# [Report 1886] / Medical Officer of Health, Wolverhampton County Borough.

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Wolverhampton (England). County Borough Council.

#### **Publication/Creation**

1886

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Borough of



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# REPORT

ON THE

# Bealth of the Borough

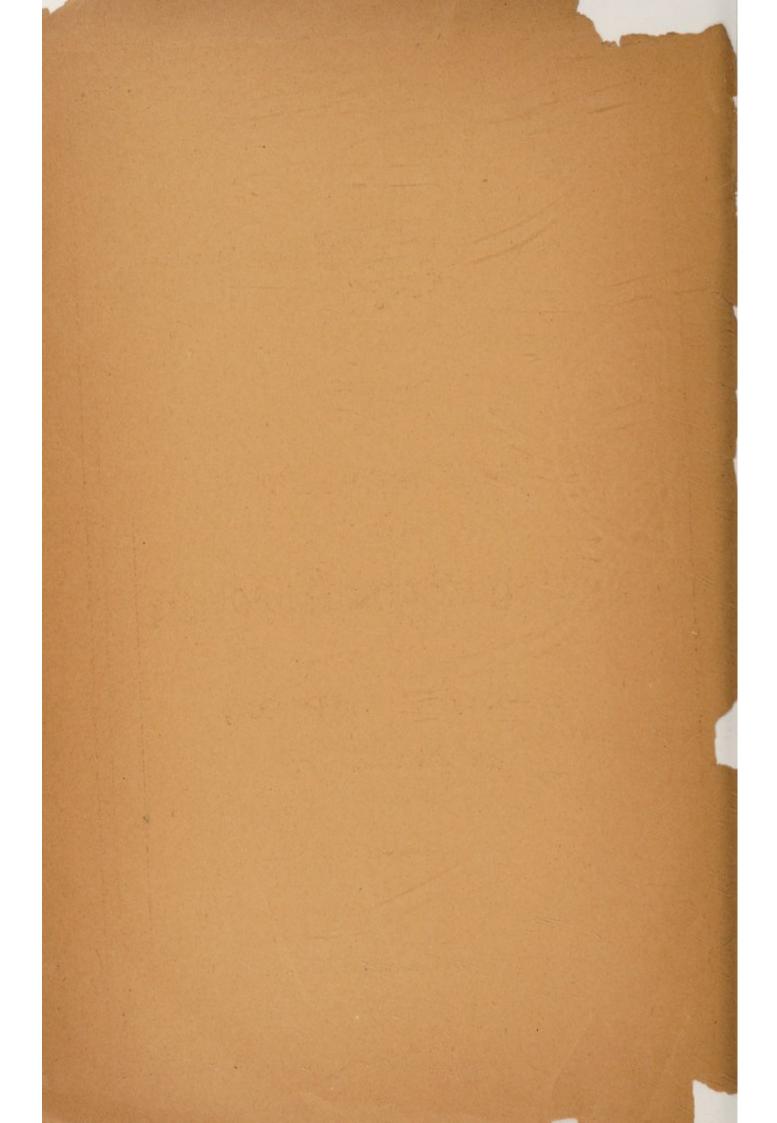
OF

# WOLVERHAMPTON,

FOR THE YEAR, 1886.

WOLVERHAMPTON:

BARFORD & NEWITT, STEAM PRINTERS, QUEEN STREET.







# REPORT

ON THE

# HEALTH OF THE BOROUGH

OF

## WOLVERHAMPTON,

FOR THE YEAR, 1886,

BY

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

MEDICAL OFFICER OF HEALTH.

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# MEDICAL OFFICER'S REPORT,

## 1886.

# Prevalence and Prevention of Infectious Disease.

THE general prevalence of infectious disease in the Borough of Wolverhampton during the year will be seen by reference to table 1; with the exception of Measles we have been singularly exempt; the details are dealt with under the different headings later on. The measures adopted for their prevention were isolation, either at the General or Borough Hospital, when it was considered necessary and could be effected, and disinfection of clothing at the stove at the Borough Hospital, and of rooms and houses by sulphur fumes or carbolic acid. I believe the public cannot be sufficiently aware of the opportunity for disinfection afforded by the Borough stove, for, though increasingly availed of, it is not yet used to the extent it should be. The only cases removed to the General Hospital during the year were two of Measles which occurred in the First Quarter (before the epidemic set in) at a common Lodging House, and which it would have been imprudent to allow unisolated, we could not take them to the Borough Hospital, as there were Scarlet Fever cases in at the time; the measure was effectual as there was no extension of the disease. At the Borough Hospital twenty-two cases were isolated, nineteen being Scarlet Fever, two Small-pox, and one Measles; the last was a case where the surroundings were especially bad, as the Borough Hospital was empty at the time I sent the child there; no apparent extension occurred. All the cases recovered except one of Scarlet Fever, which died suddenly, just after admission; it will be remembered that I do not intentionally remove cases of any severity to our Hospital, it is not however always possible to prognosticate the severity of a case of Scarlet Fever, and in this one I was mistaken; of the other cases most were convalescent, and the remaining rather mild. The average stay in the Hospital was forty-nine days. Six cases remained in the Hospital at the close of last year, twenty-two cases were admitted during the year, twenty-six cases went out well, and one died, leaving one case in at the close of the year, which went out well on January 7th, 1887. The children, almost all, are very sorry when they have to go out, and the parents as a rule are very grateful for the care taken, even when they have at first opposed the child's removal from home.

Small-pox.—On May 29th, a young woman, then ill, came from Birmingham, with her husband and infant child, to a house in the East sub-district, on the 30th Small-pox eruption appeared, and on June 2nd the case was reported by the Parish Medical Officer who was called in. The case was removed that evening to the Borough Hospital; as the infant (five weeks old) had been actually suckled up to this it was also removed, but separated from its mother; it was vaccinated on the following morning. The premises where they had been were well disinfected, all clothing stoved, and vaccination recommended to the neighbours; only the husband submitted to this. Fortunately, the steps taken were effectual, and we had no other case, except the baby, who had a scattered but typical Small-pox eruption on June 15th; the separation from its mother was then discontinued; the child's illness was very trivial, the pocks drying up and speedily falling off; the mother was rather ill at first, but eventually made a rapid recovery, she had been vaccinated in infancy; both cases went out on July 3rd.

I had difficulty in arranging for the prompt removal of the above cases as the pavilion at the Borough Hospital was then occupied by some Scarlet Fever convalescents; isolation was eventually effected in the room upstairs in the administrative block, care being taken that no communication would take place between the pavilion and the Small-pox cases. Had another case of Small-pox arisen I should have had to send the Scarlet Fever convalescents to the General Hospital and treated the Small-pox cases in the pavilion.

Measles.—It will be remembered that in 1884 we had a very severe epidemic of Measles; judging by the deaths (see table 9) by far the worst we ever had up to that date; it is very remarkable that after less than two years' interval we have an epidemic of even greater severity. So many cases remain unreported that a comparison of recorded cases with those of former years is fallacious; 1,178 are entered, there were 1,127 in 1884, the rates per 10,000 of the estimated population for the two years are, 156.5 in 1884, 147.5 this year; I am sure, however, that many more cases were unheard of this year than in 1884 on account of the severe illness of one of our Inspectors when the epidemic was at its worst. The mortality this year has been fearful; 111 deaths have occurred, a number far exceeding any previous return (see table 9); the same fatal type of disease prevailed in many other towns in the country, and especially in our vicinity. Such a death return ought to correct the general opinion that Measles is of no consequence; it is unnecessary to repeat the remarks made in the 1884 report as to the impossibility of public sanitation dealing with Measles while it is utterly disregarded by the great majority of individuals; nothing short of intelligent caution on the part of every parent could be of use, and, so far from our having this, nearly all of them spread the infection passively and not a few actively.

The 1884 epidemic commenced in the First Quarter at the Monmore Green end of the town and ceased in the Third Quarter, having spread over the whole Borough; the prevalence in the East was greater than in the West, and the mortality far greater. This year the epidemic began with the Third Quarter in the vicinity of the Cannock and Stafford Roads, and continued to the close of the year, rapidly spreading all through the Borough; the West has far the greater number of cases (793, against 385 in the East), but rather fewer deaths than the East (55 and 56); this gives a mortality in the East of more than double that in the West; this may be partly explained by the fact that many cases in the East were unreported (especially as it was the Inspector for that subdistrict who was invalided), but it is also no doubt due to the greater exposure and less protection from cold in the East; the excessive mortality really occurred during the last Quarter when the weather was severe (see the tables 8 and 4). There were few cases and no deaths until the Third Quarter, when the numbers were-East, 87 cases and 3 deaths; West, 102 cases and 5 deaths; the mortality being practically equal; in the Fourth Quarter the numbers were—East, 278 cases and 53 deaths; West, 681 cases and 50 deaths: so the excessive East mortality is confined to this Quarter altogether, and table 3 shows it to have been in the last and coldest weeks. I can give no explanation of the greater number of cases in the West beyond that already mentioned, that the numbers are unreliable owing to East cases being unreported; it is probable too that the 1884 epidemic having prevailed more in the East, that sub-district may have been somewhat more protected from a fresh attack. It is interesting to compare the numbers of reported cases, and the rates per 10,000 of the estimated populations for the two years; East, 1884, 643 cases, rate 165.4 (71 deaths); 1886, 385 cases, rate 98.6 (56 deaths); West, 1884, 484 cases, rate 122.4 (27 deaths); 1886, 793 cases, rate 192.9 (55 deaths).

Scarlet Fever.—Our records of this fever during the year are most satis factory as regards the numbers, we have had only 5 deaths, the lowest previous record being 17, and the average for the previous ten years 57.8 (see table 9). Still more remarkable is table 3; here 2 deaths are returned in the East and 3 in the West; this is misleading, inasmuch as one of the East deaths, that in the week ending August 28, was of a case removed to the Borough Hospital from the West sub-district, which was taken suddenly worse after removal and died in the Hospital (it would not be worth while to transfer this case to the West tables, as is done with the deaths in the Workhouse and General Hospital, for to do so would otherwise confuse the tables); so the facts were that we had 4 deaths from the West sub-district and only 1 from the East during the year; remembering the character of the latter sub-district, this return of only 1 death is indeed surprising; there were 37 and 25 in the years 1885 and 1884 respectively.

