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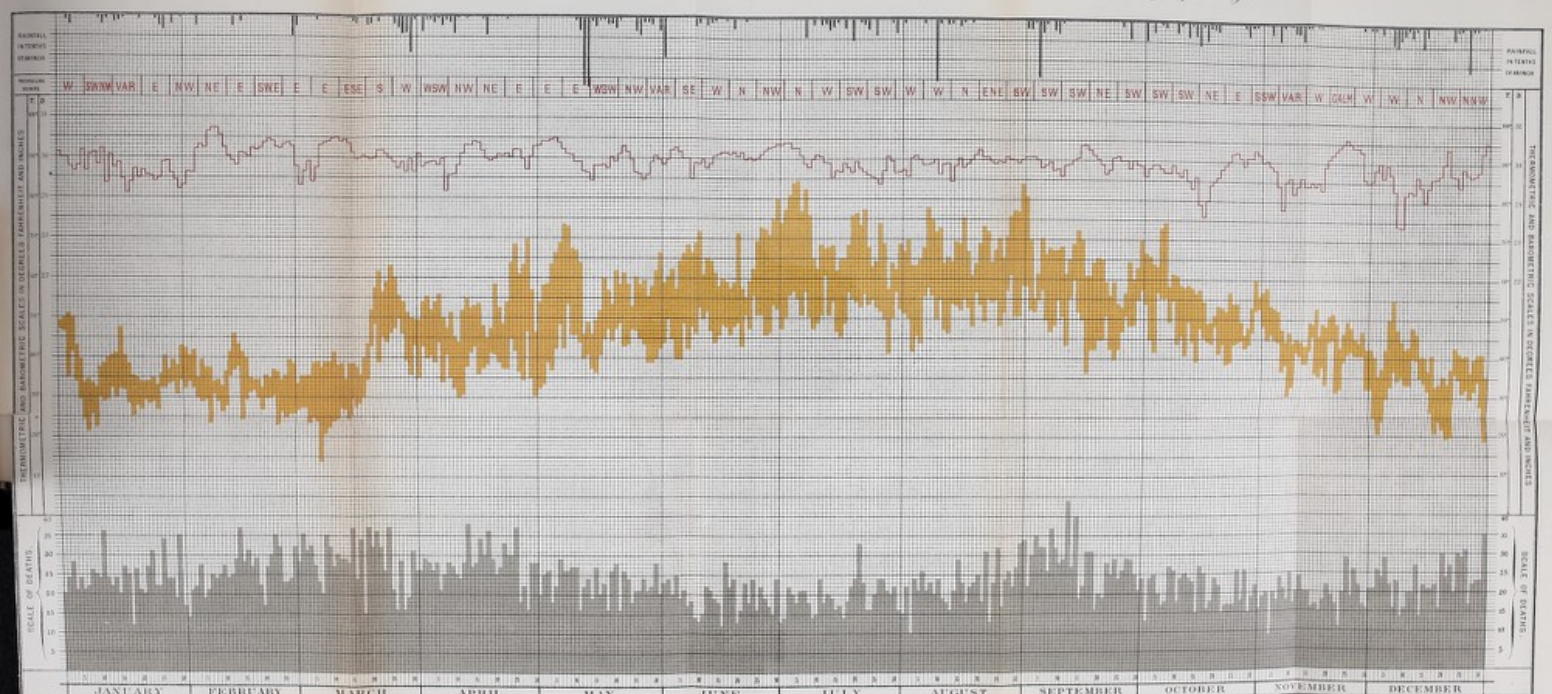
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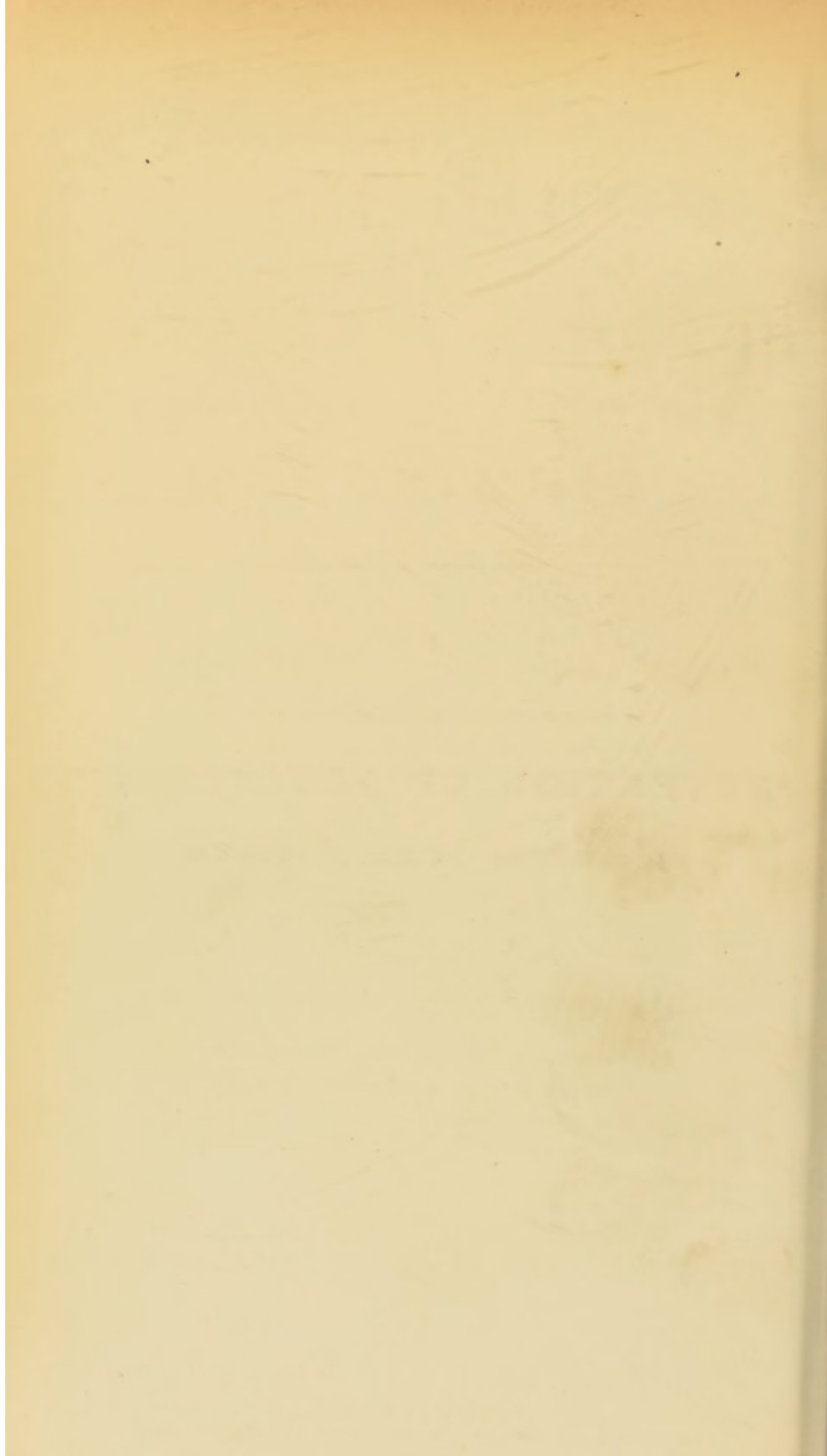
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Borough of Birmingham.

Chart illustrating the relations of the number of deaths to the principal meteorological conditions on each day of the year 1886.



MORTALITY: Deaths | METEOROLOGY: Temperature (maximum and minimum) — BAROMETRIC PRESSURE (corrected and reduced to 32° Fahrenheit and sea level) — RAINFALL.



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REPORT
ON THE
HEALTH OF THE BOROUGH
OF
BIRMINGHAM,
FOR THE YEAR 1886,

ALSO,

ON THE PROCEEDINGS TAKEN UNDER THE ACT FOR THE
PREVENTION OF ADULTERATION
OF ARTICLES OF FOOD AND DRINK,

BY
ALFRED HILL, M.D., F.I.C.,

President of the Society of Medical Officers of Health;

Ex-President of the Society of Public Analysts;

Medical Officer of Health and Analyst to the Borough.

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HEALTH DEPARTMENT,

THE COUNCIL HOUSE,

April 26th, 1887

TO THE HEALTH COMMITTEE.

MR. CHAIRMAN AND GENTLEMEN,

I have the honour of presenting to you for the fourteenth time my Annual Report on the Health of the Borough, and the satisfaction of pointing out that the greatly improved state of the public health, which has been gradually brought about by the sanitary work of the last fourteen years, has been very nearly maintained during the year 1886.

Introductory
Remarks.

In the year 1873 the Death-rate was 24·8 in the 1,000 ; in 1874 it rose to 26·8, since which time it has been more or less regularly declining until in 1885 it reached its lowest point of 19·1 per 1,000. Last year there was a rise of nearly a half of one per 1,000, raising the Death-rate to just below 19·6. This is a lower figure, however, than has been attained in any previous year except the one immediately preceding.

The fractional rise in the mortality is due to the slightly increased severity of the usual Diarrhœa visitation, and is solely attributable to the summer of 1886 being hotter than that of 1885.

The increase in the Death-rate of Diarrhœa is 0·9, but as the rise of the total Death-rate is only 0·5, it is seen that the mortality from all other causes than Diarrhœa is less than in the previous year.

I. VITAL STATISTICS.

The Population of the Borough is estimated by the Registrar-General to have been at the middle of the year 1886, 434,381, or 6,612 more than at the corresponding period of the previous year.

Population.

Natural
increase.

The natural increase of population, *i.e.*, the excess of births over deaths was 5,783, equivalent to 1.33 per cent., against a percentage of 1.46 last year, and of 1.41 in 1884. Of the only other agent affecting the movement of the population—migration to and from the town—nothing definite is known.

The decline in the natural increase arises from the two causes of a slightly higher death-rate, and a further continued reduction in the birth-rate. It is worthy of note, too, that this actual increase of population continues below that of the Registrar-General's estimate; this circumstance strengthens the conjecture hazarded in my last and other recent Reports that the population of the Borough has for several years been over-estimated, and that recent birth-, death-, and marriage rates have in consequence been set down at somewhat too low a figure.

Area.
Density.

The area of the Borough remains at 8,400 acres; the density of its population continues, therefore, to increase. It is now 51.7 persons per acre, against 50.9 last year, and only 42.4 in my first year of office, 1873.

Comparative
statement of
Death-rate, &c.,
in certain large
towns.

In the subjoined statement will be found the estimated population, the density, and the death-rate from all causes in most of the principal British towns during 1886:—

Population, Density, and Death-rate of certain Towns.	Estimated Population, 1886.	No. of Persons per Acre.	Death-rate.
London	4,149,533	55.1	19.9
Liverpool	586,320	112.5	23.8
Birmingham ...	434,381	51.7	19.6
Manchester	376,895	63.6	26.3
Sheffield	310,957	15.8	19.8
Leeds	339,057	15.7	21.9
Salford	211,241	40.9	22.1
Newcastle-on-Tyne	155,117	28.9	22.2
Norwich	92,028	12.3	23.3
Bristol	220,915	47.7	19.3
Glasgow	521,999	85.4	25.1
Dublin	353,082	14.3	26.9

Elevation.

The elevation of the Borough, or its height above the mean sea level, ranges between 310 feet at its lowest point, Nechells, and 600 feet at its highest point, the top of the Hagley Road.

This elevated position cannot fail to be an advantage to the public health, inasmuch as it favours a freer circulation of the atmosphere than would be enjoyed if the town were in a valley and more or less surrounded by hills. This natural elevation is especially valuable in a manufacturing town like Birmingham.

Elevation
(continued).

The surface soil is also, as I have mentioned in former Reports, generally of a porous nature, and this, combined with the sloping surfaces for which the Borough is notorious, conduces to that dryness of soil which is universally regarded to be of the highest hygienic importance.

Geological
position.

MARRIAGES.

From returns kindly furnished me by Mr. W. Cooper, Superintendent Registrar of the Parish of Birmingham, and Mr. Hastings and Mr. E. Docker, who hold similar offices for the Parishes of Aston and King's Norton respectively, I find that the number of Marriages in the Borough during the year was 3,462, as compared with 3,276 in 1885 and 3,435 in 1884; this year's figure compares therefore favourably with that of the two previous years, but owing to the increase in the population of the Borough during that period, while the Marriage-rate is, as will be seen from the statement below, above that of the preceding year, it is below that of 1884.

Marriages.

The number of Marriages and the Marriage-rate of the Borough in each of the last ten years have been as follows:—

Marriage-rate.

	Year 1877	1878	1879	1880	1881	1882	1883	1884	1885	1886
No. of Marriages	3,693	3,245	3,046	3,215	3,261	3,581	3,634	3,435	3,276	3,462
Rate per 1,000 of the Population	19.5	16.7	15.7	16.3	16.2	17.5	17.5	16.3	15.3	15.9

The

BIRTHS

registered during the year numbered 14,282; this is a lower number than in any year in my records, and compares with 14,383 in 1885, 14,991 in 1884, 14,701 in 1883, and 15,272, the average of the ten years, 1873—1882, both inclusive. This decided fall in the actual number of births becomes the more remarkable when we take into consideration the fact that since 1873 the population of the Borough has increased by upwards of 78,000, so that if the birth-rate of the year under review had been equal to that of 1873, 3,440 more children would have been born during the past twelve months than was actually the case.

Births.

Of the births registered during the year 7,271 were those of males, and 7,011 those of females.

Births in each
quarter since
1873.

The numbers of Births of each sex recorded in the Borough in each quarter of every year since 1873, inclusive, and the Birth-rate for each year are set forth in the following statement:—

	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Total.	Birth-rate.
1873.						
Total ...	3,741	3,564	3,378	3,814	14,497	40.78
Males ...	1,892	1,783	1,715	1,950	7,340	
Females ...	1,849	1,781	1,663	1,864	7,157	
1874.						
Total ...	3,814	3,871	3,493	3,710	14,888	41.25
Males ...	1,953	1,961	1,753	1,853	7,520	
Females ...	1,861	1,910	1,740	1,857	7,368	
1875.						
Total ...	3,787	3,737	3,581	3,757	14,862	40.57
Males ...	1,929	1,884	1,815	1,904	7,532	
Females ...	1,857	1,853	1,766	1,853	7,329	
Sexless ...	1	—	—	—	1	
1876.						
Total ...	4,140	3,924	3,803	3,949	15,816	42.53
Males ...	2,045	1,996	1,959	2,028	8,028	
Females ...	2,095	1,928	1,844	1,921	7,788	
1877.						
Total ...	4,296	4,009	3,769	3,927	16,001	42.39
Males ...	2,139	2,015	1,878	2,037	8,069	
Females ...	2,157	1,994	1,891	1,890	7,932	
1878.						
Total ...	4,139	4,096	3,849	3,880	15,964	41.67
Males ...	2,160	2,051	1,962	1,982	8,155	
Females ...	1,979	2,045	1,887	1,898	7,809	
1879.						
Total ...	4,124	3,912	3,723	4,087	15,846	39.98
Males ...	2,086	1,992	1,878	2,096	8,052	
Females ...	2,038	1,920	1,845	1,991	7,794	
1880.						
Total ...	3,964	4,104	3,572	3,471	15,111	38.28
Males ...	2,023	2,100	1,762	1,802	7,687	
Females ...	1,941	2,004	1,810	1,669	7,424	
1881.						
Total ...	3,965	3,754	3,550	3,590	14,869	36.96
Males ...	1,991	1,893	1,804	1,822	7,510	
Females ...	1,974	1,861	1,756	1,768	7,359	
1882.						
Total ...	3,968	3,760	3,478	3,660	14,866	36.39
Males ...	2,010	1,922	1,784	1,903	7,619	
Females ...	1,958	1,838	1,694	1,757	7,247	
1883.						
Total ...	3,975	3,814	3,460	3,452	14,701	35.44
Males ...	1,969	1,934	1,708	1,740	7,351	
Females ...	2,006	1,880	1,752	1,712	7,350	
1884.						
Total ...	3,765	3,817	3,557	3,852	14,991	34.91
Males ...	1,910	1,928	1,889	1,962	7,689	
Females ...	1,855	1,889	1,668	1,890	7,302	
1885.						
Total ...	3,776	3,528	3,550	3,529	14,383	33.62
Males ...	1,928	1,768	1,775	1,828	7,299	
Females ...	1,848	1,760	1,775	1,701	7,084	
1886.						
Total ...	3,697	3,623	3,524	3,438	14,282	32.88
Males ...	1,868	1,842	1,794	1,767	7,271	
Females ...	1,829	1,781	1,730	1,671	7,011	

The fall in the Birth-rate, which is common, though to a smaller extent, to the whole of England and Wales, proceeds unchecked, and has now gone on to a remarkably low point, for it amounts to no less than 23 per cent. on the figure for 1876.

The following are the birth-rates of the principal large English towns during the past year :—

28 large Towns.	London	L'pool	Birm.	Manch.	Leeds	Sheff'd	Salf'd	N'castle	N'wich	Bristol
33.2	32.3	33.5	32.9	36.3	33.9	34.1	34.4	39.5	34.7	30.5

It will be noticed that our birth-rate has fallen below that of the twenty-eight large towns, and is now lower than that of any town in the above list with the exception of London and Bristol. There can be no doubt that the most important factor in the very low birth-rates of the great majority of the large towns, and of the country as a whole, is the abnormally low marriage-rate obtaining of late years; this latter feature is, without question, the consequence of the prolonged and universal depression in commerce and agriculture.

VACCINATION.

The returns for the Parish of Birmingham, for which I am indebted to Messrs. Rust, Blanche, and Knight, Vaccination Officers, show that of 8,496 births registered in that portion of the Borough during the year which ended on the 30th of June last, 7,109, or 83.7 per cent. were successfully vaccinated; while 898, or 10.6 per cent. died before vaccination was performed, and the vaccination of 109 others, or 1.3 per cent. was postponed on production of a medical certificate stating that their health was not sufficiently good to justify the operation, or that they were insusceptible of vaccination. Two hundred and twenty-two children were removed to places unknown to the Vaccination Officers, and it is highly probable that in the majority of cases these have escaped vaccination altogether, and so remain unprotected from attacks of Small Pox. The children, to the number of 158, not thus accounted for had either been removed to other districts and brought under the knowledge of other Vaccination Officers, or no satisfactory account could be given of them at the time of the making of the return.

In that portion of the Parish of Aston within the Borough the births of 5,516 children were recorded by the local Registrars in the same period of time; of these 4,530, or 82.1 per cent. were vaccinated with success, 593, or 10.8 per cent. died unvaccinated, and 84, or 1.5 per cent. were unfit for or insusceptible of vaccination; the proportion who escaped vaccination by removing from the district, or to other parts of it without the

cognisance of the local authority is 3·7. The percentage of children not accounted for in these ways is 1·9.

In Edgbaston.

The figures for the Parish of Edgbaston, kindly supplied by Mr. T. Johnson, Vaccination Officer, indicate that of 442 children born in this district, 385, or 87·1 per cent. were successfully vaccinated, while only 5, or 1·1 per cent. could not be satisfactorily accounted for. The others either died before vaccination could well be performed, or their successful vaccination was deferred on account of ill-health or insusceptibility, or they had been removed to other districts, the Vaccination Officers of which had been duly made aware of the fact.

Table of comparison of facts.

The facts I have drawn attention to will be more easily seen and compared with those for the six preceding years by a reference to the Table below :—

PARISH.	Year.	Vaccinated.	Died before Vaccination.	Removed to places unknown.	Unfit, insusceptible, or otherwise.
Birmingham	1880	86·2	9·7	3·0	1·1
	1881	87·3	9·6	1·7	1·4
	1882	88·9	9·2	1·0	0·9
	1883	87·1	10·2	1·3	1·4
	1884	87·2	9·7	1·4	1·7
	1885	84·1	11·2	2·1	2·6
	1886	83·7	10·6	2·6	3·1
Aston (Borough portion)	1880	81·3	9·3	6·4	3·0
	1881	83·2	10·3	5·5	1·0
	1882	81·8	9·3	6·4	2·5
	1883	82·4	9·5	5·2	2·9
	1884	82·4	11·4	3·7	2·5
	1885	82·5	11·1	3·3	3·1
	1886	82·1	10·8	3·7	3·4
Edgbaston	1880	82·6	8·2	1·8	7·4
	1881	81·3	8·2	3·2	7·3
	1882	86·1	7·3	3·6	3·0
	1883	91·1	6·7	0·9	1·3
	1884	89·2	7·5	1·1	2·2
	1885	89·0	8·4	0·7	1·9
	1886	87·1	7·9	0·9	4·1

It is somewhat unsatisfactory to find that the percentage of those lost sight of on account of removal from the place where the parents lived at the time of the Registration of Birth, or unaccounted for at the time the return was made, should be higher than in recent years both in Birmingham and Aston Parishes. Vaccination
(continued).

The figures for Edgbaston continue to exhibit, however, much the same satisfactory features which they have done for several years past.

The returns it will have been noticed do not coincide with the Registration year, but are made up to Midsummer; this course is rendered unavoidable from the fact that it is quite impossible to account for the vaccination of children till they are three months old, the limit of age to which vaccination may be legally deferred. As, too, some children are not vaccinated exactly within this limit of time, it becomes necessary to keep the records open till the expiration of six months from the time of registration.

DEATHS.

The Deaths registered during 1886 numbered 8,499, and were those of 4,406 males and 4,093 females; in the previous year only 8,156 deaths were recorded. This year's number is, however, considerably lower than the average number of the ten preceding years, viz., 8,604, and the comparison is rendered all the more satisfactory by taking into account the fact that this large reduction has occurred in spite of the great increase in the population of the Borough during the last ten years. Deaths.

The Death-rate of the year under review is 19·57, as compared with rates of 21·01, 21·06 and 19·07 in the years 1883, 4, and 5 respectively, and 23·2 (or 3·6 per 1,000 higher), the average rate of the preceding twenty-one years, the period over which records of the Borough Death-rate extend. Death-rate.

It is therefore once more my pleasurable duty to point out that the past year, like each of its seven predecessors, adds another to the series of those which claim, compared with the previous ten years, or the period since the passing of the Public Health Act of 1875, a large saving of life. Though the saving effected in the year under review is somewhat smaller than that of the previous year, it is nevertheless very considerable, for I find that if the average Death-rate of the preceding ten years had been maintained during the past year, the deaths would have numbered 840 more than they actually did; calculated on this principle the saving of life in the previous year was 1,340. If, however, last year's Death-rate had equalled that observed on an average in the three years prior to the introduction of the Public Health Act of 1875, then last year's mortality would have been 11,294 instead of 8,499, or 2,795 more. Saving of Life.

Deaths
(continued).

Last year's mortality was at such a rate that of 51·1 persons living one died during that period; the proportion which those who died during the year bear to the total population is somewhat greater than in the previous year, when it was 52·4.

Mortality in
Institutions.

The Death-rate of the several Institutions, exclusive of the Workhouse, is 1·5; inclusive of that Institution it is 2·8 per 1,000 of the population of the Borough.

Discrepancy
between
Registrar-
General's and
own figures.

It is well to remark that the Deaths and Death-rate recorded by me do not coincide exactly with those given by the Registrar-General in his Reports. The discrepancy arises from the fact that the Registrar-General includes in his figures the deaths of persons in the Erdington and King's Norton Workhouses who, prior to their removal there, were living in those portions of the Borough within the Parishes of Aston and Edgbaston respectively.

I do not feel justified in following this method, inasmuch as the Registrar-General's figures take no account of the deaths of persons in our numerous Institutions who come from outside districts and who, doubtless, more than cancel the effect of excluding from our statistics of mortality the records of those whose home is in the Borough, but who have died in Institutions outside it.

The subjoined statement contains an estimate of the total population, and of its density, the gross numbers of Births and Deaths, and the Birth- and Death-rates for each year since 1865, inclusive:—

Year.	Population Estimated in the middle of each year.	Density. Persons per acre.	Births.	Deaths.	Annual Rate per 1,000 living.	
					Births.	Deaths.
1865	(The Estimate of Population in these years is not to be relied on.)	—	12,699	8,014	38·9	24·5
1866		—	12,877	8,042	38·5	24·0
1867		—	13,029	8,318	38·0	25·6
1868		—	12,992	8,548	36·3	25·9
1869		—	12,779	7,737	35·5	23·1
1870		—	12,922	7,805	35·0	23·0
1871	344,980	41·1	13,443	8,594	39·0	24·9
1872	350,164	41·7	14,123	8,048	40·5	23·1
1873	355,540	42·4	14,497	8,990	40·8	24·8
1874	360,892	43·0	14,888	9,665	41·2	26·8
1875	366,325	43·6	14,862	9,668	40·6	26·3
1876	371,839	44·3	15,816	8,330	42·5	22·4
1877	377,436	44·9	16,001	9,038	42·4	23·9
1878	383,117	45·6	15,964	9,662	41·7	25·2
1879	388,884	46·3	15,846	8,650	40·0	21·8
1880	394,738	47·0	15,111	8,088	38·3	20·5
1881	402,296	47·9	14,869	7,938	37·0	19·7
1882	408,532	48·6	14,866	8,425	36·4	20·6
1883	414,846	49·4	14,701	8,714	35·4	21·0
1884	421,258	50·1	14,991	9,043	34·9	21·1
1885	427,769	50·9	14,383	8,156	33·6	19·1
1886	434,381	51·7	14,282	8,499	32·9	19·6

The last column but one reveals a general advance in the Birth-rate till 1876, and a still more pronounced and continuous decline ever since; it will also be noticed that whilst up till 1880 the Death-rate never once fell in any year below 20 per 1,000 persons, it has since been below that figure on three occasions, notwithstanding the increased density of population recorded in the third column.

Deaths
(continued).

A comparison of our Death-rate with those of other large towns with which it is fairly comparable, for each of the last fourteen years is afforded by the following statement:—

Comparative
Death-rate of
Birmingham
and large towns.

	Twenty large English Towns.	London	L'pool	BIRM.	Manch.	Leeds	Sheff'd	Salford	Newcastle	Norw'ch	Bristol
1886...	20.7...	19.9	23.8	19.6	26.3	21.9	19.8	22.1	22.2	23.3	19.3
1885...	20.4...	19.6	23.7	19.1	26.4	19.9	20.6	21.0	26.0	20.2	19.6
1884...	21.4...	20.3	25.1	21.1	26.3	24.1	22.3	22.2	23.0	21.1	18.3
1883...	21.7...	20.4	26.6	21.0	27.6	23.2	22.9	22.3	25.4	19.6	17.8
1882...	22.6...	21.4	26.5	20.6	26.8	23.2	21.7	23.2	23.1	20.6	19.2
1881...	21.7...	21.2	26.7	19.7	25.5	21.6	21.1	22.6	21.8	19.5	19.6
1880...	22.6...	22.2	27.3	20.5	25.4	21.0	21.1	25.9	22.0	24.7	20.1
1879...	23.2...	23.3	27.1	21.8	26.9	22.6	21.3	24.9	23.6	22.0	21.1
1878...	24.4...	23.5	29.4	25.2	27.9	23.8	25.0	25.6	23.8	24.6	21.4
1877...	22.8...	21.9	26.5	23.9	27.4	22.3	21.9	25.1	22.4	21.0	21.8
1876...	23.6...	22.3	27.6	22.4	29.2	25.1	24.3	31.9	22.8	21.9	22.6
1875...	25.4...	23.7	27.5	26.3	29.9	26.4	24.8	31.5	26.1	24.5	26.8
1874...	25.4...	22.5	32.0	26.8	30.4	28.7	26.9	29.6	29.2	23.5	22.7
1873...	24.4...	22.5	25.9	24.8	30.1	27.6	25.8	29.3	30.1	21.5	23.1

The proud position which Birmingham occupied in this list of towns in 1885, when it had the lowest Death-rate of all, has not been maintained during the past year. Bristol now occupies the first position and Birmingham the second. Taking everything into consideration, it is highly satisfactory to find that the Death-rate of our town compares so favourably with that of nearly every other. It will be seen that it is 1.1 per 1,000 below the average of the twenty large English towns, and no less than 6.7 below that of Manchester, which continues to have a very high rate of mortality. The slight rise observable in our Death-rate is common to that of the average of the twenty large towns, to that of London, and to that of the whole of England and Wales, which was 19.3.

The number of Deaths, distinguishing sex, and the Death-rate for each quarter of the year, together with the totals for the year, and for the four preceding years, are stated below:—

	1st Quar.	2nd Quar.	3rd Quar.	4th Quar.	Total 1886.	Total 1885.	Total 1884.	Total 1883.	Total 1882.
Total ...	2,397	2,086	2,127	1,889	8,499	8,156	9,043	8,714	8,425
Males ...	1,230	1,092	1,128	956	4,406	4,314	4,797	4,536	4,337
Females ...	1,167	994	999	933	4,093	3,842	4,246	4,178	4,088
Death-rate	22.07	19.21	19.59	17.39	19.57	19.07	21.06	21.01	20.62

Deaths
(continued).

The Death-rate of the first quarter of the year was a more than usually high one, viz. 22·07 per 1,000, against rates of 21·69 and 19·89 in the first quarters of 1885 and 1884 respectively. The rate for the latter period was, it should be said, a remarkably low one for this time of the year. The rate of mortality of the second quarter was nearly identical with that of the corresponding portion of the previous year, while that of the third quarter was 2·5 per 1,000 higher than the unprecedently low rate in the Summer quarter of 1885. The Death-rate of the last quarter of the year corresponded very nearly with the almost equally low rate observed in the Autumn quarter of the previous year.

Chief movements in the Death-rate during the year.

It will be gathered from these remarks that the differences in the rates of the several quarters of the last two years are practically confined to the third quarter, and a study of the meteorology of the past two summer quarters clearly shows that this variation is referable to climatic influences. There can be no doubt, too, that the high Death-rate of the first quarter of the year, which was only a repetition of that of the winter quarter of the previous year, had its source in the protracted spell of severe weather which lasted till the middle of March, while the very low rate of the fourth quarter of the year is doubtless the consequence of the genial weather which ruled till the commencement of December.

Connection between health and climatic conditions.

In order to show more fully the marked influences exerted by the varying characters of the weather during the year, in so far at least as they are calculated to affect the Death-rate, the various important atmospheric changes may be thus shortly summarised.

The year opened with mild weather, but this continued for only a few days, for from the 5th of January till the 19th of March the weather was almost uninterruptedly of a severe character, while during the first fortnight of the last-named month, bitterly cold easterly winds of considerable force blew without intermission. The weather of April and May was changeable but generally cold, and that of June unseasonable, but the temperature was not sufficiently low to exert any appreciably injurious effect on the public health. From the end of June to December, however, the temperature was generally above the average, frequent spells of fine, warm, and not infrequently hot weather being experienced. The result was unfavourable to the total Death-rate, on account of the great stimulus the high temperature gave to bowel disorders. The temperature of October and November, though comparatively high, was not sufficiently so to occasion bowel complaints to any serious extent, while it was highly favourable to those suffering in any way from diseases of the chest, which were, for the time of the year, fatal to an unusually slight

degree. Severe weather set in again in December, and was maintained during the greater portion of the month, but its influence on the Death-rate was apparently not so great as one might have expected, though some of it doubtless was not perceptible till after the end of the year.

The distribution of the deaths among each of the eight Registration Sub-Districts during each quarter of the past year and during that and the three preceding years, as well as the Death-rate of each sub-district during the year under review are given in the following statement :—

Distribution of
deaths among
Registration
Sub-Districts.

	1st Quar.	2nd Quar.	3rd Quar.	4th Quar.	Total Deaths 1886.	Total Deaths 1885.	Total Deaths 1884.	Total Deaths 1883.	Death- rate 1886.
Ladywood (H.)	269	253	266	249	1,037	967	1,088	1,004	18.5
St. Thomas (H.)	197	184	178	185	744	776	907	828	19.5
St. Martin ...	189	185	199	174	747	809	870	812	18.3
St. George (H.)	478	378	391	328	1,575	1,449	1,606	1,548	24.6
All Saints (W.; L.;									
G.; B.H.) ...	451	432	357	284	1,524	1,441	1,654	1,682	28.4
Deritend ...	420	333	400	357	1,510	1,396	1,469	1,408	15.9
Duddeston ...	324	246	280	239	1,089	1,045	1,166	1,186	17.9
Edgbaston ...	69	75	56	73	273	273	283	246	10.6

A comparison of the figures for the last two years shows that rather considerably more deaths have occurred in the Registration Sub-Districts of All Saints, Saint George, and Deritend than in the previous year, while in those of Saint Thomas and Saint Martin the number of deaths has undergone a reduction; the number in the Edgbaston Sub-District is identical with that of the previous year.

Appended to the actual figures of mortality will be found, as usual, the Death-rates of the several Registration Sub-Districts; in order to calculate these it has been found necessary to adopt the only course available, viz., to proceed on the supposition that the rate of movement of the population of each District which prevailed between 1871 and 1881 has been in progress since the latter date. As, however, there are ample reasons for thinking that in several of these Districts, notably in that of Saint Thomas, this has not taken place, it will not be well to place too much reliance on even the approximate accuracy of some, at least, of the above death-rates.

In comparing the death-rates of the several Registration Sub-Districts one with another, allowance should be made in several of the districts for the occurrence in them of deaths in

Cause of death-
rates of certain
Sub-Districts
appearing too
high.

Deaths
(continued).

Public Institutions situated within their area, indicated by letters placed against their names, (H) signifying hospital, (W) workhouse, (L) lunatic asylum, and (G) gaol.

As the persons who die in these institutions come from every district in the town, it is manifestly improper for purposes of comparison to allot all such deaths to the district in which such institution or institutions may be placed. As, however, I have hitherto been unable to obtain the information necessary to allocate the deaths registered in these institutions, and belonging to the Borough, to the districts in which they would probably have occurred, if they had not been removed from their homes, I have no alternative except to eliminate all such deaths from the calculations necessary for comparing the total death-rate of one district with another. Thus, by disregarding the deaths in the Children's Hospital, the death-rate of Ladywood Sub-District is brought down from 18.5 to 16.7, and by similarly treating the deaths in the Queen's and General Hospitals, the death-rates of the Sub-Districts of Saint Thomas and Saint George stand respectively at 15.1 and 20.0, instead of at 19.5 and 24.6 if no such allowance be made.

On reference to the preceding Table it will be noticed that the Death-rate of All Saints sub-district is made to appear unusually high. This results from the circumstance that the Workhouse, Asylum, Borough Hospital, and Gaol are all situated within it. If the deaths in these institutions be subtracted, the Death-rate is reduced from 28.4 to only 16.2.

The plan I have just adopted is open however to one objection, and that consists in the fact that it takes no account of the circumstance, that at the taking of the Census the population of each Institution was included in the Sub-District in which it is situated, so that to the above Death-rates ought also to be added the normal Death-rate of the average number of persons residing during the year in these Institutions.

The error created by this means is not at all a serious one, except in the case of the All Saints Sub-District, where at the last Census there were found to be nearly 4,000 persons who were inmates of the various Institutions in that area. The apparently low Death-rate of All Saints' stands therefore in need of further correction, which however it is impossible to make with accuracy.

Distribution of
Deaths among
the Wards.

The numbers of Deaths in each of the sixteen Wards of the Borough in each Quarter of the year, the whole year, and the three preceding years, are as follows :—

	1st Quar.	2nd Quar.	3rd Quar.	4th Quar.	Total 1886.	Total 1885.	Total 1884.	Total 1883.	Deaths (continued).
Rotton Park (W., B.H.) ...	338	327	265	212	1,142	1,097	1,211	1,315	
All Saints (L.) ...	159	186	147	140	632	512	669	561	
Ladywood (H.) ...	157	132	154	136	579	547	605	539	
St. Paul ...	93	75	88	77	333	342	410	357	
St. George ...	146	113	85	83	427	399	460	585	
St. Stephen ...	144	97	132	100	473	435	532	330	
St. Mary (H.) ...	190	174	179	137	680	684	682	739	
St. Bartholomew ...	149	139	142	124	554	558	507	596	
Market Hall ...	80	56	60	45	241	271	278	243	
St. Thomas ...	141	133	127	139	540	560	653	590	
St. Martin ...	96	87	105	88	376	403	469	361	
Edgbaston ...	76	89	68	86	319	317	318	313	
Deritend ...	143	124	148	145	560	463	521	551	
Bordesley ...	199	138	181	158	676	667	697	593	
Duddeston ...	119	95	110	96	420	408	466	499	
Nechells ...	167	121	136	123	547	493	565	542	

As I possess no accurate knowledge of the population of each Ward, the above figures are of very little value, as without such knowledge it is impossible to state the Death-rate of each Ward, or to compare their respective conditions of health, as judged by the mortality at all ages and from all diseases. It will be seen, however, on comparing this year's totals with those of last, that the number of Deaths has fallen somewhat in the Wards of Saint Paul, Saint Mary, Saint Bartholomew, Market Hall, Saint Thomas, and Saint Martin, but risen in each of the other Wards, notably in those of All Saints and Deritend.

The Deaths have been distributed among the under-stated ætal periods during each quarter of the past year, and during that and the three previous years as follows :—

	1st Quar.	2nd Quar.	3rd Quar.	4th Quar.	Total 1886.	Total 1885.	Total 1884.	Total 1883.
Under 1 year of age ...	574	535	879	527	2,515	2,253	2,611	2,338
Between 1 and 5 years	391	437	304	302	1,434	1,155	1,704	1,480
" 5 " 20 "	152	110	120	132	514	477	578	688
" 20 " 40 "	263	219	222	226	930	1,053	1,081	1,115
" 40 " 60 "	445	356	283	323	1,407	1,510	1,472	1,389
At 60 years and upwards	572	429	319	379	1,699	1,708	1,597	1,704

The relative distribution of the Deaths among the several periods of life during the last two years presents a rather strong contrast, the feature of this year's figures being the rather large amount of infantile mortality, while in the previous year the Deaths of young people were unprecedentedly few, and those of elderly persons more numerous than usual. As a matter of fact the Deaths are numerically greater this year than last at each ætal period up to 20 years of age, while they are fewer in number at all the higher ages. The increase is greatest, 24 per cent., in children between 1 and 5 years of age, while the greatest reduction is shown between the ages of 20

Deaths at
certain setal
periods

(continued).

and 40, at which period of life it will be noticed the Deaths have steadily declined from upwards of eleven hundred in 1883 to only 930 in the past year.

The large increase in the mortality of infants under one year, and the major part of that in children between 1 and 5 years of age is referable to Diarrhœa in the past autumn; some portion, however, of the increase in the Deaths between 1 and 5 years of age is the consequence of the exceptional fatality of Measles in the early part of the year. The diminution in the mortality of persons over 20 years of age is mainly attributable to a smaller mortality from Phthisis and from several Local diseases, more especially Bronchitis and Apoplexy. The number of Deaths under the indefinite term "Old Age" has also been somewhat below the high figure of the previous year.

Average age at
death.

