4\\ 22\\ \end{array}$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c c} 25\\ 19\\ 25\\ 22\\ 25\\ 30\\ 27\\ 31\\ 24\\ 30\\ 27\\ 27\\ 27\\ 28\\ \end{array}$	26 27 28 37 23 36 29 28 26 28 26 28 25 22 28	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$
October 9 " 10 " 2 " 2 " 3 November 1 " 2 December 1 " 2 December 1 " 1 " 2 1869": Jan.	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c} 40^{\circ}8\\ 39^{\circ}3\\ 35^{\circ}4\\ 29^{\circ}3\\ 33^{\circ}5^{\circ}4\\ 29^{\circ}3\\ 33^{\circ}4^{\circ}29^{\circ}28^{\circ}4\\ 428^{\circ}4\\ 429^{\circ}6\\ 33^{\circ}28^{\circ}4\\ 30^{\circ}28^{\circ}4\\ 33^{\circ}5^{\circ}28^{\circ}4\\ 33^{\circ}5^{\circ}28^{\circ}4\\ 33^{\circ}5^{\circ}28^{\circ}4\\ 33^{\circ}28^{\circ}4\\ 33^{\circ}28^{\circ}4\\$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	21 24 23 24 25 25 25 26 26 26 26 26 26 26 26 26 26 26 26 26	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	32 31 34 32 30 25 29 32 32 32 34 35 35 36 36 37	3 4 3 4 3 3 2 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 2 3 3 2 3 3 2 3 3 2 3 3 2 3 3 3 3 3 3 3 3 3 3 3 3 3	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3 32 3 31 5 31 5 31 5 27 1 27 2 33 8 20 2 33 3 3 1 3 7 3	2 22 2 28 4 239 2 29 7 26 7 26 8 24 3 2 3 2 3 2 3 2 3 2 3 2 3 2 3 2	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	31 21 33 33 34 35 34 35 36 37 24 38 38 39 33 34 35 36 37 38 38 39 39 30 30 31 32 33 33 34 35 36 37 38 39 30 31 32 33 34 35 36 37 38 38 39 39 30 31 32 33 34 35 36 37 38 39 39 30 31 32 33 34 35 36 37 <td>$\begin{array}{c c c} 1 & 20 \\ 7 & 20 \\ 1 & 21 \\ 1 & 22 \\ 1 & 22 \\ 3 & 21 \\ 3 & 22 \\ 3 & 22 \\ 3 & 22 \\ 3 & 22 \\ 2 & 22 \\ 2 & 22 \\ 2 & 12 \\ 2 & 22 \\ 4 & 11 \\ 4 & 2 \\ \end{array}$</td>	$\begin{array}{c c c} 1 & 20 \\ 7 & 20 \\ 1 & 21 \\ 1 & 22 \\ 1 & 22 \\ 3 & 21 \\ 3 & 22 \\ 3 & 22 \\ 3 & 22 \\ 3 & 22 \\ 2 & 22 \\ 2 & 22 \\ 2 & 12 \\ 2 & 22 \\ 4 & 11 \\ 4 & 2 \\ \end{array}$

per 1000 in FOURTEEN LARGE TOWNS of the UNITED KINGDOM, in each Week of 1868.

Emigration.

Emigration.

EMIGRATION FROM THE UNITED KINGDOM.

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

TABLE 56.—Emigration in each of the Fifty-four Years from 1815 to 1868 inclusive.