The number of the cases reported is also exceptionally low; the numbers for 1884, 1885, 1886 have been—Borough, 212, 244, and 47; West sub-district, 72, 98, and 28; East sub-district, 140, 146, and 19. Table 1 shows, moreover, a Quarterly diminution, most marked in the East, where the numbers are 11, 6, 2, 0; that no case of Scarlet Fever should be heard of in this district during a Quarter is as remarkable as the single death per annum. Further, reference to table 1 and page 5 in the text of the 1885 report shows this Quarterly decrease in the East has gone on since the First Quarter of that

year; broadly stated, the facts then are these: there has this year been an altogether unprecedented remission of Scarlet Fever in the Borough, this remission is particularly in the sub-district which offers the greatest facility for the diseasethe East-where it has steadily diminished for two years, until it has (for the time at least) disappeared. Of course Scarlet Fever, like other epidemic disease, has naturally periods of increase and decrease, and table 9 shows this, and shows that these periods occur at intervals of four or five years; from 26 in 1875 the deaths rose to 226 in 1877, fell again to 17 in 1879, rose again to 64 in 1881, fell to 24 in 1883, and rose in 1885 to a much lower than any previous maximum, viz., 46, falling this year to only 5. In last year's report I pointed out very fully the strong grounds for concluding that the low maximum of 46 was due to the preventative measures taken, and especially to the use made of the Borough Hospital as a means of isolating the convalescents; this year's results forcibly confirm that conclusion, and I think it will appear morally certain that the extra means of isolation provided has brought about our satisfactory condition. In a district like ours, with such facilities for unnoticed, unreported, and uncared-for cases, no measures could stamp out Scarlet Fever, but in proportion to their thoroughness they should modify its severity, we must expect good and bad periods still, and can only hope that each will be respectively better than those of former years; this is exactly what table 9 shows to be the case with us the last two years; now (as regards our position towards this fever), the only difference between these and former years has been the extra isolation attained by the use of the Borough Hospital, it is hardly possible not to associate the two as effect and cause. (There is a great improvement on 1875.79 in 1880-84; this was probably due to generally greater care and to an increasing use of the General Hospital isolation, but as already pointed out in the 1885 report, that isolation could not be rendered fully efficient, and the addition of the Borough Hospital for mild and convalescing cases was an immense advance.)

This conclusion is confirmed by the East returns, here this isolation has been very thoroughly utilised, and here the good results are by far the most marked; although much used (and more of late) in the West also, it has never been so much used as in the East, hence, although a good effect has been produced there, it does not nearly attain the perfect result of a Quarter without a case. The force of all this is greatly intensified if we bear in mind that in all other respects the East is much the most favourable for the extension of Scarlet Fever. It will add greatly to the appreciation of the foregoing if the introductory remarks on the use of the Borough Hospital and the article on Scarlet Fever in the 1885 report are read in connection with it.

It was not found necessary to move any case of Scarlet Fever to the General Hospital during the year, but 5 cases were taken there by their friends and detained, most being cases of dropsy during a late period of the disease. The following shows briefly the proportion of cases and removals in the two subdistricts:—

	Quarters.	1st.	2nd.	3rd.	4th.	Year.
East	Cases reported	11	6	2		. 19
Sub-District	Removed to Borough Hospital	9	2*	1+		12
West	Removed to Borough Hospital	4†	1†	1	1	-7
Sub-District	Cases reported	15	3	4	6	28

Two cases were also taken to General Hospital by their friends.
 + One case taken to General Hospital by friends.

It is at once seen how much greater is the amount of isolation obtained in the East; it must be remembered, however, that a proportion of unremoved cases in the West are really well isolated at home, although, as a rule, this isolation is very uncertain.

As usual, I add a few of the most flagrant instances of neglect, because I think it cannot be too well known how very bad the misconduct is, mainly, perhaps, through ignorance.

The numbers in the following are from the general record of infectious diseases, and re-commence each quarter:—

- Case 7; child had been taken ill three weeks ago, was only kept away from School for a few days while the rash was out and then sent again; is now dropsical, for this the Parish Medical Officer was called in and he reported the case.
- Case 10; several days ill, found lying on a sofa in the kitchen at a fried-fish shop.
- Cases 20, 21, and 22; 2 boys of 14 and 12 years of age are found peeling freely, having been ill about a fortnight; they were playing in the garden; a girl, aged 15, is in bed, having been three days ill; she worked at a trimming shop, where another sister is now working. The boy of 12 had attended School for some days after his brother was taken ill, until he sickened himself. No doctor attended these cases; the rooms were carpeted and curtained, table-covers on, and no attempt whatever made to limit the infection. Another sister, about 20 years old, who kept house (mother being dead), would not hear of any of the cases being moved, and said she had treated them herself and knew perfectly well how to take care of them; I spent a long time reasoning with her and pointing out the danger incurred by the present carelessness, but quite in vain. Later, I found that this girl attended a dancing class, a soirée, and Church regularly during these illnesses. One of the children went into a neighbour's, two doors off; here an only child took the fever and died.
- Case 24; been ill about 11 days, now sitting up in bedroom and peeling; another child is now attending School; and four grown lads are out at work, one being a telegraph boy.
- Case 49; boy aged 12, been ill a month ago, no doctor attended, but medicine was obtained from a chemist; sent to School one day since illness; now dropsical and peeling freely.
- Case 10 (second Quarter); boy, age 5, been ill a few days; small house—kitchen and two bedrooms—three adults and five children living here, one child now attending school; a stranger was in the house, and while the Inspector was there two neighbour's children came in. Mother refused to allow this child's removal to Hospital, but the father over-ruled her.

The 47 cases this year were reported as follows:—By our Inspectors, 4; School Board Inspectors, 3; School-Mistress, 1; Parish Medical Officers, 15; other Medical Men, 3; Parents asking for disinfection after illness, 4; Parents reporting the illness, 3; General Hospital, 5; other and private sources, 9.

The following is also illustrative:—Two children were in bed with Scarlet Fever, and a Bailiff, though shown a certificate that they had infectious disease, removed the bedding, first, to a public Inn, and secondly, to a sale room; we fortunately had it seized and disinfected at once. The man was prosecuted and fined for the offence.

Diphtheria.—We have only heard of a few cases (see table 1), most of them single ones; no doubt there have been very many unreported; the number of deaths would indicate a considerable number of cases (see table 3), thus the only cases reported in the East sub-district are the two deaths; and in the West eight of the thirteen reported cases are deaths. It would evidently be quite inaccurate to compare the sub-districts on the number of cases reported; the deaths would afford a better comparison; that there should be eight deaths in the West against two in the East evidently indicates a much greater number of cases having occurred in the former sub-district; this fact I cannot give any sufficient explanation of, nor would it be safe to do so, for the numbers are too small to draw any conclusions from. Of the East cases the first was at a house where well water was used; the water had been analysed last year and found suspicious, and the well was in consequence cleansed; this was the only point made out, and as there were no other cases found this did not seem of much import. The second case was, I think, due to the shocking bad state of a closet, for which a notice had already been served before the child was taken ill. Seven of the West cases were separate ones, and there were three pairs; of the latter the first pair was unaccounted for, one was a death reported by the Registrar, and on calling to inquire the second case was heard of. The next pair of cases was reported, through the registration of one of their deaths; here a cellar drain was untrapped and sewer gas perceived escaping. The third pair was at a house in a close ill-ventilated court, but no more definite cause was found. Of the seven single cases, three were reported by the Registrar after their deaths; one was in a close, dirty locality, but nothing definite was found; in another case there had been a death from croup fourteen days before, and this was probably diphtheritic, the cellar was very dirty and offensive; in the other case no cause at all was made out. The other four cases were all explained; first, softwater tank offensive and defective drainage in cellar and brewhouse; second, bad untrapped drain; third, bad closets; fourth, defective sink drainage, and closet empties in a wet ashpit close to the house; the first, third, and fourth of these were fatal cases.

Typhoid Fever.—We have heard of twelve cases, all quite separate, in the East sub-district. Ten of these were altogether unaccounted for; five were only heard of from the Registrar after death, the other five had been all of them a long time ill when reported; another case came ill from a sea-side town; in the twelfth case there was a very offensive cellar from leakage of sewage into it from a

defective drain, but no definite causation was made out. We heard of six cases in the West sub-district, four being separate, two connected; of the last two the first was a lad who came ill from a sea-side town, and the other, his mother, probably caught the fever when nursing him. Of the four separate cases two had got the infection at sea-side places; no causation was made out in the remaining two cases.

## SANITARY CONDITION OF THE BOROUGH.

Diarrhaa.—During the year 1884, with its hot summer, we had by far the highest Diarrhœa death return on record up to that date; 1885 had much less real hot weather, and had a particularly low Diarrhoea return; this year the summer was again very hot, and the Diarrhea deaths exceed even those of 1884 (see table 9). It should be put on record that the damson crop has been so abundant that the fruit was almost thrown away; although recording the fact I don't pretend to trace any connection; summer Diarrhea is at present, except in some broad relations, an unsolved problem; certainly it seems almost limited to large towns, and the children in the country must have equal facility for fruit eating. Table 10 in our report shows for each year the fact that with warmer weather the death-rates for the large towns and for the rural districts differ more widely, there being invariably a great fall in the rural rate, and in the hotter years rather a rise in the The same table shows this rise in the towns is due to Diarrhea. We would naturally assume that with increased warmth we should find a diminished death-rate, and reference to our tables for any year shows that (excluding accidental epidemics of infectious disease) this is the case for nearly all definite causes of death except Diarrhea. There are evidently, therefore, certain insanitary conditions in large towns which are aggravated by high temperature and are conducive to Diarrhea, and for own Borough we must draw the practical conclusion that these insanitary conditions are largely prevalent, and as much so in the West subdistrict as in the East. Indeed in the 1884 report I dwelt on the fact that the proportionate increase in mortality due to the summer Diarrhea was greater in the West than in the East, and there are more grounds for the comment this year, the West Diarrhœa being much greater than in 1884; taking only deaths of children under five years the numbers are :- East, 1884, 72 deaths; 1886, 78 deaths. West, 1884, 49 deaths; 1886, 64 deaths.

