

[Report 1897] / Medical Officer of Health, Wolverhampton County Borough.

Contributors

Wolverhampton (England). County Borough Council.

Publication/Creation

1897

Persistent URL

<https://wellcomecollection.org/works/emz7g3jj>

License and attribution

This work has been identified as being free of known restrictions under copyright law, including all related and neighbouring rights and is being made available under the Creative Commons, Public Domain Mark.

You can copy, modify, distribute and perform the work, even for commercial purposes, without asking permission.



Wellcome Collection
183 Euston Road
London NW1 2BE UK
T +44 (0)20 7611 8722
E library@wellcomecollection.org
<https://wellcomecollection.org>

County Borough



of Wolverhampton.

REPORT

UPON THE

HEALTH OF WOLVERHAMPTON,

FOR THE YEAR 1897,

BY

HENRY MALET, B.A., M.D., B.Ch.,

MEDICAL OFFICER OF HEALTH.

PRINTED BY ORDER OF THE HEALTH COMMITTEE.



Digitized by the Internet Archive
in 2018 with funding from
Wellcome Library

<https://archive.org/details/b30289270>

MEDICAL OFFICER'S REPORT,

1897.

PREVALENCE AND PREVENTION OF INFECTIOUS DISEASE.

Table 2 gives the weekly numbers of cases of certain diseases certified by Medical Men under the Infectious Diseases Notification Act. The crosses represent the degree to which the disease heading those columns prevailed—these are only rough approximations. Any certificate detected as erroneous before the close of the week is not entered.

Table 1 gives the total number of cases about which enquiries were made and which were recorded; no erroneous cases are entered in this Table.

Small-Pox.—No case has been reported during the year.

Measles.—The Quarterly cases of, and deaths from, Measles since 1884 are as follows :—

	1884	1885	1886	1887
Cases	272, 710, 143, 2; 4,	2,...,17; 21,	9, 189, 959;	124, 17, 31, 22;
Deaths	11, 66, 20, 1; 1,	;	8, 103;	19, 4, 7, 1;
	1888	1889	1890	1891
Cases	119, 149, 166, 435; 150,	228, 78, 141;	68, 45, 139, 230;	73, 4, 11, 275;
Deaths	9, 6, 5, 19; 10,	11, 11, 8;	3, 10, 5, 14;	5,..., ..., 20;
	1892	1893	1894	
Cases	501, 415, 82, 33; 21,	18, 106, 248;	530, 294, 15, 4	
Deaths	21, 16, 3, 1; 6, ...	5, 10;	46, 27, ..., ...;	
	1895	1896	1897	
Cases	2, 83, 215, 549; 159,	69, 36, 45;	83, 218, 249, 400.	
Deaths	, 7, 33; 6, ...	1, 1;	3, 11, 16, 19.	

The numbers of cases of Measles reported are only rough approximations to those actually occurring; there is no definite system of reporting this disease; probably the numbers of deaths give almost as accurate an idea of the actual prevalence. The only control exercised over Measles is that of prohibiting the attendance at school of children from infected houses; and occasionally the closure of a school. The last measure has not been adopted during the year. We had a remarkable freedom from Measles since the First Quarter of 1896 until May of this year; when it became mildly epidemic, commencing in the northern side of the Borough and extending throughout the year until at its close the south was mostly affected, the north being then almost free. At the close of the year the prevalence was rapidly declining.

Scarlet Fever.—We began recording our cases in 1884, but as we have only had notification since 1890 (inclusive) the returns before that year are probably less complete than those since. The death records in my possession go back to 1870; the following are the deaths since that year, and the known cases since 1884:—

	1870	1871	1872	1873	1874	1875	1876
Deaths	54,	26,	69,	121,	34,	26,	58.
	1877	1878	1879	1880	1881	1882	1883
Deaths	226,	40,	17,	39,	64,	27,	24.
	1884	1885	1886	1887	1888	1889	1890
Deaths	37,	46,	5,	16,	17,	6,	13.
Cases	212,	244,	47,	168,	194,	124,	500.
	1891	1892	1893	1894	1895	1896	1897
Deaths	14,	3,	25,	55,	34,	21,	24.
Cases	419,	242,	623,	1096,	592,	372,	529.

The fatality varies in different periods, so that the deaths bear little ratio to the cases; as a rule with increased prevalence there is increased fatality, so that the higher death returns do not mean quite a proportionate increase in cases.

The following Table gives Quarterly particulars as to the cases in the two Sub-Districts. None of the cases in the General Hospital were sent in by us. The deaths are those of the cases reported in each

Quarter, and sometimes occur later: they therefore do not correspond to the deaths in the Mortality Tables, which are those registered in each Quarter:—

QUARTERS.			1st	2nd	3rd	4th	Year	
EAST	...	{	Total ... { Cases ...	49	43	58	69	219
			Deaths ...	2	5	3	1	11
	...	{	Borough Hospital { Cases ...	45	35	46	53	179
			Deaths ...	1	4	3	1	9
	...	{	General Hospital { Cases ...	...	...	1	2	3
			Deaths ...	...	...	...	...	...
	...	{	At Home { Cases ...	4	8	11	14	37
			Deaths ...	1	1	...	...	2

WEST	...	{	Total ... { Cases ...	40 ^a	33	96 ^b	141 ^c	310
			Deaths ...	1	1	7	8	17
	...	{	Borough Hospital { Cases ...	23	21	73	90	207
			Deaths ...	..	1	7	6	14
	...	{	General Hospital { Cases ...	...	1	...	1	2
			Deaths ...	...	...	...	...	..
	...	{	At Home { Cases ...	15	11	19	31	76
			Deaths ...	1	...	...	2 ^d	3

a.—Two were in a Public Institution and kept there.

b.—Four " " " "

c.—Nineteen " " " "

d.—One of these was registered "Diphtheria."

On account of the larger size of many of the houses in the West a greater number of cases in this Sub-District have fair facility for home isolation; hence the greater proportion of cases so treated there. The following table gives the proportion of cases kept at home in the Sub-Districts since 1884. I give the total deaths also, because the cases were imperfectly reported before 1890:—

	EAST.			WEST.		
	Total Deaths.	Cases. Cases.	Cases at home.	Total Deaths.	Cases. Cases.	Cases at home.
1884	28	?	?	9	?	?
1885	37	146	78	9	98	70
1886	2	19	4	3	28	19
1887	5	52	25	11	116	82
1888	5	53	27	12	141	56
1889	0	45	16	5	79	29
1890	5	239	61	8	261	100
1891	7	154	28	7	265	74
1892	2	76	19	1	166	50
1893	17	301	20	8	322	47
1894	39	600	53	16	496	104
1895	16	234	28	18	358	98
1896	10	155	20	11	217	55
1897	11	219	37	15	310	77

The above figures are very remarkable; the greater child population of the East, and the far greater facilities which its larger proportion of poor and crowded areas afford for the spread of infection,

would lead one to suppose that Scarlet Fever would be much more prevalent there than in the West. This was the case in 1884-5, and 1894. In 1884-5 there was very little Hospital isolation. (I have not been able to get the figures for the Sub-Districts separately prior to this). Then followed a long period of peculiarly low prevalence of Scarlet Fever; during which we were increasing the amount of our Hospital isolation, until in the East it became fairly complete. During 1893 the prevalence became very heavy, and judging by the deaths, the prevalence in the East was more than in the West, although the reported cases were more in the latter. Probably the mortality was actually greater amongst the feebler children in the East, but most likely too a number of mild cases were overlooked in that Sub-District, and thus the proportion of cases unisolated would be much greater than appears from the Table. Next year, 1894, we find a very heavy prevalence of Scarlet Fever, the East far exceeding the West both in number of cases and in mortality. Since this the prevalence has again declined, but much more in the East, which has had fewer cases and deaths than the West each year since. These facts apparently indicate that in spite of the greater facilities which exist for the extension of Scarlet Fever in the East, the fairly complete Hospital isolation attained there renders that Sub-District during ordinary years less affected than the West; but this protection fails when a more epidemic prevalence exposes the poorer and more crowded Sub-District to the danger of overlooked cases spreading infection; at a time, too, when the unknown epidemic conditions which favour infection are present. At such periods the East Sub-District is more affected than the West.

The following is the summary of the apparent effects of removal and home care on the spread of the infection in the households attacked during the year. No account is taken of houses where there is no susceptible child after the first case attacked; children who have already had Scarlet Fever being counted as insusceptible:—

EAST SUB-DISTRICT.—During the year there were 90 instances in which no second case occurred after the removal to the Hospital of a first case. In these 90 houses there remained 241 children who had not previously had Scarlet Fever.

In two houses 2 children were taken ill simultaneously ; they were removed, and 7 children remained free.

In 12 instances secondary cases occurred without Hospital removal, there were 17 such cases ; they occurred at the following intervals after the previous case was taken ill :—one day, 1 case ; two days, 3 cases ; three, four, six, seven, and nine days, 1 case each ; twelve days, 6 cases ; seventeen days, 2 cases.

In most of these Hospital removal was ultimately resorted to, and in six instances, where 13 susceptible children still remained, there was no further recurrence.

Thus in 98 instances there was no further case after Hospital removal, though 261 children remained in these houses.

In 7 instances further cases occurred *after* Hospital removal ; 8 cases so occurring at the following intervals after the removal :—one day, 3 cases ; four days, 2 cases ; seven and ten days, 1 case each ; twenty-three days, 1 case. The first three cases were certainly infected before removal took place, and the last was probably independent infection ; so that only four cases could be considered as due to failure of removal to check extension.

In these seven houses there still remained 12 children who escaped. So that altogether 273 children escaped infection after Hospital removal.

In the East, cases were treated at home in thirty houses during the year ; of these, in six there was no other child ; in eight all the other children (13) were at once sent away. In sixteen houses prolonged isolation was attempted, other children (38 in number) being kept at home. In six of these houses secondary cases occurred, 7 children being taken ill ; the intervals after previous illness being one, seven, and nine days, 1 case each ; twelve days, 3 cases ; and seventeen days, 1 case.

WEST SUB-DISTRICT.—There were 105 instances in which one case of Scarlet Fever was removed, and no other occurred. In these 105 houses there remained 280 susceptible children.

In one house 2 cases occurred simultaneously; these were removed, and 3 children remained unattacked.

In 24 instances secondary cases occurred without Hospital removal; there were 36 such cases; they occurred at the following intervals after the preceding case had been taken ill:—one day, 2 cases; two days, 5 cases; three days, 11 cases; five days, 1 case; six days, 3 cases; seven days, 2 cases; twelve days, 1 case; thirteen days, 2 cases; fourteen days, 1 case; fifteen days, 3 cases; forty-seven days, 2 cases; fifty, sixty-four, and sixty-nine days, 1 case each.

In some of these Hospital removal was ultimately effected; in five instances there was no recurrence, 12 children escaping.

Thus in 111 houses there was no further case after Hospital removal, though 295 children remained.

In 11 houses further cases occurred after Hospital removal, 14 cases occurring at the following intervals after removal:—one day, 1 case; two days, 4 cases; three days, 2 cases; four, five, eight, and fourteen days, 1 case each; twenty-five days, 2 cases; and twenty-seven days, 1 case. The first 7 cases were almost certainly infected before removal, and the last 3 were probably independent infection, so that removal only failed to limit infection in 4 cases.

In 8 of these houses 15 children remained unattacked after final removal, so that altogether 310 children escaped infection after Hospital removal.

In the West cases were treated at home in 60 houses. In 26 the only children were those primarily attacked. In 9 all the other children were sent away. In 1 the patient died in two days, in another in seven days. In 23 houses prolonged isolation was attempted, other children (43) remaining at home. In 11 of these secondary cases occurred, 15 cases occurring at the following intervals after the primary case:—Three days, 3 cases; seven, twelve, thirteen, and fourteen days, 1 case each; fifteen days, 3 cases; forty-seven days, 2 cases; fifty, sixty-four, and sixty-nine days, 1 case each.

The Summary for the Borough is as follows:—Hospital removal was effected in 227 houses. After the first removals there remained in these houses 605 children. In 209 of these houses there was no recurrence after removal, 556 children escaping. In only 18 houses was there recurrence, 22 further children being attacked. In these 18 houses 27 children still escaped after final Hospital removals. Of the 22 secondary cases 10 occurred within three days of the removal, and were probably infected before. Four occurred more than three weeks after the removal of the primary case, and were probably due to independent infection, leaving only 8 cases possibly due to failure.

Cases were treated at home, with reasonable facility for isolation, in 39 houses, where there were 81 other children besides the primary cases. Secondary cases occurred in 17 of these houses, 22 cases occurring. 4 of these were within three days of the primary attack, and were probably infected before any care was taken. 2 were over 60 days after the primary attack and were more of the nature of "return" cases than failures in isolation. Thus 18 cases were probably due to failure.

The following Tabular Statement shows the results at a glance:—

	Hospital Removal.	Home Isolation.
Total houses	227	39
Cases recurred in	18 or 7·9%	17 or 43·5%
Number of children after primary cases	605	81
Number subsequently attacked ..	22 or 3·6%	22 or 27·1%
Number possibly due to failure ...	8 or 1·3%	18 or 22·2%
Number of children escaping ...	583 or 96·3%	59 or 72·8%

The following gives the total results for the four years, 1894, 1895, 1896, and 1897:—

	Hospital.	Home.
Total houses	1225	137
Cases recurred in	130	64

	Hospital.	Home.
Number of children after primary cases	3,509	298
Number of these attacked ..	167 or 4·7%	95 or 31·8%
Number possibly due to failure ...	78 or 2·2%	67 or 22·3%
Number of children escaping ...	3,342 or 95·2%	203 or 68·1%

I must refer to the comments in the 1895 Report, page 11; the above figures further confirm them.

Diphtheria.—The Quarterly cases of, and deaths from, Diphtheria in the Borough since 1890 have been :—

	1890.	1891.	1892.	1893.
Cases	11, 3, 4, 5;	8, 8, 6, 11;	1, 7, 4, 4;	7, 5, 12, 11;
Deaths	3, ..., ..., 1;	1, 2, 1, 1;	..., 3, 1, ...;	..., 1, 1, 3;
	1894.	1895.	1896.	1897.
Cases	11, 16, 33, 22;	34, 78, 56, 140;	108, 101, 87, 64;	73, 72, 75, 91.
Deaths	5, 8, 10, 10;	19, 24, 14, 27;	19, 15, 9, 12;	11, 10, 11, 26.