TAN .	YEARS.	12.00	NORTH AMERICAN COLONIES.	UNITED STATES.	AUSTRALIAN COLONIES AND NEW ZEALAND.	ALL OTHER PLACES.	TOTAL.
1815	-		- 680	1,209	1 · · · ·	192	1 2 0.01
1816	-	-	- 3,370	9,022	*	118	12,001
1817	11.4	-	9,797	10,280	*	557	20 634
1818		-	15,136	12,429	*	222	20,004
1819		-	23,534	10,674	*	579	34 787
1820		•	17,921	6,745	*	1.063	25,729
1821	1 - 1	-	12,955	4,958	*	384	18.297
1822		Sal	16,013	4,137	*	279	20,429
1823		-	11,355	5,032	12	163	16,550
1824		-	8,774	5,152	* *	99	14,025
1025	entel lexist and	State 1	8,741	5,551	485	114	14,891
1826	1.4	- 15	12,818	7,063	903	116	20,900
1027		-	12,648	14,526	715	114	28,003
1028	1 20 -1	300	12,084	12,817	1,056	135	26,092
1029			13,307	15,678	2,016	197	31,198
1000	a stand	Serie -	30,574	24,887	1,242	204	56,907
1001	4.88		58,067	23,418	1,561	114	83,160
1892	and the state	AND THE	66,339	32,872	3,733	196	103,140
1000		12	28,808	29,109	4,093	517	62,527
1895	1.15	ER F	40,060	33,074	2,800	288	76,222
1836		No.	15,578	26,720	1,860	325	44,478
1000	at and a		34,226	37,774	3,124	293	75,417
1007	1 38	12	29,884	36,770	5,054	326	72,034
830	1.13		4,577	14,332	14,021	292	33,222
1010			12,658	33,536	15,786	227	62,207
1941			32,293	40,642	15,850	1,958	90,743
842	101	iter i	38,164	45,017	32,625	2,786	118,592
843			04,123	63,852	8,534	1,835	128,344
844	11 11 11		23,518	28,335	3,478	1,881	57,212
845			22,924	43,660	2,229	1,873	70,686
846	1 44 1	E. C. C.	01,803	58,538	830	2,330	93,501
847	de la factoria	Re 1	40,439	82,239	2,347	1,826	129,851
848			109,080	142,104	4,949	1,487	258,270
849	1.24		41.907	108,233	23,904	4,887	248,089
850		64.00	32.001	219,450	32,191	6,490	299,498
851			42,805	220,078	16,037	8,773	280,849
852			29,000	201,001	21,532	4,472	335,966
853	10.00		34,500	233,201	87,881	3,749	368,764
854	Section 1	and a	43 761	103 005	61,401	3,129	329,937
855	1 24	Start .	17.966	103 414	83,237	3,366	323,429
856	1.29		16.378	111 927	52,309	3,118	176,807
857			21 001	196 005	44,584	3,755	176,554
358	1		9 704	59716	80 205	5,721	212,875
859	144	28	6,689	70 303	91,019	5,257	113,972
360			9.786	87 500	94 200	12,427	120,432
861	140 4	Carlo -	12 707	49.764	24,002	0,881	128,469
362		-	15 599	58 700	20,708	5,561	91,770
863	-		18.083	146 818	53 054	5,143	121,214
64	-	1	12,721	147 049	40.949	9,808	223,758
865	1 40 14	Serie 2	17,211	147 258	37 282	8,195	208,900
366		8 13	13 255	161 000	94.007	8,049	209,801
867	100-11	2	15 503	159.275	14.460	0,030	204,882
868			21 062	155 529	12,200	6,709	195,953
the I	TOTAL		1,322,585	4.073.596	956 457	146.022	196,325

* 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 57.-Emigration in 1868.