General Statistics.—The features of the year as shown in tables 9, 3, and 4, are mainly these:—A rather high death-rate, a rather high return from Phthisis and Chest affections; the highest recorded returns from Measles and Diarrhæa; and a very high return of children under five years of age. In all these it greatly resembles 1884; the Quarterly details, however, differ. This year the First Quarter was bitterly cold, and we had in consequence a very high death return from Chest affections, this being marked in both sub-districts. The Second Quarter we had mild weather except during the earlier weeks, we had also a marked exemption from zymotics, and consequently very low death returns from every cause and the lowest recorded rate for this Quarter; the respiratory deaths in the East are, how-

ever, rather high. The Third Quarter we had continued mild weather until the middle, when the heat became very great; we had also continued exemption from infectious disease, except a commencing epidemic of Measles; we find in consequence very low death returns from all causes except Diarrhea, which is terribly high, and hence the death-rate is an average one, the Diarrhoa being balanced by the other favourable items; further, the Diarrhea is severe in both sub-districts. In the Fourth Quarter we had at first a continuance of the autumn heat and then very severe winter weather; we had therefore a high Diarrhœa return in each subdistrict at first, and later a very high return from Chest affections, the East being nearly three times greater than the West; besides all this we had a terrible mortality from Measles; hence the Quarter's death-rate is enormous, being the highest since the first Quarter of 1875. The year is singularly unfortunate in having three bad factors, the very severe weather at the beginning and end, the intense heat of summer and autumn, and the bad epidemic of Measles. The only other point calling for remark in the tables is the relative deaths from Phthisis and Respiratory diseases in the two sub-districts; this is seen best in table 3; Phthisis: East, 95; West, 47; Respiratory diseases: East, 211; West, 107; this fearful disproportion is of course mainly due to the greater poverty of the East, and no doubt greatly contributed to by its more exposed general aspect as compared with the sheltered West. This year's tables confirm in the strongest degree the conclusions drawn in 1884 as to the relative liability of the East sub-district to cold, and the West to heat effects.

What effect insanitary conditions and conduct may have to do with the above returns is only directly evident as regards the infectious diseases, and it is against these that the most evident and direct efforts of sanitation are aimed; our work in this field has been already alluded to. Far more important, however, are the unnoticed and indirect effects of insanitation in inducing the high returns of deaths from other causes; I pointed out in last year's report that insanitary conditions were rarely productive of directly fatal results, but brought about a state of ill-health that rendered one liable to death from other causes; and it is in this way that the defects of a town like ours brings about our high mortality. It is well that we should remember that our mortality is high, that although we are in this respect certainly much better than we were ten years ago, yet our returns (and the conditions they indicate) are yet far from satisfactory.

My object in adding table 10 to these annual reports is to show the relative prevalence (as estimated by their deaths) of certain diseases in our District and in the 27 large towns collectively, and to show the relation our death-rates (both Borough and sub-districts) bear to those of the large towns collectively and the Urban and Rural Districts. The comparison this year is confused by the Measles, but making allowance for this we see Wolverhampton does not compare unfavourably with the towns; but this is is a very lowly ideal; the status of the 27 Large Towns of England is not one to be at all satisfied with. Compare our quarterly rates (even our corrected rates, and deduct the zymotic rate in the last Quarter as it so largely depends on Measles) with the rural rates, and even with all

these advantages we have—Wolverhampton, 22·3, 17·1, 19·1, 19·2; Rural Districts, 21.6, 17.5, 15.4, 16.5; this is rather humiliating, but is much more important to remember than our relation to the town rates. In page 11 of last year's report I have pointed out that the largest factor in the production of town unhealthiness is impure air, and that the work of sanitation aims mainly at "reducing all avoidable causes of impurity to a minimum." No one acquainted with our Borough needs statistics to prove that avoidable causes of impurity are abundant and the work of removing them great; about this work, the principal function of our Inspection and Nuisance Department, I wish to make some remarks. By far the most of the work is to prevent retrogression, only a small portion to effect actual improvement; for instance, of the 1,896 notices for the abatement of nuisances served during the year, only 801 were for improvements, the remaining 1,595 were for the removal of new nuisances or for repairs; that is to say, over five-sixths of the year's inspection work was devoted to keeping the Borough from getting any worse than it is. It is a very serious consideration whether the improvement and the reparation together at present exceed the relapse, that is to say, whether we are still advancing; I believe we are, but it cannot be known except after the lapse of some years; and the possibility that we may be at a standstill should not be lost sight of, so that we may be prepared, if necessary, for more work of repair. The large proportion of this reparation part of the work is not to be wondered at; in the first place, remember the bad habits of so many of the tenants; the Inspectors' reports are full of such matters as, filthy houses and premises; keeping various animals in utterly unfit circumstances; storing stinking wash, manure, &c.; throwing slops into ashpits, on roadways, and into closet pans; and over-crowding; all of these will keep recurring. Again, there is the poverty of so many of the small property owners, which often prevents them executing needful repairs-opening choked drains, cleansing premises, &c .- still less are they able to execute improvements; and, moreover, there is great apathy and neglect (of both repairs and improvements) on the part of many of the agents and owners. And above all, there is on the part of too many of all classes the most complete ignorance of sanitation altogether and a consequent contempt for its requirements. To a certain degree, the greater the actual improvement in the general condition of the town the more of this mere reparation work will be needed; just as the cleaner we wish to keep a house the more time and labour must be spent in regularly cleaning it.

The above considerations were suggested to me by the fact that our inspection work was somewhat crippled during the close of the year by the sad illness of Sub-Inspector Thomas, whose duties included the routine inspection of the East sub-district; great credit is due to Inspector Blanton for the zealous and untiring manner in which he, as far as possible, completed the work in addition to his own; but the reparation part of it was not as full as usual.

1,896 notices were served, 194 were on hand from last year, 1,971 were complied with.

Unwholesome Food.—4 beasts, 4 calves, 3 sheep, 18 pigs, 1 hind-quarter of beef, 58lb. of veal, 21lb. of mutton, 4lb. of pork, and 5 bags of mussels have been

condemned and destroyed as unfit for food; of these notice was given. One beast, 116lb. of mutton, 7 barrels of herrings, 14½lb. of gooseberries, 317 oranges, and 15 lemons were seized by our Inspectors and destroyed under Magistrates' orders.

Disinfection.—41 houses and 1 school have been disinfected with sulphur fumes; 1,324 articles of clothing have been disinfected at the Borough stove.

#### 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, others from the West Sub-District, and others are returned as "no home"; the particulars of these cases are all entered in table 7. In all the tables for the Sub-Districts the deaths are referred to where they belong, and in all the tables only cases belonging to the Borough are entered for the last three years, except in table 9, where the Borough totals include "no homes" in order to compare with former years; and so also do the corrected Borough deaths for the last three years in table 8; in this 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 populations of the Borough and of each Sub-District being estimated separately, the former is not the sum of the latter.

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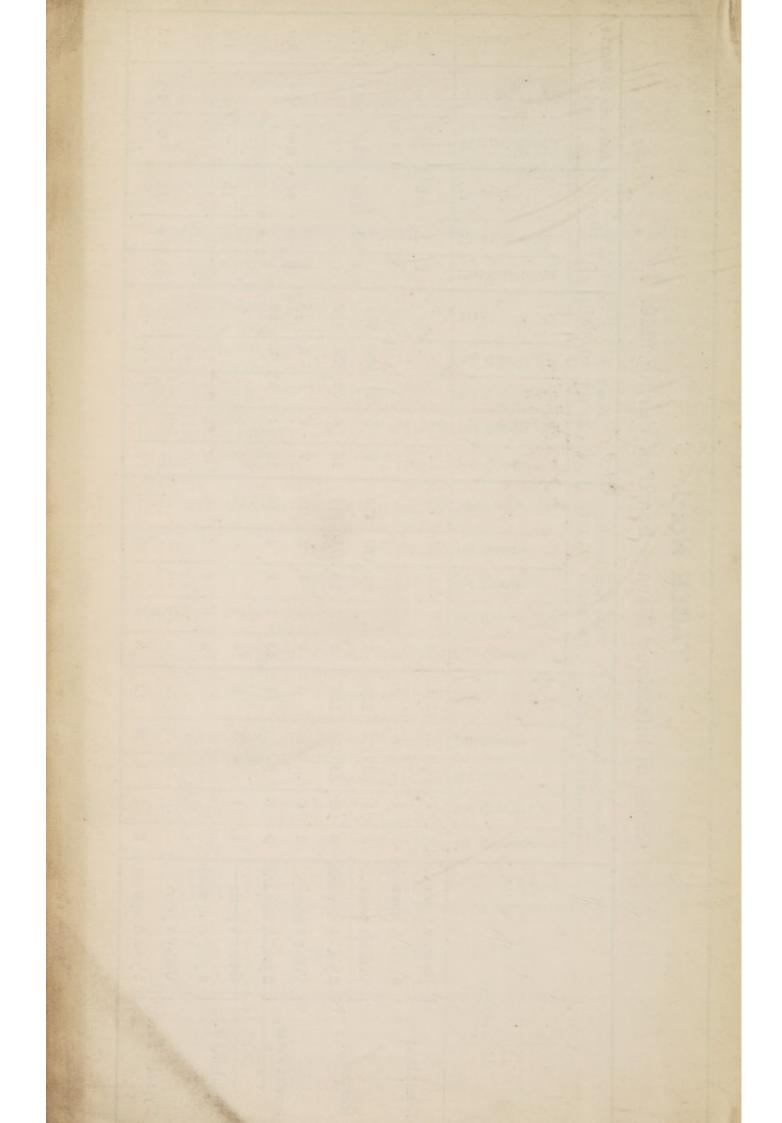
Area of the Borough, 3,440 acres.

Population 1881 (census April), 75,766.

TABLE NO. I.

Cases of Infectious Disease heard of during 1886.