The Annual cases and deaths in the Sub-Districts have been :—

		1890	1891	1892	1893	1894	1895	1896	1897
EAST	{ Cases	11	8	3	14	36	88	114	121
	{ Deaths	2	1	2	2	20	29	21	21
WEST	{ Cases	12	25	13	21	46	220	246	190
	{ Deaths	2	4	2	3	13	55	34	37

As I have several times pointed out our Diphtheria statistics are uncertain in two directions; a number of real cases are probably never seen by a doctor, and, therefore, never heard of; and a proportion of the cases reported are probably not Diphtheria; the diagnosis being difficult and uncertain in many instances. Thus the same extreme disproportion which I drew attention to last year between the numbers of cases and of deaths at different periods and in different areas at the same period has again occurred this year. The Quarterly cases reported, and the numbers of those cases that died in the Sub-Districts this year were :—

EAST	{ Cases	32	27	33	29
	{ Died	1	7	6	8
WEST	{ Cases	41	45	42	62
	{ Died	10	5	6	17

These figures cannot be even approximately accurate.

General conclusions can be drawn best from the deaths alone. These would indicate that the exceptional prevalence of Diphtheria which began in the Second Quarter of 1894 and reached a maximum at the close of 1895, declined considerably in the Third Quarter of 1896, kept thus until the Fourth Quarter of the present year, when it again nearly reached the maximum. The minimum Quarterly deaths since the exceptional prevalence began is more than double the total yearly deaths for any previous year. The following is a brief summary of the occurrences in each Sub-District during the year:—

EAST.—Of the 32 cases in the First Quarter 13 were in the Workhouse, one of these being fatal. Of the other 19 cases all recovered, this is a strong presumption against their being Diphtheria. Only 2 cases were in one house, 17 being apparently distinct. In the Second Quarter, of 27 cases 7 died; there were 3 instances of second cases in a house. In the Third Quarter, of 33 cases 6 died; six cases were evidently due to direct personal infection; two cases were after Measles. In the Fourth Quarter, of 29 cases 8 died. In three instances there were two cases in a house.

WEST.—In the First Quarter, of 41 cases 10 died. Six cases (four being fatal) occurred within a week in two small houses in a confined court, there having been free visiting. Ten cases were in pairs in 5 houses; in several other instances other members of the households had had sore throats. One case sent here from a distance on account of Diphtheria having occurred at her home, developed it on arrival. Of 45 cases in the Second Quarter, 5 died. Three cases were in one house, and two each in four others. In several instances other inmates of the house were complaining of sore throats. In the Third Quarter, of 42 cases 6 died. Five were cases of known direct infection. One case was after Measles; two were associated with Scarlet Fever. In the Fourth Quarter, 17 of 62 cases died. Forty-five were apparently separate cases; two others in separate houses were relations and visited; in one instance there had been a case in the house a few weeks previously; in three instances there were 2 cases in a house, in two of these they were cousins and had

been visiting. In one house, where there had been a case two months previously, six fresh cases occurred at brief intervals.

The foregoing shows that in spite of all that is done in the way of cautioning the public, personal negligence is still answerable for a good deal of our Diphtheria.

Typhoid Fever.—The cases and deaths for the last eight years are—

		1890	1891	1892	1893	1894	1895	1896	1897
EAST	Cases	22	34	22	53	27	78	89	51
	Deaths	6	5	6	7	10	10	24	9
WEST	Cases	22	64	53	83	54	56	49	45
	Deaths	3	11	9	16	7	8	13	12
BOROUGH	Cases	44	98	75	136	81	* 134	138	96
	Deaths	9	16	15	23	17	18	37	21

We are usually remarkably free from Typhoid Fever; this year the returns are rather below the average. We have had no outbreak at all suggestive of any general cause, but there has been (as we have experienced before) a number of cases of apparently direct infection, which, in connection with a disease like Typhoid Fever, shows an extraordinary amount of ignorance or carelessness. Out of the 51 cases reported in the East during the year 9 were three cases occurring consecutively, in each of three houses; and one case was a nurse attending Typhoid Fever patients. Out of 45 cases in the West, 4 were in one house, 6 were 3 in each of two houses, 2 in another house; another case was nursed by relatives from a different house, two of whom got the Fever. We have, probably, a few cases of Typhoid Fever that are never so ill as to need any medical attendance, and such cases are unreported and overlooked; they would serve to keep up a continual supply of infective material.

Whooping Cough.—In a large town Whooping Cough is almost always more or less present; during the present year there has been no epidemic prevalence, but there was some increased fatality during the First and Third Quarters.

Influenza.—A very mild type of Influenza has apparently been present during the first seven and the last month of the year. Except during January and December very few deaths were attributed to it.

Diarrhœa.—The *Diarrhœa* epidemic has far surpassed any previous record. The Annual deaths returned as from *Diarrhœa* since 1875 have been—

1875	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886
96	105	59	93	48	111	46	87	56	140	50	149
1887	1888	1889	1890	1891	1892	1893	1894	1895	1896	1897	
105	60	84	68	105	55	161	62	135	131	188	

With three exceptions, heavy and light fatalities alternate, probably corresponding to hotter or colder years. The exceptions are 1875-6, 1886-7, and 1895-7, so that not only has this year's return been excessively heavy, but it has followed consecutively on two years, each of most exceptional fatality.

Inasmuch as deaths from the same disease are also registered under several other terms (especially Enteritis, or Gastro-enteric Catarrh) the *Diarrhœa* returns by themselves do not give an accurate idea of the prevalence of this epidemic. In Table No. 4 all such deaths are classified together under the heading *Diarrhœal Diseases*, and this return is the most instructive to consider. It has been fairly well established that the prevalence of *Diarrhœal Disease* is in proportion to the temperature, and especially to the ground temperature. The following Table gives our weekly deaths from *Diarrhœal Diseases* during twenty weeks, and the mean weekly temperatures of the air, and of the earth at one and four feet deep:—

Week Ending	Deaths.	Air.	Temp. 1 ft.	4 ft.	Week Ending	Deaths.	Air.	Temp. 1 ft.	4 ft.
		°	°	°			°	°	°
June 12..	—	53·6	5·1	51·5	Aug. 21..	50	56·9	61·2	57·3
„ 19..	—	53·2	60·5	52·2	„ 28..	33	55·0	60·2	57·2
„ 26..	1	58·6	60·4	53·0	Sept. 4..	31	51·1	58·2	56·7
July 3..	—	59·7	63·7	53·9	„ 11..	18	50·3	55·2	55·9
„ 10..	2	53·9	62·6	55·1	„ 18..	13	51·1	56·5	55·3
„ 17..	5	58·8	63·6	55·5	„ 25..	12	50·4	54·5	54·9
„ 24..	4	59·8	63·1	56·3	Oct. 2..	14	52·9	55·4	54·4
„ 31..	23	59·7	63·4	56·5	„ 9..	8	44·9	51·7	54·1
Aug. 7..	26	63·7	65·9	57·1	„ 16..	3	47·4	50·3	53·2
„ 14..	37	57·7	62·6	57·7	„ 23..	2	49·9	51·9	52·6

Allowing about a fortnight for the average period between contracting the disease and death, this table would show that as soon as the 4 ft. deep temperature exceeded 52° , or the 1 ft. deep exceeded 60° , the epidemic began; reached its maximum with the maxima of these temperatures; and that the 1 ft. deep temperature fell more rapidly, and the 4 ft. more slowly than the epidemic subsided. These are the same conclusions indicated by the epidemics of 1895 and 1896.

The following Table gives the annual Diarrhœal deaths since 1890, and the weekly means of the 4 ft. deep earth temperature, the figures in the columns after the second give the number of weeks in each year during which this temperature exceeded the degree at the head of the column:—

	Deaths.	52°	53°	54°	55°	56°	57°	58°
1890	87	19	18	17	15	11	7	—
1891	120	18	15	12	3	—	—	—
1892	67	17	14	8	3	—	—	—
1893	227	22	19	15	13	10	5	1
1894	99	17	15	13	10	2	—	—
1895	255	20	18	16	14	10	—	—
1896	199	20	18	16	14	8	1	—
1897	319	20	17	14	11	7	4	—

The following gives similar figures for the 1 ft. deep earth temperature:—

	Deaths.	60°	61°	62°	63°	64°	65°	66°
1890	87	7	4	1	1	—	—	—
1891	120	4	1	—	—	—	—	—
1892	67	1	—	—	—	—	—	—
1893	227	12	9	8	4	1	1	1
1894	99	6	4	1	1	—	—	—
1895	255	8	3	3	2	—	—	—
1896	199	10	7	4	4	3	—	—
1897	319	11	8	7	5	1	1	—

If we except 1891 these Tables show a marked relationship between the number of Diarrhœal deaths and the number of weeks the 4 ft. temperature exceeded 52° and the 1 ft. 60° . There is no exact relation, but we are only dealing with the deaths, and as the fatality in all diseases varies greatly in different epidemics, the deaths are only a very partial indication of the actual prevalence of the disease. This lack of any information as to the actual number and locality of the cases of illness is a serious hindrance to our arriving at any definite conclusions as to the actual cause of summer Diarrhœa. Indeed it is tolerably certain that the deaths registered as Diarrhœal are most of them due to an Epidemic Disease the most prominent symptom of which is Diarrhœa, and which is largely dependent on temperature for its development; but many of them are due to quite other causes producing the same prominent symptom. This I believe is the explanation of the exception which 1891 is to the relation of temperature to death; that year we had a crop of stone fruit that was really phenomenal in its abundance, damsons especially were practically thrown away; and this would explain the fatality that year as being due to simple Diarrhœa from improper food.

The fatality from Summer Diarrhœa is almost solely amongst young children; of our 319 Diarrhœal deaths 305 were of children under 5 years.

Summer Diarrhœa fatality is almost limited to the towns, and especially the large towns. During the Third Quarter of the year the death-rate from Diarrhœa amongst the 33 great towns was 4.26, being over 6.6 in Sheffield, Leicester, Birmingham, and Preston, and 8.31 in Hull; it was 7.35 in Wolverhampton. In the 67 other large towns the rate was 3.37. In the rest of England and Wales the rate was only 1.63. Considering that this includes many districts which though called rural are essentially of the same description as crowded town areas (such for instance as Willenhall, where Diarrhœa was very fatal) it is evident that if we could exclude these the Diarrhœa death-rate in the truly country districts would be very small compared with the towns.

This is not due to the greater child population of the towns ; in the same Quarter the infant mortality was 278 per 1,000 births in the 33 great towns. In the 67 other large towns it was 241 ; in the remainder of England and Wales it was only 160.

Summer Diarrhœa is undoubtedly due to a bacillus whose vigour and virulence is developed by high temperature acting on some conditions found peculiarly in towns ; these conditions almost certainly include the presence of decomposing organic matter in and about the houses, and the lack of an abundance of fresh air and sunlight, both of which are inimical to the development of most bacilli. I will refer again to this in speaking of our sanitary condition. The apparent distribution of the epidemic in the Borough points to the same conclusion. We can only estimate the distribution of the disease by the deaths, and amongst the better-off classes these would probably be less in proportion to the cases owing to greater care and earlier treatment ; though I doubt if these would operate much, having found treatment neglected where I expected otherwise. I made a "spot map" of the deaths from Diarrhœal Disease during the year, and in many respects the results are interesting, and very instructive. All the main thoroughfares are almost free from deaths, *e.g.*, Darlington Street, Chapel Ash, Tettenhall Road, none ; Waterloo Road South and North, and Stafford Road, one death in the lower part of the Stafford Road ; Stafford Street, one death ; Cannock Road, one death ; Lower Stafford Street, none ; Victoria Street, Worcester Street, and Penn Road, one death in Worcester Street ; Dudley Street, Snow Hill, and Dudley Road, three deaths in Dudley Road. As a rule the deaths are evidently closest in the poorer and more crowded areas. In the rather small area bounded by Bilston Street, Piper's Row, Old Mill Street, and the Birmingham Canal, there were 54 deaths. In the small cluster of close streets lying opposite to the Board Schools at the commencement of the Willenhall Road, there were 16 deaths. In the small triangle of close streets bounded by Bilston Road, Chillington Street, and the L. & N.-W. Railway there were 15 deaths. Deaths were not so dense, but rather thickly scattered over the area of old property lying between Salop Street and Dudley Road ; and also on both sides of Stafford Road,

The most notable exception to the number of deaths in close property was the Blakenhall district, where there were only 9 deaths; but though many of the streets in Blakenhall are old and close, there are few courts or inhabited yards, and moreover the whole district stands very high and exposed to the wind, and has thus free æration. In the whole area lying between Tettenhall Road, Bath Road, Waterloo Road, Stafford Road and the Borough boundary, there were only 27 deaths. There were two areas where there were an unexpected number of deaths: in the block of quite new and open roads bounded by Fisher Street, Lime Street, Owens Road, and Lea Road, there were 8 deaths. In the block of fairly-well laid out property lying between Gordon Street and All Saints' Road there were 15 deaths; in many respects, however, this property is not ideal, being in parts too crowded at the back, and lying on a very suspicious subsoil.

BOROUGH HOSPITAL.

The Quarterly numbers dealt with have been as follows:—

Quarters.	Remaining in from previous Quarter.	Admitted for		Total Discharged		Died.		Average No. of days in of the cases admitted.	Average daily No. of Patients in Hospital.
		Scarlet Fever.	Small Pox.	Scarlet Fever.	Small Pox.	Scarlet Fever.	Small Pox.		
First ..	40	69	..	72	..	2	..	52·1	37·5
Second ..	37	60	..	63	..	5	..	46·4	33·7
Third ..	34	127 ^a	..	102	..	11	..	42·7	52·3
Fourth ..	59	152 ^b	..	150	..	4	..	47·5	76·0
Year ..	40	4 8	..	387	..	22	..	46	50

a.—6 from Bushbury.

b.—5 from Tettenhall; 1 from Bushbury.

Leaving 61 cases in at the close of the year.