AGE, SEX, &c. OF EMIGRANTS EMBARKED.	EMIGRANTS
Corrections have an arrive service and all others the	
DESTINATION Inducts. Children, Infants. distin- to 12 guished TOTAL.	ers.
Married. Single. Years. as to Age.	reign ot dis
M. F. M. F. M. F. M. F. M. F. <u>H.</u> <u>H</u>	Fo
	41.737 5.30
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	11,101 0,000
To British North America 2,386 2,766 8,507 2,555 2,061 1,640 628 486 20 13 21,062 6,633 2,007 3,69	8,696 - 3
To Australasia 1,224 1,367 4,985 3,147 902 899 127 147 7 4 12,809 7,201 1,990 3,14	462 1
To all other places 981 887 2,575 695 462 439 60 50 585 188 6,922 4,069 494 47	1,061 82
To all places from ports at which there are Go- Emerginal 20,030 23,084 72,434 32,865 15,893 13,869 4,319 3,722 3,950 2,178 192,344 55,880 14,825 64,260 14,825 64,825 64,826 14,825 64,826 14,825 64,826 14,825 64,826 14,	51,191 6,18
$\begin{array}{c c c c c c c c c c c c c c c c c c c $	765 -
TOTAL 20,713 23,598 74,053 33,416 16,185 14,136 4,353 3,743 3,950 2,178 196,325 58,268 14,954 64,9	5 51,956 6,18

TABLE 58.—Occupations, Sex, and general Destination of the Emigrants in 1868.

OCCUPATION.	UNITED STATES.	BRITISH NORTH AMERICA.	AUSTRAL- ASIA.	ALL OTHER PLACES.	TOTAL.
ADULT MALES.			-	Carriers .	Less Stoness
in the state of th	alt is a second	1 1 1 1			- CILLERID 1.
Agricultural Labourers, Gardeners, Carters, &c.	302	78	488	393	1,261
Bakers Confectioners, &c	164	23	36	6	229
Blacksmiths and Farriers •	132	3	27	3	165
Bookhinders and Stationers -	16	1	9	1	27
Boot and Shoe Makers	285	39	56	4	384
Braziers, Tinsmiths, Whitesmiths, &c.	251	3	16	1	271
Brick and Tile Makers, Potters, &c.	31	10 <u>331</u> ,8	3	2	86
Bricklayers, Masons, Plasterers,	667	26	31	4	722
Slaters, &c.	25		3	1	39
Builders	81	3	20	- 1 - 1991	104
Butchers, Pounterers, ac.	20	2	13		35
Cabinet Makers and Uphonstorers	2.341	122	76	14	2,553
Carpenters and Gilders	2,011	2	-4		28
Clarkers and Glueis	456	98	152	84	. 790
Clerks	16	-	8	30330105	25
Clock and Water makers	10	-	2	en and the State	12
Coal Miners and Imminers	283	3	3	-	289
Coal Millers	103	3	8	1	115
Coppers	31	1	-		32
Demostie Servents	305	20	50	37	412
Domestic Servants -	27	4	Tills - and solit	ned action of	31
Dyers Drivers Stokers &	22	3	4	.ot1-	- 30
Engine Drivers, Stokers, do	290	39	52	63	444
Engineers	17	3	2		22
Engravers	4.936	1,766	443	113	7,258
Gartlemon Professional Men Mer-	1,000				12. 32
chants, &c.	4,030	1,020	1,364	757	7,171
Jewellers and Silversmiths -	- 24	3	4	-	31
Labourers, General	43,228	4,385	1,493	1 149	49,255

lxx

Emigration.

TABLE showing the Occupations, SEX, and general DESTINATION of the EMIGRANTS in 1868—continued.