The next statement shows the average age at Death during each quarter of the past two years:—

	1885.			1886.		
First Quarter ...	30	years and	7 months.	30	years and	6 months.
Second " ...	29	"	4 "	27	"	2 "
Third " ...	25	"	5 "	21	"	7 "
Fourth " ..	30	"	9 "	27	"	6 "
Whole Year ...	29	"	2 "	26	"	9 "

A glance at the above figures will bring to light the fact that the mean age at Death in each quarter of the past year has been below that of the corresponding period of the previous year, the average reduction for the year being so much as two years and five months. Owing to the severity of the weather and the consequent heavy mortality in the aged in the first quarter, the low Death-age of the victims of the exceptional mortality from Measles—a disease of course of childhood—which was then recorded, was virtually nullified, and the high mean age at Death of the first quarter of 1885 was practically maintained. In the second quarter the high mortality from Measles continued and, as no such counteracting influence as that of the first quarter was at work to any great extent, a considerable fall in the Death-age was the result. The very low mean age at Death in the third quarter is the consequence of an unusually heavy mortality which was then recorded from infantile Diarrhœa, particularly when compared with the corresponding period of the previous year, while the figures for the fourth quarter are rendered lower than they would have been by a comparatively small mortality in the aged, as a result of the diminished number of Deaths from many "Local" diseases, but particularly from Bronchial affections; the latter favourable circumstance is doubtless attributable to the exceptionally mild weather which prevailed during the greater part of the fourth quarter. It should be said, too, that the Death age of the fourth quarter of 1885, with which this year's figures are compared, was an unusually high one.

The weekly variations of the Death-age and the Death-rate are shown on a Chart at the end of the Report.

INFANT MORTALITY.

The Deaths of infants under one year of age number 2,515, and represent an annual rate of 17·6 per cent. of the registered Births. This rate is higher than the average percentage in Birmingham by 1·4, than that of last year by 1·9, and than that of England and Wales during 1886, which was 15·0, by 2·6. Calculated on my estimated number of infants under one year living in the Borough at the middle of 1886, it is equivalent to a rate of mortality of 189·6 per 1,000 of such lives, against 203·9 in 1884, and 170·2 in 1885.

The percentage of infant mortality on the Births registered in Birmingham and the principal large English towns during the last ten years is given in the subjoined Table :—

Twenty large English Towns.	London.	L'pool.	BIRM.	Manch.	Leeds.	Sheff'ld.	Salford.	N'castle.	Norw'h.	Bristol.	
1886...	16·8...	15·9	18·8	17·6	18·3	18·1	16·8	19·8	15·5	20·2	14·9
1885...	15·4...	14·8	17·4	15·7	17·5	15·5	16·4	17·4	17·2	13·5	15·2
1884...	16·7...	15·5	19·4	17·4	18·3	18·4	17·2	18·4	15·6	18·7	14·3
1883...	15·9...	14·6	18·6	15·9	17·7	16·7	16·3	17·1	16·7	15·1	13·4
1882...	16·1...	15·1	17·8	16·5	17·9	18·0	16·5	17·8	16·6	16·9	14·2
1881...	15·2...	14·8	17·3	15·0	16·1	16·7	15·5	16·3	15·3	14·7	12·5
1880...	17·0...	15·8	19·1	17·2	18·0	17·4	16·5	20·0	17·1	21·6	14·6
1879...	15·1...	14·8	16·3	15·0	16·5	16·1	15·3	17·0	14·5	15·9	14·5
1878...	17·2...	16·4	19·3	17·0	17·5	18·8	17·6	18·5	16·1	21·1	16·0
1877...	15·4...	14·6	18·8	16·4	16·1	16·5	16·1	16·1	15·1	15·4	15·4

The large proportion of children who failed to attain to one year of age is mainly the result of the more than usually high fatality of Diarrhoea, which invariably proves far more fatal to the very young than to persons at other ages; our rate, however, compares favourably with those of five towns in the above list.

The following is a statement of the percentage of Deaths under one year of age on the total Deaths in the chief English towns during the same period of time ;—

Infant Mortality.	Twenty large English Towns.	London.	L'pool.	BIRM.	Manch.	Leeds.	Sheffld.	Salford.	N'castle.	Norw'ch.	Bristol.
(continued).	1886... 26.7...	25.8	26.4	29.6	25.3	27.9	28.9	30.8	27.5	30.1	23.5
	1885... 25.1...	24.5	24.6	27.6	24.0	26.8	27.7	28.3	25.3	22.5	24.0
	1884... 26.8...	25.7	27.1	28.9	25.1	26.4	28.3	29.4	26.7	30.1	24.5
	1883... 25.6...	24.2	24.5	26.8	23.0	24.8	26.1	27.2	24.1	26.1	24.0
	1882... 25.6...	24.3	24.5	29.1	24.6	27.8	28.4	24.0	26.9	27.7	24.4
	1881... 24.9...	24.1	24.4	27.7	23.3	28.5	27.9	27.9	25.8	25.5	22.0
	1880... 26.8...	25.7	26.7	32.1	24.0	29.4	27.5	29.3	28.0	30.0	24.0
	1879... 23.9...	23.2	23.3	27.5	22.4	26.3	25.6	27.3	22.6	24.7	24.7
	1878... 26.5...	25.2	25.5	28.6	24.0	31.0	26.5	30.5	25.8	28.7	26.4
	1877... 25.5...	24.1	27.5	29.1	22.6	29.7	25.5	27.1	26.6	24.7	25.4

On comparing this year's percentage with those of previous years it will be seen that it is necessary to go back as far as 1880 to find so high a proportion of infantile on total mortality in the Borough. Our rate compares unfavourably too, as in all previous years in my records, with the average of the twenty large English towns, while only two towns in the list, viz., Salford and Norwich, have higher rates than our own. It should be said, however, that Birmingham suffers from Diarrhoea more than any of the large towns, with one or two exceptions, and the unsatisfactory position it occupies in this one respect is almost entirely attributable to this fact.

Deaths under
five years.

The number of Deaths under five years of age is 3,949, as compared with 3,408 in 1885, 4,315 in 1884, and 4,087, the average number in the previous ten years.

The percentage on total Deaths is 46.5, against only 41.8 in 1885, and 47.6, the average percentage of the preceding ten years.

The mortality in children under five years to the Deaths at all ages bears a much more satisfactory ratio, in comparison with previous years, than does the proportion of mortality in infants under one. Though much higher than last year, this year's percentage is in fact with that exception and also that of 1883, a lower one than any others in my records. This comparatively satisfactory result would not have been attained if the mortality from several of the zymotics, notably from Scarlet Fever and Whooping Cough, had not been exceptionally small.

It is highly regrettable, however, to find that the mortality under five years of age bore last year such a ratio to the number of children born during the year that no fewer than 27.7 per cent. or more than one-fourth failed to live to five years of age, and still more so when one cannot shut one's eyes to the fact that no small proportion of this loss of young lives is in several directions preventable.

TABLE SHOWING POPULATION AND NUMBER OF DEATHS OF PERSONS, MALES AND FEMALES, AT ALL AGES, AND AT FIVE GROUPS OF AGES, DURING THE YEAR 1886. Population and deaths at certain ætal periods.

	PERSONS.		MALES.		FEMALES.	
	Estimated Population, 1886.	Deaths, 1886.	Estimated Population, 1886.	Deaths, 1886.	Estimated Population, 1886.	Deaths, 1886.
All ages... ..	434,381	8,499	210,612	4,406	223,769	4,093
Under 5 years ...	63,792	3,949	31,831	2,165	31,961	1,784
5 to 20 „ ...	142,132	514	69,313	259	72,819	255
20 to 40 „ ...	133,243	930	63,705	483	69,538	447
40 to 60 „ ...	71,617	1,407	35,101	719	36,516	688
60 and upwards..	23,597	1,699	10,662	780	12,935	919

TABLE SHOWING RATE OF MORTALITY PER ANNUM PER 1,000 PERSONS, MALES AND FEMALES, LIVING DURING 1886, AT ALL AGES, AND AT FIVE GROUPS OF AGES, COMPARED WITH THE ENGLISH LIFE TABLE RATES (FARR). Death-rates at certain ætal periods.

	PERSONS.		MALES.		FEMALES.	
	Birming- ham.	English Life Table.	Birming- ham.	English Life Table.	Birming- ham.	English Life Table.
All ages... ..	19·6	21·5	20·9	22·4	18·3	20·7
Under 5 years ...	61·9	65·7	68·0	70·1	55·8	61·3
5 to 20 „ ...	3·6	7·1	3·7	7·0	3·5	7·2
20 to 40 „ ...	7·0	10·3	7·6	10·1	6·4	10·5
40 to 60 „ ...	19·6	18·3	20·5	19·4	18·8	17·2
60 and upwards	72·0	71·7	73·2	73·9	71·0	69·7

On comparing the Death-rates of each sex at the several periods of life with those for 1885, I find that an increase is observable in the rates for both sexes “at all ages,” and at the first three periods of life specified in the Table; at all the other ætal periods the rates of mortality have undergone a

Death-rates at
certain ætal
periods
(continued).

reduction, with one exception, that in females over 60 years of age showing a further increase, having risen from 64.0 in 1884, and 69.3 in 1885, to 71.0 in the year under notice.

The increase in the mortality among females at all ages is considerably greater than that among males, so that the disparity in the mortality of the two sexes, which last year was not so pronounced as in 1884, is this year still less marked, the difference in the Death-rate of males over females not now exceeding 2.6, against 3.8 in 1884. The excess of male over female mortality is still greater, however, than that of the Life Table, which is only 1.7.

Although the Death-rates of children under five, and of young people between 5 and 20 are higher than in the previous year, they still compare favourably with those of the English Life Table, indeed the disparity between our rates of mortality in persons between 5 and 20 and those of the whole country at the same period of life is still very remarkable, ours being in fact only about one-half of the latter.

The rates of mortality in both males and females between 20 and 40 years of age manifest a further decrease on those of the preceding year, and now compare highly favourably with those of the English people generally. We have still, however, a considerable excess of male over female deaths at these ages, whereas the Life Table rates for this period of life show a slightly greater amount of female than of male mortality.

The Death-rates in persons of each sex at the two ætal periods over 40 years of age are, generally speaking, higher than those given in the Life Table, but much less so than in the previous year; the Death-rate in males over 60 years of age is, however, a little below that obtained by Dr. Farr for this period of life for the whole country.

One noteworthy feature stands out prominently in this year's figures; it is that whilst last year our Death-rate among males over 60 years was 12.4 per 1,000 higher than that among females, this year the male rate of mortality exceeds the female by only 2.2.

The following statement gives particulars respecting the Deaths and Death-rates from all causes and from zymotic diseases, and of Infant Mortality during 1886 and the preceding thirteen years:—

ANALYSIS OF THE MORTALITY IN THE BOROUGH OF BIRMINGHAM IN EACH OF
THE FOURTEEN YEARS, 1873 TO 1886.

YEAR.	Deaths of Infants under 1 year.	Proportion of Deaths under 1 year to 1,000 Births.	DEATHS.				Annual rate per 1,000 living.			
			AT ALL AGES.		FROM ALL CAUSES.		AT ALL AGES.		FROM ALL CAUSES.	
			From all Causes.	From Seven Zymotic Diseases.	Of Children under 5 years.	Of Persons over 60 years.	From all Causes.	From Seven Zymotic Diseases.	Of Children under 5 years.	Of Persons over 60 years.
1873	2627	181	8990	2042	4424	1521	24·8	5·6	12·4	4·3
1874	2688	178	9665	2652	4589	1459	26·8	7·3	12·7	4·4
1875	2957	196	9668	2145	4785	1590	26·3	5·9	13·0	4·3
1876	2537	160	8330	1336	3881	1441	22·4	3·6	10·4	3·9
1877	2628	164	9038	1576	4460	1521	23·9	4·2	11·8	4·0
1878	2766	170	9662	2421	5128	1506	25·2	6·3	13·4	4·0
1879	2385	150	8650	1251	4095	1686	21·8	3·2	10·5	4·3
1880	2601	172	8088	1324	4043	1397	20·5	3·4	10·2	3·5
1881	2212	150	7938	1128	3741	1506	19·7	2·8	9·3	3·7
1882	2452	165	8425	1413	3979	1459	20·6	3·4	9·8	3·7
1883	2338	159	8714	1306	3818	1704	21·0	3·1	9·2	4·1
1884	2611	174	9043	1681	4315	1597	21·1	3·9	10·0	3·7
1885	2253	157	8156	876	3408	1708	19·1	2·0	8·0	4·0
Average 1873 to 1885	2543	167	8797	1627	4205	1546	22·6	4·2	10·8	4·0
1886	2515	176	8499	1383	3949	1699	19·6	3·2	9·1	3·9

Full details of the mortality from the manifold causes of death at stated periods of life are to be found in Table A on pages 33-35.

SPECIFIED CAUSES OF DEATH.

The Deaths during the year were thus distributed among the eight primary classes of Disease :—

Class	I.—Zymotic Diseases	...	1,473, or 17·3 per cent. of total mortality.		
"	II.—Parasitic	"	12, or 0·1	"	"
"	III.—Dietic	"	38, or 0·5	"	"
"	IV.—Constitutional Diseases	"	1,210, or 14·2	"	"
"	V.—Developmental	"	713, or 8·4	"	"
"	VI.—Local	"	3,970, or 46·7	"	"
"	VII.—Violent Deaths	...	370, or 4·4	"	"
"	VIII.—Deaths from ill-defined and not specified causes		713, or 8·4	"	"

Specified
causes of
death.

Specified causes
of death
(continued).

A comparison of this year's figures with those of 1885 reveals the fact that the unprecedentedly small proportion of the total mortality occasioned by the zymotic group of diseases in the previous year has not been maintained, the percentage having increased from 12.1 to 17.3. All the other important classes of disease have resulted, however, in fewer deaths than in the preceding year, and owing to a higher percentage in Class I., Zymotic Diseases, the proportions to total mortality show a still larger decline, which is most noticeable in the case of "Local Diseases," which in 1885 were accountable for 50.3 per cent. of the whole number of Deaths, while in the year under review 46.7 per cent. of the Deaths were attributed to this class of disease. The Deaths from Violence and from ill-defined and non-specified causes, are numerically somewhat greater than in the previous year.

The distribution of the mortality of 1885 among the several groups of diseases was, however, far different to that observed in any previous year, and this year's percentages simply manifest a partial return to the distribution which generally prevailed before 1885, in fact the percentages in the preceding statement show a fairly close approach to those observed in 1884.

CLASS I.--ZYMOTIC DISEASES.

Zymotic
Diseases.

This group of diseases, which in addition to the seven principal zymotic diseases referred to under the heading below, includes several others of a Malarial, Zoogenous, Venereal, or Septic origin, has caused 1,473 Deaths, equivalent to an annual rate of mortality of 3.4 per 1,000 persons, against only 983, with the low rate of 2.3 in 1885. Rather more than the whole of this increase is attributable to a greater mortality from

THE SEVEN PRINCIPAL ZYMOTICS,

Seven principal
Zymotics.

viz. Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, and Diarrhœa, which have been set down as the cause of Death in 1,383 instances, against only 876 in 1885, 1,681 in 1884, and 1,306 in 1883. In the first ten years during which I held my present office, with an average population less by upwards of 50,000 than that of the year under review, the average number of Deaths from these seven diseases was 1,728, or so many as 345 more than that recorded in the past year. Diarrhœa and Measles, but particularly the former, have proved decidedly more fatal than in the previous year, and the only considerable set off has been an unusually small mortality from Whooping Cough.

Zymotic death-
rate.

The Death-rate from these seven diseases is 3.2 per 1,000 of the population, against rates of 5.6, 7.3, 5.9, 3.6, 4.2, 6.3,

3·2, 3·4, 2·8, 3·4, 3·1, 3·9, and 2·0 in succession from 1873 to 1885. It will be seen that this year's rate is higher than those of 1881, 1883, and 1885, but much lower than some of the other years, particularly those of 1874 and 1878, when epidemics of Scarlet Fever visited Birmingham.

Zymotic death-
rate
(continued).

In the following Table the zymotic Death-rate of the Borough is compared with the rates of the principal English towns during the past ten years:—

Zymotic death-
rates of large
towns.

Twenty large English Towns.	London.	L'pool.	BIRM.	Manch.	Leeds.	Sheff'd.	Salford.	N'castle.	Norw'h.	Bristol.	
1886...	2·8...	2·7	3·1	3·2	3·0	3·4	2·9	3·8	2·5	3·5	2·2
1885...	2·7...	2·8	3·6	2·0	3·1	2·2	2·7	3·4	4·4	2·1	2·3
1884...	3·5...	3·3	4·5	3·9	3·6	4·9	4·2	4·2	3·2	3·1	1·8
1883...	2·6...	2·8	4·5	3·1	3·6	4·0	4·0	3·3	4·3	1·0	1·2
1882...	3·9...	3·4	4·4	3·4	3·7	3·4	2·8	3·8	3·3	2·4	2·3
1881...	3·4...	3·6	4·5	2·8	2·3	2·9	2·7	2·9	2·6	1·7	2·3
1880...	4·0...	3·7	5·1	3·4	4·2	3·3	4·4	6·8	3·2	5·8	3·1
1879...	3·2...	3·3	6·0	3·2	3·4	3·3	3·5	4·0	3·9	2·2	2·1
1878...	4·4...	4·1	6·1	6·3	4·0	4·5	5·6	5·1	4·6	3·6	2·1
1877...	3·5...	3·5	4·7	4·2	4·2	2·8	3·3	4·8	2·5	2·9	3·4

In 1885 our zymotic Death-rate was lower than that of the twenty large English towns, and of any town given in the above list. This year, unfortunately, our zymotic Death-rate is exceeded only by those of Leeds, Norwich, and Salford. We mainly owe our less satisfactory position in this respect to the serious mortality from summer Diarrhœa, a disease from which Birmingham always suffers more than the majority of other English communities.

The percentage of zymotic Deaths on total Deaths in the same large English towns for the last ten years is given below:—

Percentage of
zymotic deaths
on total deaths.

Twenty large English Towns.	London.	L'pool.	BIRM.	Manch.	Leeds.	Sheff'd.	Salford	N'castle.	Norw'h.	Bristol.	
1886...	13·7...	13·5	13·2	16·3	11·6	15·7	14·5	17·2	11·2	15·1	11·0
1885...	13·3...	14·1	15·1	10·7	11·6	11·4	13·1	16·2	17·0	10·3	11·7
1884...	16·3...	16·4	17·8	18·6	13·6	20·2	18·6	18·9	14·0	14·7	10·0
1883...	12·0...	13·4	16·8	14·9	12·9	17·0	17·3	14·9	17·0	5·1	6·9
1882...	16·1...	16·3	16·6	16·5	14·9	15·1	11·5	16·8	14·4	12·0	12·3
1881...	15·5...	17·0	16·8	14·2	9·1	13·6	13·0	12·9	12·1	8·7	11·7
1880...	17·7...	16·8	18·6	16·4	16·4	15·7	21·0	26·2	14·4	23·7	15·4
1879...	13·8...	14·3	21·2	14·5	12·8	14·6	16·5	16·1	16·5	10·0	10·1
1878...	18·2...	17·6	21·9	25·1	14·3	19·0	23·6	19·9	12·2	14·5	10·0
1877...	15·4...	16·0	17·8	17·4	15·4	12·6	15·1	19·1	10·3	13·8	15·7

It will be noticed that with one exception, that of Salford, the percentage of zymotic Deaths on total Deaths is higher in Birmingham than in any other town in the list. In 1885, however, only one town, Norwich, had a smaller proportion of zymotic mortality than our own.

Percentage of
zymotic deaths
on total deaths
(continued).

From my previous remarks it will already have been inferred that of the seven principal zymotic diseases

DIARRHŒA,

Diarrhœa.

as is usually the case, has been the most fatal; so many as 729 Deaths have been attributed to it, against 338 in the previous year, when the mortality from this cause was unusually small. This year's figure, which includes two deaths from English Cholera or Choleraic Diarrhœa, is nearly identical with that for 1884, which was 737, so that this year's mortality, though so very much greater than that of the previous year, is somewhat less than that of two years ago.

Diarrhœal
death-rate.

The Death-rate from this cause is 1.7, as compared with a rate of 0.8 in 1885, while for the Summer Quarter of the year it was 5.0, against 2.2 in the third Quarter of the previous year.

Temperature in
relation to
Diarrhœa.

These figures, read side by side with the Meteorological Records of the past Summer and Autumn, afford additional proof of the intimate relation which subsists between a high temperature and Summer Diarrhœa.

Each month of the summer quarter had a temperature above the average. The first few days of July were very hot, but afterwards there were considerable variations of temperature, some low readings being recorded, so that Diarrhœal mortality was below the usual amount for this month.

August was a rather warm month, particularly towards the end, when some very close muggy weather was experienced. During the greater part of September, too, the temperature much exceeded the average, and this continued far into October, during the first week of which some remarkably high temperatures were reached.

The mortality from Diarrhœa followed closely on the temperature and rose rapidly during the latter part of August and the early portion of September, reaching its maximum in the week ending the 11th of September, or a month later than in the previous year.

Bearing these facts in mind it is not surprising that the amount of summer Diarrhœa in Birmingham during the past year should have been above the average.

In order to show as clearly as possible the apparent extent of the influence of a high summer temperature on infantile Diarrhœa, I have drawn up the following statement:—

Summer Quarter.	Departure from average Temperature of 20 years.	Rainfall in inches.	Mortality from Diarrhoea.		Temperature in relation to Diarrhoea (continued).
			Deaths.	Annual Rate per 1,000.	
1885	- 1°·2	5·76	236	2·2	
1886	+ 0°·9	9·04	543	5·0	

I have chosen to compare this year's with last year's figures because they afford a rather strong contrast with each other, for while the temperature of the summer quarter of 1885 was distinctly below the average, that of the past summer was above.

One important feature in the Meteorology of the past two summers is not, however, revealed by the above figures; it is that whilst this year the months of August and September, which are invariably those in which we suffered most from this disease, were the two warmest of the three, last year the reverse was the case, July being warm, and both August and September very cool.

The figures under this heading on page 33, show that, as is always the case, the very young and those who have reached advanced years, but particularly the former, suffered most, 72·2 per cent. of the deaths occurring in infants under one year of age, and 94·2 per cent. in children under five years of age, so that only 5·8 per cent. of the mortality was in persons above five years of age, 57·1 per cent. of which was in persons aged 60 years or upwards.

I continue to adopt the practice observed by the Registrar-General of classing under this head the deaths from Dysentery, and all those in which, though occupying a secondary place, Diarrhoea has supervened upon Debility, Senile Decay, or other ill-defined forms of illness.

After Diarrhoea

MEASLES

has been far more fatal than any other of the zymotics, and in proportion to population more so than in any year since 1877. The Deaths from this cause have numbered 383, against 119 in 1885, 333 in 1884, and 157 the average of the 10 years 1876-1885. This disease, which was more than usually fatal in the last fortnight of 1885, increased in virulence in the new year and continued to produce an exceptional fatality till the middle of June, after which the Deaths from this cause were comparatively few in number. The contiguous Registration Sub-Districts of Ladywood, All Saints, Saint George, and Duddeston

Measles
(continued).

have experienced much the heaviest mortality, for while the Death-rates in these districts range from 0·9 to 1·5, in the remaining four Registration Districts their average is under 0·6 per 1,000 persons.

Map.

On a map at the end of the Report the position of each fatal case in the Borough during the year is indicated by a red cross.

The Deaths from

WHOOPIING COUGH,

Whooping
Cough.

which stands next in order of fatality, have been decidedly fewer than in any year over which my records extend, only 94 deaths being attributed to this cause, against an average of 301 in the previous ten years; in 1884 and 1885 the mortality from this often very fatal infantile disease was also somewhat below the average, as 289 deaths were recorded in the former, and 253 in the latter year. As Whooping Cough is a disease over which a Sanitary Authority is unable to exercise any material control, it must be assumed that this year's comparatively slight mortality is purely accidental, and will probably be compensated for by an equally high one in the near future.

It is unsatisfactory to find that

DIPHTHERIA

Diphtheria.

has been set down as the cause of Death in more instances than in any year since 1878, and that our Death-rate from this cause, which has for many years been below that of the twenty large towns, now slightly exceeds it. Seventy-three Deaths have been referred to this disease, against 46 in 1885, and only 40 in 1884.

Diphtheria
death-rate.

Our rate of mortality from this cause during the last fourteen years is given and compared with that of the twenty large English towns during the same period in the following statement:—

DEATH-RATE FROM DIPHTHERIA PER 1,000 OF THE POPULATION.

Birmingham.

1873	1874	1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886
·31	·21	·16	·16	·14	·22	·18	·13	·14	·12	·11	·09	·11	·17

Twenty Large Towns.

·09	·16	·12	·09	·09	·13	·13	·12	·15	·17	·17	·18	·17	·16
-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----

The Deaths from

FEVER

on the other hand happily continue to decline, and our Death-^{Fever.} rate from this cause is now lower than in any previous year in my records, having fallen pretty continuously from $\cdot 63$ in 1870, and $\cdot 57$ in my first year of office in 1873, to $\cdot 21$ in 1882, $\cdot 20$ in 1883, $\cdot 19$ in 1884, $\cdot 18$ in 1885, and to $\cdot 15$ in the year under notice. Sixty-five Deaths have been ascribed to the three forms of disease combined under this heading, 59 of which were calculated to be the result of Typhoid, and 6 of Simple Continued Fever.

As in 1885, there has been an entire absence of the term "Typhus Fever" from the Death Certificates.

Not only however is the Fever Death-rate of Birmingham still diminishing, but the favourable comparison with that of the twenty large towns, which commenced in 1876, has gone on uninterruptedly ever since, the rate of the twenty towns having declined since 1870 by 75 per cent., and that of Birmingham by 76 per cent.

This highly gratifying decline in the Death-rate from Fever is not a feature confined to Birmingham and the other large towns, but is one that is manifested throughout the whole of England and Wales, where the rate has diminished from $0\cdot 91$ in the decennial period ending with 1860, $0\cdot 89$ in that ending with 1870, and $0\cdot 50$ in the succeeding ten years, to $0\cdot 26$ in the first six years of the current decennium, and to $0\cdot 21$ in 1885 and 1886.

The immense and continual reduction in our Fever Death-^{Fever death-rate.} rate, and that in the twenty large English towns, may be readily observed in the following Table:—

		Per 1,000 per annum.	
		Birmingham.	20 large towns.
1870	...	$\cdot 63$	$\cdot 90$
1871	...	$\cdot 53$	$\cdot 78$
1872	...	$\cdot 54$	$\cdot 60$
1873	...	$\cdot 57$	$\cdot 59$
1874	...	$\cdot 56$	$\cdot 58$
1875	...	$\cdot 56$	$\cdot 52$
1876	...	$\cdot 40$	$\cdot 45$
1877	...	$\cdot 38$	$\cdot 42$
1878	...	$\cdot 38$	$\cdot 42$
1879	...	$\cdot 22$	$\cdot 29$
1880	...	$\cdot 21$	$\cdot 30$
1881	...	$\cdot 16$	$\cdot 31$
1882	...	$\cdot 21$	$\cdot 36$
1883	...	$\cdot 20$	$\cdot 33$
1884	...	$\cdot 19$	$\cdot 28$
1885	...	$\cdot 18$	$\cdot 22$
1886	...	$\cdot 15$	$\cdot 22$

The fatal cases of Typhoid Fever, and their positions, are Map. indicated by blue crosses on the Map at the end of the Report.

SCARLET FEVER

Scarlet Fever. has again occasioned a very small mortality, only 39 Deaths, against 31 in the previous year, having been referred to this cause. The smallness of this number is the better realised by comparing it with the average of the preceding ten years, which is 278, or seven times as many. It is also very remarkable how the numbers for each quarter of the year approximate to each other, for in three of them there were ten Deaths recorded, and in the other one nine. There is therefore no indication at present that this often highly fatal malady is about to assume either an increased malignancy or a greater prevalence.

Map. A Map at the end of the Report is marked with red spots to show the portions of the town visited during the year with fatal cases of this disease.

SMALLPOX.

Smallpox. For the first time since 1879 no Death from this disease has been recorded in the Borough, whilst in no previous year have there been so few cases, only two having been brought under my knowledge. This freedom of the Borough from so objectionable a disease, and one which in the past has sometimes resulted in a very considerable mortality, is a highly gratifying feature of the present Report.

In the previous year eighty-four cases, twelve of which proved fatal, were reported to the Department.

Twenty large towns compared DEATHS AND DEATH-RATES FROM SMALLPOX PER 100,000 OF THE POPULATION IN 20 LARGE ENGLISH TOWNS.

Town.	Population.	Deaths from Smallpox in the year 1886.	Rate per 100,000.			
			1886.	1885.	1884.	1883.
London	4,149,533	5	0·1	22·0	22·3	3·4
Brighton	116,416	0	0·0	0·9	0·9	0·0
Portsmouth	136,278	1	0·7	0·0	0·0	0·8
Norwich	92,028	0	0·0	0·0	0·0	0·0
Plymouth	76,584	0	0·0	0·0	0·0	0·0
Bristol	220,915	7	3·2	4·6	0·0	0·0
Wolverhampton	80,012	0	0·0	0·0	6·3	9·0
Birmingham	434,381	0	0·0	2·8	14·9	26·5
Leicester	139,606	0	0·0	0·0	0·0	0·0
Nottingham	217,733	2	0·9	0·9	0·0	1·0
Liverpool	586,320	29	4·9	7·9	18·1	4·6
Manchester... ..	376,895	1	0·3	9·8	1·5	0·3
Salford	211,241	0	0·0	0·0	0·0	0·0
Oldham	130,216	0	0·0	0·0	0·0	1·7
Bradford	219,411	0	0·0	0·9	0·0	0·0
Leeds	339,057	1	0·3	0·6	0·3	3·4
Sheffield	310,957	0	0·0	2·6	11·1	0·7
Hull	191,501	0	0·0	4·8	9·8	4·0
Sunderland... ..	127,487	0	0·0	13·6	67·8	41·3
Newcastle-on-Tyne	155,117	0	0·0	2·0	7·8	39·5
In 20 towns	8,311,688	46	0·6	12·8	15·2	5·2

The numbers of Cases and Deaths reported in each quarter since 1871 have been as follows :—

Cases and
Deaths in the
Borough from
1871.

DATE.				Cases.		Deaths.	
1871.							
November 11th to end of year ...	...	...	...	359		43	
Total	...	...	...	—	359	—	43
1872.							
1st Quarter	...	...	...	798		96	
2nd "	...	...	...	632		92	
3rd "	...	...	...	355		67	
4th "	...	...	...	192		44	
Total	...	...	...	—	1,977	—	299
1873.							
1st Quarter	...	...	...	171		29	
2nd "	...	...	...	246		37	
3rd "	...	...	...	124		18	
4th "	...	...	...	253		38	
Total	...	...	...	—	794	—	122
1874.							
1st Quarter	...	...	...	757		123	
2nd "	...	...	...	1,303		196	
3rd "	...	...	...	1,059		165	
4th "	...	...	...	672		153	
Total	...	...	...	—	3,791	—	637
1875.							
1st Quarter	...	...	...	366		85	
2nd "	...	...	...	347		72	
3rd "	...	...	...	95		14	
4th "	...	...	...	16		2	
Total	...	...	...	—	824	—	173
1876.							
1st Quarter	...	...	...	2		0	
2nd "	...	...	...	2		0	
3rd "	...	...	...	2		0	
4th "	...	...	...	5		0	
Total	...	...	...	—	11	—	0
1877.							
1st Quarter	...	...	...	7		1	
2nd "	...	...	...	20		3	
3rd "	...	...	...	20		3	
4th "	...	...	...	3		1	
Total	...	...	...	—	50	—	8
1878.							
1st Quarter	...	...	...	3		0	
2nd "	...	...	...	4		0	
3rd "	...	...	...	10		2	
4th "	...	...	...	10		3	
Total	...	...	...	—	27	—	5

Cases and
Deaths in the
Borough from
1871
(continued).

DATE.				Cases.		Deaths.	
1879.							
1st Quarter	...	...	...	1		0	
2nd "	...	...	...	0		0	
3rd "	...	...	...	3		0	
4th "	...	...	...	0		0	
Total				...	4	...	0
1880.							
1st Quarter	...	...	...	2		0	
2nd "	...	...	...	5		1	
3rd "	...	...	...	8		1	
4th "	...	...	...	3		0	
Total				...	18	...	2
1881.							
1st Quarter	...	...	...	5		5	
2nd "	...	...	...	9		1	
3rd "	...	...	...	2		0	
4th "	...	...	...	0		0	
Total				...	16	...	6
1882.							
1st Quarter	...	...	...	0		0	
2nd "	...	...	...	43		6	
3rd "	...	...	...	33		9	
4th "	...	...	...	13		2	
Total				...	89	...	17
1883.							
1st Quarter	...	...	...	48		7	
2nd "	...	...	...	152		9	
3rd "	...	...	...	567		54	
4th "	...	...	...	435		40	
Total				...	1,202	...	110
1884.							
1st Quarter	...	...	...	384		54	
2nd "	...	...	...	64		8	
3rd "	...	...	...	13		1	
4th "	...	...	...	10		1	
Total				...	471	...	64
1885.							
1st Quarter	...	...	...	69		12	
2nd "	...	...	...	4		0	
3rd "	...	...	...	9		0	
4th "	...	...	...	2		0	
Total				...	84	...	12
1886.							
1st Quarter	...	...	...	1		0	
2nd "	...	...	...	1		0	
3rd "	...	...	...	0		0	
4th "	...	...	...	0		0	
Total				...	2	...	0
Grand Total				...	9,719	...	1,498

DISEASE MAP.

A Map is appended to the Report indicating the distribution over the Borough of the Deaths from three zymotic diseases, viz.:—Measles, Scarlet Fever, and Typhoid. A cursory glance at it will reveal the fact that, as in previous years, two portions of the Borough have been nearly entirely exempt from these diseases; the one an area embracing the more central portions of the town and extending north-westwards so as to include the jewellery district in the neighbourhood of Saint Paul's Ward, the greater portion of this area being occupied by business premises, manufactories, warehouses, and the like; the other part of the town which has been conspicuously free from these diseases is Edgbaston, where the children do not generally congregate together in large numbers, and as a result are not so likely to contract infection as those in less favourable circumstances in other parts of the Borough. The apparent immunity of Edgbaston, too, is rendered all the greater by the circumstance that when such diseases as Scarlet Fever and Measles do chance to occur there, the lives of those attacked are more generally preserved than they are in other parts of the town, owing to the better attention and nursing they receive, as compared with that secured by those less fortunately situated, who often succumb to such maladies because they have not the advantage of such careful attention and favourable surroundings.

It will also be noticed that whilst the comparatively few cases of Typhoid Fever and Scarlet Fever are scattered pretty equally over the Borough, those from Measles are much more numerous on its northern than its southern side.

II.—PARASITIC, AND III.—DIETIC DISEASES.

Few Deaths occur in these classes, and in consequence I have grouped them together; a smaller number than usual, only 50, were recorded in them during the past year, against 66 in 1885.

IV.—CONSTITUTIONAL DISEASES.

A smaller number of Deaths has been registered in this class than in the two previous years, viz., 1,210, equal to an annual rate of 2·8 per 1,000 persons living, against 1,252, equivalent to a rate of 2·9 in 1885, and 1,274, with a rate of 3·0 in 1884. The reduction in the Death-rate of this class is due to a diminution in the number of Deaths from Phthisis, which has fallen from 771 in 1884, and 737 in 1885, to 695 in the past year.

V.—DEVELOPMENTAL DISEASES.

Developmental
Diseases.

The unusually high number of Deaths in this class in the previous year has undergone some reduction, viz., from 729 to 713, while the Death-rate has fallen from 1·7 to 1·6.

The Deaths from Premature Birth have been a little more numerous, but from the other three diseases in this class they have been lower.

VI.—LOCAL DISEASES.

Local Diseases.

The total mortality of the very large number of diseases in this class is considerably below that of the previous year, which also was lower than that of 1884, and still lower than that of 1883, last year's figure being 3,970, against 4,105 in 1885, 4,136 in 1884, and 4,274 in 1883.

The Death-rate from this group of diseases has fallen from 10·3 in 1883, 9·8 in 1884, and 9·6 in 1885, to 9·1 in 1886.

Apoplexy and Bronchitis have had, when compared with the previous year, a greatly diminished mortality, while Croup and diseases of the stomach have occasioned a larger number of Deaths than usual.

VII.—VIOLENT DEATHS.

Violent Deaths.

The Deaths in this class vary little from year to year; 370 have been referred to it, against 357 in 1885, and 371 in 1884. The Death-rate from violence is 0·9.

VIII.—DEATHS FROM ILL-DEFINED AND NOT SPECIFIED CAUSES.

Deaths from ill-
defined and not
Specified Causes

This class includes certain causes of Death which are generally of a difficultly-definable character, and which it is, therefore, impossible to place in any of the six principal classes of disease. Those diseases which occasion the greatest mortality in this class are Marasmus and Debility; the Deaths from the former disease have been more numerous than of late, and have caused the total Deaths in this group to increase from 664 in 1885 to 713 in the past year.

TABLE A.

DEATHS REGISTERED IN THE BOROUGH OF BIRMINGHAM DURING THE
YEAR ENDING JANUARY 1ST, 1887.

1886.	AGES.						REGISTRATION SUB-DISTRICTS.								Borough.
	0-1	1-5	5-20	20-40	40-60	60 and up.	Ladywood.	St. Thomas.	St. Martin.	St. George.	All Saints.	Deritend.	Duddeston.	Edgbaston.	
ALL CAUSES	2515	1434	514	930	1407	1699	1037	744	747	1575	1524	1510	1089	273	8499
I.—Specific Febrile, or Zymotic Diseases.															
1.—MIASMATIC DISEASES.															
Smallpox	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles	80	283	20	..	..	..	55	27	32	99	50	61	..	55	383
Scarlet Fever	5	24	10	..	..	..	5	..	3	4	20	5	..	2	39
Typhus Fever	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Whooping Cough	29	63	2	..	..	..	12	5	7	22	18	23	4	3	94
Diphtheria	3	43	23	2	1	1	23	8	5	14	4	16	..	3	73
Simple, Continued, or Ill-defined Fever	1	1	2	2	..	..	..	2	1	..	..	2	1	..	6
Enteric or Typhoid Fever	..	4	19	27	7	2	13	4	4	13	6	9	8	2	59
Other Miasmatic Diseases	..	1	..	..	..	..	..	..	..	..	..	1	..	..	1
2.—DIARRHOEAL DISEASES.															
Simple Cholera	1	..	1	..	..	..	1	..	..	..	..	1	..	..	2
Diarrhoea, Dysentery	525	161	1	3	13	24	69	51	82	142	84	176	105	18	727
3.—MALARIAL DISEASES.															
Remittent Fever	1	1	..	..	..	..	..	..	..	1	..	..	1	..	2
Ague	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
4.—ZOOGENOUS DISEASES.															
Cowpox and effects of Vaccination	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Other Diseases (<i>e.g.</i> , Hydrophobia, Glanders, Splenic Fever)	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
5.—VENEREAL DISEASES.															
Syphilis	31	4	..	1	3	..	5	5	5	5	10	5	4	..	39
Gonorrhœa, Stricture of Urethra	..	..	..	..	3	5	..	..	1	3	3	1	..	..	8
6.—SEPTIC DISEASES.															
Erysipelas	8	1	..	3	6	8	4	2	2	7	6	4	1	..	26
Pyæmia, Septicæmia	..	2	2	4	1	..	3	..	1	4	..	1	..	..	9
Puerperal Fever	..	..	..	4	..	..	1	1	1	..	..	..	1	..	4
II.—Parasitic Diseases.															
Thrush, and other Vegetable Parasitic Diseases	11	..	..	..	..	..	4	..	1	2	..	4	..	..	11
Worms, Hydatids, and other Animal Parasitic Diseases	..	..	..	1	..	..	1	..	..	..	..	..	..	..	1
III.—Dietic Diseases.															
Want of Breast Milk, Starvation	20	..	..	..	..	1	4	..	1	2	10	2	2	..	21
Scurvy	..	..	..	..	..	1	..	..	..	1	..	..	..	..	1
Chronic Alcoholism	..	..	..	1	10	1	2	1	1	..	5	2	1	..	12
Delirium Tremens	..	..	..	3	1	..	..	..	2	1	1	..	..	..	4
IV.—Constitutional Diseases.															
Rheumatic Fever, Rheumatism of the Heart	..	..	2	5	4	1	1	2	1	4	1	2	1	..	12
Rheumatism	..	..	4	6	8	3	2	..	2	3	8	5	..	1	21
Gout	..	..	..	..	1	5	1	1	1	1	..	..	..	2	6
Rickets	17	16	1	..	..	..	6	1	1	7	9	3	5	2	34
Cancer, Malignant Disease	..	2	2	28	109	86	32	21	15	50	35	37	26	11	227
Tubercular Mesenterica	30	23	2	..	..	..	5	3	2	25	14	2	3	1	55
Tubercular Meningitis, Hydrocephalus	32	41	7	1	1	..	14	5	8	24	4	12	10	5	82
Phthisis	5	7	88	318	235	42	90	53	55	99	189	112	80	19	695
Other forms of Tuberculosis, Scrofula	9	14	11	3	2	..	4	2	3	11	8	7	4	..	39

TABLE A—(continued).