First Quarter.—69 cases were admitted for Scarlet Fever. Of these one was fatal—5 years old, severe stomatitis, gastro-enteritis, palatal paralysis, exhaustion; 55 days in. 15 cases were very severe, 12 severe. The complications were—Otorrhœa, 9 cases. Rhinitis, 7 cases. Albuminurea, 8 cases. Adenitis, 6 cases. Suppuration, 2 cases. Rheumatism, 4 cases. Pericarditis, 1 case. Chorea, 1 case. Stomatitis, 4 cases. Onychia, 5 cases. Pyæmia, 1 case. Cellulitis, 1 case. Ophthalmia, 1 case. 5 cases had severe acute Catarrh, probably Influenza. Two cases when admitted had Tinea Capitis with Impetigo; one case when admitted had very severe membranous sore throat, Diphtheritic Bacilli were found; the case subsequently peeled freely. One case was admitted with apparent Scarlet Fever on January 26th; on February 6th there was apparently a second attack, peeling lasted until March 23rd.

Second Quarter.—60 cases were admitted for Scarlet Fever. Of these 5 were fatal, the particulars were—A, 2½ years old; severe attack, naso-pharyngeal mischief, toxæmia; 3 days ill. B, 4 years old; double adenitis, with suppuration, severe sloughing, albuminurea; 22 days in. C, 3 years old; very severe attack in a squalid, weakly child, toxæmia; 3 days in. D, 10 months old; measles, otorrhœa, pyæmic rash, convulsions; 53 days in. E, 7 weeks old; severe naso-pharyngeal mischief, with respiratory obstruction; 4 days in. Five other cases were very severe, and 12 severe. Complications—Otorrhœa, 9 cases. Rhinitis, 3 cases. Albuminurea, 5 cases. Adenitis, 5 cases. Suppuration, 3 cases. Rheumatism, 2 cases. Onychia, 1 case. There was one case of Measles, developed 10 days after admission, and probably infected before, it was the fatal case D. One case had severe secondary throat 30 days after admission.

Third Quarter.—127 cases were admitted for Scarlet Fever. Ten of these were fatal, the particulars were—A, 9¾ years old; very severe case, with toxic symptoms; died very suddenly, only 2 days in. B, 2½ years old, very severe attack, adenitis and suppuration, septicæmia; 19 days in. C, 8 years old; nephritis, stomatitis,

uræmia; 26 days in. D, 7 years old; very severe attack, toxic rash, suppression of urine; 18 days in. E, 2 years old; very severe naso-pharyngeal mischief, toxæmia; 3 days in. F, $1\frac{1}{2}$ years old; very severe attack, toxic rash; 16 days in. G, 2 years old; severe naso-pharyngeal mischief, adenitis, toxæmia; 13 days in. H, 2 years old; severe naso-pharyngeal mischief, toxic rash; 10 days in. I, 3 years old; very severe attack, toxæmia; 7 days in. J, 3 years old; adenitis, suppuration, septicæmia; 14 days in. 18 other cases were very severe, and 14 severe. Complications—Otorrhœa, 8 cases. Rhinitis, 7 cases. Adenitis, 12 cases. Suppuration, 8 cases. Albuminurea, 7 cases. Rheumatism, 2 cases. Onychia, 8 cases. Stomatitis, 3 cases. Eczema and Impetigo, 9 cases. Icterus, 3 cases. One case when admitted had severe heart disease, and post Diphtheritic paralysis. One case had severe axillary abscess from a wound of the finger before admission. One case admitted with apparent Scarlet Fever, when peeling freely 11 days afterwards had vivid rash and temperature; later had rhinitis and adenitis, and suppuration, 36 days after the second rash. The type of disease during this Quarter was peculiarly severe.

Fourth Quarter.—152 cases were admitted for Scarlet Fever. Of these 7 were fatal—A, 8 years old; severe naso-pharyngeal mischief and adenitis, toxæmia; 18 days in. B, 2 years old; very severe attack, toxæmia; 2 days in. C, 4 years old; toxic rash, stomatitis; 6 days in. D, $1\frac{1}{2}$ years old; 12 days in, and E, $2\frac{1}{2}$ years old; 19 days; both the same as A. F, 4 years old; albuminurea, sloughing stomatitis; 27 days in. G, $1\frac{1}{2}$ years old; very severe case, toxic rash; 17 days in. 21 other cases were also very severe, and 14 severe. Complications—Otorrhœa, 14 cases. Rhinitis, 20 cases. Adenitis, 9 cases. Suppuration, 8 cases. Albuminurea, 10 cases; two had it on admission. Rheumatism, 3 cases. Onychia, 4 cases. Icterus, 1 case. Spinal Abscess, 1 case. Purpura, 1 case. Herpes, eczema, and impetigo, 9 cases. One case had Chicken-pox when admitted. This Quarter as well as last the type of case was of exceptional severity, although the mortality was fortunately not so high.

The following Table gives the proportion of cases without definite signs of Scarlet Fever when seen on admission, and the results :—

Quarters.	Total Admissions	Indefinite when admitted.				
		Total.	Apparently not had Scarlet Fever.			
			Total.	Safely Discharged	Caught Scarlet Fever	Died.
First ...	69	9	2	1	1	...
Second ...	60	10	7	4	3	1 ^a
Third ...	127	16	4	3	1	...
Fourth ...	152	14	3	3	...	...
Year ...	408	49	16	11	5	1

^a Scarlet Fever seven days after admission, died in three days.

The proportion of erroneous cases is rather small, and so is the proportion of these that caught Scarlet Fever in the Hospital; but it was a deplorable misfortune that one of these was fatal.

In all other respects the year has been a very fortunate one as regards freedom from the mischances that Institutions like the Borough Hospital are liable to.

Return Cases.—These cases of infection, apparently conveyed to their homes by patients discharged from the Hospital, do more than anything else to discredit Hospital isolation; in order that they may be clearly understood, I always give the particulars very fully. It must not be supposed that every case which occurs after a patient has come home is necessarily due to the latter; for instance, on two occasions during the year, we have had fresh cases occur in households one day, and on one occasion two days, before a former case had come home from the Hospital; had such fresh cases been a few days delayed

they would have been wrongly attributed to the cases from the Hospital. The following illustrate the same thing:—A case 48 days in, 51 ill, had had nasal eczema (a common source of infection); a fresh case occurred 62 days after the return home. A case 48 days in, 49 ill, no complications, a fresh case 37 days after return home. A case 82 days in Hospital, delayed by albuminurea and rhinitis, 35 days after return a fresh case occurred, 2 days later another, 11 days later another. A baby 15 months old, 35 days in, 36 ill; no complications; a fresh case 35 days after return home. None of these cases could have been infected from the Hospital cases, and yet, had the interval been shorter, this would have been suspected. Besides the above, fresh cases occurred after the return home of 30 patients, this is a large proportion out of 365, the total number who returned home during the year. The large number is, I think, partly due to the failure of our old dry heat disinfecting stove, partly to the large number of infective complications which we unfortunately had during the year, especially nasal discharges and skin affections. In April the old stove was replaced by a Thresh's Steam Disinfector, and we were very free from return cases until the onset of that bad type of disease which occurred in the latter half of the year. The following are the particulars of the 30 cases after which there were "returns":—

(1) Case 53 days in, 57 ill, had had otorrhœa; 26 days later mother had Scarlet Fever; this appeared certainly not due to our case, but later it was stated that a baby had something resembling Scarlet Fever 13 days after our case went home; this may have carried on the infection, but the whole matter was very uncertain. (2) Case 60 days in, 64 ill; when admitted had tinea capitis with impetigo, this caused the long detention in hospital, clear when discharged but there was a slight scaliness in one nostril; after going home the nose began discharging; 17 days after return another case occurred. If this, as was probable, was due to our case, it would mean infectiveness lasting 81 days. (3) Case 51 days in, 53 ill; no complications; fresh case 16 days after return, was removed; 3 other children in the house remained free, though in contact with our case. This infection was probably from some other source. (4) Case 49 days in, 50 ill; had otorrhœa occasionally for years; fresh case 16 days after return; but

Scarlet Fever was being treated at home close by, one case for 19 days back (3 days before our case returned) and a second case for 12 days. Here it is at least as likely that infection was from the neighbours as from our case. (5) Case 44 days in, 47 ill; no complications; did not come home for a week after leaving Hospital; a few days after coming home mother noticed some running from nose; 15 days after leaving Hospital, 8 after coming home, a fresh case occurred, probably from the nasal discharge (62 days infectiveness). (6) Case 43 days in, 45 ill; no complications; fresh case 15 days after return, and another 16 days after that; this would suggest some other source of infection. (7) Case 48 days in and ill: no complications in Hospital, but after return home had nasal discharge and severe adenitis, kept apart for 11 days after coming home, then mixed with other children; fresh case in 4 days (15 after return, 63 from commencement of illness; this was probably from our case; yet the following is peculiar: our case died rather suddenly at home 14 days later (29 after return home) and 28 days after the death a fresh case occurred here. (8) Case 43 days in, 48 ill; minute crack at angle of mouth, kept away from home for 12 days, 4 days after returning home a fresh case occurred, 15 days after leaving hospital. Infection is rather improbable here. Another case occurred a week later, this may have been infected from the other. (9) Case 53 days in, 54 ill; had had otorrhœa, but nothing since coming out; mixed with a neighbour's large family without ill result; 7 days after return a child came from Birmingham, who had Scarlet Fever 8 days later; infection from our case seems rather improbable. (10) Case 45 days in, 48 ill; no complications; fresh case 13 days after return. (11) Case 46 days in, 48 ill; no complications; fresh case 12 days after return. (12) Case 47 days in, 48 ill; no complications in, said to have a sore on his nose since coming out, did not go home, but went to a house where the home washing is done; a fresh case occurred at home 12 days after he came out. (13) Case 51 days in, 54 ill; delayed by sore at corner of mouth, nothing since coming out; fresh case 11 days later. (14) Case 28 days in, 51 ill (ill at home 23 days before admission); no complications; fresh case 11 days after return. In the last five

cases infection from our cases is possible, but rather doubtful. (15) Case 48 days in, 50 ill; no complications; 2 fresh cases 10 days after return. (16) Case 36 days in, 50 ill; no complications except slight rheumatism; fresh case 9 days after return. In the last two instances I suspected defective disinfection in our old dry hot-air Stove. (17) Case 46 in, 48 ill; peeling over 12 days before going out, no complications; fresh case 9 days after return. (18) Case 47 days in, 50 ill; had eczema over ear, nothing when discharged, nor since; fresh case 9 days after return. In the last two instances infection from our cases seems probable, but there is nothing to explain it. (19) Case 46 days in, 47 ill; no complications, but after he came home had a cold in the head and nasal discharge; fresh case 8 days after return, possibly due to the nasal discharge. (20) Case 49 days in, 51 ill; no complications in, but had nose sore since coming out; fresh case 7 days later, probably due to the nasal sore. (21) Case 44 days in, 45 ill; no complications; mother says rather poorly since coming home; fresh case 7 days later. I suspected the old disinfecting Stove in this case. (22) Case 50 days in, 54 ill; rhinitis in, apparently well when discharged and nothing since; fresh case in 6 days; I suspect the nose. (23) Case 51 days in, 56 ill, delayed by onychia; well since coming out; fresh case 5 days later, but this child had been playing at another house where a case of Scarlet Fever had occurred 4 days before he was taken ill; this was the more likely source of infection. (24) Case 48 days in, 49 ill; no complications; 5 days after return a fresh case occurred, and two more on the day following. This infection was apparently from our case, but there was nothing to explain it. (25) Case 45 days in, 47 ill; no complications in, but nose has been bleeding since return home; a fresh case 4 days later. (26) Case 42 days in, 44 ill; no complications in, but nose discharging since return home; fresh case in 4 days. The last two cases of infection were most probably due to the nasal mischief. (27) Case 79 days in, otorrhœa off and on the whole time; had the same before; allowed home after caution to parent, who assured me there were no other susceptible children at home; a child staying at the house on a visit was taken ill in 4 days. (28) Case 39 days in, 41 ill; no complications; on going home was put to

sleep with a child who was taken ill in 4 days. We give a printed card of precautions with every case discharged, warning against close contact with other children for at least a week. The last two infections were most likely from our cases; but we can hardly be blamed for them. (29) Case 43 days in, 47 ill; no complications in, said to have had nasal obstruction and discharge immediately after return home; fresh case in 3 days, and another 6 days after that. Almost certainly due to the nose mischief. (30) Case 53 days in, 55 ill; 8 days before coming out had slight soreness in the nostril, 6 days later there was the least dry scaliness; went out apparently clear 2 days after that. On the following day another child had severe Scarlet Fever, and a week after another was taken ill. The mother told us our case had a "cold in the nose" since coming out. This infection certainly seemed due to our case, but the suddenness seems almost incredible. In connection with the above, page 21 of last year's report might be read.

METEOROLOGY.

(See Table 3.)

First Quarter. - The average temperature was very moderate; except during the third and fourth weeks there was no extreme cold, and there was practically no continuous frost. The changes both of temperature and air pressure were frequently extreme and sudden; and most of the time the damp was excessive.

During the first five weeks the winds were Easterly, and again at the close of the Quarter; from the sixth to the tenth week the tendency was South-West. There were very high winds on the 24th and 25th of February, the 11th, from the 17th to the 19th, and the 26th and 27th of March were very stormy.

The Rainfall was 7.07, rather above the average. Most of the rain fell in heavy showers, the intervals being as a rule, fairly bright and fine; but the first ten days were foggy and very dull.

The mean Humidity was 86.

The Barometer was exceptionally low during the 5th, 9th, 11th and 13th weeks; during most of the Quarter variations were extreme and rapid.

Second Quarter.—The weather was remarkably fine. There were four nights frost during the first week, which was cold; for the next four weeks the night temperature kept touching frost, but the mean temperature was mild; in the sixth week (ending May 15th) there were three nights rather severe frost; after that the night temperature became steadily milder and the days were very warm; the maximum shade temperature reaching $82^{\circ}5$ and $80^{\circ}8$ in the eleventh and twelfth weeks.

The wind as a rule was low, it was high (W. and S.W.) during the second week, and rather high (N.E.) during the seventh. The prevailing direction of the wind was West tending to North West, but it was very variable. The absence of wind rendered it very close and oppressive at times.

There was a moderate Rainfall, 6.22 inches. Most of the rain was effective, falling in heavy showers, very frequently at night. There was a hailstorm on May 6th, and hail on two nights during the sixth week.

The mean humidity was low, 76.

The Barometer was moderately high and steady.

