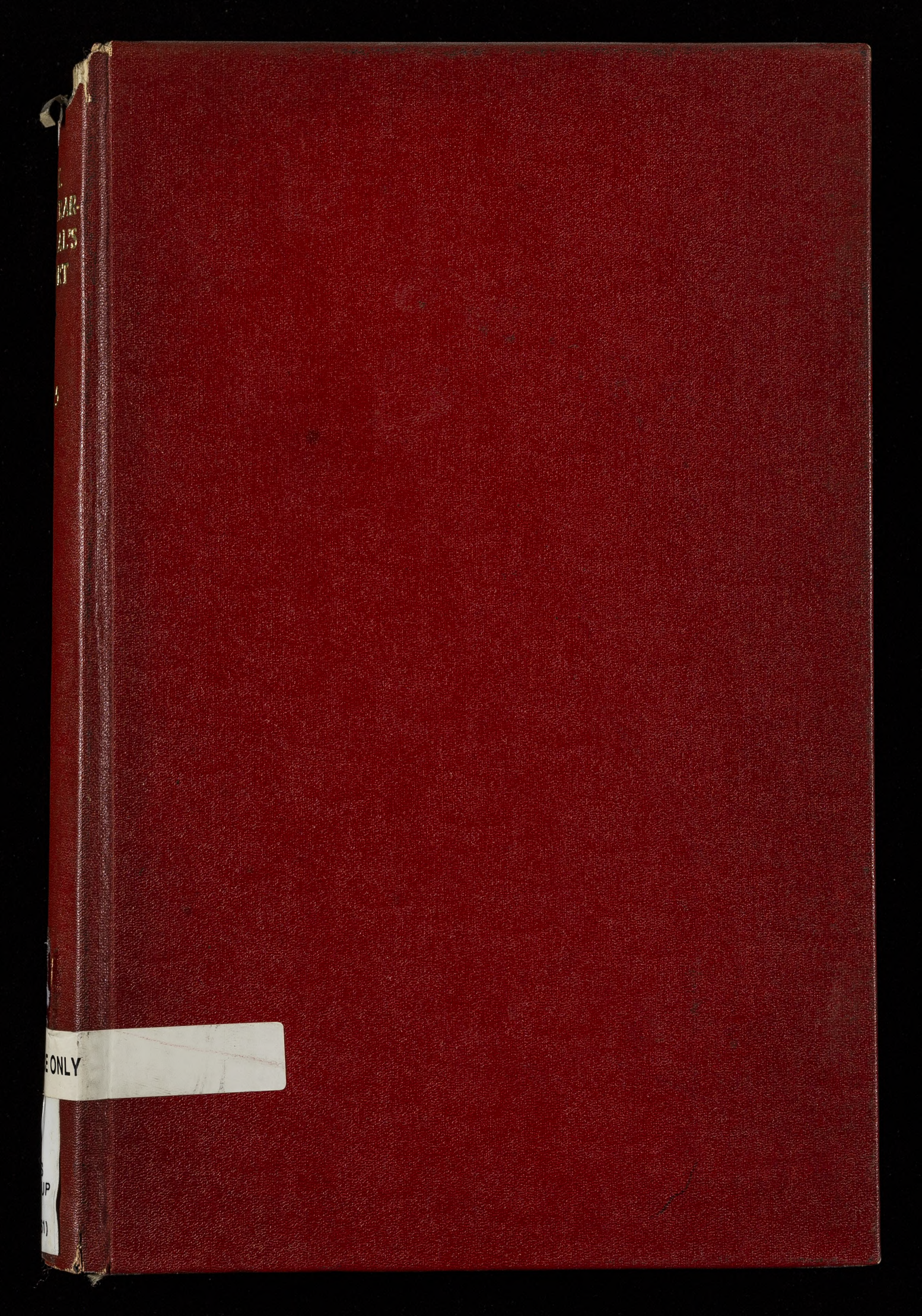

TWENTY-EIGHTH

ANNUAL REPORT

OF THE

REGISTRAR-GENERAL

OF

BIRTHS, DEATHS, AND MARRIAGES

IN ENGLAND.

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

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REPORT

TO

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

General Register Office, Somerset House,
25th June 1867.

SIR,

I HAVE the honour to submit to you my Annual Report. It relates to the marriages, births, and deaths that were registered in England and Wales in the year 1865.

The population could almost count 21,000,000 persons; for the amount, as estimated for the middle of that year, is 20,990,946. In a quarter of a century the population had added 5,000,000 to its strength.

The number of persons married in the year was 370,948; of children born alive 748,069; of persons who died in the year 490,909. In a quarter

TABLE I.—Estimated **Population,** with the Number of **Marriages, Births,** and **Deaths** registered in **England,** in each **Year** from **1838** to **1865.**

YEARS ended Dec. 31st	Estimated POPULATION in ENGLAND in the Middle of the Years.*	MARRIAGES.	PERSONS MARRIED.	BIRTHS (exclusive of Still-born).	DEATHS	EXCESS OF BIRTHS OVER DEATHS.
1838	15,312,256	118,067	236,134	463,787	342,760	121,027
1839	15,515,296	123,166	246,332	492,574	338,984	153,590
1840	15,721,029	122,665	245,330	502,303	359,687	142,616
1841	15,929,492	122,496	244,992	512,158	343,847	168,311
1842	16,123,793	118,825	237,650	517,739	349,519	168,220
1843	16,320,479	123,818	247,636	527,325	346,445	180,880
1844	16,519,565	132,249	264,498	540,763	356,933	183,830
1845	16,721,081	143,743	287,486	543,521	349,366	194,155
1846	16,925,051	145,664	291,328	572,625	390,315	182,310
1847	17,131,512	135,845	271,690	539,965	423,304	116,661
1848	17,340,492	138,230	276,460	563,059	399,833	163,226
1849	17,552,020	141,883	283,766	578,159	440,839	137,320
1850	17,766,129	152,744	305,488	593,422	368,995	224,427
1851	17,982,849	154,206	308,412	615,865	395,396	220,469
1852	18,193,206	158,782	317,564	624,012	407,135	216,877
1853	18,404,368	164,520	329,040	612,391	421,097	191,294
1854	18,616,310	159,727	319,454	634,405	437,905	196,500
1855	18,829,000	152,113	304,226	635,043	425,703	209,340
1856	19,042,412	159,337	318,674	657,453	390,506	266,947
1857	19,256,516	159,097	318,194	663,071	419,815	243,256
1858	19,471,291	156,070	312,140	655,481	449,656	205,825
1859	19,686,701	167,723	335,446	689,881	440,781	249,100
1860	19,902,713	170,156	340,312	684,048	422,721	261,327
1861	20,119,314	163,706	327,412	696,406	435,114	261,292
1862	20,336,467	164,030	328,060	712,684	436,566	276,118
1863	20,554,137	173,510	347,020	727,417	473,837	253,580
1864	20,772,308	180,387	360,774	740,275	495,531	244,744
1865	20,990,946	185,474	370,948	748,069	490,909	257,160

* 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.

of a century the annual number of marriages has increased from 122,496 to 185,474, showing an increase in that period of 51 per cent. ; the annual number of births from 512,158 to 748,069, being an increase of 46 per cent. ; that of deaths has increased from 343,847 to 490,909 in 1865, which represents an increase in the deaths of that year on those of 1841 equal to 43 per cent.

The number of emigrants of English origin who left their native soil in 1865 was upwards of 61,000, out of a total emigration from the United Kingdom in the same year of 209,801 persons.

Marriages.

185,474 men and 185,474 women married during the year according to the returns ; and in England all marriages are registered. The number has increased since the Registration Act came into operation from 118,067 in 1838 to 185,474 in the year 1865, and the increase of marriages in the 27 years is more rapid than the increase of population. In the year 1838 the proportion of marriages to the population was 771, in 1865 the proportion was 884 ; as each marriage represents two persons, the proportion of persons married to the same population in the two years at an interval of 27 years was 1542 and 1768. Thus, if out of 910 persons 7 marriages arose in 1838, the same number of persons contracted 8 marriages in 1865.

The marriages, according to the rites of the Church of England, recorded in the parish registers were 113,123 in the year 1838, and 145,104 in the year 1865 ; thus they increased largely ; while the marriages at other places of worship and in superintendent registrars' offices rose from 4,944 to 40,370. The increase of marriages, according to rites of the established church, was 31,981 ; and the increase of marriages in places foreign to the jurisdiction of the national church, and formerly unauthorized, except in the case of Jews and Quakers, was 35,426; the two increments making up an increase of 67,407 in 27 years.

The marriage rate was higher than it was in any of the previous 27 years, except in the year 1853 when one person in 56 married, while in 1865 one in 57 married ; in 1842 only one in 68 persons married, and that is the lowest proportion in the same period. Thus the extreme range

Table 2.—**Proportion** of **Marriages, Births,** and **Deaths** to the **Population** of **England,** in each **Year** from **1838** to **1865.**

Years ended Dec. 31st	To 100 Persons living.				The Number of Persons living			
	Marriages.	Persons Married.	Births.	Deaths.	To one Marriage.	To one Person Married.	To one Birth.	To one Death.
1838	·771	1·542	3·029	2·238	130	65	33	45
1839	·794	1·588	3·175	2·185	126	63	31	46
1840	·780	1·560	3·195	2·288	128	64	31	44
1841	·769	1·538	3·215	2·159	130	65	31	46
1842	·737	1·474	3·211	2·168	136	68	31	46
1843	·759	1·518	3·231	2·123	132	66	31	47
1844	·801	1·602	3·273	2·161	125	62	31	46
1845	·860	1·720	3·251	2·089	116	58	31	48
1846	·861	1·722	3·383	2·306	116	58	30	43
1847	·793	1·586	3·152	2·471	126	63	32	40
1848	·797	1·594	3·247	2·366	125	63	31	43
1849	·808	1·616	3·294	2·512	124	62	30	40
1850	·860	1·720	3·340	2·077	116	58	30	48
1851	·858	1·716	3·425	2·199	117	58	29	45
1852	·873	1·746	3·430	2·238	115	57	29	45
1853	·894	1·788	3·327	2·288	112	56	30	44
1854	·858	1·716	3·408	2·352	117	58	29	43
1855	·808	1·616	3·373	2·261	124	62	30	44
1856	·837	1·674	3·453	2·051	119	60	29	49
1857	·826	1·652	3·443	2·180	121	61	29	46
1858	·802	1·604	3·366	2·309	125	62	30	43
1859	·852	1·704	3·504	2·239	117	59	29	45
1860	·855	1·710	3·457	2·124	117	58	29	47
1861	·814	1·628	3·461	2·163	123	61	29	46
1862	·807	1·614	3·504	2·147	124	62	29	47
1863	·844	1·688	3·539	2·305	118	59	28	43
1864	·868	1·736	3·564	2·386	116	58	28	42
1865	·884	1·768	3·564	2·339	113	57	28	43
Mean . .	·824	1·648	3·350	2·238	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, person married, birth or death, was 130, 65, 33, and 45 respectively. A correction for increase of population has been made in calculating the above results.

Table 3.—**Marriages** registered in **England** in each **Year** from **1841** to **1865.**

Years ended 31st December	Total Marriages.	According to the Rites of the Established Church.						Not according to the Rites of the Established Church.					
		Special Licence.	Licence.	Banns.	Superintendent Registrar's Certificate.	Not stated.	Total in Established Church.	Total not in Established Church.	In Registered Places.		Superintendent Registrar's Office.	Quakers.	Jews.
									*Roman Catholics.	Other Christian Denominations.			
1841 -	122,496	13	15,792	78,015	972	19,579	114,371	8,125	5882		2064	66	113
1842 -	118,825	9	14,935	75,744	944	18,415	110,047	8,778	6200		2357	58	163
1843 -	123,818	8	14,544	79,849	1222	18,014	113,637	10,181	7152		2817	61	151
1844 -	132,249	10	14,930	85,176	1558	18,335	120,009	12,240	2280	6284	3446	55	175
1845 -	143,743	10	16,013	92,867	1706	18,919	129,515	14,228	2816	7181	3977	74	180
1846 -	145,664	14	17,135	92,995	1862	18,503	130,509	15,155	3027	7669	4167	68	224
1847 -	135,845	14	17,052	84,863	1968	16,979	120,876	14,969	2961	7483	4258	83	184
1848 -	138,230	13	16,896	86,519	2170	15,871	121,469	16,761	3658	8030	4790	67	186
1849 -	141,883	18	16,697	90,644	2593	13,230	123,182	18,701	4199	8662	5558	53	229
1850 -	152,744	8	17,413	98,669	3136	11,733	130,959	21,785	5623	9626	6207	69	260
1851 -	154,206	8	17,781	99,406	3351	10,412	130,958	23,248	6570	9540	6813	65	260
1852 -	158,782	8	19,461	106,497	3610	4,306	133,882	24,900	7479	10017	7100	57	247
1853 -	164,520	8	20,624	109,166	3814	4,430	138,042	26,478	8375	10149	7393	68	288
1854 -	159,727	15	21,048	105,050	3811	4,185	134,109	25,618	7813	9873	7593	52	287
1855 -	152,113	14	20,986	99,516	3804	4,001	127,751	24,362	7344	9296	7441	57	224
1856 -	159,337	9	21,336	104,280	4045	3,949	133,619	25,718	7527	9710	8037	72	312
1857 -	159,097	9	21,250	102,062	3748	3,962	131,031	28,066	7360	10686	9642	67	311
1858 -	156,070	15	19,358	100,432	3787	3,990	128,082	27,988	6643	11094	9952	79	220
1859 -	167,723	19	20,345	107,737	4204	3,905	136,210	31,513	7756	12519	10844	70	324
1860 -	170,156	14	20,742	108,6-5	4243	3,686	137,370	32,786	7800	13342	11257	75	312
1861 -	163,706	16	20,090	102,955	4048	3,588	130,697	33,009	7782	13182	11725	58	262
1862 -	164,030	18	19,486	102,870	3966	3,393	129,733	34,297	7845	13870	12723	59	300
1863 -	173,510	19	19,298	109,572	4312	3,542	136,743	36,767	8095	14714	13589	51	318
1864 -	180,387	12	19,874	113,564	4257	3,376	141,083	39,304	8659	15627	14611	58	349
1865 -	185,474	23	20,722	116,745	4170	3,444	145,104	40,370	8742	16429	14792	54	353

Years ended 31st December	Marriages contracted between				Re-married.		Under Age.		Signed the Marriage Register with Marks.			
	Bachelors and Spinsters.	Bachelors and Widows.	Widowers and Spinsters.	Widowers and Widows.	Widowers.	Widows.	Men.	Women.	Men.	Women.	Marriages in which both Signed with Marks.	Marriages in which one Signed with Marks.
1841 -	—	—	—	—	—	—	5362	16,285	39,954	59,680	—	—
1842 -	—	—	—	—	15,619	10,579	5387	16,003	38,031	56,965	—	—
1843 -	—	—	—	—	16,305	10,811	5511	16,403	40,520	60,715	—	—
1844 -	—	—	—	—	16,941	11,183	5515	17,410	42,912	65,073	—	—
1845 -	119,539	6028	11,835	6341	18,176	12,369	6287	19,376	47,665	71,229	—	—
1846 -	121,324	5997	12,212	6131	18,343	12,128	6313	20,001	47,488	70,145	—	—
1847 -	112,576	5705	11,667	5897	17,564	11,602	5556	18,118	42,429	61,877	32,622	39,062
1848 -	113,284	5920	12,702	6324	19,026	12,244	6092	19,436	43,166	62,771	32,974	39,989
1849 -	116,134	6102	13,155	6492	19,647	12,594	6650	21,105	44,027	65,135	—	—
1850 -	124,031	6575	14,558	7580	22,138	14,155	7453	23,109	47,572	70,606	—	—
1851 -	123,018	6625	14,313	7250	21,563	13,875	7737	24,286	47,439	69,812	36,186	44,879
1852 -	130,872	6696	14,944	7370	21,414	14,066	8551	26,978	48,421	70,772	36,636	45,021
1853 -	135,023	7139	14,739	7619	22,358	14,758	9131	29,219	49,983	72,204	37,345	47,497
1854 -	131,141	6826	14,189	7571	21,760	14,397	9210	28,797	47,843	68,175	35,255	45,508
1855 -	123,398	6775	14,280	7660	21,940	14,435	8386	27,207	44,846	62,672	32,139	43,240
1856 -	129,960	7163	14,462	7752	22,214	14,915	9120	29,218	45,900	64,133	32,238	45,557
1857 -	130,317	6908	14,293	7579	21,872	14,487	8885	28,798	44,013	61,765	30,518	44,742
1858 -	127,165	6711	14,547	7644	22,191	14,355	9145	28,664	42,141	58,733	28,781	43,312
1859 -	137,905	7058	15,493	8161	23,654	15,219	10307	32,041	44,807	63,127	30,574	46,786
1860 -	139,440	7093	15,358	8260	23,618	15,358	10797	32,927	43,401	61,677	28,904	47,270
1861 -	133,712	7034	15,067	7893	22,960	14,927	10415	31,927	40,204	56,770	26,333	44,308
1862 -	134,727	6846	14,566	7891	22,457	14,737	10615	32,464	38,801	54,405	25,075	43,056
1863 -	142,934	7082	15,239	8225	23,494	15,307	11475	34,527	41,262	57,416	23,626	42,426
1864 -	147,914	7511	16,117	8845	24,962	16,356	11934	36,235	41,998	58,402	26,582	47,236
1865 -	151,742	7887	16,590	9255	25,845	17,142	12410	37,260	41,664	57,828	25,216	47,060

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

of the marriage rate in 28 years is from one in 68 to one in 56; from 1·474 per cent. to 1·788 per cent. of the population.

Of the 145,104 marriages according to the rites of the established church, it is recorded that 23 were by special licence, which permits "marriage "at any time in any church or chapel, or other *meet and convenient place.*"* The Archbishop of Canterbury and his officers now exercise this dispensing power, which was formerly, with powers still more extensive, in the hands of the Pope; the fee on each special licence amounting to about 30 guineas. By licence 20,722, after banns 116,745, and by superintendent registrar's certificate 4,170 marriages are stated to have been performed in the established churches; in 3,444 instances the clergymen have not entered the particular procedure.

TABLE 4.—**Proportion** of **Marriages** and comparison of those celebrated by **Licence** and **not by Licence**, together with the Price of Wheat per Quarter in **England** in each **Year** from **1841** to **1865.**

YEARS.	MARRIAGES. To 100 PERSONS LIVING.	MARRIAGES. BY BANNS TO ONE MARRIAGE BY LICENCE.	PROPORTIONAL NUMBER OF MARRIAGES. BY LICENCE to every 100 Persons living in Houses of Rentals of £20 and upwards.	PROPORTIONAL NUMBER OF MARRIAGES. NOT BY LICENCE to every 100 Persons living in Houses of Rentals under £20.	PRICE OF WHEAT PER QUARTER.
AVERAGE:					*s.* *d.*
Of 8 years of *highest* prices -	·804*	4·979	·910	·787	64 11
Of 8 years of *intermediate* prices	·830	5·400	·887	·821	52 5
Of 9 years of *lowest* prices -	·850	5·504	·877	·846	42 1
1855	·808	4·883	·916	·791	74 8
1854	·858	4·991	·958	·842	72 5
1847	·793	4·977	·909	·774	69 9
1856	·837	4·888	·947	·819	69 2
1841	·769	4·940	·905	·747	64 4
1842	·737	5·072	·847	·719	57 3
1857	·826	4·803	·944	·807	56 5
1862	·807	5·279	·853	·799	55 5
1861	·814	5·125	·880	·803	55 4
1846	·861	5·427	·926	·850	54 8
1853	·894	5·293	·957	·884	53 3
1860	·855	5·240	·913	·846	53 3
1844	·801	5·705	·831	·796	51 3
1845	·860	5·799	·880	·856	50 10
1848	·797	5·121	·890	·782	50 6
1843	·759	5·490	·816	·749	50 1
1863	·844	5·678	·848	·844	44 8
1849	·808	5·429	·859	·800	44 3
1858	·802	5·058	·881	·789	44 3
1859	·852	5·296	·904	·844	43 10
1865	·884	5·634	·856	·889	41 9
1852	·873	5·472	·913	·866	40 9
1850	·860	5·666	·880	·857	40 3
1864	·868	5·714	·865	·869	40 2
1851	·858	5·591	·884	·853	38 6

* Disregarding the decimal point, this will read: — 804 marriages were celebrated to every 100,000 of the population; of these, 910 may be taken to represent the marriages of the higher and middle classes, and 787 those of the classes below.

* See Registrar General's Twenty-seventh Report, page x.

Of the 40,370 marriages by other forms 8,742 were contracted in places registered by Roman Catholics, 16,429 in places registered by Protestant Dissenters, and 14,792 in superintendent registrars' offices; 54 marriages were contracted by Quakers and 353 by Jews. The marriages of Quakers are declining; the marriages of Jews are increasing rapidly. In 1841 the marriages of Jews numbered 113, in 1865 they amounted to more than three times as many. The marriages of Protestant Dissenters are still increasing, so are the marriages in superintendent registrars' offices.

It may be of interest to mention that there is a complete series of Returns of English marriages from the year 1755 down to the present day; and it appears (1) that on an average of the 5 years, of which 1758 is the middle year, 52,666 men and the same number of women married annually; (2) that on an average of the 5 years, of which 1791 is the middle year, 72,347 men and as many women married annually; (3) that in the 5 years, of which 1824 is the middle, 104,180 men and the same number of women married; while (4) in the 5 years 1855–9 the marriages rose to 158,868. Taking these intervals of 33 years to represent the intervals between the marriages of successive generations it will be noticed, that the numbers run in such proportions that each couple married in the first generation left two couples of marrying grandchildren and three couples of marrying great-grandchildren. Thus 52,666 fathers left to marry 72,347 sons, 104,180 grandsons, and 158,868 great-grandsons, consequently the great-grandfathers were only equal in number to one-third part of the number of their direct male descendants in the third degree. This happens only in increasing populations, and it is probable that in the four generations preceding the year 1756 no such inequality existed. An increase of population implies a profound social modification.

The Eighth Report contains an elaborate investigation of the whole series of marriage returns down to the year 1845, and it is there shown that marriages in the mass fluctuate with the prosperity of the country.

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 **1865.**

YEARS ended 31st December	TO 100 MARRIAGES. THE PROPORTION UNDER 21 YEARS OF AGE. Males.	Females.	Mean.	THE PROPORTION WHO SIGNED THE MARRIAGE REGISTER WITH MARKS. Males.	Females.	Mean.	THE PROPORTION WHO WERE Widowers.	Widows.	Mean.
1841 -	4·38	13·29	8·83	32·7	48·8	40·8	*12·30	*8·99	*10·95
1842 -	4·53	13·47	9·00	32·0	47·9	40·0	13·14	8·90	11·02
1843 -	4·45	13·25	8·85	32·7	49·0	40·9	13·17	8·73	10·95
1844 -	4·17	13·16	8·67	32·4	49·2	40·8	12·81	8·46	10·63
1845 -	4·37	13·48	8·93	33·2	49·6	41·4	12·64	8·60	10·62
1846 -	4·33	13·73	9·03	32·6	48·2	40·4	12·59	8·33	10·46
1847 -	4·09	13·34	8·72	31·2	45·5	38·4	12·93	8·54	10·74
1848 -	4·41	14·06	9·24	31·2	45·4	38·3	13·76	8·86	11·31
1849 -	4·69	14·88	9·79	31·0	45·9	38·5	13·85	8·88	11·37
1850 -	4·88	15·13	10·01	31·1	46·2	38·7	14·49	9·27	11·88
1851 -	5·02	15·75	10·39	30·8	45·3	38·1	13·93	9·00	11·49
1852 -	5·39	16·99	11·19	30·5	44·6	37·6	13·49	8·86	11·18
1853 -	5·55	17·76	11·66	30·4	43·9	37·2	13·59	8·97	11·28
1854 -	5·77	18·03	11·90	30·0	42·7	36·4	13·62	9·01	11·32
1855 -	5·51	17·89	11·70	29·5	41·2	35·4	14·42	9·49	11·96
1856 -	5·72	18·34	12·03	28·8	40·2	34·5	13·94	9·36	11·65
1857 -	5·58	18·10	11·84	27·7	38·8	33·3	13·75	9·11	11·43
1858 -	5·86	18·37	12·12	27·0	37·6	32·3	14·22	9·20	11·71
1859 -	6·20	19·10	12·65	26·7	37·6	32·2	14·10	9·07	11·59
1860 -	6·35	19·35	12·85	25·5	36·2	30·9	13·88	9·03	11·46
1861 -	6·36	19·50	12·93	24·6	34·7	29·7	14·03	9·12	11·78
1862 -	6·47	19·79	13·13	23·7	33·2	28·5	13·69	8·98	11·34
1863 -	6·61	19·90	13·26	23·8	33·1	28·5	13·54	8·82	11·18
1864 -	6·62	20·09	13·36	23·3	32·4	27·9	13·84	9·07	11·46
1865 -	6·69	20·08	13·39	22·5	31·2	26·9	13·93	9·24	11·59

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

This is confirmed by the subsequent records ; and I have shown that there is a general rule to this effect, that the proportion of marriages to population is least when the prices of wheat are high, greatest when the prices of the same necessary of life are low. This rule is based on observations now extending in England over 25 years. The rule is reversed in the case of marriages by licence, which are rather more frequent in years when the prices of wheat are high. The facts are curious, and may be studied in Table 4. It is evident that the lower classes are most affected by the fluctuations of trade and of the prices of common articles of consumption ; and that to certain classes high prices are beneficial.

The proportion of marriages to population in England and Scotland for the last year of the Scottish Reports is shown in the subjoined Table.

Buildings registered for Marriages.—5352 buildings were on the list ; namely, 1626 belonging to Independents, 1129 to Baptists, 1216 to Wesleyan Methodists, including 629 of the original connexion, 203 Primitive Methodists, and a considerable number of the Wesleyan Methodist Free Church.

129 buildings are certified under other denominations, scattered about the country, but found chiefly in London, Devon, Somerset, and Lancaster.

MARRIAGES to every 1000 of the population in the year 1863, the date of the last Report for Scotland.

	ENGLAND.	SCOTLAND.
Registered Marriages :—		
By Rites of Established Church - - -	6·66	3·21
By Rites of other Protestant Denominations, &c.	·73	3·25
By Rites of Roman Catholics - - -	·39	·69
England : By Civil Ceremony - - - - -	·66	—
Scotland: Irregular Marriages registered after Conviction under 17 & 18 Vict. c. 80. s. 48.*	—	·01
	8·44	7·16

* Marriages can be contracted without registration in Scotland in the ways below enumerated, and without the intervention of any religious ceremony :—

1. By a promise of marriage given in writing, or proved by a reference to the oath of the party, followed by a copula.

2. By a solemn and deliberate mutual declaration exchanged between a man and a woman, either verbally or in writing, expressed *per verba de præsenti*, bearing that the parties consent to take each other for husband and wife, a marriage may be formed without any copula cohabitation, or celebration *in facie ecclesiæ*. Such mutual declaration of consent, whether oral or written, and however expressed, must unequivocally import immediate consent to hold each other henceforth as man and wife. But as consent is the essence of the contract, it must be real. Words uttered in jest, or with a different object, cannot, whatever their literal signification, be obligatory.

3. Marriage may be established by public cohabitation as man and wife alone.—*Shelford on the Law of Marriage, p.* 91.

Irregular Marriages are registered under the 48th section of 17 & 18 Vict. c. 80. :—

"In the event of any persons being convicted before any justice of the peace or magistrate of having irregularly contracted a marriage, it shall be lawful for either of the parties to such irregular marriage, and they are severally hereby required to register such marriage in the parish in which such convictions shall have taken place ; and in case of any marriage being established by a decree of declarator of any competent court, it shall be lawful for either of the parties to the action in which such decree was pronounced to register such marriage in the parish of the domicile of such parties or the parish of their usual residence ; and the production to the Registrar of an extract of such conviction or decree of declarator shall be sufficient evidence and warrant for the registration of such marriages, on payment to the Registrar of a fee of twenty shillings."

Certified Places of Worship.—The Toleration Act of 1688* gave Protestants freedom of meeting for religious worship at certified places ; in 1791 the same advantages were extended to Roman Catholics* ; in 1812 it was enacted that no Protestant congregation of more than 20 persons should meet unless the place of meeting had been certified to the bishop, archdeacon, or the quarter sessions ; and in 1852 the certificates were directed to be sent to the Registrar-General. The Act 18 & 19 Vict., c. 81, only enacts that "all places of religious worship, not being churches or "chapels of the Established Church, should, if the congregation should "desire, but not otherwise, be certified to the Registrar-General." Thus the certification is no longer indispensable, and the intolerant restrictions on religious worship are now entirely abolished in England.

Certain legal advantages attach to the registration of places of religious worship, for it places them under the especial protection of the law ; and it is indispensable to the solemnization of any marriages, except those in Established Churches or in Register Offices.

A return was procured by this office of all the places that had ever been certified since the passing of the Toleration Act in 1688 to 30th June 1852, so far as existing documents supplied the information ; and from that return it appeared that 54,804 places had been certified in the 164 years. In the first years, down to the end of 1690, 939 places were certified ; 143 as permanent, 796 as temporary buildings. Of these 239 belonged to Quakers, 108 permanent and 131 temporary buildings. The places of

	TOTAL.	SCOTTISH PRESBYTERIANS.								WESLEYAN METHODISTS.									CALVINISTIC METHODISTS.									
		Church of Scotland.	United Presbyterians.	Presbyterian Church in England.	Independents.	Baptists.	United Brethren or Moravians.	Roman Catholics.	Society of Friends.	Unitarians.	Original Connexion.	New Connexion.	Primitive Methodists.	Bible Christians.	Wesleyan Methodist Association.	Independent Methodists.	Wesleyan Reformers.	United Methodist Free Church.	Other Wesleyan Methodists.	Welsh Calvinistic Methodists.	Countess of Huntingdon's Connexion.	New Church.	Catholic and Apostolic Church.	Latter Day Saints.	Jews.	All Others.
Number of PLACES OF MEETING for PUBLIC WORSHIP in England and Wales, *certified to the Registrar General*, and ON THE REGISTER on 31st December 1865 - - - - - -	*16,819	10	49	62	2101	1714	20	590	378	81	5635	262	3011	430	43	30	–	520	142	752	29	13	17	208	15	707
		121									10,073									781						
Number of BUILDINGS REGISTERED for the Solemnization of MARRIAGES, and ON THE REGISTER on 31st December 1865, in England and Wales -	5,352	18	68	73	1626	1129	14	618	–	163	629	77	203	38	77	–	31	–	161	217	40	23	18	–	–	129
		159									1,216									257						

* This total represents the number of Places certified to the *Registrar General*. The Places certified before the Act of 1852 to Justices of the Peace, &c. are not included in the Table, and the registration under this head is now optional ; for marriage it is indispensable.

* 1 William and Mary, cap. 18. sect. 19, 31 George 3. cap. 32, 52 George 3, cap. 155, 9 & 10 Victoria, cap. 59, 18 & 19 Victoria, cap. 81. The registration clause of the Toleration Act, 1688, (1 William and Mary, cap. 18. sect. 19,) runs thus : "Provided always, "that no congregation or assembly for religious worship shall be permitted or allowed by "this Act, until the place of such meeting shall be certified to the bishop of the diocese, "or to the archdeacon of that archdeaconry, or to the justices of the peace at the general "or quarter sessions of the peace for the county, city, or place in which such meeting "shall be held and registered in the said bishop's or archdeacon's court respectively, or "recorded at the said general or quarter sessions ; the registrar or clerk of the peace "whereof respectively is hereby required to register the same, and to give certificate "thereof to such person as shall demand the same, for which there shall be no greater "fee nor reward taken than the sum of sixpence."

Wesleyan Methodists first appear in 1741–50 in small numbers and as temporary buildings; but increase rapidly in 1791–1800, and then go on until their numbers in the end amount to 3901, of which 2035 were chapels or permanent structures. The other buildings are registered chiefly as belonging to Protestant Dissenters, consisting no doubt of Presbyterians (including Unitarians), Independents, and Baptists. Of 13,950 the particular denomination is not specified.

The following summary table gives the principal results :—

NUMBER of PLACES of WORSHIP returned as having been CERTIFIED in ENGLAND and WALES in each DECENNIAL PERIOD from the Year 1688 to 30th June 1852.

Decennial Periods.	Places described as		Total Number of Places certified in each Decennial Period.
	Houses, Dwelling-houses, Rooms, or otherwise as Temporary Buildings.	Chapels, Buildings, Meeting-houses, or otherwise as Permanent Buildings.	
TOTAL -	39,817	14,987	54,804
1688—1690	796	143	939
1691—1700	1,247	32	1,279
1701—1710	1,219	41	1,260
1711—1720	875	21	896
1721—1730	448	27	475
1731—1740	424	24	448
1741—1750	502	27	529
1751—1760	703	55	758
1761—1770	701	85	786
1771—1780	978	158	1,136
1781—1790	1,154	316	1,470
1791—1800	3,479	915	4,394
1801—1810	3,975	1,485	5,460
1811—1820	7,497	2,664	10,161
1821—1830	7,675	2,910	10,585
1831—1840	4,550	2,872	7,422
1841—1850	3,090	2,720	5,810
1851—1852	504	492	996

There appears to have been no means of striking any of the 54,804 certified places off the record; but great numbers of them disappeared in the progress of time; and at the census of 1851 returns as to accommodation and attendance were obtained from 20,400 places of worship then existing and not belonging to the Established Church of England; 17,000 were returned as separate buildings. Of these separate buildings only 3228 were on the marriage registers of 31st December of that year.* The number on the marriage register on the last day of the year 1865 was 5352; and at that date 16,819 places were on the register of places for religious worship. The Quakers and Jews are not required to register their places of worship as such.

Many places of worship belonging to both Roman Catholics and Protestants are certified under the old Acts, and are not on the list of the Registrar-General as such. Every dissenting place of worship at which marriages can be solemnized is published in the official list as corrected to the first day of every year.

* See Return to Order of House of Commons, 11th February 1853.

The following is a list of the various titles by which religious denominations have been certified to the Registrar General :—

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

Minors.—Not only the numbers but the proportions of both sexes, who marry under 21 years of age, have increased nearly every year since 1841. Thus out of 100 men married in 1841 only 4·38 were minors, in 1865 the proportion rose to 6·69; the number of women under age rose in the proportion of 13·29 to 20·08.

The fact that there has arisen in the community an increase in the proportion of young mothers is evident; but it does not follow that the disposition of young people to marry has increased precisely to the same extent; for the same effect would be produced, if the disposition remaining invariable—the proportion of young people at ages 15–21 had increased faster than the people marrying at the ages of 21 and upwards. That will however only account for a small part of the actual increase.

Signature of Marriage Registers.—After a marriage is registered the bride and bridegroom are required to sign the book. Both bride and bridegroom in 112,198 marriages wrote their names; both bride and bridegroom in 26,216 couples made their marks; while in 47,360 instances either the bride or the bridegroom signed with a mark, the men in 15,448, the women in 31,612 instances. Thus in the year of 370,948 persons married, 271,456 persons wrote their names, and 99,492 made their marks! 41,664 of the fathers, 57,828 of the mothers of the next generation cannot write their names, or write so imperfectly that they did not sign in writing a document so important as their marriage register.

The proportion of brides who signed with marks was 31 in 100; of bridegrooms 23. Dark as this picture is we have only to go back to 1841,

nine years after the Reform of Parliament, to find a state of still greater ignorance.

The degree of ignorance of the elementary art of writing differs in every county; but it is by no means greater in the agricultural than it is

TABLE 6.—**Proportional Number** of **Marriages** in the several **Counties** of **England** during the **Year 1865**; of Persons who **signed their Names**; of Persons not of **full Age**; and of the **Re-marriages** of **Widowers** and **Widows.**

No.	REGISTRATION COUNTIES.	Marriages to 100 Persons Living.	Signed their Names in Writing.		Persons not of full Age.		Re-marriages.	
							Widowers.	Widows.
			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 - - -	·884	77·5	68·8	6·69	20·09	13·93	9·24
	I.—London - - -	1·115	89·8	83·6	3·53	14·77	13·12	9·22
	II.—South Eastern Counties.							
1	Surrey (*extra-metropolitan*) - -	·644	81·5	84·9	4·26	15·82	11·82	8·06
2	Kent (*extra-metropolitan*) - -	·784	79·5	80·0	5·05	22·08	11·89	9·42
3	Sussex - - - - - -	·787	80·2	84·4	6·34	18·96	12·92	8·00
4	Hampshire - - - - - -	·816	82·7	83·8	4·15	19·25	12·90	10·76
5	Berkshire - - - - - -	·745	75·7	80·8	5·75	17·39	13·70	8·47
	III.—South Midland Counties.							
6	Middlesex (*extra-metropolitan*) -	·594	81·7	84·4	5·35	16·05	11·80	7·47
7	Hertfordshire - - - - -	·632	67·1	70·5	8·23	22·21	13·10	8·41
8	Buckinghamshire - - - -	·711	71·6	71·1	9·21	24·12	15·19	7·50
9	Oxfordshire - - - - -	·739	75·8	78·1	5·36	17·27	15·69	9·62
10	Northamptonshire - - - -	·742	75·3	74·5	9·87	24·37	13·54	7·05
11	Huntingdonshire - - - -	·706	70·0	72·0	8·94	22·71	12·32	8·45
12	Bedfordshire - - - - -	·830	65·0	59·2	15·13	26·80	15·30	7·69
13	Cambridgeshire - - - -	·772	68·7	72·9	8·84	21·99	14·10	8·04
	IV.—Eastern Counties.							
14	Essex - - - - - - -	·643	69·1	74·4	7·37	23·18	14·05	9·48
15	Suffolk - - - - - - -	·753	65·8	72·3	7·41	21·32	14·47	8·40
16	Norfolk - - - - - - -	·762	67·7	73·0	8·01	20·46	15·89	8·53
	V.—South Western Counties.							
17	Wiltshire - - - - - - -	·674	74·0	76·4	7·83	17·71	18·28	9·17
18	Dorsetshire - - - - - -	·765	74·8	75·1	7·00	17·29	12·36	8·00
19	Devonshire - - - - - -	·794	82·0	77·5	5·71	16·72	13·47	7·84
20	Cornwall - - - - - -	·807	69·8	61·6	8·29	21·30	11·74	6·41
21	Somersetshire - - - - -	·730	73·4	74·1	8·18	16·01	15·10	8·66
	VI.—West Midland Counties.							
22	Gloucestershire - - - - -	·923	80·0	77·6	6·52	16·15	14·43	9·37
23	Herefordshire - - - - -	·661	69·2	74·8	3·93	13·69	13·01	8·54
24	Shropshire - - - - - -	·738	70·5	66·4	4·06	14·00	13·09	8·37
25	Staffordshire - - - - -	·898	61·8	52·4	10·21	29.50	12·82	9·94
26	Worcestershire - - - - -	·826	72·9	67·3	7·12	20·90	14·13	8·63
27	Warwickshire - - - - -	·839	76·7	68·6	7·70	22·09	15·28	10·51
	VII.—North Midland Counties.							
28	Leicestershire - - - - -	·890	78·3	70·3	11·30	23·79	13·14	7·99
29	Rutlandshire - - - - -	·708	79·5	83·1	4·82	15·66	13·86	6·02
30	Lincolnshire - - - - -	·741	78·5	77·3	4·26	18·92	14·50	8·68
31	Nottinghamshire - - - -	·793	75·4	64·8	9·56	22·59	16·39	9·34
32	Derbyshire - - - - -	·785	77·7	71·0	8·29	24·59	15·36	8·29
	VIII.—North Western Counties.							
33	Cheshire - - - - - -	·846	76·3	62·3	6·25	16·34	14·62	8·93
34	Lancashire - - - - -	·962	75·6	53·9	7·95	21·14	15·31	10·44
	IX.—Yorkshire.							
35	West Riding - - - - -	·990	77·7	58·7	9·59	26·19	14·32	9·21
36	East Riding (with York) - - -	1·029	82·1	73·8	6·44	22·53	14·83	9·60
37	North Riding - - - - -	·805	82·6	78·1	4·54	20·80	12·39	7·29
	X.—Northern Counties.							
38	Durham - - - - - -	·924	76·6	62·6	7·02	29·89	12·72	10·84
39	Northumberland - - - -	1·019	82·8	72·5	4·42	16·50	12·44	8·67
40	Cumberland - - - - -	·772	81·3	70·0	4·32	16·47	12·02	6·76
41	Westmorland - - - - -	·688	90·9	84·1	3·97	14·95	13·08	5·61
	XI.—Monmouthshire and Wales.							
42	Monmouthshire - - - -	·923	59·4	52·4	8·02	23·52	12·99	11·38
43	South Wales - - - - -	·849	64·7	46·5	6·72	17·36	14·56	9·90
44	North Wales - - - - -	·736	67·2	53·6	4·22	13·57	14·41	8·99

The Table may be read thus by omitting the decimal points:—In England, among every 100,000 persons living 884 marriages took place; of 1,000 men married 775, of 1,000 women 688, signed the marriage register by writing their names; of 10,000 men married 669 were not of full age, of 10,000 women married 2008 were not of full age; of 10,000 men married 1393 were Widowers, of the same number of women married 924 were Widows.

in manufacturing counties; and it is quite clear that some much more effectual measures are required to raise the young generation from that darkness in which their fathers were allowed to exist, in spite of the example of the success and excellent results of the schools on the Scotch system.

Births to Marriages.—The proportion of children born in 1865 to the average marriages of 1858–59–60 was 4·260. The reason for comparing the births of the year with the marriages six years earlier is stated in my last Report.

Births.

There were born in the year 748,069 children, exclusive of the still-born, a class who are not required to be registered. In 1864 the number was 740,275. On the sustained activity of the birth-rate the increase of population, the strength and vital energy of the nation, depend; and the almost constant progression within the last quarter of a century in the annual numbers of births, advancing as the population advances, must be regarded with interest. Previously to 1840 the annual registration showed less than 500,000. At the close of the decade following that year the yearly number almost touched 600,000. In the years 1851–61 the ascent was for the most part continuous, till the annual births nearly reached 700,000; and at the present time they make no halt in their onward march to 800,000. The effect of the birth supply on the population is heightened by sanitary measures that reduce the mortality; and by such internal prosperity as induces it to stay at home rather than seek new abodes in America or the colonies.

In the year 1865 the excess of births over deaths was 257,160. This excess, representing natural increase of population, is in constant fluctuation: it was greatest in 1862 when it was 276,118.

TABLE 7.—**Number** and **Annual Rate per Cent.** of **Marriages** in **England** in each **Quarter** of the Years **1838-65.**

Years.	Marriages registered. In the Quarters ending the last day of				Annual Rate per Cent. of Marriages. In the Quarters ending the last day of			
	March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.
1838 -	23,201	29,801	27,764	37,301	·618	·783	·719	·963
1839 -	24,679	31,339	29,887	37,261	·649	·812	·764	·949
1840 -	26,395	30,786	29,221	36,263	·677	·787	·737	·911
1841 -	24,447	32,551	29,397	36,101	·626	·822	·731	·895
1842 -	25,860	30,048	27,288	35,629	·654	·749	·671	·874
1843 -	25,285	31,113	28,847	38,573	·632	·767	·701	·934
1844 -	26,387	34,268	31,675	39,919	·644	·834	·760	·955
1845 -	29,551	35,300	35,003	43,889	·721	·849	·830	1·038
1846 -	31,417	37,111	35,070	42,066	·757	·882	·822	·983
1847 -	27,480	35,197	32,439	40,729	·655	·826	·751	·940
1848 -	28,338	34,721	32,995	42,116	·661	·805	·755	·961
1849 -	28,429	35,844	33,874	43,736	·661	·822	·766	·986
1850 -	30,567	39,204	37,636	45,337	·702	·888	·840	1·010
1851 -	32,724	38,635	37,316	45,531	·741	·863	·822	1·000
1852 -	32,977	40,092	38,400	47,313	·730	·885	·833	1·027
1853 -	35,149	40,446	39,899	49,026	·778	·883	·859	1·052
1854 -	33,234	40,518	38,182	47,793	·727	·874	·813	1·014
1855 -	29,186	38,549	37,308	47,070	·631	·822	·785	·988
1856 -	33,427	38,820	39,089	48,001	·707	·819	·813	·996
1857 -	33,321	41,267	38,669	45,840	·705	·861	·796	·940
1858 -	29,918	39,890	38,599	47,663	·626	·823	·785	·967
1859 -	35,382	42,042	39,803	50,496	·732	·858	·801	1·013
1860 -	35,150	43,777	40,541	50,688	·711	·883	·807	1·006
1861 -	33,274	42,012	39,884	48,536	·673	·839	·785	·953
1862 -	33,953	40,853	40,600	48,624	·680	·807	·791	·945
1863 -	35,528	44,146	41,932	51,904	·704	·863	·803	·998
1864 -	37,988	44,599	44,675	53,125	·736	·862	·852	1·011
1865 -	36,807	45,827	45,852	56,988	·714	·877	·866	1·073
Mean -	30,718	37,813	36,137	44,911	·688	·837	·788	·978

The birth-rate in 1865 was 3·564 per cent., against an average rate of 3·464 in the years 1855–64. It was exactly the same as that of the previous year. The birth-rate has been remarkably high in recent years, and since 1861 has not been below 3·500.

During the three years 1863–4–5 the number of persons living to a birth has been 28. The average derived from the entire period of registration is 30; but there is reasonable ground to believe that in respect to births the working of the Act has gradually improved as the experience of its officers has increased, and the great body of the people has become better acquainted with its requirements.

The birth-rate in 1865 was even lower than usual in the extra-metropolitan portion of Surrey, where it was 2·131 per cent. (against an average of 2·995). There are numerous institutions in Surrey which swell the population without yielding a corresponding tribute of births. In Berkshire the birth-rate was not much higher. In Northamptonshire, Bedfordshire, Cheshire, and Leicestershire it rose or nearly rose to 3·700; in Lancashire to 3·726; and in Northumberland to 3·763; in Monmouthshire to 3·823; in the West Riding of Yorkshire to 3·985; in the busy populations of Staffordshire and Durham it was above 4·100 per cent.