OCCUPATION.	UNITED STATES.	BRITISH NORTH AMERICA.	AUSTRAL- ASIA.	TOTAL.	
ADULT MALES-continued.	e annu an		Second A second		licaskes
Technikke Germikke As	a la statute	1.2 .3	TO LANGE SOBILE	ALLEY AVEL	DELL YE DILL
Millors Maltstore &c	2	-	2	2	6
Millwrights	09	5	8	-	52
Miners and Quarrymen -	5 965	2.278	245	23	30
Painters, Paperhangers, Plumbers,	0,000	2,270	230	14	0,000
and Glaziers	305	9	17	2	333
Pensioners	1		1	_	2
Printers	103	2	5	-1	111
Rope Makers	30 Lales (8	1	4		6
Saddlers and Harness Makers -	15	3	11	- 1	30
Sail Makers	1	Lot L rose	1	-	8
Sawyers	9	4	2	augao	15
Seamen IFLY -LaderO -	165	86	21	6	278
Shopkoopor Shopmon Week	plitemon	WILEL	(1 to 202000		22
men, &c.	264	35	100	Casilian	1 10 9419
Smiths, General	664	30	190113	5	712
Spinners and Weavers	347	22	•11	1	381
Sugar Bakers, Boilers, &c	50	2	1	andaO	53
Surveyors	2		- 4	2 2	ban ang mi
Tailors	809	106	36	-	951
Tallow Chandlers and Soap Makers	2	-	1	Central S	3
Tanners and Curriers	30	-	5	6	41
Turners	17	1	4	1	23
Wheelwrights	11	1	10	1	23
Wool Combers and Sorters	8	1 -	2	Z ARREN	10
Trades and Professions not before	2 392	146	242	100	2 000
Not distinguished	4.762	508	C#C	120	5,009
	hne yobrid	000	1,001	1,000	7,909
ADULT FEMALES.			El addireson	CTE PERLEY	17. Maineral
Domestic and Farm Servants.		A Stra			- Alton
Nurses, &c	6,157	394	1,864	177	8,592
Gentlewomen and Governesses -	462	155	173	78	868
Milliners, Dressmakers, and	258	ß	70	· · · ·	007
Married Women	18 578	9 766	1967	1	335
Shonwomen	8	2,700	1,007	001	20,098
Trades and Professions not before	A RUBBER A	1 1 1 412		ti I bata ana	10
specified	53	1	36	1	91
Not distinguished	20,081	1,999	999	438	23,517
Children.		Lin let		noch 35 clashe	· Address ·
Male Children 1 to 12 years	12,760	2.061	002	460	1010*
Female do. do	11,158	1,640	899	402	10,185
Infants, Males	3,538	628	127	400	14,150
Do. Females	3,060	486	147	50	2,000
1848	2 - 2	- (danes)	miller - 251-		0,740
Not distinguished as to age, Males -	3,338	20	COLLE 7 0	585	3,950
Do. Do. Females	1,973	13	4	188	2,178
145 F.C. 1.55	-	terra de la como			
TOTAL	155,532	21,062	12,809	6,922	196,325

TABLE 59.—RETURN of the NUMBER, AGES, RATINGS, and CAUSES of DEATHS of SEAMEN reported to the REGISTRAR GENERAL of SEAMEN as having died in the BRITISH MERCHANT SERVICE in the year 1868.