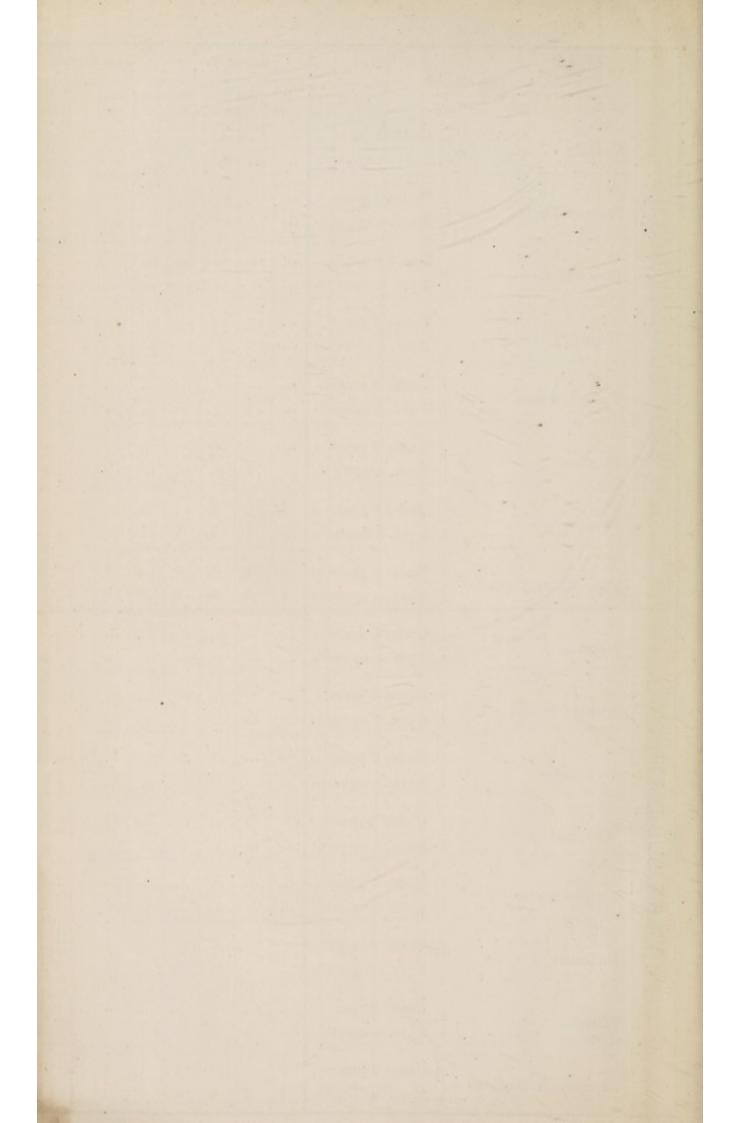
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000 or	Вотопер	Ġ1		147.2		9.0		1.8	0	24
RATE PER 10,000 OF	West Sub-district	:		192 9	0	8.9		 	7	1.4
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TOTALS.	West Sub-district	:		193	8	27	,	13	c	9
	East Sub-district	6.1		88.00	,	19		21	ç	12
В0,012.	Year	1	725	458	15	85	1	œ	:	18
191	4th Quarter	:	: 286	878	0.1	4		-	:	7
Borough Ation 8	3rd Quarter	:	127	62	-	70	:	1	;	1
Borol	2nd Quarter		1 20	4	5	4	3	60	:	27
D. D.	1st Quarter	:	: -	14	7	19	4	93	:	. ∞
lor,	Year	:	476	817	10	18	20	8	:	9
SUB-DISTRICT, ATION 41,101.	4th Quarter	:	410	271	0.1	4	:	-	:	80
Sub-1	3rd Quarter	:	64	88	-	00	:	1	:	:
West Sub- Population	2nd Quarter	:	: :	01	63	Н	0.1	က	:	П
P-A	1st Quarter	:	: 01	9	70	10	60	00	:	64
ют, 022.	Year		249	136	5	14	01	:	:	12
EAST SUB-DISTRICT, POPULATION 39,022.	4th Quarter	:		102	:	:	:	:	:	4
SUB-I	3rd Quarter	:	.: 69	24	:	61	:	:	:	1
EAST SUB-I POPULATION	retrang bas		٠, ١٥	61	60	8	П	:	:	-
P. H.	1st Quarter	:	: 10	00	67	6	1	:	:	9
		Under 5 years	Under 5 years	5 yrs. & upwards	Under 5 years	5 yrs. & upwards	Under 5 years	5 yrs. & upwards	Under 5 years	5 yrs. & upwards
		Small Pox	_	Dieasies	Searlot Fover	_	Dimbehowia	:	Tryphoid Fever	-