Sex.—Of the 748,069 children born 381,444 were boys, 366,625 were girls. The males have a majority at birth, though in the population as constituted at the present time they are a minority. For every 100 girls born there were 104 births of boys. But this proportion of males did not hold everywhere: in some counties it was higher, as in Northamptonshire and Bedfordshire, where it rose to 108, and Cumberland where it was 109. Hertfordshire amongst counties furnished the solitary exception of a male minority, the boys born there having been 99·8 to 100 girls.

Seasons.—In the terms that have been adopted as most convenient in these Tables, the first quarter of the year (ending March 31st) is designated the Winter, the second (ending June 30th) Spring, the third (ending September 30th) Summer, the fourth Autumn. If the numbers of births are distinguished by the quarters in which they are registered, it is found that as a rule they increase in the winter and afterwards decline in the three following quarters, reaching their minimum in autumn. They are uniformly higher in the earlier half of the year than in the later half; but in the shorter quarterly periods they are less observant of a definite law of rise and fall. It sometimes happens that they increase from

TABLE 8.—Showing the **Number** of **Buildings registered** for the **Solemnization** of **Marriages**, and on the Register on **31st December 1865.**

	ENGLAND: DIVISIONS AND REGISTRATION COUNTIES.	TOTAL.	SCOTTISH PRESBYTERIANS.			Independents.	Baptists.	United Brethren or Moravians.	Roman Catholics.	Unitarians.	WESLEYAN METHODISTS.							CALVINISTIC METHODISTS.				
			Church of Scotland.	United Presbyterians.	Presbyterian Church in England.						Original Connexion.	New Connexion.	Primitive Methodists.	Bible Christians.	Wesleyan Methodist Association.	Wesleyan Reformers.	Other Wesleyan Methodists.	Welsh Calvinistic Methodists.	Countess of Huntingdon's Connexion.	New Church.	Catholic and Apostolic Church.	All others.
	ENGLAND - -	5352	18	68	73	1627	1129	14	618	163	629	77	203	38	77	31	*161	217	40	23	18	129
	DIVISIONS.																					
1	LONDON - - - - -	365	4	8	9	119	74	1	50	10	27	2	2	-	5	-	6	3	2	3	6	34
2	SOUTH EASTERN COUNTIES -	431	1	1	4	157	101	-	50	16	49	-	8	5	5	2	5	-	13	1	3	10
3	SOUTH MIDLAND COUNTIES -	398	-	-	-	137	57	2	29	4	43	-	8	-	1	1	7	-	2	-	2	5
4	EASTERN COUNTIES - -	301	-	-	-	114	85	-	24	7	31	1	14	-	-	5	4	-	1	1	-	14
5	SOUTH WESTERN COUNTIES -	574	-	-	1	176	15	2	37	27	95	2	19	31	16	4	18	-	2	1	1	27
6	WEST MIDLAND COUNTIES -	559	-	1	8	157	116	3	89	18	71	14	30	1	9	-	12	3	14	1	3	9
7	NORTH MIDLAND COUNTIES -	334	-	-	-	84	85	-	30	10	53	6	27	-	5	7	22	-	1	1	1	2
8	NORTH WESTERN COUNTIES -	717	4	11	17	176	80	3	164	41	84	21	25	1	15	1	33	7	4	11	1	18
9	YORKSHIRE - - - - -	522	-	3	3	144	68	2	56	15	98	22	42	-	12	7	40	-	-	3	1	6
10	NORTHERN COUNTIES - -	304	9	44	31	47	15	1	57	4	41	8	22	-	7	3	11	-	-	1	-	3
11	MONMOUTHSHIRE AND WALES	847	-	-	-	315	203	-	32	11	37	1	6	-	2	1	3	204	1	-	-	1
	I.—LONDON.																					
	Middlesex (*part of*) - -	256	4	7	6	81	43	1	37	8	19	-	2	-	5	-	3	3	2	3	5	27
	Surrey (*part of*) - - -	75	-	1	1	27	21	-	9	2	5	2	-	-	-	-	1	-	-	-	1	5
	Kent (*part of*) - - - -	34	-	-	2	11	10	-	4	-	3	-	-	-	-	-	2	-	-	-	-	2
	II.—SOUTH EASTERN COUNTIES.																					
1	Surrey (*extra-metropolitan*) -	49	-	-	-	24	7	-	9	1	2	-	-	-	1	-	2	-	1	-	-	2
2	Kent (*extra-metropolitan*) -	129	-	-	1	41	36	-	15	4	21	-	1	1	1	1	-	-	5	-	1	1
3	Sussex - - - - -	85	1	-	-	31	20	-	8	5	8	-	-	1	1	-	-	-	4	-	1	5
4	Hampshire - - - - -	115	-	1	3	45	26	-	11	4	12	-	4	3	1	-	1	-	1	1	1	1
5	Berkshire - - - - -	53	-	-	-	16	12	-	7	2	6	-	3	-	1	1	2	-	2	-	-	1
	III.—SOUTH MIDLAND COUNTS.																					
6	Middlesex (*extra-metropol.*) -	45	-	-	-	19	10	-	9	-	3	-	-	-	-	-	-	-	1	-	1	2
7	Hertfordshire - - - -	54	-	-	-	29	17	-	3	1	2	-	-	-	-	-	1	-	-	-	-	1
8	Buckinghamshire - - -	45	-	-	-	19	19	-	2	-	4	-	1	-	-	-	-	-	-	-	-	-
9	Oxfordshire - - - -	46	-	-	-	12	14	-	9	1	7	-	1	-	-	1	1	-	-	-	-	-
10	Northamptonshire - - -	73	-	-	-	26	29	1	3	1	8	-	-	-	1	-	3	-	-	-	-	1
11	Huntingdonshire - - -	24	-	-	-	4	16	-	-	-	4	-	-	-	-	-	-	-	-	-	-	-
12	Bedfordshire - - - -	48	-	-	-	19	23	1	1	-	10	-	2	-	-	-	-	-	-	-	-	1
13	Cambridgeshire - - -	63	-	-	-	18	29	-	2	1	5	-	4	-	-	-	2	-	1	-	1	-
	IV.—EASTERN COUNTIES.																					
14	Essex - - - - - -	105	-	-	-	52	19	-	11	-	13	-	-	-	-	-	2	-	-	1	-	7
15	Suffolk - - - - - -	90	-	-	-	37	34	-	5	3	5	-	5	-	-	-	-	-	-	-	-	1
16	Norfolk - - - - - -	106	-	-	-	25	32	-	8	4	13	1	9	-	-	5	2	-	1	-	-	6
	V.—SOUTH WESTERN COUNTIES																					
17	Wiltshire - - - - -	90	-	-	-	33	32	-	4	2	9	-	7	-	-	1	-	-	-	-	-	2
18	Dorsetshire - - - - -	52	-	-	-	22	4	-	8	4	9	-	4	-	-	-	1	-	-	-	-	-
19	Devonshire - - - - -	185	-	-	1	61	39	-	9	14	23	-	1	14	3	1	6	-	-	-	-	13
20	Cornwall - - - - - -	90	-	-	-	9	7	-	6	-	28	2	3	13	11	1	8	-	1	-	-	1
21	Somersetshire - - - -	157	-	-	-	51	33	2	10	7	25	-	4	4	2	1	3	-	1	1	1	11
	VI.—WEST MIDLAND COUNTIES.																					
22	Gloucestershire - - -	148	-	1	2	51	46	1	10	3	13	1	3	1	2	-	4	-	7	-	-	3
23	Herefordshire - - - -	26	-	-	-	5	6	1	2	-	2	-	8	-	-	-	-	-	1	-	-	1
24	Shropshire - - - - -	67	-	-	-	25	10	1	9	1	2	2	9	-	1	-	3	2	1	-	1	-
25	Staffordshire - - - -	147	-	-	3	33	17	-	36	4	30	8	7	-	4	-	2	-	1	-	1	1
26	Worcestershire - - - -	60	-	-	1	12	11	-	10	5	11	2	1	-	2	-	-	-	3	-	-	2
27	Warwickshire - - - -	111	-	-	2	31	25	-	22	5	13	1	2	-	-	-	3	1	1	1	1	2
	VII.—NORTH MIDLAND COUNTS.																					
28	Leicestershire - - - -	74	-	-	-	22	29	-	8	2	8	1	3	-	-	1	-	-	-	-	-	-
29	Rutlandshire - - - -	9	-	-	-	3	3	-	-	-	-	-	-	-	-	-	3	-	-	-	-	-
30	Lincolnshire - - - -	99	-	-	-	19	23	-	6	3	20	2	15	-	1	1	9	-	-	-	-	-
31	Nottinghamshire - - -	65	-	-	-	13	20	-	5	2	10	2	3	-	2	1	2	-	-	-	1	1
32	Derbyshire - - - - -	87	-	-	-	24	10	-	11	3	15	1	6	-	2	4	8	-	1	1	-	1
	VIII.—NORTH WESTERN COS.																					
33	Cheshire - - - - -	120	-	3	3	34	9	-	16	12	17	4	6	-	4	-	6	3	-	-	-	3
34	Lancashire - - - -	597	4	8	14	142	71	3	148	29	67	17	19	1	11	1	27	4	4	11	1	15
	IX.—YORKSHIRE.																					
35	West Riding - - - -	390	-	2	2	113	56	2	34	12	68	20	25	-	11	7	30	-	-	3	1	4
36	East Riding (with York) -	75	-	-	-	18	9	-	10	3	16	2	10	-	1	-	5	-	-	-	-	2
37	North Riding - - - -	57	-	1	1	13	3	-	12	1	14	-	7	-	-	-	5	-	-	-	-	-
	X.—NORTHERN COUNTIES.																					
38	Durham - - - - -	128	-	12	5	20	7	-	28	2	24	7	12	-	2	2	6	-	-	-	-	1
39	Northumberland - - -	109	8	27	22	9	6	-	19	1	6	1	5	-	-	1	3	-	-	1	-	-
40	Cumberland - - - -	51	1	4	4	14	1	-	9	-	9	-	4	-	3	-	1	-	-	-	-	1
41	Westmorland - - - -	16	-	1	-	4	1	1	1	1	2	-	1	-	2	-	1	-	-	-	-	1
	XI.—MONMOUTHSH. AND WALES.																					
42	Monmouthshire - - -	115	-	-	-	35	53	-	10	-	7	-	3	-	1	1	-	4	-	-	-	1
43	South Wales - - - -	458	-	-	-	198	150	-	13	10	15	-	2	-	1	-	3	65	1	-	-	-
44	North Wales - - - -	274	-	-	-	82	30	-	9	1	15	1	1	-	-	-	-	135	-	-	-	-

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

TABLE 9.—**Births** in the **Years 1845–65** in **England**, distinguishing the **Legitimate** and **Illegitimate.**

YEARS.	TOTAL BIRTHS.	LEGITIMATE.	ILLEGITIMATE.
1845	543,521	505,280	38,241
1846	572,625	534,096	38,529
1847	539,935	503,840	36,125
1848	563,059	526,312	36,747
1849	578,159	538,825	39,334
1850	593,422	553,116	40,306
1851	615,865	573,865	42,000
1852	624,012	581,530	42,482
1853	612,391	572,628	39,763
1854	634,405	593,664	40,741
1855	635,043	594,260	40,783
1856	657,453	614,802	42,651
1857	663,071	620,069	43,002
1858	655,481	612,176	43,305
1859	689,881	645,130	44,751
1860	684,048	640,355	43,693
1861	696,406	652,249	44,157
1862	712,684	667,462	45,222
1863	727,417	680,276	47,141
1864	740,275	692,827	47,448
1865	748,069	701,484	46,585

the first quarter to the second, and falling in the third rise again, though it be but slightly, towards the end of the year.

The proportional numbers as they occurred in 1865 may be thus stated :—Out of four births 1·05 were in winter, 1·04 in spring, 0·96 in summer, 0·95 in autumn.

Children born out of Wedlock.—Of male children born out of wedlock the number was 23,741 ; of female children thus born 22,844. The proportion of illegitimate births to the total number of children born was 6·2 per cent. This proportion was high in Shropshire, Nottinghamshire, North Riding of Yorkshire, and Westmorland, in which counties it was 9 per cent. ; it was higher still in Norfolk and Cumberland where it was about 11 per cent.

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 1865.**

	REGISTRATION COUNTIES.	Male Children born.	Female Children born.	Born in Wedlock. Males.	Born in Wedlock. Females.	Born out of Wedlock. Males.	Born out of Wedlock. Females.	Males born to every 100 Females born.	Males born *in Wedlock* to every 100 Females so born.	Males born *out of Wedlock* to every 100 Females so born.	Children born *out of Wedlock* to every 100 Births.
	ENGLAND - - -	381,444	366,625	357,703	343,781	23,741	22,844	104·0	104·0	103·9	6·2
	I.—London - - -	54,051	52,752	51,627	50,474	2424	2278	102·5	102·3	106·4	4·4
No.	II.—South Eastern Counties.										
1	Surrey (*extra-metropolitan*) - -	4937	4772	4748	4581	189	191	103·5	103·6	99·0	3·9
2	Kent (*extra-metropolitan*) - -	10341	9670	9794	9215	547	455	106·9	106·3	120·2	5·0
3	Sussex - - - - - -	6143	5869	5770	5522	373	347	104·7	104·5	107·5	6·0
4	Hampshire - - - - - -	7935	7625	7510	7224	425	401	104·1	104·0	106·0	5·3
5	Berkshire - - - - - -	3438	3221	3226	3019	212	202	106·7	106·9	105·0	6·2
	III.—South Midland Counties.										
6	Middlesex (*extra-metropolitan*) -	3560	3405	3429	3271	131	134	104·6	104·8	97·8	3·8
7	Hertfordshire - - - - -	2902	2908	2715	2715	187	193	99·8	100·0	96·9	6·5
8	Buckinghamshire - - - - -	2588	2535	2430	2370	158	165	102·1	102·5	95·8	6·3
9	Oxfordshire - - - - -	2878	2773	2684	2568	194	205	103·8	104·5	94·6	7·1
10	Northamptonshire - - - - -	4483	4154	4217	3914	266	240	107·9	107·7	110·8	5·9
11	Huntingdonshire - - - - -	1020	980	961	910	59	70	104·1	105·6	84·3	6·5
12	Bedfordshire - - - - -	2702	2513	2516	2291	186	222	107·5	109·8	83·8	7·8
13	Cambridgeshire - - - - -	3101	2989	2878	2786	223	203	103·7	103·3	109·9	7·0
	IV.—Eastern Counties.										
14	Essex - - - - - - -	6781	6579	6443	6214	338	365	103·1	103·7	92·6	5·3
15	Suffolk - - - - - - -	5613	5487	5168	5059	445	428	102·3	102·2	104·0	7·9
16	Norfolk - - - - - - -	7012	6745	6275	6028	737	717	104·0	104·1	102·8	10·6
	V.—South Western Counties.										
17	Wiltshire - - - - - -	3752	3644	3481	3407	271	237	103·0	102·2	114·3	6·9
18	Dorsetshire - - - - - -	3048	2857	2856	2678	192	179	106·7	106·6	107·3	6·3
19	Devonshire - - - - - -	9464	9178	8908	8637	556	541	103·1	103·1	102·8	5·9
20	Cornwall - - - - - -	6734	6339	6333	5958	401	381	106·2	106·3	105·2	6·0
21	Somersetshire - - - - - -	7331	7111	6933	6721	398	390	103·1	103·2	102·1	5·5
	VI.—West Midland Counties.										
22	Gloucestershire - - - - - -	7431	7098	7048	6761	383	337	104·7	104·2	113·6	5·0
23	Herefordshire - - - - - -	1588	1539	1463	1420	125	119	103·2	103·0	105·0	7·8
24	Shropshire - - - - - -	4413	4167	4001	3782	412	385	105·9	105·8	107·0	9·3
25	Staffordshire - - - - - -	17627	16988	16585	16004	1042	984	103·8	103·6	105·9	5·9
26	Worcestershire - - - - - -	5417	5138	5119	4831	298	307	105·4	106·0	97·1	5·7
27	Warwickshire - - - - - -	10957	10524	10378	9921	579	603	104·1	104·6	96·0	5·5
	VII.—North Midland Counties.										
28	Leicestershire - - - - - -	4633	4425	4303	4096	330	329	104·7	105·1	100·3	7·3
29	Rutlandshire - - - - - -	377	372	356	353	21	19	101·3	100·8	110·5	5·3
30	Lincolnshire - - - - - -	6979	6711	6426	6122	553	589	104·0	105·0	93·9	8·3
31	Nottinghamshire - - - - - -	5770	5614	5230	5126	540	488	102·8	102·0	110·7	9·0
32	Derbyshire - - - - - -	5618	5403	5192	5033	426	370	104·0	103·2	115·1	7·2
	VIII.—North Western Counties.										
33	Cheshire - - - - - - -	9161	8792	8525	8136	636	656	104·2	104·8	97·0	7·2
34	Lancashire - - - - - - -	50261	48019	47132	45048	3129	2971	104·7	104·6	105·3	6·2
	IX.—Yorkshire.										
35	West Riding - - - - - -	32874	31454	30705	29405	2169	2049	104·5	104·4	105·9	6·6
36	East Riding (with York) - - -	5105	4849	4738	4458	367	391	105·3	106·3	93·9	7·6
37	North Riding - - - - -	3863	3799	3484	3458	379	341	101·7	100·8	111·1	9·4
	X.—Northern Counties.										
38	Durham - - - - - - -	13647	13157	12891	12477	756	680	103·7	103·3	111·2	5·4
39	Northumberland - - - - -	6909	6634	6421	6071	488	563	104·1	105·8	86·7	7·8
40	Cumberland - - - - - -	3777	3453	3325	3058	452	395	109·4	108·7	114·4	11·7
41	Westmorland - - - - - -	964	907	867	825	97	82	106·3	105·1	118·3	9·6
	XI.—Monmouthshire and Wales.										
42	Monmouthshire - - - - - -	3966	3787	3747	3584	219	203	104·7	104·5	107·9	5·4
43	South Wales - - - - - -	13401	13180	12535	12293	866	887	101·7	102·0	97·6	6·6
44	North Wales - - - - - -	6892	6509	6330	5957	562	552	105·9	106·3	101·8	8·3

TABLE **11.**—**Births** to 100 Persons living in the several **Counties** of **England** during each of the **Years 1855-65.**

	REGISTRATION COUNTIES.	Births to 100 Persons living. 1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	Average Annual Rate, 1855-64.	1865.
	ENGLAND - - -	3·373	3·453	3·443	3·366	3·504	3·437	3·461	3·504	3·539	3·564	3·464	3·564
	I.—London - - -	3·356	3·372	3·397	3·320	3·408	3·372	3·448	3·422	3·516	3·480	3·409	3·568
No.	II.—South Eastern Counties.												
1	Surrey (*extra-metropolitan*) - -	2·758	2·924	2·907	2·925	3·097	3·031	3·054	3·043	3·103	3·112	2·995	3·131
2	Kent (*extra-metropolitan*) - -	3·110	3·231	3·356	3·133	3·327	3·139	3·293	3·279	3·390	3·426	3·269	3·461
3	Sussex - - - - - -	2·919	3·092	3·043	2·961	3·111	2·965	3·053	3·054	3·127	3·197	3·052	3·206
4	Hampshire - - - - - -	2·916	3·188	3·222	3·119	3·186	3·133	3·162	3·171	3·278	3·216	3·160	3·237
5	Berkshire - - - - - -	2·899	3·068	3·081	3·010	3·272	3·016	3·124	3·253	3·326	3·297	3·135	3·209
	III.—South Midland Counties.												
6	Middlesex (*extra-metropolitan*) -	2·923	3·042	3·003	2·996	3·166	3·017	3·060	3·021	3·094	3·130	3·045	3·256
7	Hertfordshire - - - - -	2·967	3·161	3·245	3·074	3·265	3·134	3·095	3·237	3·226	3·322	3·173	3·247
8	Buckinghamshire - - - - -	3·160	3·203	3·350	3·198	3·490	3·324	3·408	3·408	3·420	3·445	3·341	3·459
9	Oxfordshire - - - - -	2·971	3·247	3·259	3·180	3·434	3·307	3·330	3·332	3·380	3·389	3·288	3·293
10	Northamptonshire - - - - -	3·445	3·529	3·563	3·502	3·625	3·613	3·506	3·517	3·691	3·497	3·549	3·613
11	Huntingdonshire - - - - -	3·196	3·410	3·459	3·363	3·491	3·377	3·214	3·404	3·550	3·520	3·398	3·411
12	Bedfordshire - - - - -	3·302	3·431	3·541	3·315	3·634	3·380	3·423	3·469	3·593	3·586	3·467	3·659
13	Cambridgeshire - - - - -	3·172	3·350	3·304	3·298	3·486	3·308	3·269	3·251	3·378	3·407	3·322	3·433
	IV.—Eastern Counties.												
14	Essex - - - - - - -	3·133	3·234	3·268	3·146	3·361	3·238	3·236	3·258	3·378	3·362	3·261	3·351
15	Suffolk - - - - - - -	3·086	3·264	3·302	3·234	3·474	3·208	3·256	3·266	3·284	3·393	3·277	3·313
16	Norfolk - - - - - - -	3·029	3·219	3·186	3·187	3·427	3·162	3·230	3·249	3·251	3·329	3·227	3·239
	V.—South Western Counties.												
17	Wiltshire - - - - - -	3·024	3·189	3·149	3·140	3·256	3·126	3·170	3·335	3·335	3·281	3·201	3·173
18	Dorsetshire - - - - - -	2·980	3·034	3·075	3·137	3·296	3·183	3·167	3·215	3·351	3·305	3·174	3·226
19	Devonshire - - - - - -	2·803	2·922	2·905	2·959	3·027	3·013	3·102	3·174	3·217	3·171	3·029	3·146
20	Cornwall - - - - - -	3·339	3·453	3·395	3·379	3·525	3·374	3·462	3·466	3·589	3·548	3·453	3·539
21	Somersetshire - - - - - -	2·914	2·996	2·934	2·997	3·139	3·052	3·088	3·120	3·135	3·112	3·049	3·115
	VI.—West Midland Counties.												
22	Gloucestershire - - - - - -	3·112	3·087	3·038	3·139	3·134	3·123	3·212	3·286	3·293	3·311	3·174	3·204
23	Herefordshire - - - - - -	2·742	2·958	2·921	2·901	3·006	2·975	3·084	3·013	2·981	3·084	2·967	2·801
24	Shropshire - - - - - -	2·887	3·072	3·077	3·068	3·214	3·143	3·213	3·273	3·239	3·343	3·153	3·211
25	Staffordshire - - - - - -	4·227	4·230	4·143	4·152	4·165	4·165	4·024	3·917	4·060	4·093	4·118	4·114
26	Worcestershire - - - - - -	3·334	3·430	3·359	3·384	3·519	3·430	3·457	3·495	3·503	3·573	3·448	3·375
27	Warwickshire - - - - - -	3·721	3·754	3·692	3·647	3·698	3·707	3·694	3·690	3·696	3·677	3·698	3·585
	VII.—North Midland Counties.												
28	Leicestershire - - - - - -	3·364	3·442	3·352	3·279	3·466	3·477	3·447	3·596	3·647	3·762	3·483	3·702
29	Rutlandshire - - - - - -	2·942	3·055	3·108	3·134	3·075	3·293	3·022	3·048	3·137	3·248	3·106	3·193
30	Lincolnshire - - - - - -	3·211	3·363	3·336	3·251	3·375	3·301	3·347	3·286	3·413	3·360	3·325	3·374
31	Nottinghamshire - - - - - -	3·469	3·575	3·701	3·480	3·699	3·709	3·563	3·535	3·475	3·365	3·557	3·369
32	Derbyshire - - - - - -	3·495	3·591	3·467	3·390	3·642	3·522	3·496	3·598	3·543	3·596	3·534	3·535
	VIII.—North Western Counties.												
33	Cheshire - - - - - - -	3·464	3·451	3·481	3·332	3·563	3·444	3·528	3·673	3·653	3·660	3·525	3·679
34	Lancashire - - - - - - -	3·777	3·763	3·747	3·580	3·713	3·676	3·770	3·858	3·725	3·768	3·738	3·726
	IX.—Yorkshire.												
35	West Riding - - - - - -	3·788	3·809	3·767	3·602	3·745	3·759	3·707	3·795	3·863	3·966	3·780	3·985
36	East Riding (with York) - - -	3·327	3·486	3·420	3·360	3·453	3·422	3·476	3·539	3·525	3·532	3·454	3·550
37	North Riding - - - - -	3·283	3·370	3·344	3·327	3·421	3·429	3·323	3·355	3·374	3·383	3·361	3·458
	X.—Northern Counties.												
38	Durham - - - - - - -	4·241	4·368	4·276	4·127	4·225	4·110	4·029	4·197	4·207	4·298	4·208	4·358
39	Northumberland - - - - -	3·431	3·556	3·416	3·454	3·510	3·509	3·552	3·718	3·686	3·734	3·557	3·763
40	Cumberland - - - - - -	3·192	3·199	3·267	3·231	3·422	3·277	3·444	3·436	3·497	3·521	3·349	3·495
41	Westmorland - - - - - -	2·788	2·902	2·928	2·826	2·993	3·253	3·159	3·067	2·953	3·124	2·999	3·006
	XI.—Monmouthshire and Wales.												
42	Monmouthshire - - - - - -	3·633	3·812	3·826	3·707	3·842	3·676	3·541	3·539	3·681	3·728	3·699	3·823
43	South Wales - - - - - -	3·351	3·502	3·559	3·503	3·714	3·585	3·419	3·501	3·476	3·562	3·517	3·578
44	North Wales - - - - - -	2·934	3·009	2·950	2·879	3·060	2·996	2·953	3·103	3·169	3·272	3·033	3·181

Deaths.

The number of deaths registered in England and Wales in 1865 was 490,909, exclusive of the deaths of still-born children. In the previous year the number was 495,531. In the first year of the decade, 1856-65,

Table **12.**—**Proportional** Number of **Births** in each **Quarter** to **1000 Births** in the **Average Quarter** of each Year, **1838–65.**

Years.	Number of Births in the Average Quarter.	Proportional Number of Births.				
		In the Average Quarter (assumed to be 1000).	First Quarter ending March 31.	Second Quarter ending June 30.	Third Quarter ending Sept. 30.	Fourth Quarter ending Dec. 31.
1838	115,947	1000	995	1053	981	971
1839	123,144	1000	1017	1049	967	967
1840	125,576	1000	1059	1033	949	959
1841	128,040	1000	1059	1017	959	965
1842	129,435	1000	1062	1039	944	955
1843	131,831	1000	1052	999	964	985
1844	135,191	1000	1068	1018	957	957
1845	135,880	1000	1068	1009	966	957
1846	143,156	1000	1027	1047	961	965
1847	134,991	1000	1099	1032	934	935
1848	140,765	1000	998	1070	991	941
1849	144,540	1000	1078	1066	927	929
1850	148,356	1000	974	1051	990	985
1851	153,966	1000	1022	1033	978	967
1852	156,003	1000	1037	1019	969	974
1853	153,098	1000	1056	1037	964	943
1854	158,601	1000	1026	1090	968	916
1855	158,761	1000	1060	1044	966	930
1856	164,363	1000	1035	1060	952	953
1857	165,790	1000	1042	1031	964	963
1858	163,870	1000	1057	1034	953	956
1859	172,470	1000	1032	1022	968	978
1860	171,012	1000	1077	1023	954	946
1861	174,102	1000	1007	1064	980	949
1862	178,171	1000	1035	1044	961	960
1863	181,855	1000	1039	1043	946	972
1864	185,069	1000	1047	1026	973	954
1865	187,017	1000	1051	1035	965	949

Table **13.**—**Births** and **Deaths** registered in **England** in each **Quarter** of the Years **1838** to **1865.**

Years.	Births.				Deaths.			
	In the Quarters ending the last day of				In the Quarters ending the last day of			
	March.	June.	September.	December.	March.	June.	September.	December.
1838	113,815	121,781	114,734	113,457	98,152	90,877	72,877	80,854
1839	123,543	128,806	120,115	120,110	89,740	87,969	76,280	84,995
1840	132,305	129,059	119,822	121,117	98,896	90,339	80,822	89,630
1841	133,720	129,884	123,868	124,686	99,069	86,134	75,440	83,204
1842	135,615	134,096	123,296	124,732	96,314	86,538	82,339	84,328
1843	136,837	131,279	128,161	131,048	94,926	87,234	76,792	87,493
1844	143,578	136,941	130,078	130,166	101,024	85,337	79,708	90,864
1845	143,080	136,853	132,369	131,219	104,664	89,149	74,872	80,681
1846	145,108	149,450	138,718	139,349	89,484	90,230	101,664	108,937
1847	146,453	139,072	127,173	127,267	119,672	106,718	93,435	103,479
1848	139,736	149,760	140,359	133,204	120,032	99,727	87,638	92,436
1849	153,772	153,693	135,223	135,471	105,870	102,153	135,227	97,589
1850	144,551	155,865	146,911	146,095	98,430	92,871	85,849	91,845
1851	157,236	159,073	150,594	148,912	105,359	90,458	91,499	99,080
1852	161,803	159,031	151,222	151,956	106,358	100,625	100,382	99,770
1853	161,729	158,697	147,602	144,363	118,119	107,647	92,201	103,130
1854	160,785	172,457	154,724	146,439	111,843	102,586	113,843	109,633
1855	166,225	165,277	154,700	148,841	134,542	106,493	87,646	97,022
1856	169,250	173,263	157,462	157,478	103,014	100,099	91,155	96,238
1857	170,430	170,444	161,181	161,016	108,665	100,046	100,528	110,576
1858	170,959	169,115	157,445	157,962	125,819	107,142	98,142	118,553
1859	175,532	175,864	168,394	170,091	121,580	105,631	104,216	109,354
1860	183,180	174,028	164,121	162,719	122,617	110,869	86,312	102,923
1861	172,933	184,820	172,033	166,620	121,215	107,558	101,232	105,109
1862	181,990	185,554	172,709	172,431	122,019	107,392	92,381	114,774
1863	186,341	189,340	173,439	178,297	128,096	118,121	112,504	115,116
1864	192,947	188,835	181,015	177,478	142,977	116,880	112,223	123,451
1865	194,130	192,988	181,941	179,010	140,410	115,892	113,362	121,245

the deaths were fewer by 100,000 than they were in the last year of that term.

The annual rate of mortality in 1865 was 2·339 per cent.; in the preceeding year 2·386. In the healthy year 1856 the rate was 2·051. The average for ten years 2·217.

The temperature in each of the two years, 1864–65, and rainfall, constitute their distinctive meteorological features. The former year was cold in all its four seasons, and its mean temperature at Greenwich was 48·5°. That of 1865 was 50·3°, and while the first or winter quarter was singularly cold, the subsequent three quarters were warm. The mean temperature of the winter of 1865 was 36·5°, which is 3·2° below the average, and it was lower than that of any previous winter in sixteen years, except 1855, when it was 34·1°. The rain-fall at Greenwich in 1865 was 26·3 in., the average for the years 1849–65 being 23·4 in. In 1864 the mortality was higher than in 1865, and the quantity of rain was only 16·8 in., and presented a rare example of deficiency. The deaths as registered in the several quarters of the year are given in the tables appended to this Report, which, with the summaries of quarterly returns, and Mr. Glaisher's copious details of the weather, afford the means of comparing 1865, in its successive stages, with previous years, under constantly changing and always new meteorological aspects.

Deaths in the Seasons.—The relative mortality of the seasons may be stated thus:—Out of four deaths that occurred in 1865 there were 1·2 in the March (or winter) quarter; 0·9 in the June quarter; 0·9 in the September (or summer) quarter; 1·0 in the December quarter. The

Table **14.**—**Annual Rate of Mortality** of Males and of Females in **England, 1838–65.**

Years.	Deaths.		Deaths of Males to 100 Deaths of Females.	Of equal Numbers living, the Number of Male Deaths to every 100 Deaths of Females.
	Of Males to 100 Males living.	Of Females to 100 Females living.		
1838	2·342	2·146	105	109
1839	2·277	2·097	104	109
1840	2·372	2·204	103	108
1841	2·238	2·083	103	107
1842	2·239	2·098	102	107
1843	2·199	2·047	103	107
1844	2·238	2·083	103	107
1845	2·166	2·011	103	108
1846	2·390	2·221	103	108
1847	2·541	2·380	103	107
1848	2·387	2·224	103	107
1849	2·578	2·445	101	105
1850	2·142	2·013	102	106
1851	2·276	2·124	103	107
1852	2·324	2·155	103	108
1853	2·383	2·197	104	108
1854	2·441	2·267	103	108
1855	2·351	2·174	104	108
1856	2·136	1·969	104	108
1857	2·257	2·107	102	107
1858	2·390	2·233	102	107
1859	2·327	2·155	103	108
1860	2·218	2·034	104	109
1861	2·268	2·063	104	110
1862	2·249	2·049	104	110
1863	2·424	2·193	105	111
1864	2·514	2·264	105	111
1865	2·477	2·208	106	112
Average of 28 years, 1838–65	2·327	2·152	103	108

The Table may be read thus:—In the year 1838 to every 100 males living there were 2·342 deaths of males; to every 100 females living there were 2·146 deaths of females; and to every 100 females who died there were 105 deaths of males. The last column shows the *relative* mortality of *males* and *females;* and that out of equal *numbers living* the deaths of males were 109 to every 100 deaths of females in 1838.

mortality of the summer is almost invariably lower than that of spring. Its fluctuations in summer are governed by heat which developes diarrhœa, and by cold and abundant rain, which tend to subdue the activity of that disease.

The mortality of 1865 was above the average in every quarter of the year, both in town and country.

TABLE **15.**—**Annual Rate of Mortality** per Cent. in the several **Counties** of **England** during each of the **Years 1855–65.**

No.	REGISTRATION COUNTIES.	DEATHS TO 100 PERSONS LIVING. 1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	Average Annual Rate, 1855–64.	1865.
	ENGLAND - -	2·261	2·051	2·180	2·309	2·239	2·124	2·163	2·147	2·305	2·386	2·217	2·339
	I.—LONDON - -	2·431	2·209	2·241	2·390	2·269	2·249	2·318	2·356	2·447	2·653	2·356	2·456
	II.—SOUTH EASTERN COUNTIES.												
1	Surrey (*extra-metropolitan*) -	1·944	1·768	1·648	1·877	1·813	1·767	1·743	1·662	1·882	1·902	1·801	1·839
2	Kent (*extra-metropolitan*) -	2·083	1·947	1·983	2·129	2·049	1·863	1·992	1·790	2·069	2·098	2·000	2·046
3	Sussex - - - - -	1·971	1·734	1·743	2·070	2·058	1·881	1·819	1·828	1·937	2·051	1·909	2·078
4	Hampshire - - - -	2·292	1·921	1·989	2·067	2·036	1·902	1·796	1·875	1·965	2·042	1·989	2·073
5	Berkshire - - - -	2·173	1·856	1·869	2·132	2·043	1·972	1·892	1·876	2·044	2·086	1·994	2·114
	III.—SOUTH MIDLAND COUNTIES.												
6	Middlesex (*extra-metropolitan*)	2·047	1·930	2·009	2·001	2·047	1·998	1·981	1·926	2·162	2·244	2·035	2·036
7	Hertfordshire - - -	1·975	1·818	1·955	1·938	1·927	1·947	1·820	1·798	2·049	2·252	1·948	2·019
8	Buckinghamshire - - -	2·244	1·915	2·034	2·121	2·163	1·981	2·097	1·933	2·062	2·240	2·079	2·084
9	Oxfordshire - - - -	2·110	1·775	2·031	2·249	2·090	1·966	1·866	1·879	2·142	2·235	2·034	2·058
10	Northamptonshire - -	2·238	1·950	2·043	2·091	2·308	2·137	2·103	1·897	2·227	2·309	2·130	2·295
11	Huntingdonshire - - -	2·038	1·856	2·108	2·050	1·978	1·867	2·033	1·992	2·332	2·233	2·049	2·173
12	Bedfordshire - - -	2·602	1·968	2·101	1·971	2·065	2·017	1·902	1·876	2·118	2·454	2·107	2·235
13	Cambridgeshire - - -	2·324	1·916	2·065	2·007	2·021	1·950	2·117	2·023	2·256	2·256	2·094	2·206
	IV.—EASTERN COUNTIES.												
14	Essex - - - - -	2·118	1·897	2·011	2·087	2·081	1·864	1·901	1·903	2·125	2·100	2·009	1·986
15	Suffolk - - - - -	2·097	1·949	2·003	2·121	2·036	1·971	2·073	1·830	2·288	2·093	2·046	2·025
16	Norfolk - - - - -	2·209	1·906	2·110	2·392	2·095	2·102	2·231	2·003	2·187	2·220	2·146	2·242
	V.—SOUTH WESTERN COUNTIES.												
17	Wiltshire - - - -	2·254	1·825	1·909	2·081	2·112	2·001	1·787	1·855	2·083	2·170	2·008	2·081
18	Dorsetshire - - - -	2·005	1·641	1·901	2·185	2·072	1·868	1·692	1·764	1·981	2·023	1·913	2·094
19	Devonshire - - - -	2·070	1·745	1·948	2·067	2·092	1·971	1·891	1·924	2·026	2·130	1·986	2·066
20	Cornwall - - - -	2·076	1·909	1·970	2·074	2·019	2·040	1·991	2·004	2·532	2·147	2·076	1·943
21	Somersetshire - - -	2·106	1·735	1·848	2·153	2·083	1·963	1·921	1·757	2·114	2·233	1·991	2·060
	VI.—WEST MIDLAND COUNTIES.												
22	Gloucestershire - - -	2·186	1·866	1·983	2·245	2·122	1·951	2·058	1·947	2·320	2·268	2·095	2·119
23	Herefordshire - - -	2·278	1·923	1·949	2·085	2·212	1·912	1·909	1·790	1·870	2·235	2·016	2·134
24	Shropshire - - - -	2·074	1·796	2·003	2·084	2·087	2·112	2·092	1·911	2·062	2·110	2·033	2·143
25	Staffordshire - - -	2·425	2·268	2·619	2·464	2·605	2·194	2·110	2·343	2·371	2·518	2·392	2·302
26	Worcestershire - - -	2·065	1·816	2·043	2·061	2·262	1·878	1·891	1·863	2·095	2·290	2·026	1·998
27	Warwickshire - - -	2·206	2·075	2·405	2·423	2·370	2·043	2·112	2·185	2·307	2·460	2·259	2·280
	VII.—NORTH MIDLAND COUNTIES.												
28	Leicestershire - - -	2·069	1·951	2·241	2·450	2·292	1·962	2·169	2·049	2·514	2·330	2·203	2·311
29	Rutlandshire - - - -	1·990	1·785	1·533	2·046	1·956	1·909	1·769	1·645	2·251	2·046	1·893	1·952
30	Lincolnshire - - - -	2·071	1·675	1·826	2·116	2·168	1·936	1·926	1·802	2·003	2·052	1·958	2·155
31	Nottinghamshire - - -	2·050	2·124	2·196	2·466	2·548	2·054	2·136	2·049	2·177	2·263	2·206	2·167
32	Derbyshire - - - -	2·120	1·953	2·104	2·356	2·264	2·103	2·171	1·984	2·082	2·167	2·130	2·111
	VIII.—NORTH WESTERN COUNTIES.												
33	Cheshire - - - -	2·197	2·048	2·269	2·267	2·169	2·173	2·164	2·246	2·396	2·300	2·223	2·328
34	Lancashire - - - -	2·680	2·464	2·628	2·719	2·454	2·371	2·592	2·560	2·629	2·718	2·582	2·832
	IX.—YORKSHIRE.												
35	West Riding - - - -	2·223	2·212	2·368	2·491	2·396	2·360	2·321	2·364	2·573	2·656	2·396	2·667
36	East Riding (with York) -	2·072	1·902	2·346	2·349	2·271	2·185	2·333	2·251	2·529	2·253	2·249	2·415
37	North Riding - - -	2·063	1·748	1·919	1·939	2·178	2·027	2·001	2·052	2·104	2·071	2·010	2·066
	X.—NORTHERN COUNTIES.												
38	Durham - - - -	2·304	2·332	2·386	2·404	2·313	2·098	2·256	2·220	2·355	2·284	2·295	2·400
39	Northumberland - - -	2·115	2·031	2·167	2·189	2·161	2·218	2·388	2·285	2·317	2·273	2·214	2·372
40	Cumberland - - - -	2·215	1·945	1·986	2·064	2·199	2·242	2·146	2·256	2·383	2·339	2·178	2·381
41	Westmorland - - -	1·805	1·574	1·661	1·770	1·974	1·975	1·777	2·086	1·735	1·820	1·818	1·716
	XI.—MONMOUTHSHIRE AND WALES.												
42	Monmouthshire - - -	2·355	2·037	2·161	2·465	2·412	2·026	2·100	2·106	2·125	2·656	2·244	2·387
43	South Wales - - -	2·230	2·004	2·004	2·412	2·289	2·116	2·052	1·987	2·050	2·310	2·146	2·389
44	North Wales - - -	2·145	1·894	1·938	2·026	2·047	2·225	2·098	2·189	2·171	2·214	2·095	2·207

Sex.—Of the 490,909 deaths 252,218 were those of males, 238,691 were those of females.

The proportion of deaths of males to 100 males living was 2·477, which is above the average; the proportion of deaths of females to a hundred living was 2·208, which is also above the average, but in a less degree above it. There were 106 deaths of males to a hundred of females. This excess of mortality in the males is great, for on an average of twenty-eight years the proportion is only 103. But in the population, as constituted at the present time, the female sex is the stronger in respect of number. If it were otherwise, if the numbers of the sexes were equal, the relative mortality is such that there would have been in 1865 the proportion of 112 deaths of males to 100 of females.

Age.—It is shown in the subjoined tables that in both sexes the rate of mortality was lowest at the age of ten years and under 15; from which point it increases onwards to life's extremity. Out of 100 boys living, who were ten but not 15 years old, the mortality was nearly 0·5. Out of an equal number living under five years of age the mortality was 7·4, about fourteen times as high as the lowest. At the age 35–45 years the rate was 1·5 per cent. Amongst men living at the age 65–75 the rate of mortality was nearly the same as that which prevailed among boys at the age 0–5 years. In the next decennial period, 75–85, the rate doubled itself, and was 15. In the succeeding decenniad it rose to 34, and of every hundred persons who had completed 95 years of age or more, and still lingered on the patriarchal summit, the mortality was 49, nearly a half died in the year.

These results may be compared with the rates of mortality in females at different ages, as these are given in the tables. It will be seen, on reference to the tables, that the comparison may be pursued through the successive periods of life, and in respect to the deaths, not of a single year, but of each of a series of years beginning with 1838.

TABLE **16.**—ENGLAND. **Mortality** per Cent. at different Ages.—**Males.***

YEARS.	AGES.—MALES. All Ages.	0–	5–	10–	15–	25–	35–	45–	55–	65–	75–	85–	95 and upwds.
	MEAN OF 28 YEARS.												
1838–65	2·327	7·253	·890	·499	·792	·983	1·290	1·813	3·148	6·782	14·715	30·638	44·277
	MEANS OF 10 YEARS.												
1841–50	2·312	7·153	·920	·513	·822	·991	1·275	1·843	3·188	6·711	14·832	30·612	44·051
1851–60	2·310	7·304	·856	·490	·772	·953	1·261	1·785	3·073	6·653	14·677	30·311	43·710
	MEANS OF 5 YEARS.												
(3 Years.) 1838–40	2·330	7·231	·961	·524	·835	1·024	1·298	1·845	3·250	6·756	14·407	29·381	43·380
(5 Years.) 1841–45	2·216	6·898	·885	·486	·781	·935	1·206	1·742	3·042	6·530	14·376	29·905	43·177
1846–50	2·408	7·407	·956	·540	·862	1·048	1·343	1·943	3·335	6·892	15·288	31·319	44·925
1851–55	2·355	7·418	·878	·516	·806	·991	1·286	1·861	3·150	6·684	15·083	30·502	44·963
1856–60	2·266	7·189	·833	·464	·737	·915	1·236	1·708	2·997	6·621	14·271	30·120	42·456
1861–65	2·386	7·366	·857	·473	·749	1·004	1·371	1·794	3·157	7·198	14·742	32·099	45·402

* For mode of reading this Table, see Note to Table 17.

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

Death-rate in town, country, and in counties.—The population may be divided into two portions nearly equal in amount, urban and rural; the former in great measure inhabiting the chief towns; the latter living chiefly in small towns, villages, and the open country. The town rate of mortality was 2·546 per cent. in 1865; that which prevailed in the country was 2·081. Their respective averages are 2·414 and 1·987.

It has been stated that the mortality of England in the year was 2·339 per cent. That of London was 2·456. In Lancashire, always unfavourably distinguished, it rose higher than in any other county, namely, to 2·832. In the West Riding the death-rate was 2·667; in the East Riding 2·415; in Durham 2·400; in South Wales and Monmouthshire nearly 2·388; in Cumberland 2·381; in Northumberland 2·372.

The metropolis and the northern counties above mentioned comprise the chief seats of industry and commerce; they are full of life, and they produce the wealth which should make life healthy. It is worthy of note, that in none of the other counties, occupying so large a proportion of the whole area of the kingdom, did the death-rate rise so high as that of England.