Third Quarter.—The high temperature of the closing weeks of the Second Quarter was maintained, the mean temperature (except during the week ending July 10th) being very high, the first week in August was excessively hot, the mean temperature for the week being $63^{\circ}7$. The maximum temperature was on August 4th, $84^{\circ}9$; the hottest days being the 4th and 5th, mean temperatures $68^{\circ}1$ and $68^{\circ}2$. The earth temperature was also excessive. The one foot deep temperature was above 60° from the middle of June to the end of August; and the weekly mean reached $65^{\circ}9$ on the week ending August 7th. The weekly mean of the 4 ft. deep temperature was over 56° from July 17th to August 28th, the highest being $57^{\circ}7$ during the second week in August.

The prevailing winds were West and South-West. During the second, third and fifth weeks there was a good deal of East wind. There was on the whole a lack of wind; during the first, fifth, and twelfth weeks there was nearly average wind; the seventh and eighth weeks were rather stormy; during the rest of the Quarter the wind was very low, and this intensified the heat.

The Rainfall was 7.36 inches; about an average amount. There were thunderstorms on the 4th, 5th and 6th of August; very heavy rain on August 8th, and heavy rain on September 29th.

The Humidity was 81, the air was very dry up to the middle of August, then rather damp.

The Barometer was moderately high as a rule, it was low and steady during the seventh, eighth and ninth weeks, high and variable for the rest of the Quarter.

Fourth Quarter. - The temperature was mild; there were a few slight frosts in the seventh and eighth weeks; the first few days in December were very cold, and from December 21st to the 25th was very cold, with rather sharp night frosts (lowest temperature 22.0). The weather was very fine, with occasional showers for the first five weeks, but October 28th and 29th were very foggy; there was considerable fog during the second and fourth weeks in November, and December the 18th and 23rd were very foggy.

From the third to the fourth weeks the prevailing wind was South-East, and also during the twelfth week; during the rest of the Quarter the prevailing direction was Westerly, mostly South-Westerly. There was a severe storm on November 28th, and the tenth week was rather stormy; during the eleventh and thirteenth weeks the wind was very high, December 29th being very stormy.

The total rainfall was very moderate, 6.17 inches. The second week was showery; there were heavy showers during the sixth, seventh, ninth, tenth, and eleventh weeks. There was a very little snow at times during the thirteenth week.

The Humidity was 92, after the first week the damp was very great.

The variations in the Barometer were extreme, as a rule, especially considering the amount of moisture in the air, it was very high.

Explanatory Remarks on the Tables.

The Returns made by the Registrar for the East Sub-District include all deaths occurring in the General Hospital and Workhouse; many of these are from outside the Borough, a few are returned as "no home," the others are of persons from the East and West Sub-Districts. Throughout the Tables the few cases returned as "no homes" are included in the East figures; the deaths from outside the Borough are excluded altogether (except in the uncorrected figures in Table 8), and the deaths from the East and West are referred to their own Sub-Districts. Particulars of these deaths in the Hospital and Workhouse are given in Table 7. In Table 8, the comparison between the Sub-Districts in all years before 1884 is misleading, as the East deaths include many really belonging to the West; the second row of figures in each year since 1884 are the corrected returns, the first row (given to compare with former years) are the Returns as sent in by the Registrars.

Table 10 gives our comparison with the other 32 great towns. The third column in this Table does not give the actual death rates, but the rates corrected for the age distribution of the populations. The death-rate varies in the different age decades, for instance, is very high under 5 years and over 60 years; comparatively low between 20 years and 40 years. Thus a district whose population consisted of persons under 5 years and over 60, with a death-rate of 40, might be far healthier (as far as death-rate is an index of health) than a district whose population was between 20 and 40 years, with a death-rate of 10. In the third column in Table 10 the rates are what they would have been had the age distribution in each town been the same as in England and Wales, and are therefore a much more accurate comparison than the actual death-rates.

VITAL STATISTICS.

The fatality from Summer Diarrhœa is so excessive that it overrides and obscures all other returns; our child population is a high one, and this renders us rather susceptible to Summer Diarrhœa. This is shown in the Annual Summary in Table 10. Only seven of the great towns exceed our death rate (corrected 23·07), the average of the towns being only 20·65. Our Diarrhœa death rate (2·11) is only exceeded by two of the towns (Preston and Hull), and is more than double the average of the 33 towns, 0·92. Our Diphtheria death rate (0·62) is the highest of the towns, average 0·31. Scarlet Fever is low in almost all the towns, average 0·18, our rate (0·24) is exceeded by six of the towns. Measles and Whooping Cough have caused an average fatality. The result gives us a high Zymotic death rate, 4·22, town average 2·87, only two exceeding us. Our child death rate is (from the above causes) a very high one, 217; town average, 177; we are slightly exceeded by two, and greatly exceeded by Preston, which had an unfortunate combination of severe epidemics of Measles and Diarrhœa. One noteworthy fact in connection with the Town Summary is the following:—Small Pox, Measles, and Scarlet Fever are the only Zymotic diseases common in our country which are alike in their generally infective character. Of these, Small Pox (unmodified) is far the most deadly, Scarlet Fever next, Measles is of such slight fatality that it is difficult to persuade people that it is of any importance at all. Of these, Small Pox, controlled by vaccination and isolation, caused only 18 deaths in the 33 towns during the year, a number *too low* to give a death rate of even 0·005, so that Small Pox is omitted in my Table. Scarlet Fever, controlled by isolation, caused 1,967 deaths, equal to a rate of 0·18. Measles, practically uncontrolled, caused 6,049 deaths, rate 0·55; three times that of Scarlet Fever. These figures need no comment.

Our comparison with past years is not a satisfactory one. The returns from Respiratory Diseases are *very* low (see Table 9), much the lowest recorded, in spite of our increased population. This modifies our total rate. This low return is, of course, partly due to the absence of severe weather, but we may hope it is in part due to

the better houses (drier and more airy) which are being built in such numbers and as quickly inhabited; and it is probably, too, in part due to better trade, causing better clothing and feeding. Excepting Diarrhœa, there is nothing serious amongst the Zymotic returns, but none are very low, and Measles and Diphtheria are considerably above the average. This all contributes to undo the effect of the low Respiratory deaths, and the addition of the terrible Diarrhœa fatality gives us a high death rate, one a little higher than the average for the previous ten years. Probably had we a correct estimate of our population, our death rate would be well below the average (see remarks after the Statistical Summary on the second last page).

The contrast between the two Sub-Districts, as shown in some detail in Table 5, is always rather instructive. In the West we find a rather high death-rate, 18·2, one certainly 3 or 4 higher than an ideal one. The First Quarter is slightly high; the causes being Diphtheria and Respiratory Diseases; the weather although mild was very variable, and damp; there was some presence of Influenza which would increase the Respiratory Diseases. The Fourth Quarter is rather worse, Diphtheria worse, some Measles deaths, but no deaths from Influenza; Respiratory deaths rather worse, probably due in part to Measles. The Second Quarter is as low a death-rate (13·8) as we could expect. But the Third Quarter is terribly high, due to Diarrhœa deaths, occurring mainly in the poor and crowded area between Salop Street and Dudley Road. The yearly death-rate in the East is terribly high, almost half as much again as the West; this is a very momentous fact. It means that had the West been as bad, about 400 more lives would have been lost during the year; or, as it was about 340 deaths in the East during the year were due to the difference between that Sub-District and the West, although the West was in some respects so bad. The main causes of the East excess are Diarrhœal Diseases (Table 4, East 176, West 143; Table 5, giving Diarrhœa only, does not show this) and most of all Respiratory Diseases, East 206, West 118. In other Zymotic Diseases the West actually exceeds the East; although hardly more than its greater population would account for. Looking at the Quarterly details in

the East (we see that in the lowest Quarter, the Second, the death-rate is very high, the Respiratory being very high (higher than any in the West except the Fourth, in the First Quarter Respiratory deaths are more than double the West, in the Fourth nearly double. In the Third Quarter the Summer Diarrhœa comes in (Diarrhœal deaths Table 4, East 146, West 122) giving an appalling death-rate of 34·7 in the East.

It is evident that there are two matters that need consideration, the Respiratory Diseases, which, *even this year, the most favourable as regards them that we have ever had*, have such a potent effect in raising our death-rate, especially in the East; and the Diarrhœa, which is at times so terribly fatal. The 1897 epidemic was so severe that it scarcely needs to emphasize its importance, but I may point out that it caused about one-sixth of our total deaths from all causes in the year, and that nearly all this mortality occurred during only one Quarter of the year; during thirteen weeks in the East (July 17 — October 9) Diarrhœal deaths were 149, in the West during twelve weeks (July 31—October 16) they were 125.

SANITARY CONDITION.

Remarks on our sanitary condition must obviously be in great part a repetition of former Reports; I should like particularly now to refer to and emphasize what I said in the 1896 Report. Many were inclined to believe those remarks were exaggerative; their accuracy is grimly confirmed by the deadly statistics of the present year. The reason why insanitary conditions are not always appreciated by those unacquainted with technicalities is because they do not see the importance of apparently little things; and thus many of our requisitions appear to them needless or at least very extravagant. Why do we regularly have such a high fatality from Respiratory Diseases? Partly because we have so many poor who are ill-clothed and ill-fed; sanitation cannot deal with that; partly because so many of our people live in houses which are thoroughly damp, and which have no proper facility for ventilation, and, even if they had, have no

fresh air about them. It is more and more recognized that the real cause of chest ailments is not mere cold but foul air, and especially air fouled with animal exhalations. Many of our poor live in damp cottages, with small rooms, which for warmth's sake are kept close and stuffy; fancy the condition of such a room after several people have spent the night in it with practically no ventilation. Even when open to the air and empty during the day these rooms have the rank smell characteristic of organic exhalation. When numbers of such rooms are in such close vicinity that their thorough ventilation by the wind becomes defective, and the air stagnates in the yards and courts around them, then the evils are intensified. When there is also absence of sunlight matters are at their worst. These are the conditions which cause deaths from consumption and chest affections; and which moreover, cause a state of defective health of which even the sufferers themselves are unaware until they escape from it and feel the difference, a state which renders them ready victims to almost any form of disease, and which, even if actual disease is escaped, renders their lives lacking in due enjoyment and utility.

We have this year done much in the way of closing houses unfit for habitation (see Table D). This Table attempts to define the chief causes of condemnation, but in most instances so many causes exist that it is difficult to draw up a Table. Broadly speaking, we condemn houses on two grounds, deficiencies existing in themselves, generally quite irreparable; or the conditions of their surroundings, still more irreparable; usually, of course, both conditions co-exist. Some houses, where mere dilapidation or defective structure is the main cause of closure, are through their open situation suitable for residing in during fine weather; others, even in fairly good repair, are unfit because they have deficient air space. The latter is really the gravest defect. A gipsy in a ragged tent in the open is more healthily housed even in winter than those in such houses as the above. Yet these are those whose closure is most objected to. It is also objected that these poor people have nowhere else to go to. I am fully alive to this, the following extract is from my 1896 Report:—"Then it will be fully evident that nothing short of doing away with this class of house altogether would really satisfy the needs of sanitation. This must

“be ultimately done, but for the present it is, of course, impossible.
 “We can only proceed gradually, dealing at first with those houses
 “which are in the worst situations, or whose bad repair gives extra
 “ground for closing them. This we are continually doing.

“The result is not as beneficial as it might be; first, because in
 “most instances the empty houses remain standing, obstructing
 “ventilation, and affording facility for accumulating filth, and next,
 “because it is always doubtful if the condition of the people turned
 “out is bettered. In spite of the vast amount of new property built
 “in the Borough, there is no additional accommodation for the very
 “poor, for it does not pay to provide it. Until this problem is solved,
 “the gravest sanitary defect of our and other large towns will remain.”

I think it is pretty clear that the time for facing this problem is drawing near.

The Diarrhœa epidemic points also to the importance of apparently little things. It is a disease of the towns, how do they differ from the villages? Even in our own town this year's deaths plainly show that (as a cause of death) Diarrhœa is practically limited to our older and crowded areas. How do they differ from the newer and more open areas? The answer in general terms is obvious. The main difference in each case is in the supply of fresh air. There must be less æration in the streets of a town, especially the narrower ones, and least of all in the yards and courts, than in any open area; and in order to counterbalance this defect, the greatest care should be taken to lessen all possible causes of air impurity.

From what has been said above under the heading of Diarrhœa, it is equally obvious that to lessen this disease all decaying matter should be got rid of, and cleanliness of walls, yards, and courts strictly observed. Such cleanliness is impossible in many of our older properties; and the endeavours to have such alterations made (such as paving and relaying yards and courts, and passages, repairing rugged walls, doing away with untidy ash-pits) as would expedite general cleanliness, often appear trifling and unimportant. Yet it is only by constant attention to such and similar apparent trifles that

the health of the poor in a town like ours can be even fairly maintained. As the success of all our efforts depends on the amount of support which they receive from the public conscience, it is most important that these matters should be generally known and understood.

SANITARY INSPECTION REPORT.

It was hoped this year that a full report of the work of the Inspectors would be appended to this Report of the Medical Officer; prolonged illness has rendered this impossible, but the Tables, which follow after those of this Report, will give a very satisfactory account of the work being done.

STATISTICAL SUMMARY, 1897.

	EAST SUB-DISTRICT.		WEST SUB-DISTRICT.		BOROUGH.	
Area —Acres	828		2,697		3,525	
Population *	39,306		48,229		87,287	
Density —No. of persons per acre.....	} 47·4.....		} 17·8		} 24·7	
Inhabited Houses }					about 18,500	
Rateable Value —Total exclusive of Government Property	} £338,755		} Os.		Od.	
Marriages					No. 886 Rate 10·2	
	No.	Rate	No.	Rate	No.	Rate.
Births	1,543	39·3...	1,511	31·4...	3,054	35·1
Deaths	1,022	26·0.....	878	18·2...	1,900	21·8
Zymotic Deaths	188	4·7...	214	4·4.....	402	4·6
Infantile Mortality }	} 235.....		} 203.....		} 219	
Deaths under 1 year per 1000 births						

*Estimated to the middle of 1897, the Borough is not quite the sum of the Sub-Districts being estimated separately. The Estimate is on the supposition that the rate of increase from 1891 to 1901 is the same as from 1881 to 1891; this is certainly not the case; judging by our numerous new streets our increase in population must be far greater than the above estimate, probably some thousands greater. This would lower all our rates.

INDEX OF TABLES.