1000	William Control	-								_	2.0	_		-	-							-		_						-		200	100		-	131	
									7	Vee	klv	RE	TU				LE				2. DEA!	THS	dn	ring	1886												
	T		-	BIR	THS.					1	My	TEL	10.	1011)	-		1101		,		DEIX.	1110	uu	DEA	-	,,											
1886.	East	Sub-Distr		est Su	b-Dist	riet.	1	Boroug	h.				ast St	ub-Di	istrict						West	Sub-I	distric	t.		T			Borou	gh.				Inst	Public itution	8.	ork-
Week ending	Males.	Females.	Rateper 1,000 per annum.	Females.	Total.	Rate per 1,000 per annum.	Males.	Females.	Rate per 1,000	Males.	Femules.	Total.	Rateper 1.000 per annum.	Over 60 Years	Under 1 Year	Under 5 Years	Uncertified.	Inquests.	Males.	Females.	Total. Rate per 1,000	Over 60 Years	Under 1 Year	Under 5 Years	Uncertified. Inquests.	Males.	Females.	Total. Rateper 1,000	Over 60 Years	Under 1 Year	Under 5 Years	Uncertified.	Inquests.	Not belonging to the Borough	No Home.	W. Sub-district.	Total in Work-
January 9 16 23 30. February 6 20 27. March 6 13 20 27. April 3.	17 14 19 11 19 6 10 18 16 11	13 30 13 30 17 31 17 36 7 18 19 38 23 29 10 20 13 31 15 31 14 25 13 32	40-1 1 40-1 1 41-4 1 48-1 1 24 1 50-8 1 38-7 1 26-7 1 41-4 1 41-4 33-4 1 42-7 2	$     \begin{array}{c c}       2 & 19 \\       1 & 12     \end{array} $	31 23 26 31 29 31 30 25 25 25 25 29 3 28	39·3 29·1 33 39·3 36·8 39·3 38 31·7 31·7 36·8 35·5	32 29 25 32 26 34 25 28 31 23 28 39 21	32 29 30 23 33 35 22 25 33 26 21	55 35-8 51 39-7 54 35-2 52 40-4 59 31-5 57 43-6 56 36-5 56 36-5 54 35-2 56 39-1 57 30-1	13 9 8 5 5 15 15 10 2 11 12	9 6 11 7 12 5	12 19 23 22 12 14 17 13 26 17 23 17	16 25·4 30·7 29·4 16 18·7 22·7 17·3 34·7 22·7 30·7	2 6 6 5 5 1 8 3 5 5 5 5 1	3 2 4 7 2 6 6 5 8 4 5	7 3 8 8 4 7 8 6 9 5 8 7 6	 1 1  1 1 1 1 1	7	6 13 6 7 8 9 7 11 11 8 12 6 5	7 8	16 20- 22 27- 13 16- 16 20- 15 19 15 19 20 25- 25 31- 15 19 20 25- 15 19 7 8-	9 1 5 1 6 3 7 3 6 8 7 11 4 3 6 6	3 6 2 4 2 4 4 4 4 7 1 3	6 8 5 4 3 6 6 7 8 6 9 4 4	1 1 1 2 2 1 1 1 1	13 24 19 16 16 14 15 18 26 18 23 18	15 17 17 22 12 15 17 15 25 14 20 14 7	28 18- 41 26- 36 23- 38 24- 28 18- 29 18- 32 20- 33 21- 51 33- 32 20- 43 28- 32 20- 18 11-	7 7 7 7 7 7 7 11 2 12 9 4 8 14 5 11 6 8 9 10 8 11	6 8 6 11 4 10 10 9 12 8 12 2 8	13 11 13 12 7 13 14 13 17 11 17 11	1 1 1 2 1 1 1 1 1	2 3 2 5 2 2 2 2 8 6 3	1 4 1 2 6 2 2 1 2 6 3 1	1	2 1  1 2 1 1 4 2  1	2 3 2 9 4 3 4 6 5 1 1 1 6 1 1 1 1 6 4 10 1 5 1 3 1 3
April 10 ", 24 May 1 ", 15 ", 22 June 5 ", 12 ", 12 ", 12 ", 12 ", 12 ", 12 ", 12 ", 13 ", 14 ", 15 ", 15 ", 15 ", 26 July 3	16 20 15 12 15 16 20 16 14 18	28 44 16 36 11 26 10 22 7 22 16 32 14 34 15 31 11 25 14 32 17 28 17 30	58-8 1 48-1 1 34-7 1 29-4 2 29-4 1 12-7 1 45-4 1 41-4 3 33-4 42-7 1 37-4 3 40-1 1	80 171 13 154 14 16 13 9 11 11 14 17 11 12 12 15 11 9 9 9 19 12 14 6 13 18 14 11	5 28 5 30 9 22 1 32 7 31 2 23 5 27 9 20 9 18 2 31 5 20 3 31	35·5 38 27·9 40·6 39·3 29·1 34·2 25·3 22·8 39·3	29 34 28 33 29 27 32 27 23 37 25 26	43 32 20 21 24 28 29 24 20 26 23 35	31 36-6 72 46-5 56 43 31-5 54 35-5 53 34-5 55 35-6 61 39-5 51 33-4 43 28 63 41 48 31-5 61 39-5 51 33-3	9 8 6 6 2 6 6 5 6 6 8 9 7 8 4 7 7 11 10 7 7 7	7 5 9 10 7 5 8 6 8 8 8 8	15 11 15 16 13 14 16 10 15 19 18 11	20 14·7 20 21·3 17·3 18·7 21·3 20 25·4 24 14·7	57 3 3 2 4 3 3 2 3 2 1 5 4 4 2 2	58 5 2 2 2 3 5 6 2 4 7 4 5 7	86 7 6 5 6 7 5 7 3 9 11 6 6 8	6 2	26 1 1 1 1 1 1 1 1 4	109 1 2 7 9 7 5 6 2 8 8 6 5	5 1 6 3 6 9 5 4 5 7 5 9	7 8- 8 10- 15 19- 10 12- 11 13- 15 19- 15 19- 15 19- 13 16- 15 19- 11 13-	8 1 1 0 5 6 3 9 4 4 3 8 2 2 4 4 3 4 4	48 2 4 3 5 1 6 1 4 1 2 5 5 2	76 2 5 5 6 3 10 3 4 3 3 5 8 3	4 9 1 ii	10 13 15 13 11 15	12 6 15 13 13 14 13 10 13 15 13 13 12	22 14 19 12 30 19 26 16 24 15 29 18 23 14 22 14 34 22 31 20 26 16 30 19	3 4 3 3 5 7 9 7 6 7 9 6 9 4 3 7 1 10 1 2 8 9 6	7 4 11 7 6 5 9 9 10 9	9 11 10 12 10 15 10 7 12 14 11 14 11	10 2  1  1  1 	35 1 1 1 1 1 2  1 1 1 1 2 	32 2 3 6 4 2 4 4 1 2 5 1 4 1	5 :	1 2 2 2 3	7 59 4 1 3 3 5 5 4 3 1 3 3 3 4 2 8 2 1 5 5 3 2 8 2 1 5 5 5 3 6 2 8 2 8 2 8 2 8 2 8 2 8 2 8 2 8
2nd Quarter  July 10 " 24 " 31 August 7 " 14 " 21 " 28 September 4 " 18 " 18 " 25 October 2	12 12 13 13 10 20 14 8 15 11 13	13 25 7 19 12 25 18 31 15 25 14 34 16 30 19 27 7 22 14 25 9 22 14 27	25·4 1 33·4 1 41·4 1 33·4 1 45·4 1 40·1 1 36 29·4 1 33·4 1 29·4 36	78 160 13 16 14 12 11 9 17 12 10 13 11 16 12 18 5 17 14 9 15 5 8 13 13 13 14 7	3 29 2 26 2 20 2 29 3 23 3 27 3 30 7 22 9 23 5 20 3 21	36·8 33 25·3 36·8 29·1 34·2 38 27·9	25 26 24 30 20 31 26 13 29 26	29 19 21 30 28 30 34 36 16 19	26 36- 54 35- 45 29- 45 29- 46 31- 60 39- 48 31- 60 39- 49 31- 45 29- 445 29- 443 28 53 34- 51 33-	2 6 3 9 3 2 1 8 2 9 7 5 1 5 1 5 9 10 3 6 3 13	2 5 3 6 3 9 6 12 9 14 7	8 14 5 14 12 14 11 22 15	6-6 18-7 16 18-7 14-7 29-4 20 36 30-7	2 5 3 . 2 . 2 5 2	54 3 4 1 5 5 6 5 8 5 12 6 14 7	86 6 1 8 7 10 7 11 7 18 14 22 11	6 1 1	1	4 4 2 8 6 5 4 7 10 11 9 7	5 6 3 6 6 9 4 3 4 6 3 13 4	9 11- 10 12- 5 6- 14 17- 12 15- 14 17- 8 10- 10 12- 14 17- 17 21- 17 21- 12 15- 20 25- 20 25-	4 2 6 4 3 2 7 5 2 1 7 1 2 6 3 7 1 5 3 2 1 3 2 3 4	100	60 3 4 3 4 6 7 6 5 9 13 8 14 13	1 6	4 16 15 10 9 17 16 24 25 22 25	7 11 6 12 9 18 10 15 13 20 10 26 16		4 6 9 5 5 5 5 2 5 6 3 2 2 3 4 8 8 9 3 4 5 6 4 5 2 5 7 8	6 6 4 9 10 10 9 10 11 22 11 23 17	7 10 4 12 13 17 13 16 16 31 22 36 24	7 1 1 1 1 2	15 3  2 	39 2 2 2 2 2 2 2 1 4 3 1 2 3 3	·· · · · · · · · · · · · · · · · · · ·		15 37 1 4 2 3 3 2 3 3 2 3 3 2 3 3 4 1 1 1 2 2 3 3 3 4 2 5 6
3rd Quarter October 9 " 16 " 23 " 30 November 6 " 13 " 27 December 4 " 11 " 18 " 28 January 1	23 14 19 16 19 18 12 11 9 8 11 18	13 32 11 27 14 33 18 36 12 24 10 21 9 18 13 21 15 26 14 32	42·7 30·7 12·7 36 14·1 148·1 132 28 12 28 12 28 13 28 14·7 42·7 14·7	8 21 12 7 12 11 17 15 13 10 18 11 15 14 12 16 17 10 11 14 18 12 16 13 10 10	1 29 7 19 1 23 5 32 9 23 1 29 1 29 1 29 2 28 9 27 1 25 2 20 3 29	36·8 24·1	31	30 16 24 26 24 29 26 26 26 19 27 27	59 33 61 39-42 27-55 35-59 38-56 36-65 42-33 34-49 31-45 29-46 30 61 39-49 31-5	3 13 8 14 4 15 5 14 3 13 5 9 7 7 3 6 14 13 7 17	8 11 9 11 10 6 8 9 7 12 15 18	24 23 26 24 19 17 16 13 26 28 35	25·4 32 30·7 34·7 32 25·4 22·7 21·3 17·3 34·7 37·4 46·7	1 2 6 7	81 8 8 8 5 5 6 3 4 9 77 8	126 12 12 16 17 13 12 6 5 8 18 14 22 21	5 1	8  2 2 2 2 1 1 2   1 2 1	93 7 6 7 6 12 7 8 10 7 15 9 3 10	7 8 11 13 7 12 10 12 12 6 6 6 6 3	165 16: 14 17: 14 17: 18 22: 19 24: 19 24: 19 24: 19 24: 19 24: 19 24: 19 24: 18 32: 22 27: 19 24: 21 26: 15 19 9 11: 13 16:	7 1 7 2 8 1 1 3 1 2 1 3 8 3 9 2 1 6 6 3 4 4 4 3	6 2 4	95 10 12 10 12 11 11 11 12 9 11 9 6 7	1	18 19 1 21 3 21 26 20 17 2 17 18 1 29 1 22 1 26 1 26	15 19 20 24 17 18 18 21 19 18 21 24 19	33 21 38 24 41 26 45 29 43 28 38 24 35 35 35 24 32 20 47 30 43 28 44 29 44 29	·5 5 ·7 6 ·7 3 ·3 8 ·6 6 ·7 6 ·8 7 ·8 7 ·8 7 ·8 8 ·8 6 ·8 6 ·8 8 ·8 6 ·8 6 ·8 6 ·8 6	14 12 11 10 10 11 11 14 17 18 17 18 16 16 17 18 12 18 18 12 18 12 18 12 18 12 18 12 18 12 18 12 18 12 18 12 18 12 18 12	23 17 17 17 17 29 23 28 28	7 1 1 2 2 1 2 1	13  2 3 5 1 1 2 2  1 2 3 5 2 2 3	27 1 1 1 1  3  2 6 3 1 2 2	3 1 1 1 2 2 2 1 1	1 2 2 1 2 3 1 1	30 36 1 1 3 1 3 3 5 1 1 4 2 7 6 6 6 3 3 3 1 3 2 4 4 2
4th Quarter .	755		37-6 68	16	1339		10000	1364 2	87 34.	1 497	436				78 271 	176 474 	7 24 				220 21 746 18	2 173	62 218 		11 8		798	1679 2 1701 2	1 35		834	35 	87	23 121 	10 22 		27 40



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	Week endi	ng		Jane	ary.			Feb	reary			M	arch.				April				M:	g.			30	me.			Ju	ly.			Au	gust.		2	Septen	ber.			Oct	tober.			Nov	ember			Decer	mber.	- 2	Jan.	18
			9	16	23	80	6	13	20	27	6	15	20	27		3   1	0 1	7 9	4	1	8 1	5 2	20	5	12	19	28	3	10 1	7 2	81	7	14	21	28	4	11	18	25	2	9	16 1	13 8	10	6 18	20	27	4	11	18	25	1	To
		Under 5 years 5 yrs. & upwards						***																									1	1					1		2	3	2	4	6 2	8	2	4	7	4	6	4	
		Under 5 years 5 yrs. & upwards												-											1										1																		
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		Under 5 years 5 yrs. & upwards							1			***						1 .			1			1	1	2					. 1				1		1		1	2	1				. 1	1			1		1		
	Typnoto Faves	Under 5 years 5 yrs. & upwards									1												-	-													1								1			1		1			
	Diaremea	Under 5 years 5 yrs. & upwards		1								1	1			-	1	1 .			1	1		1			1		2 .		1 8	1	4	1	2	4	10	7	13	4	5	1	8	5 -	2	-			2				
	Parsosas · · ·	Under 5 years 5 yrs. & upwards		1	2	1	1				1 2		1 1		2		1 1	1	1 .		1	3	1		2	2	1	1			. 9	1 2	3	1	8	1 2	1	1 4		8 .		1 2	1	1	1	- 2	1 3	1	1 2	1 2	3	-	
	RESPIRATORY DISEASES -	Under 5 years 5 yrs. & upwards	3 9		3	8		. 1	1 1	3 3	1 1		9 7		3	01 01	1 2	2	2 .	3	1	1 2	1 1	3 2	4 8	1 6	2 1	2		3 .	1	1 1	2	1 1	1 2		1 3	1	8 .	8	1	2 .	4	4	4 6	1 4	1 2	2 2	4 2	5 2	8 5	9	
		Under 5 years 5 yrs. & upwards			100																													1	1	1			1	1 .			8 :	2 1	7 8	8	7	8	3	1	5	1	
	SCARLET FEVER	Under 5 years 5 yrs. & upwards				10			. 1															1									***	***																	4		
	<b>Диратиказа</b>	Under 5 years 5 yrs. & upwards	1		1										1 -		1									100	1										***								1	***	***			111	100 3		
	WHOOPING COUGH-	Under 5 years 5 yrs. & upwards		1								-						1 .					-		110	1			100		- 100							***									***	1					
		Under 5 years 5 yrs. & upwards																									1				-				101			***		-			1		-					***			
	Diarriga	Under 5 years 5 yrs. & upwards						. 1					. 1						1	1	1 .	1				***			1	1 .	. 1	3		1	3	8	6	5	7 1	10	4	3	2	1 :	2 1	1		***	72	2			
	Parames	Under 5 years 5 yrs. & upwards		4	2	-	1			1		1 2	3 1	1 2	1			1 .	-		1	1 .	2		1					2 .	. 1	9	2			1	-		2	1	2		1		1 1	1	2		2	***		1	
	RESPIRATORY DISEASES -	Under 5 years 5 yrs. & opwards			8 2	1 2	1 0	4	1 2	1 5	1 1	-	1 5	1	3	1	3	2	2	1 .	2 .	1 -	4	2	91		1	1	1	1 .	1	1	1		5			1		1	2		1	2	. 9	1	***	1	5 2	8	2	8	



#### TABLE No. 4.

#### WEEKLY METEOROLOGICAL REPORT.

From observations taken at the Park Meteorological Station at 9 a.m. daily.