TABLE **17.**—ENGLAND. **Annual Rates** of **Mortality** per Cent. of **Males** at different Ages, **1838–65.**

YEARS.	DEATHS TO 100 LIVING. AGES.—MALES.												
	ALL AGES.	0–	5–	10–	15–	25–	35–	45–	55–	65–	75–	85–	95 and upwds.
1838	2·342	7·012	·899	·519	·853	1·078	1·358	1·945	3·413	7·053	14·810	29·870	45·695
1839	2·277	7·149	·903	·512	·820	·994	1·265	1·795	3·194	6·499	13·908	27·995	39·694
1840	2·372	7·533	1·082	·542	·832	·999	1·270	1·795	3·143	6·715	14·504	30·278	44·752
1841	2·238	6·843	·956	·510	·811	·978	1·217	1·785	3·137	6·482	14·266	29·650	43·164
1842	2·239	7·055	·901	·501	·782	·926	1·193	1·734	3·041	6·566	14·565	29·410	43·142
1843	2·199	6·910	·845	·478	·772	·919	1·212	1·723	3·007	6·525	14·067	28·708	42·651
1844	2·238	7·000	·898	·473	·762	·933	1·217	1·752	3·050	6·665	14·619	31·644	40·589
1845	2·166	6·683	·823	·466	·780	·919	1·193	1·718	2·973	6·413	14·365	30·114	46·340
1846	2·390	7·781	·826	·507	·858	1·016	1·262	1·802	3·128	6·673	15·032	32·127	49·169
1847	2·541	7·603	·971	·550	·927	1·091	1·425	2·067	3·648	7·603	17·284	35·462	54·329
1848	2·387	7·418	1·044	·530	·857	1·018	1·295	1·866	3·265	6·722	14·954	30·552	41·095
1849	2·578	7·526	1·125	·646	·950	1·236	1·573	2·264	3·653	7·186	15·162	29·925	41·916
1850	2·142	6·701	·815	·467	·716	·877	1·162	1·717	2·979	6·278	14·006	28·527	38·117
Mean of 28 Years (1838 65).	2·327	7·253	·890	·499	·792	·983	1·290	1·813	3·148	6·782	14·715	30·638	44·277
1851	2·276	7·298	·869	·491	·776	·948	1·236	1·787	3·031	6·396	14·055	28·245	41·937
1852	2·324	7·500	·908	·522	·802	·972	1·232	1·807	3·056	6·289	14·203	28·659	44·539
1853	2·383	7·332	·850	·508	·833	1·021	1·318	1·935	3·236	6·919	15·968	32·097	49·732
1854	2·441	7·770	·940	·555	·842	1·039	1·335	1·928	3·165	6·684	14·913	29·093	41·423
1855	2·351	7·189	·822	·503	·778	·974	1·288	1·848	3·260	7·132	16·276	34·415	47·181
1856	2·136	6·753	·722	·456	·736	·904	1·189	1·644	2·879	6·163	13·099	28·092	36·701
1857	2·257	7·254	·783	·470	·737	·918	1·215	1·702	2·952	6·461	14·382	30·229	40·374
1858	2·390	7·683	1·052	·503	·766	·928	1·253	1·734	3·045	6·796	14·696	31·771	47·726
1859	2·327	7·499	·926	·478	·736	·920	1·255	1·735	3·018	6·644	14·019	29·376	43·747
1860	2·218	6·758	·683	·414	·712	·905	1·270	1·725	3·091	7·042	15·159	31·133	43·732
1861	2·268	7·176	·674	·433	·728	·923	1·265	1·690	3·008	6·890	14·654	31·092	44·835
1862	2·249	6·963	·770	·444	·717	·936	1·283	1·729	3·031	6·757	14·060	29·846	36·579
1863	2·424	7·743	1·031	·503	·739	·968	1·330	1·729	3·055	6·924	14·084	31·245	48·848
1864	2·514	7·535	·993	·503	·780	1·075	1·403	1·901	3·385	7·756	15·413	34·340	53·246
1865	2·477	7·413	·816	·481	·781	1·116	1·482	1·919	3·308	7·665	15·499	33·973	48·503

The Table may be read thus:—Of 100 males living of the age 35 and under 45, 1·358 died in 1838, 1·265 in 1839, and 1·162 in 1850; the average annual rate in the 28 years, 1838–65, among the aggregate of males in this decennial period of age was 1·290.

TABLE **18.**—ENGLAND. **Mortality** per Cent. at different Ages.—**Females.**

YEARS.	AGES.—FEMALES. ALL AGES.	0–	5–	10–	15–	25–	35–	45–	55–	65–	75–	85–	95 and upwds.
	MEAN OF 28 YEARS.												
1838–65	2·152	6·253	·880	·516	·826	1·018	1·231	1·560	2·832	5·789	13·448	28·167	43·211
	MEANS OF 10 YEARS.												
1841–50	2·161	6·135	·910	·533	·853	·1063	1·279	1·589	2·822	6·134	13·506	28·376	44·445
1851–60	2·142	6·331	·844	·509	·814	·996	1·198	1·514	2·747	5·693	13·355	28·125	42·816
	MEANS OF 5 YEARS.												
(3 Years.) 1838–40	2·149	6·180	·983	·547	·855	1·027	1·280	1·601	2·882	5·764	13·260	26·785	38·682
(5 Years.) 1841–45	2·064	5·878	·886	·500	·817	·995	1·211	1·504	2·704	5·943	13·123	28·019	42·045
1846–50	2·257	6·391	·933	·566	·890	1·130	1·347	1·674	2·941	6·324	13·890	28·732	46·844
1851–55	2·183	6·405	·854	·534	·844	1·040	1·237	1·558	2·785	5·897	13·623	28·359	44·006
1856–60	2·100	6·257	·834	·484	·784	·951	1·159	1·469	2·708	5·489	13·088	27·891	41·626
1861–65	2·155	6·380	·833	·479	·776	·965	1·172	1·567	2·992	5·308	13·632	28·665	44·252

TABLE **19.**—ENGLAND. **Annual Rates** of **Mortality** per Cent. of **Females** at different Ages, **1838–65.**

YEARS.	DEATHS TO 100 LIVING. AGES.—FEMALES.												
	ALL AGES.	0–	5–	10–	15–	25–	35–	45–	55–	65–	75–	85–	95 and upwds.
1838	2·146	6·007	·899	·540	·851	1·044	1·319	1·675	3·037	5·875	13·516	26·599	37·084
1839	2·097	6·113	·937	·533	·847	1·006	1·251	1·558	2·764	5·529	12·655	25·322	36·401
1840	2·204	6·420	1·114	·569	·868	1·032	1·271	1·571	2·845	5·887	13·608	28·435	42·562
1841	2·083	5·861	·963	·520	·842	1·007	1·227	1·542	2·740	5·841	13·375	28·255	42·706
1842	2·098	6·032	·924	·513	·831	1·005	1·219	1·523	2·731	6·023	13·031	28·405	40·216
1843	2·047	5·913	·847	·486	·785	·977	1·225	1·479	2·670	5·894	12·944	27·597	44·217
1844	2·083	5·906	·900	·504	·811	1·007	1·197	1·518	2·743	6·076	13·367	28·356	42·617
1845	2·011	5·680	·798	·478	·816	·981	1·185	1·459	2·635	5·883	12·896	27·482	40·471
1846	2·221	6·704	·811	·535	·871	1·049	1·238	1·550	2·747	6·185	13·640	30·250	50·633
1847	2·380	6·580	·948	·579	·920	1·175	1·418	1·779	3·186	6·996	15·773	32·003	51·995
1848	2·224	6·419	·995	·568	·879	1·091	1·298	1·581	2·829	6·096	13·476	27·547	46·030
1849	2·445	6·506	1·100	·655	1·001	1·348	1·614	1·990	3·328	6·616	13·927	27·969	42·856
1850	2·013	5·747	·810	·492	·778	·988	1·168	1·470	2·613	5·726	12·633	25·892	42·705
Mean of 28 Years (1838–65).	2·152	6·253	·880	·516	·826	1·018	1·231	1·560	2·832	5·789	13·448	28·167	43·211
1851	2·124	6·299	·860	·527	·818	1·005	1·193	1·519	2·679	5·854	12·818	26·357	45·017
1852	2·155	6·441	·877	·539	·837	1·032	1·209	1·508	2·653	5·658	13·164	27·623	41·348
1853	2·197	6·342	·810	·543	·867	1·064	1·239	1·582	2·830	6·017	14·072	29·350	47·206
1854	2·267	6·780	·920	·564	·868	1·102	1·309	1·643	2·834	5·807	13·297	26·950	42·156
1855	2·174	6·163	·801	·497	·828	·998	1·235	1·537	2·931	6·150	14·763	31·517	44·303
1856	1·969	5·885	·732	·455	·759	·933	1·133	1·403	2·512	5·119	11·977	24·266	36·692
1857	2·107	6·377	·769	·466	·792	·942	1·152	1·462	2·711	5·581	13·116	28·141	45·450
1858	2·233	6·752	1·043	·535	·824	·977	1·185	1·479	2·759	5·726	13·775	29·697	45·845
1859	2·155	6·523	·937	·526	·794	·966	1·174	1·507	2·701	5·389	12·920	27·635	40·455
1860	2·034	5·746	·691	·439	·750	·939	1·153	1·496	2·856	5·628	13·651	29·714	39·690
1861	2·063	6·198	·678	·436	·776	·933	1·117	1·472	2·817	5·246	13·123	26·613	44·478
1862	2·049	6·016	·745	·458	·751	·928	1·137	1·491	2·845	5·234	12·980	27·172	39·725
1863	2·193	6·715	·998	·521	·766	·955	1·161	1·505	2·897	5·091	13·137	28·922	43·565
1864	2·264	6·537	·953	·513	·795	1·011	1·224	1·677	3·235	5·652	14·540	30·578	44·851
1865	2·208	6·435	·791	·465	·792	·999	1·219	1·689	3·165	5·317	14·380	30·038	48·642

TABLE **20.**—**Proportional Number** of **Deaths** in each **Quarter** to **1000 Deaths** in the **Average Quarter** of each Year, **1838–65.**

YEARS.	NUMBER OF DEATHS IN THE AVERAGE QUARTER.	PROPORTIONAL NUMBER OF DEATHS				
		In the AVERAGE QUARTER (assumed to be 1000).	FIRST QUARTER ending March 31.	SECOND QUARTER ending June 30.	THIRD QUARTER ending Sept. 30.	FOURTH QUARTER ending Dec. 31.
1838	85,690	1000	1145	1061	850	944
1839	84,746	1000	1059	1038	900	1003
1840	89,922	1000	1100	1005	899	997
1841	85,962	1000	1152	1002	878	968
1842	87,380	1000	1102	990	942	965
1843	86,611	1000	1096	1007	887	1010
1844	89,233	1000	1132	956	893	1018
1845	87,342	1000	1198	1021	857	924
1846	97,579	1000	917	925	1042	1116
1847	105,826	1000	1131	1008	883	978
1848	99,958	1000	1201	998	877	925
1849	110,210	1000	961	927	1227	885
1850	92,249	1000	1067	1007	931	996
1851	93,849	1000	1066	1006	926	1002
1852	101,784	1000	1045	989	986	980
1853	105,274	1000	1122	1022	876	980
1854	109,476	1000	1036	940	1031	993
1855	106,426	1000	1280	1001	816	903
1856	97,627	1000	1061	1031	928	980
1857	104,954	1000	1050	955	950	1045
1858	112,414	1000	1134	955	865	1046
1859	110,195	1000	1118	961	938	983
1860	105,680	1000	1166	1054	812	968
1861	108,778	1000	1129	990	923	958
1862	109,142	1000	1133	986	839	1042
1863	118,460	1000	1095	999	942	964
1864	123,883	1000	1159	949	901	991
1865	122,727	1000	1159	946	916	979

TABLE **21.**—**Annual Rate** per Cent. of **Births,** and **Deaths,** in **England,** during each **Quarter** of the Years **1838–1865.**

YEARS.	BIRTH RATE. In the Quarters ending the last day of				DEATH RATE. In the Quarters ending the last day of			
	March.	June.	Sept.	Dec.	March.	June.	Sept.	Dec.
1838	3·032	3·198	2·970	2·928	2·615	2·387	1·887	2·086
1839	3·248	3·338	3·069	3·059	2·359	2·280	1·949	2·164
1840	3·395	3·301	3·021	3·044	2·538	2·310	2·038	2·252
1841	3·424	3·278	3·082	3·092	2·537	2·174	1·877	2·063
1842	3·431	3·344	3·032	3·058	2·436	2·158	2·025	2·067
1843	3·420	3·234	3·114	3·174	2·373	2·149	1·866	2·119
1844	3·507	3·334	3·123	3·115	2·467	2·077	1·913	2·175
1845	3·491	3·291	3·140	3·103	2·554	2·144	1·776	1·908
1846	3·498	3·551	3·251	3·256	2·157	2·144	2·382	2·545
1847	3·488	3·265	2·945	2·938	2·850	2·506	2·163	2·389
1848	3·252	3·474	3·211	3·038	2·794	2·313	2·005	2·108
1849	3·575	3·523	3·056	3·053	2·462	2·341	3·057	2·199
1850	3·321	3·530	3·281	3·253	2·261	2·107	1·917	2·045
1851	3·563	3·553	3·318	3·271	2·387	2·222	2·016	2·176
1852	3·583	3·511	3·293	3·299	2·355	2·222	2·186	2·166
1853	3·579	3·464	3·177	3·099	2·614	2·349	1·985	2·214
1854	3·518	3·721	3·293	3·108	2·447	2·213	2·423	2·326
1855	3·596	3·526	3·255	3·123	2·910	2·272	1·844	2·036
1856	3·580	3·655	3·276	3·267	2·179	2·111	1·896	1·997
1857	3·604	3·555	3·316	3·304	2·298	2·087	2·068	2·269
1858	3·576	3·488	3·204	3·205	2·631	2·210	1·997	2·406
1859	3·631	3·588	3·389	3·414	2·515	2·155	2·097	2·195
1860	3·707	3·512	3·267	3·230	2·481	2·237	1·718	2·043
1861	3·500	3·690	3·388	3·272	2·453	2·147	1·994	2·064
1862	3·644	3·665	3·365	3·350	2·443	2·121	1·800	2·230
1863	3·691	3·700	3·343	3·428	2·538	2·308	2·169	2·213
1864	3·740	3·651	3·453	3·376	2·772	2·260	2·141	2·349
1865	3·765	3·692	3·434	3·370	2·723	2·217	2·140	2·283
Mean	3·513	3·487	3·217	3·187	2·505	2·222	2·047	2·182

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

GREAT BRITAIN.

The population of England and Wales estimated for the middle of the year 1865 was 20,990,946; that for Scotland was 3,136,057; therefore for Great Britain it was 24,127,003. The population of the smaller

TABLE **22.**—Estimated **Population, Marriages, Births,** and **Deaths** in the **United Kingdom,** in the Year **1865.**

———	AREA IN STATUTE ACRES.	Estimated POPULATION in the middle of the Year 1865.	MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.
UNITED KINGDOM	77,286,901	29,768,089	249,960	499,920	1,054,831	686,714
Great Britain – –	56,964,260	24,127,003	209,051	418,102	861,195	561,730
England and Wales –	37,324,883	20,990,946	185,474	370,948	748,069	490,909
Scotland – – –	19,639,377	3,136,057	23,577	47,154	113,126	70,821
Ireland – – –	20,322,641	5,641,086	40,909	81,818	193,636	124,984

Note.—The Marriages, Births, and Deaths for Ireland have been corrected for defective registration by adding one third to the registered numbers, which were as follows: Marriages 30,684, Births 145,227, and Deaths 93,738.

TABLE **23.**—**Proportion** per Cent. of **Marriages, Births,** and **Deaths** to the Population of the **United Kingdom,** in the Year **1865.**

———	ACRES TO A PERSON.	TO 100 PERSONS LIVING.			
		MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.
UNITED KINGDOM – –	2·60	·840	1·680	3·543	2·307
Great Britain – – –	2·36	·866	1·732	3·569	2·328
England and Wales – –	1·78	·884	1·768	3·564	2·339
Scotland – – – – –	6·26	·752	1·502	3·607	2·258
Ireland – – – –	3·60	·725	1·450	3·433	2·216

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

TABLE **24.**—**Estimated Population** of **England, France,** and of **Austria, 1853** to **1865.**

YEARS.	ENGLAND and WALES.	FRANCE.*	AUSTRIA.‡
1853	18,404,368	36,225,000	21,227,930
1854	18,616,310	35,910,496	21,249,494
1855	18,829,000	35,974,930	21,014,129
1856	19,042,412	36,039,364	21,148,200
1857	19,256,516	36,154,398	21,774,412
1858	19,471,291	36,236,322	21,999,254
1859	19,686,701	36,331,642	22,244,976
1860	19,902,713	36,522,404	22,474,156
1861	20,119,314	37,386,313†	22,648,851
1862	20,336,467	37,532,883†	22,841,580
1863	20,554,137	37,722,068†	23,078,057
1864	20,772,308	37,894,754†	23,317,544
1865	20,990,946	37,980,924†	20,876,643

* M. Legoyt, director of the Statistical Department of France, has favoured the Registrar General with the returns of France for the years 1853–65.

† Including the three newly annexed departments.

‡ Dr. Ficker, chief of the Statistical Department of Austria, has favoured the Registrar General with the returns of Austria. The population returned above is exclusive of Hungary, Croatia, Slavonia, and Transylvania. The population enumerated for the year 1857 and estimated for the entire empire, for each of the other years 1853-65, is 33,834,743; 33,846,907; 33,528,438; 33,763,157; 34,499,755; 34,822,519; 35,228,383; 35,594,418; 35,905,968; 36,235,552; 36,646,762; 36,975,840; and 34,676,081 respectively. The population of the States of Italy included up to 1864, are excluded from the numbers of 1865.

kingdom is less than a sixth part of that of the larger ; but it occupies an area equal to more than half of the area of England.

The number of marriages in Great Britain was 209,051, of which 23,577 were in Scotland ; the number of births 861,195, of which 113,126

TABLE **25.—Number** and **Proportion per Cent.** to **Population** of **Marriages, Births,** and **Deaths** in **England, France,** and in **Austria, 1853–65.**

YEARS.	NUMBER of MARRIAGES, BIRTHS, and DEATHS.			PROPORTIONS per Cent. of MARRIAGES, BIRTHS, and DEATHS to the POPULATION.		
	England.	**France.***	**Austria.†**	**England.**	**France.***	**Austria.†**
	MARRIAGES.					
1853	164,520	280,609	172,009	·894	·775	·838
1854	159,727	270,896	154,803	·858	·754	·762
1855	152,113	283,335	144,312	·808	·788	·977
1856	159,337	284,401	185,889	·837	·789	·931
1857	159,097	295,510	183,531	·826	·817	·874
1858	156,070	307,056	189,776	·802	·847	·870
1859	167,723	298,417	160,627	·852	·821	·738
1860	170,156	288,936	190,224	·855	·791	·880
1861	163,706	305,203	189,058	·814	·816	·869
1862	164,030	303,514	207,874	·807	·809	·913
1863	173,510	301,875	199,833	·844	·800	·867
1864	180,387	294,247	194,837	·868	·776	·836
1865	185,474	299,352	167,004	·884	·788	·800
	PERSONS MARRIED.					
1853	329,040	561,218	344,018	1·788	1·550	1·676
1854	319,454	541,792	309,606	1·716	1·508	1·524
1855	304,226	566,670	288,624	1·616	1·576	1·954
1856	318,674	568,802	371,778	1·674	1·578	1·862
1857	318,194	591,020	367,062	1·652	1·634	1·748
1858	312,140	614,112	379,552	1·604	1·694	1·740
1859	335,446	596,834	321,254	1·704	1·642	1·476
1860	340,312	577,872	380,448	1·716	1·582	1·760
1861	327,412	610,406	378,116	1·628	1·632	1·738
1862	328,060	607,028	415,748	1·614	1·618	1·826
1863	347,020	603,750	399,666	1·688	1·600	1·734
1864	360,774	588,494	389,674	1·736	1·552	1·672
1865	370,948	598,704	334,008	1·768	1·576	1·600
	BIRTHS.					
1853	612,391	936,967	802,817	3·327	2·587	3·993
1854	634,405	923,461	774,774	3·408	2·572	3·751
1855	635,043	902,336	698,165	3·373	2·508	4·189
1856	657,453	952,116	785,663	3·453	2·642	3·873
1857	663,071	940,709	863,812	3·443	2·602	4·160
1858	655,481	969,343	868,599	3·366	2·675	4·091
1859	689,881	1,017,896	910,170	3·504	2·802	4·225
1860	684,048	956,875	845,882	3·437	2·620	3·950
1861	696,406	1,005,078	857,441	3·461	2·688	3·948
1862	712,684	995,167	869,094	3·504	2·651	3·945
1863	727,417	1,013,191	920,439	3·539	2·686	3·988
1864	740,275	993,188	942,826	3·564	2·621	4·043
1865	748,069	1,006,650	816,753	3·564	2·650	3·912
	DEATHS.					
1853	421,097	795,607	682,120	2·288	2·196	3·428
1854	437,905	992,779	753,210	2·352	2·765	3·715
1855	425,703	937,942	927,253	2·261	2·607	5·139
1856	390,506	837,082	651,592	2·051	2·323	3·178
1857	419,815	858,785	609,150	2·180	2·375	2·948
1858	449,656	874,186	644,635	2·309	2·412	3·167
1859	440,781	979,333	664,448	2·239	2·696	3·072
1860	422,721	781,635	616,702	2·124	2·140	2·922
1861	435,114	866,597	682,736	2·163	2·318	3·081
1862	436,566	812,978	676,375	2·147	2·166	3·035
1863	473,837	846,539	693,016	2·305	2·244	3·110
1864	495,531	823,185	703,339	2·386	2·172	3·016
1865	490,909	920,150	646,980	2·339	2·422	3·099

* The returns for France in the years 1861 to 1865 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 1853–62.

† The returns for Austria exclude Hungary, Croatia, Slavonia, and Transylvania: but the proportions per cent. are estimated to represent the rates prevailing in the entire empire.

were in Scotland ; while the deaths were 561,730, of which 70,821 were contributed by the northern kingdom.

The above facts represent a lower marriage-rate in Scotland than in England ; viz., 1·502 (persons married to 100 living), as against 1·768 ; also a lower death-rate, 2·258, against 2·339 ; but the Scotch birth-rate is higher than the English, the former being 3·607, the latter 3·564. The excess in the birth-rate may be only apparent, and the difference in the two results may be due only to the greater stringency of the Scotch Act in respect to the registration of births.

The marriage, birth, and death rates in Great Britain were respectively 1·732, 3·569, and 2·328 per cent.

The marriage, birth, and death rates in the United Kingdom were 1·680, 3·543, and 2·307 per cent.

FRANCE, AUSTRIA, ITALY, SPAIN.

The estimated population in 1865 of France was 37,980,924; of Austria (exclusive of Hungary, Croatia, Slavonia, Transylvania, and the Italian States) 20,876,643 ; of the Austrian Empire (exclusive of Italian States) 34,676,081 ; of Italy 22,483,663 ; and of Spain 16,378,958.

The marriage-rate was in France 1·576 per cent. ; in the Austrian Empire 1·600 ; in Italy 1·830. That of England was higher than the two former, lower than the Italian rate.

The birth-rate in France was 2·650 per cent. ; in the Austrian Empire 3·912 ; in Italy 3·849 ; in Spain 3·754. The English birth-rate was very much higher than the French, but lower than the Austrian, Italian, and Spanish birth-rates.

TABLE **26.—Italy. Population, Numbers,** and **Proportions per Cent.** of **Marriages, Births,** and **Deaths, exclusive of still-born,** in each of the Years **1862** to **1865.** (Supplied by Dr. Maestri, Chief of the Statistical Department of Italy.)

YEARS.	NUMBERS.					PROPORTIONS PER CENT. TO POPULATION.			
	ESTIMATED POPULATION on 31st Dec.	MARRIAGES.	PERSONS MARRIED.	BIRTHS. Exclusive of Still-born.	DEATHS. Exclusive of Still-born.	MARRIAGES.	PERSONS MARRIED.	BIRTHS.	DEATHS.
1862	21,880,745	176,897	353,794	814,102	662,260	·808	1·616	3·721	3·027
1863	22,047,034	179,136	358,272	862,390	686,777	·813	1·626	3·912	3·115
1864	22,291,180	177,382	354,764	845,454	659,063	·796	1·592	3·793	2·952
1865	22,483,663	205,651	411,302	865,387	672,897	·915	1·830	3·849	2·993

NOTE.—The Returns of Births and Deaths in the year 1862 included the *still-born*, and as no *separate* return of them was made in that year the numbers returned as still-born in 1863 have been deducted from the Births and Deaths for the year 1862.

TABLE **27.—Spain. Population, Numbers** and **Proportions per Cent.** of **Births** and **Deaths** in each of the Years **1861** to **1865.**

YEARS.	NUMBERS.			PROPORTIONS PER CENT. TO POPULATION.	
	ESTIMATED POPULATION.	BIRTHS.	DEATHS.	BIRTHS.	DEATHS.
1861	15,867,381	611,609	417,764	3·855	2·633
1862	16,044,180	607,062	430,263	3·784	2·682
1863	16,180,660	598,141	461,661	3·697	2·853
1864	16,302,625	621,451	499,486	3·812	3·064
1865	16,378,958	614,913	538,580	3·754	3·288

NOTE.—The Population enumerated at the Census of 1860 was 15,673,536. The estimated Population for the Years 1861–5 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.

The death-rate was in France 2·422 per cent.; in the Austrian Empire 3·099; in Italy 2·993; in Spain 3·288. England was healthier than any of the four other countries.

The British Army.

I have been favoured by His Royal Highness the General Commanding-in-Chief with a return of the strength of the army at home and abroad in 1865. The British army at home consisted of 4412 officers and 79,974 non-commissioned officers and men; abroad there were 6155 officers and 118,049 non-commissioned officers and men. The entire strength was 208,590.

Table 28. — **Annual Rate of Mortality** per Cent. in **Great Britain, England, France, Austria,** and in **Italy,** *including* the **Deaths of Soldiers at Home and Abroad, 1857** to **1865.**

Years.	Great Britain.	England and Wales.	France.	Austria.	Italy.
1857	2·169	2·184	2·375	2·941	—
1858	2·297	2·323	2·412	3·160	—
1859	2·218	2·244	2·696	3·074	—
1860	2·142	2·127	2·140	2·924	—
1861	2·147	2·164	2·318	3·066	—
1862	2·150	2·146	2·166	3·020	3·027
1863	2·303	2·303	2·244	3·088	3·115
1864	2·383	2·384	2·172	2·933	2·952
1865	2·327	2·338	2·422	3·044	2·993

Table 29.—**Average Strength** of the **Army at Home,** in the Year **1865.** (Furnished to the Registrar-General by direction of H.R.H. the General Commanding in Chief.)

	United Kingdom.		England, Wales, and Channel Islands.		Scotland.		Ireland.	
	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.
Cavalry	782	12,495	537	8,487	34	565	211	3,443
Infantry	2,637	51,340	1,778	34,558	121	2,313	738	14,469
Artillery	643	13,647	566	11,608	9	358	68	1,681
Engineers	350	2,492	323	2,237	10	120	17	135
Total	4,412	79,974	3,204	56,890	174	3,356	1,034	19,728

	Officers and Men.
British Army at Home in 1865	84,386
,, Abroad ,,	124,204
Total	208,590

Table 30.—**Average Strength, Deaths,** and **Annual Rate of Mortality** per Cent. of the **Army** in the **United Kingdom** in **1865.**

	Average Strength.		Deaths.		Annual Rate of Mortality per Cent.	
	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.
United Kingdom	4,412	79,974	37	922	·839	1·153
Great Britain	3,378	60,246	34	713	1·007	1·183
Ireland	1,034	19,728	3	209	·290	1·059

Table 31. — **Return** showing the **Average Strength** of the **British Army Abroad** in each of the Years **1862–1865.** (Furnished to the Registrar-General by the Adjutant-General by direction of H.R.H. the General Commanding in Chief.)

	1862		1863		1864		1865	
	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	343	6,328	366	6,127	386	6,207	393	6,083
Infantry	4,319	100,721	4,383	97,597	4,572	98,865	4,409	92,672
Artillery	702	15,410	1,165	19,739	818	19,143	965	17,519
Engineers	132	2,244	329	2,010	391	1,825	388	1,775
Total	5,496	124,703	6,243	125,473	6,167	126,040	6,155	118,049

Table 32. — **Number** of **Deaths** in the **British Army** during each of the Years **1862–1865.** (Furnished to the Registrar-General by the Adjutant-General by direction of H.R.H. the General Commanding in Chief.)

Corps.	1862						1863						1864						1865					
	Great Britain.		Ireland.		Abroad.		Great Britain.		Ireland.		Abroad.		Great Britain.		Ireland.		Abroad.		Great Britain.		Ireland.		Abroad.	
	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.	Officers.	Non-commissioned Officers and Men.
Cavalry and Infantry	22	604	6	194	61	2,063	17	556	4	199	83	1,688	17	613	3	192	92	1,920	21	529	2	191	75	1,990
Artillery	7	142	–	19	12	370	4	147	1	9	14	402	9	157	–	11	12	416	12	162	1	18	17	468
Engineers	2	18	–	3	1	37	6	11	–	1	2	20	1	13	–	1	3	50	1	22	–	–	5	23
Total	31	764	6	216	74	2,470	27	714	5	209	99	2,110	27	783	3	204	107	2,386	34	713	3	209	97	2,481

Table 33. — **Annual Rate of Mortality** per Cent. amongst the Officers and Non-commissioned Officers and Men in the **Army Abroad,** in each of the Years **1858–65.** (Deduced from the Strength and Deaths as given in the two preceding Tables.)

Years.	Officers.	Non-commissioned Officers and Men.
1858	3·513	6·701
1859	2·111	3·396
1860	1·639	2·603
1861	1·574	2·567
1862	1·343	1·981
1863	1·586	1·682
1864	1·735	1·893
1865	1·576	2·102

The rate of mortality of the army in the United Kingdom in 1865 was amongst officers 0·839 per cent.; amongst non-commissioned officers and men it was 1·153 per cent. In the army abroad the death-rate was, of officers 1·576; of men 2·102 per cent.

Births and Deaths of British Subjects at Sea.

The number of merchant seamen at sea in 1865 was 197,643, amongst whom there were 4600 deaths, representing a mortality of 2·33 per cent. This mortality is high as compared with that of the previous thirteen years, in which it ranged from 1·38 to 2·19.

Table **34.—Army serving at Home and Abroad.**

	1861
Officers and Men born in England - - -	130,469
,, ,, Scotland - - -	20,901
,, ,, Ireland - - -	71,556
,, ,, Foreign Parts -	6,635
Total - - - - -	229,561

Table **35.—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 **1858–1865.**

Years.	Deaths of Officers and Men in the Army Abroad.	Estimated Numbers in Col. 2. belonging to	
		Great Britain.	England and Wales.
1	2	3	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

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 34.

Table **36.—Austria. Annual Rate** of **Mortality** per Cent. in the **Army** in each of the Years **1857–65.**

Years.	Estimated Strength.	Deaths.	Annual Rate of Mortality per Cent.
1857	379,374	8,646	2·279
1858	347,696	8,577	2·467
1859	527,772	16,638	3·152
1860	384,302	11,903	3·097
1861	459,300	8,763	1·908
1862	400,895	6,800	1·696
1863	467,154	5,811	1·244
1864	559,599	6,928	1·238
1865	552,148	5,261	·953

The mercantile-marine strength has increased from 162,416 in 1854 to 197,643 in 1865. There was a marked decline in the number of employed seamen in the three years 1859-61, a slight revival in 1862, and a great and sudden increase in the three subsequent years.

Of British subjects at sea in British merchant ships, exclusive of merchant seamen, there were 938 deaths. These deaths are reported to the Registrar-General of Seamen by the captains or commanding officers of vessels, who also reported 412 births as having occurred at sea.

Marine Register Book.

It is required by the Registration Act that captains or commanding officers of British vessels should transmit to the Registrar General the particulars of all births and deaths of English subjects, who are born or die at sea, such particulars to be entered in the Marine Register Book kept at this office. In 1865 111 births and 234 deaths were thus entered.

Names on the Registers, and Searches.

The aggregate number of names on the registers, being the accumulated product of $28\frac{1}{2}$ years' registration (from 1st July 1837 to 31st December

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Table **37.—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 **1856–1865,** reported by the Captains or Commanding Officers of Vessels to the Registrar General of Seamen upon Schedule C., deposited at the Termination of their respective Voyages in Ports of the United Kingdom.—(Furnished to the Registrar General by the Registrar General of Seamen.)

		Males.	Females.	Total.
Births at Sea	1856 (imperfect) -	71	66	137
	1857 - - - -	168	142	310
	1858 - - - -	132	117	249
	1859 - - - -	135	132	267
	1860 - - - -	136	114	250
	1861 - - - -	110	108	218
	1862 - - - -	146	148	294
	1863 - - - -	159	185	344
	1864 - - - -	203	177	380
	1865 - - - -	210	202	412
	Total - - -	1,470	1,391	2,861
†Deaths at Sea	1856 (imperfect) -	121	78	199
	1857 - - - -	238	140	378
	1858 - - - -	253	182	435
	1859 - - - -	524	303	827
	1860 - - - -	241	156	397
	1861 - - - -	213	121	334
	1862 - - - -	221	148	369
	1863 - - - -	347	231	578
	1864 - - - -	379	210	589
	1865 - - - -	483	315	798
	Total - - -	3,020	1,884	4,904

* British subjects are not particularly described upon Schedule C., but foreign names have been excluded from this account. A column headed *Place of Birth* was formerly contained in the schedule, for the purpose of distinguishing passengers as British subjects or Foreigners, but in many cases it was not filled up by masters, in consequence of their inability to obtain the information after the death had taken place. 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, and 140 in 1865. The number is 1183 in ten years, which, if added to the 4904 above, makes 6087, the total number of deaths of British subjects at sea in 1856–65, exclusive of those of merchant seamen.

1865) was 37,203,641. This result comprises 8,493,424 names of persons married, 17,208,017 of children born, and 11,502,200 of persons who had died in that period.

TABLE **38.—Mortality** of **Merchant Seamen at Sea,** in the 14 Years **1852-65.***

YEARS.	STRENGTH.	DEATHS.	ANNUAL RATE OF MORTALITY. To 100 living.
1852	159,563	2,205	1·38
1853	172,525	3,276	1·90
1854	162,416	2,772	1·71
1855	168,537	3,318	1·97
1856	173,918	3,549	2·04
1857	176,387	3,444	1·95
1858	177,832	3,486	1·96
1859	172,506	3,430	1·99
1860	171,592	3,760	2·19
1861	171,957	3,580	2·08
1862	173,863	3,620	2·08
1863	184,727	3,380	1·83
1864	195,756	3,893	1·99
1865	197,643	4,600	2·33
In the 14 years 1852-65	2,459,222	48,313	1·96

* Deduced from a return of the number of accounts of wages and effects of seamen (exclusive of masters) dying before the termination of the voyage, received by the Registrar General of Seamen. This return does *not include seamen dying ashore in foreign parts*, whose wages and effects are delivered to the consuls or officers of the hospitals to which such men are sent; accounts of their effects are sent direct to the Board of Trade.

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

TABLE **39.—Aggregate Number of Names on the Registers** at the End of each Year **1837-65**; also the **Number of Searches for Registers** at the **Central Office** (exclusive of Searches in Non-parochial Registers).

YEARS.	AGGREGATE NUMBER OF PERSONS MARRIED.	OF BIRTHS.	OF DEATHS.	OF NAMES REGISTERED.	NUMBER of SEARCHES for REGISTERS at the CENTRAL OFFICE.
1837 – –	116,958	164,116	148,701	429,775	Not known.
1838 – –	353,092	627,903	491,461	1,472,456	
1839 – –	599,424	1,120,477	830,445	2,550,346	
1840 – –	844,754	1,622,780	1,190,132	3,657,666	
1841 – –	1,089,746	2,134,938	1,533,979	4,758,663	
1842 – –	1,327,396	2,652,677	1,883,498	5,863,571	
1843 – –	1,575,032	3,180,002	2,229,943	6,984,977	620
1844 – –	1,839,530	3,720,765	2,586,876	8,147,171	705
1845 – –	2,127,016	4,264,286	2,936,242	9,327,544	744
1846 – –	2,418,344	4,836,911	3,326,557	10,581,812	881
1847 – –	2,690,084	5,376,876	3,749,861	11,816,771	941
1848 – –	2,966,494	5,939,935	4,149,694	13,056,123	1,030
1849 – –	3,250,230	6,518,094	4,590,533	14,358,887	1,162
1850 – –	3,555,748	7,111,516	4,959,528	15,623,792	1,228
1851 – –	3,864,160	7,727,381	5,354,924	16,946,465	1,442
1852 – –	4,181,724	8,351,333	5,762,059	18,295,176	1,658
1853 – –	4,510,764	8,963,784	6,183,156	19,637,704	1,676
1854 – –	4,830,218	9,598,189	6,621,061	21,049,468	2,340
1855 – –	5,134,444	10,233,232	7,046,764	22,414,440	2,492
1856 – –	5,453,118	10,890,685	7,437,270	23,781,073	2,853
1857 – –	5,771,312	11,553,756	7,857,085	25,182,153	2,965
1858 – –	6,083,452	12,209,237	8,306,741	26,599,430	4,063
1859 – –	6,418,898	12,899,118	8,747,522	28,065,538	5,052
1860 – –	6,759,210	13,583,166	9,170,243	29,512,619	5,636
1861 – –	7,086,622	14,279,572	9,605,357	30,971,551	6,133
1862 – –	7,414,682	14,992,256	10,041,923	32,448,861	7,297
1863 – –	7,761,702	15,719,673	10,515,760	33,997,135	7,715
1864 – –	8,122,476	16,459,948	11,011,291	35,593,715	8,346
1865 – –	8,493,424	17,208,017	11,502,200	37,203,641	9,016

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

The searches for registers at the central office increase rapidly. During 1865 the searches by the public in the indexes of births, deaths, and marriages, prepared under the Registration Act, were 9016; of these 3618 were for certificates of births, 3904 for those of deaths, and 1494 for those of marriages. The birth certificates are applied for in the largest proportion of cases when the individuals have just attained or will shortly attain the full age of 21 years; more than one third of the searches for birth registers concerned persons born in the five years 1842-46. In the case of deaths the searches are in the largest proportion in the indexes of recent years; 1269 of these searches concerned persons deceased in the years 1862-65. The searches for marriage registers are very slightly more numerous in the later indexes. The above numbers do not include upwards of 400 searches for registers of births for purposes connected with the Factory Acts, the certificates in these cases being issued without charge. In addition, 1188 searches were made in the non-parochial registers deposited in this office, and 957 certified extracts were given. During the year 1865 the total amount received in fees for searches and certificates and paid into the Exchequer was 1487*l.* 12*s.*

PUBLIC REGISTRATION OF VACCINATION.

Jenner's discovery was recognized by the Legislature in 1802, and sums were annually voted by Parliament to the National Vaccine Establishment, founded 1808, to maintain the supply of lymph, and thus to promote vaccination.

On July 23, 1840, an Act (3 & 4 Victoria, cap. 29.), to extend the practice of vaccination, came into operation. It made lawful the contracts of Guardians with the Poor Law medical officers and other practitioners for the vaccination of all persons resident in Unions or Parishes, the only stipulation being that the amount of remuneration should depend on the number of persons successfully vaccinated. The vaccinators appointed under the Act were to report the number of cases vaccinated to the Guardians or Overseers.

This Act prohibited inoculation with variolous matter, by subjecting the inoculator, on summary conviction before two or more justices, to imprisonment for any term not exceeding one month.

The 4 & 5 Victoria, cap. 32., (June 21, 1841,) made a provision for the payment of the expenses of vaccination out of poor rate, and declared that vaccination at the public expense was not to be considered parochial relief.

In the year 1853, or thirteen years after the first Act had passed, vaccination was made compulsory by a measure introduced by Lord Lyttelton, who was not a member of the Government. The country was divided into districts, in which vaccinators were appointed.

Parents were directed by a notice on registering a birth, unless the child was previously vaccinated, to take it to the Parish vaccinator within three months of its birth, and after the operation to take the child to the same officer for the inspection of the result. In the absence of the parents, the custodian of the child was to procure the vaccination within four months.

The registrar was required, when he registered the births of children not previously vaccinated, to place notices in the hands of the parents, who, after receiving such notices, became subject to a fine of 20 shillings if they neglected to comply with the provisions of the Act.

For giving the notices, keeping a record, and registering the results in his book, the registrar was entitled to a fee of *threepence* "for each child "vaccinated in respect of which he shall have performed the duties "required in this Act."

The registrar was supplied with a book in which he entered—(1) No. in birth book; (2) when and where born; (3) name; (4) sex; (5) name and surname of parent; (6) rank, occupation, or profession of such parent;

(7) when registered ; minute of notice, namely, (8) date, and (9) to whom given ; and finally (10) date of medical certificate of successful vacccination ; (11) name of the medical man by whom the certificate is signed. The first seven particulars were to be copied from the birth register, to insure the identification of the child ; the eighth and ninth particulars were records of the notice ; the particulars in the tenth and eleventh columns were to be copied from the medical certificates, which only reached the registrar in rare instances, where, for example, the same man was an active public vaccinator and a registrar of births, registering his own vaccinations.

The absence of the information to be supplied by the medical certificates deprived the register of all its value ; the labour of the registrar was thrown away, and through no fault of his own he was thus deprived of the fee which he was led to expect by the Act of Parliament. For statistical purposes the imperfect records were useless.

If the child died before vaccination, if the child was not vaccinated, or if he was vaccinated for any cause out of the district, the registrar did not get his fee. And further, if the child was vaccinated the registrar failed to get his fee unless he received a certificate from the medical practitioner who performed the operation, and who had an opportunity of inspecting the result.*

The thousands of medical practitioners in the districts of England were supplied with four sorts of books of blank certificates by this office ; one book for cases of successful vaccination, one book of duplicates to be sent to the registrar, one book for cases of insusceptibility, and one for cases of temporary unfitness for successful vaccination.

The following is a specimen of one of the certificates.

COMPULSORY VACCINATION ACT.

(16 & 17 Victoriæ, Cap. 100.)

SCHEDULE A.

DUPLICATE MEDICAL CERTIFICATE OF SUCCESSFUL VACCINATION.

[To be transmitted (pursuant to Section IV.) to the Registrar of Births and Deaths of the Sub-district in which the operation was performed.]

DIRECTIONS for filling up this Certificate.

Insert in the several blank spaces, the following particulars:—

(a) Child's Name and Surname.

(b) Child's Age.

(c) Father's, or (if the child be illegitimate) Mother's Name and Surname.

(d) Parent's Residence [if in a Town, insert the No. of the House, the Street, and the Town, as in Example 2], and also the County.

(e) Date of Certificate.

I, the undersigned, hereby certify, That (a) *Jonas Jenkins*, aged (b) *2 months*, the Child of (c) *Jonathan Jenkins* of (d) [and residing at No. *17*, in *High* Street in] the Parish of *West Wickham*, in the County of *Kent*, has been successfully Vaccinated by me.

Dated this (e) *7th* day of *February* 1867.

(*Signature of the Person certifying*) *Timothy Edwards.*

(*Add Professional Titles*) *M.R.C.S.*

N.B.—This Certificate, when it cannot be delivered to the Registrar in person, may be forwarded to him by the Post, *leaving the Postage unpaid.*

Insert hereunder, from the Paper produced to you, the *No. of the Entry* of the Child's Birth in the Register-Book.

Entry No. *71.*

(*Indorsement.*)

To Mr. *William Bickerstith*,
Registrar of Births and Deaths for the Sub-district of
Bromley,
Kent.

UNPAID.

* The proportion of omissions to bring children for inspection in some districts is said to amount to ¼, ⅓, ½, or even ⅔ of the children vaccinated. 6th Report of Medical Officer of Privy Council, pp. 104–6. See able Report of Drs. Seaton and Dr. Buchanan on the defective working of the Act.

The medical man, in the midst of his practice as a public vaccinator, had after each operation to lay down his lancet, take up his pen, and write the particulars of each case in his own book, and after inspection of the arm to fill up two certificates,—to place the first in the hands of the parent or other person, and to transmit, by post or otherwise, a duplicate to the registrar of the sub-district in which the operation was performed.

The medical fee was fixed at a sum "not less than" eighteen pence and half a crown, according as the patient's distance from the vaccinator's residence was less or more than two miles.

Practically these medical certificates were either not written, or not sent to the registrars, in numberless instances, and the essential columns of their books are for entire pages all blanks. The registrars are entitled under section 8. to allow searches of their registers of successful vaccination on payment of the fee of *one shilling* for each search and *sixpence* for each certificate. The information, when it has been obtained, with so much trouble to all parties, parents, medical men, and registrars, is so little appreciated that the registrars have received nothing under this clause.

In 1858 (August 2), by 21 and 22 Victoria, cap. 97., the powers of the General Board of Health were transferred to the Privy Council, who were empowered to issue such "regulations as they think fit for securing the due qualification of persons to be hereafter contracted with by Guardians and Overseers," and for securing the efficient performance of vaccination. The money voted by Parliament towards the expenses of the National Vaccine Establishment, or for otherwise providing for the supply of vaccine lymph, the Act says "shall be applied under the directions of the Privy Council." Clause 8. adds further, that proceedings for penalties may be taken on the complaint of the registrar or an officer authorized by the Guardians, and that the cost of such proceedings shall be defrayed out of the common fund of the Union. This Act expired on August 1st, 1859, and was then made perpetual by 22 & 23 Vict. c. 3.

The 24 & 25 Vict., of 1st August 1861, facilitates proceedings before justices for the recovery of penalties under the Acts relating to vaccination.

Such is a brief sketch of the recent legislation on the subject of vaccination.

Confining myself to the registration of successful cases which, was entrusted to the officers under me, I may state that immediately on the passing of the compulsory Act (16 & 17 Vict. c. 100.) I sent a copy of the Act to each of the 2191 registrars in England and Wales, with an instructional circular, dated September 29th, 1853, reprinted in the Official List, which is sent annually to each registrar. See pages 458–461 of the List for 1867.