DEATHS REGISTERED IN THE BOROUGH OF BIRMINGHAM DURING THE
YEAR ENDING JANUARY 1ST, 1887—continued.

1886.	AGES.						REGISTRATION SUB-DISTRICTS.								Borough.
	0-1	1-5	5-20	20-40	40-60	60 and up.	Ladywood.	St. Thomas.	St. Martin.	St. George.	All Saints.	Deritend.	Duddeston.	Edgbaston.	
IV.—Constitutional Dis.—continued.															
Purpura, Hæmorrhagic Diathesis ..	1	1	1	1	1	2	1	..	..	3	1	..	1	..	6
Anæmia, Chlorosis, Leucocythæmia ..	1	..	2	4	6	3	3	1	2	2	3	4	1	..	16
Glycosuria, Diabetes Mellitus ..	1	..	1	3	3	9	1	5	..	2	3	1	..	5	17
Other Constitutional Diseases ..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
V.—Developmental Diseases.															
Premature Birth ..	225	..	..	..	..	..	37	16	20	37	28	54	25	8	225
Atelectasis ..	39	1	..	..	..	..	2	1	6	8	3	12	8	..	40
Congenital Malformations ..	30	2	..	..	..	..	9	3	2	5	2	5	4	..	32
Old Age ..	..	..	..	..	..	416	44	20	45	61	132	47	40	27	416
VI.—Local Diseases.															
1.—DISEASES OF NERVOUS SYSTEM.															
Inflammation of Brain or Membranes ..	61	70	27	12	10	14	22	13	13	32	43	42	25	4	194
Apoplexy, Softening of Brain, Hemiplegia, Brain Paralysis ..	2	..	3	21	101	138	24	25	22	36	63	51	33	11	265
Insanity, General Paralysis of the Insane ..	..	1	3	4	3	3	2	1	2	4	4	..	1	..	14
Epilepsy ..	..	..	3	12	11	4	2	4	4	7	6	3	4	..	30
Convulsions ..	161	37	3	1	..	..	29	14	31	29	29	40	30	..	202
Laryngismus Stridulus (Spasm of Glottis) ..	18	5	1	..	..	..	2	..	5	3	..	8	5	1	24
Disease of Spinal Cord, Paraplegia, Paralysis Agitans ..	..	4	2	5	8	6	4	3	2	4	5	3	3	1	25
Other Diseases of Nervous System ..	8	4	5	1	8	7	1	3	..	4	7	5	8	5	33
2.—DISEASES OF ORGANS OF SPECIAL SENSE.															
(e.g., of Ear, Eye, and Nose).	1	..	1	..	..	..	1	..	..	..	..	..	..	1	2
3.—DISEASES OF CIRCULATORY SYSTEM.															
Pericarditis ..	..	1	2	..	..	1	2	..	..	2	..	..	..	..	4
Acute Endocarditis ..	..	..	2	3	..	..	1	1	..	1	1	1	..	..	5
Valvular Diseases of Heart ..	..	1	13	24	27	22	12	10	2	25	11	19	6	2	87
Other Diseases of Heart ..	18	2	39	67	177	174	49	52	45	70	81	85	71	24	477
Aneurism ..	..	..	..	6	11	1	..	3	1	6	4	1	1	2	18
Embolism, Thrombosis ..	..	..	..	1	..	5	..	1	1	1	1	1	1	..	6
Other Diseases of Blood Vessels ..	..	..	..	6	8	5	1	..	..	7	3	4	2	..	19
4.—DISEASES OF RESPIRATORY SYSTEM.															
Laryngitis ..	3	8	7	..	2	1	4	6	2	1	3	5	..	..	21
Croup ..	13	87	22	..	..	..	7	14	10	27	12	37	15	..	122
Emphysema, Asthma ..	..	..	2	2	5	5	..	4	..	3	3	2	2	..	14
Bronchitis ..	257	168	16	38	212	357	121	72	93	192	182	205	157	26	1048
Pneumonia ..	72	120	31	77	91	73	44	42	33	81	106	92	55	11	464
Pleurisy ..	1	1	6	9	8	7	2	3	2	7	9	5	2	2	32
Other Diseases of Respiratory System ..	20	13	3	5	13	19	8	2	9	11	9	16	15	3	73
5.—DISEASES OF DIGESTIVE SYSTEM.															
Dentition ..	28	21	..	..	..	..	9	2	4	7	11	4	11	1	49
Sore Throat, Quinsy ..	2	2	2	1	1	2	..	2	..	2	2	3	..	1	10
Diseases of Stomach ..	33	5	1	9	14	9	8	5	8	12	7	17	9	5	71
Enteritis ..	40	8	3	2	2	6	14	2	4	2	11	22	3	3	61
Obstructive Diseases of Intestines ..	1	1	1	6	7	9	2	8	1	4	..	4	4	2	25
Peritonitis ..	5	9	9	14	11	10	12	4	4	8	9	11	8	2	58
Ascites ..	..	..	..	..	3	5	4	1	..	..	2	1	..	..	8
Cirrhosis of Liver ..	..	..	..	7	31	13	7	5	2	8	12	9	8	..	51
Jaundice, and other Diseases of Liver ..	10	..	1	8	26	19	16	7	6	6	7	10	6	6	64
Other Diseases of Digestive System ..	12	7	7	6	14	14	7	8	2	21	10	9	2	1	60
6.—DISEASES OF LYMPHATIC SYSTEM															
(e.g., of Lymphatics and Spleen).	1	..	1	..	..	..	..	..	..	1	..	..	1	..	2
7.—DISEASES OF GLAND-LIKE ORGANS OF UNCERTAIN USE															
(e.g., Bronchocele, Addison's Disease).	..	..	3	..	3	1	..	1	1	3	1	1	..	..	7

TABLE A—(continued).

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DEATHS REGISTERED IN THE BOROUGH OF BIRMINGHAM DURING THE
YEAR ENDING JANUARY 1ST, 1887—continued.

1886.	AGES.						REGISTRATION SUB-DISTRICTS.								Borough.
	0-1	1-5	5-20	20-40	40-60	60 and up.	Ladywood.	St. Thomas.	St. Martin.	St. George.	All Saints.	Deritend.	Duddeston.	Edgbaston.	
Local Diseases—continued.															
8.—DISEASES OF URINARY SYSTEM.															
Nephritis	2	3	2	4	16	3	3	3	2	8	5	3	4	2	30
Bright's Disease, Albuminuria	..	3	8	25	49	20	5	12	10	22	23	7	22	4	105
Disease of Bladder or of Prostate	1	..	1	3	3	22	..	5	..	10	6	5	1	3	30
Other Diseases of the Urinary System	1	1	3	3	4	9	1	4	2	3	2	1	5	3	21
9.—DISEASES OF REPRODUCTIVE SYSTEM.															
(A) Of Organs of Generation.															
Male Organs	2	..	..	..	..	1	1	2	..	..	..	..	..	..	3
Female Organs	..	1	1	8	6	1	3	1	..	6	3	2	..	2	17
(B) Of Parturition.															
Abortion, Miscarriage	..	..	..	9	1	..	..	1	..	3	1	..	5	..	10
Puerperal Convulsions	..	..	1	2	..	..	..	..	..	..	1	2	..	..	3
Placenta Prævia, Flooding	..	..	..	4	..	..	1	..	..	1	2	..	..	..	4
Other Accidents of Child-birth	..	..	3	31	1	..	6	1	2	4	3	10	7	2	35
10.—DISEASES OF BONES AND JOINTS.															
Caries, Necrosis	..	1	2	2	2	2	..	3	..	2	3	1	..	..	9
Arthritis, Ostitis, Periostitis	1	2	1	2	..	1	3	1	..	1	2	..	..	..	7
Other Diseases of Bones and Joints	..	1	3	3	3	2	2	1	2	1	6	..	..	..	12
11.—DISEASES OF INTEGUMENTARY SYSTEM.															
Carbuncle, Phlegmon	1	..	..	1	..	1	..	..	..	..	1	1	1	..	3
Other Diseases of Integumentary System	8	1	..	..	8	19	5	3	3	4	11	4	2	4	36
VII.—Deaths from Violence.															
1.—ACCIDENT OR NEGLIGENCE.															
Fractures and Contusions	..	11	14	9	20	22	4	17	6	28	2	9	7	3	76
Gunshot Wounds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cut, Stab	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1
Burn, Scald	5	27	15	8	4	4	3	22	1	28	2	2	3	2	63
Poison	..	1	1	..	..	..	..	..	1	..	1	..	..	..	2
Drowning	2	1	7	5	5	2	5	3	3	..	5	4	1	1	22
Suffocation	117	1	1	4	2	..	13	10	18	35	13	24	12	..	125
Otherwise	1	3	7	5	3	9	3	7	3	6	2	1	4	2	28
2.—HOMICIDE.															
Manslaughter	1	1	3	2	1	..	..	2	1	3	2	..	..	..	8
Murder	2	..	1	1	..	..	..	2	..	..	2	..	..	..	4
3.—SUICIDE.															
Gunshot Wounds	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1
Cut, Stab	..	..	1	4	4	3	2	1	4	4	..	..	1	..	12
Poison	..	..	..	2	2	1	..	1	1	2	1	..	..	..	5
Drowning	..	..	..	3	3	3	..	2	..	..	2	1	1	..	6
Hanging	..	..	..	3	2	6	..	..	5	4	..	2	..	..	11
Otherwise	..	..	..	3	3	..	1	2	..	1	2	..	..	..	6
4.—EXECUTION.															
Hanging	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
VIII.—Deaths from Ill-Defined and not Specified Causes.															
Dropsy	1	..	2	6	3	..	3	1	1	4	3	..	..	..	12
Debility, Atrophy, Inanition	210	9	1	4	5	37	25	21	28	32	37	42	7	..	220
Marasmus	264	85	5	..	..	47	35	35	62	44	47	79	5	..	354
Mortification	..	1	..	1	6	1	..	..	1	2	2	2	..	..	8
Tumour	2	7	14	17	5	16	8	1	3	9	4	2	2	..	45
Abscess	6	5	..	2	6	1	2	3	2	4	1	3	4	1	20
Hæmorrhage	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1
Sudden Death (cause not ascertained)	..	..	1	..	..	..	..	..	..	..	..	1	..	..	1
Other not Specified or Ill-defined Causes	19	4	4	1	7	8	3	5	2	9	20	3	1	..	43

METEOROLOGY.

Temperature
of year.

During the past year the temperature has, on the whole, been lower than the average, notwithstanding the very fine summer experienced; and, as is usual in a cool year, the rainfall was considerably in excess of the mean. The mean temperature for 1886 was $47^{\circ}6$, or $0^{\circ}6$ below the average. This deficit would doubtless appear very small to the meteorological tyro, and so it would be if it extended over only a few days or weeks; but when we consider that this is the deficit for a whole year, we can readily understand that some very cold months must have occurred, and this was the case with the year under review. The year 1885, however, was colder by $0^{\circ}2$, than its successor, and was the coldest since 1881, which, excepting 1879, had a lower temperature than any year since 1867. The first six months in 1886 were cold; July, August, September, October, and November had a temperature above the average, whilst December was also cold.

January.

February.

March.

April.

In January the mean temperature was $35^{\circ}2$, or $1^{\circ}4$ below the average. The lowest temperature which occurred was $21^{\circ}5$, or $10^{\circ}5$ of frost. Skating was generally indulged in. Like its predecessor, February was also very cold, being as much as $5^{\circ}9$ below the mean temperature of this month. January is generally $2^{\circ}5$ colder than February, but in 1886 there was a reversal of this, as although January was $1^{\circ}4$ colder than the average, the temperature of February was actually $2^{\circ}0$ lower than that of January. March followed the example of the two preceding months, having a mean temperature $1^{\circ}9$ below the average. Such exceptionally severe weather occurred in this month that the following full statement of the low minima which occurred will, no doubt, be interesting:— $27^{\circ}0$ on the 1st, $27^{\circ}5$ on the 2nd and 3rd, $23^{\circ}5$ on the 4th, $25^{\circ}0$ on the 5th, $24^{\circ}0$ on the 6th, $14^{\circ}0$ or eighteen degrees of frost on the 7th—a reading so remarkably low for the time of year that it is doubtful if it has ever been surpassed in severity— $21^{\circ}0$ on the 8th, $22^{\circ}5$ on the 9th, $24^{\circ}0$ on the 10th, $24^{\circ}5$ on the 11th, $27^{\circ}5$ on the 12th, $27^{\circ}0$ on the 13th, $24^{\circ}0$ on the 14th, and $28^{\circ}0$ on the 17th. It is almost superfluous to add in the face of the above readings, that skating for the third or fourth time since the commencement of the year again became general. The last fortnight of March was very warm, and but for this being the case the month's average would have been remarkably low, the difference in temperature between the first and second halves of the month being $16^{\circ}5$. April, which has been

colder than the average in each of the last four years, was $1^{\circ}5$ below the mean for this month. Sharp frosts occurred on three nights, including the last day of the month. May was slightly, whilst June was much colder than the mean, but July was $0^{\circ}4$ warmer than the average. There were 15 days in July with a maximum of upwards of $70^{\circ}0$, compared with 18 in 1885, 15 in 1884, and 16 in 1883. The highest maximum temperature registered during this month was $84^{\circ}5$ on the 5th; last year it was $86^{\circ}0$. August had an average temperature of $61^{\circ}1$, or $0^{\circ}6$ above the mean. A maximum temperature of $84^{\circ}0$ occurred on the 31st of this month. September opened with some very warm weather, and had a mean temperature of $57^{\circ}1$, or $1^{\circ}7$ above the average. October and November were both very warm, the former being $3^{\circ}5$, and the latter $3^{\circ}3$ above the mean of these months respectively. On the 5th and 6th of October, the temperature attained the extraordinary heights of $73^{\circ}0$ and $74^{\circ}5$ respectively, but even these high values were eclipsed in the year 1859, when a reading of $77^{\circ}0$ occurred, which was followed in a few days by readings of 12° – 14° and even 16° below the freezing point, during which severe weather the wreck of the Royal Charter took place with its awful sacrifice of 500 lives. December was cold, frost setting in on the 1st, whilst 11 days of frost were registered on the 3rd and 18th, $12^{\circ}5$ on the 21st, $12^{\circ}0$ on the 22nd, and $13^{\circ}0$ on the 31st. The mean temperature of this month was $35^{\circ}0$ or $2^{\circ}9$ below the average.

The rainfall of 1886 was, as before mentioned, rather heavy, the total fall of the year amounting to 36.59 inches, or 4.66 inches more than the average. Seven months were drier than usual, but the other five were so wet that they far more than made up for the deficiency. January and February were both very dry. March was wet, and April dry. May was excessively wet; in fact its rainfall was considerably heavier than that of any May during the past twenty years. The total fall amounted to no less than 6.31 inches or 4.04 inches above the average. Rain set in on the 8th with a persistency which is of the rarest occurrence even in dripping England. For thirteen days we had heavy rain every day; then followed two fine days, and then, till the end of the month, every day except the 30th was wet. In 1869, 1878, and 1879, May was also very wet, but in none of those years did the rainfall approach that of the month under review. On the 12th and 13th the rainfall was 1.70 inches and 1.75 inches respectively, a larger quantity of rain being measured on these two days alone than fell during the whole month in seventeen out of the last twenty years. These two days accomplished a record, as there is in my records no other instance with two consecutive days with a fall approaching that of these two days. June, August, September, and November were dry; whilst July, October, and December were very wet. On August 9th, 1.51 in. of rain fell.

Meteorology
(continued).

May.

June.

July.

August.

September.

October.

November.

December.

Rainfall.

Meteorology
(continued).
Thunder.

A heavy thunderstorm occurred on June 1st, during which Shustoke Church was struck by lightning, and burnt to the ground, and another on the 19th of the same month; on September 4th also two very severe thunderstorms visited us, while one of short duration occurred on the following morning.

The following Table shows the temperature and rainfall for each month of 1886, as well as the variations from the monthly averages:—

MONTHS.	TEMPERATURE.			RAINFALL.		
	Mean Temperature in Degrees and Parts.	Average for 20 years, 1861-1880 inclusive	Above or below the average.	Rainfall for Month in Inches and Parts.	Average for 10 years 1867-1876 inclusive.	Above or below the average in Inches and Parts.
January	35°2	36°6	— 1°4	1·95	2·92	— 0·97
February	33·2	39·1	— 5·9	1·21	2·26	— 1·05
March	38·7	40·6	— 1·9	3·26	2·47	+ 0·79
April	45·7	47·2	— 1·5	2·20	2·01	+ 0·19
May	51·3	51·9	— 0·6	6·31	2·27	+ 4·04
June	56·6	58·4	— 1·8	1·99	2·28	— 0·29
July	62·0	61·6	+ 0·4	3·49	2·88	+ 0·61
August	61·1	60·5	+ 0·6	2·17	2·54	— 0·37
September	57·1	55·4	+ 1·7	3·38	3·67	— 0·29
October	51·7	48·2	+ 3·5	3·97	3·33	+ 0·64
November	43·6	40·3	+ 3·3	2·08	2·09	— 0·01
December	35·0	37·9	— 2·9	4·58	3·21	+ 1·37
Year	47·6	48·2	— 0·6	36·59	31·93	+ 4·66

I am indebted to the late Mr. Plant for the temperature averages for the twenty years 1861-1880.

**METEOROLOGY, BIRTHS, DEATHS, AND MORTALITY FROM CERTAIN
PREVALENT DISEASES FOR EACH WEEK OF 1886.**

Week.	Temperature of the Air.			Air Pressure.	Horizontal Movement of Air in Miles.	Mean Humidity, complete Saturation = 100.	Rainfall in inches.	Births.	Deaths at		Deaths from																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																		
	Highest during week.	Lowest during week.	Mean Temperature.						Extreme Range of Barometric Changes.	All Ages.	Under 1 year.	1 to 5 years.	Over 60.	Small Pox.	Measles.	Scarlet Fever.	Diphtheria.	Whooping Cough.	Fever.	Diarrhoea.	Phthisis.	Respiratory Diseases.																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																							
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II. SANITATION.

Removal of
insanitary
property.

i. *Influences affecting or threatening to affect injuriously the Public Health.* With the exception that there has been a rather considerable demolition of old and generally insanitary property in the neighbourhood of Norfolk Street, to provide for the formation there of a Goods Station by the Midland Railway Company, very little insanitary property has been removed during the past year.

Ashpit middens.

A few ashpit privies have been found in unsuitable places, and have been reconstructed on a better plan, but owing to the large number of these that have been replaced in past years it has been found necessary to order fewer such conversions than formerly.

Surface filth.

The deposition of offensive matters on the surfaces of the streets is under the supervision of the police, and sixteen offenders against the bye-laws in this respect have been summoned before the magistrates; nine of the defendants were fined small amounts, while one was ordered to pay costs only, and six others were let off with a caution.

The Assistant Inspectors are often compelled to direct the attention of the occupants of many of the worst courts in the Borough to the filthy state of the privies and surfaces of the courts, and in some cases, after repeated warnings, are obliged to resort to legal proceedings.

No houses, I am pleased to be able to record, have been allowed to be erected during the year on foundations made of deposits of road scrapings or other improper material.

Improper
keeping of
animals.

Fowls, pigeons, and other animals are still kept in many instances, I regret to say, in cellars and other altogether unsuitable places, notwithstanding the steps that have been taken for many years to reduce as far as possible to a minimum this decidedly harmful practice.

Smoke.

Upwards of 4,000 observations of the various chimney stacks in the Borough have been made by the Assistant Inspectors appointed for this purpose; in 256 instances, or on somewhat more occasions than in the previous year, they found dense smoke to be emitted for a longer time than is allowable. It was found necessary to summon 68 proprietors of manufactories, all of whom were convicted of the offence, penalties to the total amount of £50 being inflicted. One hundred and fifty-four letters of caution were also issued; they contained warnings that if the nuisance were not abated legal proceedings would have to be had recourse to.

In consequence of the prevalence of disease of a low type at the Birmingham and Midland Counties Eye Hospital, I was requested by the Committee of the Hospital to make an inspection of it. The following is a copy of my Report upon it:—

Report on "Eye Hospital."

"In accordance with your request I beg to say that I have visited and examined the Birmingham and Midland Counties Eye Hospital, under the kind guidance of Dr. White, as far as circumstances will permit.

"It is very difficult, and indeed impossible, to make a thorough inspection of all parts of a system of water supply and drainage in a completed building where many portions of the system are concealed from view in brick-work and underground, but I have made as full an inspection as possible.

"The building suffers under the disadvantages of not possessing enough free area, and of not having its closets and urinals cut off from the main building by short and cross ventilated lobbies, a form of arrangement which would have been easily carried out in the present instance, and would have effectually prevented them from acting as sources of contamination of the air of the main building.

"*Third Floor.* The water closets are constructed in such a way, and so situated that they do not admit of through ventilation; the best thing to do under the circumstances is to have the doors between them and the corridors kept shut, and the windows open as much as possible. The basins of the closets are of such a form as to prevent the full force of the water flush. Their pattern is what is called the "wash out," the shelf of which breaks the force of the water supply, and prevents it efficiently clearing out the deposit in the syphon bend. The water-waste-preventing cisterns have several defects, which diminish the efficiency of their flushing power. For instance, in some cases they are not placed sufficiently high, in others they do not become sufficiently filled with water and they do not completely discharge the water they contain, so that between these two faults a nominal two-gallon cistern is probably discharging only about one gallon, which is not enough. The pipes connecting the cistern with the closet basins are too narrow and possess too many bends, both of which conditions diminish the force of the flush. To fully discharge their contents such cisterns ought to act on a momentary pull at the wire. Some of these cisterns do not act until the handle is held a little time, which leads in the hands of careless people to incomplete discharge of water.

"*Second Floor.* The above remarks apply to the water-closets on this floor. The form of trap on the floor

in the water-closets on the men's side also admits of improvement. These traps and urinals emit a very disagreeable urinous odour, and require much more careful and frequent purification with carbolic acid; the same is the case with the housemaids' slop sink. The ventilation of the closets on the women's side of this floor would be much improved by a window placed in the wall opposite to the present one, which would cause efficient ventilation. The doors shutting off the closets should of course be kept constantly closed.

"*Basement.* The soil pipes of the water-closets should each be supplied for the purpose of their ventilation with an opening at the ground level situated on the house side of the trap intervening between the closet and the sewer.

"The dust shoots which communicate with the interior of the building require to be bricked up in such a way as to cut off all communication with the dust hole. This is necessary on account of the circumstance that the dust is not simply dry ashes but contains much animal and vegetable decomposing matter, which I found to be at the time of my visit intolerably offensive. The admission of such air in however small a quantity, as through chinks, is highly calculated to produce certain low forms of disease. The dust hole ought further to have the door removed and another large opening in the wall looking on the yard to ensure through ventilation; the dust should be contained in movable covered metallic receptacles which should be taken away every day before decomposition of organic matters can set in. After complete severance of the dust shoots from the dust hole, it might be desirable, as suggested by Dr. White, to connect their outer or lower ends with the external air and use them as ventilators, controlling them by means of movable valves.

"The drain trap in one of the areas in Church Street acts as a fat interceptor; owing, however, to want of attention the fat has accumulated to a large extent in it, and has become very offensive, but as I can see no place in which to suggest the placing of a suitable separate interceptor, I recommend that the trap in question receive weekly attention. The area in which it is placed is inconveniently small and very difficult of access.

"*The Porter's Bedroom.* This bedroom has no ventilation, the result being that the room is always cold and damp, and therefore unhealthy, and in its present state unfit for occupation. This condition would be greatly improved by the cutting of a hole in the wall separating the bedroom from the corridor, but as a fact it is in contravention of the requirements of the Public

Health Act and cannot be legally used either as a dormitory or dwelling room. Being unable to ascertain whether the water cistern in the receiving room is properly severed from the sewer or not, I recommend that this fact be ascertained.

Report on "Eye
Hospital"
(continued).

"In some of the upstairs urinals there was no supply of water properly available, the key being a movable one and not left in its place."

I paid a further visit some time afterwards, and subsequently reported to your Committee that "since the improvement of the drainage and ventilation I find that the Hospital is now in a good sanitary condition, and that as a result of the improvement the special forms of low type disease which for a very considerable time existed in the Institution have entirely disappeared."

Improved
Health result-
ing from
structural
alterations.

CERTIFICATION OF THE CAUSES OF DEATH.

One of the most important objects attained by the Registration Act of 1837 and subsequent amending Acts, which provide for the Registration of Births and Deaths, is that the cause of death shall be in every case as far as possible revealed; this is mainly secured by the fact that it is illegal for any person to bury a corpse without the production of an order for burial either from the Registrar or the Coroner, neither of whom is empowered to give such an order until he is convinced whether the cause of death is a natural one or not.

Certification of
causes of death.

Of the 8,499 deaths recorded during the year, 809 or 9·5 per cent. were registered on the certificate of the Coroner or of his Deputy after an inquest had been held, while in 196 other instances, or 2·3 per cent., the Coroner did not think it necessary to hold an inquest, although a certificate of the cause of death was not procurable from a medical man, so that the probable cause of death had to be ascertained from the nearest relative present at the death. The proportion of uncertified deaths in All Saints shows a considerable increase on that of last year, while the high proportion in Saint George's noticed in my last Report is still maintained; the percentage in the Deritend Registration Sub-District has fallen, however, to a very low figure.

Inquests.
Uncertified
deaths.

The proportion of uncertified deaths in the whole Borough has risen from 1·1 in 1883, and 1·5 in 1884 to 2·2 in 1885, and still further to 2·3 in the past year. It is a matter for regret that the non-certification of the cause of death should continue to increase in this manner, as not only does it imply a possible loss of life which prompt medical aid might have averted,

Uncertified
deaths
(continued).

but it leads to vitiation in the classification of disease, because comparatively little value can be attached in many instances to information obtained from an unskilled and often uneducated class of informants.

Particulars of the Certification of the causes of death in the whole Borough and in each Registration Sub-District are given in the following statement:—

Registration Sub-Districts.	Total Deaths.	Certified by		Not Certified.	Proportion per cent. of Deaths.		
		Registered Medical Practitioners.	Coroner.		Certified by		Not Certified.
					Registered Medical Practitioners.	Coroner.	
Borough of Birmingham.	8,499	7,494	809	196	88·2	9·5	2·3
Ladywood	1,037	921	89	27	88·8	8·6	2·6
St. Thomas	744	614	113	17	82·5	15·2	2·3
St. Martin	747	623	103	21	83·4	13·8	2·8
St. George	1,575	1,298	224	53	82·4	14·2	3·4
All Saints	1,524	1,404	86	34	92·1	5·7	2·2
Deritend	1,510	1,386	106	18	91·8	7·0	1·2
Duddeston	1,089	990	78	21	90·9	7·2	1·9
Edgbaston	273	258	10	5	94·5	3·7	1·8

Causes, Origin,
and Distribu-
tion of Disease.

ii. *The Causes, Origin, and Distribution of Disease.*—

A very large number of Diarrhoeal cases occurred in the late summer and early autumn, and in consequence of this and of the epidemic of Measles in the first half of the year there was occasionally considerable pressure of work on the Inspectorial staff during the first nine months of the year. As a result, however, of a practically entire absence of Smallpox and of the occurrence of unusually few cases of Scarlet Fever, less time, as a whole, has been occupied in enquiring into the surroundings and cause of cases of an infectious nature than in many previous years.

On intimation of the occurrence of cases of Scarlet Fever and Smallpox, steps are at once taken to secure the removal of the patients to the Borough Hospital, and in nearly every instance these endeavours have been rewarded with success. After the removal of the patient the rooms he occupied at home are fumigated with sulphur, the woodwork and paint are cleansed by washing them with carbolic soap and water, and the wall paper is stripped off and burnt and the surfaces lime-washed, while the bedding and clothing used by him are taken to and disinfected at the Borough Disinfecting Station.

In cases of Typhoid Fever or Diphtheria a visit is made by myself as well as by the Ward Inspector, and particular enquiries are directed to the possible source of the disease.

Causes, Origin,
and Distribu-
tion of Disease
(continued).

With a view to prevent as far as possible the spread of infection, the heads of schools and employers of labour are also notified of the attendance at places under their charge of members of households in which infectious disease exists and that such attendance should cease until a certificate is produced from the medical attendant stating that there is no longer danger of infection being conveyed in this way. It is also frequently found necessary by the Assistant Inspectors to warn neighbours of the risk they run in unnecessarily visiting infected households. When infectious disease is present at houses where such trades as mangling, laundry work, tailoring, pawnbroking, milk-selling and the like are carried on, precautionary steps are immediately taken to the extent in some instances of suspending the business until such time as there is reason to feel assured that the possibility of the spread of infection has been provided against.

Schools and
Infectious
Diseases.

Trades and
Infectious
Diseases.

iii. *Advice to the Sanitary Authority on Matters affecting injuriously the Public Health.*—

Having been requested by your Committee to state my opinion as to the best known form of Watercloset and method of flushing, I made the following Reports:—

Advice to the
Sanitary
Authority.

"I beg to report in reference to Minute No. 2,992, that the kind of water closet best suited for general use, especially for small house property, is that which is known as the 'Hopper' closet; it is so called from the resemblance of the basin to the hopper of a mill; the basin is furnished with a flushing rim which delivers a shower of water round the whole circumference of the basin, and the water falls with direct force into the syphon bend and seals the apparatus. Its great advantage is that it has no valves or other mechanism capable of getting out of order, so that it can be entrusted to the use of ignorant or careless people. It requires to be flushed by means of a syphon-action water waste preventing cistern, discharging from two to three gallons of water. The cost of the basin is only 7s. 6d. in brown glazed stone ware.

"There are many forms of closet apparatus closed by means of valves, but besides being expensive they are apt to get out of order. The simplest forms of this kind of closet are those constructed on the Underhay model.

"For use in cottage property I recommend a system which has for sometime commended itself to my mind. It requires neither basins nor cisterns, but the surface

drainage and waste water of property is diverted along glazed pipes which thus are made to act as closets and soil pipes by connecting them at intervals with perpendicular pipes terminating above immediately under the closet seat. The supply of water could be furnished from the surface direct, or better with the intervention of a cistern emptying itself automatically. The accompanying drawing will render quite intelligible the plan proposed, and various forms of closets can be seen in action in the Inspector's Office.

"The claims of this method are that it is cheaper than any other and more simple, requires no attention, and cannot become obstructed except by wilful misconduct."

Diagram No. I represents a plan of premises where the system is in operation. The outlets of the kitchen sink are indicated by the *Fig. 1*. *Fig. 2* is a trap on the yard surface, over the superficial drain. It is desirable where there are only one or two houses that a tank should be constructed, where the superficial drain joins the deep drain, in two chambers, the first (*Fig. 3*) to arrest earthy and other solid matters carried by the drainage, the second (*Fig. 4*) to constitute an automatic syphon flushing tank.

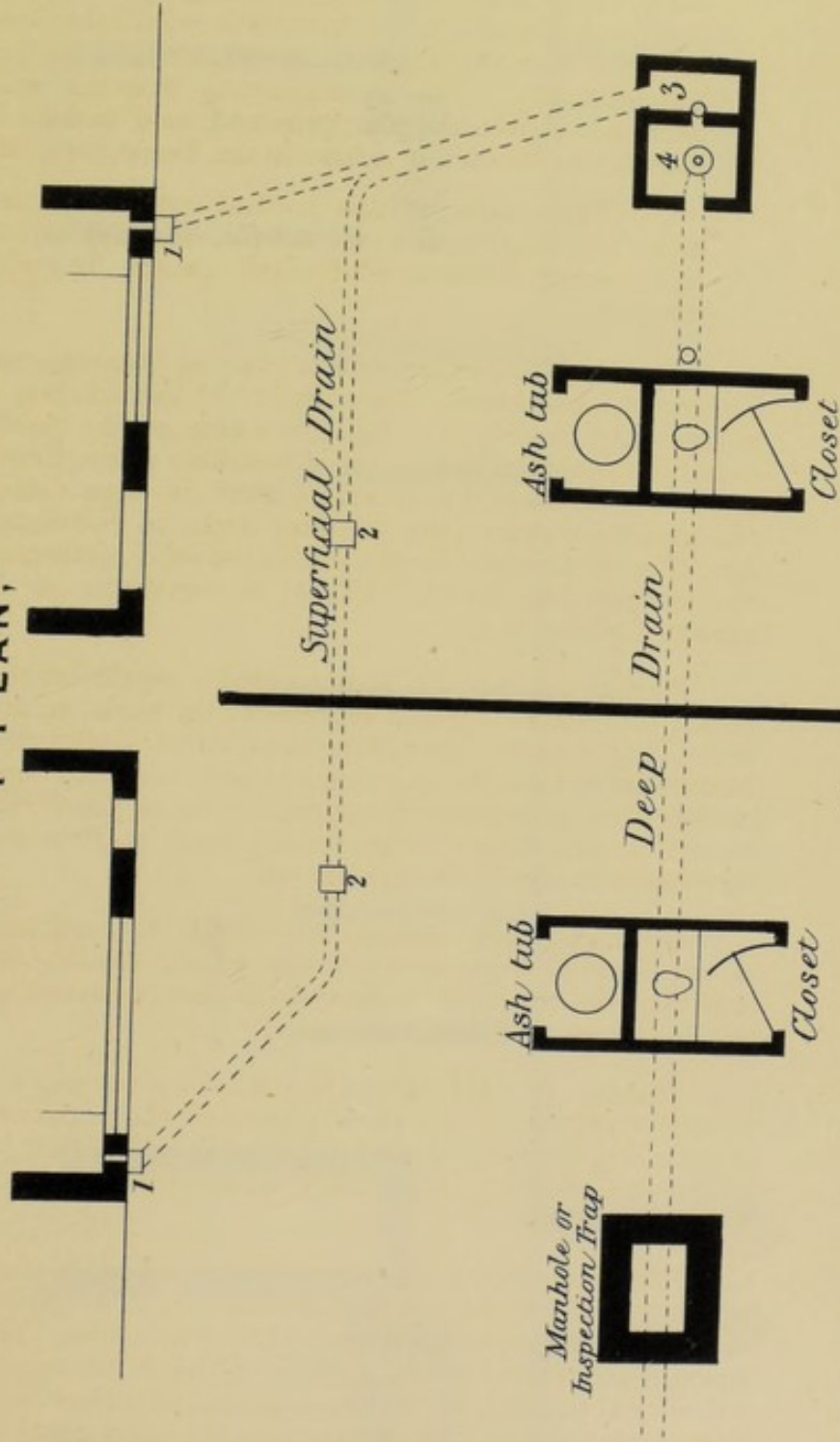
In diagram No. II. is presented a section of the closets, tanks, and drains. *Fig. a* represents the tanks on an enlarged scale; *Fig. b* is the same, furnished with a sloping instead of a horizontal bottom to the syphon tank, and the object of this modification is to prevent stoppage of the action of the syphon by the accumulation of soapy and fatty matters to a height covering the edge of the syphon cap.

By occasionally raising the handle the matters referred to are washed away down the short pipe into the deep drain, and thus the trouble of removing the accumulation referred to and much inconvenience are saved.

Diagram No. III. shows the details of the pipes. *Figs. a, b, and c* represent the vertical pipes and the horizontal pipe in section, the number of pieces of *a* being decided by the depth of the deep drain. *Figs. e and f* represent the pieces *b* and *c* as seen from above.

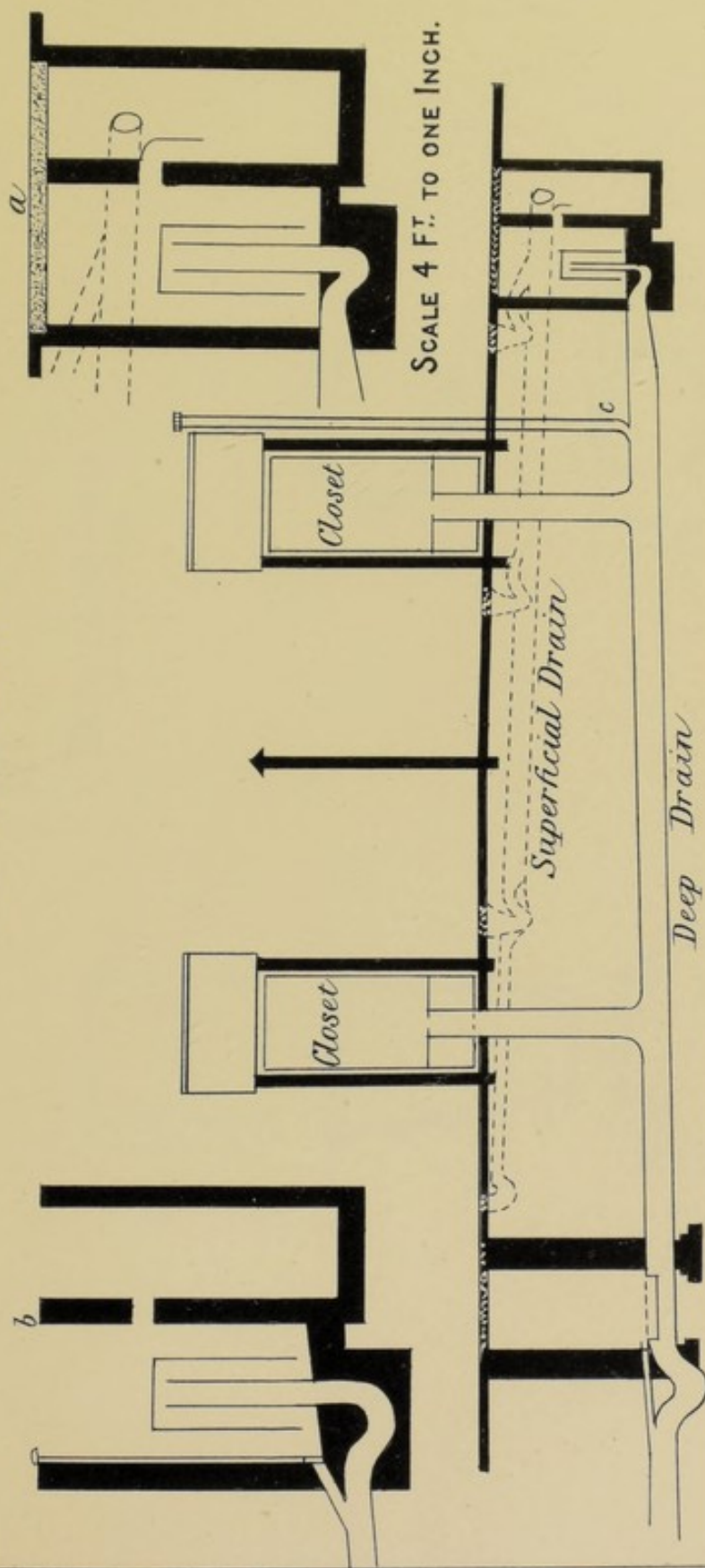
Under the closet seat is placed an oval salt-glazed stoneware pipe, the upper aperture of which is 17 x 15 inches in its diameter; the lower aperture is 12 x 10 inches. This lower opening is received into a collar on a length of pipe which is cylindrical in form, 22 inches long, and 9 inches wide, in the deep drain, so that the opening into the horizontal drain-pipe is larger than the general diameter of the same. The vertical pipe running from the closet seat to the deep drain is so shaped that its posterior wall is perfectly vertical, while its anterior

IMPROVED FLUSH CLOSETS. I PLAN,



SCALE 8 FEET TO ONE INCH

II SECTION.