(Height above Sea-Level,  $430 \cdot 25$  feet. Receiving surface of rain gnage 1 ft. above ground.)

		Baromet	er uncorrect	ted.	Average		Т	emperatu	re.		D :	Wind.	
Week e	nding	Highest.	Tomas	Att. Ther	TT 1911	Max.	Min.	Man	Ea	rth.	Rain.	Prevailing Directions.	Total in
1.		rignest.	Lowest.	Att. Ther		Max.	Ain.	Mean.	1-ft.	4-ft.		Trouming Directions	Week.
		In.	In.	0	0_100	0	0	0	0	0	In.	The state of the s	Miles.
Jan.	9th	29.650	29.150	40	90	50.2	19.0	32.6	39.6	48.0	.46	SW. N.	1850
,,	16th	29.900	29.200	40	88	46.0	22.0	36.1	35.9	42.0	1.48	NW. SW.	1970
,,	23rd	29.200	28.850	35	92	39.7	21.0	30.3	35.0	41.0	-38	SW. E. N.	1290
,,	30th	29.400	28.900	40	98	42.0	25.3	33.8	35.5	41.0	1.22	NE. SW.	1685
Feb.	6th	29.816	28.700	40	87	42.5	23.0	33.9	36.0	41.0	-29	W. W. E.	1110
,,	13th	30.200	29.450	40	98	47.5	25.7	34.8	36.0	40 8	-22	SW.	1165
,,	20th	29.782	29.270	40	91	44.0	24.5	32.4	37.5	40.5	.10	NE. E. W.	990
,,	27th	29.950	29.700	40	91	38.7	20.5	30.6	36.5	41.0	.02	SE. NE.	700
March	6th	29.950	28.830	40	88	39.0	22.0	29.3	35.0	40.2	.37	E. NE. NW.	1510
,,	18th	80.000	29.750	35	95	40.5	15.0	28.7	84.0	40.0		SE. E. NE.	1615
,,	20th	29.820	29.450	35	87	55.5	21.0	35.0	34.2	40.0	.59	SE. E.	1420 1970
,,	27th	29.660	29.250	40	88	60.5	39.2	49.4	41.9	40.0	-61	SW. W.	2725
April	3rd	29.600	29.100	40	82_	56.0	34.6	48.1	43.8	41.5	2.38	SW.	2160
,,	10th		28.750	40	82 .	54.0	81.0	41.5	44.0	42.5	.59	SW. NE. NW. W.	1260
"	17th	29.900	29.275	40	88	54.0	27.0	40.9	42.6	43.0	-20	NE. E.	1690
2"	24th	29.650	29.450	45	86	64.5	36.0	44.2	45.0	48·0 44·4	·13	SE. NE.	1610
May	1st	29.850	29.275	45	82	66.5	27.0	42.3	48.0	45.6	-91	SE. SW.	1030
,,	8th	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	29.800	50	58	72.5	88.0	52.8	49·6 50·1	46.8	4.42	E. NE.	1870
,,,	15th		29.230	50	86	65.0	35·5 39·0	44.4	49.2	47.0	-67	SW. SW. E.	1335
,,	22nd		29.300	50	87	59.0	37.0	47.6	51.5	47.0	1.07	NW. SW.	798
_,,,	29th		29.050	50 50	78 83	63·0 65·2	38.5	49.5	52.5	49.0	-77	E. SE. NE.	1110
June	5th		29·500 29·350	50	81	68.5	41.0	52.9	55.8	50.0	-28	N. E. SW.	1125
,,	12th 19th		29.470	50	77	70.0	45.0	51.6	56.0	51.0	-50	NW. W. N.	1755
,,	26th		29.400	50	71	68-0	41.7	52.7	56.8	51.0	.04	N. W.	1585
Talla.	3rd		29.750	60	64	84.0	44.0	60.6	60.5	52.0		N. N. E.	585
July	10th	7500000	29.500	65	70	82.5	42.0	60.1	65.0	55.0	-07	NW. W. N.	1170
,,	17th		29.050	60	77	66.7	45.6	55.8	60.5	56.8	1.15	SW. W. NW.	1650
,,	24th		29.250	65	75	74.5	51.5	59.0	61.3	56.1	.86	SW. W.	1785
,,	31st		29.070	60	82	70.7	48.7	54.4	60.0	56.0	.66	SW. N.W.	1225
August	7th		29.320	60	80	76.0	42.2	56.8	60.0	56.0	.12	W.	1050
	14th		29.134	60	80	70.5	46.0	59.2	60.7	56.0	66	W.	1815
,,	21st		29.450	60	84	70.0	42.0	58.9	61.0	56.0	.46	SW. NW. E.	1190
"	28th		29.600	60	86	77:0	47.5	59.8	61.0	56.0	.29	NE. W. SW.	805
Sept.	4th		29.650	65	84	82.3	49.0	59.8	62.2	57.0	1.55	SW. W. NE.	820
	11th		29.880	60	85	68.0	44.7	55.6	59.5	57.0	.80	SW.	1700 1285
,,	18th		29.550	60	76	70.0	37.5	54.9	58.6	56.8	-02	SW. E.	1025
1 ",	25th		29.375	60	87	63.0	82.7	48.0	55.6	56.1	.16	E. NE. W. SW.	1855
Oct.	2nd	29.700	29.300	60	88	69.0	42.3	54.8	54.7	54.7	·69 ·72	SE. E. SW.	1015
,,	9th		29.450	60	90	71.2	42.3	56.1	56.5	55.0		SW. W.	1820
,,/	16th		28.300	60	87	58.0	40.0	47.9	55.1	54·8 53·0	1.43	NE. SW.	1285
1 ,,	23rd		28.700	60	98	56.0	38.5	46.2	52.0	51.4	.46	NE. E. SW.	1440
1,,	30th		29.550	55	90	56.0	42.0	47.7	50.0	51.0	-85	SW.	2080
Nov.	6th		29.350	55	91	58.0	36:0	45·9 39·7	46.1	50.0	-83	NE. SW.	1500
,,	13th		28.850	50	88	47.5	31.0	43.8	45.3	50.0	-20	W. SW.	860
,,	20th		29.100	45	92	52·0 48·0	36·0 32·5	42.5	45.0	50.0	-	W. N. SW.	225
,,	27th	000	29.950	45	93	46.0	20.0	35.2	42.8	48.4	.47	SW. W. NW.	960
Dec.	4th	OO OWO	29.100	45	88	53.0	25.5	38.8	40.3	46.3	1.77	SW. NW.	2180
,,	11th		28 000	45	89	46.0	17.2	34.3	40.0	45.4	.88	E. SW.	530
,,	18th		28.700	45	90	42.0	11.0	29.9	36.2	44.2	-49	SW. NW.	805
,,	'25th		29.100	40	89 92	41.0	13.0	30.5	85.0	44.0	.88	SW. NW. NW.	677
Jan.	2nd	30.112	29.300	40	34	110	100	1 000					
									1				



TABLE No. 5. Quarterly Return of Deaths in the East Sub-District, during the Year 1886, classified according to ages and diseases.

| The control of the

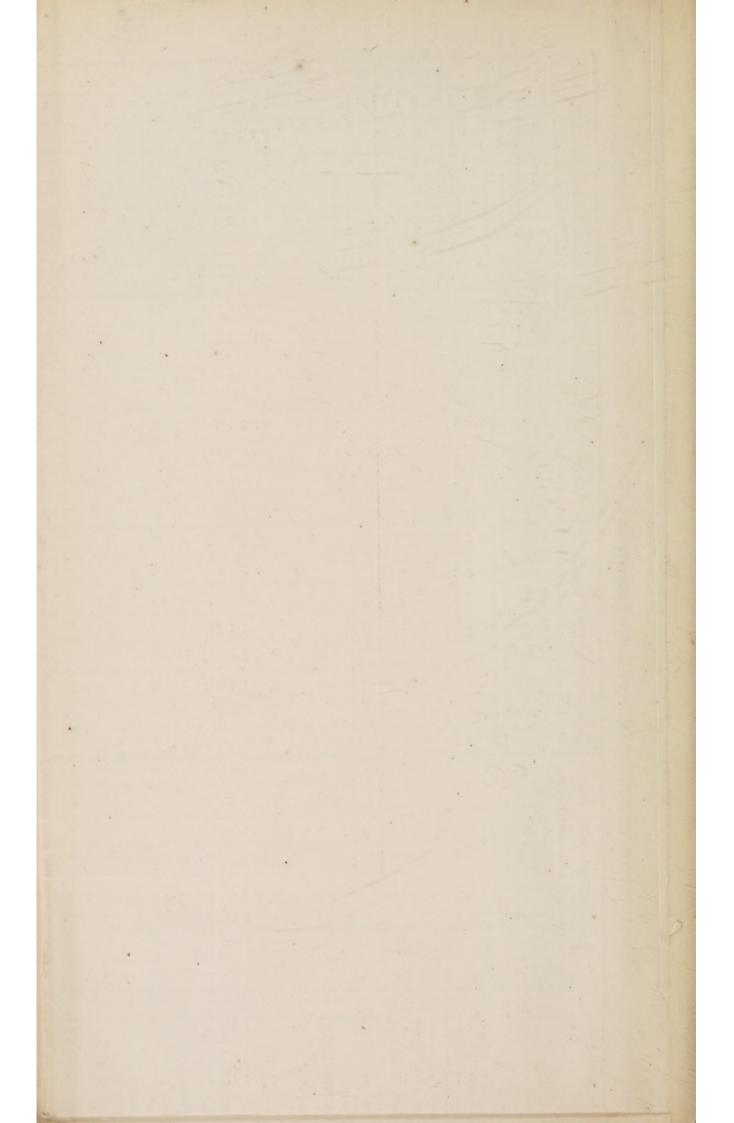


TABLE No. 6. Quarterly Return of Deaths in the West Sub-District, during the Year 1886, classified according to ages and diseases.