I have in the 13 years that ended in 1866 sent out for registrars no less than 7,743,000 notices to be given to parents and others registering births ; for medical men, 60,095 books, containing 6,009,500 certificates of successful vaccination to be given to parents ; 66,275 books for 6,627,500 duplicate certificates to be sent by vaccinators to registrars ; 3394 books for 169,700 insusceptible cases, 3395 books for 169,750 cases of temporary unfitness ; 17,866 books for the registration of vaccination, containing spaces for 8,665,110 entries. The total blank certificates, and the total spaces in registers, amount in the aggregate to 29,384,560.

On an average of the ten years, 1857–66, 707,052 births were registered annually ; 616,100 notices were sent out for distribution to the parents of children registered before the children were vaccinated. The 1425 birth register books issued annually would contain 712,650 entries, the vaccination books 703,153 entries.

As has been already stated, the registration of vaccination having so generally failed, the books have been of little or no use; and the registrars have labored in vain, and have seldom been paid for their pains. I have felt it my duty to represent these circumstances to Her Majesty's Government at various times; but up to the present date, although amendment Bills have been presented to Parliament, none have hitherto passed.

It was hoped by its sanguine supporters that the compulsory Vaccination Act might stamp out small-pox; but hitherto it has failed in that respect. In London during the 13 years (1841–53), when the voluntary Vaccination Acts by public vaccinators were in operation, 10,848 deaths from small-pox were registered; in the 13 years (1854-66) under the compulsory law the registered deaths by small-pox were 9972. In the metropolis the annual deaths were reduced only from 834 to 767 by small-pox annually; the annual mortality by small-pox from 38 to 28 per 100,000 living. The mean annual mortality from all causes in the corresponding years was 2447 and 2431 deaths to every 100,000 living.

In all England and Wales the registered deaths by small-pox in 9 years, 1841-42 and 1847–53, under the voluntary law, amounted to 46,991; in the 12 years, 1854–65, they amounted to 47,710. The annual deaths by small-pox in the first period were 5221; in the second period 3976; the annual rate of mortality by the disease was reduced in the proportion of 30 to 20 per 100,000 of the living. The annual mortality in the two periods from all causes was 2269 and 2238 per 100,000 living.

There is a diminution in the mortality by small-pox, and this may be fairly ascribed to the progress of vaccination. But it is evident that the disease as yet shows no signs of extinction. In the year 1865 the deaths from small-pox in England and Wales were 6411; and the rate of mortality was 31 per 100,000 living.

A Bill to consolidate and amend the laws relating to vaccination has been brought into Parliament during the session of the present year, by Lord Robert Montagu. The registration of successful cases by the registrars is retained, and the public vaccinator is required, after having ascertained the success of the operation, to transmit, by post or otherwise, the certificate, within 21 days after the performance of the operation, in the prescribed form, to the registrar of the district in which the birth was registered, and only when this is unknown to the registrar within whose district the operation shall have been performed.

The parents or guardians are required to transmit the certificate to the registrar, where the vaccination shall be performed by a medical practitioner not being a public vaccinator.

To the registrar it is proposed to give a fee of *one penny* for every notice he gives on registering a birth, and "another fee of *threepence* in "respect of every such child whose certificate he shall have registered "as herein provided." This threepence he will after all his trouble fail to get where the child dies, or is not vaccinated, or is not presented to the vaccinator for inspection, or where the public vaccinator, or in private cases the parents, fail to transmit to him the medical certificate. These duties are, it is true, enforced by a fine of 20*s.*, that may be recovered from defaulting vaccinators, or from parents who can command that sum.

I can only express a hope that if this Bill passes, the registration of successful vaccination may work more successfully than it has done under the previous Act, and may not prove a clog on the registration of births.

It will be my duty to see that if the new measure becomes law it does not fail through any default of the officers under my control, who if under this as under the old law fail to get paid, as I fear may be the case, must trust to the wisdom and justice of parliament for redress.

It is necessary to separate distinctly the public registration from the efficient performance of vaccination, which should extend such protection as it affords from a fatal, loathsome, and disfiguring disease to the whole of the population of the kingdom in which it was discovered.

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

I have the honour to be,
Sir,
Your faithful servant,
GEORGE GRAHAM,
Registrar-General.

Summary of the Quarterly Reports, 1865.

First Quarter.—January, February, March.

The United Kingdom.—Through the courtesy of the Registrars-General of Scotland and Ireland the returns can now be given for the United Kingdom. The number of persons married in the March quarter of 1865 was 108,960. The registered births in the quarter were 261,063; the deaths 190,537. The numbers, after adding one third to those of Ireland for defective registration, were: Persons married 117,138; births 273,838; deaths 200,317. The estimated population in 1865 was 29,768,089.

England.—Marriages were numerous in the first three months of the present year, chiefly in consequence of increased activity in the manufactures and other industry of the northern populations.

A birth-rate high above any example furnished by the previous ten years maintained the increase of population. The catalogue of deaths was also very heavy. A severe and protracted winter, with scarlatina and fever, swelled the mortuary returns. Under less favourable sanitary conditions the kingdom might have been ravaged by pestilence. And there is much still in our houses and towns to set in order.

Marriages.—Of weddings the number in the March quarter was 36,807; the daily average was 409. As it is the season in which employment is the slackest, it is also that invariably in which marriages are the fewest. There were 6381 marriages in London. The four most populous districts of the metropolis are Pancras, with about two hundred thousand persons, Kensington, Lambeth, and Marylebone. In Kensington there were 462 marriages; in Pancras, with its larger population, 454; in Marylebone almost the same number, though it contains fewer persons than Pancras by upwards of 30,000; in Lambeth the number was very great, for it rose to 482, the highest returned by the London districts, though its population scarcely exceeds that of Marylebone, and is much less than those of Pancras and Kensington.

The annual marriage-rate in the quarter, viz., proportion per cent. of persons married to population, was 1·428, the average of ten corresponding quarters, 1855–64, being 1·38. In 1864 (winter quarter) the rate was 1·472.

Births.—In the three months that ended 31st March 194,130 children were born. The births in London were 27,824, a number almost equal to the total contribution of the two north-western counties, Cheshire and Lancashire. As with the marriages, so with the births, the increase was furnished chiefly by the metropolis, the West Riding of Yorkshire, Durham, Northumberland, and South Wales. The births in the West Riding increased as follows:—In the March quarter of 1863 they were 14,846; in that of 1864 they were 16,007, and in the present year 16,430. In Durham the numbers were 5931; 6397; 6703. In Northumberland 3275; 3403; 3473. In South Wales 6217; 6487; and 6698. In Sunderland the births in the three periods were 950, 1058, and 1100. In the March quarter of the present year 1902 children were born in the parish of Pancras, London; and in the district of Bradford in the West Riding, which contains a population almost as great, 2193 were born in the same time.

The birth-rate of the quarter (children born to 100 persons living) was 3·765 against an average of 3·63. The result is extraordinary. In the same period of last year it was 3·740; in that of 1860 it was 3·707; but the forty quarters of the last ten years supply only another instance in which the birth-rate was as high as 3·700; and none as high as that of the last quarter.

Increase of Population.—The births, as has been stated, were 194,130; and the deaths in the same period were 140,410. The excess of the former over the latter was 53,720, and represents the natural increase of the population.

But the population of the United Kingdom lost about 25,000 by emigration in the quarter that ended 31st March; and of these about 8903 were persons of English origin. The total emigration (including foreigners, from British and Irish ports where there are Emigration officers was 27,513 persons, and showed a great decrease on that of the same quarter in 1863, which was 37,806, and a still greater as compared with the number last year, which was 41,037. The emigration to the United States was little more than half of that which took place in the March quarter of 1864.

Of 17,865 emigrants who went to the United States in the present year, about 3700 were English, 800 Scotch, and 11,000 Irish. The rest were foreigners.

Prices, Pauperism, and the Weather.—The price of wheat, 38*s.* 4*d.* per quarter, was less by 2*s.* than in the first three months of last year, and less by 8*s.* 3*d.* than in the same period of 1863. Both beef and mutton were dear. The average price of the best potatoes at the water-side market, Southwark, was 91*s.* per ton. In the March quarter of 1863 it was 125*s.*; in that of 1864 it was 62*s.* 6*d.*

The following are the returns of paupers in the last three winter quarters:—

	In-door.	Out-door.
1863 - - -	142,257	943,324
1864 - - -	139,606	855,776
1865 - - -	140,517	819,898

The numbers show a decrease in out-door pauperism.

Mr. Glaisher writes that January began with cold frosty weather; a warm period set in on the 4th day and continued till the 16th, during which period, though the weather was mild, the sky was cloudy, and the wind blowing a gale. From the 17th January to the end of the quarter, with the exception of short intervals at the beginning and end of February, the weather was cold for the season, sometimes to an unpleasant degree. In a cold period in January the temperature of the air was as low as 20° at many places; in February from 13° to 20° in many places, and as low as 8° at Birmingham; and in March at the equinox it was as low as 23°. In January and February snowstorms were frequent, and extended all over England and Scotland. At the end of February the weather was extremely wild and stormy; and March was cold and ungenial throughout. The mean temperature of January at Greenwich was 36·3°; that of February and also that of March 36·6°, each being below the average of the corresponding periods in twenty-four years, and the mean temperature of March being as much as 5·4° below the average. Usually February is 2° and March 5° warmer than January; but this year the increase was not obtained. To find a March equally cold it is necessary to go back to 1845, 1837, and 1814, when the mean temperature was above 35° and below 36°. In 1785 it was 33·9°. Towards the end of last century that month was oftener remarkable for extreme coldness than it has been in later times.

Deaths and State of the Public Health.—In the last quarter the total number of deaths was 140,410, being less than in the same period of 1864, when it was barely 143,000, and much greater than in that of 1863, when it was 128,000. In London it was 20,815; in Cheshire and Lancashire, containing a population somewhat greater, 23,309. In all the eleven Divisions of England the deaths were less numerous, as compared with those of the March quarter of last year, except the tenth, namely, the

Northern Counties (Durham, Northumberland, &c.), and the eleventh, Monmouthshire and Wales. In each of these two Divisions there was an increase. The South Eastern Counties also furnish an exception, but the numbers in the two quarters were almost equal.

The rate of mortality in England was 2·723 (viz., deaths to 100 persons living) against an average for the quarter of 2·52. Since the March quarter of 1855 the returns supply no example of as high a death-rate, with the exception of that of last year, when it rose in the three months to 2·772. The mortality was excessive both in the large town districts and in those districts which embrace the rural and small town population; 2·883 in the former, 2·522 in the latter; and it rose in both to nearly the same extent above the respective averages; the advantage, however, falling to the towns whose inhabitants are generally better fed, and in this important matter better fortified against the inclemency of the sky.

The effect of the winter-like severity of March doubtless remains to be read in legible characters in the registers of the quarter now running; and the lateness of that unpropitious weather must be considered in any comparison between the last two winters. The mean temperature of the winter of 1864 was 37°9° at Greenwich, and was higher by 1·4° than that of last winter; but the weather was marked by more frequent and abrupt changes, and as the cold was more seasonably confined to the first two months, its effect would be apparent chiefly on the death-registers of that quarter. The deaths from bronchitis in London in the winter quarter of 1863–5 were successively 2217, 4023, and 3217.

The following statements exhibit the progress of scarlatina and typhus in London since 1860. Scarlatina discovers a uniform well-marked tendency to increase in the last six months, and attain its maximum in the December quarter, the earlier half of the following year witnessing a decrease. It was decidedly less fatal in 1864 than in 1863; while typhus, after declining in 1863, rose again in 1864. The last quarter of the year also favours the development of typhus, but by a law which is apparently less constant.

Deaths in London from Scarlatina.

Years.	March Quarter.	June Quarter.	September Quarter.	December Quarter.	Total.
1861	420	326	467	1145	2358
1862	774	677	841	1165	3457
1863	880	1055	1519	1621	5075
1864	749	593	805	1095	3242
1865	566	—	—	—	—

Deaths in London from Typhus (including typhoid, continued fever, &c.)

Years.	March Quarter.	June Quarter.	September Quarter.	December Quarter.	Total.
1861	354	347	429	624	1754
1862	991	1015	833	796	3635
1863	735	624	652	881	2892
1864	862	783	980	1064	3689
1865	936	—	—	—	—

Bronchitis and pneumonia, scarlatina, fever, and small-pox prevailed last winter both in town and country. Zymotic diseases ravaged South Wales, and raised the death-rate in the Welsh Division to 2·951 per cent., which is higher than the rate of London or of any other division except that of the cotton districts. Out of 438 deaths in the sub-district of Cardiff, 55 were by small-pox, 31 by measles, 20 by scarlatina. Out of 128 deaths at Llantrisaint, 53 were from scarlatina. In the lower sub-district of Merthyr Tydfil out of 303 deaths, 32 were from scarlatina, 37 from measles, 11 from small-pox, and 20 from typhus. Aberdare returned 371 deaths, and of these 75 were from small-pox, and 35 from scarlatina. Of 203 deaths at Neath, small-pox caused 56, measles 31. There were 38 deaths from scarlatina at Llangafelach (Swansea), out of a total number of 143. The ill-health and the frequent deaths of the population of the Principality appeal to the pity of every patriotic Welshman.

Small-pox prevailed in many other parts; and amongst these at the following places, where it was chiefly fatal:—Tiverton, Lansdowne (Bath), Tewkesbury, Shrewsbury, Burton-on-Trent (where 41 were from small-pox out of a total number of 185), Aldridge (Walsall), Wednesbury (West Bromwich), Rowley Regis (Dudley), Birmingham, Lincoln, Liverpool, West Derby, Prescot, Warrington, Bolton, Scarborough, Easington, Chester-le-Street, Whitehaven, Pontypool, Newport. The Registrar of Chester-le-Street complains of great want of cleanliness amongst the mining population.

Scarlatina caused 20 out of 22 deaths at Northam, Southampton, a low-lying ground near the Itchen. Typhoid fever and scarlatina prevailed at Ilchester, Somersetshire, where there are old dilapidated hovels, over-crowded, and without drainage or ventilation. In the sub-district of Mount Pleasant, Liverpool, of 1150 deaths from all causes, no less than 318 were from typhus, nearly 300 of which occurred in the workhouse. At Everton, West Derby, 104 out of 775 deaths were from typhus and typhoid fever. In the sub-district of Cheetham, Manchester, there was great mortality in the workhouse at Crumpsall, 119 deaths occurred in it, 63 of which were from measles.

The Registrar of Rillington (Malton) writes as follows:

> West Heslerton used to be a most healthy village until it was drained last year; but it has never been free from fever since. The drain terminated in a walled receptacle at the end of the village, which was entirely closed at the top, thus throwing poisonous gases into the houses at every back door. At a slight expense the work might be carried into a field about 300 yards from the spot, and the village thus cleared from what has proved a heavy scourge to its inhabitants.

Taking the ten large towns in the United Kingdom, the death-rate of Liverpool (borough) was 3·979 per cent. in the quarter. The next highest rate is that of Glasgow 3·898; Dublin 3·431; Manchester 3·414; Leeds 3·203; Edinburgh 3·035; Birmingham 2·874; Bristol 2·813. London and the Borough of Salford showed the lowest death-rates 2·798 and 2·796; and their rates were almost the same.

Second Quarter.—April, May, June.

The United Kingdom.—The number of persons married in the second quarter of the year was 114,372, the registered births were 262,483; and the registered deaths 157,338. The numbers, after adding one third to those of Ireland for defective registration, were: Persons married 118,146; births 275,537; deaths 165,464. The estimated population in 1865 of England, Scotland, and Ireland was 29,772,294.

England.—The marriages in the spring quarter of the year were more numerous than they had ever been before; and this implies that the great body of the people were prosperous. The birth-rate in the second quarter was high, as it has been in every quarter since the summer of 1863; and the death-rate was above the average, for while the southern parts of the country were remarkably healthy, the mortality was high in Wales, and it was not low in some northern counties.

Marriages.—91,654 persons married in the quarter that ended on June 30th. The marriage-rate was 1·754, or ·07 above the quarterly average.

The increase of marriages occurred chiefly in London, the Eastern Counties, Shropshire, Leicestershire, Yorkshire, Durham, Northumberland,

and South Wales. The marriages declined in Lancashire: while there was some depression in the cotton manufacturing districts, there was increased activity among the woollen manufacturers. The demand for coal and iron increases every year. The effects are plainly traceable in the marriage registers.

Births.—The number of children born in the three months ending 30th June was 192,988, against 188,835 in the same period of last year. In London the births were 26,444 against 25,066; in Lancashire they were 25,624 against 25,493. The counties of Durham and Northumberland exhibit a marked increase. The former with a population in 1861 of 542,125 persons returns 7111 births; South Wales containing 699,722 persons in 1861 returns not more than 7169.

The annual birth-rate in the quarter was 3·692 per cent. against an average of 3·60 in ten previous June quarters. Within this range of comparison it rose in only one instance as high as 3·700. In London the birth-rate was 3·543; in the city of Manchester 3·624; in the borough of Liverpool it was as high as 4·173; in that of Leeds 4·497; and in Glasgow it rose to 4·604.

Increase of Population.—The registers of births record, as has been mentioned, a total of 192,988; the deaths in the same three months are 115,892. The excess of the former over the latter is 77,096, and represents the natural increase of population, which averaged 847 daily.

From ports in the United Kingdom where there are Government Emigration Officers there went out in the June quarter 71,087 emigrants, of whom 52,730 were destined for the United States, 6943 for British North America, 9820 for the Australian colonies, and 1594 for other parts of the world. More than a fourth part of the emigration consisted of persons of English origin; but the number of Irish emigrants was double that of English, and all the former, except a few thousands, went to the United States. The Scotch who left their native country were about 4600. The emigration to the United States was not quite equal to that of the same quarter in either of the two preceding years; and the numbers who went to other destinations also showed a decrease.

Prices, Pauperism, and the Weather.—The average price of wheat was 40*s.* 6*d.* per quarter; a shilling higher than it was in the June quarter of last year, but 6*s.* less than it was in the same period of 1863. Beef by the carcase at Newgate and Leadenhall Markets was on an average 5¾*d.* per lb., and was a halfpenny dearer than in the two previous June quarters. Mutton was 7⅜*d.* per lb.; it was 1¼*d.* dearer than in the same period of 1864, and nearly 2*d.* dearer than in that of 1863. The average price of best potatoes at the Waterside Market, Southwark, was 102*s.* 6*d.* per ton, being about double the price of the June quarter of 1864, but less than that of 1863.

The average number of paupers relieved in-door was 123,760, which is rather more than in the spring of last year, less than in that of 1863; the number relieved out-door was 768,496, exhibiting a small decrease on the pauperism of 1864, and a very great decrease on that of the previous year, when the number of persons who received relief was greater than in the present year by 100,000.

In his summary of results derived from the copious meteorological details that have been compiled with much care, Mr. Glaisher writes that the unusually severe weather of March interrupted agricultural operations and checked vegetation; on 5th April this wintry weather ceased suddenly; and till 10th June, during a period of sixty-seven days, the temperature was, with few exceptions, above the average, the average daily excess being nearly five degrees; and the quarter was closed by a period of twenty days in which intervals of cold and warm weather succeeded each other, but with a predominance of cold. The high summer

temperature of April urged vegetation to rapid growth, and soon effaced the traces of a backward season. Rain, which had been much needed, fell early in May, and in the second week of that month over the whole of the British islands. The mean temperature was above the average in each month, remarkably above it in April and May. The mean temperature of the quarter was 56·2° at Greenwich; and there is no record of any previous instance in which it was so high in the same period of the year. There was 7·2 in. of rain. The fall was deficient in April; above the average in May and June. The air was unusually dry; for though there was a great deal of rain in May, it fell in showers which were heavy, but of short duration.

Deaths and State of the Public Health.—The total number of deaths in the quarter that ended 30th June was 115,892 against 118,121 and 116,880 in the same three months of 1863 and 1864 respectively. The returns of London in the last three springs discover, as regards absolute numbers, a near approach to identity; but those of the kingdom generally show a decrease in last quarter, Wales, and some northern parts of England, where epidemic diseases have been rife, or active industrial operations have attracted population, being the only important exceptions. The singularly fine weather has exercised a beneficial influence on the public health; and the effect would doubtless have been more marked in the death registers if the preceding March had been less cold and ungenial. The winter months, and especially March, were as remarkable for cold as the late spring season was for heat; and many bronchial affections, which the former period transmitted, ran their course to a fatal termination after the propitious change of weather had begun. The following counties may be mentioned amongst those which exhibit a decrease of deaths in the present returns: Hampshire, Berkshire, Hertfordshire, Oxfordshire, Huntingdonshire, Cambridgeshire, Suffolk, Wiltshire, Cornwall, Staffordshire, Worcestershire, Warwickshire, Leicestershire, Rutlandshire, Cheshire, the East and North Ridings of Yorkshire, Cumberland, and Westmorland. In Lancashire the deaths in the spring quarter of 1863 and 1864 were 16,541 and 16,394; in last quarter 16,790. In the West Riding of Yorkshire they were in the same periods 10,469, 10,005, and 10,414. In South Wales they were 3871; 4062; 4779.

In England the annual rate of mortality for the June quarter was 2·217 per cent. (deaths to a hundred persons living) against an average of 2·19 for the corresponding quarter in ten previous years. In 1863 and 1864 the rate was 2·308 and 2·260 per cent.

The South-eastern Division, embracing Surrey, Kent, Sussex, Hampshire, and Berkshire, was the most healthy; for in it the rate of mortality was only 1·882 per cent. The next in degree of health was that which contains the South Midland Counties, where the mortality was 2·002. In four other divisions, viz. the Eastern, South Western, West Midland, and North Midland Counties, it did not rise as high as 2·1 per cent. In the North-western Counties (Cheshire and Lancashire), in Yorkshire, and Wales, it was but little under 2·5 per cent. The Registrars of Welsh districts report measles, scarlatina, and small-pox as diseases that had prevailed in the quarter. In Llantrisaint, of 122 deaths 27 were from measles, 20 from scarlatina, and 16 from small-pox; in the Lower sub-district of Merthyr Tydfil in 199 deaths from all causes 31 were from scarlatina; in Aberdare, another sub-district of Merthyr Tydfil, 28 cases of small-pox were fatal; in the town of Swansea there were 19 deaths from small-pox, and 23 from measles, out of 251 from all causes; scarlatina had been very prevalent in Brecknock; and in Wrexham nearly a fourth part of the deaths was from measles. Newport in Monmouthshire had been attacked by small-pox in a malignant form; and the same disease had been prevalent and fatal in the Whitehaven district, at Gravesend, Hastings, Swindon, Calne, St. Ives, and Bath. Measles was

fatal in Manchester, Wigan, and Oldham; and in the sub-district of Mount Pleasant, Liverpool, out of 849 deaths, 207 were from typhus, 26 from small-pox, and 26 from measles. In Farnham, Surrey, 24 out of 87 deaths were from scarlatina.

In London the total number of deaths was 17,370. The annual rate of mortality for the quarter was 2·316 per cent. In the town of Leeds it was 2·714; in that of Liverpool it was 3·125; in Dublin it was 2·368; in Edinburgh 2·639; in Glasgow 3·065. Of ten large towns in the United Kingdom Birmingham shows the lowest mortality for last spring; and Bristol in the same Table stands in a position not much less favourable.

In the deaths from scarlatina in London there was a decided decrease; they were 385, which is much less than in any June quarter since 1861; in the December quarter of last year they were 1095. It is satisfactory that typhus has not increased recently, although the decrease is not considerable. In the last quarter of 1864 the deaths from it were 1064; in the first two quarters of the present year they were 936 and 700. There were 738 deaths in London from diarrhœa and summer cholera. This complaint, which is commonly so fatal to young children in a more advanced period of the year, appears to have been forced into earlier developement by the unusual heat of the season; for in the spring quarter of 1863 and 1864 the numbers referred to it were only 232 and 334. Thus in the present year the previous number has been more than doubled. It is possible that other unusual conditions besides temperature have tended to produce this result; but in present darkness on the nature of those conditions, the fact itself is important, and cannot safely be overlooked, at a time when malignant cholera prevails in a part of Egypt which is in frequent and direct communication with English ports. The same precautionary measures, that are the best preparation against the threatened attack, are also the most useful to repress, if not extirpate, those marauding bands of diseases that always infest within the frontiers, and are not the less dangerous because they excite less alarm by sudden and violent outbreaks. An abundant supply of water is a first necessity for this purpose; and the inhabitants of a town should not be obliged "to fetch it from a distance," which the Registrar of Hindley in the Wigan district complains that the people there find it necessary to do, though it is a place where collieries and ironworks are in operation.

In cholera epidemics of past years the seaports of Northumberland and Durham have suffered early and severely. The following reports up to the end of June from the former county are therefore satisfactory:—

Newcastle-on-Tyne; *All Saints.*—Births 325; Deaths 162. The births are above and the deaths below the average, affording a satisfactory proof of the healthy condition of my district, comprising the parishes of All Saints, Christ Church, and St. Anne, with a population of upwards of 27,000. The lower part of the town, especially in the neighbourhood of Sandgate and Pandon Dene, inhabited by the hard-working and industrious poor, is at present remarkably healthy. There has not been one death from typhoid fever or typhus during the last three months.

Tynemouth; *Wallsend.*—Births 118; Deaths 24. The number of births is considerably above the average, in consequence of the very great increase of population caused by the great demand for labour at the new ship building yards and chemical factories. The number of deaths is very small. I never knew the district in a more healthy condition. The sanitary arrangements at Willington quay are very much improved.

Third Quarter.—July, August, September.

The United Kingdom.—The Registers of the United Kingdom show that 113,968 persons married; that the births of 243,419 children, and the deaths of 148,123 persons of both sexes, were registered in the three months ending on September 30th. The numbers, after adding one third to those of Ireland for defective registration, were: Persons married 117,832; births 254,805; deaths 154,408. The natural recorded increase

of population in 92 days was 95,296, or 1036 daily. Exclusive of 11,490 foreigners, 53,564 emigrants sailed from these islands in the same period. So about 582 emigrants left daily; and allowing for defects in registration, which has only recently been established in Ireland, the increase at home has been about 506 daily.

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

The estimated population in 1865 of England, Scotland, and Ireland is 29,772,294. The death rate of the quarter is 1·974 per cent.

England.—The marriage-rate was much above the average. Weddings were more rife than they were in the previous summer, or in the summer of any year since registration began. This implies that the great body of the people were prosperous. The birth-rate exceeded the average; and the death-rate also exceeded the average rate of the corresponding quarter of ten previous years. Many districts suffered from scarlatina and other epidemics during the two years 1863–64, and the mortality has been exceptionally high during the last three summers.

During the last three months scarlatina was epidemic in many places. Diarrhœa was prevalent and often fatal to children; and scattered cases of summer cholera were as usual fatal in unhealthy districts. At the end of the quarter 4 deaths from cholera occurred in Southampton, 2 of which were pronounced epidemic cholera. The meteorology of the season has been extraordinary, the potato has in many places been blighted, and the cattle have, to an extent unknown, been struck down by zymotic disease; yet the people have been hitherto untouched by pestilence. While Marseilles and Paris are smitten by cholera, London and the large cities of the United Kingdom remain unassailed.

Marriages.—91,704 persons married in the quarter that ended on September 30th, 1865. The rate of marriage was 1·732, or ·13 above the average.

The increase of marriages was general, but it was most striking in Yorkshire, where the woollen trade flourished in an extraordinary degree; Lancashire was also recovering from its depression. In London the marriages exceeded by nearly a thousand the marriages in the summer quarter of 1863.

Births.—181,941 births were registered in the three months ending with September. It is the highest number that has ever been registered in any summer quarter. The mean daily number of births was 1978; that is 82 hourly, or more than one birth a minute.

The births exceeded by 8502 and 926 the births registered in the corresponding quarters of the two previous years; the chief increase since 1863 being in London, Lancashire, Yorkshire (West Riding), Durham, and Wales.

The birth-rate of the quarter is 3·434, the average being 3·32.

Increase of Population.—As the births were 181,941 and the deaths 113,362, the natural increase of population in 92 days was 68,579, or 745 daily. The migration from one part of the United Kingdom to another is unrecorded; but England every year is joined by a certain number of recruits from Scotland and Ireland.

About 19,256 emigrants of English origin sailed in the 92 days from the ports of the United Kingdom, at which there are Government emigration officers; 9447 sailed to the United States, 2311 to the North American Colonies, 6018 to Australasia, and 1480 to other places; on an average 209 English emigrants left these shores daily.

Prices, Pauperism, and the Weather.—The average price of wheat was 43*s.* 3*d.* a quarter during the last three months ending with September 30th; thus it is a shilling a quarter higher than in the corresponding season of 1864, and 2*s.* 4*d.* lower than in that of 1863. The price of wheat has been remarkably steady during the two years, the three months average ranging little above or below the average (40*s.* 9*d.*) of the whole period. The best potatoes at the Waterside Market, Southwark, sold on an average at 85*s.* a ton; so the price was lower by 15*s.* than it was in the corresponding quarter of last year, and somewhat lower than the prices of the same season in 1863.

The average prices of the best mutton by the carcase in the corresponding summer months of 1863, 1864, 1865 rose from 6¾*d.* to 7*d.* and finally to 8¾*d.* per lb. The price of inferior qualities rose from 4¾*d.* to 5½*d.* and to 6¼*d.* per lb. The best beef, notwithstanding the panic, which the retail butchers have turned to account, rose in the same periods only from 6¼*d.* to 6½*d.*, and to 7*d.* per lb. The prices of the inferior qualities remained steadily at 4½*d.* per lb. during the three last summers. If the importation of cattle had been stopped, prices would, probably, have been very different.

A gratifying reduction of pauperism is observable during the three summers; the numbers of in-door and out-door poor fell from 937,581 to 856,408 and to 836,832. Within the interval of two years 100,749 paupers were struck off the relief rolls, without, we may hope, any inhumanity on the part of the Poor Law administrators.

The weather of the summer quarter was remarkable. The temperature of July was 2·4° above the average of 94 years, and the temperature of September, when the sun no longer rises to the same height, and no longer shines so many hours, was higher than the temperature of July. There was little rain in September; the blue sky was cloudless, and the air was unusually dry; but the dews were copious, and fog was prevalent on twenty days. To find a September of which the temperature approaches 63°·9, Mr. Glaisher travels back to the year 1815, when the temperature was 62°·3; and in all the years since 1771 he does not find its parallel. The temperature of August was below the average; but notwithstanding the temporary depression, the temperature of the six months from April to September exceeds any on record since the same remote date. It was approached within a little by the temperature of the same months of 1846. Both years had in them something of a tropical character.

The rain-fall at Greenwich was 6·5 inches, which is nearly an inch (·9) below the average of 50 years. Rain fell in large quantities at long intervals. The wind on the surface of the earth blew at the rate of eight miles an hour. At all the stations the rain-fall in September was inconsiderable.

Deaths and State of the Public Health.—113,362 deaths were registered in the three months, and the mortality was at the annual rate of 2·140 per cent.; that is ·17 above the average, but differing little from the mortality of the two preceding summer quarters.

This is the result of a balance of high and low rates in the eleven divisions of the kingdom, of the mortality per 1000 in the two summer quarters of 1864 and 1865. The rate for all England was 21 in the two seasons. Yorkshire here proclaims aloud in the increasing death-rate her sanitary failings; the summer mortality rose from 24 to 25. In Lancashire and Cheshire the mortality was 23 and 26. The Eastern Counties also experienced an increase; so did the Northern Counties. There is a decisive fall in the mortality of Gloucestershire, Staffordshire, Worcestershire, and Warwickshire, reducing the mortality of the West Midland Counties from 22 to 19. Various sanitary improvements have been carried out with good effect. This is also the case with London, where the works of the Metropolitan Board are apparently beginning to display

their effects. The mortality of London in the summer quarter of last year was at the rate of 24; in the summer of this year it is 22.

The districts of the chief towns, containing an estimated population of 11,757,883, have experienced high rates of mortality; during the three summer quarters the mortality has been at the rate of 24 per 1000, nearly two above the average. In the remaining districts with 9,260,260 inhabitants the mortality declined slightly, and was at the rate of 18 per 1000 in the last summer. This is *one* over the average of 17. Here also is room for improvement; but many of the towns are Augean stables, which the municipal authorities have hitherto failed to sweep out. In their limits *one* death in every *four* is unnatural, according to the finding of these inflexible facts. The eight English cities and boroughs arranged according to the mortality stand for this particular quarter in the following order of insalubrity; Bristol 20, London 22, Birmingham 23, Salford 30, Hull 30, Leeds 32, Manchester 33, Liverpool 34.

The Registrars mention many outbreaks of scarlatina, and epidemics of fever in some of its forms. The high rate of mortality during the three summers is chiefly due to these diseases. Some of the existing sanitary defects are strikingly illustrated by the Registrar of Whitstable in Kent. In Rotherham the deaths were 398 out of a population in 1861 of 44,350. The Registrars call attention to the fever deaths, and to the insufficient supply of water. The mortality is fully accounted for by Dr. Shearman, who explains how the health of the town may be established on solid foundations.

In the face of the cholera epidemic which is gathering in threatening clouds around us, the deaths from that disease and from the allied diarrhœa deserve careful study. Every year since 1837, when the causes of death were first registered, a certain number of deaths from cholera have been recorded in the registers of various districts of the country. Such cases, often called English, but more properly summer cholera, as they are met with all over Europe, prevail chiefly in the three months of July, August, and September. One hundred and thirty-six cholera deaths were registered in London, and in this quarter's notes a certain number are mentioned by the Registrars in every division, except the North Midland. One case at Wilsden in Yorkshire was registered "Asiatic cholera;" another in the Rillington sub-district, fatal in twenty-four hours, "presented all the features of Asiatic cholera." All such cases are of ordinary occurrence, and are inexplicable by those who deny the spontaneous origin of sporadic cases. The number of cases at Southampton since the end of the quarter leaves no doubt of the appearance of the epidemic form of cholera, which may either pass over England, or develop in the course of the next twelve months its usual destructive tendency.

It is gratifying to know that London and some of the other large towns are now in a far better condition to encounter the epidemic than they were either in 1848–49 or in 1853–54, when the disease killed 55,181 and 24,516 persons of both sexes and of all ranks in England and Wales.

Cholera, like small-pox, is one of those zymotic diseases which exist in all climates: under favourable conditions their products assume an active form, capable of inducing in other bodies the same morbid changes by which they were generated. They establish the kinship of the human race. Every nation is vitally interested in the sanitary condition of every other nation. Hence the endless discussions about contagion, and as regards cholera the futile vexations of quarantine. There are difficulties in the hypothesis, because experiments cannot be performed on human beings as they are in the laboratory of the chemist, or as they may be in veterinary hospitals; but for all practical purposes it may be assumed that the discharges of patients in the epidemic, either casually touching the mouth, or entering in dust and vapour through air or water, induce diarrhœa or cholera in a certain proportion of those exposed

to their influence. Now London was supplied with the sewage water of a river by several companies in 1848–49; all, except one, got their water beyond the reach of the London sewage in 1853–54, and the mortality fell proportionally as the water became purer. At the present time the water of all the companies is comparatively little contaminated by zymotic pollution. The London pumps have also been placed under inspection. The drainage is in rapid progress. Analogy justifies the hope that as the city is purified, and as the means of diffusion are cut off, the destructiveness of the disease will be diminished.

The detection since 1849 of the mode of propagation and of the premonitory stage of cholera by English practitioners are among the greatest triumphs of medical science. For as the surgeon cannot restore the shed blood to the heart, but can tie a ligature round an artery, and stop bleeding, so the physician cannot revivify a man in collapse, or restore the serum of his blood, but he can in nine cases out of ten check diarrhœa turning into cholera.

Cholera throws men into terrible convulsions, and kills half of its victims in twenty-four hours; but there is a merciful warning of its approaches in probably every instance, the neglect of which is fatal. So it is with the epidemic itself in England. It has hitherto commenced

TABLE **40.**—**Annual Rate** of **Mortality** per Cent. in **Town** and **Country Districts** of **England** in each **Quarter** of the Years **1855–1865.**

—	Area in Statute Acres.	Population enumerated. 1851.	Population enumerated. 1861.	Quarters ending	Annual Rate of Mortality per Cent. in each Quarter of the Years 1855.	1856.	1857.	1858.	1859.	1860.	1861.	1862.	1863.	1864.	Mean 1855–65	1865.
In 142 Districts and 56 Sub-districts comprising the Chief Towns	3,287,151	9,155,964	10,930,841	March	3·113	2·391	2·506	2·757	2·651	2·617	2·658	2·655	2·706	2·980	2·703	2·883
				June	2·402	2·294	2·243	2·356	2·249	2·316	2·271	2·267	2·470	2·412	2·328	2·346
				Sept.	2·057	2·160	2·374	2·245	2·284	1·843	2·193	1·984	2·410	2·386	2·194	2·388
				Dec.	2·281	2·256	2·557	2·724	2·358	2·285	2·291	2·525	2·422	2·615	2·431	2·565
				Year	2·463	2·275	2·420	2·521	2·386	2·265	2·353	2·358	2·502	2·598	2·414	2·546
In the remaining Districts and Sub-districts of England and Wales comprising chiefly Small Towns and Country Parishes	34,037,732	8,771,645	9,135,383	Year	2·055	1·797	1·916	2·077	2·077	1·951	1·938	1·890	2·057	2·107	1·987	2·081
				March	2·698	1·951	2·072	2·497	2·363	2·326	2·210	2·184	2·323	2·512	2·314	2·522
				June	2·137	1·915	1·918	2·049	2·051	2·148	1·999	1·940	2·100	2·070	2·033	2·055
				Sept.	1·615	1·609	1·727	1·717	1·884	1·573	1·753	1·572	1·862	1·833	1·715	1·824
				Dec.	1·771	1·713	1·948	2·044	2·008	1·757	1·790	1·864	1·944	2·014	1·885	1·923

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

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

generally about October, and has only proved excessively fatal in the following summer. Thus all our towns have six months notice, and the whole winter for the preparation of defensive works. Every district in the kingdom should at once appoint its Health Officer.

Fourth Quarter.— October, November, and December.

The United Kingdom.—The Registers of the United Kingdom show that 142,170 persons married; that the births of 239,457 children, and

TABLE **41.**—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 1857–1865.**

—	Average Price of Consols (for Money).	Average Price of Wheat per Quarter in England and Wales.	Pauperism. Average Number of Paupers relieved on the *last day* of each week. In-door.	Out-door.	Average Prices of Meat per lb. at Leadenhall and Newgate Markets (by the Carcase). Beef. Range of Prices.	Mean.	Mutton. Range of Prices.	Mean.	Best Potatoes per Ton at Waterside Market, Southwark. Range of Prices.	Mean.
Years.	£	s. d.			d.	d.	d.	d.	s.	s. d.
1857	91 7/8	56 5	121,669	737,287	4¼—6½	5⅜	4¾—7	5¾	108—134	120 8
1858	97	44 3	120,140	751,031	4½—6¼	5¼	4½—6¾	5½	104—136	120 0
1859	95	43 10	110,703	705,590	4½—6½	5½	4¾—7	5⅞	79—109	94 0
1860	94	53 3	110,603	687,763	4 —6⅝	5⅜	5 —7⅞	6	120—145	132 6
1861	92	55 4	122,600	720,366	4 —6½	5¼	5 —7¼	6¼	114—134	124 0
1862	93½	55 5	130,974	820,953	4 —6¼	5⅛	5 —6¾	5⅞	125—149	137 0
1863	92 7/8	44 8	129,934	859,751	4¼—6¼	5½	4¾—7	5⅞	90—110	100 0
1864	90 3/8	40 2	126,753	788,689	4½—6½	5½	5⅜—7	6 3/16	64— 86	75 0
1865	89 5/8	41 9	127589	758199	4½—7	5¾	5¾—8¼	7	75—101	88 5
Quarters ending										
1857:—										
March	93⅜	56 10	135,121	777,426	4¼—6¾	5¾	5¼—7¼	6¼	100—120	110 0
June	93⅜	56 9	119,241	732,284	4¼—6½	5⅜	4¾—6¾	5¾	105—150	127 6
Sept.	90 7/8	59 11	109,371	702,644	4½—6½	5⅜	4½—7	5¾	95—115	105 0
Dec.	89½	52 0	122,942	736,794	4¼—6½	5⅜	4½—7	5¾	130—150	140 0
1858:—										
March	96⅜	46 5	138,376	835,641	4¼—6¼	5¼	4¾—7	5⅞	130—175	152 6
June	97⅛	44 1	119,234	752,278	4¼—6	5⅛	4½—6¾	5½	140—185	162 6
Sept.	96⅛	44 7	107,197	705,301	4¼—6½	5¼	4½—6½	5½	65— 90	77 6
Dec.	98¼	41 9	115,751	710,904	4 —6½	5¼	4¼—6¾	5½	80— 95	87 6
1859:—										
March	95⅝	40 8	123,071	743,517	4¾—6¾	5¾	4¾—7	5⅞	80—100	90 0
June	92 7/8	47 3	109,350	710,968	4¾—6½	5⅝	5 —7	6	85—110	97 6
Sept.	95⅜	44 0	100,770	683,423	4¼—6¼	5¼	4⅝—6¾	5¾	65—105	85 0
Dec.	96⅛	43 4	109,623	684,454	4 —6½	5¼	4¾—6¾	5¾	85—120	102 6
1860:—										
March	94⅝	44 5	118,523	717,269	3¾—6½	5⅛	4¾—6¾	5¾	115—145	130 0
June	94⅞	52 8	107,050	692,384	4¾—6¾	5¾	5½—7½	6½	125—160	142 6
Sept.	93¾	59 1	101,680	667,680	4¼—7	5⅝	5¼—7⅛	6⅜	125—145	135 0
Dec.	93¼	56 9	115,161	673,721	3½—6¼	4⅞	4¾—6¾	5¾	115—130	122 6
1861:—										
March	91¾	55 1	131,138	757,950	4 —6½	5⅛	5½—7¾	6⅝	140—155	147 6
June	91¾	54 9	117,801	713,786	4¼—6½	5⅜	5¼—7¼	6¼	120—140	130 0
Sept.	91⅜	52 1	112,930	693,631	4¼—6½	5⅜	4⅞—7	5⅞	85—110	97 6
Dec.	93¼	59 3	128,533	716,096	4 —6¼	5⅛	4¾—6¾	5¾	110—130	120 0
1862:—										
March	93¼	60 1	143,772	804,268	4 —6¼	5⅛	4¾—6½	5⅝	130—155	142 6
June	93¾	56 8	127,861	782,113	4 —6	5	5 —7	6	180—200	190 0
Sept.	93¼	56 10	119,600	789,917	4¼—6¼	5¼	5¼—7	6⅛	100—130	115 0
Dec.	93⅝	48 2	132,663	907,514	4 —6¼	5⅛	5¼—6¾	6	90—110	100 0
1863:—										
March	92¾	46 7	142,257	943,324	4 —6¼	5⅛	5 —7	6	120—130	125 0
June	93¾	46 2	127,063	873,503	4¼—6¼	5¼	4¾—6¾	5¾	110—130	120 0
Sept.	93	45 7	120,343	817,238	4½—6¼	5⅜	4¾—6¾	5¾	70—105	87 6
Dec.	92⅞	40 6	130,072	804,940	4 —6¼	5⅛	5 —7	6	60— 80	70 0
1864:—										
March	91	40 4	139,606	855,776	4¼—6⅜	5¼	5½—7	6⅛	55— 70	62 6
June	91⅛	39 7	122,883	786,863	4¼—6¼	5¼	5¼—7	6⅛	40— 60	50 0
Sept.	89¼	42 3	116,198	740,210	4½—6½	5⅛	5⅛—7	6¼	80—120	100 0
Dec.	89⅝	38 5	128,326	771,908	4½—7	5⅝	5¼—7¼	6¼	80— 95	87 6
1865:—										
March	89⅜	38 4	140,517	819,898	4½—7	5¾	5¼—7¼	6¼	85— 97	91 0
June	90⅜	40 6	123,760	768,496	4¾—6¾	5¾	6¼—8½	7⅜	90—115	102 6
Sept.	89⅜	43 3	117,221	719,611	4½—7	5¾	6¼—8¼	7½	65—100	85 0
Dec.	88⅜	44 10	128,858	724,792	4¼—7	5⅝	5½—8¼	6⅞	60— 90	75 0

the deaths of 159,480 persons of both sexes, were registered in the three months ending on December 31st. The numbers, after adding one third to those of Ireland for defective registration, were: Persons married 146,810; births 250,651; deaths 166,534. The recorded natural increase of population in 92 days was 79,977, or 869 daily. Exclusive of 8,101 foreigners, 36,256 emigrants sailed from these islands in the same period. So about 394 emigrants left daily; and allowing for defects in registration, which has only recently been established in Ireland, the increase at home has been about 520 daily.

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

The estimated population in 1865 of England, Scotland, and Ireland was 29,772,294. The corrected death-rate of the quarter was 2·219 per cent.