SCALE 8 FEET TO ONE INCH.

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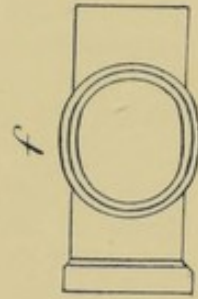
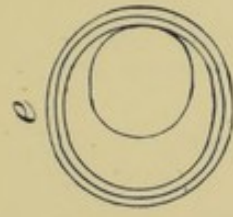
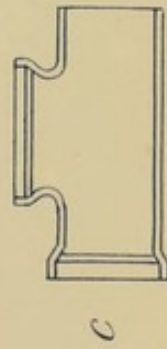
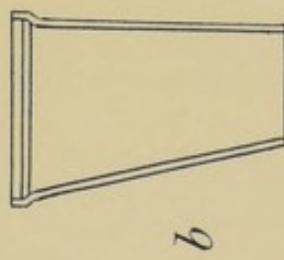
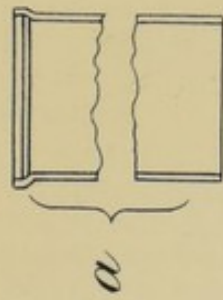
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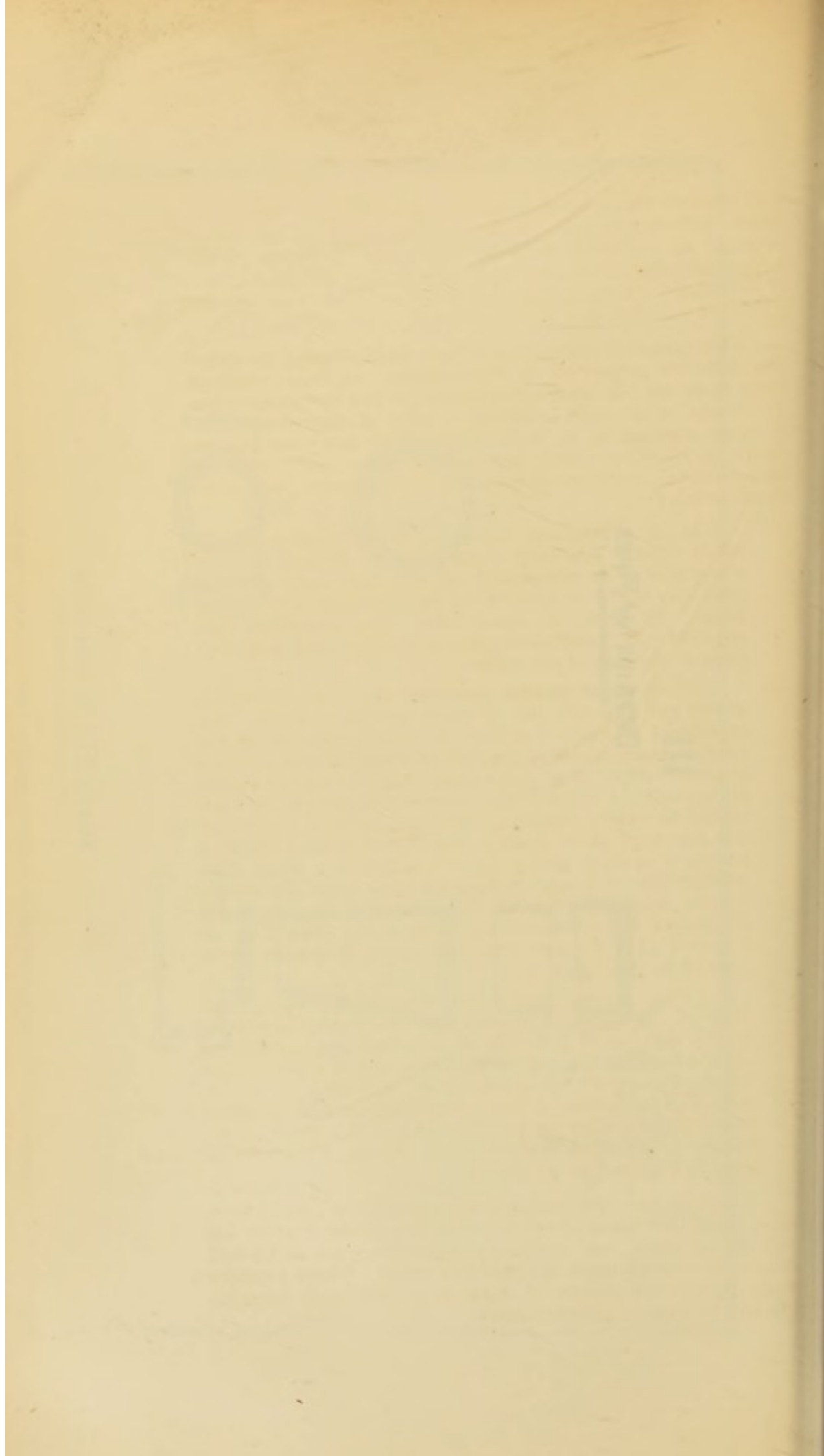
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III

DETAILS OF PIPES.



— SCALE 2 FT. TO ONE INCH. —



wall towards the lower end inclines in a straight line backwards and downwards, causing a narrowing of the lower aperture to enable it to enter the collar or flange of the horizontal pipe, which, as I have already said, is 12 x 10 in. in diameter. This peculiarity in the form of the pipe has for its object the obviation of the soiling of it during use.

Advice to the
Sanitary
Authority
(continued).

This system of closets has already been adopted on sixty-one different properties in Birmingham; on thirty-eight of them there are 133 closets without tanks, and on twenty-three 81 closets with tanks, making a total of 214 closets. It is more economical in both construction and maintenance than any other, and is exempt from the evils of accumulation, overflow, obstruction, derangement, and other disadvantages.

In a subsequent report I stated further "that water closets generally require to be flushed in such a manner as to completely remove, each time they are used, the whole contents of the basin or basin and syphon bend. In order to secure this, two conditions are required: 1st, a sufficient volume of water, 2nd, sufficient force in the flow of the water.

"Cisterns of various capacities are in use, delivering at one pull as a rule two or three gallons of water. My experience is that two gallons are quite insufficient for the purpose, particularly in the case of closets of certain forms of construction, or of those situated in the higher stories of houses. I accordingly recommend that a bye-law should be framed requiring cisterns to be of a capacity of not less than three gallons, and that they be of the kind having a syphon action, by which means a much more forcible flow of water is obtained than from the simple cistern, while the whole of the contents of the cistern are discharged by a momentary pull of the wire just as certainly as if the wire were held down during the whole time of the discharge.

"From a resolution of the Water Committee, dated May 7th, No. 2,924, it appears that the Water Committee do not approve of a supply of less than two gallons to closets fitted on the syphon principle, and of three gallons where the supply is regulated by a system of double valves. In reference to this I would remark that, provided this statement does not prohibit the use of a three gallon cistern in all cases without extra charge, I consider it may be accepted as satisfactory."

I may remark in reference to the above Report that I have since found that many of the so-called two-gallon cisterns are only so in name, not delivering more than one-and-a-half gallons, or in some cases one gallon of water. Where a cistern really delivers two gallons of water it is sufficiently large for effective flushing in ordinary cases.

Important
Legal Decision.

A case of much interest to sanitary authorities and owners of property, in which the Birmingham Town Council were the prosecutors, was heard some time ago.

The original summons called upon Messrs. Milward & Co., Solicitors, as agents of the Rev. Geo. Inge, to abate a nuisance arising from the defective construction of a water-closet, &c., at No. 65, Bull Street. The defence was that Messrs. Milward and Co., acting only as agents, were not the proper persons upon whom such an order could be made, and that they were not liable because the premises were let to a tenant who undertook to do repairs, and therefore, that an agreement between them and a tenant took away their liability to execute repairs. The defendant's counsel also read several decisions in favour of an additional argument of his that his client had no power to enter upon the premises, and that the court could not make an order upon him requiring him to do an act which would in law amount to a trespass. The Magistrates refused to make an order, but granted a case for a higher court.

The case was argued out before Baron Pollock and Mr. Justice Cave, and the decision of the Magistrates was reversed. The judges held that the nuisance complained of was one relating to a structural convenience, and that therefore the notice could only be served upon the owner, for if no order could be made upon the owner, there would be no power for the local authority to enter and do the work. Moreover, it would be a sufficient answer to any proceedings for penalties that the owner had done his best to obtain admittance to the premises and had failed.

As a result of this decision the application for the nuisance to be abated was renewed before the Magistrates, and an order was granted.

This decision settles a difficulty which has long been a hindrance to the action of the Sanitary Authority, and it will prove equally valuable to all other sanitary bodies.

Dairy Com-
pany's
premises.

Complaints having been made of the insanitary condition of the Dairy Company's premises in Lincoln's Inn, Corporation Street, I made an inspection of them and found serious defects existed. On my advice new premises were taken for carrying on the business, while the drainage of the old premises was overhauled, re-arranged and put in thorough sanitary condition.

I finally reported that the premises are now in a good sanitary condition and may therefore be registered for the sale of milk and dairy produce, on condition that no waterclosets be introduced into the basement, as has been proposed.

In accordance with the foregoing recommendation the premises were subsequently registered for the purpose specified.

iv. *Outbreaks of Infectious, Contagious, or Epidemic Diseases.*—No new outbreak of disease has occurred during the year, but Measles prevailed to a rather serious extent over a considerable portion of the Borough in the first six months of the year, as has already been explained. Outbreaks of Infectious Diseases.

v. *Examination of, and Action in regard to Suspected, Diseased, or Unwholesome Food.*—330 lots of meat have been condemned during the year; 287 of these were voluntarily surrendered by the owners, while the remaining 43 were seized by the Inspectors. The weight of meat destroyed is upwards of 34 tons. Thirty-four seizures of fish, game, etc., have also been made, while in 122 instances this class of food was found to be bad by the vendors, and voluntarily given up by them. Unwholesome food.

vi. *Duties under Sanitary Bye-Laws and Regulations.*—These have reference to Common Lodging Houses, Houses let in Lodgings, Slaughterhouses, Dairies, Cow Sheds, and places for the storage and sale of Milk.

COMMON LODGING HOUSES.

These numbered at the end of the year 108, with accommodation for 2,401 Lodgers. Common Lodging Houses.

Upwards of 10,000 visits have been paid to them, 7,656 by day, and 2,928 by night.

Six persons have been summoned for offences against the Bye-Laws regulating these houses; two of the summonses were for neglect on the part of the proprietors to obtain registers, one for permitting overcrowding, one for allowing adults of both sexes to occupy the same sleeping room, another for using an underground kitchen as a sleeping apartment, and the remaining one for the filthy state of the bed and living rooms. In four of these cases fines were imposed, in one other the proprietor was ordered to pay costs, and in one case the summons had to be withdrawn on account of inability to serve it on the defendant, who had left the town. Offences against Lodging House Bye-Laws.

In consequence of reports having been made as to want of cleanliness, overcrowding, and immorality at some Lodging Houses in New Canal Street, and as to inattention of the Inspector deputed to look after them, I made an inspection of them and Report on Lodging Houses in New Canal Street.

Report on
Lodging Houses
in New Canal
Street

(continued).

found that the allegations were not, generally speaking, sustained by what I found on my visit. The number of lodgers was in every case below that allowed by the bye-laws; the Inspector had visited, I was informed by the occupants, most of the houses only a few days before; the condition of the premises was as satisfactory as could be expected, certainly not worse than that of property of the same class in other similar parts of the town; and though it is not improbable that some of the women in at least one of the houses were loose characters, it did not appear that prostitution, if carried on by them, was carried on in these houses. I believe, in fact, that the lodging houses were conducted with ordinary care with regard to cleanliness and decent behaviour.

HOUSES LET IN LODGINGS.

Houses let in
Lodgings.

These are registered under the provisions of The Public Health Act of 1875, and numbered at the close of the year, 163, or seven fewer than at the end of 1885. Nine hundred and thirty-nine Lodgers are permitted to occupy these houses, giving an average of 5·8 persons to each house.

SLAUGHTER-HOUSES.

Slaughter-
Houses.

The numbers of both registered and licensed Slaughter-houses remain identical with those for each of the last four years; there are still I regret to say so many as 270, of which 132 are registered and 138 licensed.

At the request of the Markets and Fairs Committee I have from time to time inspected sites where it has been proposed to establish Slaughter-houses. In two cases I reported that, subject to certain alterations, licenses might be granted, but in three other instances I considered the premises and surroundings were altogether unsuited for the purpose.

It is certainly highly desirable that no more additions than are absolutely needed should be made to the already unnecessarily large number of private Slaughter-houses.

DAIRIES, COW SHEDS, AND MILK SHOPS.

Dairies, Cow
Sheds, and
Milk Shops.

The Assistant Inspector appointed to look after the Dairies and Milk Shops reports that he has paid 2,556 visits to them; in the previous year, when a considerable portion of his time was taken up with other work, 1,661 visits were made. Two hundred and ninety-one applications have been made to obtain registers for the sale of Milk, but 72 of them were refused on account of the unsuitability of the places where it was proposed

to store so important an article of food. The total number of places registered for the sale of Milk at the end of the year was 1,895. Dairies, Cow Sheds, and Milk Shops (continued).

The Cow Sheds are under the supervision of the officers of the Markets and Fairs Committee. A return has been supplied me by Mr. Birckley, the Superintendent of the Markets, who reports that 594 visits have been paid to them, and that in no case has their condition been found to be unsatisfactory.

CANAL BOATS ACTS, 1877 AND 1884.

Upwards of twelve hundred inspections were made of the Canal Boats coming into the Borough during the year. Fifty-eight boats have been registered but, as 207 registrations were struck off, the total number of boats now registered with your authority is 369. Canal Boats Acts.

From a report made by the Inspector, Mr. Parker, through the Town Clerk, to Mr. Bryden, the Inspector appointed by the Local Government Board, I learn that there is a decided improvement in the general cleanliness of the boat people and in the condition of their cabins.

Legal proceedings had to be taken in one instance on account of the master of a boat not having obtained the necessary certificate, and a fine of ten shillings with costs was inflicted. Two hundred and thirty-two notices of caution have also been issued.

No case of infectious disease has been notified as existing on any of the boats during their stay in the Borough, and in no instance has the Inspector been refused admission to examine a boat.

BAKEHOUSES.

The number of these now in use in the Borough is 496; 575 visits have been made to them during the past year, but these have led to the discovery of very few sanitary defects. The necessary cleansing of them has generally been carried out without the interference of the Inspector, but in sixty-six instances a little pressure had to be used by the officer to get this done. In two cases drains were found with their openings inside the bakehouses, while in one dogs, and in another fowls were kept. Intimation was forwarded to the Inspector of Factories on one occasion that two youths were being employed, and the practice was at once discontinued. Bakehouses.

vii. *Offensive Trades.*—Complaints, though fewer than in 1885, have continued to be made respecting a tallow chandlery in the Borough. In the previous year application was made by a firm of solicitors for permission to Offensive Trades.

Offensive
Trades
(continued).

be given to their client to carry on this trade but, as alterations were going on at the time of my visit, I deferred giving an opinion.

I have visited the premises on several occasions during the past year, but have always found repairs going on or required, and in November I reported to your Committee that I considered that "in the absence of bye-laws affecting offensive trades, it is desirable not to license the premises but simply to allow matters to remain as they are."

Application has also been made to establish an additional Knacker's Yard in the Borough. I inspected the premises in company with the Markets and Fairs Sub-Committee, and reported to them that they "are extensive and capable of being made suitable for the purpose of slaughtering and disposing of horses, provided the best arrangements and appliances be insisted on. If the license be granted it would be desirable to have the establishment under the operation of the Slaughter-house Bye-laws, so as to provide for inspection at all times, and to guard against any nuisance to the neighbours.

"You will no doubt fully consider whether there is any demand for further accommodation of the kind in the town, as any unnecessary multiplication of such establishments is of course undesirable; you will also bear in mind that the premises are situated partly in the Borough of Birmingham and partly in the District of Aston; such divided jurisdiction seems to demand consideration in a case of this kind.

"I should recommend that the keeping of pigs in connection with the establishment be prohibited."

Fortnightly
Reports of
Medical
Officer of
Health.

viii. *Fortnightly Reports of the Medical Officer of Health to the Health Committee.*—I have reported to your Committee at each of its meetings on various subjects, including the following:—

1. The general health of the Borough, including the total death-rate, Zymotic death-rate, and average age at death.
2. The occurrence of Infectious disease, and the results of the investigation of certain of the most dangerous cases.
3. The Waters supplied from shallow wells and by the Corporation.
4. Articles of Food, Drink, and Drugs obtained for analysis.
5. Diseased and unwholesome Food.
6. Reports on special questions in pursuance of resolutions, instructions, and otherwise.

BOROUGH HOSPITAL.

Two cases of Smallpox, and 428 of Scarlet Fever have been received into this Institution during the year; in the previous year 81 cases of Smallpox, and 204 of Scarlet Fever were treated here. The admissions in each quarter since the last one of 1874 have been as follows:—

Borough
Hospital.Cases admitted
each Year.

DATE.	Smallpox.	Scarlatina.	Total Cases.
1874.			
4th Quarter ... (2nd Nov. to the end of the year)	194	—	194
1875.			
1st Quarter ...	186	—	186
2nd " ...	169	—	169
3rd " ...	53	13	66
4th " ...	12	7	19
Totals ...	420	20	440
1876.			
1st Quarter ...	2	1	3
2nd " ...	2	4	6
3rd " ...	2	5	7
4th " ...	5	28	33
Totals ...	11	38	49
1877.			
1st Quarter ...	4	20	24
2nd " ...	19	7	26
3rd " ...	15	13	28
4th " ...	—	3	3
Totals ...	38	43	81
1878.			
1st Quarter ...	3	13	16
2nd " ...	4	34	38
3rd " ...	6	139	145
4th " ...	7	238	245
Totals ...	20	424	444
1879.			
1st Quarter ...	1	60	61
2nd " ...	—	37	37
3rd " ...	3	40	43
4th " ...	—	47	47
Totals ...	4	184	188
1880.			
1st Quarter ...	2	45	47
2nd " ...	3	27	30
3rd " ...	8	36	44
4th " ...	3	62	65
Totals ...	16	170	186

Cases admitted each Year (continued).	DATE.				Smallpox.	Scarlatina.	Total Cases.	
	1881.							
	1st Quarter	...	...	...	8	36	...	44
	2nd "	...	...	...	8	79	...	87
	3rd "	...	...	...	1	91	...	92
	4th "	...	...	...	—	127	...	127
	Totals	...	...	...	17	333	...	350
	1882.							
	1st Quarter	...	...	...	—	90	...	90
	2nd "	...	...	...	54	120	...	174
	3rd "	...	...	...	38	197	...	235
	4th "	...	...	...	13	220	...	233
	Totals	...	...	...	105	627	...	732
	1883.							
	1st Quarter	...	...	...	46	120	...	166
	2nd "	...	...	...	160	157	...	317
	3rd "	...	...	...	481	198	...	679
	4th "	...	...	...	403	163	...	566
	Totals	...	...	...	1,090	638	...	1,728
	1884.							
	1st Quarter	...	...	...	359	41	...	400
	2nd "	...	...	...	56	94	...	150
	3rd "	...	...	...	12	124	...	136
	4th "	...	...	...	10	101	...	111
	Totals	...	...	...	437	360	...	797
	1885.							
	1st Quarter	...	...	...	66	59	...	125
	2nd "	...	...	...	4	37	...	41
	3rd "	...	...	...	9	50	...	59
	4th "	...	...	...	2	58	...	60
	Totals	...	...	...	81	204	...	285
	1886.							
	1st Quarter	...	...	...	1	66	...	67
	2nd "	...	...	...	1	98	...	99
	3rd "	...	...	...	0	114	...	114
	4th "	...	...	...	0	150	...	150
	Totals	...	...	...	2	428	...	430

It is worthy of notice that in no year in the above statement has the number of Smallpox cases been so small as in the one under notice ; owing largely, however, to the increased use now made of the Hospital, the number of Scarlet Fever cases admitted has been rather considerable, and if we may judge by the mortality from this cause, must bear a high proportion to the whole number of cases that have occurred in the Borough. To prompt removal, in fact, of nearly every case of this highly infectious disease is doubtless chiefly attributable the long-sustained and remarkable quiescence of it during the past two years.

DISINFECTING STATION.

A somewhat greater number of articles have been dis-
infected at the Borough Station, viz. : 5,826, against 4,394 in
1885. Disinfecting
Station.

This year's number is, however, much lower than those of
1882, 3, and 4, which were respectively 8,206, 34,867, and
12,649.

The diminished use made of the Station, as compared with
several recent years, is the natural result of the almost complete
absence of Smallpox, and the comparative freedom from Scarlet
Fever during the past twelve months.

The number of articles sent for disinfection during the
last eight years is given in the following table :—

ARTICLES DISINFECTED.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Beds ...	221	128	181	452	2,165	855	259	481
Mattresses ...	339	229	358	517	1,109	592	197	390
Sheets ...	192	73	164	557	1,024	1,033	279	409
Blankets ...	241	113	290	556	1,833	1,749	376	442
Counterpanes ...	154	70	121	264	893	593	236	351
Pillows & Bolsters	586	317	481	940	3,397	2,325	603	1,017
Other Articles ...	2,645	1,632	1,940	4,920	24,446	5,502	2,444	2,736
Totals ...	4,378	2,562	3,535	8,206	34,867	12,649	4,394	5,826

The estimated Cost of the Station during the year is :—

	£	s.	d.
Wages ...	140	9	0
Horse-keep, Shoeing, &c. ...	85	0	0
Gas for Heating and Lighting ...	13	3	11
Coal ...	5	0	0
Water ...	2	0	0
Total ...	£245	12	11

Cost of Dis-
infecting
Station.

MORTUARIES

Mortuaries.

now exist at all the Police Stations in the Borough. A very large number of bodies has been taken to them during the year, indeed, from a cursory review of the totals in the subjoined statement, it will be seen that an enormous and constant increase in the use made of these valuable sanitary adjuncts has been going on ever since 1880, when 52 bodies were deposited in them, whilst in the year under notice the number received amounted to 240.

The number of corpses taken to each Station during each of the last ten years has been as under :—

	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.
Moor Street ...	32	32	28	15	13	30	76	58	66	106
Ladywood Rd.	13	5	12	7	17	17	10	23	9	12
Kenyon Street	8	10	14	10	25	22	46	42	44	55
Duke Street ...	12	10	11	12	9	17	10	18	38	28
Moseley Street	—	—	6	8	8	25	26	35	37	39
Totals ...	65	57	71	52	72	111	168	176	194	240

Report on the
Mortuaries.

Having received a Report from Mr. Parker on the condition of these establishments, I submitted the following suggestions in reference to them to your Committee :—

"Sky-lights. To those in Ladywood and Moseley Street it is desirable to affix blinds in order to keep out direct sunshine. *Ventilation.* Many of the ventilators in the walls are rusted up and closed ; these should be made to act freely. *Walls* should be covered with an impervious facing to a height of about 4 feet. *Flooring.* The floors at Kenyon Street and Duke Street should be replaced by either asphalte or concrete, and drain traps on the floor should be removed outside, the fluids being conveyed away along an open channel on the floor through the wall to a trap outside. Over each trap should be placed a water tap.

"All drain traps should be frequently flushed to prevent retention of decomposing matter.

"A supply of disinfectants should be kept at each station, especially for use in case of bodies brought in an advanced stage of putrefaction. Calvert's carbolic powder

is best adapted for the purpose. If when the structural alterations are carried out you will communicate with either myself or Mr. Parker, he will undertake to superintend the work."

Report on the
Mortuaries
(continued).

WATER SUPPLY.

Practically the only sources from which the Birmingham Water Supply. drinking water is procured are the Corporation mains and rather more than a thousand shallow wells.

I have continued to make monthly analyses of the Corporation supply, and find that its quality has been barely so good as in the previous year, and that it has presented occasionally a greater turbidity than usual. This appears to be due principally to vegetable matter, and to the growth of organic and minute organisms, principally vegetable, which have developed during the storage of the water in the reservoir. It imparts to the water an objectionable appearance.

Corporation
Supply.

I have also analysed 225 well waters, 208 of which were so contaminated that it was found necessary to call upon the owners of the wells to close them. It is a matter for satisfaction that in only fourteen cases was it found necessary to take legal measures in order to procure their closure.

Well Waters.

In addition to the above analyses, and those of articles of food and drink purchased under the provisions of the "Sale of Food and Drugs Act," sixty-three analyses of articles of a miscellaneous nature have also been made.

Miscellaneous
Analyses.

PUBLIC BATHS.

The gross number of Bathers has again fallen. In the exceptionally hot summer of 1884 it was 445,545, in 1885 it fell to 348,344, and in the past year it has undergone a further slight diminution to 339,015. The early part of the past summer was particularly cool, but as the weather from July onwards was generally warm and genial, it is not very easy to trace any direct connection between the falling off in the number of Bathers and atmospheric conditions.

Public Baths.

RETURN OF THE NUMBER OF BATHERS AT EACH OF THE CORPORATION BATHS DURING THE LAST
TEN YEARS.

	KENT STREET.			WOODCOCK STREET.			NORTHWOOD STREET.			MONUMENT ROAD.			SMALL HEATH.		
	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.	Men.	Women.	Total.
1877	95428	4397	99825	58432	2012	60444	83844	2153	85997	—	—	—	—	—	—
1878	106820	6016	112836	64680	2171	66851	101059	2129	103188	—	—	—	—	—	—
1879	105395	7274	112669	48794	1501	50295	82408	2027	84435	—	—	—	—	—	—
1880	108253	8468	116721	71843	2051	73894	115446	3166	118612	—	—	—	—	—	—
1881	115260	8768	124028	64014	1762	65776	106550	2704	109254	—	—	—	—	—	—
1882	112141	8509	120650	68272	2015	70287	113036	4049	117085	—	—	—	—	—	—
1883	101503	8025	109528	72852	2025	74877	96115	3093	99208	88073	5245	93318	8258	282	8540
1884	115608	8812	124420	80279	2079	82358	103421	3506	106927	101173	6917	108090	23009	741	23750
1885	90228	8749	98977	66111	1468	67579	77687	3039	80726	77791	6016	83807	17008	247	17255
1886	83176	9009	92185	68720	1394	70114	78429	2459	80888	76750	5677	82427	13228	173	13401

SEWERAGE WORKS.

The length of Sewers constructed by the authority of the Town Council during the past year has been only one mile, three furlongs; one mile and six furlongs have also been laid, however, in declared public highways at the cost of the owners of the adjacent property. The total length of sewers under the control of the Corporation at the end of the year is practically 198 miles. I gather also from a report by Mr. Till, the Borough Surveyor, that certain sewers have been deepened and enlarged during the year, and that the whole of them are in good working order.

Sewerage
Works.Total length of
Sewers.

STREETS AND ROADS.

From the Borough Surveyor's Annual Report it appears that the total length of streets and roads in the Borough at the end of the year was 199 miles, 3 furlongs, or about the same as in the previous year. More than two additional miles of new streets and roads were declared highways during the year; but as Engine Street has been closed by the Freeholder, and part of Fordrough Street by the Midland Railway Company, while Crooked Lane and Little Cherry Street have been replaced by Martineau Street, the total length of declared highways has only increased from 192 miles, 5 furlongs in 1885, to 194 miles, 7 furlongs in 1886. The length of undeclared highways in the Borough at the close of the year was two miles and a half, while there were also nearly two miles of private roads and passages.

Streets and
Roads.

NIGHTSOIL AND REFUSE DISPOSAL.

From a return furnished by Mr. Wilkinson, the Superintendent of the Nightsoil Department, I find that the number of pan privies in the Borough at the close of the year is only slightly in excess of that at the end of 1885, viz., 40,016 against 39,935, an increase of only 81. The contents of the pans were removed in 2,037,113 instances, while the number of loads of ashes collected was 75,848. It is estimated that there are still nearly 13,000 ashpits in the Borough, from which 51,554 cart loads of nightsoil were removed during the twelve months under review.

Nightsoil and
Refuse Disposal

The number of Waterclosets is computed to be about 11,000.

Waterclosets.

The

SANITARY WORK

of the Borough continues to be vigorously prosecuted; this is well indicated by the number of notices—15,040—which have been issued for the abatement of nuisances; among the sanitary work effected may be mentioned the clearing from obstruction of upwards of 3,000 drains, the trapping of 1,400 others, the disconnection from the yard drains of more than

Sanitary Work.

Sanitary Work
(continued).

2,000 sink drains, the cleansing of 1,809 filthy houses, the disinfection and cleansing of 478 other houses where infectious disease has existed, the removal of 709 lots of animals and of 1,233 accumulations of wash, manure, and other deposits of offensive matters, and the improvement and ventilation of 749 soil-pipes of water-closets in the interior of dwelling houses. More than 800 dangerous buildings have been discovered and reported to the Borough Surveyor, while the Water Department has been made acquainted with the whereabouts of upwards of 1,100 leaky water taps and fittings.

This immense quantity of sanitary work has been done with a comparatively trifling amount of friction, and it has been found necessary to institute legal proceedings in order to get the necessary alterations made in only thirty-eight instances.

As in former years, I have pleasure in acknowledging the valuable support and assistance given to me on all sides in the performance of the multifarious duties of my office.

I remain,

Mr. Chairman and Gentlemen,

Your obedient Servant,

ALFRED HILL, M.D.,

Medical Officer of Health.

III. APPENDIX.

(TABLES, MAP, AND CHART.)

TABLE I.
BIRTHS AND DEATHS (GROSS NUMBERS.)

DATE.	BIRTHS.	DEATHS.
1886	14,282	8,499
1885	14,383	8,156
1884	14,991	9,043
1883	14,701	8,714
1882	14,866	8,425
1881	14,869	7,938
1880	15,111	8,088
1879	15,846	8,650
1878	15,964	9,662
1877	16,001	9,038
1876	15,816	8,330
Average of Ten years } 1876-1885 ... }	15,255	8,604

NOTES.

- 1.—Population at Census 1881, 400,774.
- 2.—Population estimated to the middle of the Year 1886, 434,381.
- 3.—Area in Acres, 8,400.
- 4.—Number of Inhabited Houses in Borough at Census 1881, 78,301.
- 5.—Average number of Persons in each House at Census 1881, 5·1.

TABLE II.
ANNUAL RATE OF MORTALITY, DEATH-RATE AMONG CHILDREN, AND DEATHS IN PUBLIC INSTITUTIONS.

DATE.	Annual rate of Mortality per 1,000 Living.	Deaths of Children under 1 year ; percentage to total Deaths.	Percentage of Deaths of Children under 1 year to Registered Births.	Deaths of Children under 5 years ; percentage to total Deaths.	Percentage of Deaths in Public Institutions to total Deaths.
1886	19.6	29.6	17.6	46.5	14.5
1885	19.1	27.6	15.7	41.8	15.7
1884	21.1	28.9	17.4	47.7	13.8
1883	21.0	26.8	15.9	43.8	15.7
1882	20.6	29.1	16.5	47.2	15.4
1881	19.7	27.7	15.0	47.1	15.3
1880	20.5	32.1	17.2	49.9	12.4
1879	21.8	27.5	15.0	49.7	14.1
1878	25.2	28.6	17.0	53.1	11.8
1877	23.9	29.1	16.4	49.4	12.2
1876	22.4	30.5	16.0	46.6	11.6
Average of 10 years 1876-1885	21.5	28.8	16.2	47.6	13.8

TABLE III.

Mortality from certain classes of Diseases, and proportion to population and to 1,000 deaths in 1886.

CLASS OF DISEASES.	Total Deaths.	Death Rate per 1,000 of the population.	Proportion of Deaths to 1,000 Deaths.
1—Seven principal Zymotic Diseases	1,383	3·2	163
2—Pulmonary (other than Phthisis)	1,544	3·6	182
3—Tubercular 	823	1·9	97
4—Wasting Diseases of Infants ...	793	1·8	93
5—Convulsive Diseases of Infants...	451	1·0	53

1.—Includes Smallpox, Measles, Scarlet Fever, Diphtheria, Whooping Cough, Fever, and Diarrhoea.

3.—Includes Phthisis, Scrofula, Rickets, and Tabes.

4.—Includes Marasmus, Atrophy, Debility, and Premature Birth.

5.—Includes Hydrocephalus, Infantile Meningitis, Convulsions, and Teething.

TABLE IV.
SHOWING THE NUMBER OF DEATHS IN THE TEN YEARS, 1876 TO 1885, FROM THE SEVEN PRINCIPAL ZYMOTIC
DISEASES, AND THE NUMBER IN 1886.

	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	Annual Average of 10 years, 1876-1885.	Proportion of deaths in 10 years, 1876-1885.	1886.	Proportion of deaths to 1,000
Smallpox ...	0	8	5	0	2	6	17	110	64	12	22	2.6	0	0.0
Measles ...	87	309	54	169	63	132	150	155	333	119	157	18.2	383	45.0
Scarlet Fever ...	204	237	995	306	123	164	256	326	134	31	278	32.3	39	4.6
Diphtheria ...	58	52	83	71	51	57	49	46	40	46	55	6.4	73	8.6
Whooping Cough ...	189	369	455	384	217	362	319	176	289	253	301	35.0	94	11.1
Fever ...	147	144	147	87	84	66	87	81	84	77	101	11.7	65	7.6
Diarrhoea ...	651	457	682	234	784	341	535	412	737	338	517	60.1	729	85.8
TOTAL ...	1,336	1,576	2,421	1,251	1,324	1,128	1,413	1,306	1,681	876	1,431	166.3	1,383	162.7
London ...	12,565	10,292	14,734	12,216	13,661	13,811	13,553	10,801	13,629	11,262	12,652	155.6	11,102	135.0

TABLE V.

SUMMARY OF NUISANCES AND OTHER MATTERS REPORTED AND WORK DONE BY THE OFFICERS AND MEN EMPLOYED DURING THE YEAR ENDED DECEMBER 31ST, 1886.

(Return made by MR. PARKER, Inspector of Nuisances.)

	Nuisances Reported.	Nuisances Abated.
Nuisances remaining on the Books, Dec. 31st, 1885 ...	4,587	—
Defective Drains requiring opening and clearing from obstruction	2,459	3,096
„ Spout Drains	373	422
„ Drains not efficiently trapped	904	1,413
„ Sink Drains requiring disconnection from the Sewer	1,086	2,106
Nuisances arising from the want of drains	80	109
„ „ „ the want of an efficient supply of wholesome water	19	23
„ „ „ the keeping of fowls	516	554
„ „ „ an accumulation of water in cellars	135	150
„ „ „ the filthy condition of privies... ..	67	180
„ „ „ foul and defective urinals	642	420
„ „ „ the overcrowding of houses	63	50
„ „ „ the want of efficient ventilation	25	25
Swine and Swine Styes so kept as to be a nuisance	158	155
Houses reported unfit for human habitation	12	15
Houses disinfected, cleansed, and purified, where Zymotic disease has occurred	469	478
Filthy and unwholesome Houses requiring cleansing and whitewashing	1,569	1,809
Accumulations of wash, deposits of offensive matter, manure, &c.	1,238	1,233
Foul Ashpits and Privies requiring repairs	1,912	2,135
Back Yards requiring paving	622	694
Number of Dangerous Premises reported to the Borough Surveyor's Department	872	879
„ Defective Water Taps and Standpipes re- ported to the Water Department	1,063	1,108
Soil Pipes of Water Closets requiring disconnecting from interior of Dwelling-Houses	355	749
Privies requiring conversion to Water Closets	401	289
Number of Cases still on the Books under notice		1,535
Totals	19,627	19,627

Number of Notices issued for the abatement of Nuisances during the Year ended December 31st, 1886	15,040
Number of Cases Summoned	38
„ „ „ Convicted	38
Amount of Costs	£4 14 2
„ „ „ Penalties	£4 0 0
Number of visits to Milkshops	2,556
„ „ „ Bakehouses	575

WELL WATERS.

Well Waters submitted for Analysis ...	...	...	...	...	225
„ „ reported polluted ...	...	...	...	...	208
No. of Wells closed ...	...	...	...	...	170
„ Premises supplied with Tap Water ...	...	...	...	...	176
„ Persons Summoned ...	...	...	...	...	14

SMOKE NUISANCES.

No. of observations made by the Inspectors ...	...	...	...	4,488
„ Manufacturers Reported for the emission of dense smoke...	...	...	...	256
„ „ Cautioned ...	...	...	...	184
„ „ Summoned ...	...	...	...	68
„ „ Convicted ...	...	...	...	68
Amount of Penalties ...	...	...	...	£50 0 0
„ Costs ...	...	...	...	£30 4 0

COMMON LODGING HOUSES.

No. of Registered Common Lodging Houses ...	...	...	...	108
„ Lodgers allowed ...	...	...	...	2,401
„ Visits by day ...	...	...	...	7,656
„ Visits by night ...	...	...	...	2,928
„ Lodgers found occupying the Houses ...	...	...	...	37,569
„ Houses Registered under the Public Health Act, 1875 ...	...	...	...	163
„ Lodgers allowed ...	...	...	...	939
„ Cases summoned ...	...	...	...	6

THE CANAL BOATS ACT, 1877.

No. of Canal Boats inspected during the Year ...	...	...	...	1,231
„ Canal Boats registered during the Year ...	...	...	...	58
„ Cases summoned ...	...	...	...	1

SLAUGHTER-HOUSES.