| Company | Comp

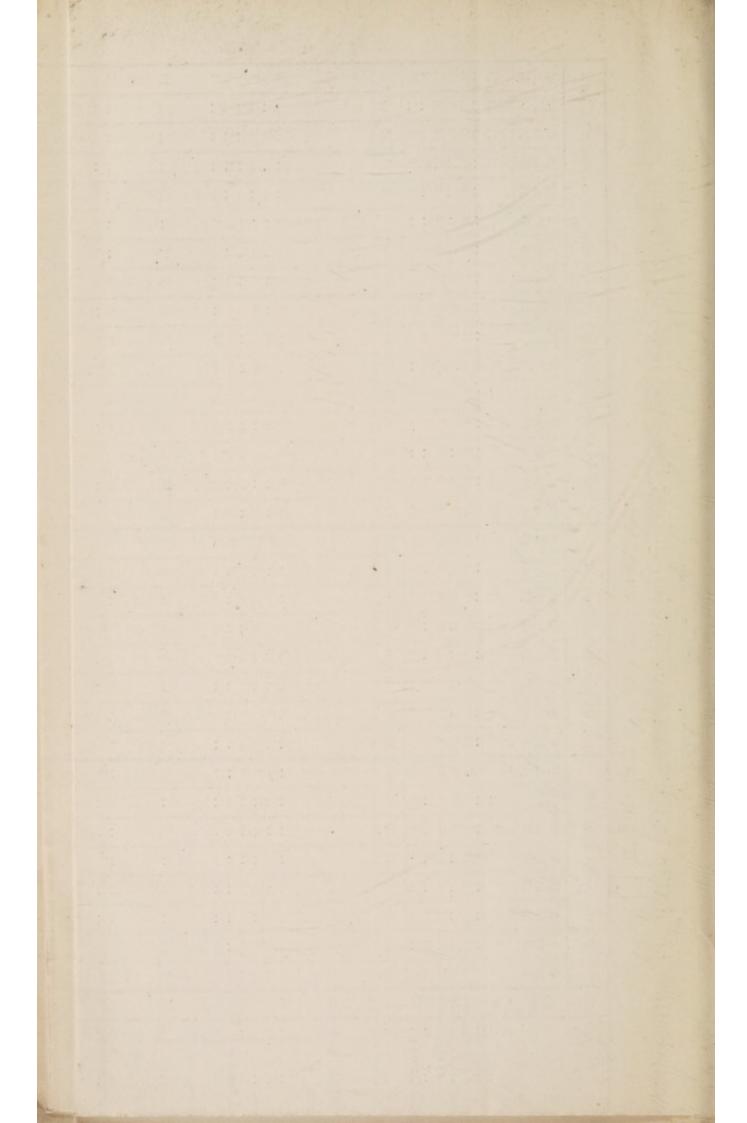


TABLE No. 7.

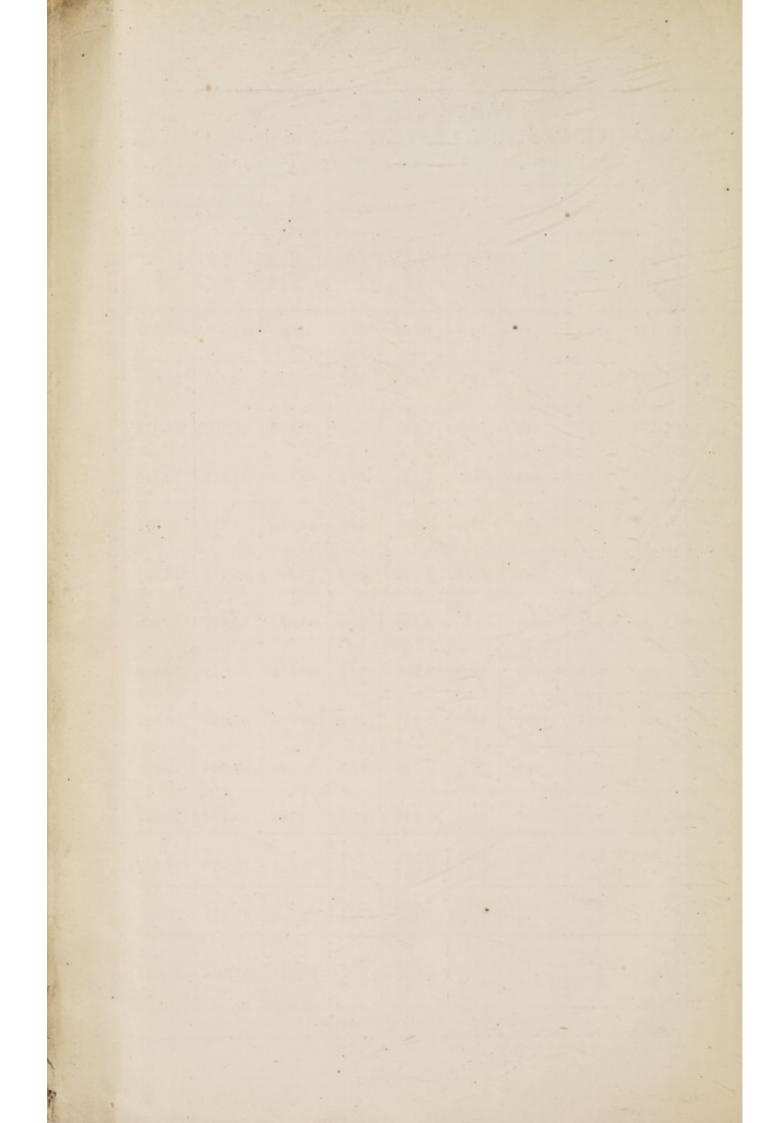
TABLE OF DEATHS during the Year 1886, in the Sanitary District of WOLVERHAMPTON; classified according to Diseases, Ages, and Localities showing also the Population of such Localities, and the Births therein during the Year, and the proportion of the deaths which occurred in Public Institutions.

	Populati Ag	on at all	bs.	мо	RTAL	TY FE SUBJ	OM A	LL CA	USES,		MORT	ALITY	FROM	I SUB	JOINE	D CA	USES, IVE Y	DISTI EARS	NGUL OF A	GE.	DEAT	rus o	P CH	ILDRE	N UNI	DER	
NAMES OF LOCALITIES adopted for the purpose of these Statistics,	Census 1881.	Estimated to middle of 1886.	Registered Births.	At ali Ages.	Under 1 year.	and under 5	5 and under 15	and under 25	25 and under 60	60 and up- wards.		Messles.	Bearlatina.	Diphtheria.	Croup (not spasmodic.')	Whooping Cough.	Entrie or Typhoid.	64	Diarrhesa and Dysentery.	Rheumatic Fever.	Erysipelas.	Pyermia.	Phthisis.	Bronchitis, Preumonia, and Pleurisy.	Heart Disease.	Injuries.	All other Disesses.
1	2	3	4.	5	6	7	8	9	10	11	12	14	15	16	17	18	20	21	22	24	25	26	29	30	31	32	33
East Sub-District	38,610	89,022	1464	988	271	203	88	26	220	180	Under 5 5 upwards		1 1	2	10	18	7	1	78 3		2	2	27 68	92 103	58	5 14	186 197
West Sub-District	87,156	41,101	1889	746	218	142	81	81	151	178	Under 5	27777	8	4	3 4	4	2		64	2	4 8	1	4 61	42 69	45		176 177
Total in Borough	75,766	80,012	2803	1679	489	345	64	57	371	858	Under 5		4	6	18	22		1 2	142	5	6		31 129		98	12 21	
General Hospital				129	9	18	17	19	56	15	Under 5	1	2	2	1	1	4				1 2		5			4 15	10 46
Workhouse				172	10	6	4	5	48	99	Under 5						2		2				1 17	10	15		13 112
Deaths occurring in public institu- tions in the East Sub-District and not belonging to the Borough				121	3	7	14	14	44	89	Under 5 5 upwards	1		1 3	***		2	***			1		7	5	12	1 13	7 67
Deaths occurring in public institu- tions in the East Sub-District and entered as 'no home'	***			22	1		2		5	14	Under 5 5 upwards			***	***								2	4	2		1 13
Deaths occurring in public institu- tions in the East Sub-District and belonging to the West Sub-District				49	5	5	1	3	12	28	Under 5		1	***	***		1		2				4		8	8	4 26

TABLE No. 8.

COMPARATIVE DEATHS & DEATH RATES of the East & West Sub-districts for the past Fourteen Years.