TABLE 42.—**Mean Annual Value** of **Meteorological Elements**

NAMES OF STATIONS.	Elevation in feet above the Sea Level.	Latitude.	Barometer. Mean.	Barometer. Mean Monthly Range.	Thermometer. Mean of the highest Monthly Readings.	Thermometer. Mean of the lowest Monthly Readings.	Thermometer. Mean Monthly Range of Readings.	Thermometer. Mean of all the highest Daily Readings.	Thermometer. Mean of all the lowest Daily Readings.	Thermometer. Mean Daily Range.	Mean Temperature. Of the Air.	Mean Temperature. Of the Dew-point.
	feet.	° ′ ″	in.	in.	°	°	°	°	°	°	°	°
Guernsey - - - -	204	49 27 30 N.	29·752	1·105	64·9	40·9	24·1	56·9	47·9	9·1	51·4	47·2
Helston - - - -	106	50 7 0	29·876	1·128	60·8	37·1	30·7	59·0	47·2	13·4	52·9	48·6
Truro - - - - -	45	50 17 0	29·897	1·154	68·4	33·3	35·0	58·1	45·6	14·1	51·4	46·2
Ventnor - - - -	150	50 35 0	29·838	1·093	64·4	39·2	25·2	57·3	47·9	9·5	46·8	44·9
Osborne - - - -	172	50 45 20	29·787	1·097	68·5	33·8	34·8	59·7	44·0	14·1	51·1	46·2
Bournemouth - - -	30	..	29·848	1·097	68·2	32·2	36·1	60·9	43·1	18·2	51·5	44·2
Worthing - - - -	25	50 45 0	29·929	1·055	65·2	36·6	28·5	57·3	45·6	11·6	50·8	47·0
St. John's Coll., near Brighton	130	50 56 0	29·712	1·102	75·2	29·6	41·4	60·3	42·4	17·9	50·7	45·4
Wilton House - - -	150	51 4 0	29·759	1·151	72·6	28·7	44·0	61·2	38·2	21·4	49·6	45·2
Barnstaple - - - -	43	51 5 15	29·894	1·188	71·3	35·9	35·4	60·1	45·5	14·6	52·1	46·4
Aldershot Camp - -	325	51 15 0	29·554	1·062	69·8	32·1	37·5	59·1	42·1	16·9	40·1	43·8
Downside College (nr. Bath)	607	51 15 0	29·304	1·112	69·6	31·8	37·8	59·2	41·3	17·6	49·3	44·5
Marlborough College - -	456	51 25 0	29·479	1·137	69·3	28·5	40·9	58·2	40·0	18·2	48·6	43·3
Clifton (Bristol) - - -	228	51 27 47	29·699	1·176	68·2	33·3	34·9	58·3	43·3	15·0	49·9	44·0
Royal Observ., Greenwich -	159	51 28 38	29·783	1·144	69·9	32·3	37·6	59·6	42·7	16·9	50·3	44·1
Guildhall - - - -	46½	51 28 0	29·872	1·114	65·9	39·2	26·7	58·0	46·9	11·1	50·4	45·2
Battersea - - - -	13	51 28 22	29·965	1·103	72·2	29·0	42·4	59·8	40·3	19·4	49·6	44·3
Camden Town - - -	118	51 31 57	29·833	1·091	70·2	32·5	37·7	59·6	43·3	16·2	50·6	44·0
Oxford - - - -	210	51 45 6	29·674	1·128	67·1	31·5	35·6	57·6	42·6	15·0	49·9	45·2
Banbury - - - -	320	51 45 55	29·579	1·120	..	..	..	..	..	..	49·9	46·0
Great Berkhampstead -	370	51 46 0	29·559	1·137	68·4	27·9	40·5	58·3	41·0	17·2	48·9	43·3
Royston - - - -	271	52 2 40	29·686	1·124	70·3	30·3	39·9	59·5	42·1	17·5	49·5	43·9
Cardington - - - -	100	52 6 40	29·843	1·134	70·0	30·0	39·9	59·0	41·5	17·4	50·0	43·3
Lampeter - - - -	420	52 7 0	29·511	1·211	70·0	28·0	42·0	60·2	31·9	17·6	50·1	45·2
Diss (Norfolk) - - -	103	52 23 0	29·847	1·120	70·6	29·9	40·8	60·3	40·1	19·4	50·2	43·0
Wisbeach - - - -	14	52 41 0	29·920	1·139	69·1	32·0	37·1	59·1	32·4	16·7	50·1	45·4
Llandudno - - - -	99¾	..	29·545	1·247	65·5	37·2	30·6	57·7	45·1	12·5	50·5	44·6
Belvoir Castle - - -	237	..	29·602	1·145	68·5	37·5	39·3	58·1	40·2	18·0	48·4	43·1
Derby - - - - -	174	52 55 0	29·731	1·184	67·2	31·2	36·0	57·2	42·5	14·7	49·0	43·7
Hawarden - - - -	260	53 11 0	..	..	67·2	36·3	32·4	56·9	44·1	12·8	49·5	43·4
Penketh - - - -	44	53 23 0	29·882	1·223	68·6	28·9	39·7	57·3	41·9	16·1	48·7	43·6
Liverpool - - - -	37	53 24 48	29·924	1·234	64·9	38·9	26·0	55·8	46·5	9·3	49·9	43·9
Manchester - - - -	123	53 29 0	29·799	1·199	69·1	31·2	37·9	58·4	41·5	16·9	48·8	44·2
Eccles - - - -	127	53 29 0	29·798	1·200	68·1	31·2	37·1	56·7	42·0	14·7	48·6	43·3
Wakefield - - - -	115	53 40 50	29·805	1·215	69·2	30·0	40·0	58·4	40·9	17·3	49·1	43·3
Stonyhurst - - - -	381	53 50 40	29·482	1·090	65·4	31·8	33·5	55·7	41·5	14·2	47·7	42·9
Otley - - - - -	200	53 54 22	29·845	1·194	..	..	..	54·5	43·7	10·8	47·6	41·6
York - - - - -	50	53 58 0	29·841	1·241	65·3	32·5	32·8	55·2	42·5	12·7	48·1	43·7
Cockermouth - - -	150	54 39 16	29·730	1·256	66·7	30·9	35·6	56·1	42·5	18·6	48·6	42·6
Allenheads - - - -	1360	54 48 44	28·420	1·139	62·4	28·1	34·3	54·4	38·3	11·1	44·0	39·1
Silloth - - - -	28	54 51 51	29·855	1·293	65·6	29·1	36·4	56·6	41·5	15·0	48·1	42·9
Carlisle - - - -	114	54 52 56	29·778	1·282	65·9	28·7	37·2	55·7	40·5	14·4	47·6	43·6
Bywell - - - -	87	54 56 43	29·784	1·237	69·8	30·6	39·2	58·5	41·5	17·0	48·4	42·6
North Shields - - -	124	55 0 7	29·831	1·291	63·0	33·3	29·7	52·8	42·1	10·7	46·4	42·2
Miltown Banbridge - -	200	54 23 0	29·648	1·262	65·7	30·4	35·2	55·5	41·8	13·6	48·0	42·1
Culloden - - - -	104	57 31 0	29·706	1·354	61·4	34·6	26·8	52·1	42·1	9·1	47·2	42·3

England.—A few fatal cases of epidemic cholera occurred during the quarter in the districts of Southampton and of Portsea Island on the southern coast of England; there was also a slight outbreak in Epping; but the number of deaths by cholera has been inconsiderable, and the epidemic has left no traces.

The mortality was above the average, but it was below that in the corresponding quarter of the previous year. The birth-rate was above the average.

If a high marriage-rate is accepted as an indication of well-being and contentment in the great bulk of the people, the present return is highly satisfactory; for in the last quarter of this year the marriage-rate was unusually, perhaps unprecedentedly, high all over the country.

Marriages.—In the quarter that ended 31st December 1865, there were 113,976 persons married in England. In London the weddings rose from 7856 and 8711 in the December quarter of the two previous years to 9738 in that of last year. In Lancashire and Cheshire, which together

in the **Year 1865.** By JAMES GLAISHER, Esq., F.R.S.

Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight of Vapour required for Saturation.	Mean degree of Humidity of the Air (Saturation=100).	Mean Weight of a Cubic Foot of Air.	Wind. Mean estimated Strength.	Wind. Relative Proportion of N.	Wind. Relative Proportion of E.	Wind. Relative Proportion of S.	Wind. Relative Proportion of W.	Mean Amount of Cloud (0–10).	Rain. Number of Days it fell.	Rain. Amount collected.	NAMES OF STATIONS.
in.	grs.	gr.		grs.							days.		
·337	3·8	0·6	86	539	1·4	91	86	89	99	4·7	156	43·3	Guernsey.
·357	4·0	0·7	85	538	2·3	81	99	83	102	5·5	178	44·6	Helston.
·323	3·6	0·8	82	540	2·1	104	72	86	103	6·2	189	48·4	Truro.
·313	3·5	1·2	75	539	..	68	113	56	128	..	156	32·7	Ventnor.
·325	3·7	0·8	84	539	0·7	84	81	94	106	5·4	120	35·1	Osborne.
·301	3·5	1·1	77	542	..	98	52	96	119	..	116	33·1	Bournemouth.
·334	3·8	0·8	88	543	0·8	101	75	85	104	3·7	161	34·7	Worthing.
·318	3·6	0·8	83	539	0·9	74	82	105	104	5·2	152	36·4	St. John's Coll., near Brighton.
·315	3·5	0·7	85	541	1·3	104	68	93	90	5·2	170	33·6	Wilton House.
·326	3·7	0·9	82	541	1·2	72	85	97	111	3·3	159	38·7	Barnstaple.
·299	3·4	0·9	80	537	1·0	80	77	99	109	6·8	143	29·4	Aldershot Camp.
·305	3·4	0·8	84	533	0·9	84	66	80	135	5·6	180	43·2	Downside College (nr. Bath).
·294	3·3	0·8	83	537	0·3	87	70	100	108	6·6	190	34·3	Marlborough College.
·300	3·4	0·9	80	539	0·4	76	76	95	118	5·3	175	36·7	Clifton (Bristol).
·302	3·4	0·9	80	541	0·3	81	62	100	122	6·4	136	29·0	Royal Observ., Greenwich.
·311	3·5	1·0	81	541	..	..	..	..	..	..	144	28·7	Guildhall.
·314	3·5	0·7	85	544	1·3	32	75	144	114	5·5	136	27·2	Battersea.
·300	3·4	1·1	80	540	..	..	..	..	..	5·3	163	32·0	Camden Town.
·312	3·5	0·7	85	539	1·1	82	61	111	102	6·7	156	28·8	Oxford.
·327	3·7	0·7	87	537	1·7	96	67	109	93	5·7	141	29·7	Banbury.
·293	3·3	0·9	81	538	0·8	83	77	84	121	5·9	154	38·0	Great Berkhampstead.
·301	3·4	0·9	82	540	..	88	53	106	118	5·7	194	29·3	Royston.
·295	3·3	1·0	79	542	..	96	69	96	104	6·0	132	27·3	Cardington.
·320	3·5	0·7	84	537	0·7	67	86	103	109	6·1	172	42·6	Lampeter.
·290	3·3	1·1	78	542	..	74	72	114	105	5·8	147	29·6	Diss (Norfolk).
·315	3·6	0·8	85	543	0·3	87	78	103	97	6·2	142	27·5	Wisbeach.
·302	3·4	0·9	81	541	0·6	67	80	34	184	6·0	147	27·2	Llandudno.
·290	3·3	0·8	83	540	1·5	65	35	135	130	5·6	142	26·5	Belvoir Castle.
·298	3·4	0·8	82	541	..	67	87	65	146	..	149	24·6	Derby.
·293	3·3	0·9	80	..	2·1	66	54	121	124	6·3	147	21·4	Hawarden.
·296	3·3	0·8	83	544	1·1	79	76	100	110	6·1	171	27·0	Penketh.
·299	3·4	0·9	80	542	1·2	79	73	109	104	6·1	146	22·8	Liverpool.
·298	3·4	0·8	83	543	..	53	87	138	87	6·4	164	28·5	Manchester.
·291	3·3	0·8	82	543	0·2	86	95	93	93	6·4	187	27·9	Eccles.
·289	3·3	0·9	81	543	1·6	72	74	101	128	6·3	166	21·7	Wakefield.
·289	3·3	0·7	84	538	0·6	100	76	80	109	7·1	190	40·6	Stonyhurst.
·273	3·1	0·8	81	542	1·2	..	..	..	..	5·8	..	23·7	Otley.
·290	3·3	0·8	83	544	..	56	110	90	109	..	..	23·3	York.
·282	3·2	0·9	80	542	0·5	53	72	112	128	4·7	153	37·8	Cockermouth.
·248	2·8	0·6	85	526	2·0	63	63	103	136	6·4	246	44·1	Allenheads.
·287	3·2	0·7	83	544	..	51	107	60	147	4·9	144	28·7	Silloth.
·297	3·3	0·6	86	544	0·2	54	91	113	107	7·6	127	24·5	Carlisle.
·285	3·2	0·8	81	540	1·2	67	97	62	139	5·3	183	29·8	Bywell.
·279	3·2	0·6	85	544	1·7	82	67	94	112	5·6	176	27·0	North Shields.
·276	3·1	0·8	81	541	2·4	72	66	124	103	4·6	173	28·6	Miltown Banbridge.
·282	3·2	0·6	84	542	0·4	48	67	116	134	4·9	152	25·1	Culloden.

contain a population not much exceeding the metropolitan, the marriages in the same three periods were 7635, 7253, and 8583. In the Northern Counties they were 2917, 3173, and 3284. In Monmouthshire and Wales 3329, 3416, and 3552. In Yorkshire 5659, 6027, and 6285.

Taking a few districts as examples, the marriages in the three December quarters of 1863, 1864, and 1865 were in Kensington 505, 555, and 712. In Marylebone 478, 524, and 599. In Pancras 554, 643, and 665. In Islington 353, 422, and 525. In Hackney 258, 281, and 371. In Shoreditch 560, 607, and 599. In Bethnal-green 360, 420, and 519. In Lambeth 624, 669, and 798. The returns show continued prosperity in the seats of the woollen trade. In Bradford the marriages in the same three corresponding quarters were 633, 635, and 677. In Leeds they were 525, 517, and 603.

The marriage-rate *per annum*, in the December quarter of 1865, was 2·146. This result represents the proportion of persons married to a hundred in the population. The average of ten corresponding quarters was 1·98 per cent. Weddings are always the most frequent in the Christmas quarter, and in that of 1864 the marriage-rate was 2·022; but within the range of the comparison, viz. the ten years 1856–65, a rate as high as 2·1 per cent. is without any example, with the single exception of that which is supplied by the present return.

Births.—179,010 births were registered in the last quarter of the year 1865. The birth-rate was 3·370, or ·073 above the average. The daily births were 1946, or 81 per hour. The number has varied little in the last three summers in any of the divisions.

Increase of Population.—As the births were 179,010, the deaths 121,245, the natural increase of population was 57,765 in 92 days, or upon an average 628 daily.

About 15,367 emigrants of English origin sailed in the 92 days from the ports of the United Kingdom at which there are emigration officers; 7,833 sailed to the United States, 823 to the American Colonies, 5,518 to Australia, and 1,193 to other places; on an average 167 English emigrants left the country daily.

Prices, Pauperism, and the Weather.—The price of wheat is rising. It was 38*s.* 5*d.* a quarter in the last three months of 1864, and 44*s.* 10*d.* a quarter in the last three months of 1865. The rise is nearly 17 per cent. on the low price of 1864. Beef by the carcase in London was on an average $5\frac{5}{8}$*d.* per lb.; about $\frac{1}{8}$*d.* below the price of the corresponding season of 1864; and a halfpenny a pound dearer than it was in the autumn of 1863. The mean of the quoted prices of beef ranged from

TABLE 43.—**Mean Annual Value** of **Meteorological Elements**

Parallels of Latitude.	Mean Elevation in Feet above the Sea Level.	Barometer. Mean.	Barometer. Mean of Monthly Range.	Thermometer. Mean of the highest Monthly Readings.	Thermometer. Mean of the lowest Monthly Readings.	Thermometer. Mean Monthly Range of Readings.	Thermometer. Mean of all the highest Daily Readings.	Thermometer. Mean of all the lowest Daily Readings.	Thermometer. Mean Daily Range.	Mean Temperature. Of the Air.	Mean Temperature. Of the Dew-point.
	feet.	in.	in.	°	°	°	°	°	°	°	°
Between the latitudes,—											
49° and 50° – –	204	29·752	1·105	64·9	40·9	24·1	56·9	47·9	9·1	51·4	47·2
50° and 51° – –	94	29·841	1·104	67·2	34·5	33·1	58·9	45·1	14·1	50·7	46·1
51° and 52° – –	289½	29·688	1·128	69·5	32·0	37·6	59·1	42·3	16·4	49·2	44·5
52° and 53° – –	178	29·711	1·163	69·0	32·0	38·2	58·9	39·5	16·7	49·7	44·0
53° and 54° – –	148	29·797	1·190	67·2	32·6	34·9	57·4	42·7	14·3	48·7	43·3
54° and 55° – –	348	29·513	1·241	66·1	29·5	36·5	56·2	40·8	15·2	47·3	42·1
North Shields – –	124	29·831	1·291	63·0	33·3	29·7	52·8	42·1	10·7	46·4	42·2
Culloden – – –	104	29·706	1·354	61·4	34·6	26·8	52·1	42·1	9·1	47·2	42·3
Miltown Banbridge (Ireland).	200	29·648	1·282	65·7	30·4	35·2	55·5	41·8	13·6	48·0	42·1
Between the latitudes,—											
49° and 58° – –	168	29·721	1·205	66·0	33·3	32·9	56·4	42·7	13·2	48·7	43·7

4¼*d.* to 7*d.* a pound; mutton from 5½*d.* to 8¼*d.* in the last three months. The average price of mutton in the last three autumns was 6*d.*, 6¼*d.*, and 6⅞*d.* a pound. The rise in the price of beef was 10 per cent., of mutton 15 per cent., in two years. This was partly the result of panic, and of interference with the supply of the markets, as the destruction of stock had not been considerable when the prices rose; and the rise itself was anticipated and augmented by the extra profits of the butchers.

The best potatoes at the waterside market, Southwark, sold at prices ranging from 60*s.* to 90*s.* a ton; from 3*s.* to 4*s.* 6*d.* the hundredweight. The prices are much lower than they were in the autumn of 1864.

On an average 128,858 paupers received complete relief in the workhouses; 724,792 paupers out of doors received relief sufficient to supply some of their wants, but not enough for subsistence. The numbers relieved in the workhouses scarcely varied; the numbers out of doors fell from 804,940 to 771,908, and to 724,792 in the last three autumnal quarters.

The temperature of the quarter was 46° Fahrenheit, equal to 8° centigrade.

The autumnal season was characterized by high temperature, storms, and a heavy rain-fall. The mean temperature of the air at Greenwich Observatory was 2·3° above the average of the season. The temperature of December there, was nearly as high as that of November; its mean temperature was 3·4° above the average of 94 Decembers. The rain-fall on 47 days was 9·2 inches at the Royal Observatory, or 2·1 inches above the average. The excess of rain fell in October, when the fall was 5·9 inches; in December the fall was only 0·9 inch, or full an inch below the average.

The rain-fall determines to some extent the water supply, and the excess in October made up the deficiency in the early part of the year. The rain-fall depends upon a great number of conditions, and consequently varies in every part of the country. Thus 20·2 inches of rain fell at Alienheads, 19·1 at Truro, and only 5·8 inches at Liverpool Observatory. The average rain-fall at Mr. Glaisher's 50 stations was 11·4 inches; which is equivalent to 1,151 tons of rain per acre, or to 42,961 million tons on the whole area of England and Wales. If the country ever suffers from the want of water, it is from defective storage or defective distribution. In the mountainous regions the annual rain-fall in some places has been found to amount to 190 inches: it would be a great advantage to get the water of the hills unpolluted for the supply of men and domestic animals in the plains.

in the **Year 1865** for different **Parallels** of **Latitude.**

Mean Elastic Force of Vapour.	Mean Weight of Vapour in a Cubic Foot of Air.	Mean additional Weight of Vapour required for Saturation.	Mean Degree of Humidity of the Air. Saturation = 100.	Mean Weight of a Cubic Foot of Air.	Wind. Mean estimated Strength.	Wind. Relative Proportion of N.	E.	S.	W.	Mean Amount of Cloud (0–10).	Rain. Number of Days it fell.	Amount collected.	Parallels of Latitude.
in.	grs.	gr.		grs.							days.	in.	
·337	3·8	0·6	86	539	1·4	91	86	89	99	4·7	156	43·3	Between the latitudes,— 49° and 50°
·324	3·7	0·9	82	540	1·3	87	82	87	109	5·2	153	37·9	50° and 51°
·307	3·5	0·9	83	539	0·9	65	74	93	102	5·7	158	33·0	51° and 52°
·301	3·4	0·9	82	541	0·8	76	70	94	125	5·9	153	29·3	52° and 53°
·291	3·3	0·8	82	542	1·1	74	81	104	108	6·2	167	27·1	53° and 54°
·280	3·1	0·7	83	539	1·0	57	86	90	131	5·8	170	33·0	54° and 55°
·279	3·2	0·6	85	544	1·7	82	67	94	112	5·6	176	27·0	North Shields.
·282	3·2	0·6	84	542	0·4	48	67	116	134	4·9	152	25·1	Culloden.
·276	3·1	0·8	81	541	2·4	72	66	124	103	4·6	173	28·6	Miltown Banbridge (Ireland).
·297	3·4	0·7	83	541	1·2	74	78	99	114	5·4	162	31·6	Between the latitudes,— 49° and 58°

Deaths ; and State of the Public Health.—The threats which were held over our heads of a new form of fever, the invasion of two points of the southern coast by epidemic cholera, which has ravaged the continent, and the prevalence of cattle plague all over England, led us to await the result of the returns with some anxiety.

It is gratifying under these circumstances to find that the mortality has been lower than it was in the autumn of 1864, and has been only ·104 above the autumnal average.

121,245 deaths were registered in the quarter, and the mortality was at the rate of 2·283 per cent. annually.

In the districts of the chief towns the mortality was at the rate of 2·565 per cent., or ·13 above the average.

The mortality in the country districts was, as usual, lower than the mortality in the town districts ; it was at the rate of 1·923 per cent., and only ·04 above the average of those districts.

Thus the rate of mortality in the country districts was about 19, in the town districts nearly 26, and in the kingdom generally nearly 23 per 1000 living.

The mortality was lowest in the South-western Counties (19), highest in the North-western Counties (29) ; thus the annual rate was 10 per thousand higher in Lancashire and Cheshire round the Mersey than it was in the counties between the Bristol Channel and the channel which divides England from France.

It is gratifying to find that the mortality rate of London (24) is lower by 2 in 1000 than it was (26) in the autumn quarter of the previous year.

The mortality has been excessively high through the year in prosperous Yorkshire ; it is still 2 above the county average (23), but it is somewhat lower than it was in the autumn of the previous year.

As a general rule the mortality has been higher than their average in the counties north of the Dee and of the Humber, and lower than the average in the counties of Wales and of the Midland and Southern region of England, around the basins of the Severn, Trent, and Thames.

The great towns of the United Kingdom may be arranged thus in the order of the autumnal mortality rate per 1000 : Bristol 24, London 24, Dublin 26, Birmingham 26, Edinburgh 29, Hull 29, Leeds 33, Salford 34, Manchester 36, Glasgow 40, Liverpool 41. The mortality in 63 of the country districts was 18 during the same season.

It is sad to see this great sacrifice of human life in so many of our large towns, where the productive industry of the country is most active,

TABLE 44.—Meteorology of Greenwich

YEARS.	Mean Weekly Movement of the Air in Miles.*	Departure from Average.	Fall of Rain in Inches.	Departure from Average.	Mean Dryness of Atmosphere.	Departure from Average.	Mean TEMPERATURE of the AIR.	Departure from Average.
	Miles.	Miles.	Inches.	Inches.	°	°	°	°
1849	1808	+122	23·9	+ 0·5	6·6	+ 0·8	50·0	+ 0·7
1850	1841	+155	19·7	− 3·7	6·1	+ 0·3	49·3	0·0
1851	1730	+ 44	21·6	− 1·8	6·5	+ 0·7	49·2	− 0·1
1852	1781	+ 95	34·2	+10·8	7·4	+ 1·6	50·6	+ 1·3
1853	1597	− 89	29·0	+ 5·6	6·2	+ 0·4	47·7	− 1·6
1854	1731	+ 45	18·7	− 4·7	4·7	− 1·1	48·9	− 0·4
1855	1659	− 27	21·1	− 2·3	4·5	− 1·3	47·1	− 2·2
1856	1775	+ 89	22·2	− 1·2	5·6	− 0·2	49·0	− 0·3
1857	1562	−124	21·4	− 2·0	5·2	− 0·6	51·0	+ 1·7
1858	1625	− 60	17·8	− 5·6	6·5	+ 0·7	49·2	− 0·1
1859	1598	− 88	25·9	+ 2·5	6·0	+ 0·2	50·7	+ 1·4
1860	1676	− 10	32·0	+ 8·6	4·6	− 1·2	47·0	− 2·3
1861	1666	− 20	20·8	+ 2·6	5·0	− 0·8	49·4	+ 0·1
1862	1680	− 6	26·2	− 2·8	4·7	− 1·1	49·5	+ 0·2
1863	1775	+ 89	19·8	− 3·6	6·0	+ 0·2	50·3	+ 1·0
1864	1597	− 89	16·8	− 6·6	7·0	+ 1·2	48·5	− 0·8
1865	1553	−133	26·3	+ 2·9	6·2	+ 0·4	50·3	+ 1·0
Average	1686	—	23·4	—	5·8	—	49·3	—

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

and where the science of the country is applied to almost every purpose, except the maintenance of the hygienic conditions on which men can live in health.

It is satisfactory to observe at the same time traces of dawning light. London has undertaken great sewage works ; Manchester is already supplied with abundance of water ; and we may hope to see ere long a generous rivalry in our cities in the race of improvement. When pure water on the constant supply system is brought to every house, and the dirt in cesspools, which is the source of zymotic disease, is carried away to fructify the soil, the municipal authorities will have laid the solid foundations of the sanitary edifice. The inspection of articles of food by health officers, measures for the regulation of lodging-houses or of any of the houses in which fever is generated, and several other duties they may also undertake ; but after all this is done, the crowning success must be achieved by the people themselves. Temperance, self-control, and skill in protecting themselves and their children from evil are every day called into requisition. The preservation of life depends upon careful attention to small things, and should be taught as a part of common education.

Mr. Leigh's able Sanitary Report on Manchester shows how much has been done, and how much remains to be done, in that city (see below). It is to be regretted that Manchester has yet no health officer, but it is indebted to the Statistical and the Sanitary Societies for the publication of much valuable practical information.

This country was threatened not only by cholera but by yellow fever in the year. The *Hecla*, from Cuba, laden with copper ore, entered Swansea Harbour, lying between a low inhabited island and the town, at 9 A.M. on 9th September, and landed James Saunders, sick ; he died in the course of the day. On the 23d of September the Registrar of Swansea received the certificate of the death of John Jesse by yellow fever, and this certificate was sent by the Registrar-General to the Council Office, who immediately, through Dr. Buchanan, instituted a searching inquiry into the subject, of which the importance was evident. *Twenty-nine* persons who had been in or near the *Hecla* were attacked by the fever, and thirteen persons died of it in Swansea, one in the *Eleanor* sloop, and one in Llanelly. The disease did not spread by contagion, but it was apparently induced by the diffusion of the fever miasm among the people. Judicious measures were taken for removing the *Hecla* from the

in the Seventeen Years 1849-1865.

MEAN TEMPERATURES of the AIR in the Quarters ending the last day of								YEARS.
March.	Departure from Average.	June.	Departure from Average.	Sept.	Departure from Average.	Dec.	Departure from Average.	
°	°	°	°	°	°	°	°	
41·9	+ 2·2	51·7	− 0·9	61·0	+ 0·8	44·8	+ 0·9	1849
39·4	− 0·3	53·5	+ 0·9	59·6	− 0·6	44·7	+ 0·8	1850
41·9	+ 2·2	51·5	− 1·1	59·8	− 0·4	43·7	− 0·2	1851
41·4	+ 1·7	51·2	− 1·4	61·8	+ 1·6	48·1	+ 4·2	1852
38·1	− 1·6	51·8	− 0·8	58·5	− 1·7	42·3	− 1·6	1853
40·8	+ 1·1	51·7	− 0·9	59·8	− 0·4	43·7	− 0·2	1854
34·1	− 5·6	50·5	− 2·1	60·4	+ 0·2	42·7	− 1·2	1855
40·0	+ 0·3	52·3	− 0·3	59·9	− 0·3	44·2	+ 0·3	1856
39·2	− 0·5	53·8	+ 1·2	63·3	+ 3·1	47·9	+ 4·0	1857
37·8	− 1·9	54·3	+ 1·7	61·0	+ 0·8	43·8	− 0·1	1858
43·3	+ 3·6	53·7	+ 1·1	62·8	+ 2·6	43·3	− 0·6	1859
38·8	− 0·9	50·5	− 2·1	56·2	− 4·0	42·6	− 1·3	1860
39·9	+ 0·2	51·8	− 0·8	60·4	+ 0·2	45·5	+ 1·6	1861
41·0	+ 1·3	53·3	+ 0·7	58·8	− 1·4	45·0	+ 1·1	1862
42·6	+ 2·9	53·1	+ 0·5	58·8	− 1·4	46·8	+ 2·4	1863
37·9	− 1·8	53·1	− 0·5	59·4	− 0·8	43·7	− 0·9	1864
36·5	− 3·2	56·2	+ 3·6	62·5	+ 2·3	46·0	+ 1·4	1865
39·7	—	52·6	—	60·2	—	44·6	—	Average.

harbour, and for purifying her foul interior. The last death by yellow fever occurred on 8th October.

In this case, as well as in the invasion of Southampton by cholera, the importance of attention to the hygienic condition both of our merchant vessels and our seaports is clearly seen; for a foul ship instead of merchandise carries from land to land the seeds of depopulating diseases, and a foul seaport supplies the soil in which they rankly germinate.

REPORT on the Sanitary Condition of MANCHESTER, by JOHN LEIGH, Esq., Registrar of the Deansgate Sub-district.

During the quarter ending 31st December 1863 there were 34 deaths from scarlatina, and, including whooping-cough amongst the infectious diseases, 51 deaths from this class altogether.

In the next quarter ending 31st March 1864, 21 deaths from scarlatina and 49 from all infectious diseases.

In the quarter ending 30th June 1864, 18 deaths from scarlatina and 31 from all nfectious diseases.

In the quarter ending 30th September 1864, 15 deaths from scarlatina, 13 from measles, and 8 from fever; 41 from all diseases of an infectious character, and 61 from diarrhœa.

In the last quarter of 1864 there were 10 deaths from scarlatina, 10 from measles, 13 from fever, 4 from small-pox; 41 from all infectious diseases.

In the first quarter of 1865 scarlatina had vanished from the district; there was not a single death from this disease, and only 3 from measles; but there were 10 deaths from small-pox, and 11 from typhus.

In the next quarter ending 30th June there were 7 deaths from fever, 7 from measles, 3 from small-pox, only 2 from scarlatina, and 1 from whooping-cough; 21 deaths from all infectious diseases. There were 17 deaths from diarrhœa.

In the quarter ending 30th September there were 15 deaths from fever, 25 from all infectious diseases, and 71 from diarrhœa.

These numbers represent the deaths occurring within the district. Many cases were taken to the hospitals, and either terminated in recovery or swelled the mortality of other districts. The figures suffice, however, to show how zymotic diseases replace each other. Beginning with scarlatina in the December quarter of 1863, we find it declining through the three succeeding quarters under a gradual rise of measles, typhus, and small-pox; measles next, to a great extent, giving way to fever and small-pox. The latter is now scarcely found in the district, and fever is in the ascendant. There can be no doubt that scarlatina, measles, small-pox, and whooping-cough, whatever or whenever their remote origin may have been, are at this day communicable and perhaps in all cases communicated by infection. I have no knowledge of ever having personally met with a case of any of these diseases of spontaneous origin. Of true typhus probably the same may be said; whilst the united testimony of observers of the very erratic course of cholera points to the same conclusion respecting it. I very carefully traced nearly every case of cholera during the last two invasions of this disease in Manchester, and invariably I found there had been direct communication with infected persons or an infected atmosphere. I entertain no more doubt of the infectious nature of cholera than of that of small-pox or scarlatina. Its course can be accounted for in no other way. Under the threatening prospect of a fresh invasion it is best to look the disease fairly in the face, and not, under

TABLE 45.—**Average Annual Rate of Mortality in the 11 DIVISIONS of England in the 10 Years 1851-60, and in the WINTER, SPRING, SUMMER, and AUTUMN QUARTERS of 1865.**

DIVISIONS.	AVERAGE ANNUAL RATE of MORTALITY to 1000 LIVING in the					
	10 Years 1851-60.	Year.	Winter Quarter 1865.	Spring Quarter 1865.	Summer Quarter 1865.	Autumn Quarter 1865.
I. LONDON	23·63	24·40	28·46	23·16	21·91	24·05
II. SOUTH EASTERN COUNTIES	19·55	20·40	24·25	18·82	19·07	19·44
III. SOUTH MIDLAND COUNTIES	20·44	21·56	25·39	20·02	20·02	20·79
IV. EASTERN COUNTIES	20·58	21·06	24·47	20·40	19·75	19·60
V. SOUTH WESTERN COUNTIES	20·01	20·42	25·20	20·53	17·14	18·81
VI. WEST MIDLAND COUNTIES	22·35	22·18	27·15	20·23	19·46	21·89
VII. NORTH MIDLAND COUNTIES	21·16	21·81	25·73	20·52	20·43	20·55
VIII. NORTH WESTERN COUNTIES	25·51	27·38	30·25	24·69	25·64	28·93
IX. YORKSHIRE	23·09	25·71	28·01	24·83	25·13	24·86
X. NORTHERN COUNTIES	21·99	23·70	26·26	22·63	22·86	23·03
XI. MONMOUTHSHIRE AND WALES	21·28	23·36	29·51	24·75	18·74	20·41

the fear of being considered alarmists, to ignore its nature, and neglect the means of breaking the force of the attack.

It may perhaps be granted, that the noisome pent-up atmosphere of courts and alleys, of overcrowded and unventilated rooms, the emanations of churchyards, the effluvia of unsluiced sewers and drains, the decomposing offal of slaughter-houses, and the disgusting exhalations from manufactories of animal matters, do not generate small-pox, measles, or scarlatina.

Cholera is probably a disease of our time, originating in the filth and dirty habits of the devotees who throng the banks of the Jumna and the Ganges, assisted by the miasms and putrescence of those polluted rivers. It is doubtful too whether in our time typhus does not absolutely originate in the ill conditions of our crowded towns. Be this as it may, nothing is more certain than that the ordinary unfavourable conditions of large towns, with their festering grave-yards, decomposing offal, noisome exhalations of tallow-chandleries, and other manufactories of animal matters, stenches of sewers and drains, and stagnant atmosphere of courts and alleys, are the predisposing causes of diseases, especially infectious diseases. If they do not actually produce disease they so reduce the tone and strength of the population, so vitiate their blood and exalt their susceptibility of deleterious influences, that a constant tendency exists to take on diseased action, whether in the form of typhus, scarlatina, small-pox, or cholera. A state of chronic disorganization is always attracting the flying bands of the enemy.

It is not a question of food and wages; the day-labourer in the country who earns his ten or twelve shillings a week, and tastes animal food but once in that week, is ruddy, strong, and healthy, compared with the highly-paid and well fed artisan who works in a crowd of fellow workmen and sleeps in the narrow street or confined court where his house stands, and whose cadaverous looks tell the tale of his surroundings.

No doubt the artisan is exposed to temptations and has facilities of indulgence which do not fall to the countryman; but the pale skins of town children, their soft and flabby muscles, and protuberant abdomens, mark them out strongly from their rustic compeers.

As a rule, a child in the country gets its teeth easily; in the town it perishes in too many instances of convulsions during the process of dentition. During the last quarter 30 children have died from convulsions in this district alone, and 85 during the year. Poison in the air, laudanum in the food, the wonder is, not that so many die, but that so many live.

No town in England is better and more abundantly supplied with good and pure water than Manchester. It comes from the mountains of sandy grit that separate Lancashire from Yorkshire. Soft, yet sparkling and pure, it is equally adapted for drinking, for culinary or washing purposes. The streets of Manchester are admirably paved and sewered, and are kept constantly clean by an organised body of scavengers. There are no pools of stagnant water, no collections of filth allowed to lie and rot in the streets. To the casual observer only the atmosphere is dark and foul. What is it then that makes Manchester so unhealthy a town? Why should its artisan be ever pale and sallow and unhealthy? He is better fed and clothed than his brother in the country. His drink is pure as at the fountain. The children have not learned intemperate habits, and yet are as sickly as their parents. I live in one of those fine wide streets still left in Manchester for private residences. My house is large; the rooms spacious; there is a large piece of open ground connected with the house, the windows are regularly and frequently opened, and the house well ventilated by large fires kept up for the purpose. Yet I am obliged to have a house in the country for my family. In the town my children grow pale, their appetites fail, they become thin and listless, and ready to be the prey of active disease, and yet, all circumstances, save atmosphere alone, are the same as those of the country. Close to my town house, on the west side, is a large grave-yard, in which interments are even yet made daily. On one side of the street, separated by a small interval, is a large tallow-melting work recently established; on the other side an ancient and time-honoured tallow-chandlery with its vested right of poisoning the neighbours; at the top of the street are half a dozen slaughter-houses, in two of which some three hundred pigs are killed and dressed weekly, the sewers getting the benefit of the effete matters. Add to the noxious products which load the atmosphere from these sources, the black out-pourings from innumerable chimneys, and a tolerable conception of the sanitary state of the neighbourhood will be obtained.

The unhealthiness of Manchester is due to its vitiated atmosphere; we have had an unusually dry season, and an extraordinary amount of sickness, with excessive mortality. Nothing but the constant rain we have in ordinary years makes a residence within its bounds tolerable. The air is well washed often, and we survive. No plant will live in Manchester without constant washing; the leaves become coated with soot, the stomata choked and closed; and respiration ceases after a few hours. And that which destroys the life of a plant is breathed by the whole inhabitants of Manchester. This is the life-giving fluid on which they are to live and work. Let any one examine the lungs after death of a person who has been long resident in Manchester, and in the bronchial glands he will find a fluid substance, inhaled soot, as black and thick as ink. Besides the black carbonaceous particles, there are salts of ammonia, and other irritating matters which are carried with the inhaled air into the finer bronchial tubes, and produce a constant irri-

tation, which undoubtedly has much to do with the large amount of phthisical and bronchial disease ever present in this great town.

Such nuisances are within the control of the authorities. Why should not the smoke be burned? Why should not the slaughter-houses and the noxious manufactories be removed to one outskirt of the town, where already many of them are situated? To a large extent they would neutralize the bad effects of each other. The chlorine and muriatic acid and sulphurous acid so largely developed in our vast chemical manufactures would destroy the animal and vegetable matters that now pollute the centre of the town; and at all events there would be ample space for diffusion of the true gases, and the distribution by the winds of the now concentrated vapours.

We have fever amongst us, and cholera at our doors. We know how fatally these are promoted and extended by the evils which we see and recognize, and yet fear to touch. Unhappily the value of human life is outweighed by other considerations.

The evils of a polluted city atmosphere exist in concentrated force in the courts, alleys, and confined over-crowded rooms in which so many of our labouring population live; and these are more difficult to deal with. The air is stagnant, and as the courts and alleys are closed at one end (blind alleys) there is no possibility of ventilation unless artificial openings be made. But a foul atmosphere is not disagreeable to a large class of working people, who enter it with indifference; and it is almost impossible to get them to open their windows. Though they are amply supplied with water, extreme uncleanliness of person, dress, and home is also matter for much regret. For this no remedy exists but education; and the clergy of all denominations hold a power which they might exercise most beneficially in the inculcation of sanitary lessons. At the present time benevolence can hardly find a nobler field.

Dirt and squalor are the enemies of religion as much as of health.

Health of London in 1865.

He who wishes to study some of the striking properties of the English race can scarcely find a better field than the area extending a few miles around St. Paul's Cathedral and Westminster Abbey. Here is the metropolis to which emigrants come daily from every county of the United Kingdom, and from which the enterprizing start to every province of the Empire. Besides the ebb and flow of migration, birth and death succeed each other in waves of thousands every week. And amidst all the changes the population increases; so that streets, once empty lanes, are full of life; and within the present bounds the population of men, women, and children of every rank, from the casual mendicant through all degrees of working men, up to the highest classes in art, intellect, and wealth, amount to three millions.

The population of London within the registration limits is by estimate 2,993,513 but beyond this central mass there is a ring of life growing rapidly, and extending along railway lines, over a circle of 15 miles radius from Charing Cross. The population within that circle, patrolled by the metropolitan police, is about 3,463,771.

The population of London within the registration limits increased at the rate of 1·73 per cent. per annum; the outer population at the rate of 2·77 per cent.

TABLE **46.**—LONDON.—**Births** and **Deaths** in the Fourteen Years **1852** to **1865.**

YEARS.	1852	1853	1854	1855	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865
BIRTHS - - -	81250	82254	84885	85532	87430	89577	89012	92909	93414	97064	97850	102119	102625	106803
DEATHS - - -	54638	60069	73697	61942	57274	59103	64093	61860	62309	65251	67371	71060	78238	73531
Excess of BIRTHS over DEATHS -	26612	22185	11188	23590	30156	30474	24919	31049	31105	31813	30479	31059	24387	33272
BIRTHS - Males -	41388	42132	42988	43501	44410	45885	45347	47330	47645	49335	49382	52277	52383	54051
BIRTHS - Females -	39862	40122	41897	42031	43020	43692	43665	45579	45769	47729	48468	49842	50242	52752
DEATHS - Males -	28063	30852	37151	31354	29076	29769	32579	31577	31657	33105	34288	36354	39551	37578
DEATHS - Females -	26575	29217	36546	30588	28198	29334	31514	30283	30652	32146	33083	34706	38687	35953
ANNUAL MORTALITY per 1000 - -	22·61	24·41	29·43	24·31	22·09	22·41	23·90	22·69	22·49	23·18	23·56	24·47	26·53	24·56

The metropolitan tables of the year 1865 are based on the returns of 135 registrars, and apply to 2,993,513 people, who are nearly all under the observation of medical men. The registered births were 2054, the deaths 1414 weekly, on an average, by all diseases and injuries. The Tables supply data for determining how much the phenomena of life and death are influenced by the surges of epidemics, by atmospheric pressure, by heat and cold, by fog and sunshine, by rain and by waters varying in their chemical as well as pathological effects, within certain limits. To extend those limits the area of observation must be extended.

This has been done. In the year 1865 the registrars of Liverpool, Manchester, Salford, Birmingham, Leeds, Bristol, and Hull supplied with the most credible punctuality weekly returns of the births and deaths and epidemical diseases reigning in those great cities and boroughs. The Registrars General of Scotland and Ireland readily contributed to the undertaking, and sent weekly the returns for Edinburgh, Glasgow, and Dublin. Thus the system of weekly observation extended over a wider area, and over 5,690,617 people, exposed to a great variety of physical and social influences.

The laws of zymotic diseases demand for their elimination a still wider area; and as observatories are wisely established in the great cities of Europe to promote the science of astronomy, so it appears desirable to seek by the same methods of exact observation to advance the science of human life.

The capital of the Austrian Empire, has, through Dr. Glatter, contributed regularly to the series of observations; and the deaths have been published here weekly. New York already publishes an imperfect weekly Table. Berlin will probably not long lag behind Vienna; and if Paris once begins, its example will be followed by Madrid, Florence, and St. Petersburgh. We shall then have hygienic observatories in all the great cities of civilized nations, where scientific men will be constantly on the look-out to give due notice of the rise and progress of diseases either injurious or fatal to the human race.

It is a common nation on the Continent that the publication of weekly tables, such as those of London, may shake the nerves of the people, and lead to explosions of terror in times of epidemic. But experience proves that the publication of the facts quiets instead of disturbing the popular mind, and while it reveals the exact extent of danger, robs it of the halo of alarm with which the imagination surrounds indefinite pestilences, walking abroad by noonday. The panic in Paris, Marseilles, and Naples from cholera last year had no parallel in London in 1854; and if weekly Tables had been published in Paris that city would probably have

TABLE **47.**—LONDON.—**Deaths in Public Institutions, 1855-65.***

	1855	1856	1857	1858	1859	1860	1861	1862	1863	1864	1865
TOTAL DEATHS IN PUBLIC INSTITUTIONS - - - - - - -	11310	10381	(53 weeks) 10079	10004	9633	9550	10276	11313	(53 weeks) 11112	12731	12116
IN WORKHOUSES - - - - - -	6552	5797	5714	5535	5228	5161	5757	6401	6187	7055	6715
PRISONS - - - - - - -	71	81	71	57	40	41	46	53	64	125	99
MILITARY AND NAVAL ASYLUMS -	299	304	285	317	307	272	251	307	289	315	278
GENERAL HOSPITALS - - -	2956	2859	3008	3094	2927	3039	3234	3167	3169	3558	3354
HOSPITALS FOR SPECIAL DISEASES -	441	612	332	272	431	413	335	690	827	982	1002
LYING-IN HOSPITALS - Women -	27	14	11	11	35	34	38	35	11	24	26
LYING-IN HOSPITALS - Children -	40	31	23	32	51	57	58	40	37	48	42
MILITARY AND NAVAL HOSPITALS -	404	282	180	211	187	173	223	236	203	215	176
HOSPITALS AND ASYLUMS FOR FOREIGNERS - - - - - -	64	61	63	53	46	47	58	74	61	82	71
LUNATIC ASYLUMS - - - -	456	340	392	422	381	313	276	310	264	327	353

* 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.

enjoyed the same comparative immunity as London in 1865; for the London Tables, demonstrating the diffusion of cholera by the wells and by the water companies, led the latter, under legislative pressure, to seek purer sources of supply; while Paris was left behind in this work of improvement, and unnumbered thousands of the people perished.

The Rinderpest has created an alarm which could never have arisen in England if people knew the amount of stock, and its mortality, in ordinary times, as well as the laws which govern epizootics precisely as they govern epidemics. It is an exact reproduction of the Continental panic in times of cholera, and enables us to understand it.

The seasons of the year 1865 were in many respects remarkable. The winter was cold, and February and March seemed insensible to the growing power of the summer. The mean temperature of each of the first three months lay between 36° and 37°. The mean night temperature of those months was below or little above the freezing point of water; bronchitis was unusually fatal; and the rate of mortality in the coldest weeks of January and February rose a fourth above the annual average. The temperature rose in April and May, and was several degrees above the average of those months. The temperature of the air made a sudden start in April, and its mean ranged, up to May 20th, from 49° to 56°; its weekly mean extremes from 40° at night to 72° in the day. Then after May 20th, through June, the mean temperature was high, and it rose still higher in July, reading 66°. The temperature began to rise rapidly on the 20th of June; and the thermometer touched 88° in the air, and 148° in the sun, on June 23d. The deaths from diarrhœa suddenly increased in this week to 187; in successive weeks they rose to 184, to 301 in July, and then slowly declined through August and September.