(Return made by MR. BIRCKLEY, Superintendent of Markets.)

No. of Visits ...	...	...	...	...	11,748
Voluntary Surrenders of Meat ...	...	...	...	...	287
Seizures of Bad Meat ...	...	...	...	...	43
Weight Destroyed ...	...	...	...	...	77,910lbs.
Voluntary Surrenders of Fish, etc. ...	...	...	...	...	122
Seizures of Fish, &c. ...	...	...	...	...	34

CONTAGIOUS DISEASES (ANIMALS) ACT.

(Return made by MR. BIRCKLEY, Superintendent of Markets.)

No. of Visits to Railway Stations ...	...	...	...	...	1,593
No. of Visits to Cow Sheds ...	...	...	...	...	594

TABLE VI.

METEOROLOGICAL CONDITION OF THE AIR, AND AMOUNT OF RAINFALL
FOR THE YEAR ENDING DECEMBER 31st, 1886.

Observed at 9-0 a.m. at Oakwood, Acock's Green, by myself and my son, Mr. H.
GROSVENOR HILL.
The Instruments are about 460 feet above the mean level of the sea.

1886.	Pressure of Air.	TEMPERATURE OF THE AIR.				RAINFALL.		
	Barometer	Reading of Thermometer.				Gauge 1 foot diameter. Receiving surface 3ft. 8in. above the ground.		
Months.	Mean Monthly Reading (corrected and reduced to 32 degrees Fahrenheit)	Highest in Shade.	Lowest in Shade.	Range of Tempe- rature in the Month.	Mean Tempe- rature in the Month.	Depth of Rain depo- sited upon a square foot of surface, in inches and parts.	Measure- ment converted into weight per acre.	Number of days on which Rain fell, when 5/100ths of an inch or more was measured.
	In Parts.	Dg. Pts.	Dg. Pts.	Dg. Pts.	Dg. Pts.	In Parts.	Tons.	
January ..	29.189	51.0	21.5	29.5	35.2	1.95	197	12
February ...	29.666	46.0	23.0	23.0	33.2	1.21	122	4
March ...	29.487	63.0	14.0	49.0	38.7	3.26	329	13
April ...	29.462	70.0	30.0	40.0	45.7	2.20	222	9
May ...	29.528	73.5	32.5	41.0	51.3	6.31	637	17
June ..	29.544	80.0	40.0	40.0	56.6	1.99	201	7
July ...	29.462	84.5	41.5	43.0	62.0	3.49	352	15
August ...	29.526	84.0	42.0	42.0	61.1	2.17	219	9
September ...	29.567	81.0	36.5	44.5	57.1	3.38	341	9
October ...	29.337	74.5	39.0	35.5	51.7	3.97	401	16
November ...	29.425	58.0	30.5	27.5	43.6	2.08	210	10
December ...	29.197	54.5	19.0	35.5	35.0	4.58	463	16

PRICES OF COAL, FLOUR, POTATOES, AND BUTCHERS' MEAT,
AND THE NUMBER OF PAUPERS RELIEVED IN THE PARISH OF BIRMINGHAM
DURING EACH OF THE FIVE YEARS ENDED MICHAELMAS, 1882-1886.

Years.	Average Prices of Food and Fuel.				PAUPERISM.	
	Coal per ton.	Flour per 224lbs.	Potatoes per ton.	Butchers' Meat per lb.	Weekly Average of Paupers relieved during the Year.	
					In-door.	Out-door.
1886	8/9 $\frac{3}{4}$	19/-	64/-	Beef -/4 $\frac{1}{2}$ Mut'n -/7	2,292	3,374
1885	10/1 $\frac{1}{2}$	20/3	91/3	Beef -/6 $\frac{1}{4}$ Mut'n -/6 $\frac{3}{4}$	2,616	3,697
1884	10/1 $\frac{1}{2}$	22/1 $\frac{1}{2}$	70/-	Beef -/7 Mut'n -/7 $\frac{3}{4}$	2,544	4,346
1883	10/5	25/2	101/8	-/7 $\frac{3}{4}$	2,388	4,861
1882...	9/9	29/10	75/-	Beef -/5 $\frac{3}{4}$ Mut'n -/8 $\frac{1}{4}$	2,355	4,886

RAINFALL AND TEMPERATURE IN EACH MONTH AND YEAR FROM 1876 TO 1886.

MONTH.	1876.		1877.		1878.		1879.		1880.		1881.		1882.		1883.		1884.		1885.		Average for 10 yrs. 1876—1885.		1886.													
	Rainfall.	No. of days in which 5 inches of an inch or more was measured.	Temperature.	Rainfall.	No. of days on which 5 inches of an inch or more was measured.	Temperature.	Rainfall.	No. of days on which 5 inches of an inch or more was measured.	Temperature.	Rainfall.	No. of days on which 5 inches of an inch or more was measured.	Temperature.	Rainfall.	No. of days on which 5 inches of an inch or more was measured.	Temperature.	Rainfall.	No. of days on which 5 inches of an inch or more was measured.	Temperature.	Rainfall.	No. of days on which 5 inches of an inch or more was measured.	Temperature.	Rainfall.	No. of days on which 5 inches of an inch or more was measured.													
January	1.75	6	36.1	4.47	18	42.8	1.96	11	43.2	10	32.4	0.69	3	33.7	4	28.4	2.41	7	40.5	4.21	14	40.3	3.04	13	43.2	1.98	9	35.9	2.35	9	37.6	1.95	12	35.2		
February	2.55	14	39.6	2.43	12	44.5	1.11	8	40.1	3.68	18	38.5	3.12	16	41.0	3.43	13	36.3	2.15	5	41.9	3.53	13	42.4	1.65	11	40.8	3.40	9	42.2	2.71	12	40.7	1.21	4	33.2
March	3.16	22	40.8	2.72	15	40.3	1.17	9	43.6	0.95	9	40.7	0.53	3	41.7	2.37	11	41.0	2.57	6	45.6	1.44	9	35.1	2.74	7	43.1	1.02	7	40.2	1.87	10	41.2	3.26	13	38.7
April	1.98	13	47.5	2.82	12	45.0	2.17	11	48.3	3.39	16	43.6	2.35	7	46.0	0.78	3	44.3	4.18	17	47.0	0.98	6	47.1	1.62	9	44.2	2.99	11	45.8	2.33	10	45.9	2.20	9	45.7
May	1.00	5	48.1	2.27	9	48.2	5.33	21	54.7	4.26	13	50.1	1.62	6	50.6	1.48	7	53.9	3.19	11	52.9	1.38	9	51.5	1.06	7	52.8	2.60	14	48.3	2.42	10	51.1	6.31	17	51.3
June	2.23	8	58.0	2.06	10	59.0	3.37	14	60.8	6.16	19	56.0	2.55	17	56.2	1.74	15	57.9	4.00	15	55.7	3.63	9	57.0	2.32	5	57.4	3.97	9	53.5	3.29	12	57.6	1.99	7	56.6
July	1.42	6	63.7	5.03	12	59.8	0.98	7	63.7	3.97	18	59.0	4.80	20	59.8	1.66	9	62.5	3.83	14	60.0	3.95	11	58.4	2.67	15	61.7	0.51	3	62.3	2.88	11	61.1	3.49	15	62.0
August	1.22	5	62.7	2.29	10	61.6	6.44	18	62.0	5.72	13	60.1	0.80	4	60.9	5.18	16	57.4	2.48	12	59.2	0.64	5	60.5	1.74	4	64.1	3.31	11	56.9	2.98	10	60.5	2.17	9	61.1
September	5.83	21	55.7	4.58	13	54.9	3.15	13	56.9	3.59	12	55.6	4.63	10	58.7	1.65	9	54.4	3.03	9	53.7	5.89	15	55.9	1.19	6	58.5	1.94	10	54.5	3.55	12	55.9	3.38	9	57.1
October	2.26	9	53.0	1.91	12	49.1	3.65	16	52.2	2.06	9	49.6	6.38	11	44.0	3.17	11	45.2	6.61	15	48.9	2.64	12	49.2	1.44	7	48.8	4.61	14	44.9	3.47	12	48.5	3.97	16	51.7
November	2.94	8	43.4	2.87	15	47.4	3.15	11	39.4	1.98	12	40.9	2.30	9	40.1	3.13	16	47.3	4.56	18	42.0	4.47	15	41.9	1.61	8	41.8	3.46	14	41.1	3.05	13	42.5	2.08	10	43.6
December	5.68	19	42.9	2.40	11	41.3	2.44	11	31.2	1.07	5	35.3	3.48	13	41.7	3.40	9	37.9	4.59	18	37.8	1.02	5	40.4	2.43	12	39.5	0.65	4	37.9	2.71	11	38.6	4.58	16	35.0
Year	32.02	136	49.3	36.75	149	49.5	34.93	160	49.7	38.84	154	46.8	33.25	119	47.9	28.95	123	47.2	43.60	147	48.8	33.78	123	48.3	23.52	104	49.7	30.44	115	47.4	33.61	132	48.4	36.59	137	47.6

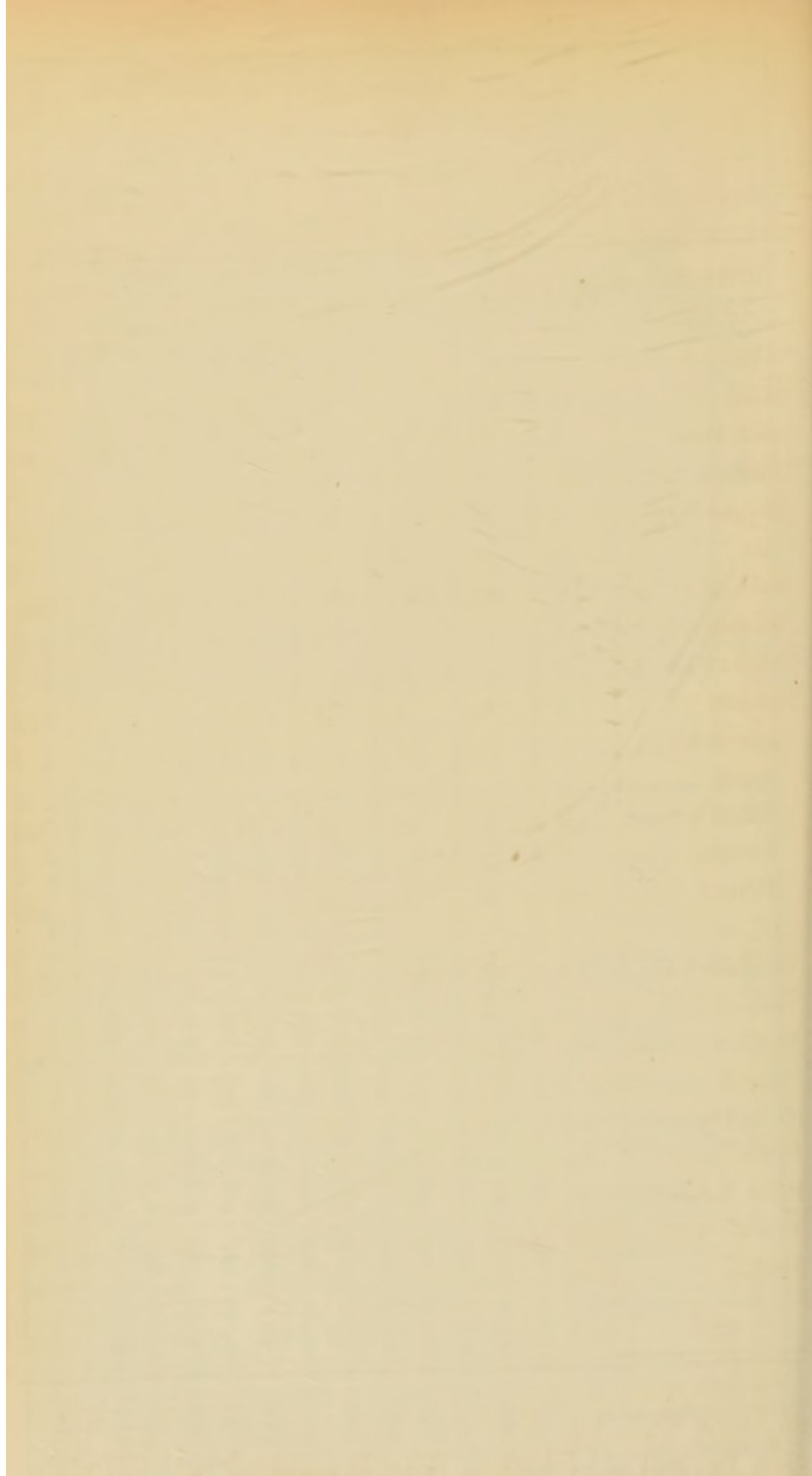


TABLE VIII.

NEW CASES OF DISEASE COMING UNDER TREATMENT DURING THE YEAR, 1886,
AT THE FOLLOWING INSTITUTIONS.

DISEASES.	I. General Hospital.	II. General Dispensary	III. Queen's Hospital.	IV. Children's Hospital.	V. The Work- house.	VI. Out-door Pauper Patients.	VII. Boro' Hosptl.	TOTAL.
Smallpox	...	...	...	...	...	...	2	2
Measles	11	119	8	53	53	549	...	793
Scarlet Fever.....	8	20	3	65	13	36	428	573
Diphtheria	21	3	7	34	...	1	...	66
Whooping Cough ...	5	63	7	397	16	65	...	553
Croup	47	12	10	24	...	10	...	103
Diarrhœa	5,630	264	2,654	1,476	119	551	...	10,694
Dysentery	7	...	...	4	...	8	...	19
Asiatic Cholera	...	...	...	...	...	...	...	...
Erysipelas	19	45	4	10	31	37	...	146
Continued Fever ...	...	1	...	1	...	7	...	9
Typhus	...	...	...	...	...	...	...	...
Enteric or Typhd.	46	55	15	22	15	21	...	174
Relapsing	...	...	...	...	...	...	...	...
Febricula	106	32	21	66	...	...	...	225
Ague	1	1	7	...	...	4	...	15
Rheumatic Fever ...	275	190	170	8	...	299	...	942
Puerperal Fever ...	...	4	...	...	1	...	...	5
Bronchitis & Catarrh	1,671	2,535	965	1,630	790	2,924	...	10,515
Influenza	...	...	...	...	...	...	...	...
Pleurisy & Pneumonia	408	204	90	199	118	122	...	1,141
Phthisis	335	1,093	383	91	368	402	...	2,672
Constl. Syphilis.....	131	178	95	212	193	240	...	1,049
All other diseases ...	17,999	17,289	8,102	9,299	4,312	5,699	...	62,700
Accidents	13,660	171	9,350	152	257	82	...	23,672
Totals.....	40,380	22,279	21,891	13,743	6,286	11,057	430	116,066

The above returns are made by (I.)—Francis J. J. Orton, Esq., M.B.; (II.)—Sidney C. Lawrence, Esq., L.R.C.P., E. Dormer Kirby, Esq., M.B., J. Howard North, Esq., M.R.C.S., and Thomas Nelson, Esq., M.D.; (III.)—William Richards, Esq., M.B.; (IV.)—G. W. Powell, Esq.; (V.)—A. B. Simpson, Esq., L.R.C.S., Surgeon; (VI.)—Walter Bowen, Esq., Clerk to the Guardians; (VII.)—W. H. Line, Esq., B.A., M.D., Medical Superintendent.

TABLE IX.—WATER: RESULT OF ANALYSES

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity.	Organic Carbon.	Organic Nitrogen.
CORPORATION SUPPLY.					
1886.					
Jan. 20th	7 Court, Oxford Street	3°·9	27·82	·224	·050
Feb. 4th	12 Court, Bread Street	5°·5	27·48	·126	·041
Mar. 3rd	48, Ladywood Road	4°·4	30·36	·177	·043
April 5th	Corporation Wharf, Sheepcote Street	8°·3	30·02	·171	·044
May 4th	190, Sherlock Street	11°·7	25·66	·254	·047
June 5th	128, Winson Street.....	12°·8	31·24	·052	·007
July 6th	22, Heneage Street.....	18°·9	25·64	·212	·041
Aug. 4th	172, Darwin Street.....	15°·0	24·58	·167	·022
Sept. 6th	6 Court, Clark Street	16°·1	26·74	·128	·024
Oct. 5th	2 Court, Brearley Street	15°·0	25·08	·129	·021
Nov. 3rd	240, Bloomsbury Street.....	11°·1	24·52	·203	·035
Dec. 6th	147, Bath Row	8°·9	29·48	·287	·063
	Average Results 1886...	11°·0	27·38	·177	·037
	" " 1885...	10°·7	27·37	·106	·035
	" " 1884...	11°·7	29·78	·103	·024
	" " 1883...	11°·4	27·23	·148	·027
	" " 1882...	11°·9	29·15	·171	·028
WELL WATERS.					
Jan. 4th	1—5, Ladywell Walk.....	...	51·80	...	small
" "	22, Pershore Street.....	...	127·40	...	...
" "	75 and 77, Henley Street	...	54·60	...	moderate
" "	79—89, Henley Street	...	53·60	...	moderate
" "	98 and 100, Henley Street	...	169·80	...	...
" "	59 and 61, Kyott's Lake Road	...	112·40	...	large
" 11th	24, Moat Lane.....	...	20·20	...	small
" "	28—34, Cattell's Grove	...	97·40	...	large
" "	46, Carpenter Road	...	51·80	...	moderate
" 13th	132, Hagley Road	...	43·60	...	...
" 18th	1—4, Lee Crescent.....	...	60·80	...	rather large
" "	35 and 36, Lee Crescent	...	44·40	...	rather large
" "	52 and 53, Lee Crescent	...	103·60	...	large
" "	54 and 55, Lee Crescent	...	75·60	...	rather large
" "	55 and 57, Jamaica Row	...	99·80	...	...
" "	10—14, Upper Dean Street	...	76·40	...	...
Feb. 1st	1 and 2, Hope Place, and 15 and 16, Long Street	...	76·60	...	very large
" "	17 and 18, and 1 to 4, at back Long Street	...	70·60	...	very large
" "	124 and 125, Long Street	...	149·40	...	very large
" "	126, Long Street.....	...	75·60	...	large
" "	8 and 9, Wrentham Street	...	138·20	...	large
" "	77, Hope Street	...	233·80	...	...
" 8th	93 and 94, Victoria Street.....	...	94·60	...	very large
" "	95 and 96, Victoria Street.....	...	106·60	...	very large
" "	20—24, Albert Street.....	...	124·80	...	excessive

EXPRESSED IN PARTS PER 100,000.

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated.)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
·001	·176	·227	1,450	1·6	8°·4	9°·1	17°·5	Turbid; dirty yellow
·001	·176	·218	1,450	1·6	5°·7	10°·6	16°·3	Very slightly turbid;
·001	·198	·242	1,670	1·5	9°·0	9°·8	18°·8	yellowish green
·001	·242	·287	2,110	1·6	10°·2	8°·7	18°·9	Turbid; yellowish
·002	·242	·290	2,110	1·6	5°·4	10°·1	15°·5	Very slightly turbid,
·001	·330	·338	2,980	1·5	12°·1	10°·9	23°·0	yellowish green
·002	·286	·328	2,550	1·4	10°·1	6°·2	16°·3	Slightly turbid; greenish
·001	·286	·309	2,550	1·9	5°·1	8°·8	13°·9	yellow
·002	·209	·234	1,790	1·5	6°·9	10°·8	17°·7	Very slightly turbid;
·001	·330	·352	2,990	1·7	2°·7	10°·3	13°·0	faint greenish
·001	·154	·190	1,220	1·4	3°·2	10°·7	13°·9	Clear, slightly greenish
·001	·110	·174	790	1·4	9°·4	11°·2	20°·6	Clear, yellow
·001	·228	·266	1,970	1·6	7°·3	9°·8	17°·1	Clear, faint greenish
·002	·206	·242	1,760	1·8	7°·5	9°·5	17°·0	Clear, blue
·002	·201	·227	1,710	1·7	7°·3	9°·2	16°·5	Clear
·002	·250	·278	2,190	1·8	7°·5	9°·3	16°·8	Clear
·003	·227	·266	1,870	1·7	6°·8	9°·2	16°·0	Clear
·001	1·76	1·761	17,290	6·1	...	...	...	Clear
·080	4·18	4·246	42,140	20·3	...	...	...	Clear
·001	·22	·221	1,890	1·8	...	...	...	Clear
·001	·22	·221	1,890	1·7	...	...	...	Clear
·400	3·74	4·070	40,380	11·3	...	...	...	Clear, brown residue on
·002	·22	·221	1,890	4·2	...	...	...	evaporation
·002	·33	·331	2,990	2·1	...	...	...	Clear
·001	·66	·661	6,290	6·5	...	...	...	Clear
·001	1·98	1·981	19,490	6·5	...	...	...	Clear, brown residue on
·050	1·87	1·911	18,790	4·0	...	...	...	evaporation
·002	3·30	3·301	32,690	6·5	...	...	...	Clear
·001	1·54	1·541	15,090	4·1	...	...	...	Turbid
·002	4·84	4·841	48,090	8·9	...	...	...	Clear
·001	4·07	4·071	40,390	5·3	...	...	...	Clear
·240	2·75	2·947	29,150	9·9	...	...	...	Clear
·035	1·32	1·349	13,170	6·4	...	...	...	Clear
·001	2·86	2·861	28,290	6·9	...	...	...	Clear
·001	2·42	2·421	23,890	6·6	...	...	...	Clear
·001	7·70	7·701	76,690	13·3	...	...	...	Clear
·001	1·10	1·101	10,690	6·9	...	...	...	Clear
·001	2·31	2·311	22,790	9·9	...	...	...	Clear
·700	4·95	5·526	54,940	28·8	...	...	...	Clear, residue yellow
·001	1·76	1·761	17,290	6·6	...	...	...	Clear
·001	3·63	3·631	35,900	6·5	...	...	...	Clear
·001	4·62	4·621	45,890	4·5	...	...	...	Clear

TABLE IX.—

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity.	Organic Carbon.	Organic Nitrogen.
1886.	WELL WATERS—continued.				
Feb. 8th	26—32, Albert Street	...	131.60	...	large
" "	12 and 13 Courts, Rea Street	...	256.20	...	very large
" "	80, Lower Hurst Street	...	63.80	...	large
" 15th	Sandon Terrace, Albert Street	...	106.60	...	...
" "	Somerset Place, Albert Street	...	111.60	...	rather large
" "	58—62, Albert Street	...	186.40	...	large
" "	84—86, Albert Street	...	123.60	...	...
" "	Back 78, Summer Lane	...	243.20	...	...
" "	152, Newtown Row	...	156.80	...	rather large
" "	43, Pershore Street	...	42.20	...	rather large
Mar. 2nd	63, Pershore Street	...	203.20	...	large
" "	10 and 11, Bromsgrove Street	...	108.20	...	...
" "	59 and 60, Suffolk Street	...	178.80	...	...
" "	54, Hurst Street	...	180.60	...	large
" "	68, Edgbaston Street	...	165.20	...	very large
" 8th	35—41, Burbury Street	...	95.20	...	...
" "	33, Farm Street	...	158.80	...	...
" "	72 and 74, Abbey Street	...	126.80	...	very large
" "	216, Park Road	...	118.80	...	large
" "	158, New John Street	...	147.60	...	very large
" "	72, Summer Lane	...	168.20	...	...
" 15th	5, Bacchus Road	...	82.60	...	large
" "	70—72, Bacchus Road	...	201.80	...	very excessive
" "	40, Bacchus Road, and 23 and 25 Soho Road	...	40.20	...	large
" "	456—466, Park Road	...	50.80	...	rather large
" "	49 and 51, Pershore Street	...	62.60	...	"
" "	39 and 40, Dean Street, and 29 to 33, Sherlock Street	...	103.20	...	large
" 22nd	121 and 122, Longmore Street	...	102.60	...	rather large
" "	123 and 124, Longmore Street	...	92.60	...	...
" "	51 and 52, Princess Road	...	148.80	...	large
" "	32, Varna Road	...	125.20	...	...
" "	316—326, Park Road	...	143.40	...	...
" "	4 and 5, Norton Street	...	105.20	...	moderate
" 29th	448—452, Park Road	...	79.20	...	"
" "	431, Park Road	...	114.80	...	very large
" "	74—86, New Spring Street	...	185.20	...	...
" "	58—60, Digbeth	...	85.40	...	large
" "	79 and 81, Jamaica Row ..	...	211.20	...	...
" "	Back 67, Bacchus Road	...	50.60	...	rather large
April 5th	23 and 24, Wright Street	...	135.20	...	—
" "	63 and 63A, Wright Street	...	139.20	...	very large
" "	68 and 69, Wright Street	...	118.80	...	"
" "	100 to 102, Wright Street	...	118.20	...	large
" "	7—9, Smithfield Street	...	205.40	...	...
" "	167, Bromsgrove Street	...	166.60	...	...

(continued.)

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
·001	7·70	7·701	76,690	8·8	...	...	...	Turbid
·001	5·61	5·611	55,790	28·4	...	...	...	Clear
·001	1·54	1·541	15,090	3·0	...	...	...	Clear
·040	4·51	4·543	45,110	7·6	...	...	...	Clear, residue yellow
·001	4·40	4·401	43,690	7·4	...	...	...	Clear, residue slightly brown
·001	7·70	7·701	76,690	16·6	...	...	...	Clear
·480	6·60	6·995	69,630	9·6	...	...	...	Clear, residue light brown
·080	8·58	8·646	86,140	37·0	...	...	...	Clear, residue brown
·002	6·60	6·601	65,690	20·9	...	...	...	Clear
·003	·66	·662	6,300	4·8	...	...	...	Clear
·002	2·31	2·311	22,790	74·3	...	...	...	Clear
·120	3·96	4·059	40,270	10·2	...	...	...	Clear, residue slightly yellow
·020	5·50	5·516	54,840	33·1	...	...	...	Slightly turbid, residue brown
·003	9·02	9·022	89,900	17·6	...	...	...	Slightly turbid
·010	7·04	7·048	70,160	21·5	...	...	...	Clear
·480	5·06	5·455	54,230	9·5	...	...	...	Clear, residue brown
·640	4·29	4·817	47,850	21·6	...	...	...	Clear, residue brown
·002	2·64	2·641	22,090	2·68	...	...	...	Turbid
·001	4·40	4·401	43,690	20·5	...	...	...	Clear
·003	5·61	5·612	55,800	13·9	...	...	...	Clear, residue light brown
·480	8·80	9·195	91,630	13·1	...	...	...	Clear, residue brown
·003	3·41	3·412	33,800	8·9	...	...	...	Clear
·001	8·80	8·801	87,690	17·5	...	...	...	Clear
·002	·99	·991	9,590	5·2	...	...	...	Clear
·001	·55	·551	5,190	5·9	...	...	...	Clear
·006	1·76	1·765	17,330	5·5	...	...	...	Clear
·016	3·96	3·973	39,410	12·3	...	...	...	Clear
·002	1·54	1·541	15,090	7·2	...	...	...	Clear
·480	1·10	1·495	14,630	6·7	...	...	...	Clear
·002	2·20	2·201	21,690	8·4	...	...	...	Clear
·320	4·07	4·334	43,020	9·9	...	...	...	Clear
·320	10·34	10·604	105,720	11·9	...	...	...	Clear
·011	5·94	5·949	59,170	9·5	...	...	...	Clear, residue slightly brown
·001	1·87	1·871	18,390	6·1	...	...	...	Clear, residue light brown
·002	4·84	4·841	48,090	12·9	...	...	...	Turbid, residue light brown
·320	9·24	9·504	94,720	14·6	...	...	...	Clear
·001	2·09	2·091	20,590	7·0	...	...	...	Clear
·600	·44	·934	9,020	33·3	...	...	...	Turbid, residue brown
·001	·44	·441	4,090	5·0	...	...	...	Clear
·120	6·71	6·809	67,770	9·8	...	...	...	Clear; residue light brown
·001	3·19	3·191	31,590	8·7	...	...	...	Clear
·001	2·20	2·201	21,690	8·2	...	...	...	Clear
·001	4·29	4·291	42,590	7·4	...	...	...	Clear
·320	6·05	6·313	62,810	24·9	...	...	...	Clear; residue yellowish
·024	5·28	5·299	52,670	18·4	...	...	...	Clear

TABLE IX.—

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity	Organic Carbon.	Organic Nitrogen.
1886.	WELL WATERS— <i>continued.</i>				
April 14th	29—31, Lee Bank Road	...	111·20	...	very large
" "	32 and 33, Lee Bank Road	...	103·20	...	"
" "	52 and 53, Lee Bank Road	...	73·40	...	rather large
" "	103, Summer Road.....	...	120·60	...	...
" 19th	Back 152, Herbert Road	...	70·20	...	large
" "	53, Wright Street, and 27, Muntz Street	...	137·20	...	"
" "	57, Wright Street	...	192·80	...	...
" "	70, Wright Street	...	117·20	...	very large
" "	111 and 113, Summer Road	...	98·40	...	moderate
" "	Ivy Cottage, Summer Road	...	94·20	...	"
" 27th	75 and 77, Conybere Street	...	152·40	...	very large
" "	53—56, Salop Street	...	145·20	...	large
" "	19 and 20, Hollier Street (1st pump)	...	125·40	...	"
" "	19 and 20, Hollier Street (top pump)	...	97·80	...	moderate
" "	25, Digbeth	...	19·40	...	moderate
" "	28, Digbeth.....	...	172·40	...	very large
May 3rd	13 and 14, Digbeth.....	...	35·80	...	rather large
" "	17, Digbeth	...	24·20	...	...
" "	10, Moat Row	...	213·40	...	very large
" "	40, Sherlock Street.....	...	134·80	...	...
" "	Berwood House, Coventry Rd. (Diphtheria)	...	102·40	...	very large
" "	47, Wright Street	...	139·80	...	large
" 10th	305, Coventry Road	...	57·40	...	...
" "	308, Coventry Road	...	78·20	...	large
" "	311—313, Coventry Road	...	158·40	...	very large
" "	85, Wright Street	...	108·80	...	"
" "	115, Summer Road.....	...	90·40	...	"
" "	Laburnum Cottage, Summer Road	...	85·40	...	rather large
" 11th	14 and 15, Calthorpe Road	...	77·60	...	"
" "	52 & 53, Lee Bank Road (2nd time)	...	73·20	...	"
" 17th	87 and 89, Albert Street	...	135·20	...	...
" "	96—100, Albert Street	...	109·40	...	very large
" "	72 — 74, Victoria Street.....	...	123·80	...	"
" "	75, Victoria Street	...	111·40	...	very large
" 21st	1 and 2, Phoenix Villa, Varna Road	...	187·80	...	very large
" "	3, Phoenix Villa, Varna Road	...	187·40	...	very large
" "	Phoenix Lodge, Varna Road.....	...	178·80	...	very large
" 24th	51, Hagley Road.....	...	49·40	...	very large
" "	91, Hagley Road.....	...	46·80	...	very large
" "	127, Hagley Road	...	148·40	...	large
" "	Winson Bridge House, Winson Green Road (2nd time)	...	99·40	...	very large
" 31st	32, Angelina Street	...	239·80	...	excessive
" "	111, Angelina Street	...	177·60	...	very large
" "	47 and 48, Lombard Street	...	271·80	...	...
" "	Dowell's Alms Houses, Warner St.	...	167·80	...	very large

(continued.)

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
.001	3.08	3.081	30,490	22.4	...	...	...	Clear
.011	4.18	4.189	41,570	15.7	...	...	...	Clear
.002	3.63	3.631	35,990	7.9	...	...	...	Clear; residue light brown
.042	5.06	5.094	50,620	10.5	...	...	...	Clear; residue brown
.001	2.64	2.641	26,090	3.8	...	...	...	Clear
.001	5.06	5.061	50,290	13.2	...	...	...	Clear
.800	8.14	8.799	87,670	19.3	...	...	...	Clear
.002	3.08	3.081	30,490	6.8	...	...	...	Clear
.001	4.40	4.401	43,690	6.2	...	...	...	Clear
.001	4.40	4.401	43,690	5.1	...	...	...	Clear
.001	5.28	5.281	52,490	12.2	...	...	...	Clear
.001	5.72	5.721	56,890	9.4	...	...	...	Clear
.001	3.41	3.411	33,790	6.5	...	...	...	Clear
.001	2.20	2.201	21,690	4.0	...	...	...	Clear
.001	none	trace	0	1.0	...	...	...	Clear
.001	3.41	3.411	33,790	25.3	...	...	...	Clear
.001	1.21	1.211	11,790	4.4	...	...	...	Clear
.080	trace	.066	340	1.4	...	...	...	Clear
.004	11.11	11.113	110,810	17.4	...	...	...	Clear
.960	4.18	4.970	49,380	11.9	...	...	...	Clear; suspended matter like wood or straw
.003	4.84	4.842	48,100	5.8	...	...	...	Clear
.001	5.50	5.501	54,690	9.8	...	...	...	Clear
.050	1.10	1.141	11,090	3.3	...	...	...	Clear; residue yellow
.001	2.20	2.201	21,690	5.2	...	...	...	Clear
.001	5.50	5.501	54,690	8.7	...	...	...	Slightly turbid
.008	5.50	5.506	54,740	4.2	...	...	...	Clear; residue yellowish
.001	3.30	3.301	32,690	4.1	...	...	...	Turbid; residue yellowish
.001	2.75	2.751	27,190	2.9	...	...	...	Clear
.002	3.19	3.191	31,590	8.0	...	...	...	Clear; residue yellowish
.001	3.74	3.741	37,090	7.9	...	...	...	Clear; residue brown
.080	7.92	7.986	79,540	7.3	...	...	...	Slightly turbid
.001	6.71	6.711	66,790	6.9	...	...	...	Clear
.001	5.28	5.281	52,490	10.1	...	...	...	Clear
.001	4.07	4.071	40,390	4.5	...	...	...	Clear
.001	7.04	7.041	70,090	21.5	...	...	...	Suspended particles
.001	6.71	6.711	66,790	21.4	...	...	...	Slightly turbid
.001	6.49	6.491	64,590	22.1	...	...	...	Slightly turbid
.006	2.20	2.205	21,730	3.6	...	...	...	Clear; residue containing brown particles
.003	2.31	2.312	22,800	5.4	...	...	...	Clear
.003	6.60	6.602	65,700	19.9	...	...	...	Clear
.001	6.60	6.601	65,690	5.0	...	...	...	Turbid
.001	6.05	6.051	60,190	26.1	...	...	...	Clear
.001	2.86	2.861	28,290	8.9	...	...	...	Clear
.040	10.78	10.813	107,810	30.1	...	...	...	Clear
.001	4.62	4.621	45,890	12.2	...	...	...	Clear

TABLE IX.—

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity.	Organic Carbon.	Organic Nitrogen.
1886.	WELL WATERS—continued.				
May 31st	27 and 29, Balsall Heath Road ...	...	110·20	...	...
" "	30 and 31, Varna Road	...	117·40	...	very large
June 7th	30, Mount Street, All Saints	...	130·80	...	...
" "	1 and 2, Harding Street.....	...	114·60	...	very large
" "	22, Soho Road.....	...	29·80	...	moderate
" "	49—101, Bacchus Road, and 526— 536, Park Road	...	228·80	...	...
" "	211 and 212, Bordesley Green	...	157·20	...	...
" "	184, Cattell Road	...	117·40	...	moderate
" 15th	178 and 180, Bristol Street (2nd time)	...	130·80	...	large
" "	136, Hope Street.....	...	220·60	...	...
" "	133 and 135, Pershore Street	...	148·80	...	...
" "	114, Pershore Street, and premises occupied by Mr. Beart, Clay- brook Street.....	...	129·80	...	...
" "	1, Vaughton Street South	...	165·20	...	...
" "	86 and 87, Charles Henry Street...	...	100·40	...	...
" 21st	Providence Terrace, Friston Street	...	60·40	...	rather small
" "	248, St. Vincent Street	...	22·60	...	rather small
" "	250 and 252, St. Vincent Street ...	...	11·80	...	small
" "	102 and 104, Ledsam Street	...	178·40	...	...
" "	213, Bordesley Green.....	...	117·20	...	excessively large
" "	20—24, Albert Street, Small Heath (2nd time)	...	95·40	...	excessively large
" 28th	85 and 87, Pershore Road (2nd time)...	...	94·20	...	rather large
" "	213, Pershore Road	...	78·40	...	very large
" "	215 and 217, Pershore Road	...	80·20	...	moderate
" "	223, Pershore Road.....	...	64·40	...	rather large
" "	38 and 39, Allison Street	...	137·20	...	rather small
" "	17 and 19, Bartholomew Street.....	...	164·20	...	...
July 6th	210 and 211, Deritend (2nd time)	...	209·20	...	very large
" "	30 and 31 Darwin Street (3rd time)	...	109·40	...	rather large
" 7th	84, Saint Luke's Road.....	...	141·20	...	...
" "	102 and 104, Saint Luke's Road ...	...	143·40	...	excessively large
" "	106, Saint Luke's Road	...	147·20	...	very large
" "	150 and 152, Saint Luke's Road ...	...	134·20	...	"
" 19th	34, Westfield Road (Diphtheria) ...	...	59·20	...	"
" "	Houses occupied by Cutler and Goode, Hermitage Road.....	...	39·40	...	"
" "	Houses occupied by Lee and Cul- wick, Hermitage Road	...	66·20	...	"
" "	69 and 71, Great Tindal Street.....	...	201·40	...	"
" "	Premises occupied by Birmingham Boat Building Co., Tindal Street	...	122·20	...	moderate
" "	10, Ryland Street.....	...	236·20	...	...
" 26th	40, Lansdowne Street	...	83·20	...	moderate
" "	43, Lansdowne Street	...	90·40	...	rather large

(continued.)