- No. 1.—Cases of Measles, Scarlet Fever, Diphtheria, and Typhoid Fever recorded during the year 1897.
- „ 2.—Weekly Returns under the Infectious Diseases Notification Act, and prevalence of some other Diseases.
- „ 3.—Weekly Meteorological Returns and Death-rate.
- „ 4.—Weekly Returns of Deaths in the Sub-Districts.
- „ 5.—Quarterly Births and Deaths in the Sub-Districts and Borough.
- „ 6.—Deaths in the Sub-Districts during the year 1897, classified according to Ages and Diseases.
- „ 7.—Deaths during the year 1897, classified according to Diseases, Ages, and Localities, and the proportion of Deaths which occurred in Public Institutions.
- „ 8.—Deaths and Death-rates and Populations of the Sub-Districts and Borough for the past 25 years.
- „ 9.—Eleven years' Annual Returns of Deaths from various Diseases and at various ages, and Death rates and Births and Birth rates in the Borough.
- „ 9A.—Eleven years' Quarterly ditto.
- „ 10.—Various Death-rates, &c., in the 33 great Towns during the year 1897. (*From the Registrar General's Annual Summary*)

(*See also Explanatory Remarks on the Tables on page 28.*)

Table A.—Summary of routine work.

- „ B.—Special inspections.
- „ C.—Unwholesome food condemned and destroyed.
- „ D.—Houses closed as unfit for habitation.
- „ E.—Summary of circulars and notices served.
- „ F.—Record of magisterial proceedings taken.

TABLE No. 1.

Cases of Infectious Diseases recorded in 1897.

	EAST SUB-DISTRICT. POPULATION 39,306.					WEST SUB-DISTRICT. POPULATION 48,229.					BOROUGH. POPULATION 87,287.					TOTALS:			RATE PER 10,000 OF POPULATION.		
	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.	1st Quarter.	2nd Quarter.	3rd Quarter.	4th Quarter.	Year.	East Sub-District	West Sub-District	Borough.	East Sub-District	West Sub-District	Borough.
Small Pox .. { Under 5 years .. { 5 years & upwards	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Measles .. { Under 5 years .. { 5 years & upwards	13	72	57	120	262	2	56	87	135	280	15	128	144	255	542	455	455	910	115.7	94.3	104.2
Scarlet Fever { Under 5 years .. { 5 years & upwards	11	18	13	22	64	12	7	31	34	84	23	25	44	56	148	219	310	529	55.7	64.2	60.6
Diphtheria .. { Under 5 years .. { 5 years & upwards	5	9	16	12	42	14	15	12	25	66	19	24	28	37	108	121	190	311	30.7	39.3	35.6
Typhoid Fever { Under 5 years .. { 5 years & upwards	..	..	3	..	3	1	..	1	..	2	1	..	4	..	5	51	45	96	12.9	9.3	10.9

1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	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	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114	115	116	117	118	119	120	121	122	123	124	125	126	127	128	129	130	131	132	133	134	135	136	137	138	139	140	141	142	143	144	145	146	147	148	149	150	151	152	153	154	155	156	157	158	159	160	161	162	163	164	165	166	167	168	169	170	171	172	173	174	175	176	177	178	179	180	181	182	183	184	185	186	187	188	189	190	191	192	193	194	195	196	197	198	199	200	201	202	203	204	205	206	207	208	209	210	211	212	213	214	215	216	217	218	219	220	221	222	223	224	225	226	227	228	229	230	231	232	233	234	235	236	237	238	239	240	241	242	243	244	245	246	247	248	249	250	251	252	253	254	255	256	257	258	259	260	261	262	263	264	265	266	267	268	269	270	271	272	273	274	275	276	277	278	279	280	281	282	283	284	285	286	287	288	289	290	291	292	293	294	295	296	297	298	299	300	301	302	303	304	305	306	307	308	309	310	311	312	313	314	315	316	317	318	319	320	321	322	323	324	325	326	327	328	329	330	331	332	333	334	335	336	337	338	339	340	341	342	343	344	345	346	347	348	349	350	351	352	353	354	355	356	357	358	359	360	361	362	363	364	365	366	367	368	369	370	371	372	373	374	375	376	377	378	379	380	381	382	383	384	385	386	387	388	389	390	391	392	393	394	395	396	397	398	399	400	401	402	403	404	405	406	407	408	409	410	411	412	413	414	415	416	417	418	419	420	421	422	423	424	425	426	427	428	429	430	431	432	433	434	435	436	437	438	439	440	441	442	443	444	445	446	447	448	449	450	451	452	453	454	455	456	457	458	459	460	461	462	463	464	465	466	467	468	469	470	471	472	473	474	475	476	477	478	479	480	481	482	483	484	485	486	487	488	489	490	491	492	493	494	495	496	497	498	499	500	501	502	503	504	505	506	507	508	509	510	511	512	513	514	515	516	517	518	519	520	521	522	523	524	525	526	527	528	529	530	531	532	533	534	535	536	537	538	539	540	541	542	543	544	545	546	547	548	549	550	551	552	553	554	555	556	557	558	559	560	561	562	563	564	565	566	567	568	569	570	571	572	573	574	575	576	577	578	579	580	581	582	583	584	585	586	587	588	589	590	591	592	593	594	595	596	597	598	599	600	601	602	603	604	605	606	607	608	609	610	611	612	613	614	615	616	617	618	619	620	621	622	623	624	625	626	627	628	629	630	631	632	633	634	635	636	637	638	639	640	641	642	643	644	645	646	647	648	649	650	651	652	653	654	655	656	657	658	659	660	661	662	663	664	665	666	667	668	669	670	671	672	673	674	675	676	677	678	679	680	681	682	683	684	685	686	687	688	689	690	691	692	693	694	695	696	697	698	699	700	701	702	703	704	705	706	707	708	709	710	711	712	713	714	715	716	717	718	719	720	721	722	723	724	725	726	727	728	729	730	731	732	733	734	735	736	737	738	739	740	741	742	743	744	745	746	747	748	749	750	751	752	753	754	755	756	757	758	759	760	761	762	763	764	765	766	767	768	769	770	771	772	773	774	775	776	777	778	779	780	781	782	783	784	785	786	787	788	789	790	791	792	793	794	795	796	797	798	799	800	801	802	803	804	805	806	807	808	809	810	811	812	813	814	815	816	817	818	819	820	821	822	823	824	825	826	827	828	829	830	831	832	833	834	835	836	837	838	839	840	841	842	843	844	845	846	847	848	849	850	851	852	853	854	855	856	857	858	859	860	861	862	863	864	865	866	867	868	869	870	871	872	873	874	875	876	877	878	879	880	881	882	883	884	885	886	887	888	889	890	891	892	893	894	895	896	897	898	899	900	901	902	903	904	905	906	907	908	909	910	911	912	913	914	915	916	917	918	919	920	921	922	923	924	925	926	927	928	929	930	931	932	933	934	935	936	937	938	939	940	941	942	943	944	945	946	947	948	949	950	951	952	953	954	955	956	957	958	959	960	961	962	963	964	965	966	967	968	969	970	971	972	973	974	975	976	977	978	979	980	981	982	983	984	985	986	987	988	989	990	991	992	993	994	995	996	997	998	999	1000	1001	1002	1003	1004	1005	1006	1007	1008	1009	1010	1011	1012	1013	1014	1015	1016	1017	1018	1019	1020	1021	1022	1023	1024	1025	1026	1027	1028	1029	1030	1031	1032	1033	1034	1035	1036	1037	1038	1039	1040	1041	1042	1043	1044	1045	1046	1047	1048	1049	1050	1051	1052	1053	1054	1055	1056	1057	1058	1059	1060	1061	1062	1063	1064	1065	1066	1067	1068	1069	1070	1071	1072	1073	1074	1075	1076	1077	1078	1079	1080	1081	1082	1083	1084	1085	1086	1087	1088	1089	1090	1091	1092	1093	1094	1095	1096	1097	1098	1099	1100	1101	1102	1103	1104	1105	1106	1107	1108	1109	1110	1111	1112	1113	1114	1115	1116	1117	1118	1119	1120	1121	1122	1123	1124	1125	1126	1127	1128	1129	1130	1131	1132	1133	1134	1135	1136	1137	1138	1139	1140	1141	1142	1143	1144	1145	1146	1147	1148	1149	1150	1151	1152	1153	1154	1155	1156	1157	1158	1159	1160	1161	1162	1163	1164	1165	1166	1167	1168	1169	1170	1171	1172	1173	1174	1175	1176	1177	1178	1179	1180	1181	1182	1183	1184	1185	1186	1187	1188	1189	1190	1191	1192	1193	1194	1195	1196	1197	1198	1199	1200	1201	1202	1203	1204	1205	1206	1207	1208	1209	1210	1211	1212	1213	1214	1215	1216	1217	1218	1219	1220	1221	1222	1223	1224	1225	1226	1227	1228	1229	1230	1231	1232	1233	1234	1235	1236	1237	1238	1239	1240	1241	1242	1243	1244	1245	1246	1247	1248	1249	1250	1251	1252	1253	1254	1255	1256	1257	1258	1259	1260	1261	1262	1263	1264	1265	1266	1267	1268	1269	1270	1271	1272	1273	1274	1275	1276	1277	1278	1279	1280	1281	1282	1283	1284	1285	1286	1287	1288	1289	1290	1291	1292	1293	1294	1295	1296	1297	1298	1299	1300	1301	1302	1303	1304	1305	1306	1307	1308	1309	1310	1311	1312	1313	1314	1315	1316	1317	1318	1319	1320	1321	1322	1323	1324	1325	1326	1327	1328	1329	1330	1331	1332	1333	1334	1335	1336	1337	1338	1339	1340	1341	1342	1343	1344	1345	1346	1347	1348	1349	1350	1351	1352	1353	1354	1355	1356	1357	1358	1359	1360	1361	1362	1363	1364	1365	1366	1367	1368	1369	1370	1371	1372	1373	1374	1375	1376	1377	1378	1379	1380	1381	1382	1383	1384	1385	1386	1387	1388	1389	1390	1391	1392	1393	1394	1395	1396	1397	1398	1399	1400	1401	1402	1403	1404	1405	1406	1407	1408	1409	1410	1411	1412	1413	1414	1415	1416	1417	1418	1419	1420	1421	1422	1423	1424	1425	1426	1427	1428	1429	1430	1431	1432	1433	1434	1435	1436	1437	1438	1439	1440	1441	1442	1443	1444	1445	1446	1447	1448	1449	1450	1451	1452	1453	1454	1455	1456	1457	1458	1459	1460	1461	1462	1463	1464	1465	1466	1467	1468	1469	1470	1471	1472	1473	1474	1475	1476	1477	1478	1479	1480	1481	1482	1483	1484	1485	1486	1487	1488	1489	1490	1491	1492	1493	1494	1495	1
---	---	---	---	---	---	---	---	---	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	------	---

TABLE No 2.

WEEKLY RETURNS under the Infectious Diseases Notification Act,
and prevalence of certain other Diseases.

A few cases x Prevalent xx Very Prevalent xxx

1897		Small Pox	Scarlet Fever	Diphtheria	Typhoid Fever	Puerperal Fever	Measles	Whooping Cough	Pneumonia	Influenza
Week Ending										
January	9th...	...	8	3	1	...	...	x	xx	x
"	16th...	...	3	3	1	1	x	x	xx	x
"	23rd...	...	3	6	...	...	x	x	xx	xx
"	30th...	...	11	15	3	...	x	xx	xx	xx
February	6th...	...	8	4	3	...	x	x	x	x
"	13th...	...	9	7	1	...	...	x	x	x
"	20th...	...	7	10	3	...	x	x	x	...
"	27th...	...	8	7	2	...	x	x	x	...
March	6th...	...	6	4	...	...	x	x	x	x
"	13th...	...	12	6	1	...	x	x	x	x
"	20th...	...	8	2	1	...	x	x	x	x
"	27th...	...	4	2	1	...	x	x	x	x
April	3rd...	...	5	3	3	...	x	x	x	x
"	10th...	...	2	7	2	...	x	x	x	x
"	17th...	...	11	8	...	...	x	x	x	x
"	24th...	...	7	4	3	1	x	x	x	x
May	1st...	...	3	5	1	...	x	x	x	x
"	8th...	...	2	4	...	...	x	x	x	x
"	15th...	...	6	5	1	...	xx	x	x	x
"	22nd...	...	13	3	1	...	xx	x	x	x
"	29th...	...	3	8	2	...	xx	x	x	x
June	5th...	...	13	5	2	...	xx	x	x	x
"	12th...	...	5	4	...	...	xx	x	x	x
"	19th...	...	4	9	1	...	xx	x	x	x
"	26th...	...	6	2	...	...	xx	x	x	x
July	3rd...	...	5	9	2	...	xx	x	x	x
"	10th...	...	12	8	...	...	xx	x	x	x
"	17th...	...	5	4	1	...	xx	x	x	x
"	24th...	...	14	7	4	...	xxx	x	x	x
"	31st...	...	9	8	2	...	xxx	x	x	x
August	7th...	...	8	3	...	...	xxx	x	x	x
"	14th...	...	14	4	6	...	xxx	x	x	x
"	21st...	...	13	7	5	...	xx	x	x	...
"	28th...	...	15	5	3	1	xx	x	x	...
September	4th...	...	14	5	4	...	xx	x	x	...
"	11th...	...	11	3	6	...	xx	x	x	...
"	18th...	...	10	7	7	...	xx	x	x	...
"	25th...	...	16	8	2	...	xx	x	x	...
October	2nd...	...	12	6	6	...	xx	x	x	...
"	9th...	...	17	5	3	...	xx	x	x	...
"	16th...	...	23	9	2	...	xx	x	x	...
"	23rd...	...	23	7	4	...	xx	x	x	...
"	30th...	...	28	9	...	...	xx	x	x	...
November	6th...	...	28	9	4	...	xx	x	x	...
"	13th...	...	20	4	1	...	xx	x	x	...
"	20th...	...	14	8	2	...	xx	x	x	...
"	27th...	...	14	10	...	...	xx	x	xx	...
December	4th...	...	9	14	1	...	xx	x	xx	...
"	11th...	...	10	6	...	...	xx	x	xx	x
"	18th...	...	13	3	1	...	xx	x	xx	x
"	25th...	...	8	6	...	...	xx	xx	xx	xx
January	1st...	...	11	2	2	...	xx	xx	xx	xx
YEAR ...		...	543	312	101	3				

Tables 1 and 2 do not tally; 1 including a few cases not reported by Doctors,
and 2 including some cases which ultimately proved incorrect.

TABLE No. 3.

Weekly Meteorological Report, from observations taken at 9 a.m. daily.