The deaths from summer cholera had not exceeded one weekly, but in the third week of June 3 died, and the deaths increased weekly until 23 were registered in the last week of July; then the deaths gradually fell off, and the deaths by cholera in the year were 193. These included one or more persons who were attacked in Paris. A few cases of Asiatic cholera, it will be recollected, occurred in Southampton, and at Epping in

TABLE **48.**—LONDON.—**Deaths** and **Meteorology, 1849-65.**

YEARS.	Total Number of Deaths.	Mean Temperature of Air.	Dryness of Atmosphere.	Fall of Rain in Inches.	Mean *Weekly* Amount of Horizontal Movement of the Air, approximated to the results of Robinson's Anemometer by reductions from Whewell's to 1859.*
		°	°		Miles.
1849	68756	50·0	6·6	23·9	1808
1850	48950	49·3	6·1	19·7	1841
1851	55488	49·2	6·5	21·6	1730
1852	54638	50·6	7·4	34·2	1781
1853	60069	47·7	6·2	29·0	1597
1854	73697	48·9	4·7	18·7	1731
1855	61942	47·1	4·5	21·1	1659
1856	57274	49·0	5·6	22·2	1775
1857	59103	51·0	5·2	21·4	1562
1858	64093	49·2	6·5	17·8	1626
1859	61860	50·7	6·0	25·9	1598
1860	62309	47·0	4·6	32·0	1676
1861	65251	49·4	5·0	20·8	1666
1862	67371	49·5	4·7	26·2	1680
1863	71060	50·3	6·0	19·8	1775
1864	78238	48·5	5·8	16·3	1597
1865	73531	50·3	6·3	28·7	1553

1865	Number of Deaths weekly.	Mean Temperature of Air.	Average daily Range of Temperature.	Dryness of Atmosphere.	Fall of Rain in Inches.	Amount of Horizontal Movement of the Air in each Week.†
		°	°	°		
First Quarter	1619	36·5	10·7	4·7	6·1	1893
Second Quarter	1336	56·2	23·4	8·9	7·2	1312
Third Quarter	1284	62·5	21·2	8·0	6·5	1354
Fourth Quarter	1405	46·0	12·3	4·0	9·2	1644

WEEKLY AVERAGE OF 1865.

* 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.

the neighbourhood of London. Scarlatina became more fatal in London than it had been in the two last weeks of June.

It is worthy of note that the cattle plague was first observed at Lambeth on June 24th, at Islington on June 27th, at Hackney on the 28th, on July 1st in Whitechapel; by the 3d of July it had attacked 40 cows in various places, and had killed half of them.* According to the official returns, 7238 cattle were attacked before December 30th by Rinderpest in the metropolitan police district; the poleaxe was liberally used; 3103 of the attacked were killed, 2218 were slaughtered healthy by way of precaution, and 3263 died of the disease. Thus 5321 were slaughtered, 3263 died, 588 remained sick on December 30th; and it would appear that the "stamping out" is only partially successful when a large proportion of the cattle are killed either by the butchers or by the disease. During the whole of this period the milk must in many cases have been drawn from infected cows before the secretion of milk had ceased; and it is to be feared that their carcases were often sold as meat. Lancisi found that such meat induced diarrhœa; and though the effect of the cattle plague on the health of the population of London is not yet apparent, the facts must be carefully watched.

The temperature of every month of the year after March, except August, was above the average of 24 years, and in two weeks of September the heat was tropical; the mean of the highest daily air temperatures of the two weeks ending September 16th was 80·5°; the highest air temperature of Friday, September 8th, was 86°; while the temperature of the thermometer in the sun was 131°, and the warmth of the waters of the Thames rose to 68°. This heat produced no sensible effect on the mortality. There was no rain in either of those weeks. Towards the end of October 5·2 inches of rain fell in three weeks; and thus, notwithstanding previous droughts, the rain-fall of the year, as well as the temperature exceeded the average.

The annual rate of mortality in London was 2·433 during 26 years; and the mortality in the year 1865 of extreme heat and extreme cold was 2·456. There was a sensible decline in the mortality of the districts south of the Thames.

The mortality in the whole of the great city population of the United Kingdom was at the rate of 2·718 per cent. in 1865.

TABLE **49.**—POPULATION; BIRTHS and DEATHS; ANNUAL BIRTH and DEATH RATES; MEAN TEMPERATURE and RAINFALL, in the Year **1865,** in ELEVEN LARGE TOWNS.

CITIES, &c.	ESTIMATED POPULATION in the Middle of the Year 1865.	BIRTHS in 52 Weeks ending 30th Dec. 1865.	DEATHS in 52 Weeks ending 30th Dec. 1865.	ANNUAL RATE to 1000 living during the 52 Weeks ending 30th Dec. 1865.		MEAN TEMPERATURE in 52 Weeks ending 30th Dec. 1865.	RAINFALL in inches in 52 Weeks ending 30th Dec. 1865.
				Births.	Deaths.		
TOTAL of 11 LARGE TOWNS -	5,690,617	208,582	154,117	36·74	27·18	49·0	28·1
LONDON - (Metropolis) -	3,015,494	106,722	73,460	35·51	24·44	50·3	29·0
LIVERPOOL - (Borough) -	476,368	19,367	17,290	40·79	36·42	49·9	22·8
MANCHESTER - (City) -	354,930	12,900	11,675	36·47	33·01	48·8	28·5
SALFORD - - (Borough) -	110,833	4,207	3,239	38·09	29·32	48·7	27·9
BIRMINGHAM - (Borough) -	327,842	12,699	8,014	38·87	24·53	49·1	30·7
LEEDS - - (Borough) -	224,025	9,834	6,911	44·05	30·95	49·2	21·7
BRISTOL - - (City) -	161,809	5,668	3,792	35·15	23·52	50·0	36·6
HULL - - (Borough) -	103,747	3,975	2,820	38·45	27·27	..	..
EDINBURGH - (City) -	174,180	6,191	4,878	35·66	28·10	46·6	20·1
GLASGOW - (City) -	423,723	17,916	13,887	42·43	32·89	47·4	35·4
DUBLIN (City and some suburbs)	317,666	8,903	8,151	28·12	25·75	50·3	28·2
VIENNA - - (City) -	560,000	..	17,775	..	31·85	49·3	..

* Report of Dr. Letheby on the City of London, 1865, p. 8, and Official Returns of the Veterinary Department of the Privy Council.

Emigration from the United Kingdom.

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

Table 50.—**Emigration** in each of the Fifty-one **Years** from **1815** to **1865** inclusive.

Years.	North American Colonies.	United States.	Australian Colonies and New Zealand.	All other Places.	Total.
1815	680	1,209	*	192	2,081
1816	3,370	9,022	*	118	12,510
1817	9,797	10,280	*	557	20,634
1818	15,136	12,429	*	222	27,787
1819	23,534	10,674	*	579	34,787
1820	17,921	6,745	*	1,063	25,729
1821	12,955	4,958	*	384	18,297
1822	16,013	4,137	*	279	20,429
1823	11,355	5,032	*	163	16,550
1824	8,774	5,152	*	99	14,025
1825	8,741	5,551	485	114	14,891
1826	12,818	7,063	903	116	20,900
1827	12,648	14,526	715	114	28,003
1828	12,084	12,817	1,056	135	26,092
1829	13,307	15,678	2,016	197	31,198
1830	30,574	24,887	1,242	204	56,907
1831	58,067	23,418	1,561	114	83,160
1832	66,339	32,872	3,733	196	103,140
1833	28,808	29,109	4,093	517	62,527
1834	40,060	33,074	2,800	288	76,222
1835	15,573	26,720	1,860	325	44,478
1836	34,226	37,774	3,124	293	75,417
1837	29,884	36,770	5,054	326	72,034
1838	4,577	14,332	14,021	292	33,222
1839	12,658	33,536	15,786	227	62,207
1840	32,293	40,642	15,850	1,958	90,743
1841	38,164	45,017	32,625	2,786	118,592
1842	54,123	63,852	8,534	1,835	128,344
1843	23,518	28,335	3,478	1,881	57,212
1844	22,924	43,660	2,229	1,873	70,686
1845	31,803	58,538	830	2,330	93,501
1846	43,439	82,239	2,347	1,826	129,851
1847	109,680	142,154	4,949	1,487	258,270
1848	31,065	188,233	23,904	4,887	248,089
1849	41,367	219,450	32,191	6,490	299,498
1850	32,961	223,078	16,037	8,773	280,849
1851	42,605	267,357	21,532	4,472	335,966
1852	32,873	244,261	87,881	3,749	368,764
1853	34,522	230,885	61,401	3,129	329,937
1854	43,761	193,065	83,237	3,366	323,429
1855	17,966	103,414	52,309	3,118	176,807
1856	16,378	111,837	44,584	3,755	176,554
1857	21,001	126,905	61,248	3,721	212,875
1858	9,704	59,716	39,295	5,257	113,972
1859	6,689	70,303	31,013	12,427	120,432
1860	9,786	87,500	24,302	6,881	128,469
1861	12,707	49,764	23,738	5,561	91,770
1862	15,522	58,706	41,813	5,143	121,214
1863	18,083	146,813	53,054	5,808	223,758
1864	12,721	147,042	40,942	8,195	208,900
1865	17,211	147,258	37,283	8,049	209,801
Total	1,272,765	3,597,789	905,085	125,871	5,901,510

Average annual emigration from the United Kingdom — From 1815 to 1865 - 115,716; For the 10 years ending 1865 - 160,774

* 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 51.—**Emigration** in **1865.**

Destination.	Age, Sex, &c. of Emigrants embarked.										Total.	Native Country of Emigrants.				
	Adults.				Children, from 1 to 12 Years.		Infants.		Not distinguished as to Age.			English.	Scotch.	Irish.	Foreigners.	Not distinguished.
	Married.		Single.													
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.						
To the United States	14,934	15,725	57,019	28,301	11,009	10,084	3,048	2,847	2,866	1,825	147,258	30,816	5,562	82,085	23,712	5,083
To British North America	1,629	1,984	8,155	2,217	1,285	1,055	321	338	177	50	17,211	5,083	2,152	7,189	2,551	236
To Australasia	4,660	5,179	13,127	7,247	3,054	2,814	598	604	–	–	37,283	21,082	4,681	10,920	582	18
To all other places	2,071	1,071	2,324	940	371	354	69	47	621	181	8,049	4,364	475	482	1,774	954
To all places from ports at which there are Government Emigration Officers	22,681	23,762	79,932	38,308	15,581	14,201	4,014	3,812	3,664	2,056	208,011	60,949	12,831	99,340	28,601	6,290
To all places from other ports	213	197	693	397	138	106	22	24	–	–	1,790	396	39	1,336	18	1
Total	22,894	23,959	80,625	38,705	15,719	14,307	4,036	3,836	3,664	2,056	209,801	61,345	12,870	100,676	28,619	6,291

Table 52.—**Occupations, Sex,** and general **Destination** of the **Emigrants** in **1865.**

Occupation.	United States.	British North America.	Australasia.	All other Places.	Total.
Adult Males.					
Agricultural Labourers, Gardeners, Carters, &c.	235	54	1,525	42	1,856
Bakers, Confectioners, &c.	251	21	56	2	330
Blacksmiths and Farriers	125	10	180	4	319
Bookbinders and Stationers	14	2	11	—	27
Boot and Shoe Makers	418	155	152	1	726
Braziers, Tinsmiths, Whitesmiths, &c.	375	13	23	—	411
Brick and Tile Makers, Potters, &c.	22	4	11	—	37
Bricklayers, Masons, Plasterers, Slaters, &c.	956	67	245	4	1,272
Builders	102	2	12	10	126
Butchers, Poulterers, &c.	89	10	52	5	156
Cabinet Makers and Upholsterers	6	1	25	—	32
Carpenters and Joiners	1,425	487	415	7	2,334
Carvers and Gilders	38	1	8	—	47
Clerks	838	422	196	163	1,619
Clock and Watch Makers	88	52	10	2	152
Coach Makers and Trimmers	6	—	13	—	19
Coal Miners	455	26	3	—	484
Coopers	147	24	11	1	183
Cutlers	60	—	—	—	60
Domestic Servants	111	24	63	34	232
Dyers	47	1	3	1	52
Engine Drivers, Stokers, &c.	21	3	11	6	41
Engineers	207	28	67	37	339
Engravers	25	1	1	—	27
Farmers	4,460	1,073	669	132	6,334
Gentlemen, Professional Men, Merchants, &c.	2,960	1,157	1,258	820	6,195
Jewellers and Silversmiths	72	3	3	1	79
Labourers, General	41,994	3,449	8,287	236	53,966

TABLE showing the OCCUPATIONS, SEX, and general DESTINATION of the EMIGRANTS in 1865—*continued.*

OCCUPATION.	UNITED STATES.	BRITISH NORTH AMERICA.	AUSTRALASIA.	ALL OTHER PLACES.	TOTAL.
ADULT MALES—*continued.*					
Locksmiths, Gunsmiths, &c.	10	—	4	1	15
Millers, Maltsters, &c.	89	8	19	—	116
Millwrights	46	1	4	—	51
Miners and Quarrymen	3,962	771	821	89	5,643
Painters, Paperhangers, Plumbers, and Glaziers	338	37	64	1	440
Pensioners	5	1	5	—	11
Printers	119	18	24	3	164
Rope Makers	3	3	—	—	6
Saddlers and Harness Makers	51	3	19	—	73
Sail Makers	3	—	3	—	6
Sawyers	14	8	48	—	70
Seamen	214	91	43	8	356
Shipwrights	9	6	18	3	36
Shopkeepers, Shopmen, Warehousemen, &c.	304	72	114	42	532
Smiths, General	778	31	92	2	903
Spinners and Weavers	666	79	19	—	764
Sugar Bakers, Boilers, &c.	46	—	2	1	49
Surveyors	3	1	8	1	13
Tailors	2,037	525	54	3	2,619
Tallow Chandlers and Soap Makers	—	—	1	—	1
Tanners and Curriers	32	4	17	2	55
Turners	36	2	1	—	39
Wheelwrights	12	1	38	—	51
Woolcombers and Sorters	2	—	2	—	4
Trades and Professions not before specified	2,734	611	908	69	4,322
Not distinguished	4,493	421	2,149	2,662	9,725
ADULT FEMALES.					
Domestic and Farm Servants, Nurses, &c.	5,459	198	4,057	186	9,900
Gentlewomen and Governesses	369	138	197	80	784
Milliners, Dressmakers, and Needlewomen	816	15	91	3	919
Married Women	15,725	1,984	5,179	1,071	23,959
Shopwomen	5	—	3	1	9
Trades and Professions not before specified	50	3	19	—	72
Not distinguished	21,608	1,863	2,880	670	27,021
CHILDREN.					
Male Children, 1 to 12 years	11,009	1,285	3,054	371	15,719
Female do. do.	10,084	1,055	2,814	354	14,307
Infants, Males	3,048	321	598	69	4,036
Do. Females	2,847	338	604	47	3,836
Not distinguished as to age, Males	2,866	177	—	621	3,664
Do. Do. Females	1,825	50	—	181	2,056
TOTAL	147,258	17,211	37,283	8,049	209,801

TABLE **53.**

POPULATION OF THE UNITED KINGDOM,

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	**30,551,042**	14,865,304	15,685,738

* 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 and 1867 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* Table 3. p. 81. Vol. III. Census 1861,) to the population for 1866 and 1867 returned in Table 55. pp. lxiv–lxv.]

TABLE **54.**—Logarithms of the above Population of the UNITED KINGDOM.

Middle of Years.	PERSONS.	MALES.	FEMALES.
1801	7·2122518	6·9082749	6·9141489
1811	7·2679345	6·9635210	6·9702620
1821	7·3283913	7·0219850	7·0326718
1831	7·3878095	7·0793269	7·0941063
1841	7·4326020	7·1246962	7·1383408
1851	7·4434825	7·1353552	7·1494358
1861	7·4677402	7·1582849	7·1749751
1866	7·4820136	7·1698198	7·1918676
1867	7·4850260	7·1721738	7·1955050

TABLE 55.—**Population** of the **United Kingdom** estimated to the **middle** of each **Year 1801–67, exclusive** of the **portions** of the **Army, Navy, and Merchant Seamen Abroad.**

YEARS.	UNITED KINGDOM.			ENGLAND AND WALES.			SCOTLAND.			IRELAND.			YEARS.
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	
1801	15,902,322	7,748,246	8,154,076	9,060,993	4,404,490	4,656,503	1,625,000	751,998	873,002	5,216,329	2,591,758	2,624,571	1801
1802	16,059,507	7,826,658	8,232,849	9,129,636	4,441,131	4,688,505	1,643,877	760,616	883,261	5,285,994	2,624,911	2,661,083	1802
1803	16,254,224	7,921,956	8,332,268	9,234,649	4,494,127	4,740,522	1,662,981	769,341	893,640	5,356,594	2,658,488	2,698,106	1803
1804	16,477,279	8,029,902	8,447,377	9,366,826	4,559,230	4,807,596	1,682,318	778,178	904,140	5,428,135	2,692,494	2,735,641	1804
1805	16,715,637	8,145,199	8,570,438	9,513,111	4,631,137	4,881,974	1,701,890	787,126	914,764	5,500,636	2,726,936	2,773,700	1805
1806	16,951,925	8,258,482	8,693,443	9,656,119	4,700,476	4,955,643	1,721,701	796,188	925,513	5,574,105	2,761,818	2,812,287	1806
1807	17,184,902	8,370,728	8,814,174	9,794,594	4,768,221	5,026,373	1,741,750	805,361	936,389	5,648,558	2,797,146	2,851,412	1807
1808	17,410,054	8,479,565	8,930,489	9,924,001	4,831,985	5,092,016	1,762,045	814,653	947,392	5,724,008	2,832,927	2,891,081	1808
1809	17,639,472	8,583,409	9,051,063	10,056,421	4,895,182	5,161,239	1,782,587	824,063	958,524	5,800,464	2,869,164	2,931,300	1809
1810	17,866,908	8,697,020	9,169,888	10,185,578	4,957,559	5,228,019	1,803,384	833,596	969,788	5,877,946	2,905,865	2,972,081	1810
1811	18,103,492	8,811,499	9,291,993	10,322,592	5,025,212	5,297,380	1,824,434	843,250	981,184	5,956,466	2,943,037	3,013,429	1811
1812	18,366,908	8,941,561	9,425,347	10,479,871	5,103,251	5,376,620	1,851,003	857,627	993,376	6,036,034	2,980,683	3,055,351	1812
1813	18,644,377	9,082,277	9,562,100	10,649,743	5,191,211	5,458,532	1,877,966	872,255	1,005,711	6,116,668	3,018,811	3,097,857	1813
1814	18,923,845	9,224,893	9,698,952	10,820,112	5,280,331	5,539,781	1,905,352	887,136	1,018,216	6,198,381	3,057,426	3,140,955	1814
1815	19,218,341	9,374,727	9,843,614	11,004,012	5,375,916	5,628,096	1,933,141	902,275	1,030,866	6,281,188	3,096,536	3,184,652	1815
1816	19,520,488	9,526,546	9,993,942	11,196,156	5,474,848	5,721,308	1,959,229	915,552	1,043,677	6,365,103	3,136,146	3,228,957	1816
1817	19,814,027	9,673,857	10,140,170	11,377,841	5,568,195	5,809,646	1,986,045	929,399	1,056,646	6,450,141	3,176,263	3,273,878	1817
1818	20,104,922	9,819,981	10,284,941	11,555,054	5,659,313	5,895,741	2,013,552	943,776	1,069,776	6,536,316	3,216,892	3,319,424	1818
1819	20,388,744	9,964,535	10,424,209	11,723,379	5,747,842	5,975,537	2,041,720	958,652	1,083,068	6,623,645	3,258,041	3,365,604	1819
1820	20,686,389	10,117,002	10,569,387	11,903,722	5,843,289	6,060,433	2,070,523	973,996	1,096,527	6,712,144	3,299,717	3,412,427	1820
1821	21,007,386	10,278,540	10,728,846	12,105,614	5,946,821	6,158,793	2,099,945	989,793	1,110,152	6,801,827	3,341,926	3,459,901	1821
1822	21,338,890	10,437,930	10,900,960	12,320,360	6,050,929	6,269,431	2,125,822	1,002,327	1,123,495	6,892,708	3,384,674	3,508,034	1822
1823	21,666,344	10,596,147	11,070,197	12,529,518	6,153,157	6,376,361	2,152,017	1,015,019	1,136,998	6,984,809	3,427,971	3,556,838	1823
1824	21,977,412	10,745,695	11,231,717	12,720,736	6,246,003	6,474,733	2,178,536	1,027,872	1,150,664	7,078,140	3,471,820	3,606,320	1824
1825	22,281,164	10,891,074	11,390,090	12,903,059	6,333,955	6,569,104	2,205,383	1,040,889	1,164,494	7,172,722	3,516,230	3,656,492	1825
1826	22,575,495	11,032,473	11,543,022	13,074,286	6,417,196	6,657,090	2,232,639	1,054,068	1,178,571	7,268,570	3,561,209	3,707,361	1826
1827	22,872,049	11,173,727	11,698,322	13,247,277	6,500,546	6,746,731	2,259,072	1,066,418	1,192,654	7,365,700	3,606,763	3,758,937	1827
1828	23,190,529	11,325,793	11,864,736	13,438,474	6,591,959	6,846,515	2,287,924	1,080,935	1,206,989	7,464,131	3,652,899	3,811,232	1828
1829	23,504,943	11,475,573	12,029,370	13,625,045	6,681,424	6,943,621	2,316,020	1,094,524	1,221,496	7,563,878	3,699,625	3,864,253	1829
1830	23,814,667	11,622,656	12,192,011	13,805,041	6,767,221	7,037,820	2,344,662	1,108,485	1,236,177	7,664,964	3,746,950	3,918,014	1830
1831	24,135,422	11,776,491	12,358,931	13,994,460	6,859,085	7,135,375	2,373,561	1,122,526	1,251,035	7,767,401	3,794,880	3,972,521	1831
1832	24,372,051	11,896,932	12,475,119	14,164,696	6,943,932	7,220,764	2,397,777	1,134,485	1,263,292	7,809,578	3,818,515	3,991,063	1832
1833	24,602,698	12,012,203	12,590,495	14,328,471	7,023,322	7,305,149	2,422,239	1,146,585	1,275,654	7,851,988	3,842,296	4,009,692	1833
1834	24,861,899	12,141,056	12,720,843	14,520,297	7,116,031	7,404,266	2,446,968	1,158,798	1,288,170	7,894,634	3,866,227	4,028,407	1834
1835	25,133,468	12,275,028	12,858,440	14,724,063	7,213,625	7,510,438	2,471,889	1,171,097	1,300,792	7,937,516	3,890,306	4,047,210	1835
1836	25,406,281	12,408,238	12,998,043	14,928,477	7,310,074	7,618,403	2,497,167	1,183,629	1,313,538	7,980,637	3,914,535	4,066,102	1836
1837	25,650,426	12,527,350	13,123,076	15,103,778	7,392,191	7,711,587	2,522,653	1,196,245	1,326,408	8,023,995	3,938,914	4,085,081	1837
1838	25,903,697	12,651,465	13,252,232	15,287,699	7,479,021	7,808,678	2,548,402	1,208,997	1,339,405	8,067,596	3,963,447	4,104,149	1838
1839	26,200,106	12,796,609	13,403,497	15,514,255	7,586,593	7,927,662	2,574,413	1,221,884	1,352,529	8,111,438	3,988,132	4,123,306	1839
1840	26,487,026	12,937,181	13,549,845	15,730,813	7,689,301	8,041,512	2,600,692	1,234,910	1,365,782	8,155,521	4,012,970	4,142,551	1840
1841	26,751,199	13,065,536	13,685,663	15,929,492	7,784,883	8,144,609	2,621,854	1,242,689	1,379,165	8,199,853	4,037,964	4,161,889	1841
1842	27,004,417	13,194,189	13,810,228	16,130,326	7,887,620	8,242,706	2,653,165	1,258,690	1,394,475	8,220,926	4,047,879	4,173,047	1842
1843	27,255,699	13,321,297	13,934,402	16,332,228	7,990,370	8,341,858	2,683,639	1,274,223	1,409,416	8,239,832	4,056,704	4,183,128	1843
1844	27,525,119	13,456,832	14,068,287	16,535,174	8,093,100	8,442,074	2,713,318	1,289,265	1,424,053	8,276,627	4,074,467	4,202,160	1844
1845	27,776,364	13,582,614	14,193,750	16,739,136	8,195,776	8,543,360	2,742,167	1,303,795	1,438,372	8,295,061	4,083,043	4,212,018	1845
1846	28,002,094	13,694,941	14,307,153	16,944,092	8,298,360	8,645,732	2,770,154	1,317,792	1,452,362	8,287,848	4,078,789	4,209,059	1846
1847	27,972,537	13,675,994	14,296,543	17,150,018	8,400,820	8,749,198	2,797,245	1,331,236	1,466,009	8,025,274	3,943,938	4,081,336	1847
1848	27,820,088	13,593,648	14,226,440	17,356,882	8,503,116	8,853,766	2,823,406	1,344,105	1,479,301	7,639,800	3,746,427	3,893,373	1848
1849	27,669,579	13,512,837	14,156,742	17,564,656	8,605,212	8,959,444	2,848,609	1,356,381	1,492,228	7,256,314	3,551,244	3,705,070	1849
1850	27,523,694	13,436,128	14,087,566	17,773,324	8,707,074	9,066,250	2,872,821	1,368,045	1,504,776	6,877,549	3,361,009	3,516,540	1850
1851	27,393,337	13,369,095	14,024,242	17,982,849	8,808,662	9,174,187	2,896,015	1,379,080	1,516,935	6,514,473	3,181,353	3,333,120	1851
1852	27,448,257	13,394,542	14,053,715	18,193,206	8,909,938	9,283,268	2,918,162	1,389,469	1,528,693	6,336,889	3,095,135	3,241,754	1852
1853	27,542,588	13,441,288	14,101,300	18,404,368	9,010,866	9,393,502	2,939,236	1,399,196	1,540,040	6,198,984	3,031,226	3,167,758	1853
1854	27,658,704	13,496,584	14,162,120	18,616,310	9,111,410	9,504,900	2,959,211	1,408,246	1,550,965	6,083,183	2,976,928	3,106,255	1854
1855	27,821,730	13,574,202	14,247,528	18,829,000	9,211,528	9,617,472	2,978,065	1,416,606	1,561,459	6,014,665	2,946,068	3,068,597	1855
1856	28,011,034	13,661,616	14,349,418	19,042,412	9,311,182	9,731,230	2,995,771	1,424,261	1,571,510	5,972,851	2,926,173	3,046,678	1856
1857	28,188,280	13,739,458	14,448,822	19,256,516	9,410,334	9,846,182	3,012,310	1,431,200	1,581,110	5,919,454	2,897,924	3,021,530	1857
1858	28,389,770	13,828,357	14,561,413	19,471,291	9,508,949	9,962,342	3,027,665	1,437,414	1,590,251	5,890,814	2,881,994	3,008,820	1858
1859	28,590,224	13,915,802	14,674,422	19,686,701	9,606,982	10,079,719	3,041,812	1,442,890	1,598,922	5,861,711	2,865,930	2,995,781	1859
1860	28,778,411	13,997,137	14,781,274	19,902,713	9,704,394	10,193,319	3,054,738	1,447,622	1,607,116	5,820,960	2,845,121	2,975,839	1860
1861	28,974,362	14,084,642	14,889,720	20,119,314	9,801,152	10,318,162	3,066,633	1,451,707	1,614,926	5,788,415	2,831,783	2,956,632	1861
1862	29,204,983	14,184,718	15,020,265	20,336,467	9,897,217	10,439,250	3,083,989	1,459,144	1,624,845	5,784,527	2,828,357	2,956,170	1862
1863	29,395,051	14,261,081	15,133,970	20,554,137	9,992,537	10,561,600	3,101,345	1,466,581	1,634,764	5,739,569	2,801,963	2,937,606	1863
1864	29,566,316	14,326,608	15,239,708	20,772,308	10,087,086	10,685,222	3,118,701	1,474,018	1,644,683	5,675,307	2,765,504	2,909,803	1864
1865	29,768,089	14,408,029	15,360,060	20,990,946	10,180,821	10,810,125	3,136,057	1,481,455	1,654,602	5,641,086	2,745,753	2,895,333	1865
1866	29,946,058	14,468,451	15,477,607	21,210,020	10,273,700	10,936,320	3,153,413	1,488,892	1,664,521	5,582,625	2,705,859	2,876,766	1866
1867	30,157,239	14,548,808	15,608,431	21,429,508	10,365,688	11,063,820	3,170,769	1,496,329	1,674,440	5,556,962	2,686,791	2,870,171	1867

NOTE.—The above Table has been constructed by the Registrar-General of England in conjunction with the Registrars-General of Scotland and Ireland. The population of the islands in the British Seas is not included.

Number of **Registered Marriages** in **England** in each Year from **1755** to **1800.** (From Preface of Enumeration Abstract, Population 1831, Vol. 1., p. xxxiv.*)

Years.	Marriages.	Years.	Marriages.	Years.	Marriages.
1755	49,379	1771	60,612	1786	68,992
1756	50,972	1772	60,337	1787	76,448
1757	48,300	1773	59,769	1788	70,032
1758	50,672	1774	60,512	1789	70,696
1759	55,537	1775	62,473	1790	70,648
1760	57,848	1776	65,462	1791	72,590
1761	58,101	1777	65,020	1792	74,919
1762	56,543	1778	62,727	1793	72,880
1763	62,233	1779	63,671	1794	71,797
1764	63,310	1780	64,309	1795	68,839
1765	59,227	1781	63,768	1796	73,107
1766	57,043	1782	63,071	1797	74,997
1767	55,324	1783	66,287	1798	79,477
1768	58,331	1784	68,935	1799	77,557
1769	61,825	1785	71,509	1800	69,851
1770	62,693				

* The marriages were furnished to Mr. Rickman by the officiating ministers of churches and chapels from the parochial registers. Lord Hardwicke's Marriage Act *passed in* 1753.

Estimated Population; Number of **Marriages***; and **Proportion** of **Marriages** to **100** of **Population** in **England** and **Wales**, 1801–40.

Year.	Estimated Population.	Marriages.	Marriages to 100 Persons living.	Year.	Estimated Population.	Marriages.	Marriages to 100 Persons living.
1801	9,060,993	67,288	·743	1821	12,105,614	100,868	·833
1802	9,129,636	90,396	·990	1822	12,320,360	98,878	·803
1803	9,234,649	94,379	1·022	1823	12,529,518	101,918	·813
1804	9,366,826	85,738	·915	1824	12,720,736	104,733	·823
1805	9,513,111	79,586	·837	1825	12,903,059	110,428	·856
1806	9,656,119	80,754	·836	1826	13,074,286	104,941	·803
1807	9,794,594	83,923	·857	1827	13,247,277	107,130	·809
1808	9,924,001	82,248	·829	1828	13,438,474	111,174	·827
1809	10,056,421	83,369	·829	1829	13,625,045	104,316	·766
1810	10,185,578	84,470	·829	1830	13,805,041	107,719	·780
1811	10,322,592	86,389	·837	1831	13,994,460	112,094	·801
1812	10,479,871	82,066	·783	1832	14,164,696	116,604	·823
1813	10,649,743	83,860	·787	1833	14,328,471	120,127	·838
1814	10,820,112	92,804	·858	1834	14,520,297	121,884	·839
1815	11,004,012	90,944	·826	1835	14,724,063	119,598	·812
1816	11,196,156	91,946	·821	1836	14,928,477	120,849	·810
1817	11,377,841	88,234	·775	1837	15,103,778	112,727	·746
1818	11,555,054	92,779	·803	1838	15,312,256	118,067	·771
1819	11,723,379	95,571	·815	1839	15,515,296	123,166	·794
1820	11,903,722	96,833	·813	1840	15,721,029	122,665	·780

* The number of marriages in each year from 1801 to 1837 is taken from the Parish Register Abstract, 1841, p. xvi.

ENGLISH LIFE TABLE.

THE following Tables (lxxiv-xci) are extracted from the volume entitled "The English Life Table,"* and will be found of frequent use, as the Life Table is the foundation of vital statistics, and serves to solve all the common problems involved in the doctrines of the probabilities and of the duration of life. Those interested in insurance will resort to the volume in question for special information on that subject, as far as single male or female lives or joint lives of the two sexes are concerned. The subjoined extracts from the Introduction to the Life Table explain the construction and use of the Tables now reprinted.

The English Life Table No. 3. consists of three parts, or three Life Tables, each of seven columns; the first part for Persons consisting of such proportions at each age of the two sexes as are produced by the births; the second part for Males; and the third part for Females. The base of the (1) Table for Persons is 1,000,000 children born alive; and as boys and girls were born in England during the period of observation in the proportions of 511,745 boys to 488,255 girls, these numbers were made respectively the bases of (2) the Male Life Table, and (3) of the Female Life Table.

In the Synoptical Table (pp. lxxvi-lxxvii), the numbers of the males and females living and dying at each year of age are given as they would exist in a population under the law of birth and mortality, found by direct observation to prevail in England and Wales, undisturbed by emigration, by excess of births over deaths, or by any other element of that kind.

The males, we find, if there is no emigration, exceed the females in number in infancy, in childhood, and in manhood up to the age of 53, when the women after the age of childbearing enjoy a firmer hold on life, and die at a lower rate than the men; so that the number of women of 53 and upwards exceeds the number of men of the corresponding ages. The males are to the females of all ages as 20,426,138 to 20,432,046; thus proving decisively that the disparity in the numbers of the two sexes of the English population is due exclusively to emigration.

The Male and Female Life Tables were constructed independently; that of the Persons was obtained by combining the other two in one.

The column d_x (p. lxxiv) expresses the deaths which occur in the years after the ages x; thus, by the Table, 5,583 persons die in the year after the precise age 20, so they are all of the age 20 and under 21, or in their 21st year.

* English Life Table. Tables of Lifetimes, Annuities, and Premiums; with an Introduction by William Farr, M.D., F.R.S. Published by authority of the Registrar General of England. London, 1864; Longman and Co.

The number in the column (d_{20}) is derived from l_0, the basis with which it is connected by the law of mortality prevailing at that and in all preceding ages.

The Table represents a generation of 1,000,000 persons, and it will be observed that in the first year 149,493 die, in the second 53,680, the numbers decreasing every year until the age of 13; 3,382 die in their 14th year (13–14); after the age of puberty the deaths at each year of age increase until 15,469 die in the year 73–74. Great numbers die after that age, but the deaths at the advanced ages decrease rapidly, and 92 die at the age of 100, *one* at the age 108. So 109 years (ω) is the limit of age by this Table.

The column l_x is taken from the machine logarithms $\lambda\, l_x$; it is the sum of the column d_x added up from the bottom; so d_x is always the difference of l_x and l_{x+1}. Thus $l_{x+1} + d_x = l_x$; $d_x = l_x - l_{x+1}$. The values d_x were deduced from the primary column l_x.

L_x is the sum of the series l_x; and $L_x = l_x + L_{x+1}$.

P_x is usually taken to represent the tabular population living at the age x and under $x + 1$; thus by this Table 600,615 is the normal population of the age 30 and under 31; and it is usually taken as the mean of the numbers by the Table living to 30 and 31; that is, $P_x = \frac{l_x + l_{x+1}}{2} = l_{x+1} + \frac{d_x}{2}$. The series $\lambda\, l_x$ by the machine was calculated with the proper differences, to give the logarithms of the values l_x, $l_{x+\frac{1}{4}}$, $l_{x+\frac{1}{2}}$, $l_{x+\frac{3}{4}}$, and l_{x+1}; thus, by the Male Table, $l_{30} = 304{,}534$; $l_{30\frac{1}{4}} = 303{,}770$; $l_{30\frac{1}{2}} = 303{,}004$; $l_{30\frac{3}{4}} = 302{,}236$; $l_{31} = 301{,}466$. Here $\frac{304{,}534 + 301{,}466}{2} = 303{,}000$; which differs little at this age from $l_{30\frac{1}{2}} = 303{,}004$. At other ages where the series d_x is varying rapidly, the values $\frac{l_x + l_{x+1}}{2}$ differ more from the value of $l_{x+\frac{1}{2}}$; but the difference is never considerable, so that no error of consequence can be committed by taking $\frac{l_x + l_{x+1}}{2}$ to represent the numbers living through the year of age following x. The $l_{x+\frac{1}{2}}$ is, however, preferable to the other, and is probably the most correct; for its logarithm is calculated by the machine as part of the series. The symbol $l_{x+\frac{1}{2}}$ and P_x may for practical purposes be used indiscriminately.

[See all the values of the logarithms and numbers of l_x, and $l_{x+\frac{1}{4}}$, $l_{x+\frac{1}{2}}$, $= P_x$, $l_{x+\frac{3}{4}}$ and l_{x+1}; the logarithms at pp. 130–133, and the numbers at pp. 146–149 of the English Life Table.]

The number of deaths decreases rapidly in each month after birth. The Table of living and the deaths at the end of each month of the first year of life is in itself interesting; it was obtained for each of the first three months directly from the returns; from the aggregate deaths in the second quarter, and in the last two quarters; so the deaths in each of the other nine months were interpolated. The particular value P_0 was deduced directly from the 13 values, $l_0 + l_{\frac{1}{12}} + l_{\frac{2}{12}} \ldots\ldots + l_1$.

LIFE TABLE for EACH MONTH of the FIRST YEAR of Age.

Age.	**Living** at 0 and at the end of each Month of Age.			**Deaths** in each Month of Age.		
	$l_{\frac{x}{12}}$			$d_{\frac{x}{12}}$		
x (Months.)	PERSONS.	MALES.	FEMALES.	PERSONS.	MALES.	FEMALES.
0	1,000,000	511,745	488,255	46,503	26,787	19,716
1	953,497	484,958	468,539	17,195	9,640	7,555
2	936,302	475,318	460,984	12,178	6,758	5,420
3	924,124	468,560	455,564	10,100	5,598	4,502
4	914,024	462,962	451,062	9,550	5,320	4,230
5	904,474	457,642	446,832	9,033	5,044	3,989
6	895,441	452,598	442,843	8,547	4,771	3,776
7	886,894	447,827	439,067	8,087	4,498	3,589
8	878,807	443,329	435,478	7,657	4,229	3,428
9	871,150	439,100	432,050	7,253	3,959	3,294
10	863,897	435,141	428,756	6,872	3,691	3,181
11	857,025	431,450	425,575	6,518	3,424	3,094
12	850,507	428,026	422,481	—	—	—

This Table was calculated from the corrected Births and from the Deaths under 1 year of age. Of 1,000,000 Children born, 953,497 were living at the end of the first month of age, 46,503 having died in the interval, of whom 26,787 were Males and 19,716 were Females; 936,302 were living at the end of the second month, and the deaths in that month were 17,195, of whom 9,640 were Males and 7,555 were Females.

Note.—In determining the decrements of life in the *first year* for FEMALES two series of observations have been used.

The first series extends over 17 years (1838–54), and represents the deaths at three periods of age under 1 year; viz., 317,733 under 3 months, 123,639 at 3 and under 6 months, and 197,904 at 6 months and under 1 year.

In apportioning the deaths at 0 and under 1 month, 1 and under 2 months, and 2 and under 3 months for the Life Table, the 317,733 deaths under 3 months were proportionally distributed by means of the deaths in each of the first three months of age abstracted for 8 years (1839–46): the results obtained were 191,619 deaths at 0–1 month, 73,430 at 1–2 months, and 52,684 at 2 and under 3 months.

By subtracting the deaths (317,733, 123,639, and 197,904) thus obtained for the 17 years 1838-54 successively from the Total Births for the 17 years $1837\frac{1}{2}$-$1853\frac{1}{2}$ (=4,745,485), the numbers living at 0–3, 3–6, 6–12, and 12 months are ascertained. The logarithms of these numbers living ($\lambda\, l_{\frac{3}{12}}$, $\lambda\, l_{\frac{6}{12}}$, $\lambda\, l_1$, and $\lambda\, l_{1\frac{1}{4}}$) were used to interpolate the numbers living at 9 months ($= \lambda\, l_{\frac{9}{12}}$); then starting with the basis of the Female Life Table ($\lambda = 5{\cdot}6886465$) at age 0, the numbers living (l_x) were obtained at 3, 6, and 9 months by applying the logarithms inserted in the Quarterly Life Table.

To obtain the deaths in each of the first three months of life, where the observations only extended over a period of 8 years (1839–46), the 317,733 deaths in the 17 years 1838–54 under 3 months of age have been proportionally distributed from the observations for the said 8 years, 1839–46, and subsequently by interpolation the numbers living at each month under 1 year of age were obtained.

The decrements of life in the *first year* for MALES were determined in a precisely similar manner.

Q_x is the sum of the column P_x; and in all cases $Q_x = P_x + Q_{x+1}$, and $P_x = Q_x - Q_{x+1}$. The column represents—to the basis 1,000,000—(1) the tabular *numbers living* of every age x and upwards; also (2) the *number*

of years of life which the l_x persons of the age will enjoy; so that $\frac{Q_x}{l_x}$ = the mean afterlifetime at the age x.

Y_x is a column which I have added to the Life Table, to extend its use to the solution of problems involving the ages of the living.

$Y_x = Y_{x+1} + Q_{x+1} + \frac{1}{2} P_x$; and $\frac{Y_x}{Q_x}$ = the mean *afterlifetime* of all the persons of the *age x and upwards;* also $x + \frac{Y_x}{Q_x}$ = *the mean age* of the persons living of the age x and upwards. Thus the men of the age of 40 *and upwards* are of the average age of 56·26; they will live 16·26 years longer, and die at the average age 72·52 years.

The numbers and logarithms of the columns l_x, Q_x, and Y_x are given for males (pp. lxxx-lxxxi) and females (pp. lxxxiv-lxxxv).

The *annual rate of mortality* $\frac{d_x}{P_x}$ = at all ages after the first $\frac{d_x}{l_{x+\frac{1}{2}}} = m_x$ was calculated for males and females; and 100 m_x or the mortality per cent. is printed (p. lxxxvi). The reciprocal $\left(\frac{P_x}{d_x}\right)$ gives the number living at the age x to $x + 1$ out of which *one death* occurs annually. Thus at the age 20 (and under 21) the mortality is at the rate of one death in 120 men; or (100 m_{20}) = ·832 per cent. By inserting two ciphers after the decimal point we have m_{20} = ·00832; and on passing the decimal point *one* to the right, 8·32 is the mortality per 1,000, which is a convenient unit for several of the intermediate ages of life.

Two columns of the same Table show the rate of mortality among males and females of the age x and upwards; thus, males of the age of 20 and upwards die at the rate of 1 in 39·48 annually; women of the age of 60 and upwards die at the rate of 1 in 14·34.

1 in 39·91 males and 1 in 41·85 females of all ages die annually in a stationary population, under the English law of mortality.

These numbers also represent the *mean lifetime* (E_x), which is 39·91 years for males, and 41·85 years for females, when $x = 0$. The *afterlifetime* is usually called the Expectation of Life at the age x; but this common expression of three words is admitted to be open to objection. The mean *afterlifetime* is obtained by dividing the tabular years of life (Q_x) which are enjoyed after any age x, by the tabular numbers l_x living at that age.

Q_x is the sum of the values $l_{x+\frac{1}{2}}$, from any given age after $x = 1$, to the end of the Table; and $L_x = l_x + l_{x+1} + l_{x+2} + l_{x+n} \ldots l_\omega$. Now it has been shown that $l_{x+\frac{1}{2}}$ differs little at any age from $\frac{l_x + l_{x+1}}{2}$ $\therefore$ $L_x - \frac{1}{2} l_x = \frac{1}{2} l_x + l_{x+1} + l_{x+2} \ldots + l_\omega$, differs little from Q_x; and $E_x = \frac{Q_x}{l_x} = \frac{L_x}{l_x} - \frac{1}{2}$ nearly; these two are the limits of the expression for the afterlifetime, which for persons is 40·86 at birth by the first, and 40·89 by the last formula. The deaths in *each year of age* are by the last formula assumed to take place at

equal intervals, and the living during that short interval to decrease in arithmetical progression; while in the former formula the living in the *middle of the year* are taken to represent the mean numbers living *through the year.* The lifetime in years is not greater than the one, nor less than the other number.

The Table (pp. lxxxviii-lxxxix) shows the mean *afterlifetime* of males of the age x and upwards; that is, of males of the age of x, and of every higher age. At birth it is 31·77 years; and that is also the *mean age* of the living in a normal population having equal numbers of births and of deaths, subject at all ages to the English law of mortality.