	EAST SUB-	DISTRICT.	WEST SUB	-DISTRICT	Вово	јен.	Estimate mid	ed Populatio	on at the ear.
Year.	Number of Deaths.	Rate per 1000.	Number of Deaths.	Rate per . 1000.	Number of Deaths.	Rate per 1000	East.	West.	Borough.
1873	1,125	29.7	631*	19.8	1,756	25.1	38,010	31,831	69,906
1874	1,048	27 6	627	19.3	1,675	23.6	38,087	32,463	70,686
1875	1,155	30.3	640	19:3	1,795	25.2	38,163	33,108	71,878
1876	1,099	28.2	655	19	1,754	23:9	38,241	33,766	72,118
1877	1,157	30.2	611	17.8	1,768	24.3	38,318	34,436	72,871
1878	1,081	28.2	644	18.4	1,725	23.4	38,396	35,119	78,682
1879	1,093	28.5	608	17	1,701	22.9	88,474	85,817	74,402
1880	960	24.9	629	17.2	1,589	21.1	38,552	36,528	75,178
1881	998	25-9	650	17:5	1,648	21.3.	38,629	87,258	75,968
1882	1,056	27.3	657	17:3	1,713	22 3	38,708	87,998	76,756
1883	1,042	26.9	601	15.5	1,643	21.2	38,786	38,748	77,557
1884	1,158 954	29·8 24·6	699 758	17·7 19·1	1,857 1,734	23 7 22·2	38,864	39,516	78,867
1885	1,012 813	25·5 20·5	658 720	16 17·5	1,670 1,564	20·7 19·4	38,943	40,301	79,185
1886	1,125 933	28·9 23·9	697 746	17 18·2	1,822 1,701	22·8 21·3	39,022	41,101	80,012



т	Δ	R	п	E	N	0	9

			nding			(ouete	rs end			Qua	rters e	nding				ending			vaartees			Qu	arters			Qua	rien es			Quarte	rs end			Quari	ees en			Quart	CEN 400			Quart	ers en	ding	
	25/3 2			1870		(3 30)	6 20/9	29,12	1877.	00/8 2	9,6 28	1,9 28/1:	1878.			17/9/27/	1970		26,62		1880.	26/3	25/0 2	(981/11	1881.	1/4	1/7 (80)		1682.	31/3 300	0 29/9.		1880.)	19/8 24	0 27/9		1884.	81/8 97,	0.25/9		885.	3/1 3/	2 2/10	1/1	1880.
Small Pox																					100							1 2	4	1	2 1	8	7	2	E -	1	4				-				
Measles	2	28	2	2 8	0	1	2 6	4	9	2		. 1	0	21	27	2	1 5	2	2	1	6	1			1	18	41	1 4	65				lan .	11 6	0.2	1	98	1			1		. 8	103	111
Scarlet Fever	-	2	10 4	1 5	8	25 3	4 88	70	220	20	11	4 1	40	1	4	4	7 1	7	11	7 1	5 39	18	30	10 6	64	9	0	1 4	97	1 1	1 3	0	24	6	7 20	4	117	17 1	4 0	6	46	1	0 1		- 0
Whoeping Cough	9	10	11	6 2	6	7	4 2	7	22	82	200	14 11	1 94	1	4	4	5 1	7 1	0 21	*	6 45		6	14 15	411	200	18	1 21	28	15	d		21	1	1 8	10	1.5	11	7 1	25	All	2		6	22
Diphtheria	4	2	1	3 1	0 _			1	1	3		1	1 1	1	-	1 -		6	1	1	2 4		1	1 2	4	-	1		1	4			4	11 -	1	1	6	4 -	1	4	10	6	b	1	10
Typhoid Fever	2	4	6	8 1	5	b.	4	1	10	2	8	6 6	6 15	1	2	2	1	6	N 1		16	2	2	0 2	12	1	2	2 2	7	=	1 2	2	10	0	1	5	9	2	1	1	4	2	1 1	4	19
Diarrhora	- 8	10	71 1	8 10	15	0 1	0 20	8 13	50	0	2	68 16	0 50	11	6	16	13 4	8 1	0 8	75 1	8 111	1	8	17 10	66	15	7 5	6 0	97	7	1 29	16	56	4	8 118	15	140	4	6 20	14	50	6 1	0 98	35	149
Phthisis and chest affections	129	186	84 13	0 48	8 1	46 11	4 6	129	453	117	90	58 160	2 480	180	168	64 1	65 59	8 13	3 115	81 10	433	156	119	78 110	463	147	119 8	3 103	457	160 11	4 83	115	475	120 14	2 80	146	497	157 11	75	149	494	150 10	0 76	145	480
Total Deaths belonging to Borough;	410	423 4	10 40	2 164	8 4	13 26	0 27	460	1611	438	381 :	157 42	1000	460	408	271 4	15 150	5 35	5 855	116 36	7 1493	440	400	141 371	1552	464	422 38	5 363	1684	468 87	2 311	361	1542	349 43	7 497	481	1784	400 30	0 812	417 1	100	440 34	2 892	501	1701
Rate per 1000 per annum	22-6 2	10-5-2	1-0,22	0 22	4 24	1-2 20	0 20%	25-3	22-6	22-8-2	20-7 1	9-1 29-1	1 21-8	25-1	22	14-6 22	0 21	1 18-	9 19-8	2-8 19	5 19-9	25-2	21-1	18 18-2	20-1	24-2	22 20	1 18-9	21-8	21-2 19-	2 17-6	18-6	19-9	7-9-20	1 25-4	22	22-2	23-6 18	7 15-8	19-6	19-4 1	22-0 17-	1 19-1	26-6	21-0
Total Deaths registered	410	458 4	39 45	8 175	4 4	80 25	11 410	6 487	1768	470	407	200 400	8 172	500	400	200 4	46 170	1 38	2 976	4.05 35	5 1180	478	419	102 230	1618	465	\$33 40	193	1718	498 41	0 858	877	1643	185 48	0 522	462	1857	501 35	4 235	440 1	670	478 88	1 400	554	1821
Rate per 1000 per annum	24-4 5	25-2 2	2-6-20	5 23	9 2	0-4 21	5 22-1	5 20-8	24-8	25-6	22-1 2	0-7 25-	5 234	20	23-5	16-1	24 22	9 20	8 20 5	53-12 5	1 21-2	25-2	22-1 1	9-1 19	21.8	25-0	22-6 2	20-5	22-3	25-7 21-	2 18-5	19-5	21-2	19-7-24	9 20-7	23-6	23.7	25-3 19	0 10 0	20-7	20-7	25-9 19-	1 20-1	27-6	22-8
Sixty years of age and upwards	.85	99	606 8	s 34	14 2	200 1	16 61	8 100	294	100	92	61 11	4 367	150	115	65 1	03 44	1 8	7 80	85 1	4 851	180	105	60 92	407	110	80 0	0 99	391	148 10	0 66	89	408	87 8	0 77	80	842	122 7	0 78	105	875	120 8	03	86	351
Under one year of age	116	111	169 11					119		1000		184 12										100		107 110		190	115 11	71	458	100 9	0 118	99	419	91 11	0 184	118	506	85 10	6 80	114	388	106 1	5 148	140	499
Under five years of age	185	200 :	81 20	10 81	9 1	74 14	10 200	920	703	211	178	202 203	8 79	17	178	124 1	97 67	3 14	4 157	224 17	1 700	168	164	150 176	653	223	207 18	0 130	740	168 14	5 156	147	616	101 2:	289	190	887	164 1	4 115	165	599	162 14	6 221	205	834
Deaths in Workhouse	44	46	42 - 8	16	15	55 3	1 30	7 26	179	49	41	23 5	4 167	194	50	54	23 23	8 8	20	33 2	7 128	549	00	130 (5	171	43	100	6 50	172	78 6	5 87	48	822	20 1	9 35	45	112	65	7 112	42	186	20 1	7 34	40	172
Deaths in Hospital			21 9		7	31 5	22 20	0 20	109	1574	-	14 8			21		40 15		9 22			100		27 18		100	10 1		95	183		17	101	41 1	9 22	80	185	50 1	3 21	27	186	27 4			129
Inquests	336.0									1		18 1		-								-		25 19						28 2				16 :	18	12	64	19 1	2 19	20	80	85 1	10	24	87
Births	775	689 7	155 60	9 291	8 7	11 71	671	691	2852	739	724	681 673	2 2816	786	719	634 6	88 284	5 72	727	088 72	2817	196	740	637 662	2769	600	711 0	600	17/2	718 71	191	616	2804	702 7	635	681	2601	748 6	8 663	720 5	1906	781 75	650	697	2908
Rate per 1000 per annum				29	8 .				39-2				39-2				. 39	9			87-5				39-3			-	20-1		-		80-2	-	-	****	84-4	-	-	-	84-8		77		35-1
Population of Borough estimated at middle of year.		7	2,118				72,8	871			7	3,632				74,402	la la		3	7.178			1	5,960		1000	76	756			77,5	17			78,1	167	1947		79,1	85			80,0	012	

# TABLE NO. 10.

N, 2. 4th Quarter	548 27·2 7·4 147 102 1 33 1·7 207	OT.,	220 21.4 7.2 7.4 50 	18·5 19·7 16·5
IAMPTOI ON 80,01 Srd Quarter.	399 20·0 5·6 1111 8 111 91 1·8 222	SUB-DISTRICT LATION 41,101.	165 16·1 5·2 54 5 7 7 7 7 8	17.8 19.4 15.4
WOLVERHAMPTON, POPULATION 80,012, 2nd 3rd c. Quarter. Quarter. Q	870 18·6 1·5 29  8 10 1·9 11·9	WEST SUB-DI POPULATION	146 14·2 1·4 15 	18.0 18.3 17.5
PC PC 1st Quarter.	461 28:1 1:0 20  1 6 6 2:0 145	WE	215 20·9 1 2 13 .:.	22.8 23.6 21.6
TOWNS. 284. 4th Quarter.	26,591 21.6 3,676 851 702 1,006 3.4 173	2T,	301 80-9 8-6 84 84 53	
TWENTY-SEVEN LARGE TOWNS POPULATION 4,944,284.  1st 2nd 3rd 4th Quarter. Quarter. Quarter.	26,829 21.8 5.3 6,506 866 869 4,912 8.0 840	SUB-DISTRICT, JLATION 39,022.	214 225.0 6:8 67 1 1	1::
C.SEVEN PULATIO 2nd Quarter.	24,866 19.8 1.8 2,234 804 215 867 867 140	EAST SUB-DIS POPULATION	192 19-7 1-7 17 17	1 1 1
TWENTY POI 1st Quarter.	29,567 24.0 2.544 755 811 289 8:4 159	EA	226 23.2 1.4 14 	
COLUMN TWO IS NOT THE OWNER, THE PARTY NAMED IN				
	1:1::::::::::::::::::::::::::::::::::::			
			1111111	: : :
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			m of Total Deaths of Zymotic Deaths	
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	oer of Deaths of Zymotic Deaths		ber of Deaths  000 per annum of Total Deaths  n Zymotics  Measles  Scarlet Fever  Diarrhæa	000 per annum England and Wales ", Urban Districts ", Rural Districts

The above returns for Wolverhampton are taken from the Registrar General's and do not accurately tally with ours because the quarters slightly differ, they are a little unjust to Wolverhampton as including deaths not belonging to it; our rates for the quarters are at most 22.3, 17.1, 19.1, and 26.6; these include deaths returned as no home.