To Trans.	Class :	I.		sind					Deall
	ORDER	I.	D	eaths.				ORDER III.	Deaths.
mall-pox -			-	15	Lar	yngitis	-		-]
Juinsv (incl	uded with	disease	s of	1	Bro	urisv	-	hatman frather ?	a na
Respirator	y Organs,	Class]	Ш.,	Ser 2	Pne	eumonia	-	were witten fille	- 83
Order III.)			210	Ast	hma	-		- 100
Ervsipelas (i	ncluded wit	th dise	ases	340	Lui	ig diseas	e, §	·C. – –	-)
of Integun	nentary Sys	stem, C	lass	A TO I				OPDER V	
III., Order	vIII.)			216	Net	hritis		ORDER V.	-1 2000
Diarrhœa		1	1	100	Isc	huria	-		-
Cholera ·		- ⁵ -	-	175	Bri	ght's dis	ease	e (Nephria) -	- 36
Ague -		• • •	-	34	Cal	culus (S	ton	e)	- minute
Rheumatism			1	155 11	Ki	dney dise	ase,	, §c	- Jall Rad
1		3		\$		8			
878	ORDER .	21. 21.		86		165		ORDER VIII.	
38	I f	(inclu	ded w	vith	Ph	legmon	-	11	da and ald
Syphilis Stricture of]) a Urethra) (reases	Class	III.		cer -	- &	content v arenous	- 18
Stricture or		Ord	ler V.	.) 08	SR	in uiseus	e, 9		Smithe Oc
188	ODDED	111		22				Class V.	
53	CRDER .	111.	22.	26				ORDER L	
Purpura and	Scurvy .	11. 12.		20		(100	TDI	ORDEN I.	F)
	Class I	ст.				(Acc	TDE	INT OR MEGLIGENC	
1 18 50	OPDER	TT and			Dr	owning	-{;	by accident -	- 1,141
Phthicia	ORDER		_	τ7τ	Ot	her accid	lent	al deaths -	- 281
LIIIISIS	T. T.			- / -					
10	Class J	III.						Order III.	
	Order	I. @8						(HOMICIDE.)	
Cephalitis	1.028	- 300	-	300	M	urder an	d M	Ianslaughter -	- 16
Apoplexy			-	-	1.4.			DIA FEMILIES.	
Insanity			-	\$116				ORDER IV.	
Epilepsy		-	1 -	19HL		2, 6,157		(SHICIDE)	
Convulsions Brain dioga	- lee	-1.04	-	-202	M	oans not	sta	ted	- 23
Diain aisea	sc, yc.				III		Sec		Contraction of the
	ORDER	II.				TOTAL S	spec	ified Causes -	- 4,851
Pericarditis	-		-] '		Causes 1	aot	specified	- 380
Aneurism Heart disease		1 22	-	108				TOTAL	- 5,237
mean aiseas	se, ge.			1 Caller					
				R	TINC				
		1 806	Guna	ILA	IIING	122.760	12	Firemen	- 143
Mates - Midshipmer	439	409	Stewa	ards -	-	8-1	60	Stowaways -	- II
Quartermas	ters - 00 -	10	Cook	s -	-	- } 30		Unknown -	- 925
Boatswains	- 50, - A	125	Carpe	enters	85 - []	- 1	31	TOTAL -	- 5,237
Able seame	amen -	1935	Mino	r capaci	ties	82.2	75	solu M. o'sa at assimption	
Apprentices	s and boys	441	Engi	neers	-	1 0-0.E	57		
to a				٨	GES				in gran
	TT 1 AC	1. 00		I art	COLD.	Over 6	2 V	ears 17	
RE BACAN	Under 20	years -	-	2,111		Unkno	wn	871	
	31-40 ye	ars -	-	766			m -		
	41-50 ye	ars -	-	326			.1.0.	TAL 5,237	176
	51-60 ye	ars -	-	90					

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TABLE 61.

with Army, Navy, and Merchant Seamen abroad belonging thereto.*					
Middle of Years.		Persons.	Males.	FEMALES.	
1801	-	16,302,410	8,096,082	8,206,328	
1811	-	18,532,522	9,194,348	9,338,174	
1821	-	21,300,573	10,519,256	10,781,317	
1831	-	24,423,588	12,004,025	12,419,563	
1841	-	27,077,095	13,325,889	13,751,206	
1851	-	27,764,034	13,656,998	14,107,036	
1861	-	29,358,927	14,397,427	14,961,500	
(Estimated. 1866)	30,339,861	14,784,947	15,554,914	
1867	-	30,551,276	14,864,733	15,686,543	
1868	-	30,774,590	14,950,520	15,824,070	
1869	-	31,005,108	15,038,049	15,967,059	
1870	-	31,232,013	15,121,679	16,110,334	

POPULATION OF THE UNITED KINGDOM,

* 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 1866-1870 the numbers have been estimated by adding the population enumerated in the islands in the British Seas in 1861, and the number of men in the Army, Navy, and Merchant Service abroad, (see Tables 3. and 16. pp. 81. and 87. Vol. III. Census 1861,) to the population for 1866-70, returned in Table 60. pp. lxxiv-lxxv.]

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•4881923	7.1746563	7.1993182
1869	7.4914332	7.1771915	7 2032249
1870	7•4946000	7.1796000	7.2071045

TABLE 62.-Logarithms of the above Population of the UNITED KINGDOM.