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated.)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
·040	4·40	4·433	44,010	8·5	...	...	...	Clear
·001	3·74	3·741	37,090	6·9	...	...	...	Clear
·025	6·38	6·400	63,680	10·8	...	...	...	Floating particles
·004	5·94	5·943	59,110	6·2	...	...	...	Turbid
·001	1·43	1·431	13,990	4·1	...	...	...	Clear
·080	9·90	9·966	99,340	17·3	...	...	...	Clear ; brown residue
·060	5·50	5·549	55,170	11·5	...	...	...	Clear ; brown residue
·001	5·72	5·721	56,890	11·6	...	...	...	Turbid
·001	6·38	6·381	63,490	12·8	...	...	...	Clear
·060	10·56	10·609	105,770	19·7	...	...	...	Clear
·320	5·50	5·763	57,310	13·9	...	...	...	Clear
·640	5·28	5·804	57,720	14·6	...	...	...	Clear
2·400	·77	2·746	27,140	17·8	...	...	...	Slightly turbid
·120	3·30	3·399	33,670	9·2	...	...	...	Turbid
·001	4·74	4·741	47,090	8·0	...	...	...	Clear
·001	·66	·661	6,290	2·6	...	...	...	Slightly turbid
·001	·11	·111	·790	1·2	...	...	...	Clear
·030	9·68	9·705	96,730	16·6	...	...	...	Clear
·001	3·30	3·301	32,690	5·9	...	...	...	Slightly turbid
·002	3·96	3·961	39,290	2·7	...	...	...	Clear ; residue yellowish
·001	3·08	3·081	30,490	4·1	...	...	...	Clear
·001	3·08	3·081	30,490	3·7	...	...	...	Slightly turbid
·001	2·42	2·421	23,890	3·0	...	...	...	Clear
·001	·77	·771	7,390	6·8	...	...	...	Clear
·002	4·40	4·401	43,690	10·9	...	...	...	Turbid
·050	6·38	6·421	63,890	9·2	...	...	...	Turbid
·002	8·36	8·361	83,290	14·0	...	...	...	Clear
·001	3·30	3·301	32,690	11·4	...	...	...	Clear
·028	5·94	5·963	59,310	10·1	...	...	...	Turbid
·008	9·02	9·026	89,940	6·5	...	...	...	Clear
·001	8·36	8·361	83,290	6·3	...	...	...	Turbid
·001	5·94	5·941	59,090	4·1	...	...	...	Turbid
·003	3·30	3·302	32,700	5·6	...	...	...	Turbid
·002	2·20	2·201	21,690	2·5	...	...	...	Turbid
·003	3·52	3·522	34,900	3·4	...	...	...	Turbid
·014	3·30	3·312	32,800	26·7	...	...	...	Turbid
·001	1·98	1·981	19,490	12·3	...	...	...	Slightly turbid
·500	16·50	16·912	168,800	26·9	...	...	...	Slightly turbid
·009	4·62	4·627	45,950	5·1	...	...	...	Turbid
·011	4·84	4·849	48,170	7·3	...	...	...	Slightly turbid

TABLE IX.—

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity.	Organic Carbon.	Organic Nitrogen.
1886.	WELL WATERS—continued.				
July 26th	7 and 8, Northbrook Street	...	86.20	...	large
" "	128 and 132, Dudley Road	...	46.40	...	moderate
" "	147, Saint Luke's Road	...	148.20	...	...
" "	Back 157, Bromsgrove Street	...	199.20	...	...
Sep. 27th	30 and 32, Hickman Road.....	...	49.80	...	very large
" "	Alpha Place, Larches Street (Typhoid)	...	95.20	...	rather large
" "	220, Bradford Street	...	312.20	...	rather large
" "	223—225, Bradford Street.....	...	182.20	...	moderate
" "	30—32, Conybere Street.....	...	146.40	...	rather large
" "	198 and 199, Cheapside	...	291.60	...	very large
Oct. 4th	51 and 53, Ladypool Road	...	102.20	...	very large
" "	66 to 78, Ladypool Road	...	92.60	...	large
" "	75, Ladypool Road	...	109.20	...	rather large
" "	33 and 34 Larches Street (Scarlet Fever)	...	202.20	...	...
" "	40 & 41, Bridge St. West (Diarrhœa)	...	95.40	...	rather large
" "	58, Ludgate Hill	...	215.60	...	...
" 11th	76, Stratford Road (Diarrhœa)	...	167.20	...	very large
" "	200, Camp Hill	...	172.60	...	rather large
" "	245, Bradford Street	...	151.20	...	moderate
" "	317 to 318, Bradford Street	...	182.20	...	very large
" "	16 and 17, Calthorpe Road	...	68.40	...	moderate
" "	66 and 68, Summer Road	...	225.60	...	...
" 18th	26, Baker Street	...	128.20	...	large
" "	39—43, Baker Street	...	171.60	...	"
" "	55, Baker Street	...	150.20	...	"
" "	57 and 59, Baker Street.....	...	156.20	...	excessive
" "	180 and 181, Broad Street.....	...	141.40	...	large
" "	54, Irving Street	...	139.60	...	"
" 25th	198 and 199, Cheapside	...	286.60	...	excessively large
" "	91 and 92, Dymoke Street	...	154.20	...	large
" "	25, Hick Street	...	124.60	...	rather large
" "	386, Moseley Road	...	117.20	...	very large
" "	Payton's Brick Yard, Garrison Lane	...	83.20	...	small
" "	37—39, Garrison Lane	...	161.40	...	very large
Nov. 1st	Powell's Buildings, Rutland Road	...	143.80	...	...
" "	House occupied by Mr. Lusty, Sandon Road	...	110.20	...	large
" "	383, Hagley Road (Scarlet Fever)...	...	30.80	...	moderate
" "	180, Aston Road	...	197.20	...	...
" "	181, Aston Road	...	253.20	...	...
" "	182, Aston Road	...	84.40	...	...
" 8th	288, Hagley Road	...	51.80	...	large
" "	282, Hagley Road	...	106.20	...	very large
" "	91, Hagley Road (2nd time)	...	51.80	...	rather large
" "	6, Calthorpe Road	...	70.20	...	large
" "	19, Pershore Road	...	160.20	...	...
" "	107, Pershore Street	...	145.40	...	...

(continued.)

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated.)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
·004	4·18	4·183	41,510	7·9	...	...	...	Slightly Turbid
·003	1·10	1·102	10,700	7·9	...	...	...	Slightly Turbid
·600	4·62	5·114	50,820	5·6	...	...	...	Turbid
·030	9·24	9·265	92,330	18·9	...	...	...	Turbid
·002	2·20	2·201	21,690	1·7	...	...	...	Clear
·001	3·30	3·301	32,690	6·1	...	...	...	Slightly Turbid
·001	5·06	5·061	50,290	45·5	...	...	...	Slightly Turbid
·001	4·18	4·181	41,490	15·7	...	...	...	Slightly Turbid
·001	4·18	4·181	41,490	10·9	...	...	...	Slightly Turbid
·001	11·00	11·001	109,690	39·5	...	...	...	Clear
·001	3·74	3·741	37,090	10·7	...	...	...	Clear
·001	2·42	2·421	23,890	3·6	...	...	...	Clear
·001	1·32	1·321	12,890	5·5	...	...	...	Clear
·960	8·80	9·591	95,590	16·7	...	...	...	Slightly Turbid
·002	4·18	4·181	41,490	9·2	...	...	...	Turbid
·100	5·50	6·323	62,910	52·8	...	...	...	Slightly Turbid
·001	4·18	4·181	41,490	9·3	...	...	...	Clear
·001	5·72	5·721	56,890	8·9	...	...	...	Turbid
·001	4·84	4·841	48,090	14·7	...	...	...	Slightly Turbid
·002	2·86	2·861	28,290	14·8	...	...	...	Clear
·008	3·30	3·306	32,740	6·1	...	...	...	Slightly Turbid
·300	11·66	11·907	118,750	13·7	...	...	...	Slightly Turbid
·001	4·18	4·181	41,490	6·6	...	...	...	Slightly Turbid
·002	7·26	7·261	72,290	10·2	...	...	...	Clear
·002	6·16	6·161	61,490	10·9	...	...	...	Clear
·001	7·26	7·261	72,290	7·2	...	...	...	Slightly Turbid
·001	8·14	8·141	81,090	26·3	...	...	...	Clear, residue yellow
·012	4·84	4·850	48,180	19·3	...	...	...	Turbid
·001	9·24	9·241	92,090	40·3	...	...	...	Pretty clear, small floating particles
·001	4·40	4·401	43,690	11·9	...	...	...	Clear
·001	1·76	1·761	17,290	8·4	...	...	...	Clear
·001	2·42	2·421	23,890	11·9	...	...	...	Clear
·001	1·43	1·431	13,990	2·8	...	...	...	Turbid
·001	4·84	4·841	48,090	8·4	...	...	...	Clear
·480	7·70	8·095	80,630	12·6	...	...	...	Turbid
·018	2·64	2·655	26,230	5·1	...	...	...	Turbid
·001	·88	·881	8·490	1·5	...	...	...	Clear
·060	8·91	8·959	89,270	19·1	...	...	...	Clear
·120	9·02	9·119	90,870	37·3	...	...	...	Slightly Turbid
·060	2·31	2·359	23,270	16·5	...	...	...	Turbid
·001	1·32	1·321	12,890	3·2	...	...	...	Clear
·012	6·60	6·610	65,780	10·5	...	...	...	Slightly Turbid
·008	2·42	2·426	23,940	5·2	...	...	...	Clear
·002	3·96	3·961	39,290	6·1	...	...	...	Clear
·200	4·84	5·005	49,730	9·8	...	...	...	Clear
·240	4·62	4·818	47,860	18·1	...	...	...	Clear

TABLE IX.—

Date of Receipt of Samples.	DESCRIPTION.	Temp. C.	Total Solid Impurity.	Organic Carbon.	Organic Nitrogen.
1886.	WELL WATERS—continued..				
Nov. 15th	278, Dudley Road	...	41·80	...	large
" "	6, Winson Street.....	...	130·20	...	...
" "	38, Winson Street	...	104·80	...	...
" "	16, Green Street	...	100·20	...	...
" "	10 and 11, Bromsgrove Street (2nd Time)	...	153·20	...	...
" "	86, Hurst Street	...	140·40	...	large
" 22nd	43—49, Herbert Road	...	170·80	...	...
" "	14, Kelynge Street	...	94·20	...	large
" "	6 & 7, Mount Pleasant, Coventry Rd.	...	67·80	...	small
" "	1 & 2, Laurel Place, Mount Pleasant, Coventry Road	...	69·20	...	moderate
" "	57, Erskine Street	...	85·20	...	"
" 29th	13, Willis Street	...	126·40	...	rather large
" "	5 and 7, Ampton Road	...	57·60	...	"
" "	7 and 8, Wheeley's Road	...	183·20	...	"
" "	1—3, Wheeley's Road	...	183·20	...	moderate
" "	12, Wheeley's Road	...	198·20	...	very large
" "	158, Pershore Road (2nd Time)	...	107·80	...	"
" "	73, Balsall Heath Road	...	97·80	...	very large
Dec. 6th	Ivy House, Summerfield Park, Dudley Road	...	170·80	...	"
" "	Heath Green Cottage, Dudley Road	...	94·20	...	rather large
" "	106, Dudley Road	...	67·80	...	large
" "	145 and 147, Dudley Road	...	69·20	...	rather large
" "	68, Edgbaston Street (2nd Time) ...	...	85·20	...	very large
" "	65 and 66, Smallbrook Street	...	126·40	...	...

(continued.)

Ammonia	Nitrogen as Nitrates and Nitrites.	Total Combined Nitrogen.	Previous Sewage or Animal Contami- nation. (Estimated)	Chlorine.	Hardness.			REMARKS.
					Tempo- rary.	Perma- nent.	Total.	
.001	1.76	1.761	17,290	1.7	...	...	...	Clear
1.200	6.82	7.808	77,760	13.2	...	...	...	Slightly Turbid
.320	5.72	5.983	59,510	12.4	...	...	...	Turbid, with brown floating particles
.480	5.06	5.455	54,230	8.6	...	...	...	Slightly Turbid
.800	6.16	6.819	67,870	14.3	...	...	...	Clear
.020	5.28	5.296	52,640	19.3	...	...	...	Clear
.320	10.12	10.383	103,510	14.5	...	...	...	Slightly Turbid
.001	4.84	4.841	48,090	8.7	...	...	...	Clear
.001	2.64	2.641	26,090	5.1	...	...	...	Clear
.001	1.98	1.981	19,490	4.2	...	...	...	Clear
.005	1.76	1.764	17,320	6.8	...	...	...	Clear
.001	9.02	9.021	89,890	7.5	...	...	...	Turbid
.001	2.31	2.311	22,790	6.5	...	...	...	Slightly Turbid
trace	2.20	2.200	21,680	61.8	...	...	...	Slightly Turbid
.001	4.40	4.401	43,690	59.6	...	...	...	Slightly Turbid
trace	4.18	4.180	41,480	68.4	...	...	...	Slightly Turbid
.001	1.98	1.981	19,490	15.2	...	...	...	Slightly Turbid
.001	3.30	3.301	32,690	8.5	...	...	...	Slightly Turbid
.001	.99	.991	9,590	3.6	...	...	...	Slightly Turbid
.001	3.30	3.301	32,690	12.8	...	...	...	Slightly Turbid
.001	2.42	2.421	23,890	3.9	...	...	...	Clear
.001	1.32	1.321	12,890	3.1	...	...	...	Clear
.010	7.04	7.048	70,160	17.8	...	...	...	Clear
.160	8.36	8.491	84,590	27.6	...	...	...	Slightly Turbid

TABLE X.

RETURN FOR THE PERIOD 1ST JULY, 1885 TO 30TH JUNE, 1886, RESPECTING THE VACCINATION OF CHILDREN WHOSE BIRTHS WERE REGISTERED IN THE BOROUGH DURING THE SAID PERIOD.

PARISH,	Number of Births returned in the "Birth List Sheets" as Registered.	Number of these Births duly entered in Columns 10, 11, and 13 of the "Vaccination Register" (Birth List Sheets), viz. :				Number of these Births which remained unentered in the "Vaccination Register" of on account (as shown by Report Book) of				Number of these Births remaining neither duly entered in the "Vaccination Register" (cols. 3, 4, 5, and 6 of this Return) nor temporarily accounted for in the "Report Book" (cols. 8, 9, and 10 of this Return).
		Col. 10.	Col. 11.		Col. 13.	Postponement by Medical Certificate.	Removal to Districts the Vaccination Officer of which has been duly apprised.	Removal to places unknown or which cannot be reached; and cases not having been found.		
			"Insusceptible of Vaccination."	"Had Smallpox."					"Dead, Unvaccinated."	
1	2	3	4	5	6	8	9	10	11	
Birmingham ...	8,496	7,109	24	—	898	85	106	222	52	
Aston (within the Boro')	5,516	4,530	4	—	593	80	23	206	80	
Edgbaston (")	442	385	3	—	35	7	7	4	1	

Table of the Number of Deaths occurring in each Street in the Borough of Birmingham during the Year, 1886.

STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases
A			Bath Street ...	1	6	Burbury Street ...	4	14
Abberley Street ...			Beachfield Road ...			Burlington Passage ...		
Abbey Street ...	3	2	Beach Street ...	1	9	Butler Street ...	2	3
Aberdeen Street ...	5	17	Beak Street ...		7	Butlin Street ...	1	4
A. B. Row ...			Bear Lane ...					
Ada Street ...			Beatrice Crescent ...					
Adam Street ...	3	25	Beaufort Road ...		4			
Adderley Street ...	2	15	Bedford Road ...	2	4	C		
Adelaide Street ...			Beechfield Road ...		2	Calthorpe Road ...		3
Adelaide St., Deritend ...	2	3	Belgrave Road ...	1	7	Cambridge Crescent ...		2
Albany Road ...			Bell Barn Road ...	2	30	Cambridge Street ...		
Albert Street, Deritend ...	2	3	Bellis Street ...		8	Camden Drive ...		4
Albert Street, All Saints ...		4	Bell Street ...			Camden Grove ...		3
Albert St., St. Martin's ...		1	Belmont Passage ...		6	Camden Street ...	6	40
Albion Street ...		5	Belmont Row ...		5	Camp Hill ...	1	14
Alcester Street ...	2	20	Benacre Street ...	4	17	Camp Street ...		
Alexandra Road ...	2	1	Bennett's Hill ...			Canal Street ...	1	1
Alexandra Street ...		7	Berkley Street ...		1	Cannon Street ...		1
Alfred Street ...		1	Berners Street ...		6	Cape Lane ...		
Alcock Street ...		7	Beswick Street ...			Cape Street ...		5
Allen's Road ...	3	2	Betholom Row ...			Cardigan Street ...	2	3
Allesley Street ...		3	Birchall Street ...	4	4	Carlisle Street ...		2
Allison Street ...	2	8	Bird Lane ...			Carlyle Road ...		4
All Saints' Road ...			Bishopsgate Street ...	4	14	Carnarvon Road ...		
All Saints' Street ...		3	Bishop St., St. Martin's ...	2	11	Caroline Street ...		4
Alma Crescent ...	1	5	Bishop Street, St. Mary's ...			Carpenter Road ...		2
Alma Street ...			Bishop Street South ...	1	3	Carr's Lane ...		
Alston Street ...	3	18	Bissell Street ...	3	13	Cartland Road ...		5
Ampton Road ...			Blake Lane ...			Carver Street ...	2	16
Anderton Road ...		7	Blews Street ...	3	8	Castle Street, St. Martin's ...		1
Anderton Street ...	2	13	Blews Street West ...	1	12	Castle Street, Deritend ...		
Andover Street ...			Bloomsbury ...			Cathcart Street ...		4
Angelina Street ...	8	19	Bloomsbury Street ...	2	27	Cato Street ...	2	12
Argyle Street ...	2	7	Blucher Street ...	3	11	Cato Street North ...	1	6
Armoury Road ...			Bolton Road ...	6	11	Cattell Road ...	5	13
Arsenal Street ...	2	1	Bolton Street ...			Cattell Grove ...		1
Arthur Road ...		2	Bond Street ...			Cecil Street ...	3	20
Arthur Street ...	9	24	Bordesley Green ...	2	13	Centre Row ...		4
Ashford Street ...		1	Bordesley Green Road ...		4	Chad Road ...		
Ashted Row ...		10	Bordesley Park Road ...	14	35	Chandos Road ...		
Aston Brook Street ...	1	1	Bordesley Street ...	6	22	Chapel House Street ...		
Aston Road ...	8	29	Bow Street ...	1	7	Chapel Street ...	1	3
Aston Street ...	1	6	Bowyer Street ...		3	Chapman Road ...		2
Asylum Road ...		6	Bracebridge Street ...	1	11	Charles Arthur Street ...	1	12
Athole Street ...		1	Bradford Street ...	7	19	Charles Henry Street ...	5	27
Atlas Road ...		4	Braithwaite Road ...		1	Charles Road ...		1
Auckland Road ...	1	3	Branston Street ...	4	2	Charlotte Road ...	1	3
Augusta Street ...		4	Brasshouse Passage ...		1	Charlotte Street ...		5
Augustus Road ...		3	Brass Street ...		3	Chattaway Street ...	1	5
Austin Street ...		1	Bread Lane ...			Cheapside ...	8	36
Avenue Road ...			Bread Street, St. Paul's ...		13	Cheatham Street ...		4
			Bread St., St. Martin's ...			Chequers Walk ...		1
B			Brearley Street ...	11	21	Cherry Street ...		1
Bacchus Road ...	2	8	Brearley Street West ...	15		Cherry Wood Lane ...	1	3
Bagot Street ...	3	13	Brewery St., Deritend ...			Chester St., Ladywood ...	1	14
Bailey Street ...			Brewery St., St. Mary's ...	3		Chester St., Duddleston ...	1	4
Baker Street ...	2	7	Brewery St., Duddleston ...			Cheston Road ...		1
Balloon Street ...			Brickiln Street ...			Christ Church Passage ...		
Balsall Heath Road ...		3	Bridge Row ...		2	Church Road, Duddleston ...	1	6
Banbury Street ...		3	Bridge Street, Nechells ...			Church Road, Edgbaston ...		2
Barford Road ...	5	10	Bridge Street Duddleston ...		1	Church Street ...		6
Barford Street ...	10	19	Bridge Street St. Thomas ...		1	Clarendon Road ...		
Barford Street South ...	3	4	Bridge Street West ...	16	39	Clark Street ...	3	11
Barker Street ...	1	7	Bristol Road ...	1	7	Claverdon Street ...	1	5
Barlow's Road ...			Bristol Street ...	1	17	Claybrook Street ...		2
Barn Street ...	5	5	Broad Street ...	4	18	Clement Street ...		5
Barrack Street ...		1	Bromsgrove Street ...	2	15	Cleve Terrace ...	1	2
Barr Street ...	3	14	Brookfield Road ...		4	Clissold Street ...	2	7
Barr Street West ...	2	5	Brook Road ...			Cliveland Street ...	1	9
Bartholomew Row ...		7	Brook Street ...			Coach Yard ...		
Bartholomew Street ...	1	6	Broom Street ...		1	Coleman Street ...	3	12
Barwell Road ...	1	3	Brueton's Walk ...			Coleshill Street ...	1	8
Barwick Street ...			Buckingham Street ...	2	10	College Street ...		4
Baskerville Passage ...			Buck Street ...		1	Colmore Row ...		
Baskerville Place ...		1	Bullock Road ...			Commercial Street ...		
Bath Passage ...		2	Bullock Street ...		11	Communication Row ...		3
Bath Row ...	1	11	Bull Ring ...		2	Congreve Street ...		
			Bull Street ...		1	Constance Road ...		
						Constitution Hill ...	2	7

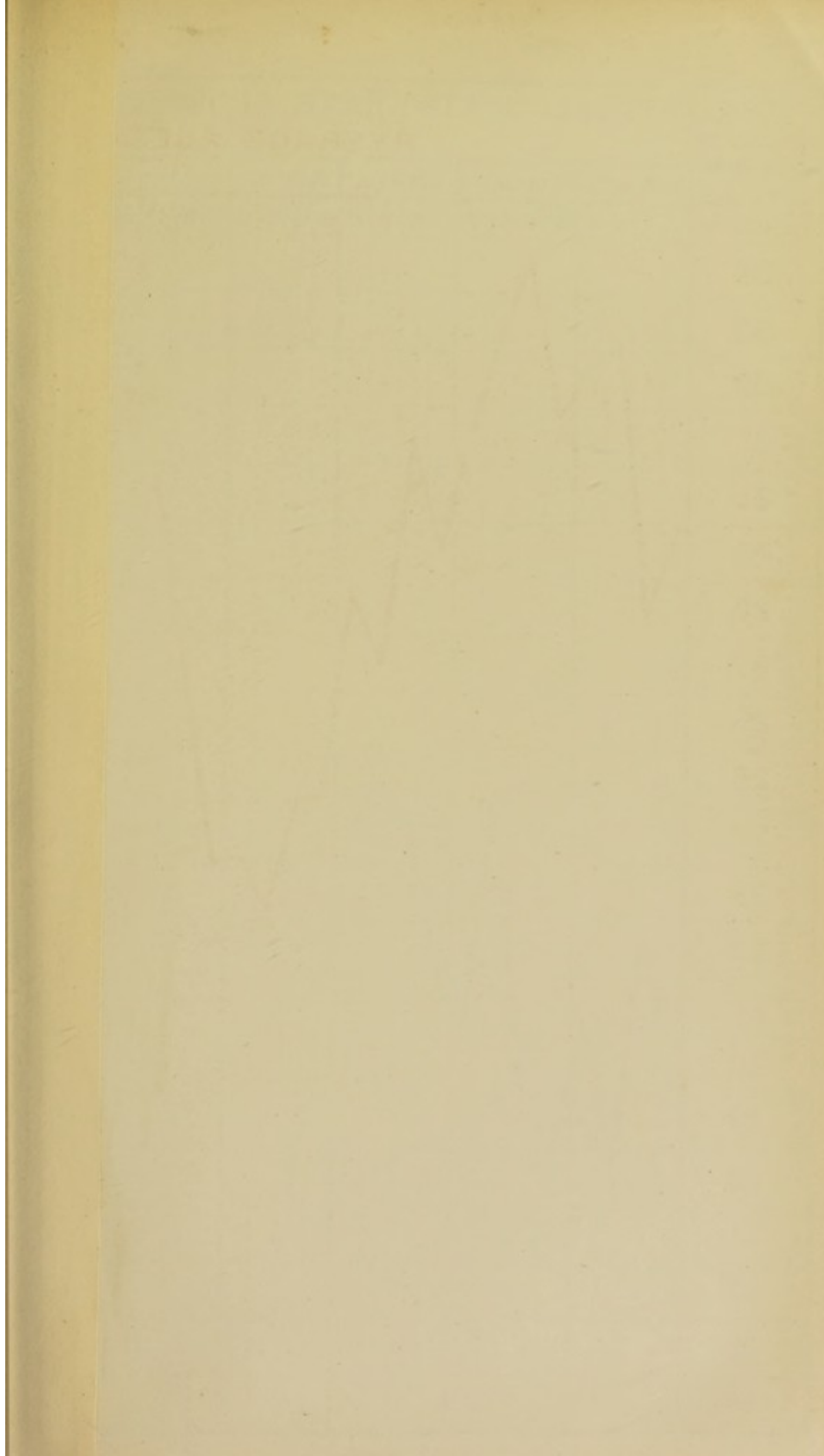
STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases
Conybere Street ...	5	20	Falconer Road ...	1		Green Street, Deritend ...	3	5
Cook's Hill ...	1	4	Farm Road ...	12	24	Green Street, All Saints' ...	1	12
Cook Street ...	2	19	Farm Street ...	1		Green's Village ...	8	15
Cooksey Road ...	1	3	Farquhar Road ...	3	10	Greenway Street ...	8	18
Cope Street ...	1	5	Fawdry Street ...	4	11	Grosvenor Row ...	3	8
Coplow Street ...	1	8	Fazeley Street ...	4	2	Grosvenor Street ...	8	18
Coralie Street ...	1	1	Fisher Street ...	5	10	Grosvenor Street West ...	3	8
Corporation Street ...	9	42	Fleet Street ...	12	9	Grove Street ...	1	6
Cotton Row ...	1	7	Floodgate Street ...	3	2	Guildford Street ...	1	2
Cotton Street ...	1	6	Florence Street ...	3	2	Gullet, St. Mary's ...	1	4
Coventry Road ...	1	5	Fordrough Lane ...	3	2	Gullet, Deritend ...	1	4
Coventry Street ...	1	2	Fordrough Street ...	3	2	Gullet, St. Thomas's ...	1	4
Cowper Street ...	1	2	Ford Street ...	3	2			
Cox Street ...	1	2	Forge Street ...	3	2	H		
Coxwell Road ...	1	2	Forster Street ...	3	2	Hagley Road ...	1	14
Crabtree Road ...	1	2	Foundry Road ...	1	2	Halberton Street ...	1	2
Cranmore Street ...	1	15	Fowler Street ...	1	2	Hall Hill Road ...	1	2
Cregoe Street ...	1	28	Fox Street ...	1	6	Hall Street ...	2	11
Crescent ...	1	1	Francis Road ...	5	21	Hampton Street ...	2	11
Crescent Wharf ...	1	1	Francis Street ...	9	9	Hampton Row ...	1	4
Crompton Road ...	10	40	Frankfort Street ...	1	4	Handsworth New Road ...	5	8
Cromwell Street ...	10	40	Franklin Street ...	1	5	Hanley Street ...	3	2
Crooked Lane ...	2	10	Frank Street ...	1	5	Hanover Street ...	3	3
Cross Street ...	2	10	Frederick Road ...	1	6	Harborne Road ...	1	5
Cuckoo Road ...	2	2	Frederick Street ...	1	6	Harding St. St. George's ...	1	3
Cumberland Street ...	2	4	Freeman Road ...	3	10	Harding St., All Saints' ...	1	4
Curzon Street ...	2	2	Freeman Street ...	3	10	Harford Street ...	1	4
Cuthbert Road ...	2	2	Freeth Street ...	3	10	Harrison's Road ...	5	9
			Friston Street ...	7		Hatchett Street ...	2	4
D						Hawkes Street ...	6	15
Dale End ...	1	8	Galton Street ...	1	3	Heath Mill Lane ...	7	37
Dart Street ...	1	8	Garbett Street ...	4	20	Heath Street ...	7	37
Dartmouth Street ...	6	27	Garrison Lane ...	7	33	Heath Street South ...	6	16
Darwin Street ...	5	13	Garrison Street ...	5	8	Heaton Street ...	1	1
Dawson Street ...	1	1	Gas Street ...	1	9	Helena Street ...	9	35
Dean Street ...	1	1	Geach Street ...	1	2	Heneage Street ...	3	3
Dearman Road ...	1	1	Gee Street ...	1	4	Henley Street ...	1	2
Derby Street ...	3	20	Gem Street ...	2	2	Henn Street ...	6	12
Devon Street ...	5	9	George Road ...	2	5	Henrietta Street ...	1	22
Devonshire Street ...	3	13	George Street, St. Paul's ...	6	13	Henry Street ...	2	2
Digbeth ...	3	1	George Street, Nechells ...	6	13	Herbert Road ...	1	2
Digby Street ...	3	1	George Street West ...	6	13	Hermitage Road ...	1	2
Doe Street ...	1	10	Gibb Street ...	1	3	Hickman Road ...	1	7
Dolman Street ...	1	10	Gillott Road ...	1	3	Hick Square ...	1	7
Dolobran Road ...	1	1	Gladstone Road ...	3	3	Hick Street ...	1	4
Dora Road ...	1	1	Glebe Passage ...	3	3	Highfield Road ...	1	4
Drury Lane ...	1	2	Glebe Street ...	3	3	Highgate Road ...	7	33
Duchess Road ...	10	10	Gloucester Street ...	2	14	Highgate Place ...	2	4
Duddleston Mill Road ...	10	10	Glover's Road ...	2	14	Highgate Street ...	1	3
Duddleston Row ...	5	23	Glover's Street ...	2	4	High Park Street ...	1	3
Dudley Road ...	2	7	Godwin Street ...	1	1	High Street ...	1	26
Dudley Street ...	2	7	Golden Hillock Road ...	5	26	High Street, Bordesley ...	8	26
Dugdale Street ...	1	10	Gooch Street ...	1	3	High Street, Deritend ...	1	4
Duke Street ...	7	20	Goode Street ...	1	3	Hill Street ...	4	22
Dymoke Street ...	7	20	Good Knave's End ...	1	1	Hinckley Street ...	4	22
E			Goodrick Street ...	1	2	Hingeston Street ...	1	9
Eastern Road ...	1	2	Gopsall Street ...	1	3	Hob Moor Road ...	2	3
Easy Row ...	1	3	Gordon Street ...	1	3	Hockley Hill ...	3	3
Edgbaston Road ...	1	3	Gosta Green ...	3	3	Hockley Pool Road ...	2	3
Edgbaston Street ...	1	3	Gough Road ...	3	3	Hockley Street ...	3	3
Edmund Street ...	4	8	Gough Street ...	3	3	Holborn Hill ...	2	2
Edward Road ...	4	8	Grace Road ...	1	8	Holland Street ...	2	5
Edward Street ...	2	19	Grafton Road ...	2	12	Holliday Street ...	2	13
Elkington Street ...	1	9	Graham Street ...	6	29	Hollier Street ...	2	10
Ellen Street ...	5	20	Grange Road ...	5	13	Holloway Head ...	1	1
Ellis Street ...	1	9	Grantham Road ...	1	21	Holly Road ...	2	10
Elvetham Road ...	1	7	Grant Street ...	3	3	Holt Street ...	1	2
Emily Street ...	1	7	Granville Street ...	6	29	Hooper Street ...	2	26
Emmeline Street ...	1	7	Great Barr Street ...	9	37	Hope St. (St. Martin's) ...	11	57
Enfield Road ...	1	7	Great Brook Street ...	9	37	Hope St. (All Saints') ...	1	2
Engine Street ...	1	7	Great Charles Street ...	1	16	Horse Fair ...	1	10
Erasmus Road ...	1	7	Great Colmore Street ...	4	16	Hospital Street ...	1	1
Ernest Street ...	1	7	Great Francis Street ...	6	22	Howard Place ...	1	2
Erskine Street ...	2	6	Great Hampton Row ...	10	20	Howard Street ...	1	10
Essex Street ...	4	8	Great Hampton Street ...	2	10	Howe Street ...	1	1
Essington Street ...	1	7	Great King Street ...	4	17	Hubert Road ...	1	1
Eversley Road ...	1	7	Great Lister Street ...	6	24	Hubert Street ...	1	1
Exeter Row ...	1	7	Great Russell Street ...	2	10	Humpage Road ...	1	1
Eyre Street ...	1	7	Great Tindal Street ...	1	1	Hunter's Lane ...	1	1
F			Greenfield Crescent ...	4	17	Hunter's Vale ...	2	9
Factory Road ...	2	2	Green Lane ...	4	17	Hurst Street ...	1	1
			Green's Court ...	4	17	Hutton Street ...	1	1

STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases
Hylton Street ...	2	1	Lennox Street ...	8	16	Mill Lane ...		2
Hyde Road ...		6	Leopold Street ...	3	15	Mill Street ...		
			Lilly Green ...	3	1	Milton Street ...		2
I			Lingard Street ...	2	8	Milward Street ...	1	4
			Link Road ...		1	Minories ...		1
			Lionel Street ...	2	25	Moat Lane ...		
Icknield Port Road ...	12	45	Lister Street ...			Moat Row ...		
Icknield Square ...	3	16	Little Ann Street ...		6	Molliett Street ...		5
Icknield Street ...	3	25	Little Barr Street ...		6	Moland Street ...	2	11
Inge Street ...	2	5	Little Bow Street ...		2	Mole Street ...	1	5
Ingleby Street ...		11	Little Broom Street ...			Mona Road ...		
Inkerman Street ...		8	Little Charles Street ...			Monmouth Street ...		
Irving Street ...	6	32	Little Cannon Street ...			Montague Road ...	1	3
Islington ...	2	7	Little Cherry Street ...	2	1	Montague Street ...	2	2
Ivy Lane ...		2	Little Edward Street ...		2	Montgomery Street ...		3
			Little Francis Street ...		3	Montpellier Street ...	1	2
J			Little Green Lane ...	3	14	Monument Road ...	6	34
			Little Hill Street ...			Moore's Row ...		1
			Little King Street ...	2	8	Moorsom Street ...	1	4
			Little Shadwell Street ...			Moor Street ...	1	14
Jamaica Row ...		3	Liverpool Street ...	1	1	Moreton Street ...		3
James Street ...		1	Livery Street ...		5	Morville Street ...	1	20
James Turner Street ...		5	Lloyd Street ...		1	Moseley Road ...	8	16
James Watt Street ...		1	Lodge Road ...	2	29	Moseley Street ...	3	28
Jenkins Street ...		3	Lombard Street ...	2	5	Mott Street ...	4	9
Jennens Row ...		2	London Prentice Street ...			Mountfield Road ...		
John Bright Street ...		1	Long Acre ...	5	36	Mount Pleasant ...		2
Johnson Street ...	1	1	Longmore Street ...			Mount Street, Deritend ...		4
Johnstone Street ...	1	5	Long Street ...	2	7	Mount St., Winslow Green ...	2	5
			Lord Street ...	2	6	Mount Street, Nechells ...	1	6
K			Louisa Street ...			Musgrave Road ...		5
			Loveday Street ...		6	Muntz Street ...	1	7
			Love Lane ...		2			
			Lower Dartmouth Street ...			N		
			Lower Darwin Street ...	2	3			
Keeley Street ...		3	Lower Dean Street ...	1	2	Navigation Street ...	4	9
Kelynge Street ...	7	9	Lower Essex Street ...	7	13	Nechells Park Road ...	1	24
Kendal Road ...		1	Lower Fazeley Street ...	1		Nechells Place ...	3	11
Kent Street ...		3	Lower Henry Street ...			Needham Street ...		
Kent Street North ...	1	4	Lower Hurst Street ...	4	10	Needless Alley ...		
Kenyon Street ...	2	6	Lower Hurst Street East ...		2	Nelson Street ...	4	4
Key Hill ...	4	10	Lower Lawley Street ...			Nelson Street South ...	2	19
King Alfred's Place ...	1	1	Lower Loveday Street ...		1	Nelson Street West ...	4	11
King Edward's Place ...			Lower Pershore Street ...			Netherlands ...		1
King Edward's Road ...	3	15	Lower Priory ...		1	New Bartholomew St. ...		4
Kingscote Road ...			Lower Russell Street ...		6	New Bond Street ...		1
Kingston Road ...	1	2	Lowe Street ...			New Bridge Street ...		
King Street ...	1	2	Lower Temple Street ...			New Canal Street ...	7	11
Kyott's Lake Road ...	1	1	Lower Tower Street ...	14	24	New Church Street ...		
Kyrwick's Lane ...	4	10	Lower Trinity Street ...			Newdegate Street ...		
			Lower Windsor Street ...			New Edmund Street ...		
L			Loxton Street ...		3	New England ...		
			Ludgate Hill ...		7	New Hall Hill ...		3
			Ludgate Hill Passage ...			New Hall Street ...	2	14
			Lupin Street ...	2	14	New Inkleys ...		
			Lytleton Road ...			New John Street ...	6	22
Ladypool Lane ...		9				New John Street West ...	9	47
Ladywell Passage ...			M			New Market Street ...		
Ladywell Walk ...		1				New Meeting Street ...		
Ladywood Road ...	2	24	Macdonald Street ...		7	New Spring Street ...	5	8
Ladywood Grove ...			Main Street ...		7	New Street ...	1	
Lancaster Street ...	1	9	Malvern Hill Road ...		3	New Summer Street ...	3	25
Lander Street ...			Manchester Street ...	2	4	Newton Road ...		
Lander Street ...			Manor Road ...			Newton Street ...	2	5
Langley Road ...			Market Street ...	1	2	Newtown Row ...	12	27
Lansdowne Street ...	1	8	Mark Lane ...			Nile Street ...		
Larches Street ...	2	10	Marroway Street ...		2	Nineveh Road ...		
Latimer Street ...		2	Marshall Street ...		5	Noel Road ...		1
Latimer Street South ...	3	24	Marshall Street South ...		4	Norfolk Road ...		
Lawden Road ...	1	7	Mary Ann Street ...		4	Norfolk Street ...	2	
Lawley Street ...	6	22	Mary Street ...			Norman Street ...	1	3
Lawrence Street ...	1	9	Masshouse Lane, St. Mtns ...			Northampton Street ...	1	1
Lease Lane ...			Masshouse Lane, Edgbn ...			Northbrook Street ...		3
Ledsam Street ...	2	14	Meadow Road ...			Northumberland Street ...		4
Lee Bank Road ...	1	23	Meeting House Yard ...			North Warwick Street ...		
Lee Crescent ...	2	5	Melville Road ...		1	Northwood Street ...	2	8
Lee Mount ...		3	Meriden Street ...	1	7	North Street ...		
Leek Street ...		3	Metchley Lane ...			Norton Street ...		1
Lees Street ...	1	8	Metchley Park Road ...			Norwood Road ...		2
Legge Lane ...		1	Miles Street ...	2	11	Nova Scotia Street ...		3
Legge Street ...	5	7	Milk Street ...	7	9	Nursery Road ...		
Lench Street ...	5	8	Miller Street ...		8			

STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases
O			R			Shadwell Street ... 1		
Oakley Road ...	1		Radnor Street... ..	7		Shakespeare Road ...	3	14
Old Cross Street ...	5		Raglan Road			Sheepcote Lane		1
Old Meeting Street ...	2		Railway Ter., Duddleston	1	4	Sheepcote Street	1	4
Old Square	1		Railway Ter., Nechells	1	9	Sheep Street	4	12
Oliver Road	1		Rann Street		1	Sherborne Street	4	20
Oliver Street	3		Ratcliff Place			Sherlock Street		34
Oozells Street	1	1	Ratcliff Street			Shutt Lane		
Oozells Street North ...	2	3	Ravenhurst Street ...	1	11	Sidney Road		
Orford Road		1	Rawlins Street		4	Silver Street		
Ormond Street	2	7	Rea Street	2	11	Sir Harry's Road		1
Osler Street	1	21	Rea Street South	1	2	Skinner Lane		7
Oughton Place		4	Regent Parade			Skinner Street		2
Outlet Road			Regent Park Road ...		1	Slaney Street		5
Owen Street	1	7	Regent Place		2	Slough Lane		2
Oxford Street	1	7	Regent Row			Smallbrook Street ...		
Oxford Road		1	Regent Street			Smithfield Passage ...		1
Oxygen Street... ..	1	2	Reservoir Retreat ...			Smithfield Street ...		
P			Reservoir Road		7	Smith Street, St George's	4	19
Paddington Street ...	5		Richard St., Nechells ...	2	15	Smith Street, Duddleston		3
Pakenham Road		2	Richard St., St. Paul's	1		Snappe Street		
Palmer Street	3		Richmond Hill Road ...			Snow Hill	1	5
Parade		5	River Street	1	1	Soho Road		3
Paradise Street		2	Robert Road		9	Somerset Road		1
Parker Street	2	5	Rocky Lane	2		Somerset Street	2	4
Park Lane		1	Rodway Street			South Road		8
Park Road, All Saints	3	46	Rope Walk			Spark Street		2
Park Road, Edgbaston			Rosalie Street	1	1	Speaking Stile Walk ...		2
Park Street	1	11	Rotton Park Road ...		6	Speedwell Road		
Parliament Street ...		3	Rotton Park Street ...		3	Spencer Street	3	3
Paternoster Row		1	Rowland Street	3	13	Spiceal Street		1
Paxton Road		5	Rupert Street		2	Spon Terrace		1
Pebble Mill Road ...			Russell Street	2	3	Spooner Street	1	2
Peel Street	5	8	Ruston Street	5	7	Springfield Street ...	1	13
Penn Street, Deritend ...	3	5	Ruston Street North ...		10	Spring Hill		9
Penn Street, Duddleston	1	2	Rutland Road	1	2	Spring Hill Passage ...		1
Perrot Street		1	Ryland Road	4	14	Spring Road	1	3
Pershore Road		17	Ryland Street, Deritend			Spring Street		3
Pershore Street	4	12	Ryland St., Ladywood ...	2	11	Spring Vale		1
Phillip St., Market Hall			Ryland Street North ...			Stafford Street	1	4
Pickford Street	2	4	S			Staniforth Street ...	4	14
Piddock Street		1	Salop Street		1	Stanley Road		
Pigott Street		3	Saltley Road	3	7	Stanhope Street		4
Pinfold Street		1	Saltley Street	1	5	Stanmore Road		1
Pitney Street			Sampson Road	1	7	Station Street... ..		2
Pitsford Street		1	Sampson Road North ...			Stella Street	1	
Plough & Harrow Road		1	Sandon Road	1	1	Steelhouse Lane	2	11
Pope Street	3	9	Sand Pits	1	1	Stephenson Place ...		
Poplar Avenue		1	Sand Street	1	2	Stephenson Street ...		
Porchester Street ...			Sandy Lane	3	9	Steward Street	1	18
Port Hope Road		2	Sarah Street			Stirling Road		3
Portland Road		3	St. Andrew's Road	6	16	Stoke Street		7
Potter Street		5	St. Clement's Road ...		1	Stone Yard		3
Poultry			St. George's Crescent ...	5	8	Stoney Lane	1	4
Powell Street		3	St. George's Street	1	1	Stour Street	4	9
Prescott Street	4	18	St. George's Place			Stratford Place		
Price Street	3	6	St. George's Terrace ...			Stratford Road	1	6
Priestley Road		4	St. James' Place		4	Stratford Street		2
Primrose Hill			St. James' Road		4	Stuart Street	2	5
Princes Row			St. James' Street	4	11	Suffolk Street	1	12
Princes Street... ..			St. Luke's Road	4	15	Summerfield Crescent ...		3
Princess Road... ..	2	3	St. Mark's Street	4		Summerfield Road		1
Princip Street... ..	2	3	St. Mark's Street West ...			Summer Hill		3
Priory Road			St. Martin's Lane		2	Summer Hill Road		1
Pritchett's Road			St. Martin's Place		1	Summer Hill Street ...	4	5
Pritchett Street	6	14	St. Martin's Row			Summer Hill Terrace ...		1
Proctor Street	1	5	St. Martin's Street	1	12	Summer Lane... ..	15	41
Prospect Row			St. Mary's Row		4	Summer Row		1
Q			St. Mary's Street		4	Summer Road... ..	3	12
Queen Street			St. Oswald's Road			Summer Street		
			St. Paul's Square		2	Sun Street		7
			St. Peter's Place			Sun Street West		2
			St. Philip's Church Yard			Sutton Street	1	3
			St. Stephen's Street ...		1	Swallow Street		2
			St. Vincent Street	2	15	Swan Passage... ..		
			Scholefield Street	1	23	Sydney Road		2
			Scotland Passage			T		
			Scotland Street			Talbot Street	1	9
			Scott Street			Talfourd Street	4	10
			Seymour Street	1	7	Tanter Street		
						Taylor Street		1
						Temple Field Street ...	2	

STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases	STREETS.	Zymotic Diseases	Other Diseases
Temple Row ...		4	W			Worcester Wharf ...	1	3
Temple Row West ...						Wordsworth Road ...		1
Temple Street ...		2				Wrentham Street ...	1	14
Tenby Street ...		4		1	6	Wright Street ...	4	7
Tenby Street North ...	1	1		4	10	Wrottesley Street ...		1
Tennant Street ...	5	11		1	3	Wyndcliffe Road ...		
Theodore Street ...	1	10		3	12	Wyndham Road ...		1
Theresa Road ...		2			1	Wynn Street ...	2	19
Thimble Mill Lane ...	2	3				X		
Thomas St., St. Mary's								
Thomas Street, Deritend	1	4		5	12			
Thorp Street ...		3			4			
Tillingham Street ...		1			4	Y		
Tindal Street ...		4		1	4			
Tonk Street ...				5	31			
Tower Street ...	7	30			7			
Trafalgar Road ...				2	12	Yardley Road ...		2
Trent Street ...	1	1			5	Yew Tree Road ...		
Trinity Terrace ...		8				York Passage ...		
Turner Street ...		6			4	York Road ...		
Tyndall Street ...	3	1		6	10	York Street ...	1	1
U			Wellington St., Icknield Sq.			Z		
			Well Lane ...		5			
			Well Street ...	1	11			
	3	21	Westbourne Road ...					
			Western Road ...					
			Westfield Road ...					
			Westley Street ...	1	5			
			Weston Street ...		2			
			Wharf Lane ...		4			
	4	6	Wharf St., All Saints ...		2			
	1	2	Wharf St., St. Thomas's		3			
			Wharf St., Duddeston ...			ADDENDA.		
	1	4	Wharton Street ...					
			Wheeler Street ...	7	14			
			Wheele's Lane ...		4		Great Western Railway	4
			Wheele's Road ...		7		Birmingham and Wor-	
	1	5	White Lion Passage ...				cester Canal ...	5
			White Road ...	1	9		Birmingham and Faze-	
	1	5	Whitmore Road ...		2		ley Canal ...	3
			Whitmore Street ...		14		Birmingham & Warwick	
			Whittall Street ...	1	5		Canal ...	2
V			Wiggin Street ...		1		Old Birmingham Canal	11
			William Edward Street	1	8		Summerfield Park ...	1
			William Henry Street ...		4		New Street Rail. Station	2
			William St., St. Thomas'	8	23	AT INSTITUTIONS.		
	3	23	William Street, Deritend	1				
			William Street North ...	1	3			
	1	6	Willis Street ...		8		General Hospital ...	18 276
	6	19	Willow Avenue ...				Queen's Hospital ...	9 158
			Wilton Street ...		1		Children's Hospital ...	34 70
	1	4	Windmill Street ...		4		Workhouse ...	24 551
			Windsor Street ...	6	21		Asylum ...	60
			Winson Green Road ...	4	9		Gaol ...	5
			Winson Street ...		10		Deaf and Dumb Inst. ...	1
	1	1	Witton Street ...	2	11		Borough Hospital ...	16
			Woodbourne Road ...				Homœopathic Hospital	8
			Woodcock Street ...	2	11		Orthopædic Hospital ...	3
			Wood St., St. Thomas'				Blue Coat School ...	1
	1	2	Wood Street, Ladywood		3	TOTALS		
	1	1	Worcester Street ...		1		1383	7116

Grand Total ... 8,499



1886

DEATH RATE PER
1000 PER ANN &TOTAL DEATH RATE FROM ALL CAUSES
AVERAGE AGE AT DEATHAV. DEATH
AGE IN YEARS

JANUARY FEBRUARY MARCH APRIL MAY JUNE

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24

34

33

32

31

30

29

28

27

26

25

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23

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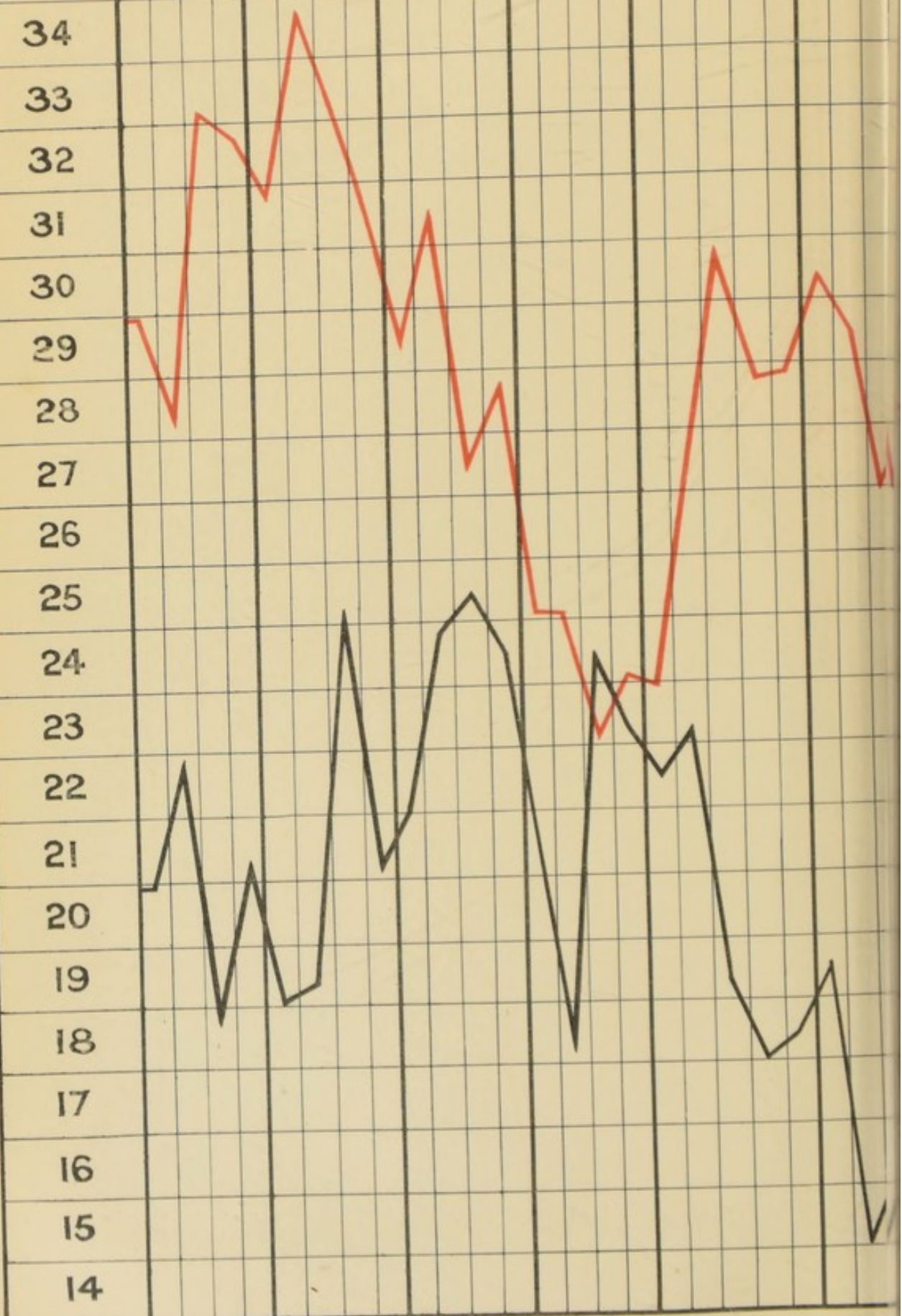
18

17

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15

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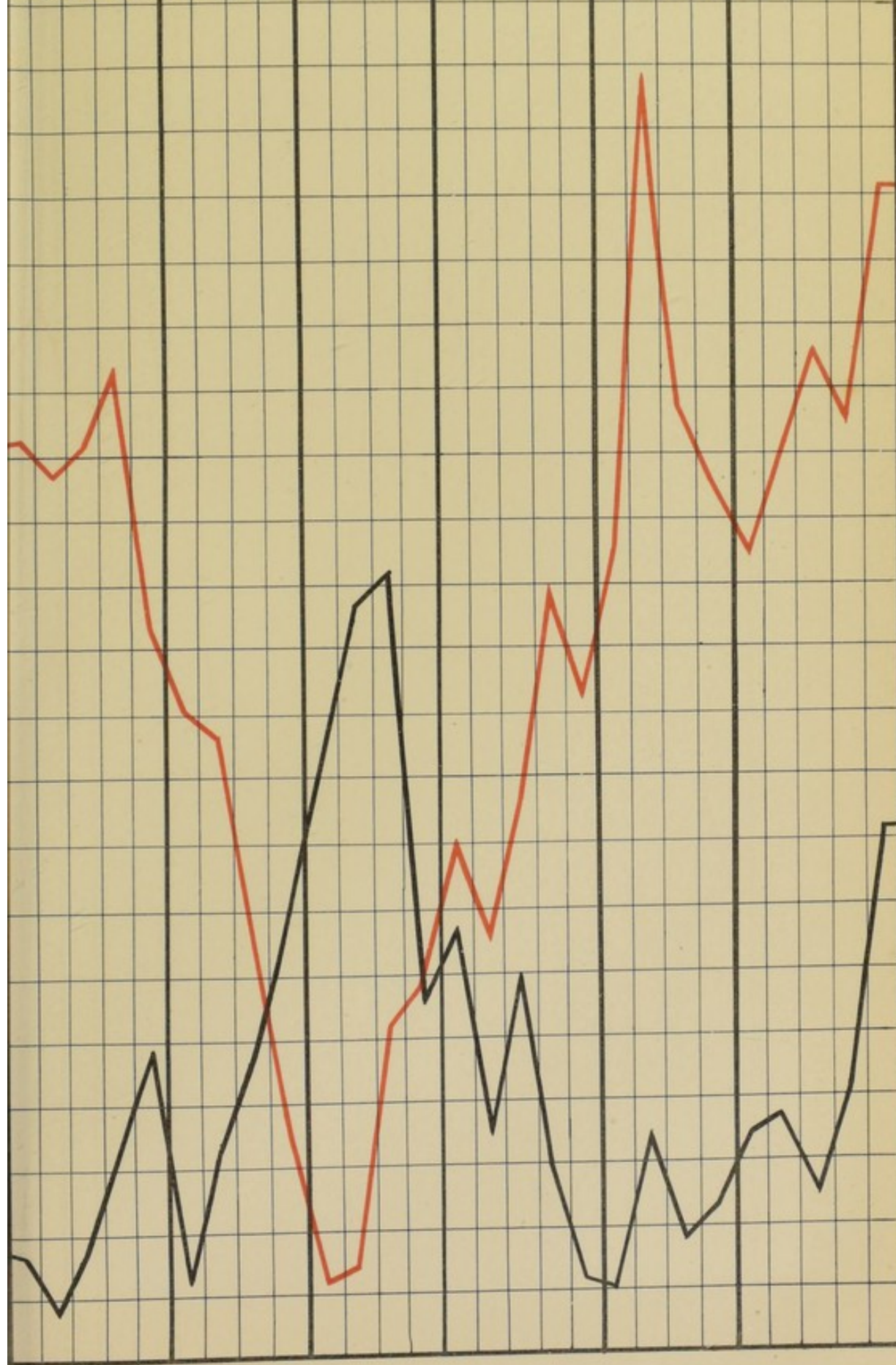


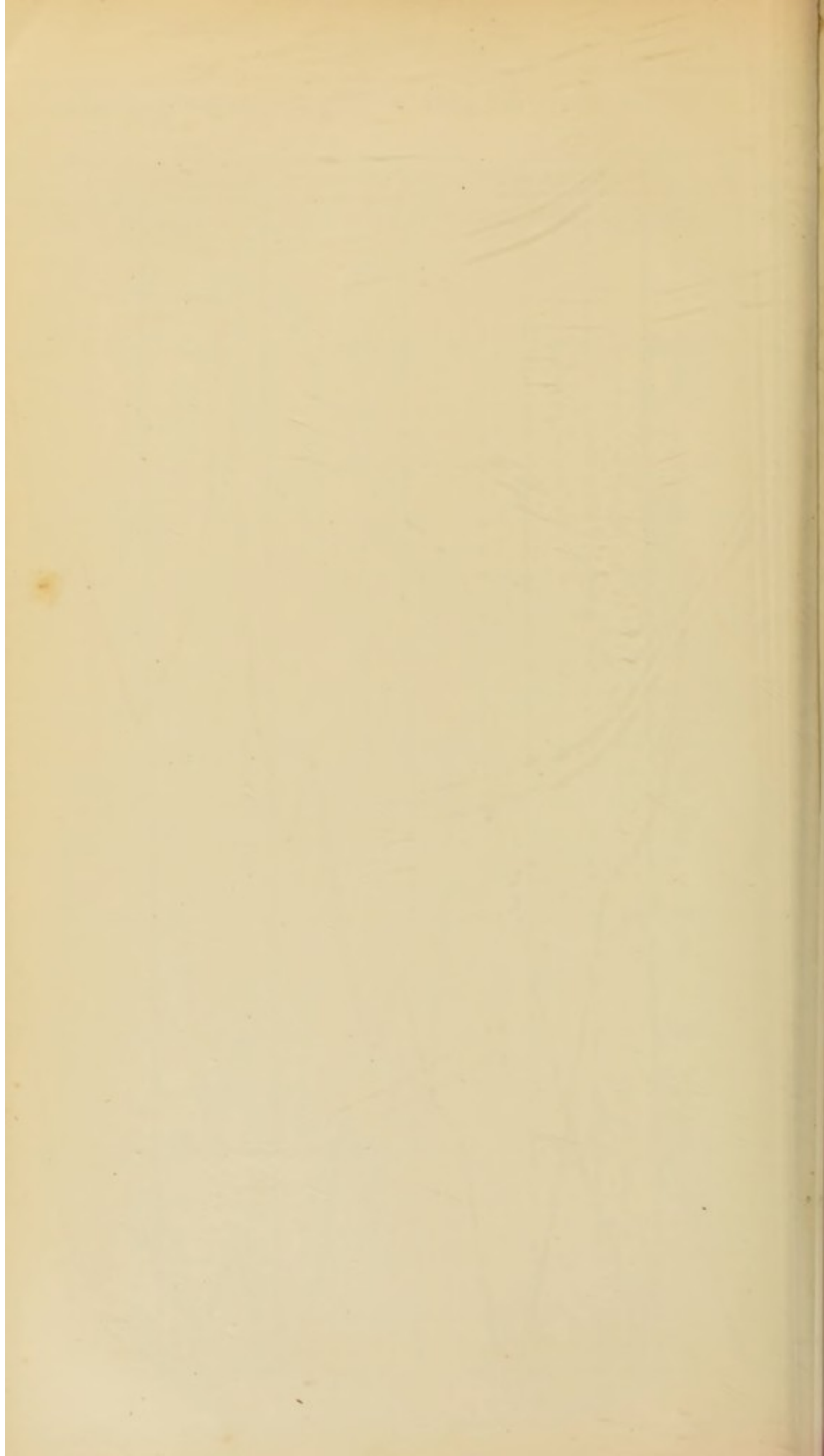
S SHEWN IN WEEKLY PERIODS THUS —

" " " " "

JULY AUGUST SEPTEMBER OCTOBER NOVEMBER DECEMBER

26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52



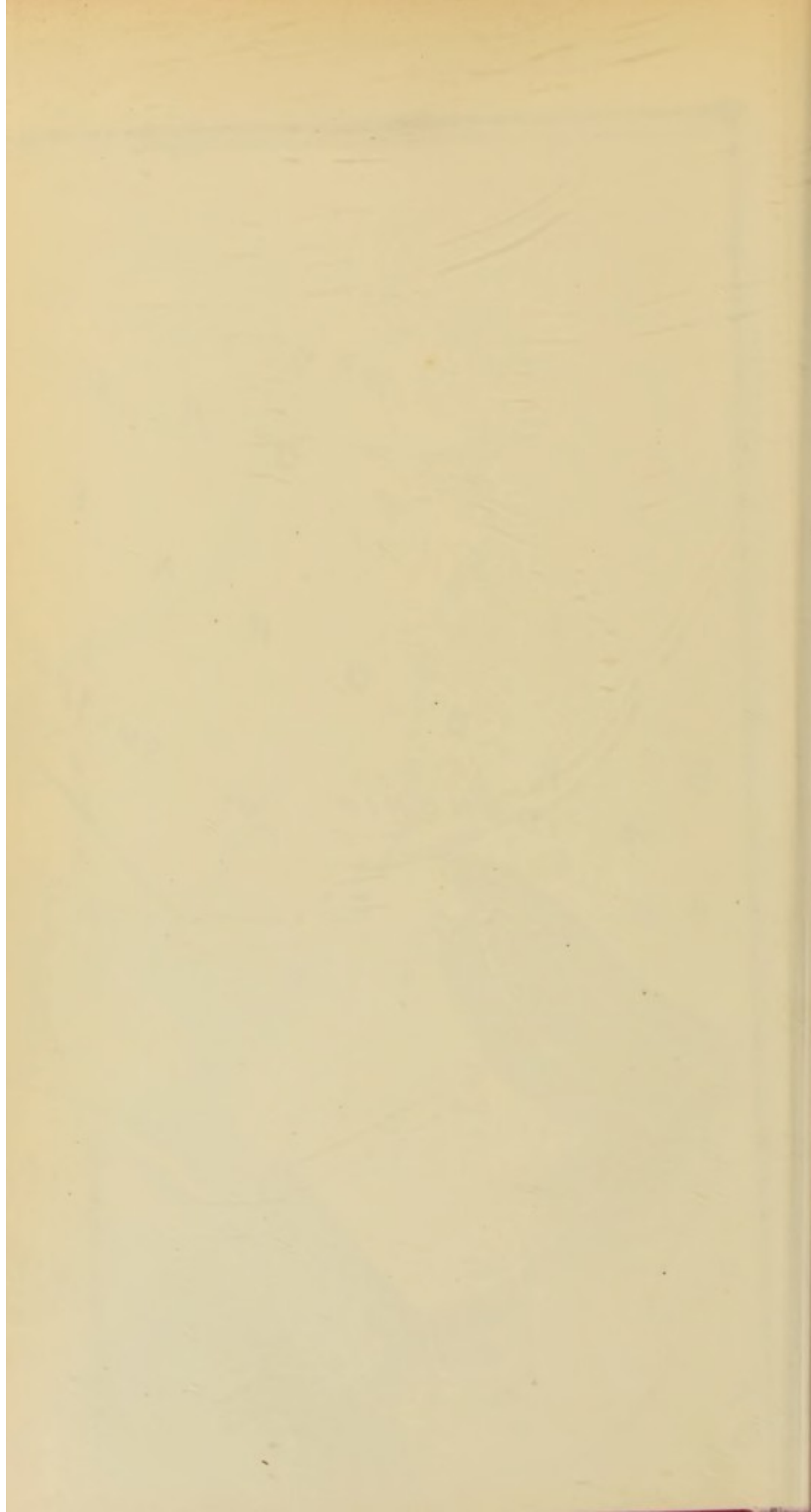


MAP OF THE BOROUGH OF BIRMINGHAM. 1886.

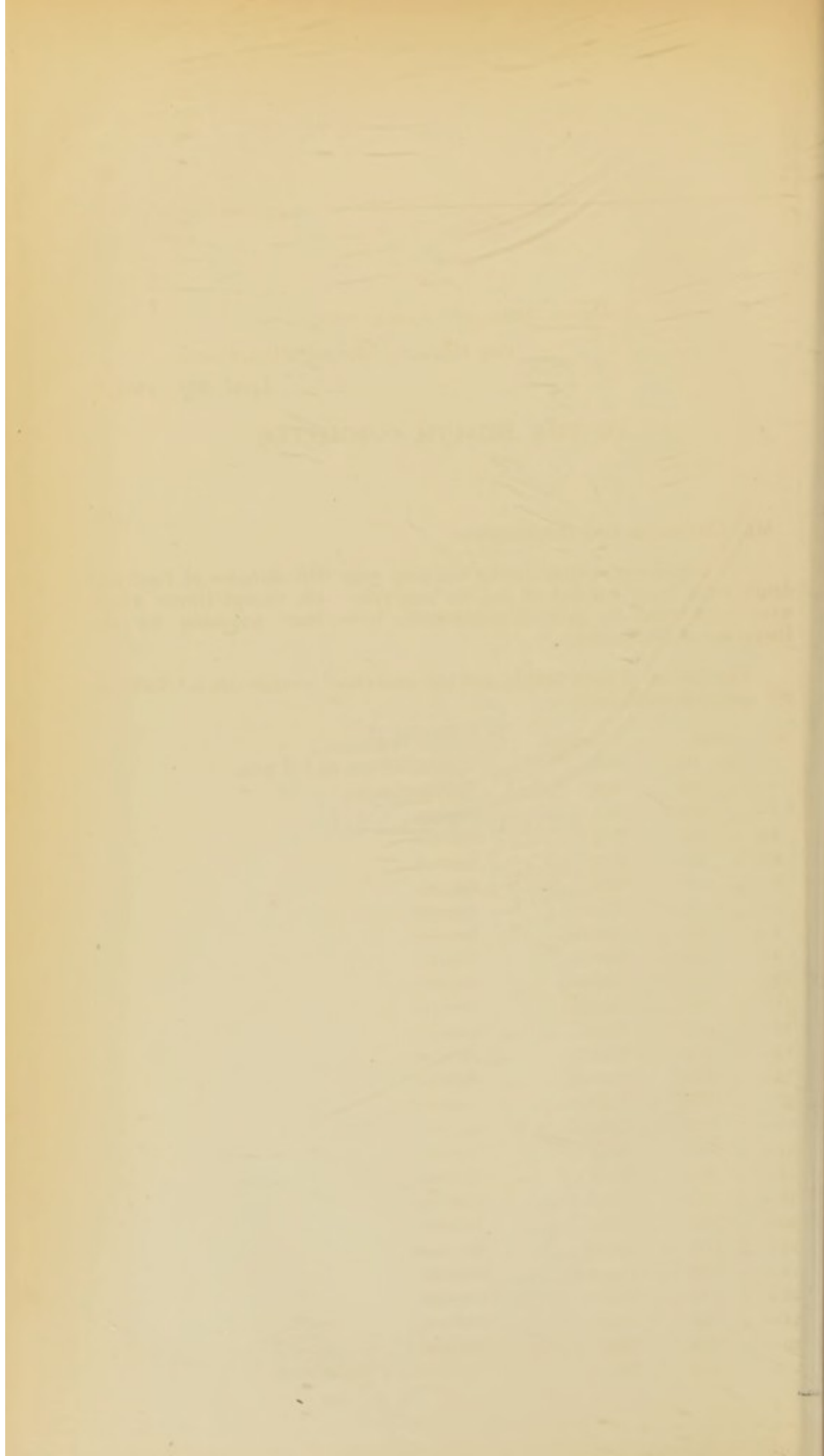
The Borough and Ward Boundaries are shown thus

NOTE. THE RED SPOTS REPRESENT THE NUMBER OF DEATHS (39) FROM SCARLET FEVER IN 1886.
 " " " " " " " " (383) " " MEASLES " " " "
 " BLUE " " " " " " " " (59) " " TYPHOID FEVER " " " "





REPORT
ON
ADULTERATION.



BOROUGH ANALYST'S LABORATORY,

THE COUNCIL HOUSE, BIRMINGHAM,

April 26th, 1887.

TO THE HEALTH COMMITTEE.

MR. CHAIRMAN AND GENTLEMEN,

I beg to report that during the past year 876 samples of food and drink have been handed to me for analysis. All, except three, which were forwarded by private purchasers, have been procured by the Inspector of Nuisances.

The nature of each article and the analytical results are set forth in the annexed statement:—

NO.	DATE.	ARTICLE.	REMARKS.
1—	Jan. 4th	Milk	Adulterated with 23 % of water.
2—	„ 4th	Milk	Genuine (nearly).
3—	„ 4th	Milk	Genuine.
4—	„ 4th	Milk	Genuine.
5—	„ 4th	Milk	Genuine.
6—	„ 4th	Milk	Genuine.
7—	„ 15th	Flour	Genuine.
8—	„ 15th	Oatmeal.....	Genuine.
9—	„ 15th	Flour	Genuine.
10—	„ 15th	Oatmeal.....	Genuine.
11—	„ 15th	Oatmeal.....	Genuine.
12—	„ 15th	Flour	Genuine.
13—	„ 15th	Flour	Genuine.
14—	„ 15th	Oatmeal.....	Genuine.
15—	„ 15th	Flour	Genuine.
16—	„ 15th	Oatmeal.....	Genuine.
17—	„ 15th	Flour	Genuine.
18—	„ 15th	Bread	Genuine.
19—	„ 15th	Bread	Genuine.
20—	„ 15th	Bread	Genuine.
21—	„ 15th	Bread	Genuine.
22—	„ 15th	Oatmeal.....	Genuine.
23—	„ 15th	Bread.....	Genuine.
24—	„ 15th	Bread.....	Genuine.
25—	„ 18th	Milk	Genuine.
26—	„ 18th	Milk	Deprived of 12 % of its cream.

NO.	DATE.	ARTICLE.	REMARKS.
27—	Jan. 18th	Milk	Adulterated with 6 % of water, and deprived of 14 % of its cream. Fined 10s. and costs.
28—	" 18th	Milk	Adulterated with 6 % of water, and deprived of 36 % of its cream. Paid costs.
29—	" 18th	Milk	Genuine (nearly).
30—	" 18th	Milk	Genuine.
31—	" 20th	Butter	Genuine.
32—	" 20th	Butter	Genuine.
33—	" 20th	Butter	Genuine.
34—	" 20th	Butter	Consisted entirely of Butterine. Fined 10s. and costs.
35—	" 20th	Butter	Genuine.
36—	" 20th	Butter	Genuine.
37—	" 27th	Coffee	Contained 31 % of Chicory. Labelled a mixture.
38—	" 27th	Mustard	Genuine.
39—	" 27th	White Pepper	Genuine.
40—	" 27th	Coffee	Contained 49 % of Chicory. Labelled a mixture.
41—	" 27th	Mustard	Genuine.
42—	" 27th	White Pepper	Genuine.
43—	" 27th	Coffee	Contained 57 % of Chicory. Labelled a mixture.
44—	" 27th	Mustard	Genuine.
45—	" 27th	White Pepper	Genuine.
46—	" 27th	Coffee	Contained 48 % of Chicory. Labelled a mixture.
47—	" 27th	Mustard	Genuine.
48—	" 27th	White Pepper	Genuine.
49—	" 27th	Coffee	Contained 34 % of Chicory. Labelled a mixture.
50—	" 27th	Mustard	Genuine.
51—	" 27th	White Pepper	Genuine.
52—	" 27th	Coffee	Adulterated with 20 % of Chicory.
53—	" 27th	Mustard	Genuine.
54—	" 27th	White Pepper	Genuine.
55—	Feb. 1st	Bread	Genuine.
56—	" 1st	Bread	Genuine.
57—	" 1st	Bread	Genuine.
58—	" 1st	Bread	Genuine.
59—	" 1st	Bread	Genuine.
60—	" 1st	Bread	Genuine.
61—	" 1st	Bread	Genuine.
62—	" 1st	Bread	Genuine.
63—	" 1st	Bread	Genuine.
64—	" 1st	Bread	Genuine.
65—	" 1st	Bread	Genuine.
66—	" 1st	Bread	Genuine.
67—	" 2nd	Milk	Genuine.
68—	" 2nd	Milk	Genuine.
69—	" 2nd	Milk	Adulterated with 16 % of water. Fined 5s. and costs.
70—	" 2nd	Skimmed Milk	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
71—	Feb. 2nd	Milk	Genuine.
72—	" 2nd	Milk	Genuine.
73—	" 11th	Milk	Adulterated with 4 % of water, and deprived of 6 % of its cream. Cautioned by Health Sub-Committee.
74—	" 11th	Milk	Adulterated with 6 % of water, and deprived of 6 % of its cream. Cautioned by Health Sub-Committee.
75—	" 11th	Milk	Genuine.
76—	" 11th	Milk	Genuine.
77—	" 11th	Milk	Genuine.
78—	" 11th	Milk	Genuine.
79—	" 16th	Mustard.....	Genuine.
80—	" 16th	Mustard.....	Genuine.
81—	" 16th	Mustard.....	Genuine.
82—	" 16th	White Pepper ...	Genuine (nearly).
83—	" 16th	Mustard	Genuine.
84—	" 16th	White Pepper ...	Genuine.
85—	" 16th	Mustard.....	Genuine.
86—	" 16th	White Pepper ...	Genuine (nearly).
87—	" 16th	Mustard	Genuine.
88—	" 16th	White Pepper ...	Genuine.
89—	" 16th	White Pepper ...	Genuine.
90—	" 16th	White Pepper ...	Genuine.
91—	" 16th	Black Pepper ...	Genuine (nearly).
92—	" 16th	Black Pepper ...	Adulterated with 3 % of mineral matter.
93—	" 16th	Black Pepper ...	Adulterated with 4 % of mineral matter.
94—	" 16th	Black Pepper ...	Adulterated with 8½ % of mineral matter.
95—	" 16th	Black Pepper ...	Adulterated with 3 % of mineral matter.
96—	" 16th	Black Pepper ...	Adulterated with 4 % of mineral matter.
97—	" 16th	Milk	Genuine.
98—	" 16th	Milk	Genuine (nearly).
99—	" 16th	Milk	Genuine (nearly).
100—	" 16th	Milk	Genuine.
101—	" 16th	Milk	Genuine.
102—	" 16th	Milk	Genuine.
103—	" 22nd	Vinegar	Genuine.
104—	" 22nd	Oatmeal	Genuine.
105—	" 22nd	Vinegar	Genuine.
106—	" 22nd	Oatmeal.....	Genuine.
107—	" 22nd	Oatmeal.....	Genuine.
108—	" 22nd	Vinegar	Genuine.
109—	" 22nd	Vinegar	Genuine.
110—	" 22nd	Oatmeal.....	Genuine.
111—	" 22nd	Oatmeal.....	Genuine.
112—	" 22nd	Vinegar	Genuine.
113—	" 22nd	Oatmeal.....	Genuine.
114—	" 22nd	Vinegar	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
115—	Feb. 22nd	Ale	Genuine.
116—	" 22nd	Ale	Genuine.
117—	" 22nd	Ale	Genuine.
118—	" 22nd	Ale	Genuine.
119—	" 22nd	Ale	Genuine.
120—	" 22nd	Ale	Genuine.
121—	" 26th	Butter	Genuine.
122—	" 26th	Butter	Genuine.
123—	" 26th	Butter	Genuine.
124—	" 26th	Butter	Consisted entirely of Butterine.
125—	" 26th	Butter	Genuine.
126—	" 26th	Butter	Genuine.
127—	Mar. 1st	Arrowroot	Genuine.
128—	" 1st	Arrowroot	Genuine.
129—	" 1st	Mustard	Genuine.
130—	" 1st	Arrowroot	Genuine.
131—	" 1st	Mustard	Genuine.
132—	" 1st	Arrowroot	Genuine.
133—	" 1st	Arrowroot	Genuine.
134—	" 1st	Mustard	Genuine.
135—	" 1st	Mustard	Genuine (nearly)
136—	" 1st	Mustard	Genuine.
137—	" 1st	Mustard	Genuine.
138—	" 1st	Arrowroot	Genuine.
139—	" 1st	Ale	Genuine.
140—	" 1st	Ale	Genuine.
141—	" 1st	Ale	Genuine.
142—	" 1st	Ale	Genuine.
143—	" 1st	Ale	Genuine (nearly).
144—	" 1st	Ale	Genuine.
145—	" 11th	Bread	Genuine.
146—	" 11th	Bread	Genuine.
147—	" 11th	Bread	Genuine.
148—	" 11th	Bread	Genuine.
149—	" 11th	Bread	Genuine.
150—	" 11th	Bread	Genuine.
151—	" 16th	Vinegar	Genuine.
152—	" 16th	Vinegar	Genuine.
153—	" 16th	Vinegar	Genuine.
154—	" 16th	Vinegar	Genuine.
155—	" 16th	Vinegar	Genuine.
156—	" 16th	Vinegar	Genuine.
157—	" 16th	Milk	Genuine.
158—	" 16th	Milk	Genuine.
159—	" 16th	Milk	Deprived of 60 % of its cream. Cautioned by Health Sub-Committee.