The equation $E'_0 = \frac{Y_0}{Q_0}$ *represents the mean ages of the living,* for Y_0 is the sum of the series $\frac{1}{2} Q_0 + Q_1 \ldots + Q_\omega$; which is again, as may be found by substituting for Q_x its values in P_x, the equivalent of $\frac{1}{2} P_0 + 1\frac{1}{2} P_1 + 2\frac{1}{2} P_2 + 3\frac{1}{2} P_3 \ldots + (n + \frac{1}{2}) P_n$ carried to the extreme limits of the Table. Now the mean age of the living at the age 0 and under 1 is nearly $\frac{1}{2} P_0$; at 1 and under 2 it may be taken at $1\frac{1}{2}$ years; consequently $1\frac{1}{2} \times P_1$ = the number of years that the persons of the age 1 and under 2 have lived. The same reasoning will apply at 20, or at any other age n; and the sum of the series $(n + \frac{1}{2}) l_{n+\frac{1}{2}}$, in which n is made to vary from 0 to 109, will be = Y_0 = sum of the number of years that the whole normal population has lived. But the numbers who have lived Y_0 years are Q_0; and $\frac{Y_0}{Q_0}$ = the average age. In like manner it may be shown that $Y_x = \frac{1}{2} l_{x+\frac{1}{2}} + 1\frac{1}{2} l_{x+1\frac{1}{2}} + 2\frac{1}{2} l_{x+2\frac{1}{2}} + 3\frac{1}{2} l_{x+3\frac{1}{2}} + 4\frac{1}{2} l_{x+4\frac{1}{2}} \ldots\ldots$ to tabular limit = the number of years that all the persons (Q_x) have lived over age x. And $xQ_x + Y_x$ = the total number of years that the Q_x persons have lived; $\therefore \frac{xQ_x + Y_x}{Q_x} = x + \frac{Y_x}{Q_x} = x + E'_x$ = mean age of all the persons living of the age of x and upwards.

Y_x also represents the number of years of life that Q_x persons of the tabular ages will live; and $\frac{Y_x}{Q_x}$ = their mean *afterlifetime.* It has been shown that Q_x = the number of years that l_x persons of the age x will live; and Q_{x+1} = the number of years that l_{x+1} persons will live; $\therefore (l_x + l_{x+1})$ persons will live $(Q_x + Q_{x+1})$ years; and $\frac{1}{2}(l_x + l_{x+1})$ persons = P_x will live $\frac{1}{2}(Q_x + Q_{x+1})$ years. In like manner it may be shown that $\frac{l_{x+1} + l_{x+2}}{2} = P_{x+1}$ persons will live $\frac{1}{2}(Q_{x+1} + Q_{x+2})$ years; and as the sum of the series P_x from any given age to the end of the Table is Q_x, so the sum of the series $\frac{1}{2} Q_x + Q_{x+1} + Q_{x+2} + Q_{x+3} \ldots + Q_\omega = Y_x$ = the number of years of life that the Q_x persons will enjoy; $\therefore E'_x = \frac{Y_x}{Q_x}$ = the mean *afterlifetime* of all the persons of the ages $x + \frac{Y_x}{Q_x}$. By adding their *afterlifetime* to *the age,* the mean age at death is found to be $x + 2E'_x = x + 2\frac{Y_x}{Q_x}$.

The constituent individuals of a population are its elements; and the population is normal when its elements, arranged in corresponding groups, are in the same proportions as the elements of the Life Table. The births = deaths in the same time; to a given number born, the living at each year of age are in the same proportion as P_x to l_0; the rates of mortality are the same; the population lives a number of years after each age, represented by the calculated lifetime.

In a normal population there is an indissoluble connexion between (1) the numbers living, (2) the mean lifetime, (3) the births, (4) the deaths, (5) the rate of mortality, (6) the probable duration of life. Thus by the Life Table of Persons 1,000,000 annual births imply 1,000,000 annual deaths; sustaining a population of 40,858,184, of whom 20,426,138 are males, 20,432,046 are females; half of the persons living 45 years = the probable lifetime; and the mean lifetime being 40·858184 or nearly 41 years; that is = the mean age at death = the number of years of life falling to the share of the children born. To 41 persons living there is *one* birth, *one* death, annually; the rate of mortality is 1 in 41; and 41 is the mean duration of life.

It has been shown that the *rate of mortality* involves three elements,—time, numbers living, numbers dying; thus, if out of 102 living men of a given age 4 die at equal intervals in the year, 98 will live to the end of the year; so $\frac{98}{102}$ = the probability of living a year; $\frac{4}{102}$ = the probability of dying in the same time; and by hypothesis the 102 men in the year enjoy among them $\frac{102 + 98}{2}$ = 100 years of life; now the years of life to be passed by the survivors in the next year will, if 4 die in the year, be 96, and thus the years of life will accumulate year by year, until the last life shall expire. All the years of life belong to the 102 men; and dividing the said years of life by 102 the mean afterlifetime is determined. Thus the units of the numbers that express living men, men dying, and years of life, are produced by men living a definite number of years and then dying.

By retaining one unit of time, and one living, in all cases, the variations of the m express the variations in the rate of mortality. By fixing the numbers living, and taking the death as a unit, the mean interval of time —which varies—between each death, will express the velocity of dying in the scale of time, under different conditions; and by making the living man a unit, the death becomes a unit, and the variations in the years of lifetime express the different degrees of longevity. By making the time a unit (one year), and the death a unit, the variations in the *numbers living*, out of which 1 death occurs annually—or the relative amount of resistance to death by life is expressed—under the given conditions. One death in *one* year to 41 *living*, implies a mean lifetime of 41 years. It was shown before that 41 persons living through *one year* enjoy the same number of *years of life* as *one person* living *forty-one years.*

In a population which is disturbed by emigration, by immigration, by varying excesses of births over deaths or of deaths over births, or by

pestilence, the *mean age of the dying* (G_0) can be determined from the registers by arranging the deaths consecutively in a column (d_x) at the various ages, and drawing up from this column the columns corresponding to l_x and L_x or even to Q_x. The table thus constructed gives the mean age of the dying in the year or years, as this property depends solely on the fact that when the figures are so arranged and related, $G_0 = \frac{L_0}{l_0} - \frac{1}{2} = \frac{Q_0}{l_0} = \frac{1}{l_0}\left(\frac{1}{2} d_0 + 1\frac{1}{2} d_1 + 2\frac{1}{2} d_2 + 3\frac{1}{2} d_3 \ldots + (\omega + \frac{1}{2}) d_\omega\right)$ $= \frac{1}{l_0}(d_1 + 2 d_2 + 3 d_3 + 4 d_4 \ldots \omega d_\omega) + \frac{1}{2}$.

The two latter series (d_x) express evidently the number of years lived by the persons dying at all ages = l_0. But people are born in one place, die in another, and moreover the number of births is scarcely ever the same as the number of deaths. So there is no necessary connexion between the ages of these persons at death, the rate of mortality, the probability of living, or the mean duration of the lives of children born and living in precisely the same circumstances. The results nearly coincide sometimes with those deduced, on correct principles, from a Life Table; and the early Life Tables of Halley, Simpson, Dr. Price, and others, were constructed from the Burial Registers of Breslau, London, and Northampton, without any reference to the living. The errors of such Tables are illustrated in the Appendix to the 8th Report of the Registrar General, where the old incorrect Northampton Table is compared with a new Table for Northampton constructed on nearly the same plan as the English Table.

The mean age of those who died in England in the 17 years 1838–54 was 29·4; whereas the mean lifetime of children born in England during the same period is 40·9 years by the Life Table. This reduction of the age at death, 11·5 years below the mean lifetime, is the result of the introduction of an excess of young lives; as in addition to the 380,631 births to balance the 380,631 deaths, 191,068, making 571,699 children in the whole, were born annually and thrown into the population. The mean age of the dying = the mean age to which people live in a normal population; but as our population is increasing, the mean age of the dying in a limited time is 11·5 years less than the mean lifetime. The mean age of the population of England was 26·4 years in 1851, instead of 32·1 years; so the excess of young people reduces the age of the nation by 5·7 years, or by half the difference $\left(= \frac{11 \cdot 5}{2}\right)$ between the age at death (29·4) and the mean lifetime (40·9). Instead of living as long as they have lived (26·4 years), they will live about 35·6 years ($= E_{26 \cdot 4}$).

(*Introduction to English Life Table*, pp. xxxi-xxxvii.)

YEARLY TABLE :—PERSONS.*

AGE	DYING in each year of age 0–1, 1–2, &c.	BORN, and LIVING at each age.	SUM of the NUMBERS BORN, and LIVING at each age (x), and from age x to the last age in the Table.	POPULATION, or the LIVING in each year of age 0–1, 1–2, &c.	(1) SUM of the LIVING of every age x and upwards to the last Age in the Table; also (2) the YEARS which the Persons (l_x) WILL LIVE.	(1) The YEARS which the Persons at the age x and upwards WILL LIVE; also, (2) the years which they HAVE LIVED over x.	AGE
		$\Sigma\, d_x$	$\Sigma\, l_x$	$l_{x+\frac{1}{2}}$	$\Sigma\, \mathrm{P}_x$	$\Sigma\, \frac{1}{2}(\mathrm{Q}_x + \mathrm{Q}_{x+1}) = \mathrm{Y}_{x+1} + (\mathrm{Q}_{x+1} + \frac{1}{2}\mathrm{P}_x)$	
x	d_x	l_x	L_x	P_x †	Q_x	Y_x	x
0	149,493	1,000,000	41,389,940	902,781	40,858,184	1,309,533,768	0
1	53,680	850,507	40,389,940	818,421	39,955,403	1,269,126,974	1
2	28,238	796,827	39,539,433	781,471	39,136,982	1,229,580,781	2
3	18,456	768,589	38,742,606	758,591	38,355,511	1,190,834,535	3
4	13,315	750,133	37,974,017	742,952	37,596,920	1,152,858,319	4
5	9,899	736,818	37,223,884	731,530	36,853,968	1,115,632,876	5
6	7,768	726,919	36,487,066	722,834	36,122,438	1,079,144,673	6
7	6,559	719,151	35,760,147	715,716	35,399,604	1,043,383,652	7
8	5,458	712,592	35,040,996	709,743	34,683,888	1,008,341,905	8
9	4,625	707,134	34,328,404	704,733	33,974,145	974,012,889	9
10	4,028	702,509	33,621,270	700,433	33,269,412	940,391,111	10
11	3,637	698,481	32,918,761	696,626	32,568,979	907,471,915	11
12	3,431	694,844	32,220,280	693,113	31,872,353	875,251,249	12
13	3,382	691,413	31,525,436	689,725	31,179,240	843,725,452	13
14	3,468	688,031	30,834,023	686,316	30,489,515	812,891,075	14
15	3,669	684,563	30,145,992	682,759	29,803,199	782,744,718	15
16	3,957	680,894	29,461,429	678,956	29,120,440	753,282,899	16
17	4,317	676,937	28,780,535	674,827	28,441,484	724,501,937	17
18	4,720	672,620	28,103,598	670,313	27,766,657	696,397,866	18
19	5,150	667,900	27,430,978	665,379	27,096,344	668,966,366	19
20	5,583	662,750	26,763,078	659,970	26,430,965	642,202,711	20
21	5,668	657,167	26,100,328	654,343	25,770,995	616,101,731	21
22	5,748	651,499	25,443,161	648,634	25,116,652	590,657,907	22
23	5,820	645,751	24,791,662	642,850	24,468,018	565,865,573	23
24	5,886	639,931	24,145,911	636,996	23,825,168	541,718,979	24
25	5,950	634,045	23,505,980	631,077	23,188,172	518,212,309	25
26	6,009	628,095	22,871,935	625,098	22,557,095	495,339,676	26
27	6,065	622,086	22,243,840	619,060	21,931,997	473,095,130	27
28	6,121	616,021	21,621,754	612,967	21,312,937	451,472,663	28
29	6,176	609,900	21,005,733	606,819	20,699,970	430,466,210	29
30	6,231	603,724	20,395,833	600,615	20,093,151	410,069,649	30
31	6,287	597,493	19,792,109	594,357	19,492,536	390,276,805	31
32	6,343	591,206	19,194,616	588,042	18,898,179	371,081,448	32
33	6,404	584,863	18,603,410	581,668	18,310,137	352,477,290	33
34	6,466	578,459	18,018,547	575,234	17,728,469	334,457,987	34
35	6,533	571,993	17,440,088	568,735	17,153,235	317,017,135	35
36	6,601	565,460	16,868,095	562,168	16,584,500	300,148,268	36
37	6,678	558,859	16,302,635	555,529	16,022,332	283,844,852	37
38	6,756	552,181	15,743,776	548,813	15,466,803	268,100,284	38
39	6,841	545,425	15,191,595	542,015	14,917,990	252,907,888	39
40	6,931	538,584	14,646,170	535,130	14,375,975	238,260,905	40
41	7,027	531,653	14,107,586	528,152	13,840,845	224,152,495	41
42	7,127	524,626	13,575,933	521,075	13,312,693	210,575,726	42
43	7,236	517,499	13,051,307	513,895	12,791,618	197,523,571	43
44	7,348	510,263	12,533,808	506,604	12,277,723	184,988,900	44
45	7,467	502,915	12,023,545	499,197	11,771,119	172,964,479	45
46	7,592	495,448	11,520,630	491,668	11,271,922	161,442,959	46
47	7,722	487,856	11,025,182	484,011	10,780,254	150,416,870	47
48	7,857	480,134	10,537,326	476,223	10,296,243	139,878,622	48
49	7,997	472,277	10,057,192	468,297	9,820,020	129,820,490	49
50	8,141	464,280	9,584,915	460,228	9,351,723	120,234,619	50
51	8,414	456,139	9,120,635	451,955	8,891,495	111,113,010	51
52	8,590	447,725	8,664,496	443,452	8,439,540	102,447,492	52
53	8,761	439,135	8,216,771	434,776	7,996,088	94,229,678	53
54	9,259	430,374	7,777,636	425,784	7,561,312	86,450,978	54

* The Numbers in this Table of PERSONS are the sums of the corresponding numbers in the Tables of MALES and FEMALES, pp. lxxviii-ix and lxxxii-lxxxiii.

† In the English Life Tables No. 1. and No. 2., P_x was put in the form proposed by Mr. Griffith

YEARLY TABLE :—PERSONS.

AGE	DYING in each year of age 0–1, 1–2, &c,	BORN, and LIVING at each age.	SUM of the NUMBERS BORN, and LIVING at each age (x), and from age x to the last age in the Table.	POPULATION, or the LIVING in each year of age 0–1, 1–2, &c.	(1) SUM of the LIVING of every age x and upwards to the last Age in the Table; also (2) the YEARS which the Persons (l_x) WILL LIVE.	(1) The YEARS which the Persons at the age x and upwards WILL LIVE; also, (2) the years which they HAVE LIVED over x.	AGE
		$\Sigma\, d_x$	$\Sigma\, l_x$	$l_{x+\frac{1}{2}}$	$\Sigma\, \mathrm{P}_x$	$\Sigma\, \frac{1}{2}(\mathrm{Q}_x + \mathrm{Q}_{x+1}) = \mathrm{Y}_{x+1} + (\mathrm{Q}_{x+1} + \frac{1}{2}\mathrm{P}_x)$	
x	d_x	l_x	L_x	P_x	Q_x	Y_x	x
55	9,583	421,115	7,347,262	416,364	7,135,528	79,102,559	55
56	9,909	411,532	6,926,147	406,619	6,719,164	72,175,213	56
57	10,245	401,623	6,514,615	396,543	6,312,545	65,659,358	57
58	10,593	391,378	6,112,992	386,125	5,916,002	59,545,084	58
59	10,958	380,785	5,721,614	375,353	5,529,877	53,822,145	59
60	11,338	369,827	5,340,829	364,207	5,154,524	48,479,944	60
61	11,737	358,489	4,971,002	352,671	4,790,317	43,507,524	61
62	12,149	346,752	4,612,513	340,730	4,437,646	38,893,543	62
63	12,572	334,603	4,265,761	328,371	4,096,916	34,626,261	63
64	13,002	322,031	3,931,158	315,583	3,768,545	30,693,531	64
65	13,430	309,029	3,609,127	302,368	3,452,962	27,082,777	65
66	13,846	295,599	3,300,098	288,727	3,150,594	23,781,000	66
67	14,244	281,753	3,004,499	274,679	2,861,867	20,774,769	67
68	14,607	267,509	2,722,746	260,249	2,587,188	18,050,242	68
69	14,925	252,902	2,455,237	245,476	2,326,939	15,593,178	69
70	15,184	237,977	2,202,335	230,414	2,081,463	13,388,977	70
71	15,369	222,793	1,964,358	215,127	1,851,049	11,422,721	71
72	15,468	207,424	1,741,565	199,697	1,635,922	9,679,235	72
73	15,469	191,956	1,534,141	184,215	1,436,225	8,143,162	73
74	15,363	176,487	1,342,185	168,785	1,252,010	6,799,045	74
75	15,136	161,124	1,165,698	153,520	1,083,225	5,631,427	75
76	14,789	145,988	1,004,574	138,542	929,705	4,624,962	76
77	14,319	131,199	858,586	123,973	791,163	3,764,528	77
78	13,726	116,880	727,387	109,936	667,190	3,035,351	78
79	13,021	103,154	610,507	96,548	557,254	2,423,130	79
80	12,214	90,133	507,353	83,919	460,706	1,914,150	80
81	11,320	77,919	417,220	72,143	376,787	1,495,403	81
82	10,358	66,599	339,301	61,297	304,644	1,154,688	82
83	9,352	56,241	272,702	51,437	243,347	880,692	83
84	8,324	46,889	216,461	42,597	191,910	663,063	84
85	7,300	38,565	169,572	34,788	149,313	492,452	85
86	6,298	31,265	131,007	27,994	114,525	360,533	86
87	5,346	24,967	99,742	22,179	86,531	260,005	87
88	4,459	19,621	74,775	17,284	64,352	184,563	88
89	3,653	15,162	55,154	13,240	47,068	128,853	89
90	2,933	11,509	39,992	9,959	33,828	88,406	90
91	2,310	8,576	28,483	7,349	23,869	59,557	91
92	1,781	6,266	19,907	5,315	16,520	39,363	92
93	1,343	4,485	13,641	3,764	11,205	25,500	93
94	989	3,142	9,156	2,609	7,441	16,177	94
95	713	2,153	6,014	1,766	4,832	10,041	95
96	500	1,440	3,861	1,167	3,066	6,092	96
97	342	940	2,421	752	1,899	3,609	97
98	228	598	1,481	472	1,147	2,086	98
99	147	370	883	288	675	1,175	99
100	92	223	513	171	387	644	100
101	57	131	290	99	216	342	101
102	33	74	159	56	117	176	102
103	19	41	85	30	61	87	103
104	10	22	44	16	31	41	104
105	6	12	22	8	15	18	105
106	3	6	10	4	7	7	106
107	2	3	4	2	3	2	107
108	1	1	1	1	1	..	108
109	..	..	..	..	..	..	109

Davies, $= \frac{1}{2}(l_x + l_{x+1}) = l_{x+1} + \frac{1}{2}d_x$; but in this series of Tables it has been calculated directly, and, except in the single case of P_0, represents the numbers living in the middle of each year of age ($= l_{x+\frac{1}{2}}$). P_0 is the arithmetical mean of the series l_0, $l_{\frac{1}{12}}$, $l_{\frac{2}{12}}$, ... l_1.

Age	Numbers attaining each Year of Age (x) to 1,000,000 born.			Population maintained at each Year of Age (x) by 1,000,000 Annual Births.			Deaths out of the same Population in each Year of Age (x).			Age
	l_x			P_x			d_x			
x	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	x
0	1,000,000	511,745	488,255	902,781	456,820	445,961	149,493	83,719	65,774	0
1	850,507	428,026	422,481	818,421	411,999	406,422	53,680	27,521	26,159	1
2	796,827	400,505	396,322	781,471	392,294	389,177	28,238	14,215	14,023	2
3	768,589	386,290	382,299	758,591	381.312	377,279	18,456	9,213	9,243	3
4	750,133	377,077	373,056	742,952	373,461	369,491	13,315	6,719	6,596	4
5	736,818	370,358	366,460	731,530	367,672	363,858	9,899	5,033	4,866	5
6	726,919	365,325	361,594	722,834	363,244	359,590	7,768	3,953	3,815	6
7	719,151	361,372	357,779	715,716	359,635	356,081	6,559	3,310	3,249	7
8	712,592	358,062	354,530	709,743	356,632	353,111	5,458	2,734	2,724	8
9	707,134	355,328	351,806	704,733	354,133	350,600	4,625	2,297	2,328	9
10	702,509	353,031	349,478	700,433	352,007	348,426	4,028	1,983	2,045	10
11	698,481	351,048	347,433	696,626	350,141	346,485	3,637	1,776	1,861	11
12	694,844	349,272	345,572	693,113	348,431	344,682	3,431	1,666	1,765	12
13	691,413	347,606	343,807	689,725	346,789	342,936	3,382	1,637	1,745	13
14	688,031	345,969	342,062	686,316	345,139	341,177	3,468	1,679	1,789	14
15	684,563	344,290	340,273	682,759	343,415	339,344	3,669	1,781	1,888	15
16	680,894	342,509	338,385	678,956	341,566	337,390	3,957	1,928	2,029	16
17	676,937	340,581	336,356	674,827	339,550	335,277	4,317	2,112	2,205	17
18	672,620	338,469	334,151	670,313	337,336	332,977	4,720	2,320	2,400	18
19	667,900	336,149	331,751	665,379	334,906	330,473	5,150	2,541	2,609	19
20	662,750	333,608	329,142	659,970	332,231	327,739	5,583	2,764	2,819	20
21	657,167	330,844	326,323	654,343	329,448	324,895	5,668	2,801	2,867	21
22	651,499	328,043	323,456	648,634	326,629	322,005	5,748	2,836	2,912	22
23	645,751	325,207	320,544	642,850	323,777	319,073	5,820	2,868	2,952	23
24	639,931	322,339	317,592	636,996	320,894	316,102	5,886	2,897	2,989	24
25	634,045	319,442	314,603	631,077	317,982	313,095	5,950	2,926	3,024	25
26	628,095	316,516	311,579	625,098	315,042	310,056	6,009	2,954	3,055	26
27	622,086	313,562	308,524	619,060	312,075	306,985	6,065	2,981	3,084	27
28	616,021	310,581	305,440	612,967	309,030	303,887	6,121	3,009	3,112	28
29	609,900	307,572	302,328	606,819	306,057	300,762	6,176	3,038	3,138	29
30	603,724	304,534	299,190	600,615	303,004	297,611	6,231	3,068	3,163	30
31	597,493	301,466	296,027	594,357	299,920	294,437	6,287	3,100	3,187	31
32	591,206	298,366	292,840	588,042	296,804	291,238	6,343	3,134	3,209	32
33	584,863	295,232	289,631	581,668	293,651	288,017	6,404	3,171	3,233	33
34	578,459	292,061	286,398	575,234	290,461	284,773	6,466	3,211	3,255	34
35	571,993	288,850	283,143	568,735	287,229	281,506	6,533	3,254	3,279	35
36	565,460	285,596	279,864	562,168	283,952	278,216	6,601	3,300	3,301	36
37	558,859	282,296	276,563	555,529	280,626	274,903	6,678	3,352	3,326	37
38	552,181	278,944	273,237	548,813	277,248	271,565	6,756	3,406	3,350	38
39	545,425	275,538	269,887	542,015	273,813	268,202	6,841	3,465	3,376	39
40	538,584	272,073	266,511	535,130	270,317	264,813	6,931	3,529	3,402	40
41	531,653	268,544	263,109	528,152	266,755	261,397	7,027	3,596	3,431	41
42	524,626	264,948	259,678	521,075	263,123	257,952	7,127	3,668	3,459	42
43	517,499	261,280	256,219	513,895	259,417	254,478	7,236	3,746	3,490	43
44	510,263	257,534	252,729	506,604	255,632	250,972	7,348	3,826	3,522	44
45	502,915	253,708	249,207	499,197	251,763	247,434	7,467	3,912	3,555	45
46	495,448	249,796	245,652	491,668	247,807	243,861	7,592	4,001	3,591	46
47	487,856	245,795	242,061	484,011	243,759	240,252	7,722	4,095	3,627	47
48	480,134	241,700	238,434	476,223	239,617	236,606	7,857	4,192	3,665	48
49	472,277	237,508	234,769	468,297	235,375	232,922	7,997	4,292	3,705	49
50	464,280	233,216	231,064	460,228	231,032	229,196	8,141	4,395	3,746	50
51	456,139	228,821	227,318	451,955	226,525	225,430	8,414	4,626	3,788	51
52	447,725	224,195	223,530	443,452	221,832	221,620	8,590	4,758	3,832	52
53	439,135	219,437	219,698	434,776	217,010	217,766	8,761	4,885	3,876	53
54	430,374	214,552	215,822	425,784	212,061	213,723	9,259	5,013	4,246	54

Age	Numbers attaining each Year of Age (x) to 1,000,000 born.			Population maintained at each Year of Age (x) by 1,000,000 Annual Births.			Deaths out of the same Population in each Year of Age (x).			Age
	l_x			P_x			d_x			
x	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	x
55	421,115	209,539	211,576	416,364	206,984	209,380	9,583	5,144	4,439	55
56	411,532	204,395	207,137	406,619	201,772	204,847	9,909	5,281	4,628	56
57	401,623	199,114	202,509	396,543	196,419	200,124	10,245	5,428	4,817	57
58	391,378	193,686	197,692	386,125	190,914	195,211	10,593	5,584	5,009	58
59	380,785	188,102	192,683	375,353	185,248	190,105	10,958	5,752	5,206	59
60	369,827	182,350	187,477	364,207	179,409	184,798	11,338	5,929	5,409	60
61	358,489	176,421	182,068	352,671	173,386	179,285	11,737	6,118	5,619	61
62	346,752	170,303	176,449	340,730	167,171	173,559	12,149	6,314	5,835	62
63	334,603	163,989	170,614	328,371	160,757	167,614	12,572	6,515	6,057	63
64	322,031	157,474	164,557	315,583	154,139	161,444	13,002	6,720	6,282	64
65	309,029	150,754	158,275	302,368	147,319	155,049	13,430	6,921	6,509	65
66	295,599	143,833	151,766	288,727	140,299	148,428	13,846	7,115	6,731	66
67	281,753	136,718	145,035	274,679	133,091	141,588	14,244	7,297	6,947	67
68	267,509	129,421	138,088	260,249	125,711	134,538	14,607	7,458	7,149	68
69	252,902	121,963	130,939	245,476	118,181	127,295	14,925	7,593	7,332	69
70	237,977	114,370	123,607	230,414	110,533	119,881	15,184	7,695	7,489	70
71	222,793	106,675	116,118	215,127	102,802	112,325	15,369	7,756	7,613	71
72	207,424	98,919	108,505	199,697	95,033	104,664	15,468	7,770	7,698	72
73	191,956	91,149	100,807	184,215	87,274	96,941	15,469	7,733	7,736	73
74	176,487	83,416	93,071	168,785	79,581	89,204	15,363	7,639	7,724	74
75	161,124	75,777	85,347	153,520	72,012	81,508	15,136	7,483	7,653	75
76	145,988	68,294	77,694	138,542	64,629	73,913	14,789	7,268	7,521	76
77	131,199	61,026	70,173	123,973	57,493	66,480	14,319	6,990	7,329	77
78	116,880	54,036	62,844	109,936	50,663	59,273	13,726	6,655	7,071	78
79	103,154	47,381	55,773	96,548	44,196	52,352	13,021	6,266	6,755	79
80	90,133	41,115	49,018	83,919	38,142	45,777	12,214	5,832	6,382	80
81	77,919	35,283	42,636	72,143	32,542	39,601	11,320	5,361	5,959	81
82	66,599	29,922	36,677	61,297	27,428	33,869	10,358	4,862	5,496	82
83	56,241	25,060	31,181	51,437	22,821	28,616	9,352	4,349	5,003	83
84	46,889	20,711	26,178	42,597	18,729	23,868	8,324	3,834	4,490	84
85	38,565	16,877	21,688	34,788	15,151	19,637	7,300	3,328	3,972	85
86	31,265	13,549	17,716	27,994	12,070	15,924	6,298	2,840	3,458	86
87	24,967	10,709	14,258	22,179	9,462	12,717	5,346	2,384	2,962	87
88	19,621	8,325	11,296	17,284	7,292	9,992	4,459	1,965	2,494	88
89	15,162	6,360	8,802	13,240	5,521	7,719	3,653	1,590	2,063	89
90	11,509	4,770	6,739	9,959	4,102	5,857	2,933	1,260	1,673	90
91	8,576	3,510	5,066	7,349	2,988	4,361	2,310	979	1,331	91
92	6,266	2,531	3,735	5,315	2,132	3,183	1,781	744	1,037	92
93	4,485	1,787	2,698	3,764	1,489	2,275	1,343	553	790	93
94	3,142	1,234	1,908	2,609	1,017	1,592	989	401	588	94
95	2,153	833	1,320	1,766	678	1,088	713	285	428	95
96	1,440	548	892	1,167	441	726	500	196	304	96
97	940	352	588	752	279	473	342	132	210	97
98	598	220	378	472	172	300	228	86	142	98
99	370	134	236	288	103	185	147	55	92	99
100	223	79	144	171	60	111	92	33	59	100
101	131	46	85	99	34	65	57	21	36	101
102	74	25	49	56	19	37	33	11	22	102
103	41	14	27	30	10	20	19	7	12	103
104	22	7	15	16	5	11	10	3	7	104
105	12	4	8	8	3	5	6	2	4	105
106	6	2	4	4	1	3	3	1	2	106
107	3	1	2	2	1	1	2	1	1	107
108	1	..	1	1	..	1	1	..	1	108

YEARLY TABLE :—MALES.

AGE	DYING in each year of age 0–1, 1–2, &c.	BORN, and LIVING at each age.	SUM of the NUMBERS BORN, and LIVING at each age (x) and from x to the last age in the Table.	POPULATION, or the LIVING in each year of age 0–1, 1–2, &c.	(1) SUM of the LIVING of every age x and upwards to the last age in the Table; also (2) the YEARS which the MALES (l_x) WILL LIVE.	(1) The YEARS which the Males at the age x and upwards WILL LIVE; also (2) the years which they HAVE LIVED over (x).	AGE
		Σd_x	Σl_x	$l_{x+\frac{1}{2}}$	ΣP_x	$\Sigma \frac{1}{2}(Q_x + Q_{x+1}) = Y_{x+1} + (Q_{x+1} + \frac{1}{2}P_x)$	
x	d_x	l_x	L_x	P_x*	Q_x	Y_x	x
0	83,719	511,745	20,699,829	456,820	20,426,138	648,962,343	0
1	27,521	428,026	20,188,084	411,999	19,969,318	628,764,615	1
2	14,215	400,505	19,760,058	392,294	19,557,319	609,001,296	2
3	9,213	386,290	19,359,553	381,312	19,165,025	589,640,124	3
4	6,719	377,077	18,973,263	373,461	18,783,713	570,665,755	4
5	5,033	370,358	18,596,186	367,672	18,410,252	552,068,773	5
6	3,953	365,325	18,225,828	363,244	18,042,580	533,842,357	6
7	3,310	361,372	17,860,503	359,635	17,679,336	515,981,399	7
8	2,734	358,062	17,499,131	356,632	17,319,701	498,481,880	8
9	2,297	355,328	17,141,069	354,133	16,963,069	481,340,495	9
10	1,983	353,031	16,785,741	352,007	16,608,936	464,554,493	10
11	1,776	351,048	16,432,710	350,141	16,256,929	448,121,560	11
12	1,666	349,272	16,081,662	348,431	15,906,788	432,039,702	12
13	1,637	347,606	15,732,390	346,789	15,558,357	416,307,129	13
14	1,679	345,969	15,384,784	345,139	15,211,568	400,922,167	14
15	1,781	344,290	15,038,815	343,415	14,866,429	385,883,168	15
16	1,928	342,509	14,694,525	341,566	14,523,014	371,188,447	16
17	2,112	340,581	14,352,016	339,550	14,181,448	356,836,216	17
18	2,320	338,469	14,011,435	337,336	13,841,898	342,824,543	18
19	2,541	336,149	13,672,966	334,906	13,504,562	329,151,313	19
20	2,764	333,608	13,336,817	332,231	13,169,656	315,814,204	20
21	2,801	330,844	13,003,209	329,448	12,837,425	302,810,663	21
22	2,836	328,043	12,672,365	326,629	12,507,977	290,137,962	22
23	2,868	325,207	12,344,322	323,777	12,181,348	277,793,300	23
24	2,897	322,339	12,019,115	320,894	11,857,571	265,773,840	24
25	2,926	319,442	11,696,776	317,982	11,536,677	254,076,716	25
26	2,954	316,516	11,377,334	315,042	11,218,695	242,699,030	26
27	2,981	313,562	11,060,818	312,075	10,903,653	231,637,856	27
28	3,009	310,581	10,747,256	309,080	10,591,578	220,890,241	28
29	3,038	307,572	10,436,675	306,057	10,282,498	210,453,203	29
30	3,068	304,534	10,129,103	303,004	9,976,441	200,323,733	30
31	3,100	301,466	9,824,569	299,920	9,673,437	190,498,794	31
32	3,134	298,366	9,523,103	296,804	9,373,517	180,975,317	32
33	3,171	295,232	9,224,737	293,651	9,076,713	171,750,202	33
34	3,211	292,061	8,929,505	290,461	8,783,062	162,820,315	34
35	3,254	288,850	8,637,444	287,229	8,492,601	154,182,483	35
36	3,300	285,596	8,348,594	283,952	8,205,372	145,833,497	36
37	3,352	282,296	8,062,998	280,626	7,921,420	137,770,101	37
38	3,406	278,944	7,780,702	277,248	7,640,794	129,988,994	38
39	3,465	275,538	7,501,758	273,813	7,363,546	122,486,824	39
40	3,529	272,073	7,226,220	270,317	7,089,733	115,260,184	40
41	3,596	268,544	6,954,147	266,755	6,819,416	108,305,610	41
42	3,668	264,948	6,685,603	263,123	6,552,661	101,619,571	42
43	3,746	261,280	6,420,655	259,417	6,289,538	95,198,472	43
44	3,826	257,534	6,159,375	255,632	6,030,121	89,038,642	44
45	3,912	253,708	5,901,841	251,763	5,774,489	83,136,337	45
46	4,001	249,796	5,648,133	247,807	5,522,726	77,487,730	46
47	4,095	245,795	5,398,337	243,759	5,274,919	72,088,907	47
48	4,192	241,700	5,152,542	239,617	5,031,160	66,935,868	48
49	4,292	237,508	4,910,842	235,375	4,791,543	62,024,516	49
50	4,395	233,216	4,673,334	231,032	4,556,168	57,350,661	50
51	4,626	228,821	4,440,118	226,525	4,325,136	52,910,009	51
52	4,758	224,195	4,211,297	221,832	4,098,611	48,698,135	52
53	4,885	219,437	3,987,102	217,010	3,876,779	44,710,440	53
54	5,013	214,552	3,767,665	212,061	3,659,769	40,942,166	54

* In the English Life Tables No. 1 and No. 2, P_x was put in the form proposed by Mr. Griffith Davies, $= \frac{1}{2}(l_x + l_{x+1}) = l_{x+1} + \frac{1}{2}d_x$; but in this series of Tables it has been calculated directly, and, except in the single case of P_0, represents the numbers living in the middle of each year of age ($= l_{x+\frac{1}{2}}$). P_0 is the arithmetical mean of the series l_0, $l_{\frac{1}{12}}$, $l_{\frac{2}{12}}$ ..... l_1. $\lambda P_x = \lambda l_{4x+2}$ in the Quarterly Table, page 130 of the English Life Table.

YEARLY TABLE :—MALES.

AGE	DYING in each year of age 0–1, 1–2, &c.	BORN, and LIVING at each age.	SUM of the NUMBERS BORN, and LIVING at each age (x) and from x to the last age in the Table.	POPULATION, or the LIVING in each year of age 0–1, 1–2, &c.	(1) SUM of the LIVING of every age x and upwards to the last age in the Table; also (2) the YEARS which the MALES (l_x) WILL LIVE.	(1) The YEARS which the Males at the age x and upwards WILL LIVE; also (2) the years which they HAVE LIVED over (x).	AGE
		Σd_x	Σl_x	$l_{x+\frac{1}{2}}$	ΣP_x	$\Sigma \frac{1}{2}(Q_x + Q_{x+1}) = Y_{x+1} + (Q_{x+1} + \frac{1}{2}P_x)$	
x	d_x	l_x	L_x	P_x	Q_x	Y_x	x
55	5,144	209,539	3,553,113	206,984	3,447,708	37,388,428	55
56	5,281	204,395	3,343,574	201,772	3,240,724	34,044,212	56
57	5,428	199,114	3,139,179	196,419	3,038,952	30,904,374	57
58	5,584	193,686	2,940,065	190,914	2,842,533	27,963,631	58
59	5,752	188,102	2,746,379	185,248	2,651,619	25,216,555	59
60	5,929	182,350	2,558,277	179,409	2,466,371	22,657,560	60
61	6,118	176,421	2,375,927	173,386	2,286,962	20,280,894	61
62	6,314	170,303	2,199,506	167,171	2,113,576	18,080,625	62
63	6,515	163,989	2,029,203	160,757	1,946,405	16,050,634	63
64	6,720	157,474	1,865,214	154,139	1,785,648	14,184,608	64
65	6,921	150,754	1,707,740	147,319	1,631,509	12,476,029	65
66	7,115	143,833	1,556,986	140,299	1,484,190	10,918,180	66
67	7,297	136,718	1,413,153	133,091	1,343,891	9,504,139	67
68	7,458	129,421	1,276,435	125,711	1,210,800	8,226,794	68
69	7,593	121,963	1,147,014	118,181	1,085,089	7,078,849	69
70	7,695	114,370	1,025,051	110,533	966,908	6,052,851	70
71	7,756	106,675	910,681	102,802	856,375	5,141,209	71
72	7,770	98,919	804,006	95,033	753,573	4,336,235	72
73	7,733	91,149	705,087	87,274	658,540	3,630,179	73
74	7,639	83,416	613,938	79,581	571,266	3,015,276	74
75	7,483	75,777	530,522	72,012	491,685	2,483,800	75
76	7,268	68,294	454,745	64,629	419,673	2,028,121	76
77	6,990	61,026	386,451	57,493	355,044	1,640,763	77
78	6,655	54,036	325,425	50,663	297,551	1,314,465	78
79	6,266	47,381	271,389	44,196	246,888	1,042,246	79
80	5,832	41,115	224,008	38,142	202,692	817,456	80
81	5,361	35,283	182,893	32,542	164,550	633,835	81
82	4,862	29,922	147,610	27,428	132,008	485,556	82
83	4,349	25,060	117,688	22,821	104,580	367,262	83
84	3,834	20,711	92,628	18,729	81,759	274,092	84
85	3,328	16,877	71,917	15,151	63,030	201,698	85
86	2,840	13,549	55,040	12,070	47,879	146,243	86
87	2,384	10,709	41,491	9,462	35,809	104,399	87
88	1,965	8,325	30,782	7,292	26,347	73,321	88
89	1,590	6,360	22,457	5,521	19,055	50,620	89
90	1,260	4,770	16,097	4,102	13,534	34,326	90
91	979	3,510	11,327	2,988	9,432	22,843	91
92	744	2,531	7,817	2,132	6,444	14,905	92
93	553	1,787	5,286	1,489	4,312	9,527	93
94	401	1,234	3,499	1,017	2,823	5,959	94
95	285	833	2,265	678	1,806	3,645	95
96	196	548	1,432	441	1,128	2,178	96
97	132	352	884	279	687	1,270	97
98	86	220	532	172	408	723	98
99	55	134	312	103	236	401	99
100	33	79	178	60	133	216	100
101	21	46	99	34	73	113	101
102	11	25	53	19	39	57	102
103	7	14	28	10	20	28	103
104	3	7	14	5	10	13	104
105	2	4	7	3	5	5	105
106	1	2	3	1	2	2	106
107	1	1	1	1	1	..	107
108	..	..	..	..	..	..	108
109	..	..	..	..	..	..	109

YEARLY TABLE:—MALES.

l_x, Q_x, Y_x, and their Logarithms.

AGE (x)	l_x	Q_x	Y_x	$\lambda\, l_x$	$\lambda\, Q_x$	$\lambda\, Y_x$	AGE (x)
0	511,745	20,426,138	648,962,343	5·7090538	7·3101863	8·8122194	0
1	428,026	19,969,318	628,764,615	5·6314702	7·3003632	8·7984881	1
2	400,505	19,557,319	609,001,296	5·6026079	7·2913093	8·7846182	2
3	386,290	19,165,025	589,640,124	5·5869132	7·2825095	8·7705870	3
4	377,077	18,783,713	570,665,755	5·5764301	7·2737814	8·7563818	4
5	370,358	18,410,252	552,068,773	5·5686214	7·2650597	8·7419931	5
6	365,325	18,042,580	533,842,357	5·5626788	7·2562986	8·7274130	6
7	361,372	17,679,336	515,981,399	5·5579539	7·2474661	8·7126340	7
8	358,062	17,319,701	498,481,880	5·5539583	7·2385404	8·6976494	8
9	355,328	16,963,069	481,340,495	5·5506295	7·2295045	8·6824525	9
10	353,031	16,608,936	464,554,493	5·5478129	7·2203420	8·6670367	10
11	351,048	16,256,929	448,121,560	5·5453670	7·2110385	8·6513959	11
12	349,272	15,906,788	432,039,702	5·5431636	7·2015826	8·6355237	12
13	347,606	15,558,357	416,307,129	5·5410877	7·1919639	8·6194138	13
14	345,969	15,211,568	400,922,167	5·5390375	7·1821741	8·6030601	14
15	344,290	14,866,429	385,883,168	5·5369242	7·1722067	8·5864559	15
16	342,509	14,523,014	371,188,447	5·5346726	7·1620566	8·5695945	16
17	340,581	14,181,448	356,836,216	5·5322204	7·1517206	8·5524689	17
18	338,469	13,841,898	342,824,543	5·5295186	7·1411957	8·5350718	18
19	336,149	13,504,562	329,151,313	5·5265313	7·1304804	8·5173956	19
20	333,608	13,169,656	315,814,204	5·5232361	7·1195746	8·4994317	20
21	330,844	12,837,425	302,810,663	5·5196235	7·1084781	8·4811712	21
22	328,043	12,507,977	290,137,962	5·5159306	7·0971873	8·4626046	22
23	325,207	12,181,348	277,793,300	5·5121599	7·0856954	8·4437218	23
24	322,339	11,857,571	265,773,840	5·5083133	7·0739958	8·4245122	24
25	319,442	11,536,677	254,076,716	5·5043918	7·0620808	8·4049649	25
26	316,516	11,218,695	242,699,030	5·5003955	7·0499425	8·3850680	26
27	313,562	10,903,653	231,637,856	5·4963237	7·0375719	8·3648097	27
28	310,581	10,591,578	220,890,241	5·4921749	7·0249609	8·3441765	28
29	307,572	10,282,498	210,453,203	5·4879467	7·0120988	8·3231555	29
30	304,534	9,976,441	200,323,733	5·4836359	6·9989756	8·3017323	30
31	301,466	9,673,437	190,498,794	5.4792385	6·9855808	8·2798922	31
32	298,366	9,373,517	180,975,317	5·4747496	6·9719026	8·2576193	32
33	295,232	9,076,713	171,750,202	5·4701635	6·9579286	8·2348972	33
34	292,061	8,783,062	162,820,315	5·4654737	6·9436459	8·2117086	34
35	288,850	8,492,601	154,182,483	5·4606728	6·9290408	8·1880350	35
36	285,596	8,205,372	145,833,497	5·4557526	6·9140983	8·1638573	36
37	282,296	7,921,420	137,770,101	5·4507040	6·8988030	8·1391550	37
38	278,944	7,640,794	129,988,994	5·4455172	6·8831384	8·1139066	38
39	275,538	7,363,546	122,486,824	5·4401815	6·8670871	8·0880893	39
40	272,073	7,089,733	115,260,184	5·4346853	6·8506299	8·0616794	40
41	268,544	6,819,416	108,305,610	5·4290162	6·8337472	8·0346510	41
42	264,948	6,552,661	101,619,571	5·4231610	6·8164178	8·0069775	42
43	261,280	6,289,538	95,198,472	5·4171056	6·7986188	7·9786299	43
44	257,534	6,030,121	89,038,642	5·4108353	6·7803260	7·9495785	44
45	253,708	5,774,489	83,136,337	5·4043342	6·7615136	7·9197909	45
46	249,796	5,522,726	77,487,730	5·3975858	6·7421536	7·8892330	46
47	245,795	5,274,919	72,088,907	5·3905728	6·7222158	7·8578685	47
48	241,700	5,031,160	66,935,868	5·3832768	6·7016681	7·8256590	48
49	237,508	4,791,543	62,024,516	5·3756788	6·6804754	7·7925634	49
50	233,216	4,556,168	57,350,661	5·3677590	6·6585998	7·7585385	50
51	228,821	4,325,136	52,910,009	5·3594966	6·6359998	7·7235379	51
52	224,195	4,098,611	48,698,135	5·3506256	6·6126367	7·6875124	52
53	219,437	3,876,779	44,710,440	5·3413096	6·5884710	7·6504090	53
54	214,552	3,659,769	40,942,166	5·3315317	6·5634537	7·6121709	54

YEARLY TABLE:—MALES.

l_x, Q_x, Y_x, and their Logarithms.