Week ending	BAROMETER REDUCED TO 32° AND SEA LEVEL		Humidity	TEMPERATURE					Rain	WIND		Death Rate per 1,000 per annum
	Mean	Range		Max.	Min.	Mean	Earth			Prevailing Directions	Total in Week	
							1ft.	4ft.				
1897	in.	in.	0-100	°	°	°	°	°	in.		mls.	
January 9th	29.840	.538	93	44.0	28.5	35.7	38.3	43.7	1.15	SE	1845	20.3
" 16th	29.903	.598	95	39.5	23.6	31.7	37.8	43.4	.06	NE	579	23.9
" 23rd	29.968	.619	?	35.6	18.0	28.5	34.8	42.8	.05	NE	1214	20.3
" 30th	29.813	.840	?	39.0	14.0	29.6	34.2	42.1	.30	NW	1058	27.4
February 6th	29.517	.518	98	43.0	28.5	33.4	35.3	41.4	2.19	SE, E	987	20.3
" 13th	30.049	.387	89	55.0	30.2	38.9	38.5	41.2	.12	SW	1185	19.7
" 20th	30.246	.548	90	52.8	28.0	42.7	41.6	41.9	.89	SW	1439	18.5
" 27th	30.331	.508	82	56.2	30.7	44.2	44.5	42.9	...	SW	2021	20.9
March 6th	29.561	.740	85	48.8	29.3	37.8	41.0	43.7	.77	N, SW	1996	20.9
" 13th	29.846	.606	77	49.3	28.5	38.0	40.9	43.5	.31	S, SW	1591	17.9
" 20th	29.491	.829	84	53.4	31.8	41.9	42.4	43.4	.73	SW	2041	24.5
" 27th	29.808	.443	79	66.0	40.2	49.0	46.8	44.1	.18	SW, NW	2375	22.1
April 3rd	29.420	.535	81	53.0	21.9	36.8	44.2	45.0	.32	NW, NE	1694	20.9
" 10th	29.860	.577	79	52.0	23.9	36.9	42.5	44.9	.37	SE, SW, NW	1240	19.1
" 17th	29.864	.609	79	57.2	30.6	43.3	45.4	44.8	.75	SE, W, SW	2069	13.1
" 24th	29.891	.530	76	55.0	31.3	41.7	47.0	45.4	.60	SW, SE, E	1637	17.3
May 1st	29.870	.307	87	65.1	33.5	46.9	48.9	46.0	.21	SE, SW, NW	1235	13.7
" 8th	29.928	.367	70	66.3	30.7	45.3	50.1	46.9	.11	W	1620	19.1
" 15th	30.149	.476	65	60.0	26.7	41.6	50.2	47.6	.27	NW, N	1085	16.1
" 22nd	30.132	.520	63	68.6	33.9	49.9	54.5	48.1	...	NE	1793	16.1
" 29th	29.604	.615	73	67.8	33.9	49.2	55.4	49.5	.74	NW, SW	1032	18.5
June 5th	29.978	.422	80	75.4	43.0	54.8	57.2	50.4	.43	SW, NW	810	19.1
" 12th	30.106	.492	81	79.7	36.8	53.6	58.1	51.5	.95	NE, SW	1104	14.3
" 19th	29.943	.911	73	82.5	38.2	53.2	60.5	52.2	.85	SW, W, NW	1647	16.7
" 26th	30.012	.457	82	80.8	47.5	58.6	60.4	53.0	.13	SW, NW, E	1088	17.9
July 3rd	30.002	.260	80	75.8	47.8	59.7	63.7	53.9	.81	N, NW	856	17.9
" 10th	29.931	.510	69	70.3	33.6	53.9	62.6	55.1	.10	NW	1319	17.9
" 17th	30.140	.484	67	81.4	42.0	58.8	63.6	55.5	...	E, N	933	23.3
" 24th	29.867	.475	75	78.4	48.1	59.8	63.1	56.3	.40	SE, E, W	831	19.1
" 31st	30.018	.528	78	78.0	50.0	59.7	63.4	56.5	.22	W, NW	984	28.7
August 7th	29.947	.527	68	84.9	46.1	63.7	65.9	57.1	.75	E, SE	1012	34.0
" 14th	29.822	.205	80	73.0	43.5	57.7	62.6	57.7	1.23	SW	960	34.6
" 21st	29.622	.358	85	70.0	46.1	56.9	61.2	57.3	.60	SW	1361	52.0
" 28th	29.675	.274	89	67.7	45.5	55.0	60.2	57.2	.45	W, SW	935	32.2
September 4th	29.677	.478	90	67.0	35.3	51.1	58.2	56.7	1.45	SW	1590	33.4
" 11th	30.050	.706	83	63.6	29.6	50.3	55.2	55.9	.45	NW, E	?	31.0
" 18th	30.184	.807	91	67.0	34.2	51.1	56.5	55.3	.10	N, NW	?	25.7
" 25th	29.862	.421	82	64.7	34.8	50.4	54.5	54.9	.23	N, SW	1391	20.3
October 2nd	30.055	.493	91	68.2	40.5	52.9	55.4	54.4	1.38	SW	679	21.5
" 9th	30.347	.261	84	56.7	31.9	44.9	51.7	54.1	.03	NW, SW	859	24.5
" 16th	29.808	.711	92	60.8	32.9	47.4	50.3	53.2	.48	W, S	1358	18.5
" 23rd	30.321	.794	90	65.2	35.8	49.9	51.9	52.6	.27	S, E	1118	22.1
" 30th	30.237	.183	96	61.9	36.6	45.7	49.1	52.3	.04	SE	1035	25.7
November 6th	30.326	.149	91	53.2	37.9	43.7	47.7	51.6	...	SE, E	1283	21.5
" 13th	30.086	.764	98	56.8	33.2	46.4	48.5	50.9	.62	SE, SW	1243	16.7
" 20th	30.192	1.090	95	55.0	26.2	42.8	47.1	50.6	1.10	SW	1131	15.5
" 27th	30.438	.731	98	53.0	28.6	40.0	45.7	50.1	.31	SW, NW	782	19.1
December 4th	29.841	.899	90	50.2	24.1	35.5	40.6	49.1	.89	NW, SW	1647	20.9
" 11th	29.651	.827	92	52.6	29.3	38.2	40.2	47.7	.85	SW	1968	23.3
" 18th	29.752	.856	94	54.5	27.7	43.1	42.1	46.7	1.08	SW	1738	17.9
" 25th	30.472	.316	88	44.0	22.0	34.1	39.7	46.5	...	SE	1214	14.9
January 1st	29.594	1.151	92	51.8	28.7	41.3	40.6	45.6	.50	SW	2099	23.3

Total Rainfall in the year, 26.82 inches.

TABLE No. 4.—Weekly Returns of Deaths in the Sub-Districts.

	Week ending	January.	February.	March.	April.	May.	June.	July.	August.	September	October.	November	December	1897.	
		9 16 23 30	6 13 20 27	6 13 20 27	3 10 17 24	1 8 15 22 29	5 12 19 26	3 10 17 24 31	7 14 21 28	4 11 18 25	2 9 16 23 30	6 13 20 27	4 11 18 25 1/1	Totals.	
EAST SUB-DISTRICT.	MEASLES { Under 5 yrs. 5 & upwards	1		1		1	1	2	3	2	1	3	1	21	
	SCARLET FEVER { Under 5 yrs. 5 & upwards	1		1	1	1	1	1	1	1			1	9	
	WHOOPING COUGH { Under 5 yrs. 5 & upwards	1	4	1	1	1	1	1	1	1	1			18	
	DIPHTHERIA { Under 5 yrs. 5 & upwards			1		1	2	1	2	1	2	1	2	13	
	TYPHOID FEVER { Under 5 yrs. 5 & upwards		1								1			1	
	DIARRHŒAL DISEASES { Under 5 yrs. 5 & upwards		1	1	1	1	2	2	4	12	23	18	19	165	
	PHTHISIS { Under 5 yrs. 5 & upwards	2	2	1	2	1	2	1	1	1	2	1	1	11	
	RESPIRATORY DISEASES { Under 5 yrs. 5 & upwards	1	3	2	3	1	2	1	1	3	2	1	1	63	
	ALL CAUSES { Under 5 yrs. 60 & upwds. All Ages	7	8	9	11	7	3	9	5	7	11	6	8	5	539
		18	18	21	25	19	21	19	18	19	13	26	18	22	191
	18	18	21	25	19	21	19	18	19	13	26	18	22	1022	
WEST SUB-DISTRICT.	MEASLES { Under 5 yrs. 5 & upwards		1			1	1	1	2	1	2	2	1	26	
	SCARLET FEVER { Under 5 yrs. 5 & upwards			1				1	1	1	2	1		8	
	WHOOPING COUGH { Under 5 yrs. 5 & upwards	1	1	1	1		1	2	1	1	2	1	1	21	
	DIPHTHERIA { Under 5 yrs. 5 & upwards	1	2	1	1	1	1	1	1	1	2	1	1	26	
	TYPHOID FEVER { Under 5 yrs. 5 & upwards	1		1			1		1	1	1	1	1	12	
	DIARRHŒAL DISEASES { Under 5 yrs. 5 & upwards	1			2	1	2	1	9	11	25	26	15	138	
	PHTHISIS { Under 5 yrs. 5 & upwards	1	2	3	1	1	3	2	3	2	1	1	1	51	
	RESPIRATORY DISEASES { Under 5 yrs. 5 & upwards	1	1	1	2	1	2	1	1	1	1	1	1	54	
	ALL CAUSES { Under 5 yrs. 60 & upwds. All Ages	5	8	4	7	7	6	4	3	5	7	2	9	5	8
		16	22	13	21	15	12	17	16	17	15	19	13	17	173
	16	22	13	21	15	12	17	16	17	15	19	13	17	878	

TABLE No. 5.—Quarterly Births and Deaths during 1897.

QUARTERS.		East Sub-District, 39,306					West Sub-District, 48,229					Borough, 87,287					
		1st	2nd	3rd	4th	Year	1st	2nd	3rd	4th	Year	1st	2nd	3rd	4th	Year	
BIRTHS	Males ...	207	186	194	179	766	201	192	203	201	797	408	378	397	380	1563	
	Females...	205	182	192	198	777	195	171	164	184	714	400	353	356	382	1491	
	Total ...	412	368	386	377	1543	396	363	367	385	1511	808	731	753	762	3054	
	Rate ...	42.0	37.5	39.4	38.4	39.3	32.9	30.2	30.5	32.0	31.4	37.1	33.6	34.6	35.0	35.1	
	Males ...	135	127	188	120	570	104	84	163	122	473	239	211	351	242	1043	
	Females...	122	74	152	104	452	104	82	123	96	405	226	156	275	200	857	
	Total ...	257	201	340	224	1022	208	166	286	218	878	465	367	626	442	1900	
	Rate ...	26.2	20.5	34.7	22.8	26.0	17.3	13.8	23.8	18.1	18.2	21.3	16.8	28.7	20.3	21.8	
	60 years and upwards	65	43	39	44	191	54	41	39	39	173	119	84	78	83	364	
	Under 1 year ...	76	51	176	60	363	51	48	140	69	308	127	99	316	129	671	
DEATHS	1—5 years ...	27	34	59	56	176	21	25	53	33	132	48	59	112	89	308	
	Zymotics ...	22	22	106	38	188	24	27	118	45	214	46	49	224	83	402	
	Rate ...	2.2	2.2	10.8	3.8	4.7	1.9	2.2	9.8	3.7	4.4	2.1	2.2	10.3	3.8	4.6	
	Small Pox ...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...	
	Measles ...	2	4	10	6	22	1	7	6	13	27	3	11	16	19	49	
	Scarlet Fever ...	3	5	4	1	13	1	1	7	2	11	4	6	11	3	24	
	Whooping Cough	8	2	7	1	18	5	5	6	5	21	13	7	13	6	39	
	Diphtheria ...	1	6	5	9	21	10	4	6	17	37	11	10	11	26	58	
	Typhoid Fever ...	1	...	2	6	9	3	1	5	3	12	4	1	7	9	21	
	Influenza ...	4	...	...	2	6	4	3	...	...	7	8	3	...	2	13	
	Diarrhoea ...	1	2	78	11	92	...	5	87	4	96	1	7	165	15	188	
	Phthisis...	19	15	10	8	52	16	7	13	15	51	35	22	23	23	103	
	Respiratory Diseases	72	37	25	72	206	34	21	20	43	118	106	58	45	115	324	
	Uncertified ...	2	...	1	...	3	3	2	1	1	7	5	2	2	1	10	
	Inquests...	23	14	22	18	77	10	10	7	18	45	33	24	29	36	122	
	Deaths in Public Institutions in the East Sub-District.		{														
			Hospital														
			Workhouse ...														
			From Outside the Borough														
			From the West Sub-District														
		{															
		No Home ...															
		{															
		Deaths in Public Institutions															
		in the															
		East Sub-District.															
		{															
		164															
		185															
		127															
		85															
		27															

1961 Growth and Development of the Chickens - 2 ON 2 JBAT

Time to approach

Weight at approach

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

Time to approach

Remarks

TABLE No. 6.