NO.	DATE.	ARTICLE.	REMARKS.
160—	Mar. 18th	White Pepper ...	Genuine.
161—	" 18th	Oatmeal.....	Genuine.
162—	" 18th	White Pepper ...	Genuine.
163—	" 18th	White Pepper ...	Genuine.
164—	" 18th	Oatmeal	Genuine.
165—	" 18th	Black Pepper ...	Genuine.
166—	" 18th	Oatmeal.....	Genuine.
167—	" 18th	Black Pepper.....	Adulterated with 6 % of mineral matter.
168—	" 18th	Oatmeal.....	Genuine.
169—	" 18th	Black Pepper.....	Adulterated with 3 % of mineral matter.
170—	" 18th	Oatmeal.....	Genuine.
171—	" 18th	White Pepper ...	Genuine.
172—	" 18th	Oatmeal.....	Genuine.
173—	" 18th	Black Pepper.....	Adulterated with 6 per cent. of mineral matter.
174—	" 18th	White Pepper ...	Genuine.
175—	" 18th	Black Pepper.....	Genuine.
176—	" 18th	White Pepper ...	Genuine.
177—	" 18th	Black Pepper.....	Genuine.
178—	" 18th	Bread	Genuine.
179—	" 18th	Bread	Genuine.
180—	" 18th	Bread	Genuine.
181—	" 18th	Bread	Genuine.
182—	" 18th	Bread	Genuine.
183—	" 18th	Bread	Genuine.
184—	" 18th	Flour	Genuine.
185—	" 18th	Flour	Genuine.
186—	" 18th	Flour	Genuine.
187—	" 18th	Flour	Genuine.
188—	" 18th	Flour	Genuine.
189—	" 18th	Flour	Genuine.
190—	" 20th	Butter	Genuine.
191—	" 20th	Butter	Genuine.
192—	" 20th	Lard	Genuine.
193—	" 20th	Butter	Adulterated with 79% of foreign fat. Cautioned by the Health Sub-Committee.
194—	" 20th	Butter	Genuine.
195—	" 24th	Milk	Adulterated with 4% of water. Cautioned by the Health Sub-Committee.
196—	" 24th	Milk	Adulterated with 4% of water. Cautioned by the Health Sub-Committee.
197—	" 24th	Milk	Genuine.
198—	" 24th	Milk	Genuine.
199—	" 24th	Milk	Genuine.
200—	" 24th	Milk	Genuine.
201—	" 29th	Ale	Genuine.
202—	" 29th	Ale	Genuine.
203—	" 29th	Ale	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
204—	Mar. 29th	Ale	Genuine.
205—	" 29th	Ale	Adulterated with five grains of salt per gallon.
206—	" 29th	Ale	Genuine.
207—	" 31st	Milk	Genuine.
208—	" 31st	Milk	Genuine.
209—	" 31st	Milk	Genuine.
210—	April 1st	Milk	Deprived of 30 % of its cream. Summons dismissed
211—	" 1st	Milk	Genuine.
212—	" 1st	Milk	Genuine.
213—	" 1st	Milk	Genuine.
214—	" 1st	Milk	Genuine.
215—	" 1st	Milk	Genuine, but of low quality.
216—	" 5th	Ale	Genuine.
217—	" 5th	Ale	Genuine.
218—	" 5th	Ale	Genuine.
219—	" 5th	Ale	Genuine.
220—	" 5th	Ale	Genuine.
221—	" 5th	Ale	Genuine.
222—	" 5th	Vinegar	Genuine.
223—	" 5th	Vinegar	Genuine.
224—	" 5th	Vinegar	Genuine.
225—	" 5th	Vinegar	Genuine.
226—	" 5th	Vinegar	Genuine.
227—	" 5th	Vinegar	Genuine.
228—	" 6th	Milk	Genuine.
229—	" 6th	Milk	Genuine.
230—	" 6th	Milk	Genuine.
231—	" 6th	Milk	Genuine.
232—	" 6th	Skimmed Milk	Adulterated with 13 % of water. Fined 10s. and costs.
233—	" 6th	Milk	Genuine, but of low quality.
234—	" 14th	Cocoa	Adulterated with 35·7 % of sugar and 27·5 % of starch. Cautioned by Health Sub-Committee.
235—	" 14th	Milk	Adulterated with 8 % of water. Cautioned by Health Sub-Committee.
236—	" 14th	Milk	Genuine.
237—	" 14th	Milk	Genuine.
238—	" 14th	Milk	Genuine.
239—	" 14th	Milk	Genuine.
240—	" 14th	Milk	Genuine.
241—	" 16th	Bread	Genuine.
242—	" 16th	Bread	Genuine.
243—	" 16th	Bread	Genuine.
244—	" 16th	Bread	Genuine.
245—	" 16th	Bread	Genuine.
246—	" 16th	Bread	Genuine.
247—	" 16th	Oatmeal	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
248—	April 16th	Oatmeal	Genuine.
249—	„ 16th	Oatmeal	Genuine.
250—	„ 16th	Oatmeal	Genuine.
251—	„ 16th	Oatmeal	Adulterated with 25 % of barley meal. Cautioned by Health Sub-Committee.
252—	„ 16th	Oatmeal	Genuine.
253—	„ 17th	White Pepper.....	Genuine.
254—	„ 17th	White Pepper.....	Genuine.
255—	„ 17th	White Pepper.....	Genuine.
256—	„ 17th	White Pepper.....	Genuine.
257—	„ 17th	White Pepper.....	Genuine.
258—	„ 17th	White Pepper.....	Genuine.
259—	„ 27th	Milk	Adulterated with 9 % of water. Cautioned by Health Sub-Committee.
260—	„ 27th	Milk	Adulterated with 7 % of water. Cautioned by Health Sub-Committee.
261—	„ 27th	Milk	Genuine.
262—	„ 27th	Milk	Consisted largely of cream.
263—	„ 27th	Milk	Genuine.
264—	„ 27th	Milk	Adulterated with 11 % of water. Fined 2s. 6d. and costs.
265—	„ 28th	Milk	Adulterated with 2½ % of water, and deprived of 10 % of its cream. Cautioned by Health Sub-Committee.
266—	„ 28th	Milk	Genuine.
267—	„ 28th	Milk	Genuine.
268—	May 3rd	Oatmeal	Genuine.
269—	„ 3rd	Oatmeal	Genuine.
270—	„ 3rd	Oatmeal	Genuine.
271—	„ 3rd	Oatmeal	Genuine.
272—	„ 3rd	Bread	Genuine.
273—	„ 3rd	Bread	Genuine.
274—	„ 3rd	Bread	Genuine.
275—	„ 3rd	Bread	Genuine.
276—	„ 3rd	Bread	Genuine.
277—	„ 3rd	Bread	Genuine.
278—	„ 3rd	Oatmeal	Genuine.
279—	„ 3rd	Oatmeal	Genuine.
280—	„ 3rd	Ale	Genuine.
281—	„ 3rd	Ale	Genuine.
282—	„ 3rd	Ale	Genuine.
283—	„ 3rd	Ale	Genuine.
284—	„ 3rd	Ale	Genuine.
285—	„ 3rd	Ale	Genuine.
286—	„ 3rd	Milk	Genuine.
287—	„ 3rd	Milk	Genuine.
288—	„ 3rd	Milk	Genuine.
289—	„ 3rd	Milk	Genuine.

NO.	DATE.	ARTICLE.	REMARKS
290—	May 3rd	Milk	Adulterated with 16 % of water.
291—	„ 3rd	Milk	Adulterated with 20 % of water. Fined £5 and costs.
292—	„ 3rd	Milk	Genuine.
293—	„ 3rd	Milk	Genuine.
294—	„ 7th	Butter.....	Adulterated with 71 % of foreign fat. Fined 2s. 6d. and costs.
295—	„ 7th	Butter.....	Adulterated with 79 % of foreign fat. Fined 40s. and costs.
296—	„ 7th	Butter.....	Genuine.
297—	„ 7th	Butter.....	Genuine.
298—	„ 7th	Butter.....	Genuine.
299—	„ 7th	Butter.....	Adulterated with 70 % of foreign fat. Fined 40s. and costs.
300—	„ 8th	Milk	Deprived of 11 % of its cream.
301—	„ 8th	Milk	Deprived of 11 % of its cream.
302—	„ 10th	Milk	Genuine. Private Purchaser.
303—	„ 17th	Black Pepper	Adulterated with 5½ % of mineral matter and sand. Cautioned by Health Sub-Committee.
304—	„ 17th	Black Pepper	Adulterated with 4¼ % of mineral matter and sand.
305—	„ 17th	Black Pepper	Adulterated with 5½ % of mineral matter and sand.
306—	„ 17th	Black Pepper	Genuine.
307—	„ 17th	Black Pepper	Adulterated with 9 % of mineral matter and sand. Cautioned by Health Sub-Committee.
308—	„ 17th	Black Pepper	Adulterated with 8 % of mineral matter and sand. Cautioned by Health Sub-Committee.
309—	„ 18th	Bread	Genuine.
310—	„ 18th	Bread	Genuine.
311—	„ 18th	Bread	Genuine.
312—	„ 18th	Bread	Genuine.
313—	„ 18th	Bread	Genuine.
314—	„ 18th	Bread	Genuine.
315—	„ 18th	Oatmeal.....	Genuine.
316—	„ 18th	White Pepper ...	Genuine (nearly).
317—	„ 18th	White Pepper ...	Adulterated with 3 % of mineral matter, half of which was sand.
318—	„ 18th	Oatmeal	Genuine.
319—	„ 18th	Oatmeal	Genuine.
320—	„ 18th	White Pepper ...	Genuine.
321—	„ 18th	Oatmeal	Genuine.
322—	„ 18th	White Pepper ...	Genuine (nearly).
323—	„ 18th	Oatmeal	Genuine.
324—	„ 18th	White Pepper ...	Genuine (nearly).
325—	„ 18th	Oatmeal	Genuine.
326—	„ 18th	White Pepper ...	Genuine.
327—	„ 18th	Flour	Genuine.
328—	„ 18th	Flour	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
329—	May 18th	Flour	Genuine.
330—	" 18th	Flour	Genuine.
331—	" 18th	Flour	Genuine.
332—	" 18th	Flour	Genuine.
333—	" 20th	Milk	Genuine.
334—	" 20th	Milk	Genuine.
335—	" 25th	Ale	Genuine.
336—	" 25th	Ale	Genuine.
337—	" 25th	Ale	Genuine.
338—	" 25th	Ale	Genuine.
339—	" 25th	Ale	Genuine.
340—	" 25th	Ale	Genuine.
341—	" 25th	Vinegar	Genuine.
342—	" 25th	Vinegar	Genuine.
343—	" 25th	Preserved Green Peas	Genuine.
344—	" 25th	Vinegar	Genuine.
345—	" 25th	Vinegar	Genuine.
346—	" 25th	Vinegar	Genuine.
347—	" 25th	Vinegar	Genuine.
348—	" 25th	Milk	Genuine.
349—	" 25th	Milk	Genuine.
350—	" 25th	Milk	Genuine.
351—	" 25th	Milk	Genuine, but of low quality.
352—	" 25th	Milk	Genuine.
353—	" 25th	Milk	Adulterated with 9 % of water. Cautioned by Health Sub-Committee.
354—	June 2nd	Bread	Genuine.
355—	" 2nd	Bread	Genuine.
356—	" 2nd	Bread	Genuine.
357—	" 2nd	Bread	Genuine.
358—	" 2nd	Bread	Genuine.
359—	" 2nd	Bread	Genuine.
360—	" 3rd	Milk	Deprived of 22 % of its cream.
361—	" 7th	Flour	Genuine.
362—	" 7th	Flour	Genuine.
363—	" 7th	Flour	Genuine.
364—	" 7th	Flour	Genuine.
365—	" 7th	Flour	Genuine.
366—	" 7th	Flour	Genuine.
367—	" 7th	Milk	Genuine.
368—	" 7th	Milk	Genuine.
369—	" 7th	Milk	Genuine.
370—	" 7th	Milk	Genuine.
371—	" 7th	Milk	Genuine.
372—	" 7th	Milk	Deprived of 25 % of its cream. Fined 5s. and costs.

NO.	DATE.	ARTICLE.	REMARKS.
373—	June 11th	Vinegar	Genuine.
374—	" 11th	Vinegar	Genuine.
375—	" 11th	Vinegar	Genuine.
376—	" 11th	Vinegar	Genuine.
377—	" 11th	Vinegar	Genuine.
378—	" 11th	Vinegar	Genuine.
379—	" 11th	Ale	Genuine.
380—	" 11th	Ale	Genuine.
381—	" 11th	Ale	Genuine.
382—	" 11th	Ale	Genuine.
383—	" 11th	Ale	Genuine.
384—	" 11th	Ale	Genuine.
385—	" 11th	Ale	Genuine.
386—	" 11th	Ale	Genuine.
387—	" 11th	Ale	Genuine.
388—	" 11th	Ale	Genuine.
389—	" 11th	Ale	Genuine.
390—	" 11th	Ale	Genuine.
391—	" 17th	Milk	Genuine.
392—	" 17th	Milk	Deprived of 13 % of its cream. Fined 5s. and costs.
393—	" 17th	Milk	Genuine.
394—	" 17th	Milk	Genuine.
395—	" 17th	Milk	Genuine.
396—	" 17th	Milk	Adulterated with 22 % of water. Fined 20s. and costs.
397—	" 24th	Cayenne	Genuine.
398—	" 24th	Cayenne	Genuine.
399—	" 24th	Pickles	Genuine.
400—	" 24th	Pickles	Genuine.
401—	" 24th	Pickles	Genuine.
402—	" 24th	Pastry	Genuine.
403—	" 24th	Cayenne	Genuine.
404—	" 24th	Pastry	Genuine.
405—	" 24th	Pastry	Genuine.
406—	" 24th	Pastry	Genuine.
407—	" 24th	Milk	Genuine (nearly).
408—	" 24th	Milk	Genuine.
409—	" 24th	Milk	Genuine.
410—	" 24th	Milk	Genuine.
411—	" 24th	Milk	Genuine.
412—	" 24th	Milk	Genuine.
413—	" 29th	Bread	Genuine.
414—	" 29th	Oatmeal	Genuine.
415—	" 29th	Bread	Genuine.
416—	" 29th	Oatmeal	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
417—	June 29th	Bread	Genuine.
418—	" 29th	Oatmeal	Genuine.
419—	" 29th	Bread	Genuine.
420—	" 29th	Oatmeal	Genuine.
421—	" 29th	Bread	Genuine.
422—	" 29th	Oatmeal	Genuine.
423—	" 29th	Bread	Genuine.
424—	" 29th	Oatmeal	Genuine.
425—	" 29th	Milk	Genuine.
426—	" 29th	Milk	Adulterated with 3 % of water and deprived of 15 % of its cream. Fined 10/- and costs.
427—	" 29th	Milk	Genuine.
428—	" 29th	Milk	Genuine.
429—	" 29th	Milk	Genuine.
430—	" 29th	Milk	Genuine.
431—	July 2nd	Sugar Confectionery	Genuine.
432—	" 2nd	Sugar Confectionery	Genuine.
433—	" 2nd	Sugar Confectionery	Genuine.
434—	" 2nd	Sugar Confectionery	Genuine.
435—	" 2nd	Sugar Confectionery	Genuine.
436—	" 2nd	Sugar Confectionery	Genuine.
437—	" 2nd	Sugar Confectionery	Genuine.
438—	" 2nd	Sugar Confectionery	Genuine.
439—	" 2nd	Sugar Confectionery	Genuine.
440—	" 2nd	Sugar Confectionery	Genuine.
441—	" 2nd	Sugar Confectionery	Genuine.
442—	" 6th	Ale	Genuine.
443—	" 6th	Ale	Genuine (nearly).
444—	" 6th	Ale	Genuine.
445—	" 6th	Ale	Genuine.
446—	" 6th	Ale	Genuine.
447—	" 6th	Ale	Genuine.
448—	" 6th	Vinegar	Genuine.
449—	" 6th	Vinegar	Genuine.
450—	" 6th	Vinegar	Genuine.
451—	" 6th	Vinegar	Genuine.
452—	" 6th	Vinegar	Genuine.
453—	" 6th	Vinegar	Genuine.
454—	" 7th	Milk	Adulterated with 32 % of water. Fined £5 and costs.
455—	" 8th	Milk	Genuine.
456—	" 8th	Milk	Genuine (nearly).
457—	" 8th	Milk	Genuine (nearly).
458—	" 8th	Milk	Deprived of 15 % of its cream. Fined 10/- and costs.
459—	" 8th	Milk	Genuine.
460—	" 8th	Milk	Genuine (nearly).

NO.	DATE.	ARTICLE.	REMARKS.
461—	July 12th	Mustard	Contained starch.
462—	" 12th	White Pepper	Adulterated with 3 % of mineral matter.
463—	" 12th	Mustard	Genuine.
464—	" 12th	Black Pepper	Adulterated with 4 % of mineral matter.
465—	" 12th	Mustard	Genuine.
466—	" 12th	White Pepper	Genuine.
467—	" 12th	Mustard	Genuine.
468—	" 12th	White Pepper	Genuine.
469—	" 12th	Mustard	Genuine.
470—	" 12th	White Pepper	Genuine.
471—	" 12th	Mustard	Contained starch.
472—	" 12th	White Pepper	Genuine.
473—	" 12th	Milk	Genuine.
474—	" 12th	Skimmed Milk	Analysis incomplete.
475—	" 12th	Milk	Analysis incomplete.
476—	" 12th	Milk	Genuine.
477—	" 12th	Milk	Analysis incomplete.
478—	" 12th	Milk	Genuine.
479—	" 16th	Milk	Genuine.
480—	" 16th	Milk	Genuine.
481—	" 16th	Milk	Genuine.
482—	" 26th	Bread	Genuine.
483—	" 26th	Bread	Genuine.
484—	" 26th	Bread	Genuine.
485—	" 26th	Bread	Genuine.
486—	" 26th	Bread	Genuine.
487—	" 26th	Bread	Genuine.
488—	" 26th	Flour	Genuine.
489—	" 26th	Flour	Genuine.
490—	" 26th	Arrowroot	Genuine.
491—	" 26th	Flour	Genuine.
492—	" 26th	Flour	Genuine.
493—	" 26th	Arrowroot	Genuine.
494—	" 26th	Flour	Genuine.
495—	" 26th	Arrowroot	Genuine.
496—	" 26th	Flour	Genuine.
497—	" 26th	Arrowroot	Genuine.
498—	" 26th	Arrowroot	Genuine.
499—	" 26th	Arrowroot	Genuine.
500—	Aug. 3rd	Bread	Genuine.
501—	" 3rd	Bread	Genuine.
502—	" 3rd	Bread	Genuine.
503—	" 3rd	Bread	Genuine.
504—	" 3rd	Bread	Genuine.
505—	" 3rd	Bread	Genuine.
506—	" 3rd	Vinegar	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
507—	Aug. 3rd	Vinegar.....	Genuine.
508—	" 3rd	Vinegar.....	Genuine.
509—	" 3rd	Vinegar.....	Genuine.
510—	" 3rd	Vinegar.....	Genuine.
511—	" 3rd	Vinegar.....	Genuine.
512—	" 3rd	Ale	Genuine.
513—	" 3rd	Ale	Genuine.
514—	" 3rd	Ale	Genuine.
515—	" 3rd	Ale	Genuine.
516—	" 3rd	Ale	Genuine.
517—	" 3rd	Ale	Contained 58 grains of salt per gallon.
518—	" 11th	Bread ..	Genuine.
519—	" 11th	Bread ..	Genuine.
520—	" 11th	Bread ..	Genuine.
521—	" 11th	Bread ..	Genuine.
522—	" 11th	Bread ..	Genuine.
523—	" 11th	Bread ..	Genuine.
524—	" 11th	Oatmeal ..	Genuine.
525—	" 11th	Oatmeal ..	Genuine.
526—	" 11th	Oatmeal ..	Genuine.
527—	" 11th	Oatmeal ..	Genuine.
528—	" 11th	Oatmeal ..	Genuine.
529—	" 11th	Oatmeal ..	Genuine.
530—	" 18th	Black Pepper Corns...	Genuine.
531—	" 18th	White Pepper Corns...	Genuine.
532—	" 18th	White Pepper Corns...	Genuine.
533—	" 18th	Black Pepper Corns...	Genuine.
534—	" 18th	Black Pepper Corns...	Genuine.
535—	" 18th	Black Pepper Corns...	Genuine.
542—	Sept. 1st	Bread ..	Genuine.
543—	" 1st	Bread ..	Genuine.
544—	" 1st	Bread ..	Genuine.
545—	" 1st	Bread ..	Genuine.
546—	" 1st	Bread ..	Genuine.
547—	" 1st	Bread ..	Genuine.
548—	" 3rd	Flour ..	Genuine.
549—	" 3rd	Flour ..	Genuine.
550—	" 3rd	Flour ..	Genuine.
551—	" 3rd	Flour ..	Genuine.
552—	" 3rd	Flour ..	Genuine.
553—	" 3rd	Flour ..	Genuine.
554—	" 9th	Milk ..	Genuine.
555—	" 9th	Milk ..	Genuine.
556—	" 9th	Milk ..	Genuine.
557—	" 9th	Milk ..	Genuine.
558—	" 9th	Milk ..	Genuine.
559—	" 9th	Milk ..	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
560—	Sept. 10th	Arrowroot	Genuine.
561—	" 10th	White Pepper	Genuine.
562—	" 10th	Arrowroot	Genuine.
563—	" 10th	White Pepper	Genuine.
564—	" 10th	Arrowroot	Genuine.
565—	" 10th	White Pepper	Genuine.
566—	" 10th	Arrowroot	Genuine.
567—	" 10th	White Pepper	Adulterated with 2 % of mineral matter.
568—	" 10th	Arrowroot	Genuine.
569—	" 10th	White Pepper	Genuine.
570—	" 10th	Arrowroot	Genuine.
571—	" 10th	White Pepper	Genuine.
572—	" 10th	Ale	Genuine.
573—	" 10th	Ale	Genuine.
574—	" 10th	Ale	Contained 62 grains of salt per gallon.
575—	" 10th	Ale	Genuine.
576—	" 10th	Ale	Genuine.
577—	" 10th	Ale	Genuine.
578—	" 10th	Vinegar	Genuine.
579—	" 10th	Vinegar	Genuine.
580—	" 10th	Vinegar	Genuine.
581—	" 10th	Vinegar	Genuine.
582—	" 10th	Vinegar	Genuine.
583—	" 10th	Vinegar	Genuine.
584—	" 10th	Bread	Genuine.
585—	" 10th	Bread	Genuine.
586—	" 10th	Bread	Genuine.
587—	" 10th	Bread	Genuine.
588—	" 10th	Bread	Genuine.
589—	" 10th	Bread	Genuine.
590—	" 10th	Oatmeal	Genuine.
591—	" 10th	Oatmeal	Genuine.
592—	" 10th	Oatmeal	Genuine.
593—	" 10th	Oatmeal	Genuine.
594—	" 10th	Oatmeal	Genuine.
595—	" 10th	Oatmeal	Genuine.
596—	" 20th	Bread	Genuine.
597—	" 20th	Bread	Genuine.
598—	" 20th	Bread	Genuine.
599—	" 20th	Bread	Genuine.
600—	" 20th	Bread	Genuine.
601—	" 20th	Bread	Genuine.
602—	" 20th	Flour	Genuine.
603—	" 20th	Flour	Genuine.
604—	" 20th	Flour	Genuine.
605—	" 20th	Flour	Genuine.
606—	" 20th	Flour	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
607—	Sept. 20th	Flour	Genuine
608—	" 20th	Oatmeal	Genuine.
609—	" 20th	Oatmeal	Genuine.
610—	" 20th	Oatmeal	Genuine.
611—	" 20th	Oatmeal	Genuine.
612—	" 20th	Oatmeal	Genuine.
613—	" 20th	Oatmeal	Genuine.
614—	" 25th	Ale	Genuine.
615—	" 25th	Ale	Contained 72 grains of salt per gallon.
616—	" 25th	Ale	Genuine.
617—	" 25th	Ale	Genuine.
618—	" 26th	Ale	Genuine.
619—	" 25th	Ale	Genuine.
620—	" 25th	Vinegar	Genuine.
621—	" 25th	Vinegar	Genuine.
622—	" 25th	Vinegar	Genuine.
623—	" 25th	White Pepper	Genuine.
624—	" 25th	Vinegar	Genuine.
625—	" 25th	White Pepper	Genuine.
626—	" 25th	Vinegar	Genuine.
627—	" 25th	White Pepper	Genuine.
628—	" 25th	Vinegar	Genuine.
629—	" 25th	White Pepper	Genuine.
630—	" 25th	White Pepper	Genuine.
631—	" 25th	Black Pepper	Adulterated with 4% of mineral matter.
632—	Oct. 4th	Ale	Genuine.
633—	" 4th	Ale	Genuine.
634—	" 4th	Ale	Adulterated with common salt. Cautioned by Health Sub-Committee.
635—	" 4th	Milk	Genuine.
636—	" 4th	Milk	Genuine.
637—	" 4th	Milk	Genuine.
638—	" 4th	Milk	Genuine.
639—	" 4th	Milk	Genuine.
640—	" 4th	Milk	Genuine.
641—	" 4th	Ale	Genuine.
642—	" 7th	Milk	Genuine.
643—	" 7th	Skimmed Milk	Genuine.
644—	" 7th	Milk	Genuine.
645—	" 7th	Milk	Genuine.
646—	" 7th	Milk	Genuine.
647—	" 7th	Milk	Genuine.
648—	" 11th	Beer	Genuine.
649—	" 11th	Beer	Genuine.
650—	" 11th	Beer	Genuine.
651—	" 11th	Beer	Genuine.
652—	" 11th	Beer	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
653—	Oct. 11th	Beer	Genuine.
654—	" 11th	Beer	Genuine.
655—	" 11th	Beer	Genuine.
656—	" 11th	Beer	Genuine.
657—	" 11th	Beer	Genuine.
658—	" 11th	Beer	Genuine.
659—	" 11th	Beer	Genuine.
660—	" 11th	Arrowroot	Genuine.
661—	" 11th	Arrowroot	Genuine.
662—	" 11th	Arrowroot	Genuine.
663—	" 11th	Arrowroot	Genuine.
664—	" 11th	Arrowroot	Genuine.
665—	" 11th	Arrowroot	Genuine.
666—	" 11th	Vinegar	Genuine.
667—	" 11th	Vinegar	Genuine.
668—	" 11th	Vinegar	Genuine.
669—	" 11th	Vinegar	Genuine.
670—	" 11th	Vinegar	Genuine.
671—	" 11th	Vinegar	Genuine.
672—	" 14th	Milk	Genuine.
673—	" 14th	Milk	Genuine (nearly)
674—	" 14th	Milk	Genuine.
675—	" 14th	Milk	Genuine.
676—	" 14th	Milk	Genuine.
677—	" 14th	Milk	Genuine.
678—	" 18th	Bread	Genuine.
679—	" 18th	Bread	Genuine.
680—	" 18th	Bread	Genuine.
681—	" 18th	Bread	Genuine.
682—	" 18th	Bread	Genuine.
683—	" 18th	Bread	Genuine.
684—	" 21st	Milk	Genuine.
685—	" 21st	Milk	Genuine.
686—	" 21st	Milk	Genuine.
687—	" 21st	Milk	Genuine.
688—	" 21st	Milk	Genuine.
689—	" 21st	Milk	Deprived of 16½ % of its cream. Fined 5/- and costs.
690—	" 25th	Flour	Genuine.
691—	" 25th	Oatmeal	Genuine.
692—	" 25th	Flour	Genuine.
693—	" 25th	Oatmeal	Genuine.
694—	" 25th	Flour	Genuine.
695—	" 25th	Oatmeal	Genuine.
696—	" 25th	Flour	Genuine.
697—	" 25th	Oatmeal	Genuine.
698—	" 25th	Flour	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
699—	Oct. 25th	Oatmeal.....	Genuine.
700—	" 25th	Flour.....	Genuine.
701—	" 25th	Oatmeal.....	Genuine.
702—	" 27th	Milk	Genuine.
703—	" 27th	Milk	Genuine.
704—	" 27th	Milk	Genuine.
705—	" 27th	Milk	Genuine.
706—	" 27th	Milk	Adulterated with $7\frac{1}{2}$ % of water. Cautioned by Health Sub-Committee.
707—	" 27th	Milk	Genuine.
708—	" 28th	Milk	Genuine.
709—	" 28th	Milk	Genuine.
710—	" 28th	Milk	Genuine.
711—	Nov. 1st	Bread.....	Genuine.
712—	" 1st	Bread.....	Genuine.
713—	" 1st	Bread.....	Genuine.
714—	" 1st	Bread.....	Genuine.
715—	" 1st	Bread.....	Genuine.
716—	" 1st	Bread.....	Genuine.
717—	" 1st	Arrowroot	Genuine.
718—	" 1st	Arrowroot	Genuine.
719—	" 1st	Arrowroot	Genuine.
720—	" 1st	Arrowroot	Genuine.
721—	" 1st	Arrowroot	Genuine.
722—	" 1st	Arrowroot	Genuine.
723—	" 2nd	Milk	Adulterated with 26 % of water. Private purchaser.
724—	" 2nd	Milk	Adulterated with 26 % of water. Private purchaser.
725—	" 6th	Butter	Genuine.
726—	" 6th	Butter	Genuine.
727—	" 6th	Butter	Consisted entirely of Butterine. Cautioned by Chairman of Health Committee.
728—	" 6th	Butter	Genuine.
729—	" 6th	Butter	Genuine.
730—	" 6th	Butter	Consisted entirely of Butterine. Fined 10/- and costs.
731—	" 6th	Butter	Genuine.
732—	" 6th	Butter	Genuine.
733—	" 6th	Butter	Consisted entirely of Butterine. Paid costs.
734—	" 6th	Butter	Genuine.
735—	" 6th	Butter	Genuine.
736—	" 6th	Butter	Genuine.
737—	" 6th	Butter	Genuine.
738—	" 6th	Beer	Genuine.
739—	" 6th	Beer	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
740—	Nov. 6th	Beer	Genuine.
741—	" 6th	Beer	Genuine.
742—	" 6th	Beer	Genuine.
743—	" 6th	Beer	Genuine.
744—	" 8th	Vinegar	Genuine.
745—	" 8th	Vinegar	Genuine.
746—	" 8th	Vinegar	Genuine.
747—	" 8th	Vinegar	Genuine.
748—	" 8th	Vinegar	Genuine.
749—	" 8th	Vinegar	Genuine.
750—	" 11th	Milk	Genuine.
751—	" 11th	Milk	Genuine.
752—	" 11th	Milk	Genuine.
753—	" 11th	Milk	Adulterated with 6 % of water. Cautioned by Health Sub-Committee.
754—	" 11th	Milk	Genuine.
755—	" 11th	Milk	Genuine.
756—	" 12th	Milk	Adulterated with 8 % of water. Cautioned by Health Sub-Committee.
757—	" 15th	Bread.....	Genuine.
758—	" 15th	Bread.....	Genuine.
759—	" 15th	Bread... ..	Genuine.
760—	" 15th	Bread.....	Genuine.
761—	" 15th	Bread.....	Genuine.
762—	" 15th	Bread.....	Genuine.
763—	" 22nd	Flour	Genuine.
764—	" 22nd	Oatmeal.....	Genuine.
765—	" 22nd	White Pepper	Genuine.
766—	" 22nd	Flour	Genuine.
767—	" 22nd	Oatmeal.....	Genuine.
768—	" 22nd	White Pepper	Genuine.
769—	" 22nd	Flour	Genuine.
770—	" 22nd	White Pepper	Genuine.
771—	" 22nd	Flour	Genuine.
772—	" 22nd	Flour	Genuine.
773—	" 22nd	Oatmeal.....	Genuine.
774—	" 22nd	White Pepper	Genuine.
775—	" 22nd	Flour	Genuine.
776—	" 22nd	Oatmeal.....	Genuine.
777—	" 22nd	White Pepper	Genuine.
778—	" 22nd	Flour	Genuine.
779—	" 22nd	Oatmeal.....	Genuine.
780—	" 22nd	White Pepper	Genuine.
781—	" 22nd	Milk	Genuine.
782—	" 22nd	Milk	Genuine.
783—	" 22nd	Milk	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
784—	Nov. 22nd	Milk	Genuine.
785—	" 22nd	Milk	Genuine.
786—	" 22nd	Milk	Genuine.
787—	" 29th	Vinegar	Genuine.
788—	" 29th	Ale	Genuine.
789—	" 29th	Vinegar	Genuine.
790—	" 29th	Ale	Genuine.
791—	" 29th	Ale	Genuine.
792—	" 29th	Ale	Genuine.
793—	" 29th	Ale	Genuine.
794—	" 29th	Ale	Genuine.
795—	" 29th	Vinegar	Genuine.
796—	" 29th	Vinegar	Genuine.
797—	" 29th	Vinegar	Genuine.
798—	" 29th	Vinegar	Genuine.
799—	" 30th	Milk	Genuine.
800—	" 30th	Milk	Genuine.
801—	" 30th	Milk	Genuine.
802—	" 30th	Milk ..	Deprived of 20 % of its cream. Cautioned by Health Sub-Committee.
803—	" 30th	Milk	Genuine.
804—	" 30th	Milk	Genuine.
805—	Dec. 2nd	Milk	Genuine.
806—	" 2nd	Milk	Genuine.
807—	" 2nd	Milk	Genuine.
808—	" 2nd	Milk	Genuine.
809—	" 2nd	Milk	Genuine.
810—	" 2nd	Milk	Genuine.
811—	" 6th	Oatmeal.....	Genuine.
812—	" 6th	Oatmeal.....	Genuine.
813—	" 6th	Oatmeal.....	Genuine.
814—	" 6th	Oatmeal.....	Genuine.
815—	" 6th	Oatmeal.....	Genuine.
816—	" 6th	Oatmeal.....	Genuine.
817—	" 6th	Flour	Genuine.
818—	" 6th	Flour	Genuine.
819—	" 6th	Flour	Genuine.
820—	" 6th	Flour	Genuine.
821—	" 6th	Flour	Genuine.
822—	" 6th	Flour	Genuine.
823—	" 6th	Bread ..	Genuine.
824—	" 6th	Bread	Genuine.
825—	" 6th	Bread	Genuine.
826—	" 6th	Bread	Genuine.
827—	" 6th	Bread	Genuine.
828—	" 6th	Bread	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
829—	Dec. 13th	Ale	Genuine.
830—	" 13th	Vinegar	Genuine.
831—	" 13th	Vinegar	Genuine.
832—	" 13th	Vinegar	Genuine.
833—	" 13th	Ale	Genuine.
834—	" 13th	Vinegar	Genuine.
835—	" 13th	Vinegar	Genuine.
836—	" 13th	Ale	Contained 16 grains of salt per gallon more than are allowed by the Excise.
837—	" 13th	Ale	Genuine.
838—	" 13th	Ale	Genuine.
839—	" 13th	Ale	Genuine.
840—	" 13th	Vinegar	Genuine.
841—	" 13th	Butter	Genuine.
842—	" 16th	Brandy	Genuine.
843—	" 16th	Whiskey	Genuine (nearly).
844—	" 16th	Brandy	Genuine (nearly).
845—	" 16th	Whiskey	Genuine.
846—	" 16th	Brandy	Genuine.
847—	" 16th	Whiskey	Genuine.
848—	" 16th	Brandy	Genuine.
849—	" 16th	Whiskey	Genuine (nearly).
850—	" 16th	Brandy	Genuine.
851—	" 16th	Whiskey	Genuine.
852—	" 16th	Brandy	Genuine.
853—	" 16th	Whiskey	Genuine.
854—	" 16th	Gin	Genuine.
855—	" 16th	Gin	Genuine.
856—	" 16th	Gin	Genuine.
857—	" 16th	Gin	Genuine.
858—	" 16th	Gin	Adulterated, being 38° under proof.
859—	" 16th	Gin	Adulterated, being 46°·5 under proof.
860—	" 20th	Bread	Genuine.
861—	" 20th	Bread	Genuine.
862—	" 20th	Bread	Genuine.
863—	" 20th	Bread	Genuine.
864—	" 20th	Bread	Genuine.
865—	" 20th	Bread	Genuine.
866—	" 20th	Oatmeal	Genuine.
867—	" 20th	Oatmeal	Genuine.
868—	" 20th	Oatmeal	Genuine.
869—	" 20th	Oatmeal	Genuine.
870—	" 20th	Oatmeal	Genuine.
871—	" 20th	Oatmeal	Genuine.
872—	" 20th	Butter	Genuine.
873—	" 20th	Butter	Genuine.

NO.	DATE.	ARTICLE.	REMARKS.
874—	Dec. 20th	Butter	Genuine.
875—	„ 20th	Flour	Genuine.
876—	„ 20th	Flour	Genuine.
877—	„ 20th	Flour	Genuine.
878—	„ 20th	Flour	Genuine.
879—	„ 20th	Flour	Genuine.
880—	„ 20th	Flour	Genuine.
881—	„ 24th	Gin.....	Adulterated, being 38° under proof. Cautioned by Health Sub-Committee.
882—	„ 24th	Gin.....	Adulterated, being 46° under proof. Cautioned by Health Sub-Committee.

The above articles comprise—

	195	Samples of Milk.
	126	„ Bread.
	106	„ Ale.
	83	„ Oatmeal.
	78	„ Vinegar.
	78	„ Pepper.
	67	„ Flour.
	39	„ Butter.
	30	„ Arrowroot.
	24	„ Mustard.
	11	„ Sugar Confectionery.
	8	„ Gin.
	6	„ Brandy.
	6	„ Coffee.
	6	„ Whiskey.
	4	„ Pastry.
	3	„ Cayenne Pepper.
	3	„ Pickles.
	1	„ Cocoa.
	1	„ Preserved Peas.
	1	„ Lard.
Total	876	Samples.

The following statement gives the number of samples analysed and the percentages of adulteration of certain leading articles of food and drink in each year since 1873 :—

PROPORTION OF ADULTERATED ARTICLES PER 100 SAMPLES
ANALYSED OF THE FOLLOWING COMMODITIES.

Years.	Number of Samples Analyzed.	Total Percentage of Adulteration	Percentage of Adulteration of undermentioned Articles.								
			Milk.	Bread and Flour.	Butter.	Groceries.	Wines.	Beer.	Spirits.	Drugs.	Other Articles
1873	87	65	75	0	0	87	—	—	—	100	100
1874	79	42	67	0	66	16	—	0	100	—	—
1875	73	38	55	0	—	36	100	—	—	25	—
1876	92	33	30	—	—	19	—	33	25	36	62
1877	176	40	58	0	—	12	—	21	36	26	31
1878	158	21	57	0	0	10	0	13	26	—	—
1879	168	25	60	0	0	5	—	16	—	—	0
1880	178	21	46	0	0	0	—	0	—	—	0
1881	197	23	54	0	36	8	—	0	50	0	0
1882	321	18	36	0	25	10	—	0	—	—	0
1883	151	38	47	0	30	42	100	17	29	100	—
1884	816	21	41	1	40	23	—	0	40	21	0
1885	914	13	24	0	40	22	—	2	0	7	0
1886	876	9	18	0	23	10	—	6	20	—	0

The activity manifested in the extensive number of articles purchased during the last three years, which have averaged a little more than the number advised by the Local Government Board, namely two per 1,000 of the population, seems to have had a salutary effect on the practice of vending adulterated articles, for the percentage of such articles has fallen to only nine, a considerably lower figure than in any previous year, the nearest approach to it having been in the immediately preceding year.

Milk.

Milk has received a greater amount of attention than any other single article. So many as 195 samples of this easily sophisticated substance have been analysed; 36 or 18 per cent. of them were not of the proper standard of quality. The proportion of distinctly adulterated samples is, however, I am pleased to say, 25 per cent. lower than that of the preceding year, which in its turn had a larger proportion of genuine samples than any previous year.

The very large reduction which has taken place in the ^{Milk} amount of adulteration of this most important article of food ^{(continued).} is the better illustrated by contrasting its present extent with that which prevailed in 1873, when no fewer than three out of every four samples submitted for analysis had been tampered with.

The samples of Bread and Flour number 193; in not a ^{Bread and} single instance could I detect any form of adulteration. This ^{Flour.} highly gratifying fact is not a feature peculiar to last year, but is one which I have alluded to in former reports.

Out of the 78 Peppers examined, 18 or 23 per cent. ^{Pepper.} contained a greater amount of mineral matter than they should do, while of 24 Mustards procured two were mixtures of that ^{Mustard} article with flour and turmeric.

Nine of the 39 Butters consisted either wholly or partly of ^{Butter.} Butterine; it is satisfactory to find, however, that the percentage of genuine samples has risen from 60 in 1885 to 77 in the year under notice.

Five of the six samples of Coffee handed to me were ^{Coffee.} declared on labels affixed to them to be mixtures of that substance with Chicory; the other sample was sold as the pure article, but one-fifth of it was found to consist of Chicory.

Of the 106 Ales analysed, six contained an excessive ^{Ale.} amount of salt, while four of the Gins were below the limit of ^{Gin.} strength fixed by the Act.

One of the Oatmeals was adulterated with 25 per cent. of ^{Oatmeal.} Barley Meal, and an analysis of the single sample of Cocoa ^{Cocoa.} revealed the presence of considerable quantities of sugar and starchy matter.

The samples of Vinegar, Arrowroot, Sugar Confectionery, ^{Miscellaneous} Brandy, Whiskey, Pastry, Cayenne Pepper and Pickles, and ^{Articles.} the solitary samples of Preserved Peas and Lard were all genuine, or nearly so.

I remain,

Mr. Chairman and Gentlemen,

Your obedient Servant,

ALFRED HILL, M.D., F.I.C.,

Borough Analyst.

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