AGE (x)	l_x	Q_x	Y_x	$\lambda\, l_x$	$\lambda\, Q_x$	$\lambda\, Y_x$	AGE (x)
55	209,539	3,447,708	37,388,428	5·3212644	6·5375305	7·5727372	55
56	204,395	3,240,724	34,044,212	5·3104701	6·5106420	7·5320432	56
57	199,114	3,038,952	30,904,374	5·2991007	6·4827239	7·4900199	57
58	193,686	2,842,533	27,963,631	5·2870978	6·4537056	7·4465936	58
59	188,102	2,651,619	25,216,555	5·2743928	6·4235111	7·4016858	59
60	182,350	2,466,371	22,657,560	5·2609067	6·3920584	7·3552132	60
61	176,421	2,286,962	20,280,894	5·2465500	6·3592590	7·3070870	61
62	170,303	2,113,576	18,080,625	5·2312231	6·3250179	7·2572135	62
63	163,989	1,946,405	16,050,634	5·2148160	6·2892332	7·2054921	63
64	157,474	1,785,648	14,184,608	5·1972084	6·2517958	7·1518174	64
65	150,754	1,631,509	12,476,029	5·1782696	6·2125895	7·0960765	65
66	143,833	1,484,190	10,918,180	5·1578586	6·1714895	7·0381503	66
67	136,718	1,343,891	9,504,139	5·1358242	6·1283641	6·9779128	67
68	129,421	1,210,800	8,226,794	5·1120046	6·0830724	6·9152306	68
69	121,963	1,085,089	7,078,849	5·0862280	6·0354654	6·8499627	69
70	114,370	966,908	6,052,851	5·0583120	5·9853852	6·7819600	70
71	106,675	856,375	5,141,209	5·0280640	5·9326640	6·7110653	71
72	98,919	753,573	4,336,235	4·9952810	5·8771253	6·6371128	72
73	91,149	658,540	3,630,179	4·9597499	5·8185822	6·5599281	73
74	83,416	571,266	3,015,276	4·9212469	5·7568384	6·4793271	74
75	75,777	491,685	2,483,800	4·8795382	5·6916870	6·3951166	75
76	68,294	419,673	2,028,121	4·8343795	5·6229110	6·3070939	76
77	61,026	355,044	1,640,763	4·7855162	5.5502822	6·2150458	77
78	54,036	297,551	1,314,465	4·7326834	5·4735615	6·1187491	78
79	47,381	246,888	1,042,246	4·6756059	5·3925000	6·0179703	79
80	41,115	202,692	817,456	4·6139981	5·3068366	5·9124644	80
81	35,283	164,550	633,835	4·5475641	5·2162979	5·8019762	81
82	29,922	132,008	485,556	4·4759977	5·1206002	5·6862393	82
83	25,060	104,580	367,262	4·3989823	5·0194486	5·5649760	83
84	20,711	81,759	274,092	4·3161911	4·9125356	5·4378964	84
85	16,877	63,030	201,698	4·2272869	4·7995473	5·3047016	85
86	13,549	47,879	146,243	4·1319221	4·6801451	5·1650751	86
87	10,709	35,809	104,399	4·0297399	4·5539922	5·0186964	87
88	8,325	26,347	73,321	3·9203692	4·4207312	4·8652284	88
89	6,360	19,055	50,620	3·8034343	4·2800090	4·7043221	89
90	4,770	13,534	34,326	3·6785456	4·1314262	4·5356232	90
91	3,510	9,432	22,843	3·5453037	3·9746038	4·3587531	91
92	2,531	6,444	14,905	3·4032992	3·8091555	4·1733320	92
93	1,787	4,312	9,527	3·2521123	3·6346788	3·9789562	93
94	1,234	2,823	5,959	3·0913128	3·4507109	3·7751734	94
95	833	1,806	3,645	2·9204603	3·2567177	3·5616975	95
96	548	1,128	2,178	2·7391040	3·0523091	3·3380579	96
97	352	687	1,270	2·5467827	2·8369567	3·1038037	97
98	220	408	723	2·3430251	2·6106602	2·8591383	98
99	134	236	401	2·1273492	2·3729120	2·6031444	99
100	79	133	216	1·8992630	2·1238516	2·3344538	100
101	46	73	113	1·6582641	1·8633229	2·0530784	101
102	25	39	57	1·4038397	1·5910646	1·7558749	102
103	14	20	28	1·1354667	1·3010300	1·4471580	103
104	7	10	13	0·8526118	1·0000000	1·1139434	104
105	4	5	5	0·5547310	0·6989700	0·6989700	105
106	2	2	2	0·2412705	0·3010300	0·3010300	106
107	1	1	..	$\bar{1}$·9116657	0·0000000	..	107
108	..	..	..	$\bar{1}$·5653419	..	..	108
109	..	..	..	$\bar{1}$·2017142	..	..	109

YEARLY TABLE :—FEMALES.

AGE	DYING in each year of age 0–1, 1–2, &c.	BORN, and LIVING at each age.	SUM of the NUMBERS BORN, and LIVING at each age (x) and from age x to the last age in the Table.	POPULATION, or the LIVING in each year of age 0–1, 1–2, &c.	(1) SUM of the LIVING of every age x and upwards to the last age in the Table; also (2) the YEARS which the Females (l_x) WILL LIVE.	(1) The YEARS which the Females at the age x and upwards WILL LIVE; also (2) the years which they HAVE LIVED over (x).	AGE
		Σd_x	Σl_x	$l_{x+\frac{1}{2}}$	ΣP_x	$\Sigma\frac{1}{2}(Q_x + Q_{x+1}) = Y_{x+1} + (Q_{x+1} + \frac{1}{2}P_x)$	
x	d_x	l_x	L_x	P_x*	Q_x	Y_x	x
0	65,774	488,255	20,690,111	445,961	20,432,046	660,571,425	0
1	26,159	422,481	20,201,856	406,422	19,986,085	640,362,359	1
2	14,023	396,322	19,779,375	389,177	19,579,663	620,579,485	2
3	9,243	382,299	19,383,053	377,279	19,190,486	601,194,411	3
4	6,596	373,056	19,000,754	369,491	18,813,207	582,192,564	4
5	4,866	366,460	18,627,698	363,858	18,443,716	563,564,103	5
6	3,815	361,594	18,261,238	359,590	18,079,858	545,302,316	6
7	3,249	357,779	17,899,644	356,081	17,720,268	527,402,253	7
8	2,724	354,530	17,541,865	353,111	17,364,187	509,860,025	8
9	2,328	351,806	17,187,335	350,600	17,011,076	492,672,394	9
10	2,045	349,478	16,835,529	348,426	16,660,476	475,836,618	10
11	1,861	347,433	16,486,051	346,485	16,312,050	459,350,355	11
12	1,765	345,572	16,138,618	344,682	15,965,565	443,211,547	12
13	1,745	343,807	15,793,046	342,936	15,620,883	427,418,323	13
14	1,789	342,062	15,449,239	341,177	15,277,947	411,968,908	14
15	1,888	340,273	15,107,177	339,344	14,936,770	396,861,550	15
16	2,029	338,385	14,766,904	337,390	14,597,426	382,094,452	16
17	2,205	336,356	14,428,519	335,277	14,260,036	367,665,721	17
18	2,400	334,151	14,092,163	332,977	13,924,759	353,573,323	18
19	2,609	331,751	13,758,012	330,473	13,591,782	339,815,053	19
20	2,819	329,142	13,426,261	327,739	13,261,309	326,388,507	20
21	2,867	326,323	13,097,119	324,895	12,933,570	313,291,068	21
22	2,912	323,456	12,770,796	322,005	12,608,675	300,519,945	22
23	2,952	320,544	12,447,340	319,073	12,286,670	288,072,273	23
24	2,989	317,592	12,126,796	316,102	11,967,597	275,945,139	24
25	3,024	314,603	11,809,204	313,095	11,651,495	264,135,593	25
26	3,055	311,579	11,494,601	310,056	11,338,400	252,640,646	26
27	3,084	308,524	11,183,022	306,985	11,028,344	241,457,274	27
28	3,112	305,440	10,874,498	303,887	10,721,359	230,582,422	28
29	3,138	302,328	10,569,058	300,762	10,417,472	220,013,007	29
30	3,163	299,190	10,266,730	297,611	10,116,710	209,745,916	30
31	3,187	296,027	9,967,540	294,437	9,819,099	199,778,011	31
32	3,209	292,840	9,671,513	291,238	9,524,662	190,106,131	32
33	3,233	289,631	9,378,673	288,017	9,233,424	180,727,088	33
34	3,255	286,398	9,089,042	284,773	8,945,407	171,637,672	34
35	3,279	283,143	8,802,644	281,506	8,660,634	162,834,652	35
36	3,301	279,864	8,519,501	278,216	8,379,128	154,314,771	36
37	3,326	276,563	8,239,637	274,903	8,100,912	146,074,751	37
38	3,350	273,237	7,963,074	271,565	7,826,009	138,111,290	38
39	3,376	269,887	7,689,837	268,202	7,554,444	130,421,064	39
40	3,402	266,511	7,419,950	264,813	7,286,242	123,000,721	40
41	3,431	263,109	7,153,439	261,397	7,021,429	115,846,885	41
42	3,459	259,678	6,890,330	257,952	6,760,032	108,956,155	42
43	3,490	256,219	6,630,652	254,478	6,502,080	102,325,099	43
44	3,522	252,729	6,374,433	250,972	6,247,602	95,950,258	44
45	3,555	249,207	6,121,704	247,434	5,996,630	89,828,142	45
46	3,591	245,652	5,872,497	243,861	5,749,196	83,955,229	46
47	3,627	242,061	5,626,845	240,252	5,505,335	78,327,963	47
48	3,665	238,434	5,384,784	236,606	5,265,083	72,942,754	48
49	3,705	234,769	5,146,350	232,922	5,028,477	67,795,974	49
50	3,746	231,064	4,911,581	229,196	4,795,555	62,883,958	50
51	3,788	227,318	4,680,517	225,430	4,566,359	58,203,001	51
52	3,832	223,530	4,453,199	221,620	4,340,929	53,749,357	52
53	3,876	219,698	4,229,669	217,766	4,119,309	49,519,238	53
54	4,246	215,822	4,009,971	213,723	3,901,543	45,508,812	54

* In the English Life Tables No. 1 and No. 2, P_x was put in the form proposed by Mr. Griffith Davies, $= \frac{1}{2}(l_x + l_{x+1}) = l_{x+1} + \frac{1}{2}d_x$; but in this series of Tables it has been calculated directly, and, except in the single case of P_0, represents the numbers living in the middle of each year of age ($= l_{x+\frac{1}{2}}$). P_0 is the arithmetical mean of the series l_0, $l_{\frac{1}{12}}$, $l_{\frac{2}{12}}$ ..... l_1. $\lambda P_x = \lambda l_{4x+2}$ in Quarterly Table, page 132 of the English Life Table.

YEARLY TABLE :—FEMALES.

AGE	DYING in each year of age 0–1, 1–2, &c.	BORN, and LIVING at each age.	SUM of the NUMBERS BORN, and LIVING at each age (x) and from age x to the last age in the Table.	POPULATION, or the LIVING in each year of age 0–1, 1–2, &c.	(1) SUM of the LIVING of every age x and upwards to the last age in the Table; also (2) the YEARS which the Females (l_x) will live.	(1) The YEARS which the Females at the age x and upwards WILL LIVE; also (2) the years which they HAVE LIVED over (x).	AGE
		Σd_x	Σl_x	$l_{x+\frac{1}{2}}$	ΣP_x	$\Sigma\frac{1}{2}(Q_x + Q_{x+1}) = Y_{x+1} + (Q_{x+1} + \frac{1}{2}P_x)$	
x	d_x	l_x	L_x	P_x	Q_x	Y_x	x
55	4,439	211,576	3,794,140	209,380	3,687,820	41,714,131	55
56	4,628	207,137	3,582,573	204,847	3,478,440	38,131,001	56
57	4,817	202,509	3,375,436	200,124	3,273,593	34,754,984	57
58	5,009	197,692	3,172,927	195,211	3,073,469	31,581,453	58
59	5,206	192,683	2,975,235	190,105	2,878,258	28,605,590	59
60	5,409	187,477	2,782,552	184,798	2,688,153	25,822,384	60
61	5,619	182,068	2,595,075	179,285	2,503,355	23,226,630	61
62	5,835	176,449	2,413,007	173,559	2,324,070	20,812,918	62
63	6,057	170,614	2,236,558	167,614	2,150,511	18,575,627	63
64	6,282	164,557	2,065,944	161,444	1,982,897	16,508,923	64
65	6,509	158,275	1,901,387	155,049	1,821,453	14,606,748	65
66	6,731	151,766	1,743,112	148,428	1,666,404	12,862,820	66
67	6,947	145,035	1,591,346	141,588	1,517,976	11,270,630	67
68	7,149	138,088	1,446,311	134,538	1,376,388	9,823,448	68
69	7,332	130,939	1,308,223	127,295	1,241,850	8,514,329	69
70	7,489	123,607	1,177,284	119,881	1,114,555	7,336,126	70
71	7,613	116,118	1,053,677	112,325	994,674	6,281,512	71
72	7,698	108,505	937,559	104,664	882,349	5,343,000	72
73	7,736	100,807	829,054	96,941	777,685	4,512,983	73
74	7,724	93,071	728,247	89,204	680,744	3,783,769	74
75	7,653	85,347	635,176	81,508	591,540	3,147,627	75
76	7,521	77,694	549,829	73,913	510,032	2,596,841	76
77	7,329	70,173	472,135	66,480	436,119	2,123,765	77
78	7,071	62,844	401,962	59,273	369,639	1,720,886	78
79	6,755	55,773	339,118	52,352	310,366	1,380,884	79
80	6,382	49,018	283,345	45,777	258,014	1,096,694	80
81	5,959	42,636	234,327	39,601	212,237	861,568	81
82	5,496	36,677	191,691	33.869	172,636	669,132	82
83	5,063	31,181	155,014	28,616	138,767	513,430	83
84	4,490	26,178	123,833	23,868	110,151	388,971	84
85	3,972	21,688	97,655	19,637	86,283	290,754	85
86	3,458	17,716	75,967	15,924	66,646	214,290	86
87	2,962	14,258	58,251	12,717	50,722	155,606	87
88	2,494	11,296	43,993	9,992	38,005	111,242	88
89	2,063	8,802	32,697	7,719	28,013	78,233	89
90	1,673	6,739	23,895	5,857	20,294	54,080	90
91	1,331	5,066	17,156	4,361	14,437	36,714	91
92	1,037	3,735	12,090	3,183	10,076	24,458	92
93	790	2,698	8,355	2,275	6,893	15,973	93
94	588	1,908	5,657	1,592	4,618	10,218	94
95	428	1,320	3,749	1,088	3,026	6,396	95
96	304	892	2,429	726	1,938	3,914	96
97	210	588	1,537	473	1,212	2,339	97
98	142	378	949	300	739	1,363	98
99	92	236	571	185	439	774	99
100	59	144	335	111	254	428	100
101	36	85	191	65	143	229	101
102	22	49	106	37	78	119	102
103	12	27	57	20	41	59	103
104	7	15	30	11	21	28	104
105	4	8	15	5	10	13	105
106	2	4	7	3	5	5	106
107	1	2	3	1	2	2	107
108	1	1	1	1	1	..	108
109	..	..	..	..	..	..	109

YEARLY TABLE:—Females.

l_x, Q_x, Y_x, and their Logarithms.

Age (x)	l_x	Q_x	Y_x	$\lambda\, l_x$	$\lambda\, Q_x$	$\lambda\, Y_x$	Age (x)
0	488,255	20,432,046	660,571,425	5·6886465	7·3103120	8·8199198	0
1	422,481	19,986,085	640,362,359	5·6258069	7·3007279	8·8064259	1
2	396,322	19,579,663	620,579,485	5·5980479	7·2918051	8·7927975	2
3	382,299	19,190,486	601,194,411	5·5824033	7·2830860	8·7790149	3
4	373,056	18,813,207	582,192,564	5·5717743	7·2744629	8·7650667	4
5	366,460	18,443,716	563,564,103	5·5640266	7·2658486	8·7509434	5
6	361,594	18,079,858	545,302,316	5·5582216	7·2571950	8·7366373	6
7	357,779	17,720,268	527,402,253	5·5536144	7·2484703	8·7221421	7
8	354,530	17,364,187	509,860,025	5·5496536	7·2396546	8·7074509	8
9	351,806	17,011,076	492,672,394	5·5463032	7·2307319	8·6925583	9
10	349,478	16,660,476	475,836,618	5·5434193	7·2216875	8·6774579	10
11	347,433	16,312,050	459,350,355	5·5408707	7·2125205	8·6621441	11
12	345,572	15,965,565	443,211,547	5·5385381	7·2031844	8·6466111	12
13	343,807	15,620,883	427,418,323	5·5363145	7·1937054	8·6308531	13
14	342,062	15,277,947	411,968,908	5·5341051	7·1840651	8·6148645	14
15	340,273	14,936,770	396,861,550	5·5318275	7·1742567	8·5986391	15
16	338,385	14,597,426	382,094,452	5·5294114	7·1642764	8·5821708	16
17	336,356	14,260,036	367,665,721	5·5267986	7·1541207	8·5654531	17
18	334,151	13,924,759	353,573,323	5·5239434	7·1437877	8·5484795	18
19	331,751	13,591,782	339,815,053	5·5208121	7·1332764	8·5312427	19
20	329,142	13,261,309	326,388,507	5·5173833	7·1225864	8·5137348	20
21	326,323	12,933,570	313,291,068	5·5136479	7·1117185	8·4959480	21
22	323,455	12,608,675	300,519,945	5·5098150	7·1006696	8·4778733	22
23	320,544	12,286,670	288,072,273	5·5058879	7·0894343	8·4595015	23
24	317,592	11,967,597	275,945,139	5·5018696	7·0780071	8·4408228	24
25	314,603	11,651,495	264,135,593	5·4977625	7·0663819	8·4218270	25
26	311,579	11,338,400	252,640,646	5·4935685	7·0545518	8·4025031	26
27	308,524	11,028,344	241,457,274	5·4892891	7·0425102	8·3828403	27
28	305,440	10,721,359	230,582,422	5·4849253	7·0302499	8·3628262	28
29	302,328	10,417,472	220,013,007	5·4804778	7·0177623	8·3424483	29
30	299,190	10,116,710	209,745,916	5·4759466	7·0050392	8·3216936	30
31	296,027	9,819,099	199,778,011	5·4713313	6·9920717	8·3005477	31
32	292,840	9,524,662	190,106,131	5·4666311	6·9788496	8·2789960	32
33	289,631	9,233,424	180,727,088	5·4618446	6·9653628	8·2570232	33
34	286,398	8,945,407	171,637,672	5·4569701	6·9516001	8·2346127	34
35	283,143	8,660,634	162,834,652	5·4520053	6·9375497	8·2117470	35
36	279,864	8,379,128	154,314,771	5·4469475	6·9231988	8·1884076	36
37	276,563	8,100,912	146,074,751	5·4417935	6·9085339	8·1645753	37
38	273,237	7,826,009	138,111,290	5·4365396	6·8935403	8·1402293	38
39	269,887	7,554,444	130,421,064	5·4311817	6·8782025	8·1153478	39
40	266,511	7,286,242	123,000,721	5·4257153	6·8625036	8·0899076	40
41	263,109	7,021,429	115,846,885	5·4201352	6·8464255	8·0638844	41
42	259,678	6,760,032	108,956,155	5·4144359	6·8299487	8·0372519	42
43	256,219	6,502,080	102,325,099	5·4086114	6·8130523	8·0099822	43
44	252,729	6,247,602	95,950,258	5·4026553	6·7957133	7·9820462	44
45	249,207	5,996,630	89,828,142	5·3965606	6 7779073	7·9534124	45
46	245,652	5,749,196	83,955,229	5·3903199	6·7596072	7·9240478	46
47	242,061	5,505,335	78,327,963	5·3839253	6·7407838	7·8939168	47
48	238,434	5,265,083	72,942,754	5·3773685	6·7214053	7·8629821	48
49	234,769	5,028,477	67,795,974	5·3706407	6·7014365	7·8312040	49
50	231,064	4,795,555	62,883,958	5·3637325	6·6808390	7·7985399	50
51	227,318	4,566,359	58,203,001	5·3566343	6·6595701	7·7649454	51
52	223,530	4,340,929	53,749,357	5·3493358	6·6375827	7·7303783	52
53	219,698	4,119,309	49,519,238	5·3418264	6·6148244	7·6947740	53
54	215,822	3,901,543	45,508,812	5·3340949	6·5912363	7·6580955	54

YEARLY TABLE:—Females.

l_x, Q_x, Y_x, and their Logarithms.

Age (x)	l_x	Q_x	Y_x	$\lambda\, l_x$	$\lambda\, Q$	$\lambda\, Y_x$	Age (x)
55	211,576	3,687,820	41,714,131	5·3254664	6·5667697	7·6202831	55
56	207,137	3,478,440	38,131,001	5·3162583	6·5413845	7·5812782	56
57	202,509	3,273,593	34,754,984	5·3064447	6·5150247	7·5410171	57
58	197,692	3,073,469	31,581,453	5·2959887	6·4876289	7·4994321	58
59	192,683	2,878,258	28,605,590	5·2848423	6·4591298	7·4564510	59
60	187,477	2,688,153	25,822,384	5·2729470	6·4294540	7·4119962	60
61	182,068	2,503,355	23,226,630	5·2602329	6·3985225	7·3659862	61
62	176,449	2,324,070	20,812,918	5·2466194	6·3662492	7·3183330	62
63	170,614	2,150,511	18,575,627	5·2320149	6·3325416	7·2689435	63
64	164,557	1,982,897	16,508,923	5·2163168	6·2973001	7·2177187	64
65	158,275	1,821,453	14,606,748	5·1994118	6·2604180	7·1645536	65
66	151,766	1,666,404	12,862,820	5·1811753	6·2217803	7·1093362	66
67	145,035	1,517,976	11,270,630	5·1614720	6·1812649	7·0519482	67
68	138,088	1,376,388	9,823,448	5·1401557	6·1387409	6·9922640	68
69	130,939	1,241,850	8,514,329	5·1170691	6·0940692	6·9301504	69
70	123,607	1,114,555	7,336,126	5·0920440	6·0471016	6·8654668	70
71	116,118	994,674	6,281,512	5·0649013	5·9976808	6·7980642	71
72	108,505	882,349	5,343,000	5·0354509	5·9456404	6·7277852	72
73	100,807	777,685	4,512,983	5·0034919	5·8908037	6·6544637	73
74	93,071	680,744	3,783,769	4·9688124	5·8329839	6·5779246	74
75	85,347	591,540	3,147,627	4·9311894	5·7719841	6·4979833	75
76	77,694	510,032	2,596,841	4·8903892	5·7075974	6·4144454	76
77	70,173	436,119	2,123,765	4·8461669	5·6396050	6·3271064	77
78	62,844	369,639	1,720,886	4·7982670	5·5677778	6·2357521	78
79	55,773	310,366	1,380,884	4·7464227	5·4918741	6·1401572	79
80	49,018	258,014	1,096,694	4·6903565	5·4116433	6·0400855	80
81	42,636	212,237	861,568	4·6297799	5·3268211	5·9352896	81
82	36,677	172,636	669,132	4·5643934	5·2371314	5·8255118	82
83	31,181	138,767	513,430	4·4938867	5·1422862	5·7104812	83
84	26,178	110,151	388,971	4·4179384	5·0419885	5·5899172	84
85	21,688	86,283	290,754	4·3362162	4·9359252	5·4635257	85
86	17,716	66,646	214,290	4·2488769	4·8237741	5·3310019	86
87	14,258	50,722	155,606	4·1540665	4·7051964	5·1920263	87
88	11,296	38,005	111,242	4·0529197	4·5798407	5·0462688	88
89	8,802	28,013	78,233	3·9445605	4·4473596	4·8933900	89
90	6,739	20,294	54,080	3·8286020	4·3073677	4·7330367	90
91	5,066	14,437	36,714	3·7046463	4·1594770	4·5648317	91
92	3,735	10,076	24,458	3·5722846	4·0032882	4·3884209	92
93	2,698	6,893	15,973	3·4310969	3·8384083	4·2033865	93
94	1,908	4,618	10,218	3·2806526	3·6644539	4·0093659	94
95	1,320	3,026	6,396	3·1205101	3·4808689	3·8059085	95
96	892	1,938	3,914	2·9502167	3·2873538	3·5926208	96
97	588	1,212	2,339	2·7693088	3·0835026	3·3690302	97
98	378	739	1,363	2·5773121	2·8686444	3·1344959	98
99	236	439	774	2·3737409	2·6424645	2·8887410	99
100	144	254	428	2·1580991	2·4048337	2·6314438	100
101	85	143	229	1·9298792	2·1553360	2·3598355	101
102	49	78	119	1·6885630	1·8920946	2·0755470	102
103	27	41	59	1·4336213	1·6127839	1·7708520	103
104	15	21	28	1·1645140	1·3222193	1·4471580	104
105	8	10	13	0·8806901	1·0000000	1·1139434	105
106	4	5	5	0·5815875	0·6989700	0·6989700	106
107	2	2	2	0·2666332	0·3010300	0·3010300	107
108	1	1	..	$\bar{1}$·9352434	0·0000000	..	108
109	..	..	..	$\bar{1}$·5868233	..	..	109

YEARLY TABLE :—Males and Females.

Mortality of Males and Females in England.

Age (x)	Annual Mortality per Cent. at the Age (x).		Males and Females living at the Age (x) to One Death annually.		The living of the Age (x) and upwards to One Death annually.		Age (x)
	Males.	Females.	Males.	Females.	Males.	Females.	
0	18·326	14·749	5	7	39·91	41·85	0
1	6·680	6·436	15	16	46·65	47·31	1
2	3·624	3·603	28	28	48·83	49·40	2
3	2·416	2·450	41	41	49·61	50·20	3
4	1·799	1·785	56	56	49·81	50·43	4
5	1·369	1·337	73	75	49·71	50·33	5
6	1·088	1·061	92	94	49·39	50·00	6
7	·920	·912	109	110	48·92	49·53	7
8	·767	·771	130	130	48·37	48·98	8
9	·649	·664	154	151	47·74	48·35	9
10	·563	·587	178	170	47·05	47·67	10
11	·507	·537	197	186	46·31	46·95	11
12	·478	·512	209	195	45·54	46·20	12
13	·472	·509	212	196	44·76	45·44	13
14	·486	·524	206	191	43·97	44·66	14
15	·519	·556	193	180	43·18	43·90	15
16	·564	·601	177	166	42·40	43·14	16
17	·622	·658	161	152	41·64	42·40	17
18	·688	·721	145	139	40·90	41·67	18
19	·759	·789	132	127	40·17	40·97	19
20	·832	·860	120	116	39·48	40·29	20
21	·850	·882	118	113	38·80	39·63	21
22	·868	·904	115	111	38·13	38·98	22
23	·886	·925	113	108	37·46	38·33	23
24	·903	·946	111	106	36·79	37·68	24
25	·920	·966	109	104	36·12	37·04	25
26	·938	·985	107	102	35·44	36·39	26
27	·955	1·005	105	100	34·77	35·75	27
28	·974	1·024	103	98	34·10	35·10	28
29	·993	1·043	101	96	33·43	34·46	29
30	1·013	1·063	99	94	32·76	33·81	30
31	1·034	1·082	97	92	32·09	33·17	31
32	1·056	1·102	95	91	31·42	32·53	32
33	1·080	1·123	93	89	30·74	31·88	33
34	1·105	1·143	90	87	30·07	31·23	34
35	1·133	1·165	88	86	29·40	30·59	35
36	1·162	1·186	86	84	28·73	29·94	36
37	1·194	1·210	84	83	28·06	29·29	37
38	1·229	1·234	81	81	27·39	28·64	38
39	1·265	1·259	79	79	26·72	27·99	39
40	1·306	1·285	77	78	26·06	27·34	40
41	1·348	1·313	74	76	25·39	26·69	41
42	1·394	1·341	72	75	24·73	26·03	42
43	1·444	1·371	69	73	24·07	25·38	43
44	1·497	1·403	67	71	23·41	24·72	44
45	1·554	1·437	64	70	22·76	24·06	45
46	1·615	1·473	62	68	22·11	23·40	46
47	1·680	1·510	60	66	21·46	22·74	47
48	1·749	1·549	57	65	20·82	22·08	48
49	1·823	1·591	55	63	20·17	21·42	49

The Table may be read thus:—To 100,000 men living at the age of 20 and under 21 there are 832 deaths annually; to 100,000 females living 860 deaths annually; or 1 in 120 men and 1 in 116 women of that age die annually. And of men of the age of 20 and upwards 1 in 39·48 dies annually;

YEARLY TABLE :—Males and Females.

Mortality of Males and Females in England.

Age (x)	Annual Mortality per Cent. a the Age (x)		Males and Females living at the Age (x) to One Death annually.		The living of the Age (x) and upwards to One Death annually.		Age (x)
	Males.	Females.	Males.	Females.	Males.	Females.	
50	1·902	1·634	53	61	19·54	20·75	50
51	2·042	1·680	49	60	18·90	20·09	51
52	2·145	1·729	47	58	18·28	19·42	52
53	2·251	1·780	44	56	17·67	18·75	53
54	2·364	1·987	42	50	17·06	18·08	54
55	2·485	2·120	40	47	16·45	17·43	55
56	2·617	2·259	38	44	15·86	16·79	56
57	2·763	2·407	36	42	15·26	16·17	57
58	2·925	2·566	34	39	14·68	15·55	58
59	3·105	2·738	32	37	14·10	14·94	59
60	3·305	2·927	30	34	13·53	14·34	60
61	3·529	3·134	28	32	12·96	13·75	61
62	3·777	3·362	26	30	12·41	13·17	62
63	4·053	3·614	25	28	11·87	12·60	63
64	4·360	3·891	23	26	11·34	12·05	64
65	4·698	4·198	21	24	10·82	11·51	65
66	5·071	4·535	20	22	10·32	10·98	66
67	5·483	4·906	18	20	9·83	10·47	67
68	5·933	5·314	17	19	9·36	9·97	68
69	6·425	5·760	16	17	8·90	9·48	69
70	6·962	6·247	14	16	8·45	9·02	70
71	7·545	6·778	13	15	8·03	8·57	71
72	8·176	7·355	12	14	7·62	8·13	72
73	8·861	7·980	11	13	7·22	7·71	73
74	9·599	8·659	10	12	6·85	7·31	74
75	10·391	9·389	10	11	6·49	6·93	75
76	11·246	10·175	9	10	6·15	6·56	76
77	12·158	11·024	8	9	5·82	6·21	77
78	13·136	11·930	8	8	5·51	5·88	78
79	14·178	12·903	7	8	5·21	5·56	79
80	15·290	13·942	7	7	4·93	5·26	80
81	16·474	15·048	6	7	4·66	4·98	81
82	17·726	16·227	6	6	4·41	4·71	82
83	19·057	17·483	5	6	4·17	4·45	83
84	20·471	18·812	5	5	3·95	4·21	84
85	21·966	20·227	5	5	3·73	3·98	85
86	23·529	21·716	4	5	3·53	3·76	86
87	25·196	23·292	4	4	3·34	3·56	87
88	26·947	24·960	4	4	3·16	3·36	88
89	28·799	26·726	3	4	3·00	3·18	89
90	30·717	28·564	3	4	2·84	3·01	90
91	32·764	30·521	3	3	2·69	2·85	91
92	34·897	32·579	3	3	2·55	2·70	92
93	37·139	34·725	3	3	2·41	2·55	93
94	39·430	36·935	3	3	2·29	2·42	94
95	42·035	39·338	2	3	2·17	2·29	95
96	44·444	41·873	2	2	2·06	2·17	96
97	47·312	44·397	2	2	1·95	2·06	97
98	50·000	47·333	2	2	1·85	1·96	98
99	53·398	49·730	2	2	1·76	1·86	99
100	55·000	53·153	2	2	1·68	1·76	100

of women of the age of 20 and upwards 1 in 40·29 dies annually. The mean afterlifetimes at these ages are 39·48 and 40·29. The mean afterlifetimes at other ages are shown by the corresponding figures.

YEARLY TABLE:—MALES.

The MEAN AFTERLIFETIME (or the Expectation of Life) of MALES of the Age x, and of MALES of the Age x and upwards; also the MEAN AGES OF THE LIVING and the MEAN AGE AT DEATH.

AGE (or past Life-time).	MEAN AFTER-LIFETIME of MALES of the Age x.	MEAN AFTER-LIFETIME of MALES of the Age x and upwards.	MEAN AGE of MALES LIVING of the Age x and upwards.	MEAN AGE at DEATH.		AGE (or past (Life-time).
				Of MALES ACTUALLY LIVING at the Age x.	Of MALES ACTUALLY LIVING at the Age x and upwards.	
x	$E_x = \frac{Q_x}{l_x}$	$E'_x = \frac{Y_x}{Q_x}$	$x + E'_x$	$x + E_x$	$x + 2E'_x$	x
	Years.	Years.	Years.	Years.	Years.	
0	39·91	31·77	31·77	39·91	63·54	0
1	46·65	31·49	32·49	47·65	63·98	1
2	48·83	31·14	33·14	50·83	64·28	2
3	49·61	30·77	33·77	52·61	64·54	3
4	49·81	30·38	34·38	53·81	64·76	4
5	49·71	29·99	34·99	54·71	64·98	5
6	49·39	29·59	35·59	55·39	65·18	6
7	48·92	29·19	36·19	55·92	65·38	7
8	48·37	28·78	36·78	56·37	65·56	8
9	47·74	28·38	37·38	56·74	65·76	9
10	47·05	27·97	37·97	57·05	65·94	10
11	46·31	27·56	38·56	57·31	66·12	11
12	45·54	27·16	39·16	57·54	66·32	12
13	44·76	26·76	39·76	57·76	66·52	13
14	43·97	26·36	40·36	57·97	66·72	14
15	43·18	25·96	40·96	58·18	66·92	15
16	42·40	25·56	41·56	58·40	67·12	16
17	41·64	25·16	42·16	58·64	67·32	17
18	40·90	24·77	42·77	58·90	67·54	18
19	40·17	24·37	43·37	59·17	67·74	19
20	39·48	23·98	43·98	59·48	67·96	20
21	38·80	23·59	44·59	59·80	68·18	21
22	38·13	23·20	45·20	60·13	68·40	22
23	37·46	22·80	45·80	60·46	68·60	23
24	36·79	22·41	46·41	60·79	68·82	24
25	36·12	22·02	47·02	61·12	69·04	25
26	35·44	21·63	47·63	61·44	69·26	26
27	34·77	21·24	48·24	61·77	69·48	27
28	34·10	20·86	48·86	62·10	69·72	28
29	33·43	20·47	49·47	62·43	69·94	29
30	32·76	20·08	50·08	62·76	70·16	30
31	32·09	19·69	50·69	63·09	70·38	31
32	31·42	19·31	51·31	63·42	70·62	32
33	30·74	18·92	51·92	63·74	70·84	33
34	30·07	18·54	52·54	64·07	71·08	34
35	29·40	18·15	53·15	64·40	71·30	35
36	28·73	17·77	53·77	64·73	71·54	36
37	28·06	17·39	54·39	65·06	71·78	37
38	27·39	17·01	55·01	65·39	72·02	38
39	26·72	16·63	55·63	65·72	72·26	39
40	26·06	16·26	56·26	66·06	72·52	40
41	25·39	15·88	56·88	66·39	72·76	41
42	24·73	15·51	57·51	66·73	73·02	42
43	24·07	15·14	58·14	67·07	73·28	43
44	23·41	14·77	58·77	67·41	73·54	44
45	22·76	14·40	59·40	67·76	73·80	45
46	22·11	14·03	60·03	68·11	74·06	46
47	21·46	13·67	60·67	68·46	74·34	47
48	20·82	13·30	61·30	68·82	74·60	48
49	20·17	12·94	61·94	69·17	74·88	49

YEARLY TABLE:—MALES.

The MEAN AFTERLIFETIME (or the Expectation of Life) of MALES of the Age x and of MALES of the Age x and upwards; also the MEAN AGES OF THE LIVING and the MEAN AGE AT DEATH.

AGE (or past Life-time).	MEAN AFTER-LIFETIME of MALES of the Age x.	MEAN AFTER-LIFETIME of MALES of the Age x and upwards.	MEAN AGE of MALES LIVING of the Age x and upwards.	MEAN AGE at DEATH.		AGE (or past Life-time).
				Of MALES ACTUALLY LIVING at the Age x.	Of MALES ACTUALLY LIVING at the Age x and upwards.	
x	$E_x = \frac{Q_x}{l_x}$	$E'_x = \frac{Y_x}{Q_x}$	$x + E'_x$	$x + E_x$	$x + 2E'_x$	x
	Years.	Years.	Years.	Years.	Years.	
50	19·54	12·59	62·59	69·54	75·18	50
51	18·90	12·23	63·23	69·90	75·46	51
52	18·28	11·88	63·88	70·28	75·76	52
53	17·67	11·53	64·53	70·67	76·06	53
54	17·06	11·19	65·19	71·06	76·38	54
55	16·45	10·84	65·84	71·45	76·68	55
56	15·86	10·51	66·51	71·86	77·02	56
57	15·26	10·17	67·17	72 26	77·34	57
58	14·68	9·84	67·84	72·68	77·68	58
59	14·10	9·51	68·51	73·10	78·02	59
60	13·53	9·19	69·19	73·53	78·38	60
61	12·96	8·87	69·87	73·96	78·74	61
62	12·41	8·55	70·55	74·41	79·10	62
63	11·87	8·25	71·25	74·87	79·50	63
64	11·34	7·94	71·94	75·34	79·88	64
65	10·82	7·65	72·65	75·82	80·30	65
66	10·32	7·36	73·36	76·32	80·72	66
67	9·83	7·07	74·07	76·83	81·14	67
68	9·36	6·79	74·79	77·36	81·58	68
69	8·90	6·52	75·52	77·90	82·04	69
70	8·45	6·26	76·26	78·45	82·52	70
71	8·03	6·00	77·00	79·03	83·00	71
72	7·62	5·75	77·75	79·62	83·50	72
73	7·22	5·51	78·51	80·22	84·02	73
74	6·85	5·28	79·28	80·85	84·56	74
75	6·49	5·05	80·05	81·49	85·10	75
76	6·15	4·83	80·83	82·15	85·66	76
77	5·82	4·62	81·62	82·82	86·24	77
78	5·51	4·42	82·42	83·51	86·84	78
79	5·21	4·22	83·22	84·21	87·44	79
80	4·93	4·03	84·03	84·93	88·06	80
81	4·66	3·85	84·85	85·66	88·70	81
82	4·41	3·68	85·68	86·41	89·36	82
83	4·17	3·51	86·51	87·17	90·02	83
84	3·95	3·35	87·35	87·95	90·70	84
85	3·73	3·20	88·20	88·73	91·40	85
86	3·53	3·05	89·05	89·53	92·10	86
87	3·34	2·92	89·92	90·34	92·84	87
88	3·16	2·78	90·78	91·16	93·56	88
89	3·00	2·66	91·66	92·00	94·32	89
90	2·84	2·54	92·54	92·84	95·08	90
91	2·69	2·42	93·42	93·69	95·84	91
92	2·55	2·31	94·31	94·55	96·62	92
93	2·41	2·21	95·21	95·41	97·42	93
94	2·29	2·11	96·11	96·29	98·22	94
95	2·17	2·02	97·02	97·17	99·04	95
96	2·06	1·93	97·93	98·06	99·86	96
97	1·95	1·85	98·85	98·95	100·70	97
98	1·85	1·77	99·77	99·85	101·54	98
99	1·76	1·70	100·70	100·76	102·40	99
100	1·68	1·62	101·62	101·68	103·24	100

YEARLY TABLE:—Females.

The Mean Afterlifetime (or the Expectation of Life) of Females of the Age x and of Females of the Age x and upwards; also the Mean Ages of the Living and the Mean Age at Death.

Age (or past Life-time).	Mean After-lifetime of Females at the Age x.	Mean After-lifetime of Females of the Age x and upwards.	Mean Age of Females living of the Age x and upwards.	Mean Age at Death.		Age (or past Life-time).
				Of Females actually living at the Age x.	Of Females actually living at the Age x and upwards.	
x	$E_x = \frac{Q^x}{l_x}$	$E'_x = \frac{Y_x}{Q_x}$	$x + E'_x$	$x + E_x$	$x + 2E'_x$	x
	Years.	Years.	Years.	Years.	Years.	
0	41·85	32·33	32·33	41·85	64·66	0
1	47·31	32·04	33·04	48·31	65·08	1
2	49·40	31·70	33·70	51·40	65·40	2
3	50·20	31·33	34·33	53·20	65·66	3
4	50·43	30·95	34·95	54·43	65·90	4
5	50·33	30·56	35·56	55·33	66·12	5
6	50·00	30·16	36·16	56·00	66·32	6
7	49·53	29·76	36·76	56·53	66·52	7
8	48·98	29·36	37·36	56·98	66·72	8
9	48·35	28·96	37·96	57·35	66·92	9
10	47·67	28·56	38·56	57·67	67·12	10
11	46·95	28·16	39·16	57·95	67·32	11
12	46·20	27·76	39·76	58·20	67·52	12
13	45·44	27·36	40·36	58·44	67·72	13
14	44·66	26·96	40·96	58·66	67·92	14
15	43·90	26·57	41·57	58·90	68·14	15
16	43·14	26·18	42·18	59·14	68·36	16
17	42·40	25·78	42·78	59·40	68·56	17
18	41·67	25·39	43·39	59·67	68·78	18
19	40·97	25·00	44·00	59·97	69·00	19
20	40·29	24·61	44·61	60·29	69·22	20
21	39·63	24·22	45·22	60·63	69·44	21
22	38·98	23·83	45·83	60·98	69·66	22
23	38·33	23·45	46·45	61·33	69·90	23
24	37·68	23·06	47·06	61·68	70·12	24
25	37·04	22·67	47·67	62·04	70·34	25
26	36·39	22·28	48·28	62·39	70·56	26
27	35·75	21·89	48·89	62·75	70·78	27
28	35·10	21·51	49·51	63·10	71·02	28
29	34·46	21·12	50·12	63·46	71·24	29
30	33·81	20·73	50·73	63·81	71·46	30
31	33·17	20·35	51·35	64·17	71·70	31
32	32·53	19·96	51·96	64·53	71·92	32
33	31·88	19·57	52·57	64·88	72·14	33
34	31·23	19·19	53·19	65·23	72·38	34
35	30·59	18·80	53·80	65·59	72·60	35
36	29·94	18·42	54·42	65·94	72·84	36
37	29·29	18·03	55·03	66·29	73·06	37
38	28·64	17·65	55·65	66 64	73·30	38
39	27·99	17·26	56·26	66·99	73·52	39
40	27·34	16 88	56·88	67·34	73·76	40
41	26·69	16·50	57·50	67·69	74·00	41
22	26·03	16·12	58·12	68·03	74·24	42
43	25·38	15·74	58·74	68·38	74·48	43
44	24·72	15·36	59·36	68·72	74·72	44
45	24·06	14·98	59·98	69·06	74·96	45
46	23·40	14·60	60·60	69·40	75·20	46
47	22·74	14·23	61·23	69·74	75·46	47
48	22·08	13·85	61·85	70·08	75·70	48
49	21·42	13·48	62·48	70·42	75·96	49

YEARLY TABLE:—Females.

The Mean Afterlifetime (or the Expectation of Life) of Females of the Age x and of Females of the Age x and upwards; also the Mean Ages of the Living and the Mean Age at Death.

Age (or past Life-time).	Mean After-lifetime of Females of the Age x.	Mean After-lifetime of Females of the Age x and upwards.	Mean Age of Females living of the Age x and upwards.	Mean Age at Death.		Age (or past Life-time).
				Of Females actually living at the Age x.	Of Females actually living at the Age x and upwards.	
x	$E_x = \frac{Q_x}{l_x}$	$E'_x = \frac{Y_x}{Q_x}$	$x + E'_x$	$x + E_x$	$x + 2E'_x$	x
	Years.	Years.	Years.	Years.	Years.	
50	20·75	13·11	63·11	70·75	76·22	50
51	20·09	12·75	63·75	71·09	76·50	51
52	19·42	12·38	64 38	71·42	76·76	52
53	18·75	12·02	65·02	71·75	77·04	53
54	18·08	11·66	65·66	72·08	77·32	54
55	17·43	11·31	66·31	72·43	77·62	55
56	16·79	10·96	66·96	72·79	77·92	56
57	16·17	10·62	67·62	73·17	78·24	57
58	15·55	10·28	68·28	73·55	78·56	58
59	14·94	9·94	68·94	73·94	78·88	59
60	14·34	9·61	69·61	74·34	79·22	60
61	13·75	9·28	70·28	74·75	79·56	61
62	13·17	8·96	70·96	75·17	79·92	62
63	12·60	8·64	71·64	75·60	80·28	63
64	12·05	8·33	72·33	76·05	80·66	64
65	11·51	8·02	73·02	76·51	81·04	65
66	10·98	7·72	73·72	76·98	81·44	66
67	10·47	7·42	74·42	77·47	81·84	67
68	9·97	7·14	75·14	77·97	82·28	68
69	9·48	6·86	75·86	78·48	82·72	69
70	9·02	6·58	76·58	79·02	83·16	70
71	8·57	6·32	77·32	79·57	83·64	71
72	8·13	6·06	78·06	80·13	84·12	72
73	7·71	5·80	78·80	80·71	84·60	73
74	7·31	5·56	79·56	81·31	85·12	74
75	6·93	5·32	80·32	81·93	85·64	75
76	6·56	5·09	81·09	82·56	86·18	76
77	6·21	4·87	81·87	83·21	86·74	77
78	5·88	4·66	82·66	83·88	87·32	78
79	5·56	4·45	83·45	84·56	87·90	79
80	5·26	4·25	84·25	85·26	88·50	80
81	4·98	4·06	85·06	85·98	89·12	81
82	4·71	3·88	85·88	86·71	89·76	82
83	4·45	3·70	86·70	87·45	90·40	83
84	4·21	3·53	87·53	88·21	91·06	84
85	3·98	3·37	88·37	88·98	91·74	85
86	3·76	3·22	89·22	89·76	92·44	86
87	3·56	3·07	90·07	90·56	93·14	87
88	3·36	2·93	90·93	91·36	93·86	88
89	3·18	2·79	91·79	92·18	94·58	89
90	3·01	2·66	92·66	93·01	95·32	90
91	2·85	2·54	93·54	93·85	96·08	91
92	2·70	2·43	94·43	94·70	96·86	92
93	2·55	2·32	95·32	95·55	97·64	93
94	2·42	2·21	96·21	96·42	98·42	94
95	2·29	2·11	97·11	97·29	99·22	95
96	2·17	2·02	98·02	98·17	100·04	96
97	2·06	1·93	98·93	99·06	100·86	97
98	1·96	1·84	99·84	99·96	101·68	98
99	1·86	1·76	100·76	100·86	102·52	99
100	1·76	1·69	101·69	101·76	103·38	100