*DEATHS in the Sub-Districts during the year 1897, classified according to
Ages and Diseases.*

	EAST SUB-DISTRICT.							WEST SUB-DISTRICT.						
	AGES.						TOTALS	AGES.						TOTALS
	0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards		0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards	
I.—ZYMOTIC DISEASES ...	82	73	18	7	7	1	188	100	77	24	7	5	1	214
III.—DIETIC DISEASES ...	..	..	..	4	..	..	4	..	..	..	..	..	..	..
IV.—CONSTITUTIONAL DISEASES	28	8	11	58	13	2	120	31	11	19	64	13	1	139
V.—DEVELOPMENTAL DISEASES	30	..	..	2	15	28	75	26	..	..	1	9	25	61
VI.—LOCAL DISEASES ...	170	84	27	139	93	23	536	99	41	18	110	82	30	380
VII.—VIOLENCE ...	2	7	8	11	4	3	35	1	3	5	11	1	2	23
VIII.—ILL-DEFINED CAUSES	51	4	..	7	2	..	64	51	..	1	5	3	1	61
TOTALS	363	176	64	228	134	57	1022	308	132	67	198	113	60	878
I—Zymotic Diseases.														
1—MIASMATIC.														
Measles ...	2	19	1	..	..	..	22	10	16	1	..	..	..	27
Scarlet Fever ...	..	9	4	..	..	..	13	1	7	3	..	..	..	11
Whooping Cough ...	9	9	..	..	..	..	18	10	11	..	..	..	..	21
Diphtheria ...	1	12	7	..	1	..	21	4	22	11	..	..	..	37
Simple Fever ...	..	1	..	..	..	..	1	..	..	..	..	..	..	..
Typhoid Fever ...	..	1	5	3	..	..	9	..	..	8	4	..	..	12
Influenza ...	..	..	1	2	2	1	6	..	2	..	1	4	..	7
2—DIARRHOEAL.														
Diarrhoea ...	67	22	..	..	3	..	92	75	19	1	..	1	..	96
5—VENEREAL.														
Syphilis ...	1	..	..	..	..	..	1	..	..	..	1	..	..	1
Stricture of Urethra ...	..	..	..	1	..	..	1	..	..	..	..	..	..	..
6—SEPTIC.														
Erysipelas ...	2	..	..	1	1	..	4	..	..	..	..	..	1	1
Puerperal Fever ...	..	..	..	..	..	..	..	..	..	..	1	..	..	1
III.—Dietic Diseases.														
Chronic Alcoholism ...	..	..	..	1	..	..	1	..	..	..	..	..	..	..
Delirium Tremens ...	..	..	..	3	..	..	3	..	..	..	..	..	..	..
IV—Constitutional Diseases.														
Rheumatic Fever ...	..	..	3	2	..	..	5	..	..	1	2	..	..	3
Rheumatism ...	..	..	..	..	..	..	..	..	..	..	1	1	..	2
Rickets ...	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Malignant Disease ...	..	..	..	14	9	2	25	..	..	..	16	10	1	27
Tabes Mesenterica ...	..	8	..	..	..	..	8	4	1	2	..	..	..	7
Tubercular Meningitis ...	..	2	..	..	..	..	2	2	5	1	..	..	..	8
Phthisis ...	..	5	3	6	37	1	52	..	..	13	38	..	..	51
Other Tuberculoses ...	..	1	1	1	..	1	4	1	1	1	3	..	..	6
Purpura ...	..	..	..	..	..	..	..	..	..	..	1	..	..	1
Anæmia ...	..	..	..	3	..	..	3	..	..	1	1	..	..	2
Diabetes ...	..	..	..	2	2	..	4	..	..	..	2	2	..	4
Others ...	14	2	1	..	..	..	17	24	3	..	..	..	..	27

TABLE No. 6—Continued.

	EAST SUB-DISTRICT.							WEST SUB-DISTRICT.						
	AGES.						TOTALS	AGES.						TOTALS
	0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards		0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards	
V—Developmental Diseases.														
Premature Birth	26	...	...	...	...	...	26	23	...	...	...	...	...	23
Atelectasis	3	...	...	...	...	...	3	...	...	...	...	...	...	...
Congenital Malformations ...	1	...	...	...	...	...	1	3	...	...	...	...	...	3
Old Age	...	...	...	2	15	28	45	...	...	...	1	9	25	35
VI—Local Diseases.														
1 NERVOUS SYSTEM.														
Meningitis	13	9	3	3	...	...	28	9	9	1	3	1	...	23
Apoplexy	1	1	...	11	15	6	34	...	...	...	11	13	8	32
Epilepsy	...	...	...	2	1	...	3	...	...	...	2	...	...	2
Convulsions	30	7	...	...	...	...	37	11	3	1	1	...	...	16
Disease of Spinal Cord ...	...	...	...	2	...	...	2	...	...	...	1	1	...	2
Others	...	...	...	2	1	1	4	...	...	2	8	10	2	22
3—CIRCULATORY SYSTEM.														
Diseases of Heart... ..	...	...	5	35	18	5	63	...	...	4	26	18	7	55
Others	...	...	...	...	1	...	1	...	...	...	1	...	...	1
4—RESPIRATORY SYSTEM.														
Laryngitis	...	3	1	...	...	...	4	1	1	2	...	...	...	4
Asthma	...	...	1	1	1	...	3	...	...	...	1	2	1	4
Bronchitis	22	11	1	23	32	5	94	13	3	...	18	17	6	57
Pneumonia... ..	27	36	7	19	12	1	102	22	13	2	9	2	1	49
Pleurisy	...	...	...	2	...	...	2	...	...	1	...	...	...	1
Others	...	...	...	1	...	...	1	...	1	...	1	1	...	3
5—DIGESTIVE SYSTEM.														
Dentition	7	2	1	...	...	...	10	2	4	...	...	...	...	6
Diseases of Stomach	5	...	1	...	2	...	8	2	...	...	...	...	...	2
Enteritis	60	12	2	4	2	...	80	35	7	...	1	2	...	45
Obstructive Diseases of Intestine	...	...	...	2	...	3	5	1	...	...	1	...	1	3
Peritonitis	2	...	1	1	...	...	4	...	...	1	4	...	...	5
Cirrhosis of Liver	...	...	...	5	...	...	5	...	...	...	4	2	...	6
Other Diseases of Liver ...	...	...	...	1	1	1	3	1	...	...	4	3	1	9
Others	1	1	...	2	1	...	5	2	...	...	...	...	...	2
8—URINARY SYSTEM.														
Nephritis	2	1	...	14	4	...	21	...	...	...	9	7	1	17
Bladder or Prostate	...	...	...	...	1	...	1	...	...	...	1	1	1	3
Others	...	...	...	1	...	...	1	...	...	...	1	1	...	2

TABLE No. 6—Continued.

	EAST SUB-DISTRICT.							WEST SUB-DISTRICT.						
	AGES.						TOTALS	AGES.						TOTALS
	0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards		0 to 1	1 to 5	5 to 25	25 to 60	60 to 75	75 and upwards	
9—REPRODUCTIVE SYSTEM.														
B—Parturition.														
Abortion	...	...	...	2	...	...	2	...	...	...	...	...	...	...
Puerperal Convulsions	...	...	...	...	...	...	...	...	...	1	...	...	...	1
Flooding	...	...	...	1	...	...	1	...	...	1	...	...	...	1
Others	...	...	3	3	...	...	6	...	...	1	1	...	...	2
10—BONES AND JOINTS.														
Caries, Necrosis	...	...	...	1	...	...	1	...	...	1	...	...	...	1
Arthritis	...	...	1	...	...	...	1	...	...	2	...	...	...	2
11—INTEGUMENTARY SYSTEM.														
Carbuncle	...	...	...	...	...	...	...	...	...	...	...	1	...	1
Others	...	1	...	1	1	1	4	...	...	...	...	1	...	1
VII—Violence.														
1—ACCIDENT OR NEGLIGENCE.														
Fractures and Contusions	...	1	3	4	1	1	10	...	...	1	3	1	1	6
Cut, Stab	...	...	...	1	...	...	1	...	...	...	...	...	...	...
Burn, Scald	...	4	1	2	2	2	11	...	3	2	...	...	1	6
Poison	...	...	1	...	...	...	1	...	...	1	1	...	...	2
Drowning	...	2	...	2	...	...	4	...	...	1	2	...	...	3
Suffocation... ..	2	...	...	...	...	...	2	1	...	...	...	...	...	1
3—SUICIDE.														
Gunshot Wounds	...	...	1	...	...	...	1	...	...	...	...	...	...	...
Cut, Stab	...	...	...	1	...	...	1	...	...	...	1	...	...	1
Poison	...	...	...	1	...	...	1	...	...	...	...	...	...	...
Hanging	...	...	...	...	1	...	1	...	...	4	...	...	...	4
Otherwise	...	...	2	...	...	...	2	...	...	...	...	...	...	...
VIII—Ill-Defined Causes.														
Debility, Atrophy, Inanition	42	1	...	...	...	...	43	46	...	...	2	...	...	48
Mortification	...	...	...	1	...	...	1	...	...	...	2	1	...	3
Abscess	2	2	...	...	...	...	4	1	...	...	...	...	...	1
Hæmorrhage	...	...	...	2	...	...	2	...	...	1	1	1	...	3
Causes not Specified	7	1	...	4	2	...	14	4	...	...	2	...	...	6

TABLE No. 8.

Deaths and Death Rates for the past Twenty-five years.

Year.	EAST SUB-DISTRICT.				WEST SUB-DISTRICT.				BOROUGH.				Estimated Populations.		
	Total.	Rate.	Zymotic.	Rate.	Total.	Rate.	Zymotic.	Rate.	Total.	Rate.	Zymotic.	Rate.	East.	West.	Borough.
1873	1,125	29.7	...	...	631	19.8	..	...	1,756	25.1	...	...	38,010	31,841	69,906
1874	1,048	27.6	...	...	627	19.3	...	...	1,675	23.6	...	...	38,087	32,487	70,636
1875	1,155	30.3	...	...	640	19.3	...	...	1,795	25.2	...	...	38,163	33,140	71,373
*1876	1,099	28.2	...	...	655	19.0	...	...	1,754	25.9	...	...	38,241	33,806	72,118
1877	1,157	30.2	...	...	611	17.7	...	...	1,768	24.3	...	...	38,318	34,485	72,871
1878	1,081	28.2	...	...	644	18.3	...	...	1,725	23.5	...	...	38,396	35,178	73,632
1879	1,093	28.5	...	...	608	17.0	...	...	1,701	22.9	...	...	38,474	35,884	74,402
1880	960	24.9	..	...	629	17.2	...	...	1,589	21.2	...	...	38,552	36,606	75,178
*1881	998	25.4	...	...	650	17.1	...	...	1,648	21.3	...	...	38,620	37,305	75,932
1882	1,056	27.4	...	...	657	17.3	...	...	1,713	22.4	...	...	38,663	37,909	76,596
1883	1,042	27.0	...	...	601	15.6	...	...	1,643	21.3	...	...	38,706	38,552	77,266
1884	1,158	29.9	222	5.7	699	17.9	116	2.9	1,857	23.9	327	4.3	38,748	39,146	77,942
	981	25.4			753	19.3			1,734	22.3					
*1885	1,012	25.6	102	2.5	658	16.2	74	1.8	1,670	20.9	176	2.2	38,791	39,779	78,624
	844	21.4			720	17.8			1,564	19.5					
1886	1,125	29.0	182	4.7	697	17.3	156	3.8	1,822	23.0	338	4.2	38,834	40,423	79,311
	955	24.6			746	18.5			1,701	21.5					
1887	1,133	29.2	122	3.1	659	16.1	102	2.4	1,792	22.4	224	2.8	38,876	41,077	80,005
	944	24.3			720	17.5			1,664	20.8					
1888	1,005	25.8	95	2.4	707	17.0	121	2.9	1,712	21.2	216	2.6	38,919	41,741	80,705
	827	21.3			768	18.5			1,595	19.8					
1889	1,065	27.4	104	2.6	674	15.9	102	2.4	1,739	21.4	206	2.5	38,962	42,417	81,411
	883	22.7			737	17.4			1,620	19.9					
*1890	1,183	29.8	98	2.4	725	16.5	80	1.8	1,908	22.8	178	2.1	39,005	43,103	82,124
	977	24.6			795	18.1			1,772	21.2					
1891	1,214	31.1	120	3.0	822	18.8	122	2.7	2,036	24.6	242	2.9	39,048	43,800	82,842
	1,026	26.3			888	20.3			1,914	23.1					
1892	1,117	28.6	125	3.2	724	16.3	96	2.1	1,841	22.1	220	2.6	39,091	44,509	83,567
	935	24.0			781	17.6			1,716	20.6					
1893	1,260	32.3	153	3.9	731	16.1	129	2.8	1,990	23.6	282	3.3	39,134	45,229	84,298
	1,040	26.6			813	18.0			1,853	22.0					
1894	1,175	30.0	193	4.9	668	14.5	121	2.6	1,843	21.7	314	3.7	39,177	45,961	85,036
	975	24.9			744	16.2			1,719	20.2					
1895	1,335	34.1	202	5.1	872	18.7	235	5.0	2,207	25.8	437	5.1	39,220	46,706	85,781
	1,106	28.2			963	20.6			2,069	24.2					
*1896	1,088	27.2	166	4.1	773	16.0	146	3.0	1,861	21.1	312	3.5	39,263	47,462	86,530
	899	22.5			841	17.4			1,740	19.7					
1897	1,234	31.5	188	4.7	793	16.4	214	4.4	2,027	23.3	402	4.6	39,306	48,229	87,287
	1,022	26.0			878	18.2			1,900	21.8					

* These years contain 53 weeks.

For explanation, see remarks at the end of the text.

TABLE No. 9.—Eleven Years' Annual Deaths, &c.

	1887	1888	1889	1890	1891	1892	1893	1894	1895	* 1896	1897	A
Small Pox ...	—	—	—	—	—	—	1	5	—	—	—	0.6
Measles ...	31	39	40	32	25	41	21	73	40	8	49	35.0
Scarlet Fever ...	16	17	6	13	14	3	25	55	34	21	24	20.4
Whooping Cough ...	29	58	48	27	26	80	4	28	53	28	39	38.1
Diphtheria...	7	10	7	4	5	4	5	33	84	55	58	21.4
Typhoid Fever ...	14	11	9	9	15	16	23	17	18	37	21	16.9
Diarrhoea ...	105	60	84	68	105	55	161	62	135	131	188	96.6
Phthisis and Respiratory...	512	560	485	673	668	582	560	520	553	450	427	556.3
60 years and upwards ...	419	406	406	452	491	400	445	389	468	402	364	427.8
Under one year ...	469	445	479	477	531	482	600	484	659	561	671	518.7
1—5 years...	272	237	299	250	287	275	212	310	353	220	308	271.5
Under 1 year, per 1,000 births ...	175	166	179	171	188	171	206	167	217	185	219	182.8
Total Deaths ...	1664	1595	1620	1772	1914	1716	1853	1719	2069	1740	1900	1766.2
Rate per 1,000 ...	20.8	19.8	19.9	21.2	23.1	20.6	22.0	20.2	24.2	19.7	21.8	21.15
Zymotics ...	224	216	206	178	242	220	282	314	437	312	402	263.1
Rate per 1,000 ...	2.8	2.6	2.5	2.1	2.9	2.6	3.3	3.7	5.1	3.5	4.6	3.11
Births ...	2675	2674	2666	2735	2820	2805	2902	2889	3027	3023	3054	2821.6
Rate per 1,000 ...	33.5	33.2	32.8	32.8	34.1	33.6	34.5	34.0	35.4	34.3	35.1	33.82

* These years contain 53 weeks. A—Annual averages for the ten years preceding 1897.

TABLE No. 9a.—Eleven Years' Quarterly Deaths.

Quarters ending	1887				1888				1889				1890				1891				1892				1893				1894				1895				1896				1897			
	2/4	2/7	30/9	31/12	31/3	30/6	29/9	29/12	30/3	29/6	28/9	28/12	29/3	28/6	27/9	31/9*	4/4	4/7	3/10	2/1	2/4	2/7	1/10	31/12	1/4	1/7	30/9	30/12	31/3	30/6	29/9	29/12	30/3	29/6	28/9	28/12	29/3	27/6	26/9	2/1*	3/4	3/7	2/10	1/1
Small Pox ...	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	1	—	3	2	—	—	—	—	—	—	—	—	—	—	—	—	—
Measles ...	19	4	7	1	9	6	5	19	10	11	11	8	3	10	5	14	5	—	—	20	21	16	3	1	6	—	5	10	46	27	—	—	—	—	7	38	6	—	1	1	8	11	16	19
Scarlet Fever...	2	1	5	8	8	4	4	1	2	—	1	3	4	2	3	4	2	2	2	8	1	—	—	2	1	1	6	17	7	19	19	10	17	2	8	7	6	1	7	7	4	6	11	8
Whooping Cgh.	6	1	7	15	20	14	11	4	4	14	6	24	17	8	—	2	—	—	5	21	47	27	3	3	1	—	1	2	5	10	11	2	8	12	14	19	2	13	8	5	13	7	18	6
Diphtheria.....	—	3	1	3	4	4	1	1	—	2	2	3	3	—	—	1	1	2	1	1	—	3	1	—	—	1	1	3	5	8	10	10	19	24	14	27	19	15	9	12	11	10	11	26
Typhoid Fever.	1	2	5	6	2	5	2	2	1	2	4	2	2	3	1	3	5	2	5	3	1	7	5	3	3	4	9	7	—	2	6	9	3	—	5	10	12	9	11	5	4	1	7	9
Diarrhoea ...	6	4	90	5	4	7	30	19	3	8	56	17	7	3	42	16	5	7	66	27	7	4	31	13	3	11	140	7	4	1	44	13	2	1	113	15	10	7	101	13	1	7	165	15
Phthisis and Respiratory	170	120	75	147	184	137	95	144	165	116	76	128	248	139	109	177	177	204	84	203	241	129	84	128	156	136	98	170	154	143	91	132	211	138	89	115	128	108	63	151	141	80	68	138
60 yrs. & upwd.	134	130	66	89	127	98	80	101	130	84	87	105	144	91	80	137	137	168	79	107	143	93	69	95	100	118	91	136	102	114	82	91	194	111	83	80	101	94	76	131	119	84	78	83
Under 1 year...	98	95	172	104	118	103	113	111	103	109	138	129	116	79	147	134	93	120	159	159	143	107	120	112	127	99	232	142	115	115	129	125	138	113	260	148	107	102	188	164	127	99	316	129
1—5 years ...	84	40	63	85	73	64	37	64	67	71	74	87	83	57	43	67	47	54	49	136	123	81	40	31	24	34	71	83	96	91	68	55	79	65	89	120	62	46	52	60	48	59	112	89
Total Deaths...	447	394	417	406	478	395	335	387	433	371	386	423	545	365	392	470	417	536	400	561	587	415	340	374	403	389	535	526	460	473	394	392	599	439	556	475	418	374	451	497	465	367	626	442
Rate per 1,000	22.4	19.7	20.9	20.3	23.7	19.6	16.6	19.2	21.3	18.6	19.0	20.8	26.6	17.8	19.1	21.3	20.2	25.9	19.3	27.1	28.1	19.9	16.3	17.9	19.1	18.5	25.4	25.0	21.7	22.3	18.5	18.5	28.0	20.5	26.0	22.2	19.3	17.3	20.9	21.4	21.3	16.8	28.7	20.3
Zymotics ...	39	20	122	43	61	45	56	54	22	42	82	60	44	30	58	46	24	41	88	89	92	59	45	24	19	22	169	72	81	86	98	49	79	69	174	115	60	53	141	58	46	49	224	83
Rate per 1,000	1.9	1.0	6.1	2.1	3.0	2.2	2.7	2.6	1.0	2.0	4.0	2.9	2.1	1.4	2.8	2.0	1.1	1.9	4.2	4.3	4.4	2.8	2.1	1.1	0.9	1.0	8.0	3.4	3.8	4.0	4.6	2.3	3.6	3.2	8.1	5.3	2.7	2.4	6.5	2.4	2.1	2.2	10.3	3.8
Estimated Population	80,005				80,705				81,411				82,124				82,842				83,567				84,298				85,036				85,781				86,530				87,287			

* These Quarters contain 14 weeks.

TABLE No. 10.

DEATH-RATES, ETC., IN THE 33 GREAT TOWNS IN 1897.

	Population estimated to middle of 1897	Cor- rected Death- Rate.	RECORDED DEATH-RATES.							Deaths under 1,000 Births.
			Principal Zymotic Diseases.	Measles.	Scarlet Fever.	Diph- theria.	Whoop- ing Cough.	Fever.	Diarr- hoea.	
ENGLAND AND WALES	..	17.43								
ENGLAND AND WALES, less 33 TOWNS	..	16.26								
33 TOWNS	10,992,524	20.65								177
LONDON	4,463,169	19.38	2.58	0.43	0.18	0.51	0.41	0.13	0.92	159
WEST HAM	273,682	16.89	2.61	0.51	0.11	0.37	0.36	0.18	1.08	172
CROYDON	121,171	13.62	1.43	0.14	0.10	0.07	0.26	0.07	0.79	135
BRIGHTON	121,401	15.23	1.64	0.14	0.10	0.10	0.21	0.18	0.91	144
PORTSMOUTH	182,585	16.57	2.53	0.19	0.06	0.15	0.35	0.24	1.54	168
PLYMOUTH	97,658	18.51	2.17	0.50	0.05	0.13	0.54	0.08	0.87	185
BRISTOL	232,242	17.97	1.83	0.25	0.08	0.15	0.50	0.20	0.65	149
CARDIFF	170,063	16.67	2.19	0.44	0.10	0.53	0.20	0.12	0.80	151
SWANSEA	100,309	17.28	1.36	0.45	0.10	0.11	0.42	0.07	0.21	140
WOLVERHAMPTON	87,287	23.07	4.22	0.53	0.24	0.62	0.44	0.28	2.11	217
BIRMINGHAM	505,772	23.86	3.88	0.79	0.18	0.29	0.44	0.18	2.00	214
NORWICH	110,154	17.98	2.21	0.03	0.10	0.09	0.43	0.29	1.27	194
LEICESTER	203,599	19.17	3.13	0.07	0.35	0.36	0.40	0.19	1.76	205
NOTTINGHAM	232,934	20.19	2.81	0.21	0.15	0.09	0.49	0.21	1.66	206
DERBY ..	103,291	17.68	1.92	0.17	0.10	0.09	0.21	0.25	1.10	168
BIRKENHEAD	111,249	20.07	2.45	0.50	0.21	0.23	0.29	0.24	0.98	164
LIVERPOOL	633,070	26.76	3.83	0.54	0.33	0.20	0.56	0.27	1.93	200
BOLTON	121,433	24.89	4.02	1.78	0.19	0.05	0.34	0.21	1.45	186
MANCHESTER	534,299	26.17	3.81	1.18	0.23	0.09	0.56	0.19	1.56	195
SALFORD	213,190	26.88	5.50	2.22	0.29	0.15	0.53	0.31	2.00	219
OLDHAM	145,845	21.97	2.61	0.67	0.14	0.08	0.53	0.14	1.05	183
BURNLEY	106,122	22.41	3.98	1.33	0.05	0.57	0.60	0.18	1.25	220
BLACKBURN	131,330	21.90	3.45	1.11	0.05	0.06	0.63	0.29	1.31	206
PRESTON	115,103	26.78	5.63	2.77	0.04	0.03	0.36	0.30	2.23	262
HUDDERSFIELD	101,454	19.07	1.50	0.27	0.32	0.20	0.21	0.15	0.35	131
HALIFAX	95,747	18.35	1.39	0.50	0.22	0.09	0.09	0.17	0.32	140
BRADFORD	231,260	19.97	2.22	0.35	0.04	0.07	0.19	0.13	1.44	179
LEEDS ..	409,472	22.03	2.80	0.40	0.23	0.16	0.24	0.20	1.57	190
SHEFFIELD	351,848	23.57	3.49	0.56	0.26	0.13	0.40	0.31	1.83	198
HULL ..	225,045	19.50	3.25	0.11	0.27	0.14	0.25	0.25	2.23	181
SUNDERLAND	142,107	20.67	2.56	0.44	0.08	0.03	0.54	0.27	1.20	165
GATESHEAD	101,070	19.63	2.33	0.50	0.17	0.08	0.31	0.20	1.07	172
NEWCASTLE	217,555	20.79	2.09	0.43	0.10	0.12	0.28	0.16	1.00	178

TABLE A.

SUMMARY OF ROUTINE WORK.

Nuisances reported by Sanitary Inspectors	...	..	4,403
Nuisances reported at the Office by residents	...	...	157
Preliminary Notices served for the Abatement of Nuisances			3,561
Legal Notices	ditto	ditto	1,429
Inspections of Premises after service of Notices	...	...	10,780
Number of Infectious Cases of Sickness enquired into	...		1,840
Houses disinfected	...	...	515
Articles disinfected in Steam Disinfector	...	...	12,508
Reports made to the Borough Surveyor of Dangerous Buildings, &c.	...	...	326
Reports made to the Waterworks Engineer of Waste of Water	...	...	351

TABLE B.

SPECIAL INSPECTIONS.

Number of visits paid to Slaughterhouses	...	...	1,250
Ditto	ditto	Bakehouses	803
Ditto	ditto	Workshops	1,080
Ditto	ditto	Dairies	35
Ditto	ditto	Cowsheds	89
Ditto	ditto	Milkshops	1,107
Total	...	...	4,364

UNWHOLESOME FOOD CONDEMNED AND DESTROYED.

TABLE D.

Deficient air space	...	...	...	...	...	...	26
Damp and dilapidated	...	...	...	...	...	...	6
Dilapidated	...	...	...	...	...	...	5
Dilapidated and close	...	...	...	...	...	...	6
Damp, dilapidated, and close	...	...	...	...	...	...	4
Damp	...	...	...	...	...	...	1
Damp and close	...	...	...	...	...	...	2
							—
					Total	...	50

TABLE E.

SUMMARY OF CIRCULARS AND NOTICES SERVED.

To pave or repair paving of yards, &c.	...	...	...	280
To repair and cleanse soft water cisterns	..	...	...	47
To pave Courts...	...	..	...	7
To cleanse and limewash houses, premises, &c.	...	...	...	898
To provide or repair spouting	..	...	...	351
To repair closets, &c.	...	...	...	334
To provide or repair flushing cisterns to W.C.'s	...	...	...	9
To open and cleanse W.C. and yard drains	...	...	...	496
To remove Poultry	...	...	...	182
„ „ Refuse	...	...	...	66
„ „ Manure	...	...	...	89
„ „ Pigs	...	...	...	49
„ „ Hogwash	...	...	...	85
„ „ Offensive water from cellars	...	...	...	24
To trap drains	...	...	...	92
To discontinue overcrowding	...	...	..	70
To repair houses	...	...	..	133
To provide ashtubs or repair ash pits	...	...	...	221
To provide a proper supply of wholesome water in lieu of contaminated well water	...	...	...	15
To take up and re-lay defective drainage	...	...	...	47
To drain stables, cellars, premises, &c., into the Main Sewer				77
To do away with catchpits	...	...	...	25
To drain sinks	...	...	...	251
To convert privies into water carriage system	...	...	...	64
„ „ pan closets	„	...	...	26
To repair waste water closets	...	...	...	19
To remove Bell and D traps and fix stoneware gullies	...			24
To reconstruct urinals	...	...	...	26
To provide a proper supply of wholesome water	...	...	...	10
To fix wash-down closets in lieu of insanitary closets	...			22
To abate nuisance from smoke	...	...	...	6
To provide manure middens	...	...	...	18
Miscellaneous	...	...	...	340

TABLE F.

The following is a record of the Magisterial proceedings taken :—

No.	Nature of Offence.	Cases heard.	Result.
1	House in a foul state. . .	Jan. 23rd, 1897	Case withdrawn on payment of costs, as house was cleansed
2	Foul privies and ashpits . .	" " "	Adjourned for 14 days for work to be done and to pay costs.
3	Refusing to close houses condemned as unfit for habitation	Feb. 13th, "	Adjourned for 14 days for houses to be closed and to pay costs.
4	Tenants refusing to quit above-mentioned houses	" " "	Adjourned for 14 days.
5	Refusing to quit house condemned as unfit for habitation	" " "	Fined 40s. and costs, or one month's imprisonment.
6	Defective drainage and spouting and premises foul	Aug. 7th, "	Ordered to abate and pay costs.
7	Defective drainage and offensive dumbwell	" " "	Ordered to abate and pay costs.
8	Houses without a proper supply of water	" " "	Adjourned for 7 days for water to be put on and pay costs.
9	Defective drainage and roofs	" " "	Ordered to abate and pay costs.
10	Insufficient closet accommodation & defective paving	" 14th "	Adjourned for 14 days for work to be done and pay costs.
11	Defective sink drainage and sewage water in cellars	" " "	Ordered to abate and pay costs.
12	Foul water tank, no ash accommodation, and foul premises	" " "	Ordered to abate and pay costs.
13	Non-compliance with Magistrates' order in cases Nos. 14 and 15	Sep. 25th, "	Fined 30s. and costs in each case.
14	Defective spouting and paving, and dilapidated closet	Dec. 4th "	Ordered to abate and pay costs.
15	Defective sink drainage and soft-water cisterns foul	" " "	" " "
16	Foul privy and catchpits	" 11th, "	Adjourned for 3 weeks for work to be done and pay costs.
17	Defective spouting . . .	" " "	Adjourned for 7 days and pay costs.
18	Pigs being kept . . .	" " "	Withdrawn on payment of costs
19	Premises without drainage, brewhouses and closets dilapidated, and yard paving and spouting defective	" " "	Adjourned for 3 weeks for work to be done and pay costs.
20	Paving and spouting defective, brewhouses dilapidated, and premises foul	" " "	" " "